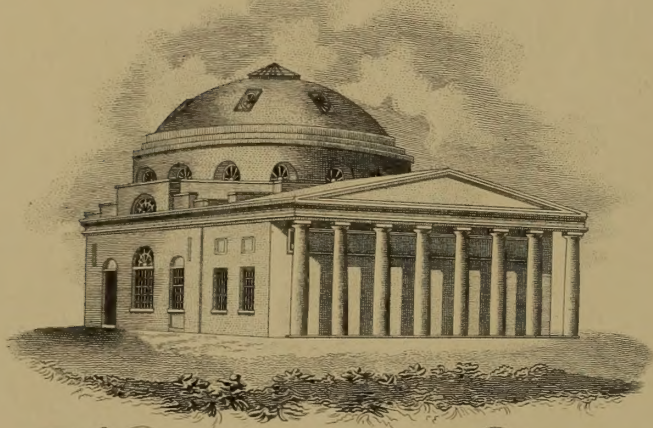




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University of Maryland Theses

Early Doctor of Medicine and Doctor of Physic Dissertations with  
Corrected Tables of Contents

These manuscripts described as either an Inaugural Dissertation or an Inaugural Essay were presented to the University of Maryland for the Degree of Doctor of Medicine and/or Doctor of Physic during the years 1813-1887. The individual dissertations were bound together during the 1940's. The original tables of contents for the bound volumes contained multiple errors in authors' names, titles, and/or years. To address these errors, an additional "Corrected Table of Contents" has been inserted at the beginning of each volume.

The project team who investigated and corrected the tables of contents were Richard J. Behles, Historical Librarian/Preservation Officer; María Milagros Pinkas, Metadata Management Librarian; Angela Cochrane and Carol Harling-Henry, Resources Division; Sarah Hovde, Abra Schnur and Megan Wolff, Services Division.

These dissertations were digitized in 2011-2012 and are available at the UM Digital Archive ([archive.hshsl.umaryland.edu](http://archive.hshsl.umaryland.edu)) and the Internet Archive ([www.archive.org](http://www.archive.org)).

THE HISTORY OF THE UNITED STATES

OF THE UNITED STATES OF AMERICA  
FROM 1776 TO 1876

The first part of the book deals with the early years of the nation, from the signing of the Declaration of Independence in 1776 to the end of the Revolutionary War in 1783. It covers the struggle for independence from British rule and the establishment of the new government under the Articles of Confederation and the Constitution.

The second part of the book covers the period from 1800 to 1860, known as the Era of Good Feelings. It discusses the rise of the Federalist Party, the War of 1812, and the expansion of the United States into the West. It also covers the early years of the Industrial Revolution and the growth of the American economy.

The third part of the book covers the period from 1860 to 1876, known as the Reconstruction Era. It discusses the Civil War, the Reconstruction of the South, and the rise of the Ku Klux Klan. It also covers the end of Reconstruction and the beginning of the Gilded Age.



(CORRECTED TABLE OF CONTENTS)

UNIVERSITY OF MARYLAND

THESES

1881 (b)

Author	Title	Notes
Ames, John G.	Jottings on the Hygiene of Pompeii	
Baker, J.E.Seymour	Intermittent Fever	
Donovan, Charles O., Jr.	Sweat	(bound out of order)
Rohrbaugh, Edwin P.	Rest as Therapeutic Agent	
Berkley, Henry J.	Bromide of Potassium	
Hoffman, J. Homer	Cerebro-Spinal Meningitis	(no title page)
Cohen, Fred P.	Enteric Fever	(no title page)
Derr, Hamilton K.	Typhoid Fever	
Hubbard, Wilson H.	Report of Clinical Cases	(no title page)
Wallis, Hansford L.	Scarlatina	
Keen, Thomas F.	Scarlatina	(no title page)
Fulton, John S.	Secretion	(noteworthy illustrations)
Holley, James Thomas	Therapeutic Action of Quinine	
Ward, William H.	Intermittent Fever	
Reid, John T.	Pleuritis	
Prentiss, Harry G.	Acute Articular Rheumatism	(faded ink)



<b>Author</b>	<b>Title</b>	<b>Notes</b>
Mitchell, Charles W.	Puerperal Eclampsia	
Leech, B. Touner	Typhoid Fever	

HSLSL 2012 for the UM Digital Archive. Sources consulted for corrections: Original Dissertation; University of Maryland Medical Faculty, Matriculation List, 1851-1892; Cordell, Eugene F. "University of Maryland, 1807-1907" (New York : The Lewis Publishing Company, 1907), Volume 2.



UNIVERSITY OF MARYLAND

THESES

1881 (6)

Ames, J. G.	Jottings on the Hygiene of Pompeii	40p.
Baker, J. E. S.	Intermittent Fever	27p.
Donovan, C. O. Jr.	Sweat	11p. Bound differently gutter problems
Rohrbaugh, E. P.	Rest as a Therapeutic Agent	37p.
Berkley, H. J.	Bromide of Potassium	34p.
Hoffman, J. H.	Cerebro-Spinal Meningitis	40p. no title page
Cohen, F. P.	Enteric Fever	30p. stained no title page
Derr, H. K.	Typhoid Fever	46p.
Hubbard, W. H.	Report of Clinical Cases	16p. no title page
Walls, H. L.	Scarlatina	33p.
Keen, T. F.	Scarlatina	12p. no title page
Fulton, J. S.	Secretion	34p. Illustrations
Holley, J. F.	Therapeutic Action of Quinine	26p.
Ward, Wm. H.	Intermittent Fever	19p.
Reid, J. T.	Pleuritis	25p.
Prentiss, N. G.	Acute Articular Rheumatism	21p. Faded ink
Mitchell, G. W.	Puerperal Eclampsia	31p.
Leech, B. T. Tamer	Typhoid Fever	29p.

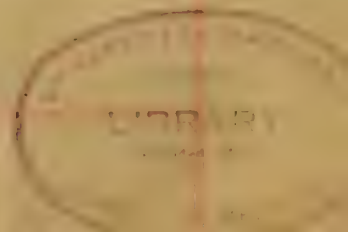
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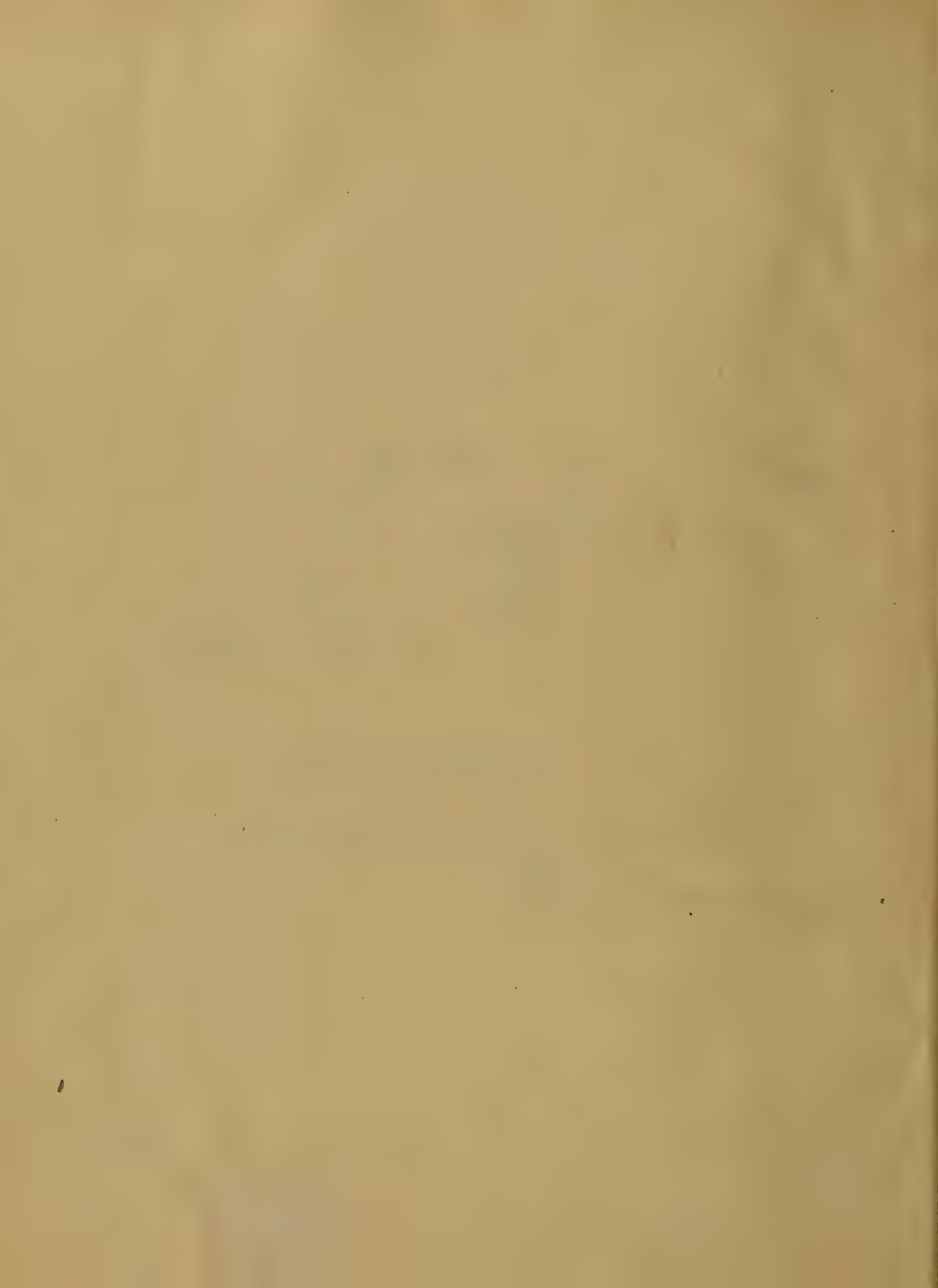
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Settings on the Hygiene  
of Pompeii  
by Dr. James  
Manland

University of Maryland  
School of Medicine  
March 1881

LMb  
16987











1  
Pattinson the history of the sea  
by John G. ...

A country without ruins is a country  
without history. One rich in  
them recalls the past and enables  
us to live among those who have  
long passed from our recollection.

Wondering among the ruins of  
Pompeii, with the walls of towers deeply  
ruined in the streets as bright and  
fresh as though done but yesterday,  
one can scarcely realize that the  
city has been buried under the  
earth seven or eight hundred years  
discovered only by accident and chance.



is not it which, but from the  
ashes that covered it.

Travelers straining through this  
city, expecting to greet a throng of people  
and to hear the hum of busy life,  
will be disappointed. Vain will be  
their search through the deserted  
streets for one of the many who at  
one time trod the intricate ways or  
inhabited the rich dwellings, nothing  
but deserted habitations and silent  
walls greet you.

Let us enter this house, no invitation  
has been extended, but the open door  
calls and you pass under the portals  
to see a part of your interior, but  
no imperial gifts to you; a grand and



of healing silence gives you a delightful  
revelation. The owner is gone; the builder  
is unknown, but his work remains  
and we are left to contemplate on the  
part of our imagination restores the  
original people to their dwellings and  
we see their inner life and live as they  
did two thousand years ago.

How strange how subtle how divine  
how interesting you involuntarily re-  
-claim as you gaze about on these mon-  
-uments of the past.

During my ramble my attention  
my attention was arrested by the pre-  
-servation of these monuments still  
filled with their rich decorations  
frescoes and mosaic floors.





marble courts and sun-flooded piazzas;  
 their small, but rich dining-halls; their  
 miniature gardens and narrow sleeping  
 apartments. . . A train of thought  
 was sustained which carried me out  
 of the domain of fancy into that of  
 hard fact. I found myself wam-  
 -ing rambling notes about this ancient  
 city, that compelled me to search more  
 into that of which I least thought -  
 the hygienic affairs of the place.  
 My ramblings and jottings I now  
 give; not for their value, but as a  
 pastime and one that will remain in  
 my memory, and ever carry me back  
 to Henry Hall, with its art and an-  
 -tiquities; it will mingle with my



with her bright and happy children,  
the scent of the orange grove, the  
soft breeze from the chimney  
of staples, the vineclad side of Mount  
Vesuvius, with her soft wreath of smoke.  
It will, I say be one of the dreams of the  
past upon which my mind can dwell.  
This is why I record them, and if they  
bring a smile of remembrance from their  
superficial nature I am too happy  
to record it, if one of approval, or  
no witness to it. Thus do I feel while  
backing in the sun on the hills of the  
pen with the wild poppy nodding in  
the breeze, with the street of the town  
behind us and the city before us.

Let us glance at the garden landscape



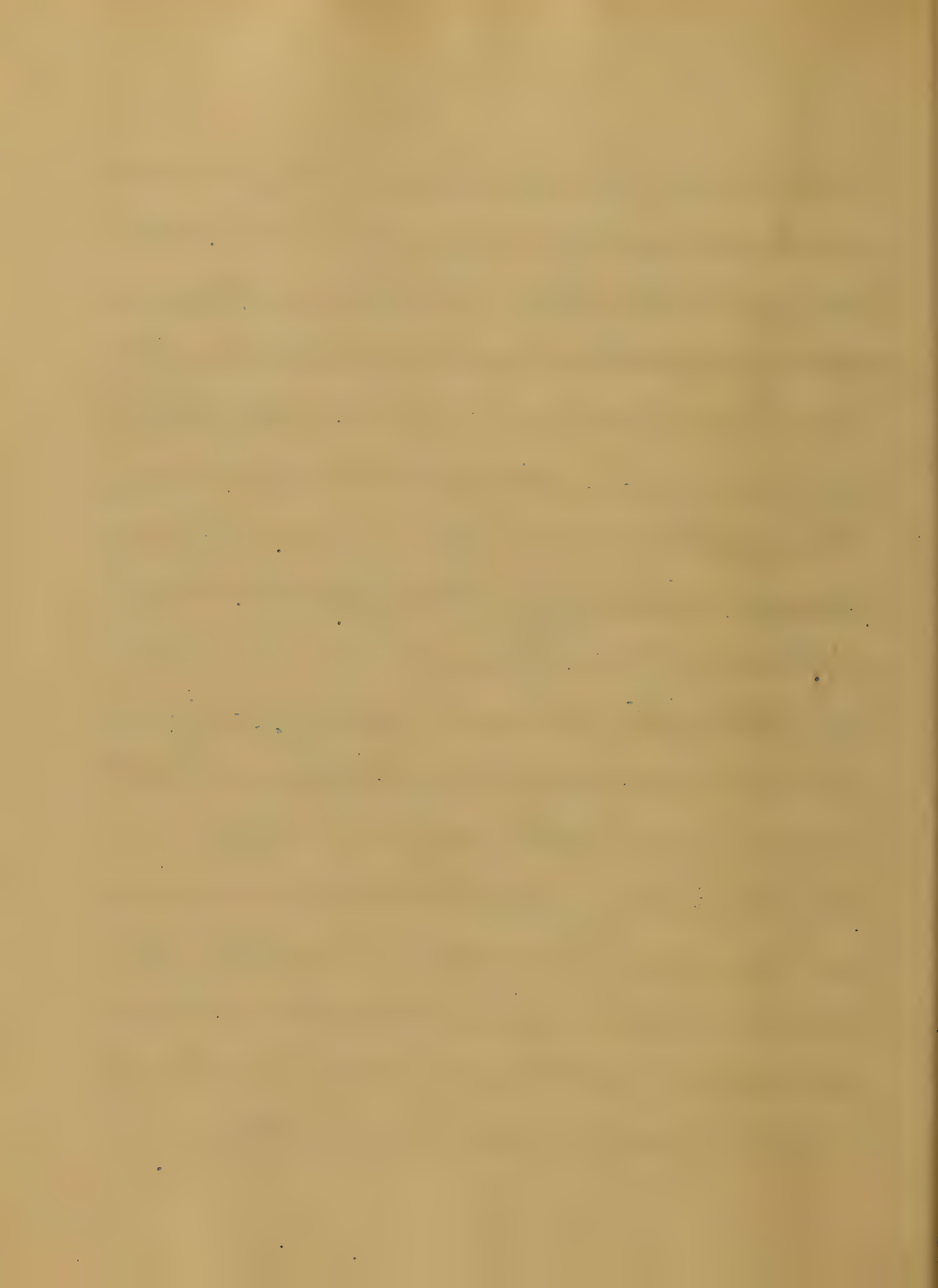
V

old walled place, beautifully situated  
on the end of a promontory with the  
sea on both sides, at the mouth of the  
Sarno overshadowed by Vesuvius.  
Looking east and grand upon the  
beautiful sea plain at her feet.

The distant mountains was a pleasing  
back ground, with the bright blue sea  
in front of ~~us~~ <sup>and</sup> and sure you will  
say that the site, even though selected  
four hundred years before Christ  
was an excellent one for a city.

The plan is elliptical: streets not ~~wide~~  
but running generally at right angles  
to each other: the sidewalks are narrow  
but raised well above the roadway.

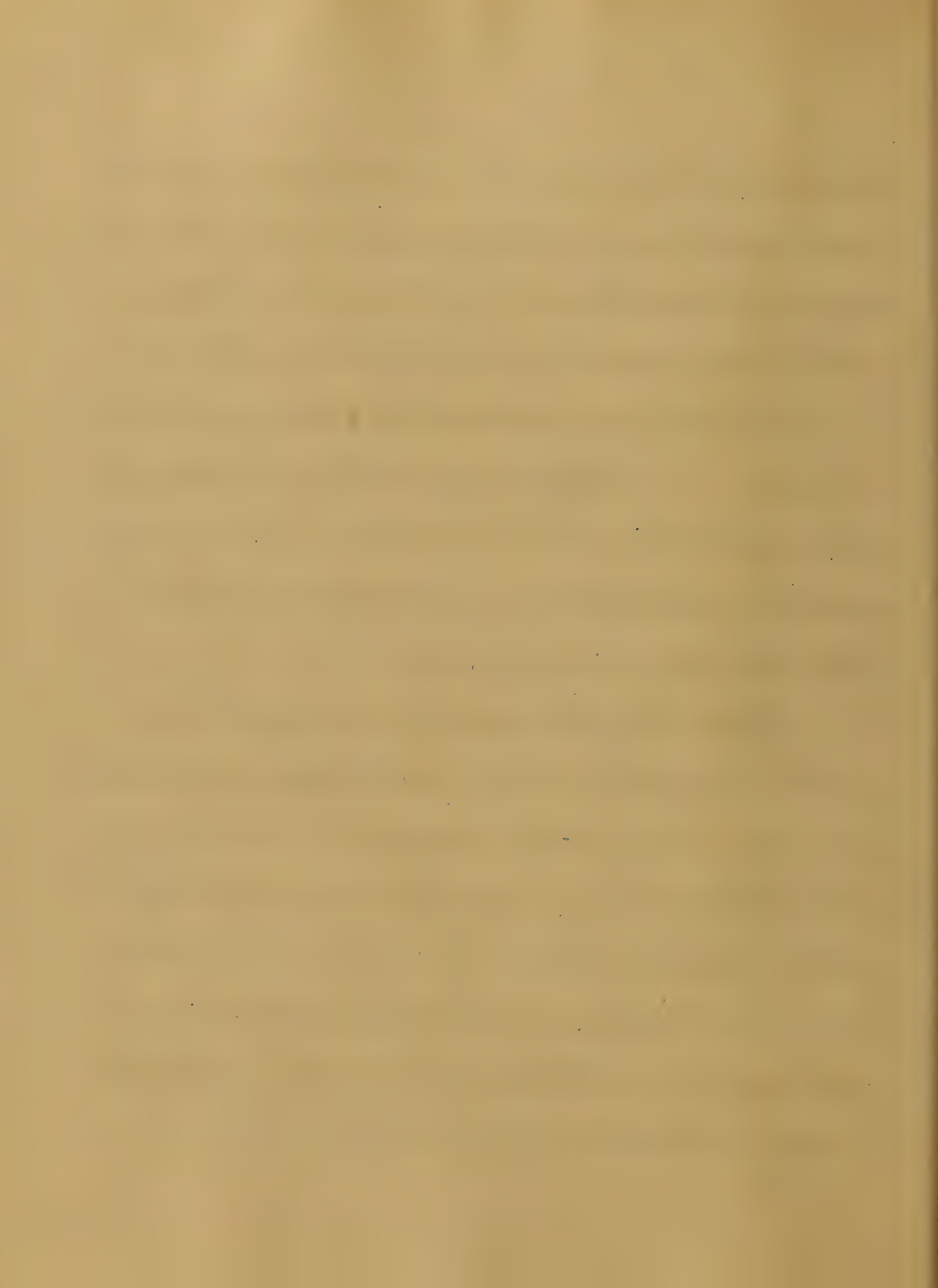
The houses a semi-imitation of the



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These styles, are low and closely packed - with very little external beauty; one or two stories high - nearly square - with remnants of wooden or tile roofs that covered these ancient dwellings. Stepping stones crossed the streets at their intersections, enabling pedestrians to cross when the streets were flooded.

These stepping stones, together with the absence of underground sewers at once indicate an early drainage system. That this was the prevailing method, is still further shown by the well known concrete composed of three layers of stone and rubble; the surface layer being broad and flat, provided

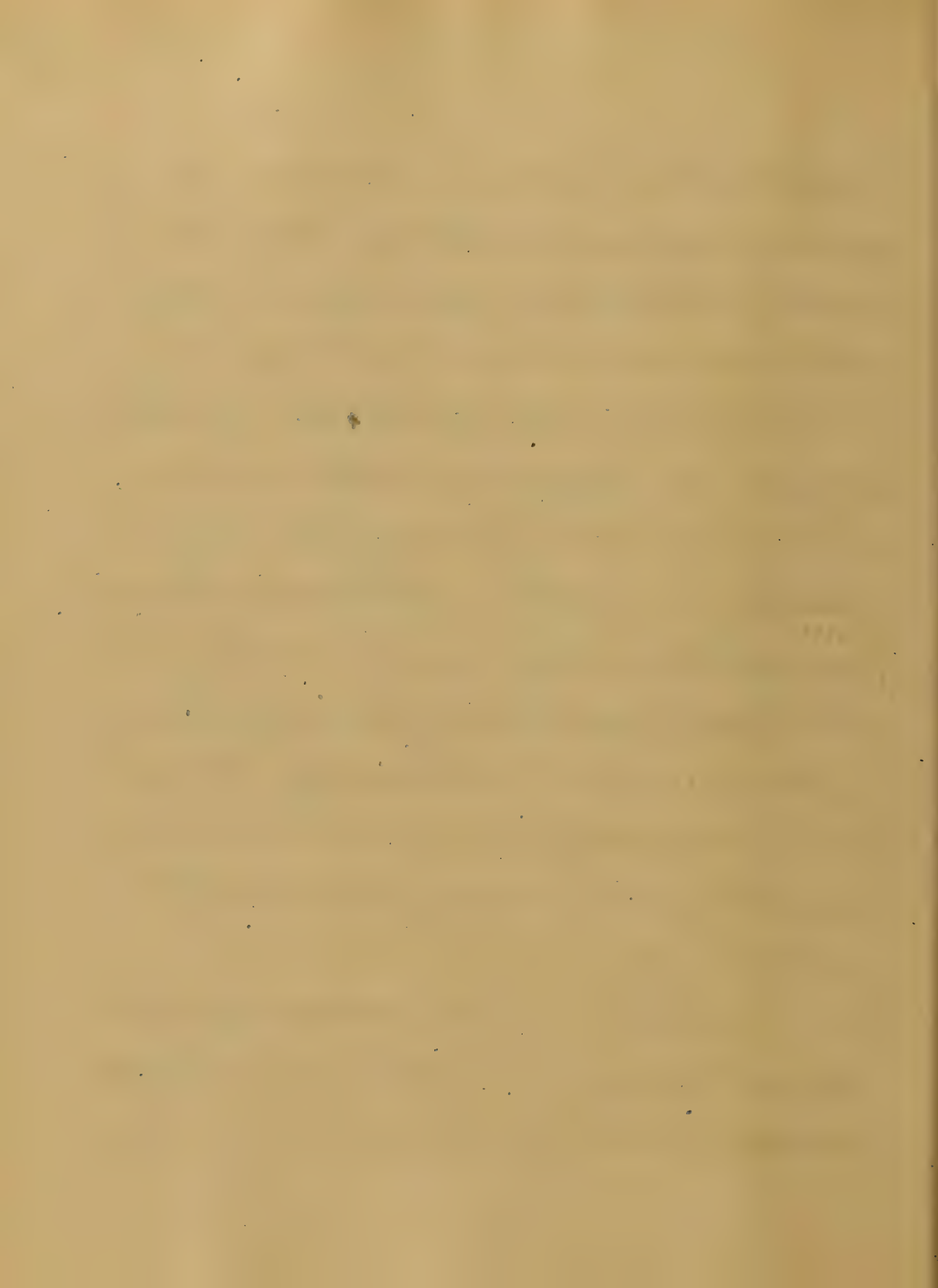




infiltration into the soil and was  
secure against contaminating the  
water of the wells and cisterns which  
were very numerous in the city.

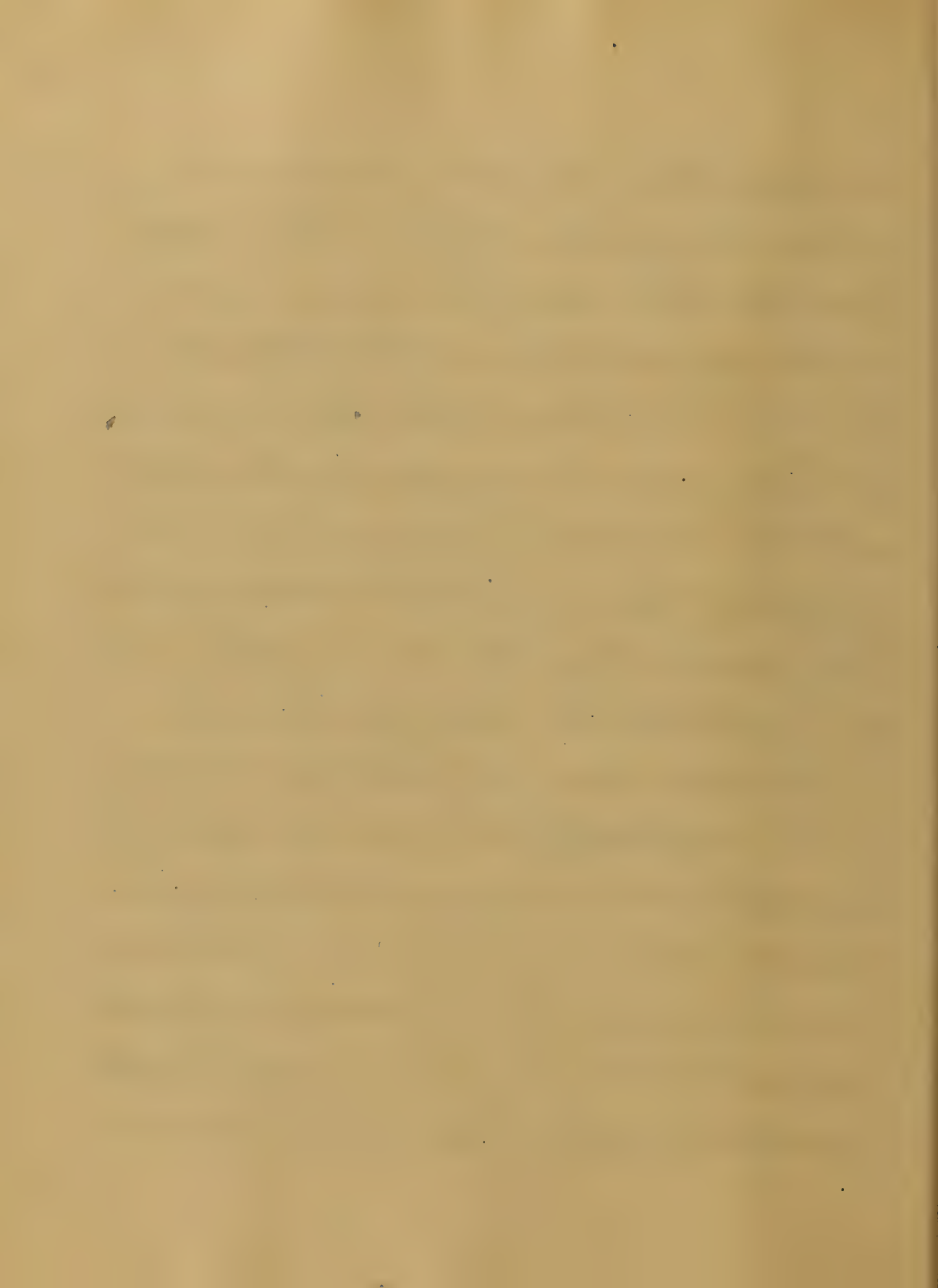
The natural roll of the land insured  
a rapid drainage for the water and the  
dirt of the streets, leaving them in a  
healthy condition. Absence of snow  
secured them from sewer gas contamina-  
tions which are such sources of disease  
at the present day. The river Acene  
with its sanitar current bore the  
street washing away from the city  
into the sea.

What could there have been?  
Large troughs in the streets with marble  
pavement upon the front, which were



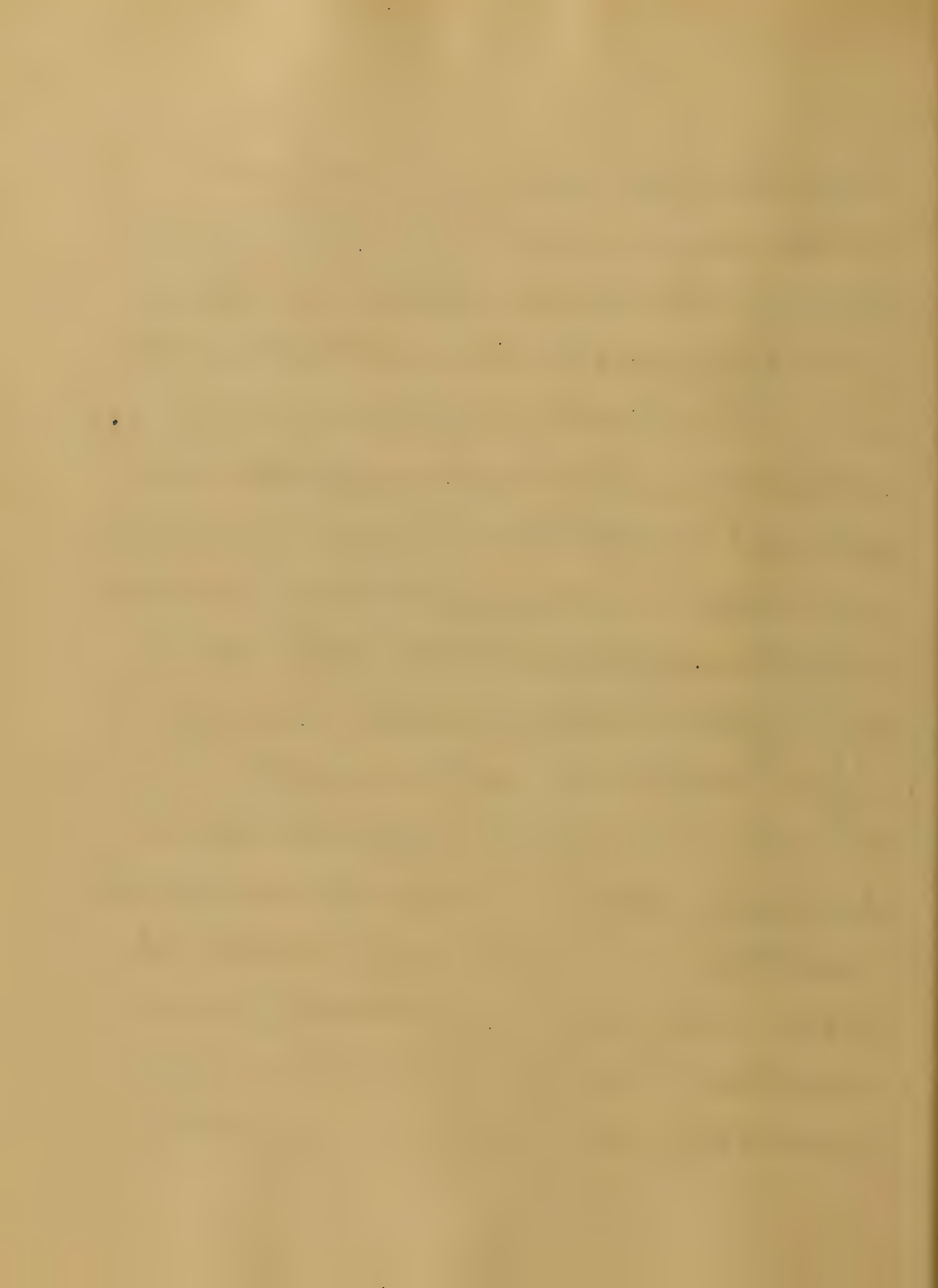
homely faces with open mouths, from  
 which lead pipes project. It is not a  
 hard problem to solve. As a general  
 at the affair tells us that they are  
 public fountains. The matter which  
 is half worn away, speak for its  
 utility and value; and we can readily  
 imagine dozens of people waiting their  
 turns  
 to munch their bread by application  
 of living life to those of stones.

The water was not wasted, but caught  
 in the receptacles below and used for the  
 smooth, worn edges of the troughs  
 testify and show how these fountains  
 were frequented by the occupants of the  
 site, with their curious methods and  
 graceful jaw to obtain the water.



able fluid for domestic consumption  
These are numerous and a few will  
for the liberal care of the city, for the  
in supplying this very essential ob-  
ject to health and cleanliness.

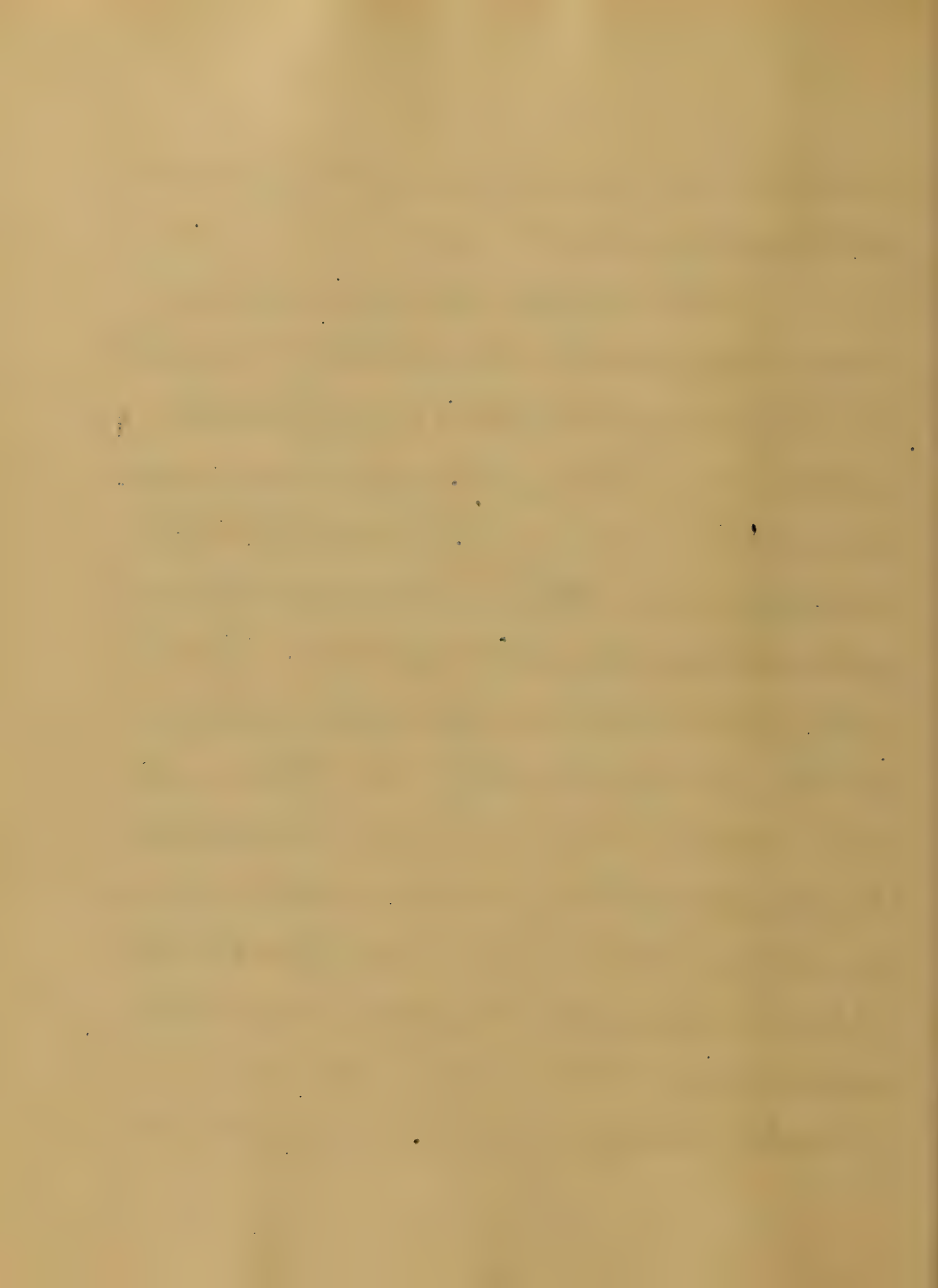
That this abundant supply of water  
was not wasted but generally used by  
all, will be acknowledged by an exam-  
-ination of their bath tubs, which  
differ from those of the present day  
only in material not in shape; they  
were considered as our essential  
article, though these people, no doubt  
held them in higher estimation for  
while they recognized bathing as es-  
-sential to health, they also resorted  
to the bath as a pleasure, and they



number and variety of books, light, & strengthen the mind.

These books were of various sizes and kind; large books for adults - small ones for children & by books, & shower &c. They were generally made of cork, many of maple, & elaborately sculptured leather to presume that the better classes met with each other in possessing fine books to which they devoted much time each day.

The extent to which baking was carried cannot be judged from the above; for while there is abundant evidence of the assertions just made, they can be further corroborated by a school

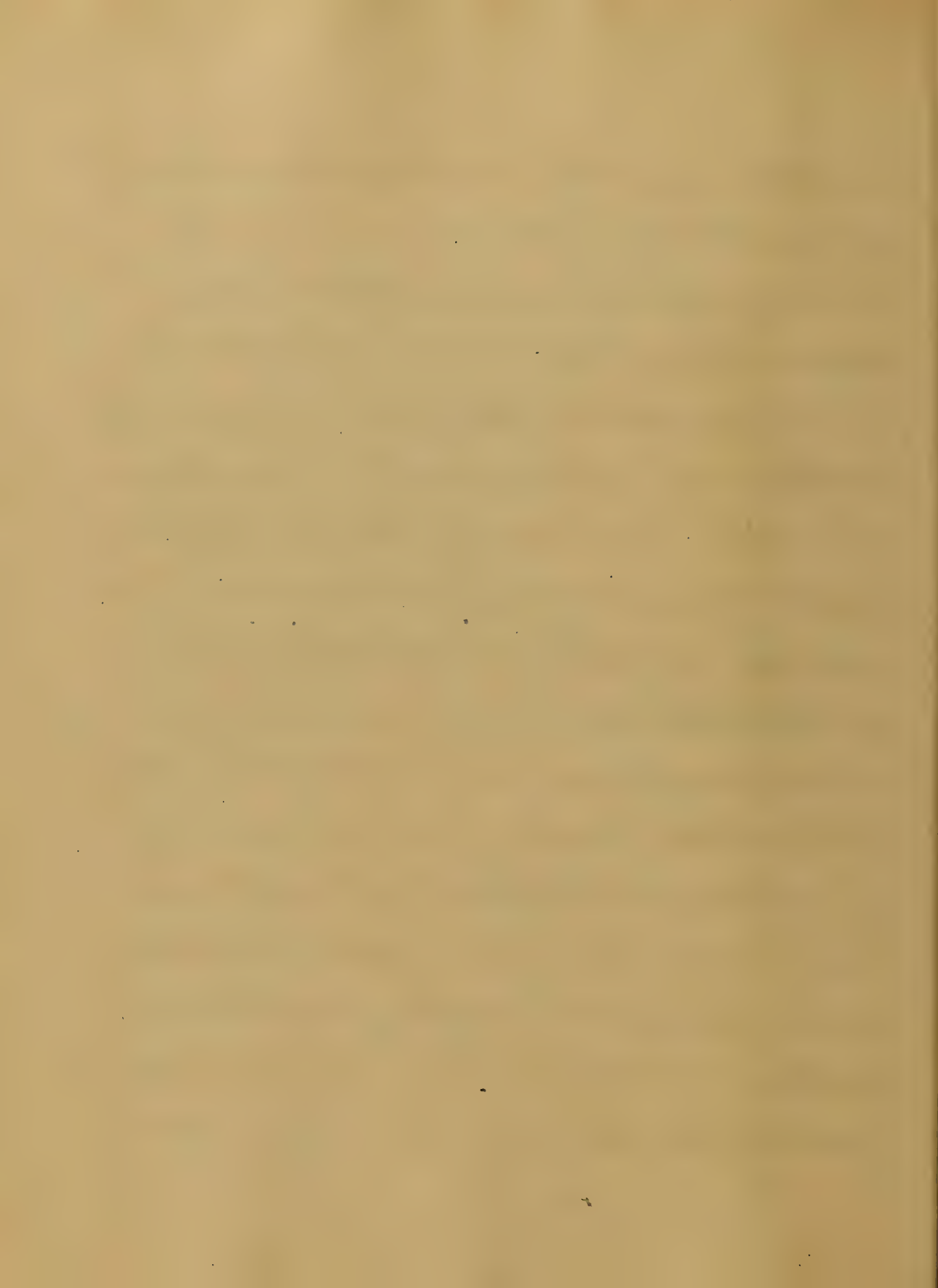




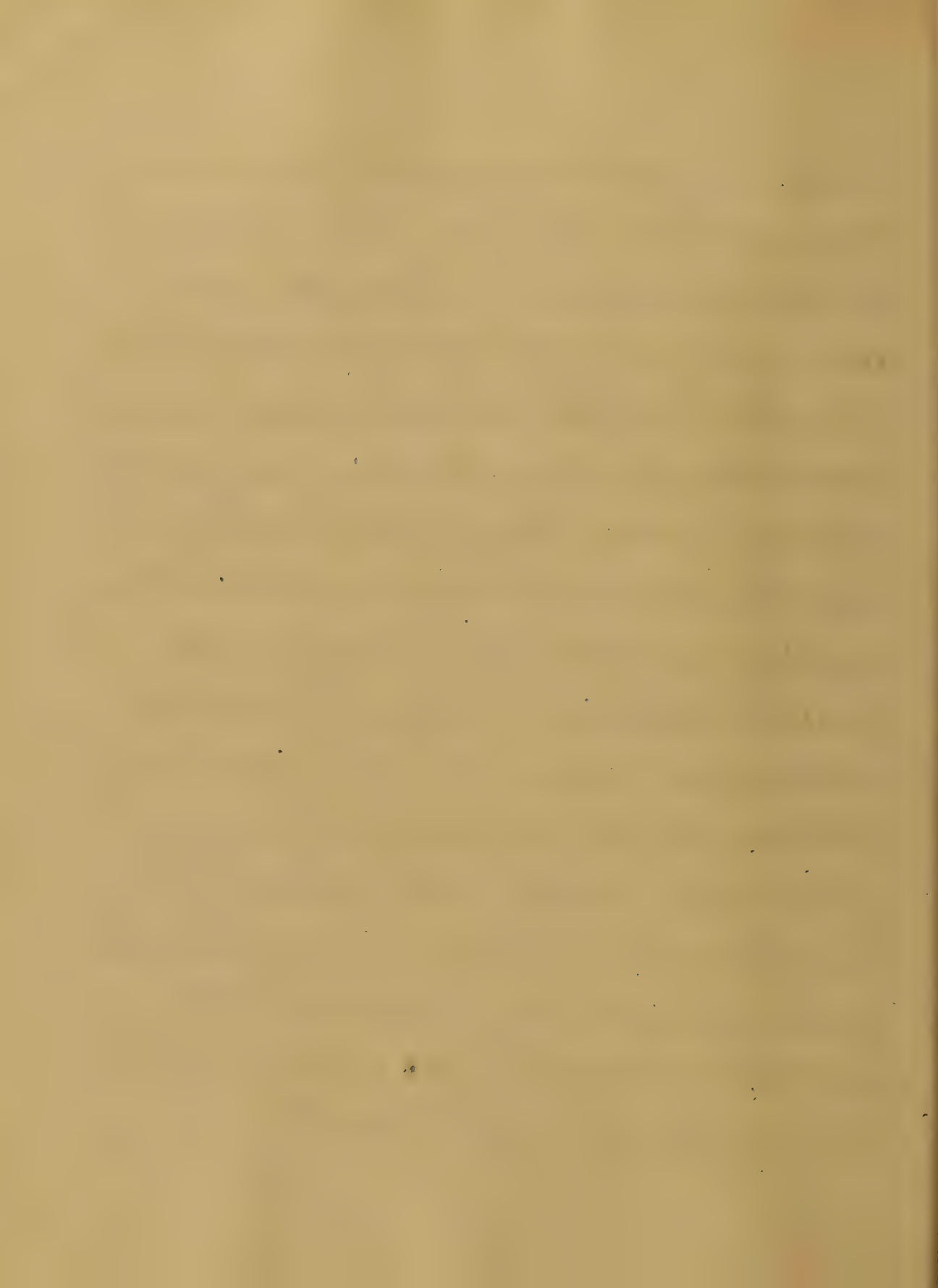
visit to one of the public baths which  
stand today lasting monuments.

Their silent and decent halls  
speak appealingly to the sanitarian  
of the present in behalf of the general  
adoption of public baths in our cities,  
when all could enjoy this health pre-  
serving remedy.

As we cross the threshold of the  
public bath, we find ourselves in a  
large reception room well provided  
with stone benches running nearly  
the whole length. The foot rests which  
seem to have been six inches high, worn  
to the floor, are a lasting evidence  
of their constant use. In an ad-  
joining room we find a large number



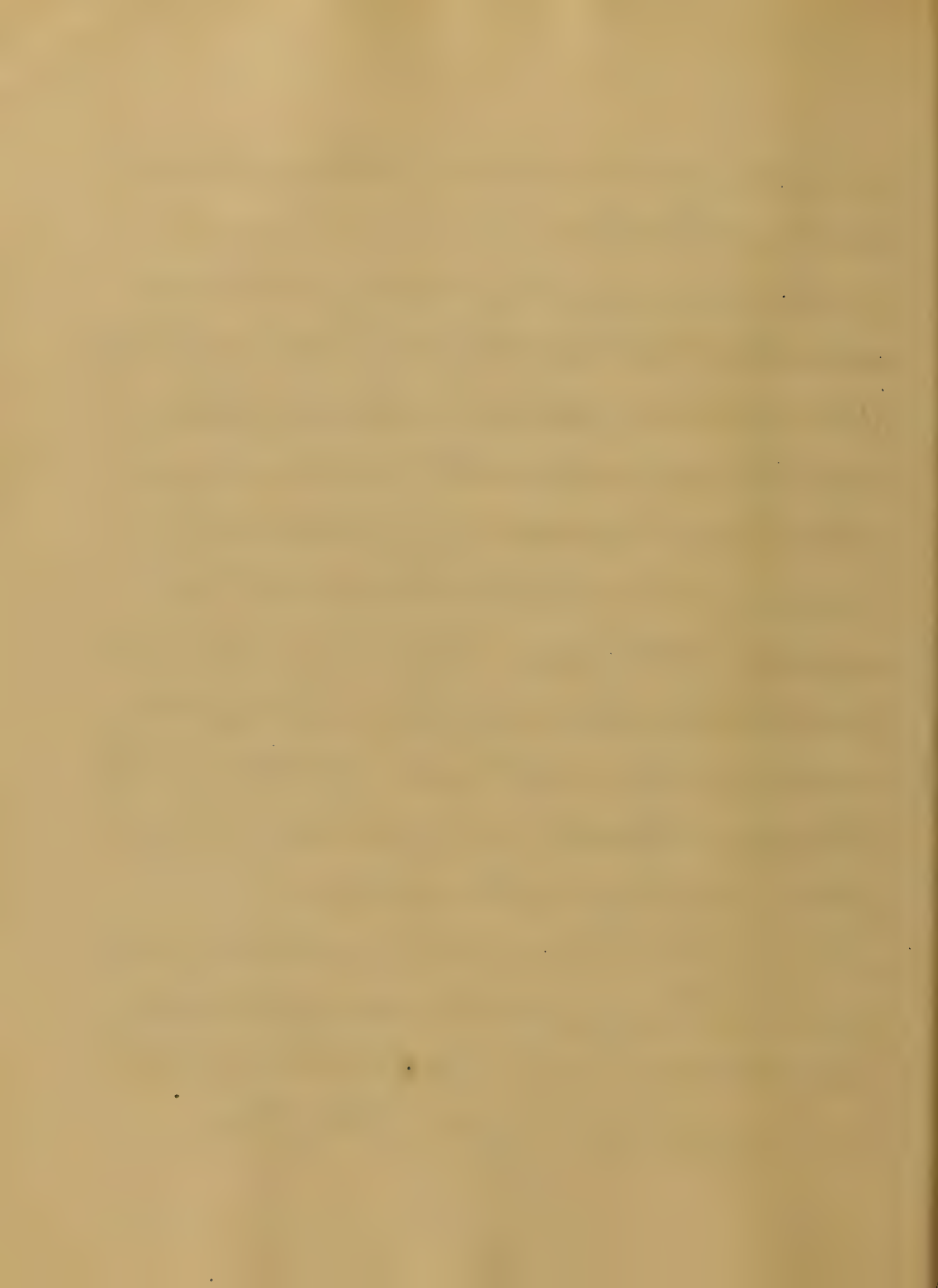
basin of great capacity, not in con-  
-dense of great mass; it is hard on,  
but we can examine it together with  
the surroundings; rich frescoes and  
bas-relief of chariot races, and marine  
monsters, hunting scenes, all of which  
strengthen our admiration for the people  
who thus combined beauty with utility in  
making so wise a provision for the  
public health. Indeed the baths  
at Pompeii consisted of large buildings  
with ample arrangements for  
bromases, double walls, double  
and flues for heating water and for the  
passage and regulation of hot air,  
so that one could enjoy not only a  
cold bath, but tepid baths in winter.



about the walls and from this vapor or  
hot air bath could be increased.

While one casts his eyes about and  
sees the bright sunlight pouring through  
the windows, striking the stone floor  
and shedding his mild rays in every  
nook and corner, as if speaking a  
word of cheer to the bare walls and  
empty cupboards, a feeling of sadness  
creeps over him and his mind gladly  
reverts to the happiness witnessed by  
the every object around which bears  
tokens of bygone pleasures.

Some will have the stones and see  
see the Pompeians coming to enjoy  
their daily baths. Seat the self, no it  
to him and let us watch them.



Here are youth and age, health and  
disease; here comes a rheumatic,  
closely followed by a gentle mer-  
chant; this is a truly singular  
individual with a sluggish circula-  
tion and cardiac trophy, not  
so likely as the latter in the pale  
worn-faced city magistrate,  
whose dry and shriveled skin  
betrays the lack of cutaneous  
secretion. Still the crowd comes for  
entertainment, some from curiosity,  
some for its humorous effect.

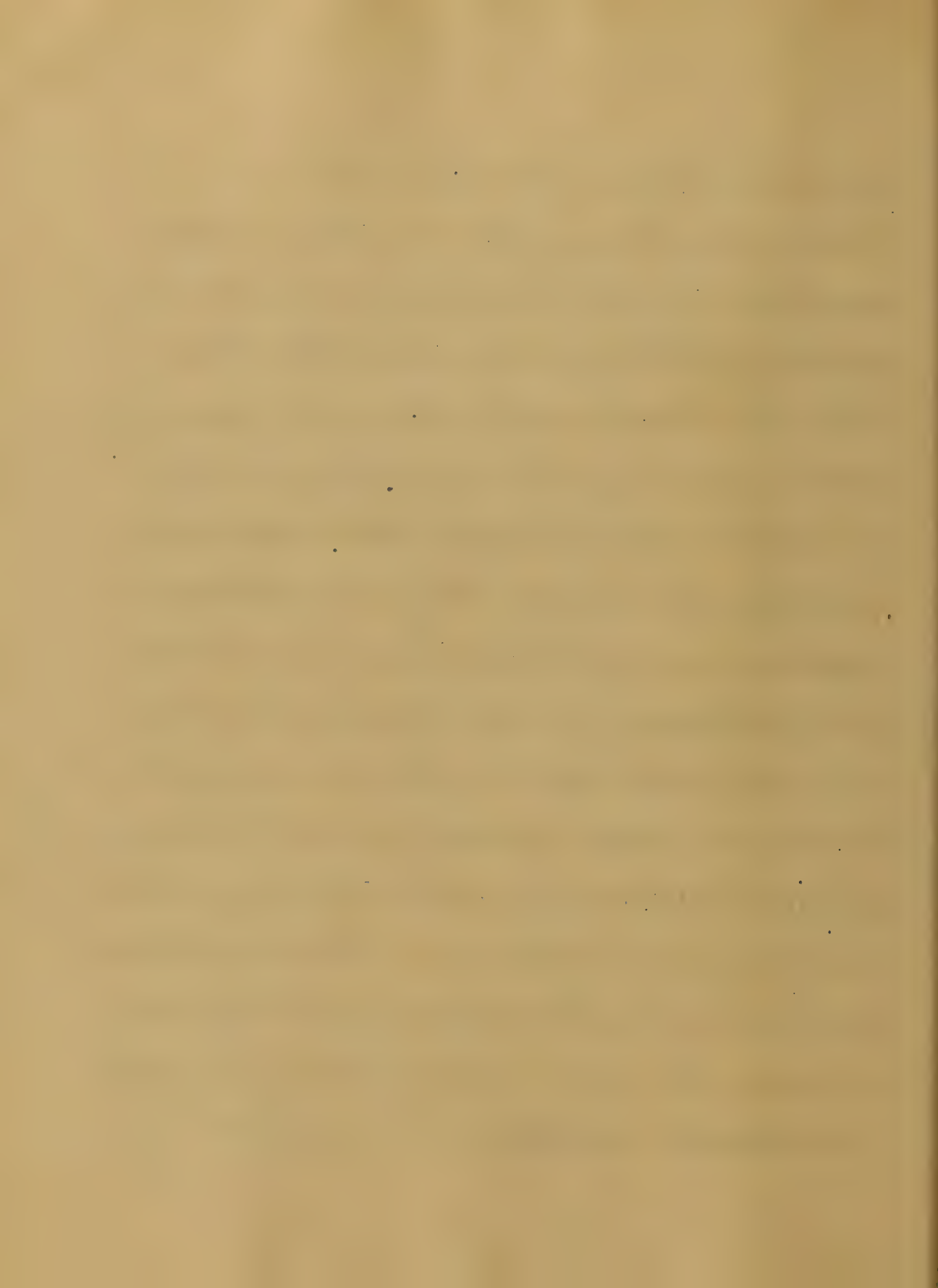
The cold plunge for its exhilaration  
to the nerves the hot air bath for its  
dephlogestic effects. The soft and effem-  
inate face of the town are here of a





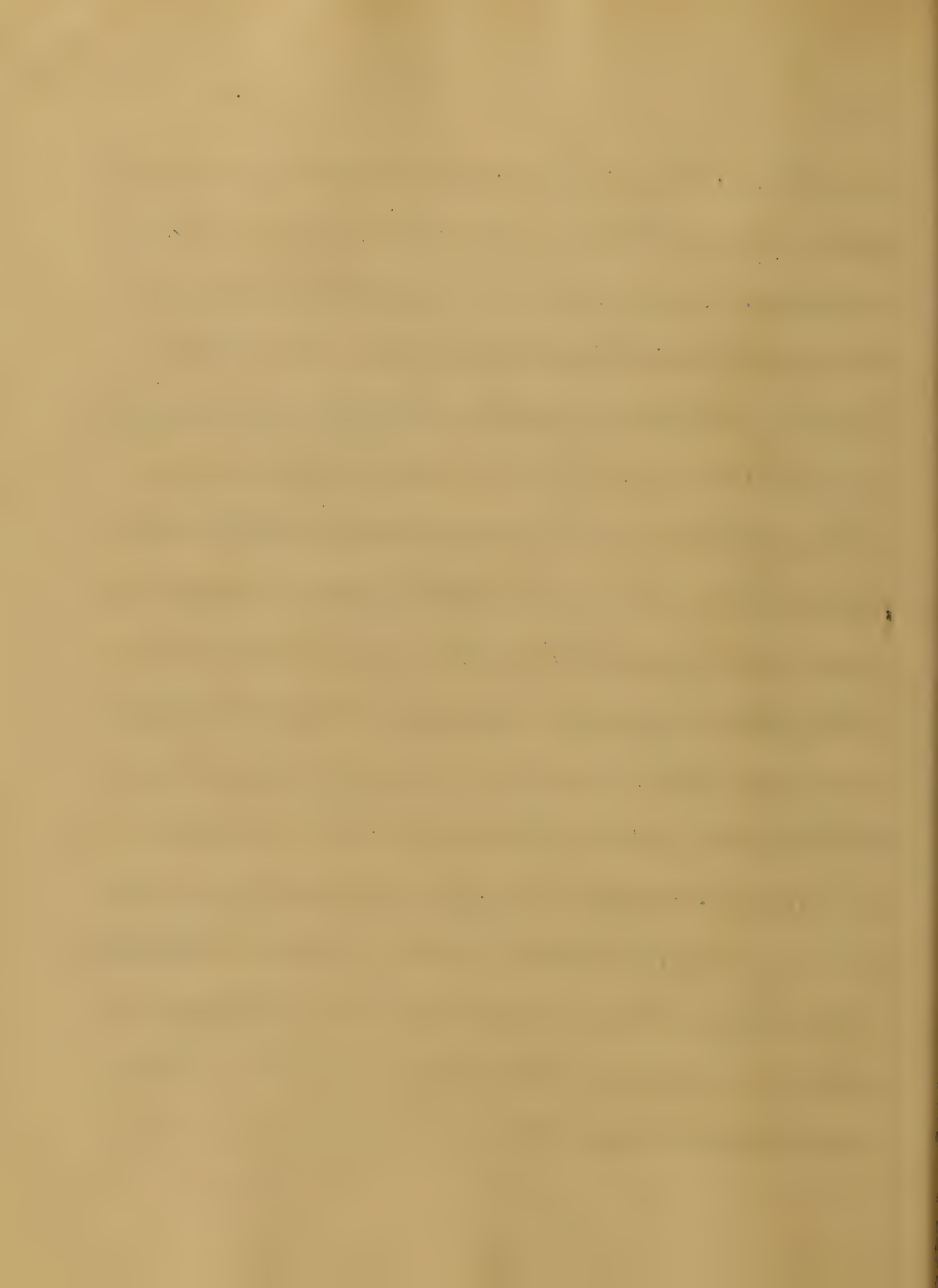
its beautifying properties.

But no glance at the attire of the  
father as they solemnly assist them-  
selves as their garments, the toga  
with its loose folds hanging gracefully  
about the body, hides the frame and  
muscular development out adds digni-  
-ty to the wearer. They are not so nu-  
-merous as the Grecian dress, but all  
are picturesque: the tunic with its  
varied hues rich in Syrian dyes, of  
colours as both pleasing and lasting,  
show to advantage the supple and well  
knit fibres of the man. The sandals,  
on the naturally shaped feet banish  
at once the idea of corns, bunions and  
other pedal malformations which out



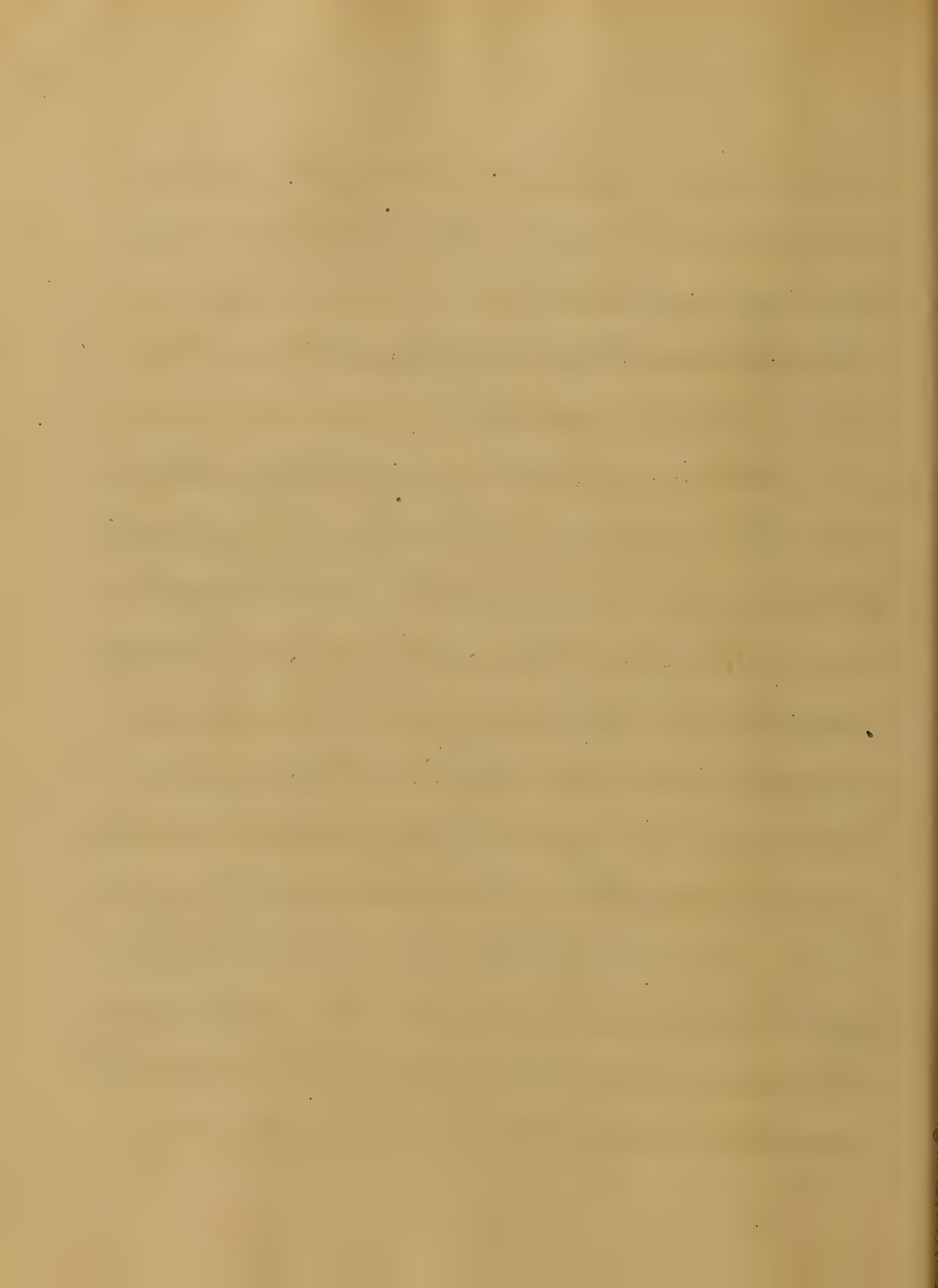
modern ideas of civilization have brought  
 upon us: allowing the brain of the shaman  
 to carry the highest intellect by a  
 chain of narrow, forced, shallow, and high  
 heels - distorting the natural smile of  
 both sexes into a homely grin.

The women are broad-shouldered with well  
 formed hips; no waist-shaped waists  
 meet our eyes, corsets are unknown,  
 their free, easy movements would excite  
 envy in the mind of many of our western  
 belles, who wear false smiles to hide  
 their periodical suffering. We see the  
 sake of that damnable goddess Fashion  
 who suggests the popular but ignorant  
 idea of encompassing nations in the  
 smallest possible limits.



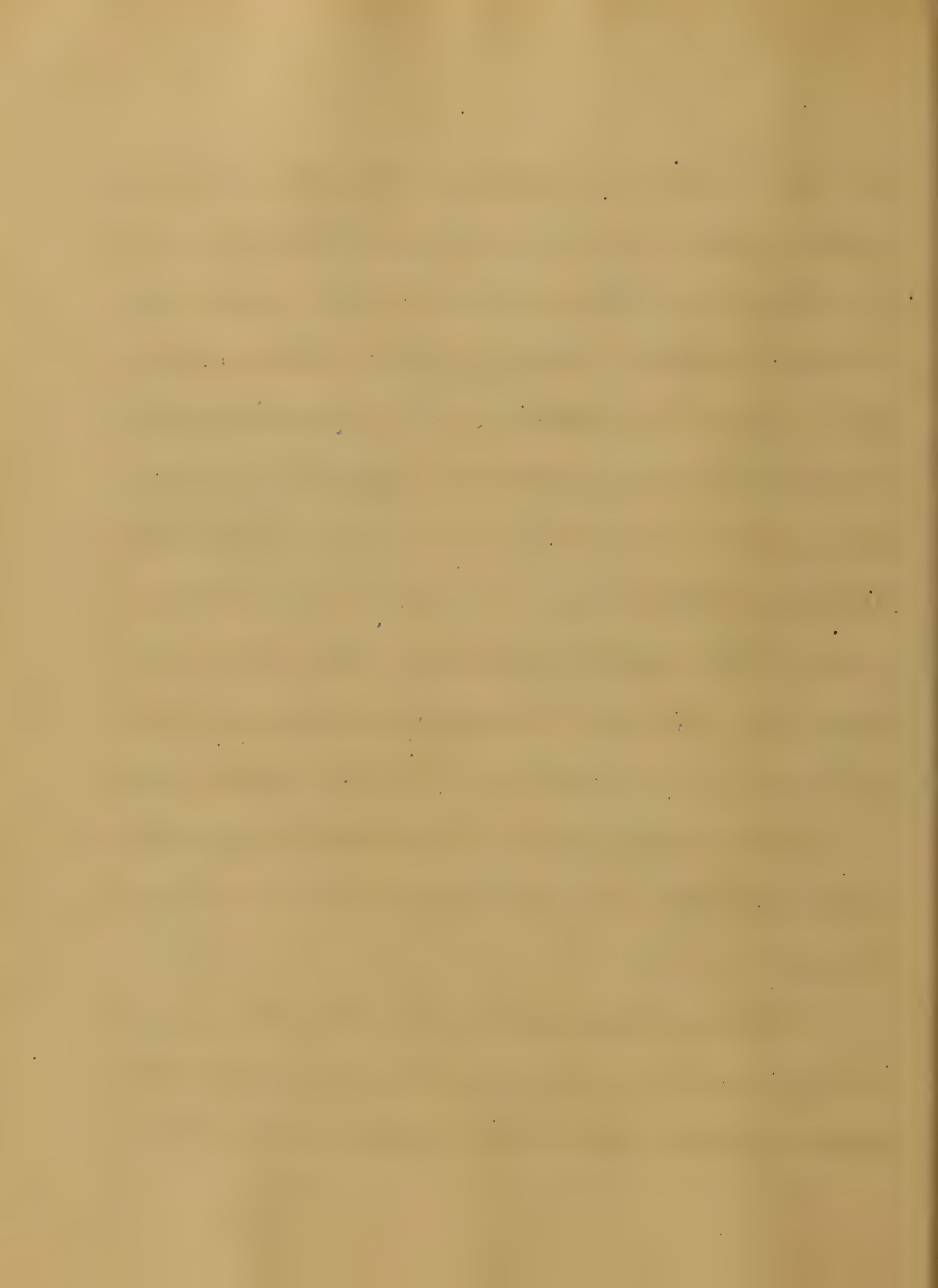
We mention this but casually, still  
the idea is worthy of study. Excuse  
the depression: we cannot dwell - our  
thoughts are too flighty - and we turn  
again to our business.

Now we see the youth with athletic  
frame indulging in the cold plunges that  
bring vigor and health with it. Ah,  
here the shrouded-skinners and drop-  
sick ones reclining on their bronze-  
ornamented couches indulging in  
hot-air and rejoicing at the first drop  
of perspiration that relieves their suffer-  
ing. Here are the more gentle and  
effeminate enjoying in a quiet manner  
the warm water bath from which they  
emerge to have their bodies soaked



with the strict preparation to the rubbing and anointing with oils and perfumes. These oils, which were many and varied, judging from the ampoures found, were applied by attending slaves while their masters turned languidly upon their couches or gasped with their companions on the latest scum-mill. We stroll down to the sea and here we find hundreds basking in the sun or bathing in the ocean and deriving vigor from its saline properties: happy, so we leave them in their happiness.

The aquaria, baths, fountains and artificial cascades together with the vast amount of lead pipes with stop-





placed here and there in each house, give good evidence of an ample supply of water and the numerous cisterns both private and public, show to what extent provisions were made for a large store for time of need. Perhaps it would be interesting to mention that today one of these ancient wells, the depth of which corresponds exactly with the level of the sea, still gives forth a supply of clear cold water.

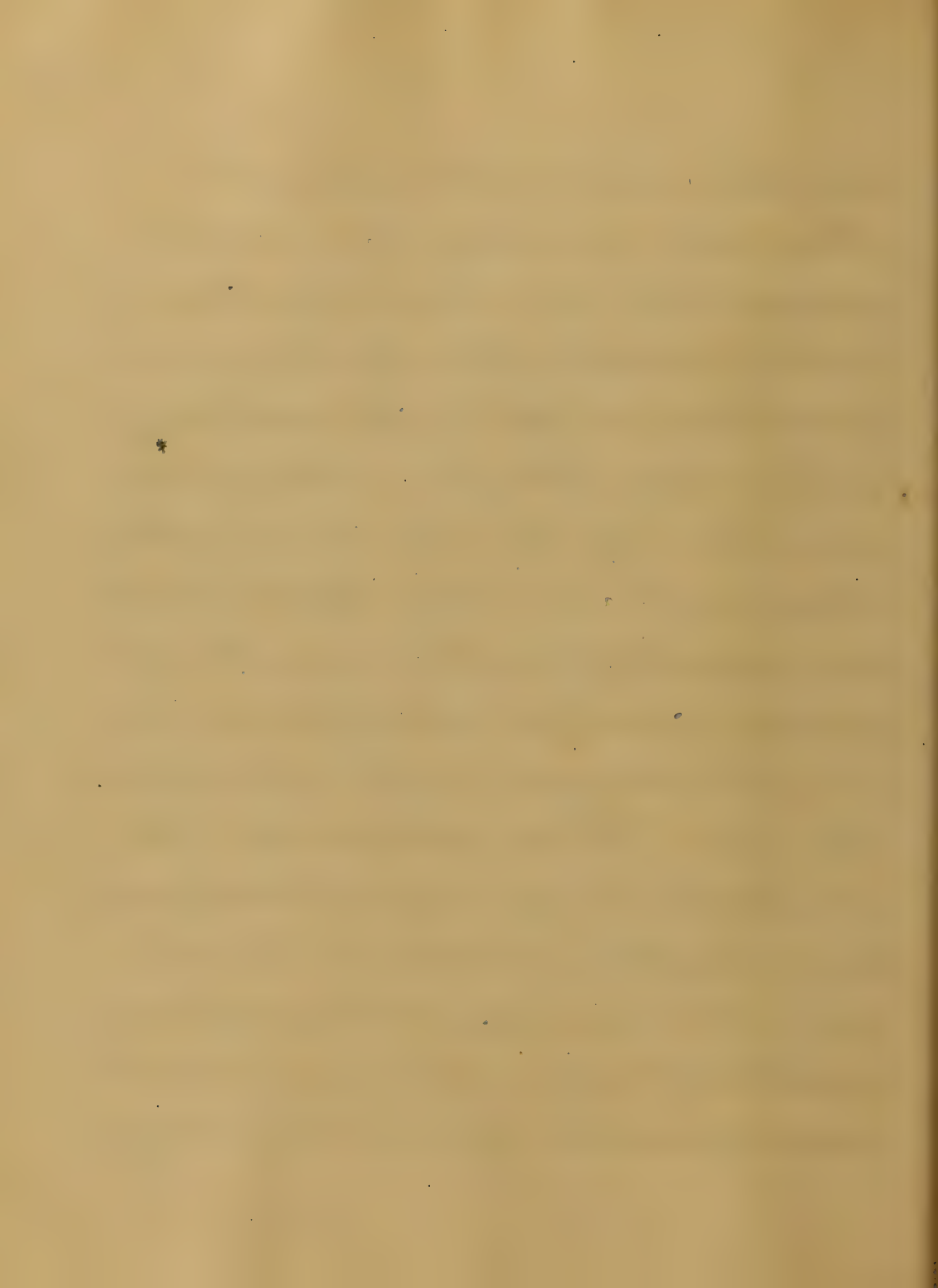
Thus we see the abundant provisions for water and the care taken to preserve it pure.

Having touched upon the first and very necessary, we will glance at the care these people bestowed upon the



— that great health preserve;

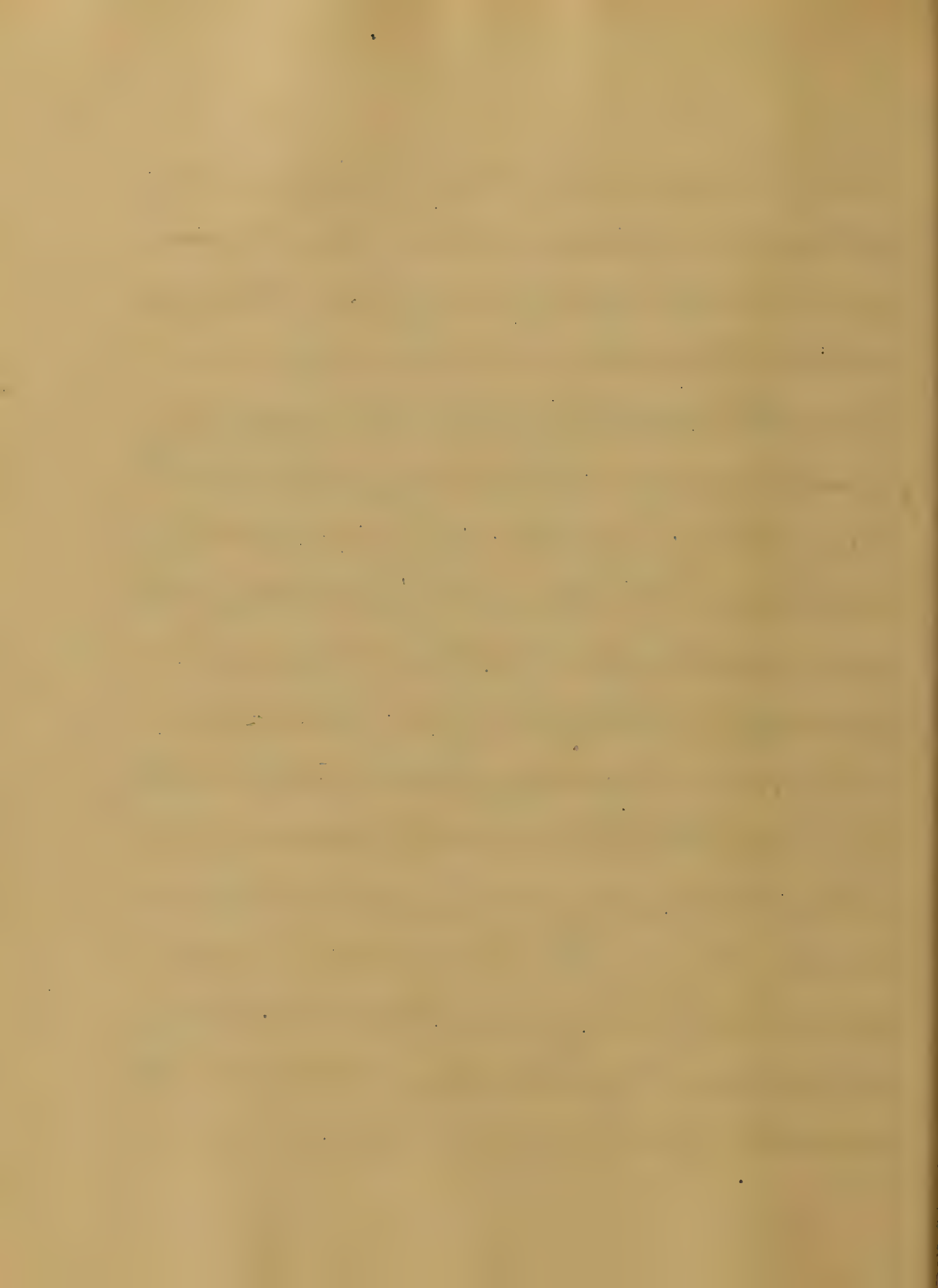
That the quarantine their will to prevent them from becoming contagious, is well shown by several well known instances which I will mention, in this case, I think you bearing the burden the great the city, while no stones are found within the city walls, it is equally true that emanations from such places do not extend and further deteriorate the air. It is well known that cemeteries are essential to our well being, their location outside of the city was not only a prevention of miasmatic infiltration, but a subsequent, another factor in preserving the air from becoming



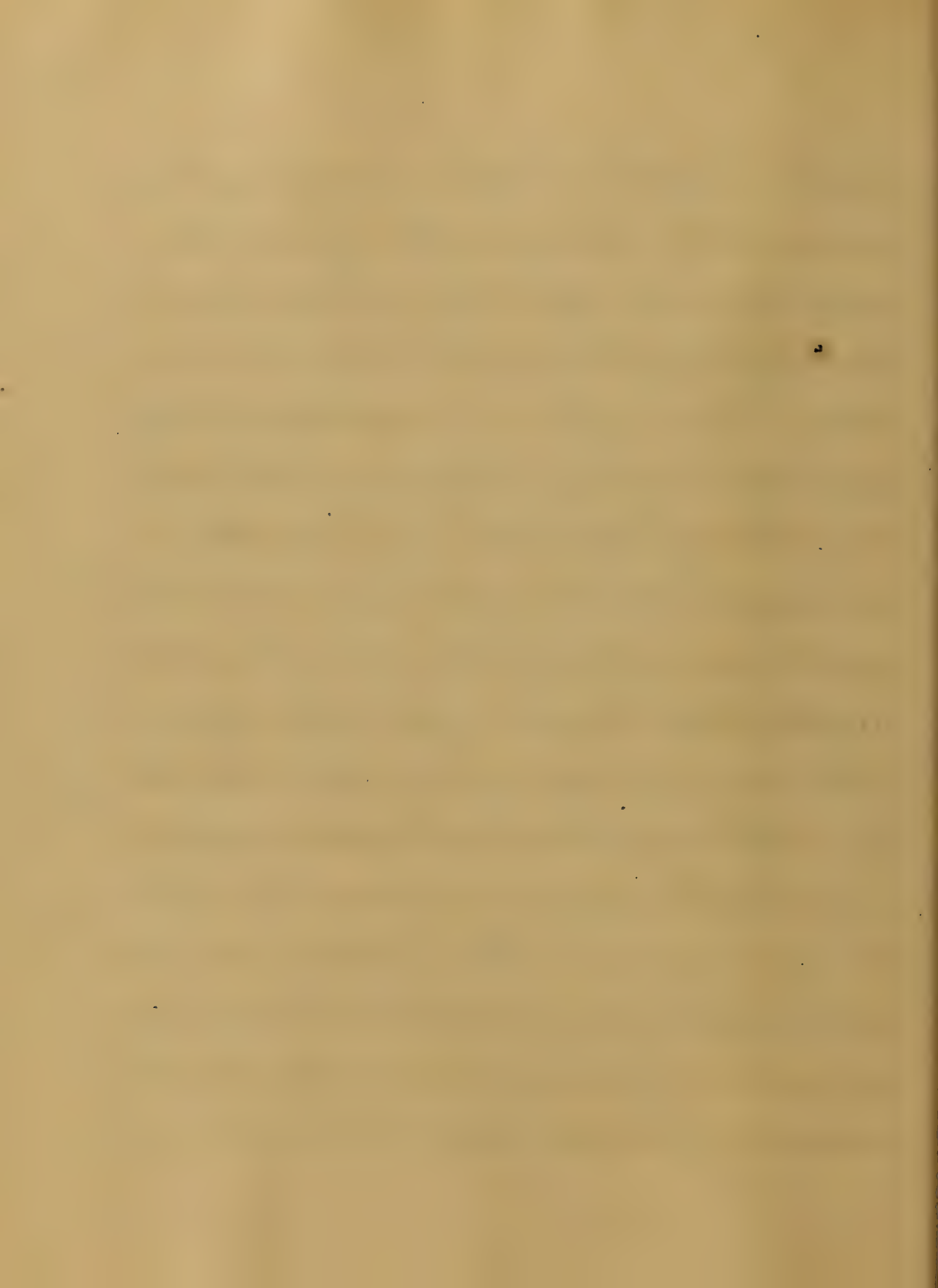
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Their houses were small and generally  
without windows; or when found, were  
only small apertures about the size  
of the transoms of our doors.

Another peculiarity is, absence of  
fire places and chimneys; only five  
have been found during the excavations.

The use of charcoal furnaces, the  
very small size of the rooms and  
absence of windows, all indicate a  
neglect in providing for a full supply  
of fresh air. Their rooms to be sure were  
not devoted to general use, each was  
used for a special purpose; and we  
can readily imagine that the family  
spent most of the day in the central  
courts which was unroofed. We do

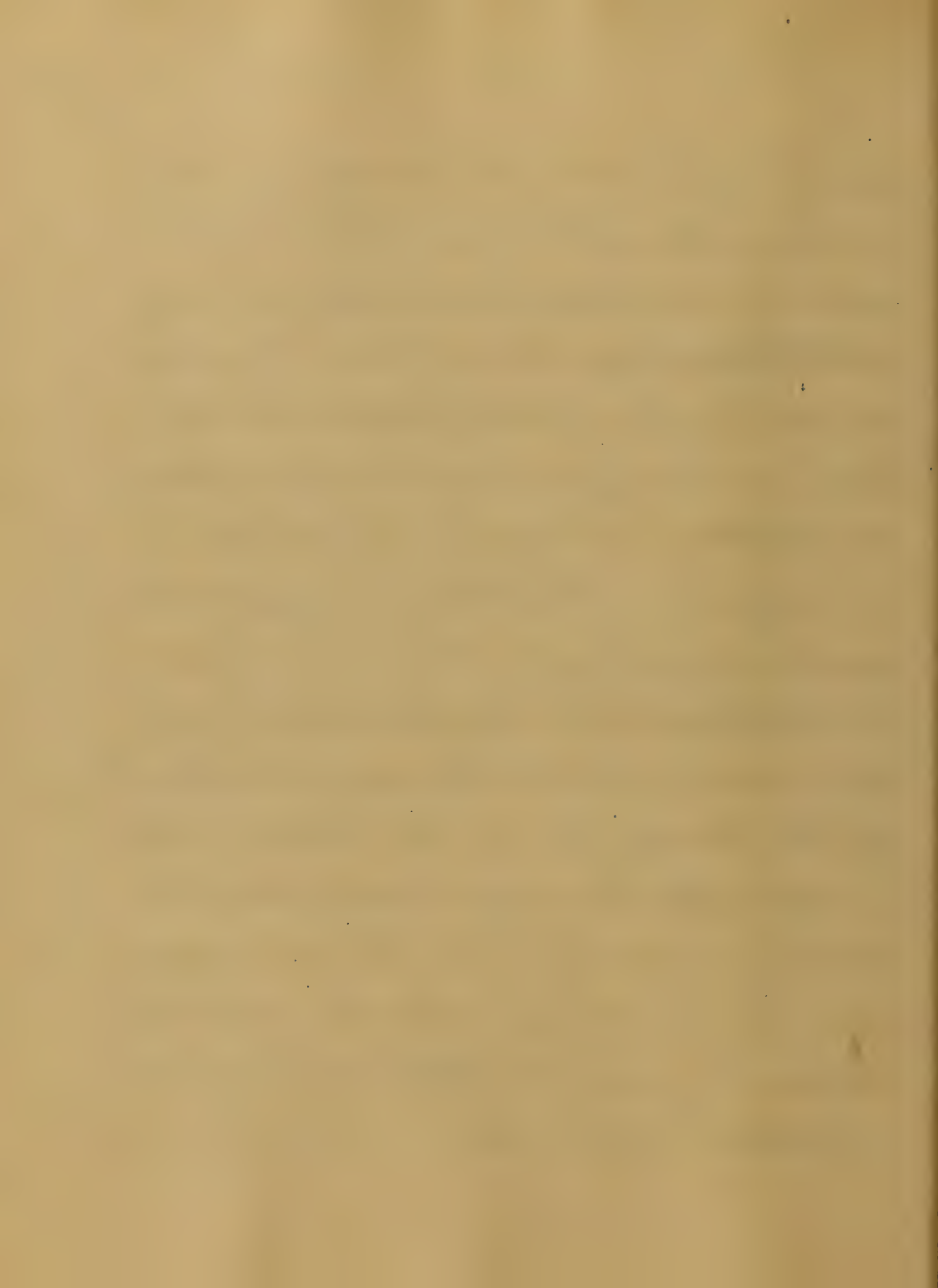


light ~~was~~ admitted was insuffi-  
 cient. This was another great over-  
 sight, for the sanitary influence of  
 sunlight, is too well known to dwell  
 upon here. The only natural light  
 admitted to their sleeping apartments,  
 was through the door; and as their  
 average bedrooms were more closets,  
 containing less than five hundred  
 cubic feet of space, you will agree  
 with me in condemning them; still  
 from their great number we would  
 infer that each was occupied by a  
 single person. These people may have  
 sacrificed light for the coolness and  
 immunity from flies which it has  
 secured; but the comfort was small





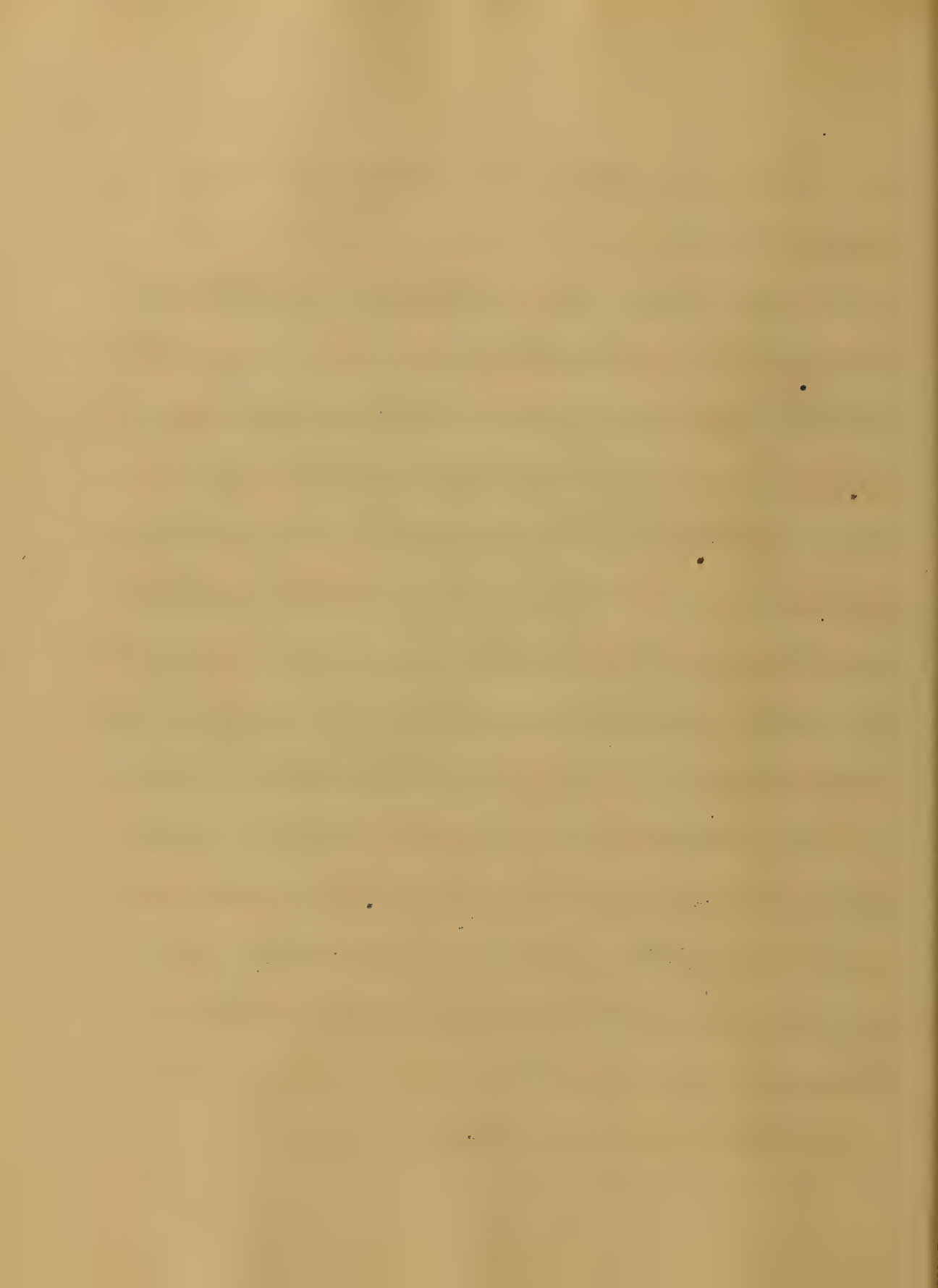
at a high rate. Even the windows were small, - not larger than our window rooms, - and were covered in; the only ventilation was through the top, which could be opened and closed at will thus admitting, at best, but a defective ventilation and a limited amount of light. That they were ignorant of the ill effects of impure air is again distinctly shown by the location of their water closet; this essential part of the house was in the kitchen, with no attempt at concealment; another faulty arrangement. The man was that there were similar to the earth closets or else they were emptied each day, the alfactores would insist upon this, but



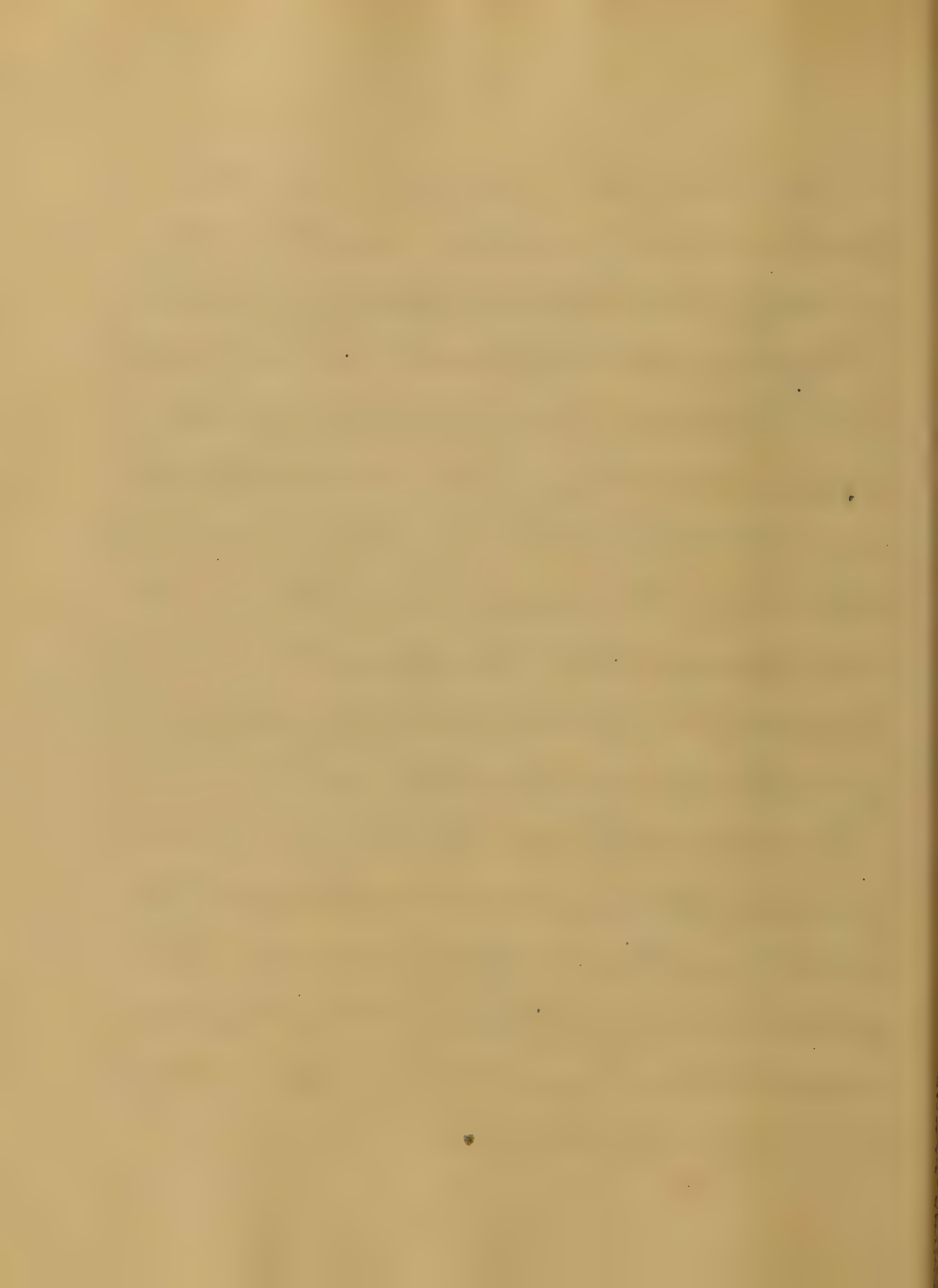
we will hope that sanitary arrangements  
shall be such.

The method of artificial light the  
ancient ones lamp with its flame  
floating in an open dish shaped recep-  
tacle, gave at best, but a feeble light,  
and notwithstanding the impregnation  
of such a faulty arrangement, with the  
santonium, still we are compelled  
to declare, while examining these simple  
and beautiful lamps, that the Peri-  
-ans were a wonderful people and  
well advanced in the arts and civil-  
-ization, though they were still in-  
-ant of one of the great sanitary  
laws ventilation

how we in part a modern way



- the excuse for the medical articles  
 people in not providing more facilities  
 for a more liberal supply of medicine?  
 It was a most deplorable report! still  
 I think we can point to some features  
 about their household and habits that  
 may, perhaps, throw some light upon the  
 cause of this complaint. We must  
 not forget that the climate is a mild  
 one, and we know that they spend the  
 greater part of their time out of doors.  
 This conviction is supported by several  
 drawings, handed down to us, which  
 picture streets well provided with  
 awnings, that protect them from the sun  
 rays falling on as they saunter  
 through the city.

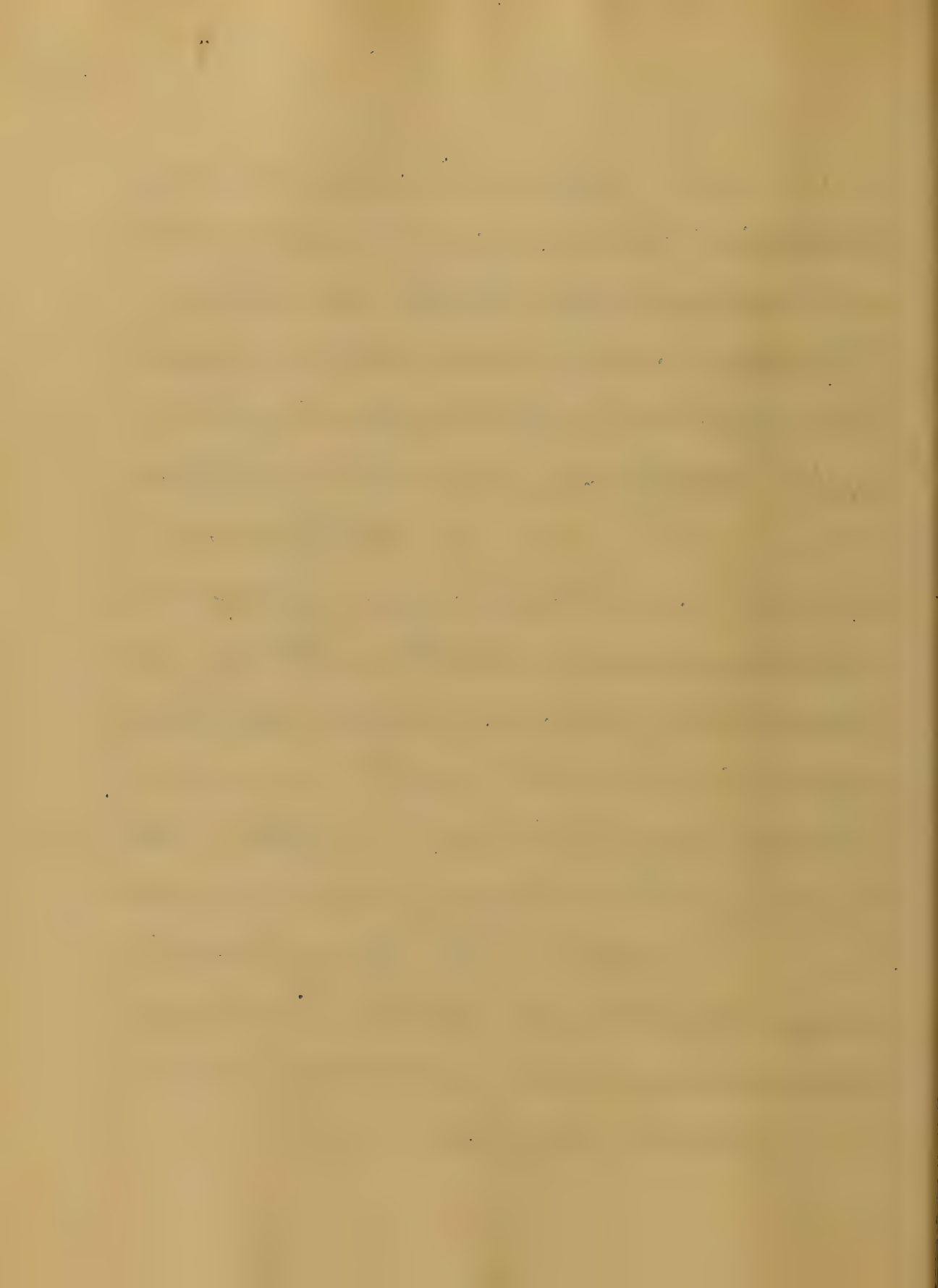


Again we cannot help noticing the many stone seats, placed at convenient distances that the weary might rest or the indolent lounge, showing that the comfort of the citizens was not neglected.

When we note the smooth worn surface of the numerous seating places, we know they were not ignored, but were in constant use.

The hanging balconies are still another proof of their indulg in the open air.

Again the Forums, Basilica, the temples of Venus, Juno, Mercury and others, together with the ~~the~~





and public gardens, were in the  
opposite place for the benefit of the  
frequented as well as the less frequented

Again, in the courts, the fountains  
whose jets of sparkling water break  
and running down over miniature  
cascades, helped greatly to keep the  
air cool and absorb many impurities  
and in the naturally dry climate, kept  
the atmosphere of the house at a healthy  
point of saturation. The more no  
exercise, at least their production of  
fresh air was poor, and so we learn  
our comments concerning their im-  
-provements, but with the hope that  
by increasing the air supply, these and  
other means employed, that to



expressed in that most terrible and  
an object.

That the moral state of people  
was that could not say that they  
were good, would be perhaps, in fact  
to mind superior to mine. I know  
the relics, which the city so richly sup-  
plies you can decide, as will as I  
whether they were essential and to mind  
influence on the mind and heart.

This passion, and crimes this suffer-  
-tunes and shades of life cannot be  
dedicated, but we can stop for a moment  
and adjust a line to the chains and  
can make it real. The frescoes and  
art decorations actually show me that  
the followers of Christ were men



is also near the river ship.

Their devotion to Venus is also well  
 proven by their immoral practices  
 which decorate the walls of their houses  
 of prostitution. That prostitution  
 was not suppressed, there is no doubt;  
 whether under the surveillance of the  
 city authorities is doubtful, but we have  
 reasons to believe that it was, from the  
 regularly arranged houses, and the  
 shellie signs, made of stone, which  
 are so plainly exposed to public view,  
 indicative of its constant existence.  
 Also from the fact that the name and  
 address of one of these prostitutes with  
 the price of her favors were found  
 scratched on a public bench of the city.



That other depredations belonging to  
 the same class were practised, is  
 clearly traced by the drawings and  
 bronze, that are preserved to us, and  
 their injurious effects on the general  
 health, are also well shown by these  
 evidence alike. The impoisonment can  
 readily supply what is left out by a  
 close examination of the contents of  
 the secret gallery in the Neapolitan  
 museum, to enable the curious to inves-  
 tigate them at length, which neither  
 time, space, nor inclination, will allow  
 on the present notice, but their bearing  
 & bearing on the moral health of the  
 inhabitants, is the reason I touch  
 upon them.





That the Pompeians regarded amusement  
 as conducive to good health, we know  
 and one is impressed with the beautiful  
 provisions made for the enjoyment of their  
 citizens. We not only find the city  
 possessed of a capacious tragic  
 theatre presenting to the stranger's eye  
 every sign of long and continuous use,  
 but a *theatre comique* - the size of which  
 shows no mean allowance for all whose  
 leisure may have led them to spend a  
 few hours within its walls. We still  
 have the admission tickets as if they were  
 fresh as when first used.

The structures now stand in ruined  
 dignity becoming the objects for which  
 they were designed, thus exciting



seats whose own section leads to  
 the imagination the long deliberations  
 of favor or primacy of admiration  
 while the deliberated steps present  
 a feeble effort to please, as though  
 pleading for an echo or phantasmal  
 from the din and dark colored walls.

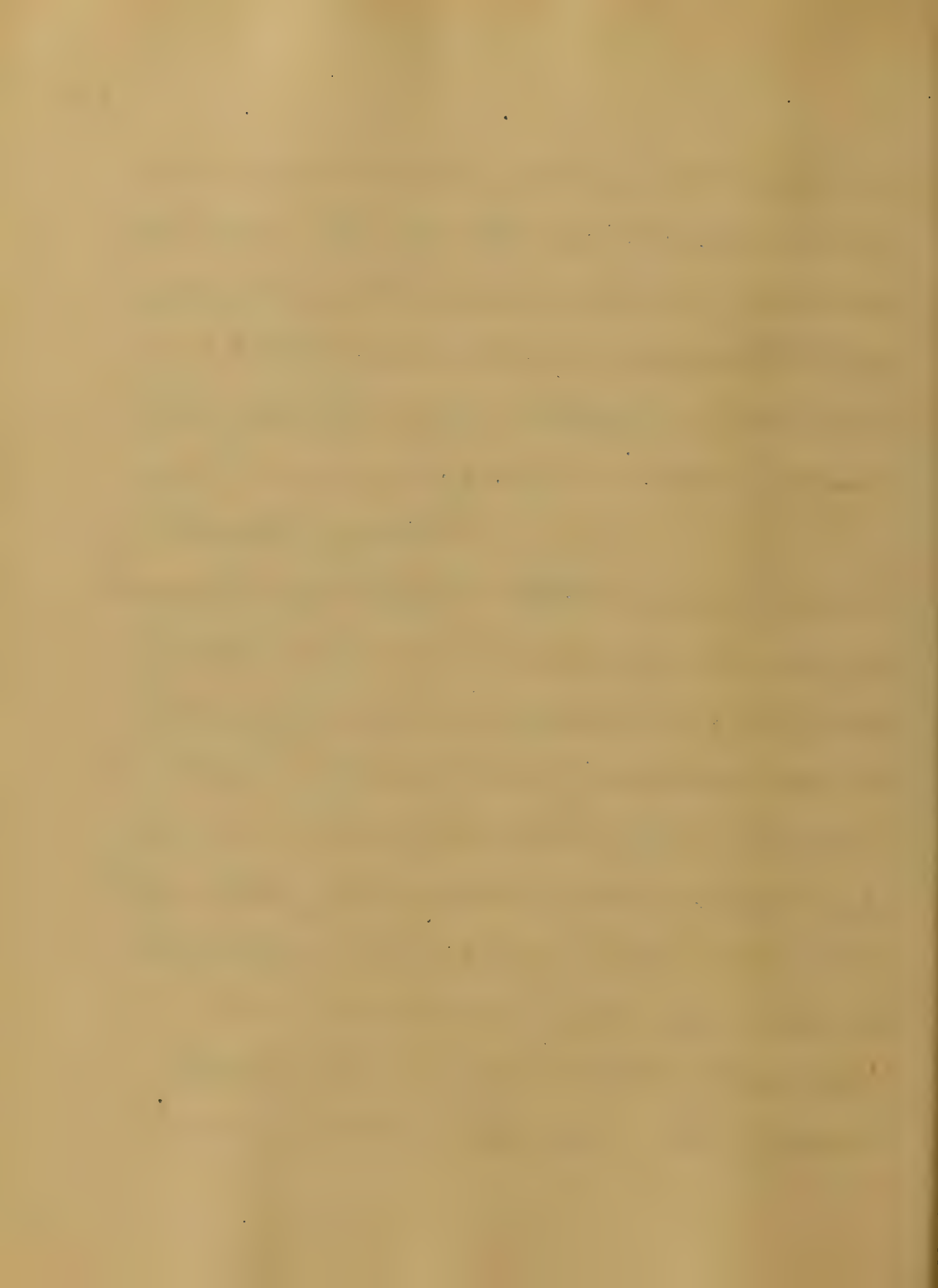
Though the theatres are in keeping  
 with the amusement of the present  
 century, it might be well to add  
 that the pleasures of the people did  
 not stop at so mild a pastime as play,  
 the skilled gladiators with swords of  
 steel, have fought in the amphitheatres  
 of Pompeii, and here mingled with  
 the earth, the life-blood of the antipa-  
 onist whose dying moments were



hattered by the noise of his fall,  
 while the appreciation of his victory  
 shown by the audience, the measure  
 of enthusiasm and demonstration  
 could be equalled only by the fortu-  
 nity of such a scene.

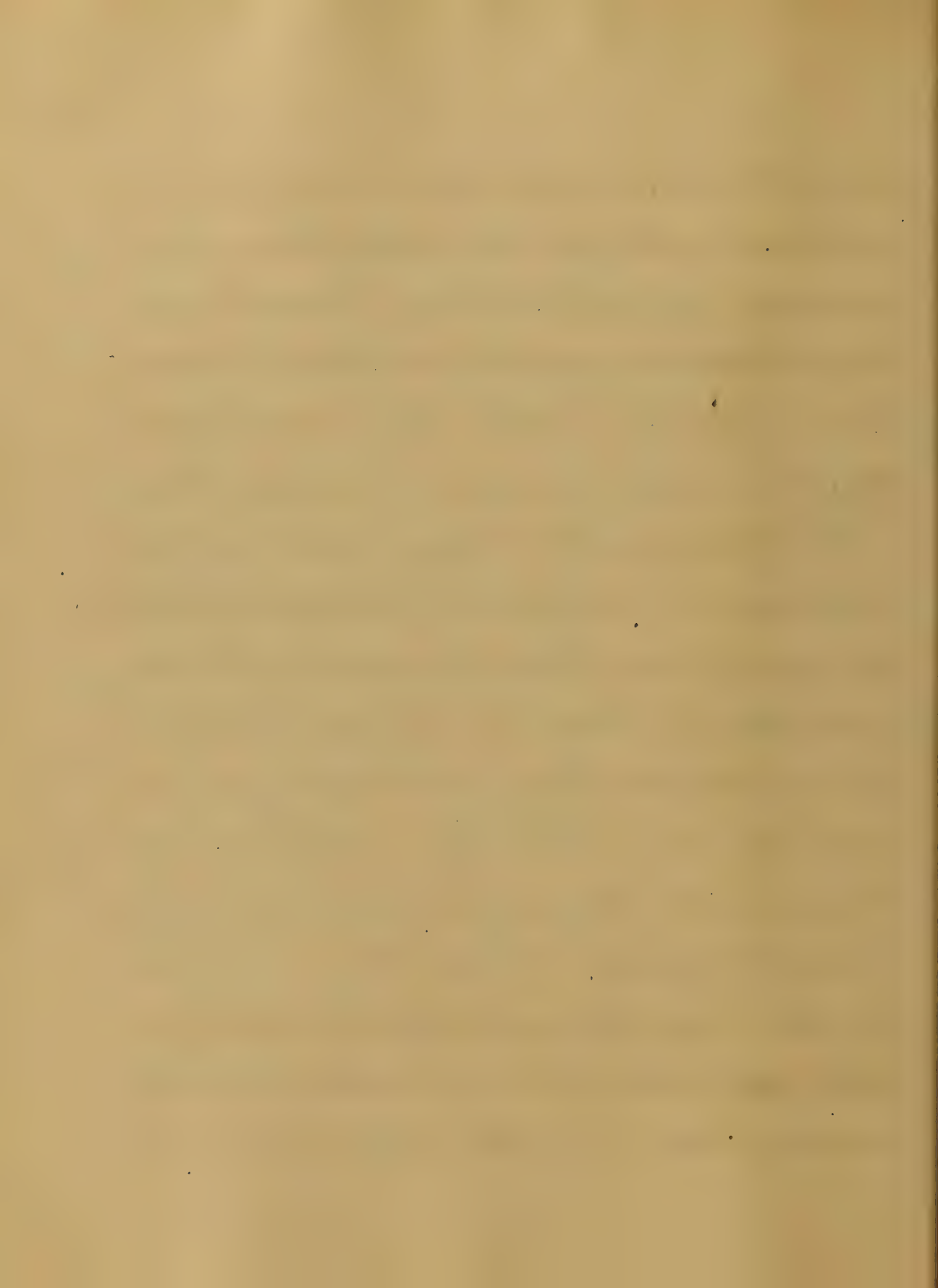
The can dwell

but a moment from the food of it  
 for it was the same as we see today,  
 we are fortunate in having preserved  
 to us picturals just as they were pre-  
 served to be eaten, a picture which  
 perhaps, will not be entirely clear  
 what one eats indicates the character  
 of the man physically.  
 'Eggs, fish, oysters  
 and dormice; the last not to be



were fattened in glass jars and served  
 a luncheon: Onions, carrots, beans  
 raisins, plums, cherries, figs, pomero-  
 -ates, oranges, grapes, mustard, seeds  
 corn, wheat, millet, olive oil, wine  
 pacht, bread of coarse ground flour.

This, you see, provides ample variety  
 to insure a substantial meal, besides  
 the many varieties of game vegetables  
 and fruit, which are shown by the  
 mosaic paintings indicating an  
 abundance. That they were fond of  
 eating and were gourmands we know  
 from the legends which they indulged  
 in; but as these were principally  
 with the rich we can hope that the  
 masses were not addicted to the same





of eating too much. though we must acknowledge that at their meals good disposition and hilarity prevailed, and I cannot but think that the grinning skeleton that they introduced to remind them of the uncertainty of life, bidding them to enjoy the present, was surely beneficial in many respects. cheerfulness begets a good digestion and as they indulged in but two meals a day - the principal being dinner, I saw with them in devoting time to it, and banishing all care.

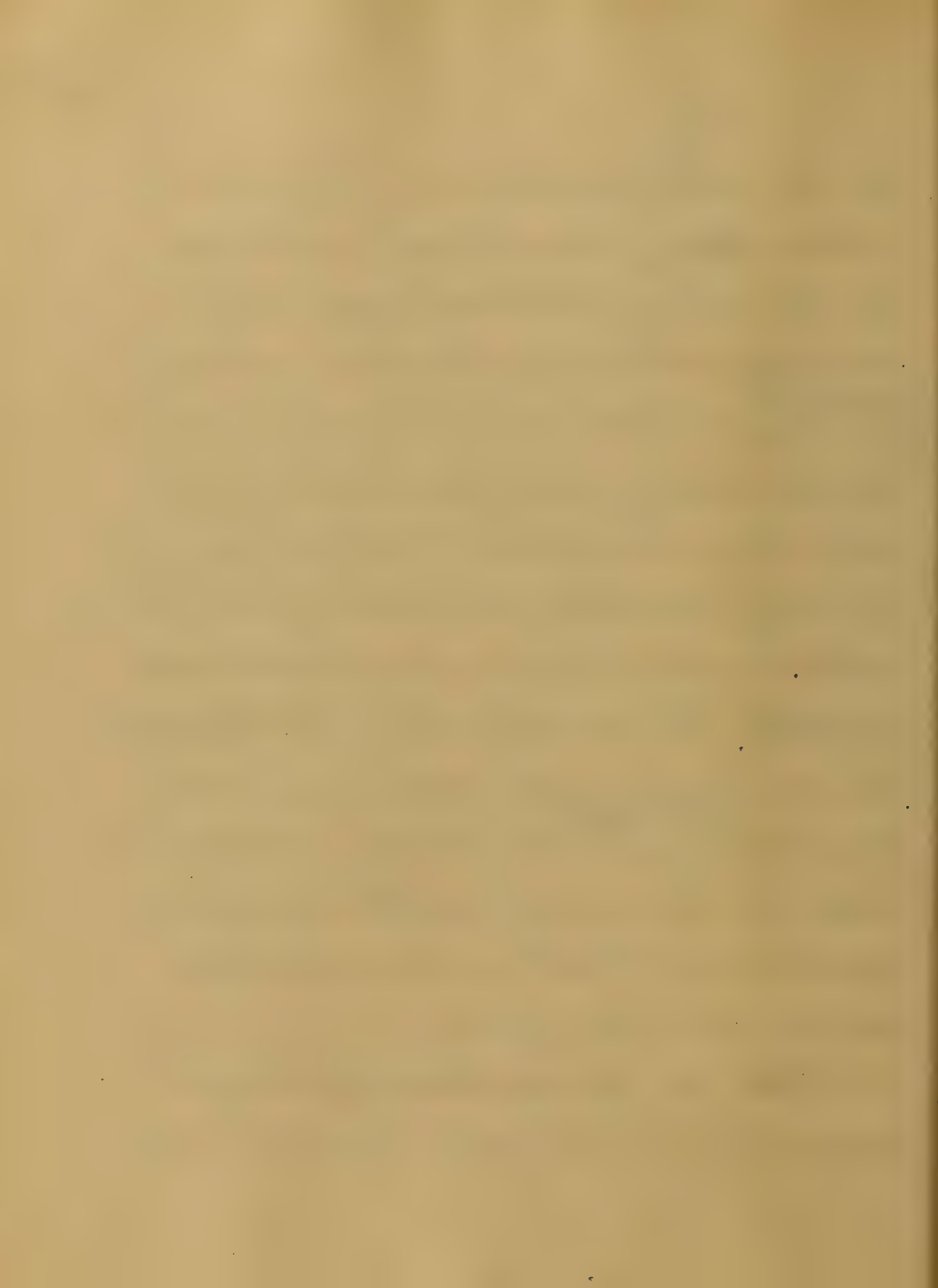
Their reclining on cushions adorned with carpets of flowers, and still further entertained by music during meals, no doubt was a great pleasure.



After to tooth health and happiness.

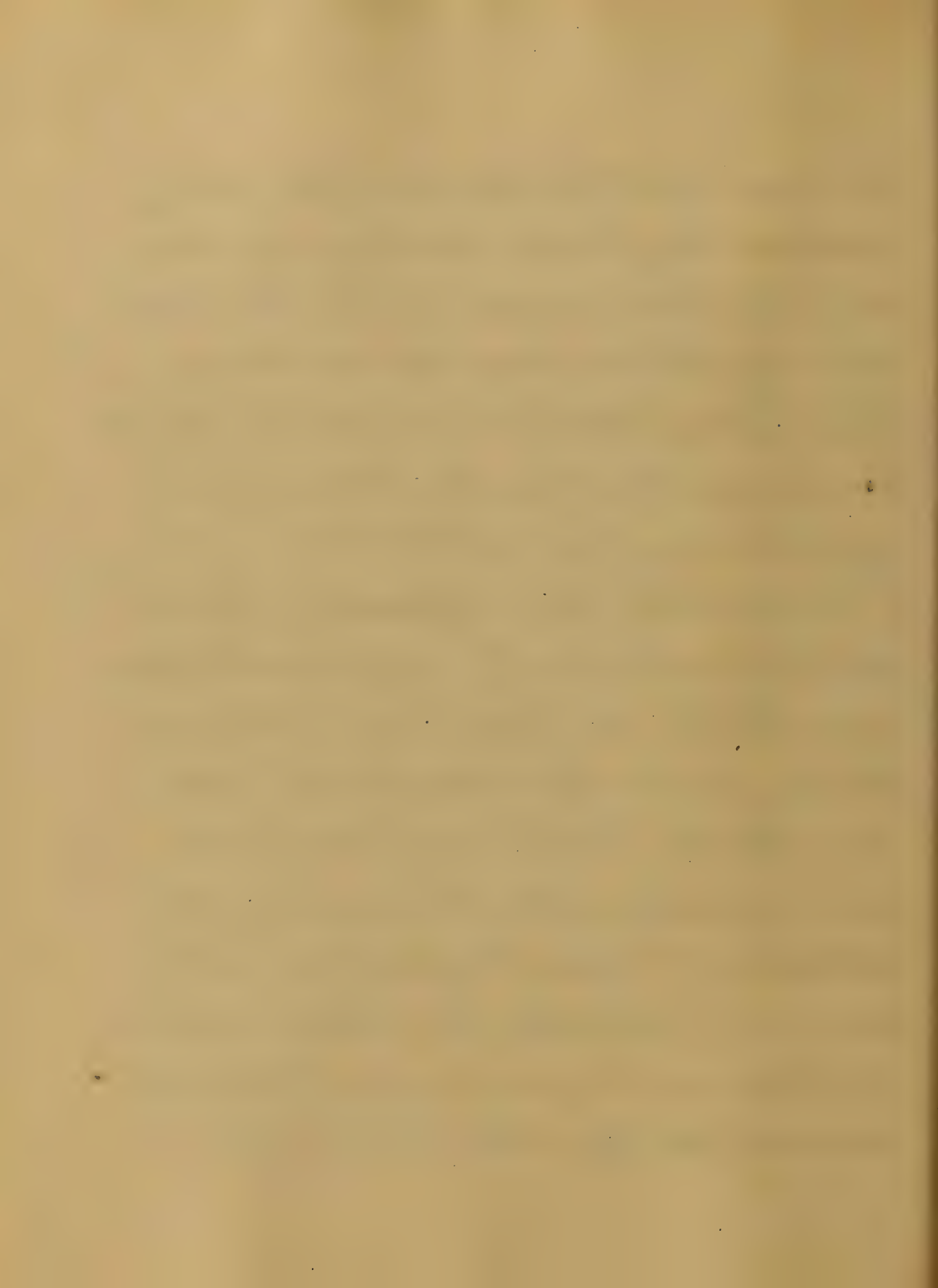
One thing worthy of mention is the care bestowed upon their cooking utensils; they are not only graceful in shape, but made of bronze and lined nearly always with silver or gold, to prevent the deleterious effects of corrosion which such vessels are apt to produce. I will also mention the general use of tooth picks which is one of the great means of preserving <sup>the teeth</sup> and preventing decomposition in the mouth with its attendant bad breath and destruction action on digestion.

With an indescribable feeling I pause before the surgeon's house and draw



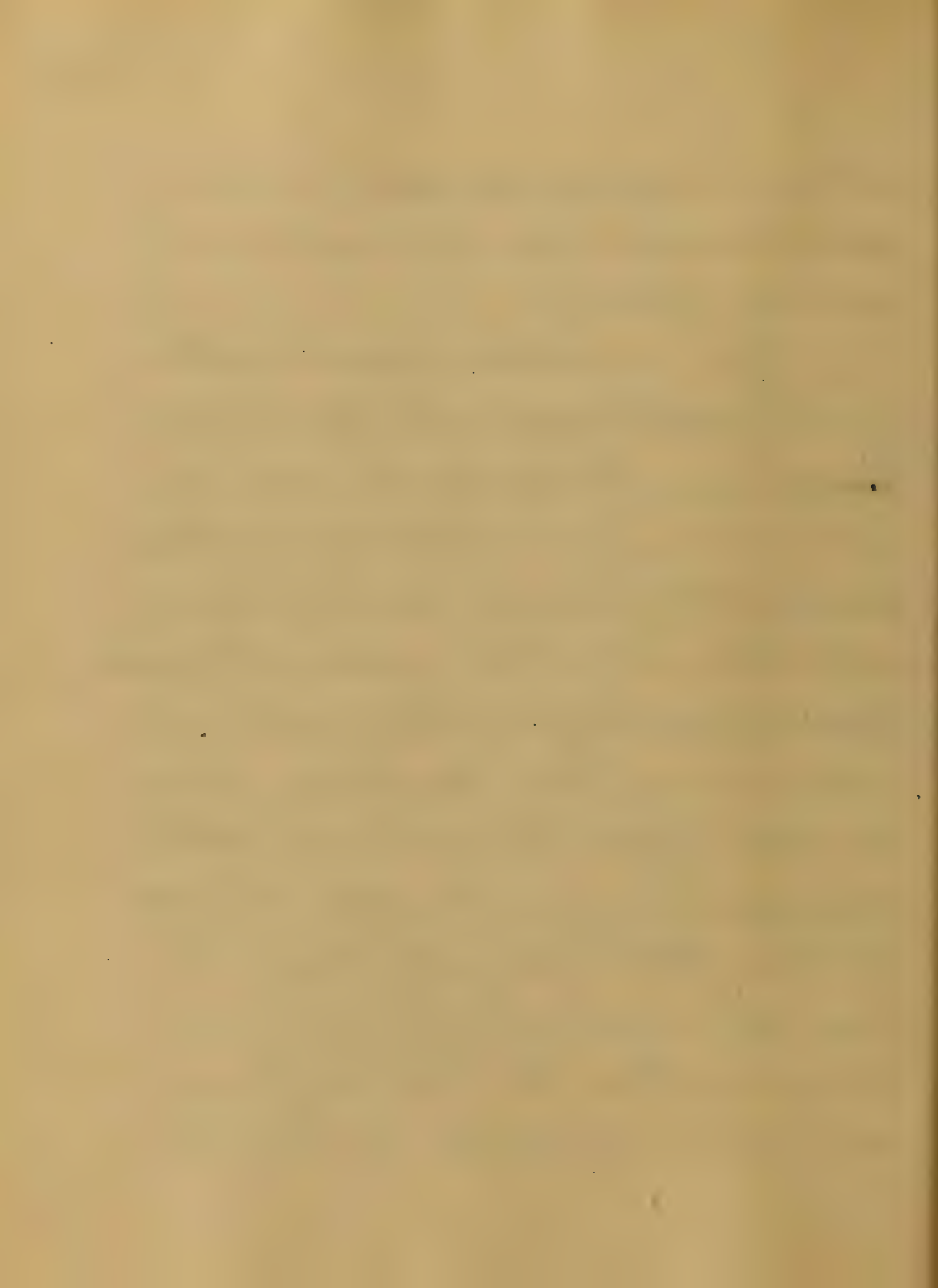
I cross the threshold I reverently  
 uncover my head, knowing my ina-  
 bility to give expression to the thoughts  
 the subject deserves. He has been  
 crowned by worthier hands than mine!  
 his praise has been sounded in chord  
 of harmony and gratitude!

I will only take a passing glance  
 at his instruments which are before  
 me. While we find his medicine  
 boxes with the crude drugs, each  
 in separate apartments, we find  
 them graced with the dignity of  
 catheters, bougies, vaginal as well  
 as anal specula, but little inferior  
 to those of the present day. Knives of  
 various shapes and sizes together



with seton needles, pincers, and tooth forceps and also actual cautery irons.

I stand before the altar in the temple of Hygiea with the two Gods before me; Harpocrates seizes me with such a force that ere resistance flashes through my brain, I find myself within his spell and with bowed head I pass before the grand and noble Aesculapene, pausing but a moment before the kind and gentle Hygiea, lay my notes upon the altar at their feet and gently pass out from the temple, happy to have stood within the shadow of such noble Gods, and as my thoughts

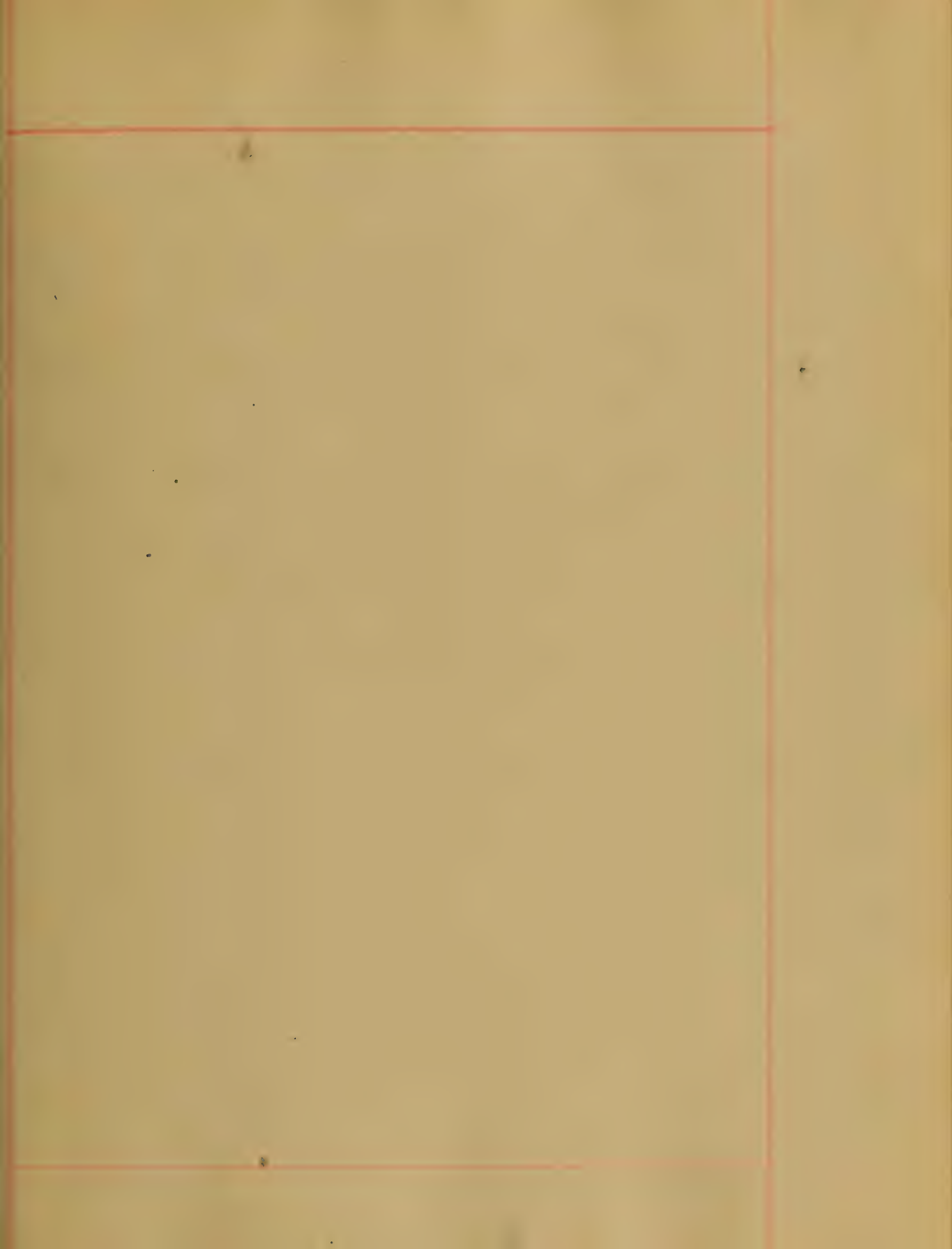




run thick and fast with memories  
of the past, the stern and majestic  
Jupiter meets my gaze; seated on his  
throne, his silent and dignified look  
recalls me to myself. So I promise to  
perpetuate his name and honor my  
calling, if Providence and devotion con-  
fer upon me the key to the mysteries  
of that ancient Cabalistic sign.

Ry.







An

Inaugural Dissertation

on

Intermittent Fever

submitted to the examination

of the

Provost, Regents, and Faculty of Physic

of the

"University of Maryland

School of Medicine"

for the degree

of

Doctor of Medicine

or

J. C. Seymour Bowen

1881

Sharpsburg - Maryland



Gentlemen of the Faculty, Paris.

It is with pleasure that I present for your consideration and examination a Thesis for the degree of Doctor of Medicine.

For my Inaugural Dissertation I have chosen Intermittent Fever, a disease the history of which reaches back to the earliest period of medical science. It is a disease that extends over that vast belt of countries from the  $63^{\circ}$  north latitude to the  $53^{\circ}$  south latitude. Probably there is no part of the temperate or torrid zones in which a greater or smaller area of country may be found where malaria is endemic.





and where it prevails to a greater or less extent every year.

The virulence of the disease increasing, as we approach the equator. In America it is quite common along the great Atlantic sea-board, as far north as Boston; along that vast scope of country drained by the Mississippi and its tributaries, the valley of the Sacramento on the Western coast; as well as the Gulf states and Mexico on the South. It prevails along the western and southern coasts of Europe; along the the coasts of Africa, among the western districts of Asia, the South



American low-lands, and among  
the inhabitants of the islands of  
South Pacific.

Causes. The great etiological  
factor is malaria. But what  
malaria is no one has as yet  
been able to isolate or define.

Dr. Salisbury, of Ohio, from his  
own observations, believes the specific  
cause to be in the sporules of certain  
algae, a species of *Fucoxidiae*.

This has not yet been proven  
by other experiments, consequently  
cannot be accepted as the definite  
cause. Malaria is also called  
"marsh miasm", on account  
of the abundance of this poison



in the neighbourhood of marshes. Some marshes do not produce the poison. Especially those that are studded with timber, as the "Dismal Swamp," with the luxuriant growth of the cypress tree.

The occurrence of malaria is especially common in marshy regions, and the more extensive these are, the more frequent and severe, as a rule, will be the disease.

Marshes are influenced in the production of miasma by the quantity of water, the rapidity of its evaporation, with a mean summer temperature of  $60^{\circ}$  and lasting for two or more months,



along with the decaying organic matter which seems to aid materially in their production.

The froison is said to be more noxious in marshes produced partly by salt water. Especially delta lands. This is believed to be due to the action of salt water, in killing the fresh water plants, and thus producing a larger amount of decaying material.

Agriculture with her draining and ditching, is the greatest enemy to malaria. Therefore malaria is less common in a thickly settled community than in sparsely inhabited regions where





cultivation is neglected, where the ground remains untilled, and a luxuriant native vegetation is abandoned to its own destiny.

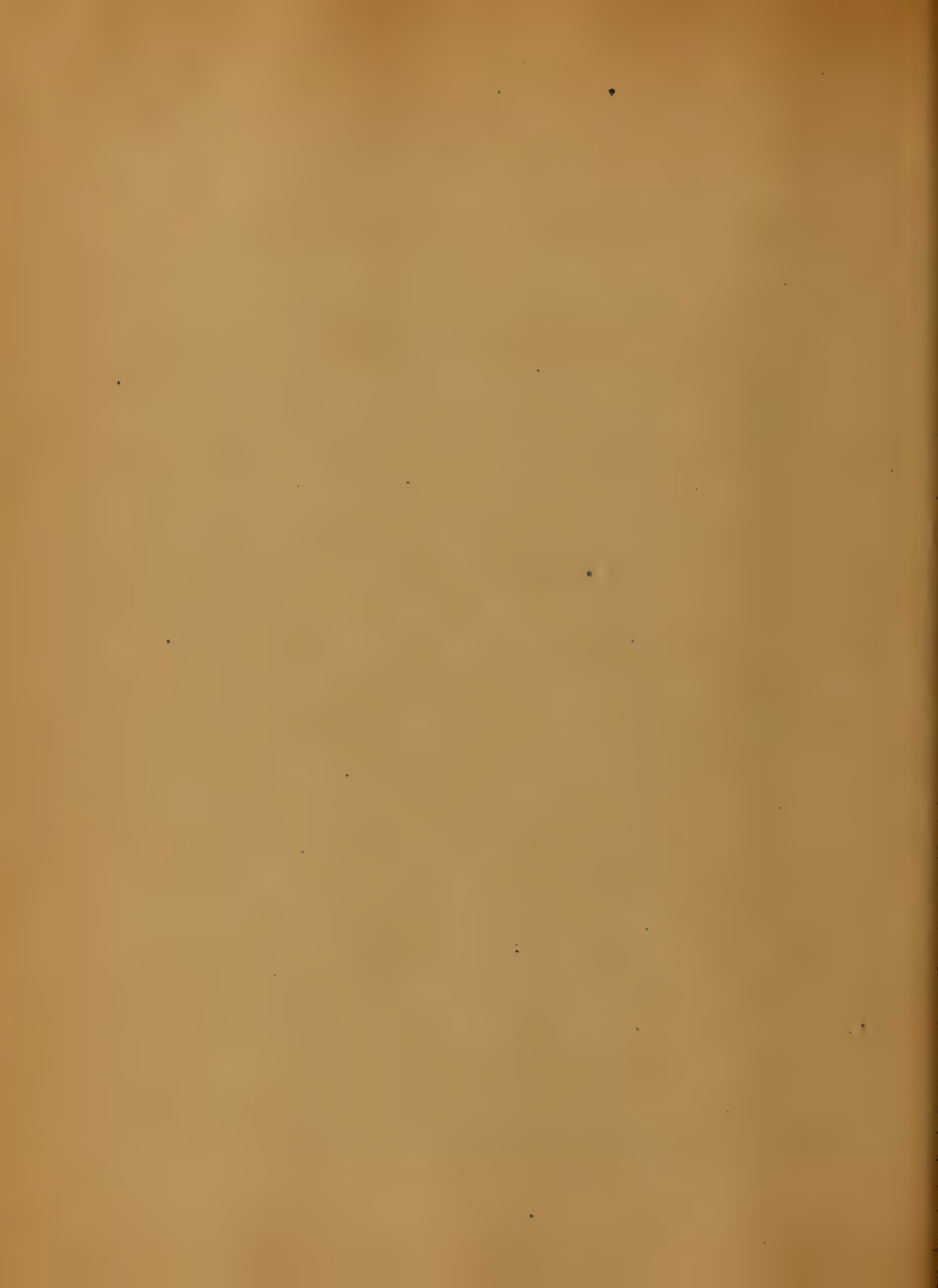
Damp bottom-lands, and regions that are exposed to an annual overflow, such as the deltas of rivers, with heaps of mire thrown upon their banks, as well as lands with clayey or alluvial soil, from miasms as well as swamps. The working of virgin soil, by which process the animal and vegetable organisms, hidden in the ground and brought to the surface, to rot under the influence of warmth and air, thus not only affecting



the laborers engaged in such enterprises, but the inhabitants of the surrounding country, far and wide, are attacked with malaria.

Heat is another great factor in the production of malaria. It is furthermore well known that the development of the disease usually takes place during the summer months, and that it disappears, or at least fewer cases arise, during the winter, unless the winter be very mild. The type and intensity of the fever are usually in pretty direct relation to the temperature of the atmosphere.

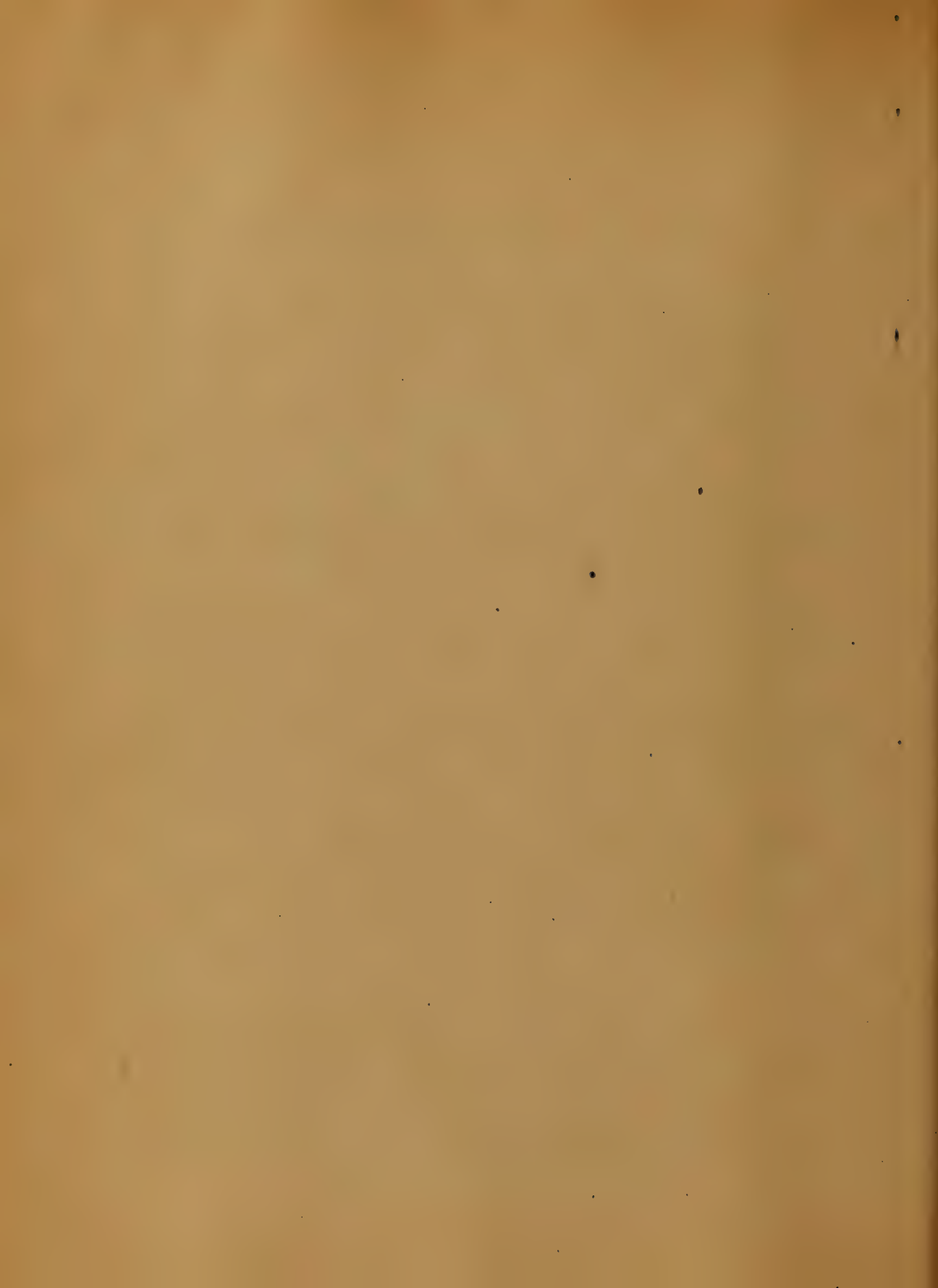
So then in summing up



These facts, the conclusion we must  
come to, is, that the disease is one  
almost confined to the spring, sum-  
mer, and autumnal months, and  
the most common of these periods  
for its occurrence is the autumn.

Intermittent Fever, attacks all  
races and nations with the same  
violence, excepting the negro race  
who are less liable to be attacked by  
it, both in their country and abroad.

Man is liable to be infected  
from infancy to old age, but the  
forms are varied. In children  
we have intermittent cold troubles;  
quotidian or tertian forms of inter-  
mittent in youth; while in middle

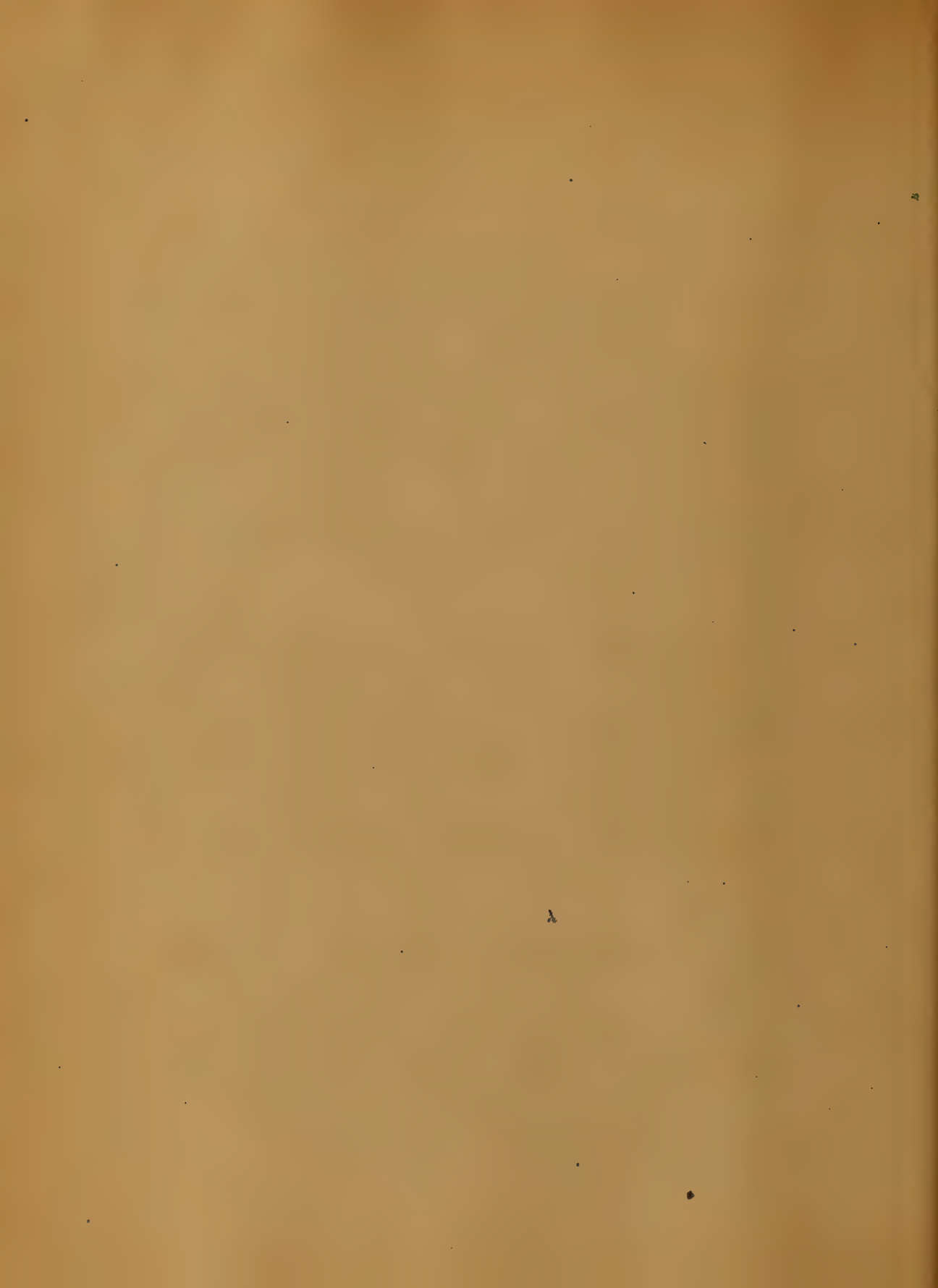


life, when it is most common,  
we meet with all forms; in old age  
the pernicious form is most common  
when once infected.

Men on account of their being  
more in contact with the poison  
are more liable to the infection  
than women.

Hunger, thirst, loss of sleep, tidily  
and mental exertions, fright, anger,  
exhaustion, and fatigue, must be  
regarded among the predisposing  
causes.

Intermittent fever is characterized  
by the occurrence of febrile paroxysms  
in regular succession, and by the  
absence of febrile movement.





between the paroxysms. The distinctive feature being the intermission. In its simple form it is rarely attended with danger to patient when under proper treatment.

When the paroxysms occur day after day, it is of the quotidian form; tertian when occurring on alternate days; quartan when on the first and fourth days; there are, also, quintan sixtan septan, and octan, which occur respectively on the fifth, sixth, seventh, and eighth days. The latter is not unfrequently met with. Sometimes two distinct paroxysms occur



on the same day, and hence we have double quotidian, double tertian, &c., So we may have a double paroxysm of either type.

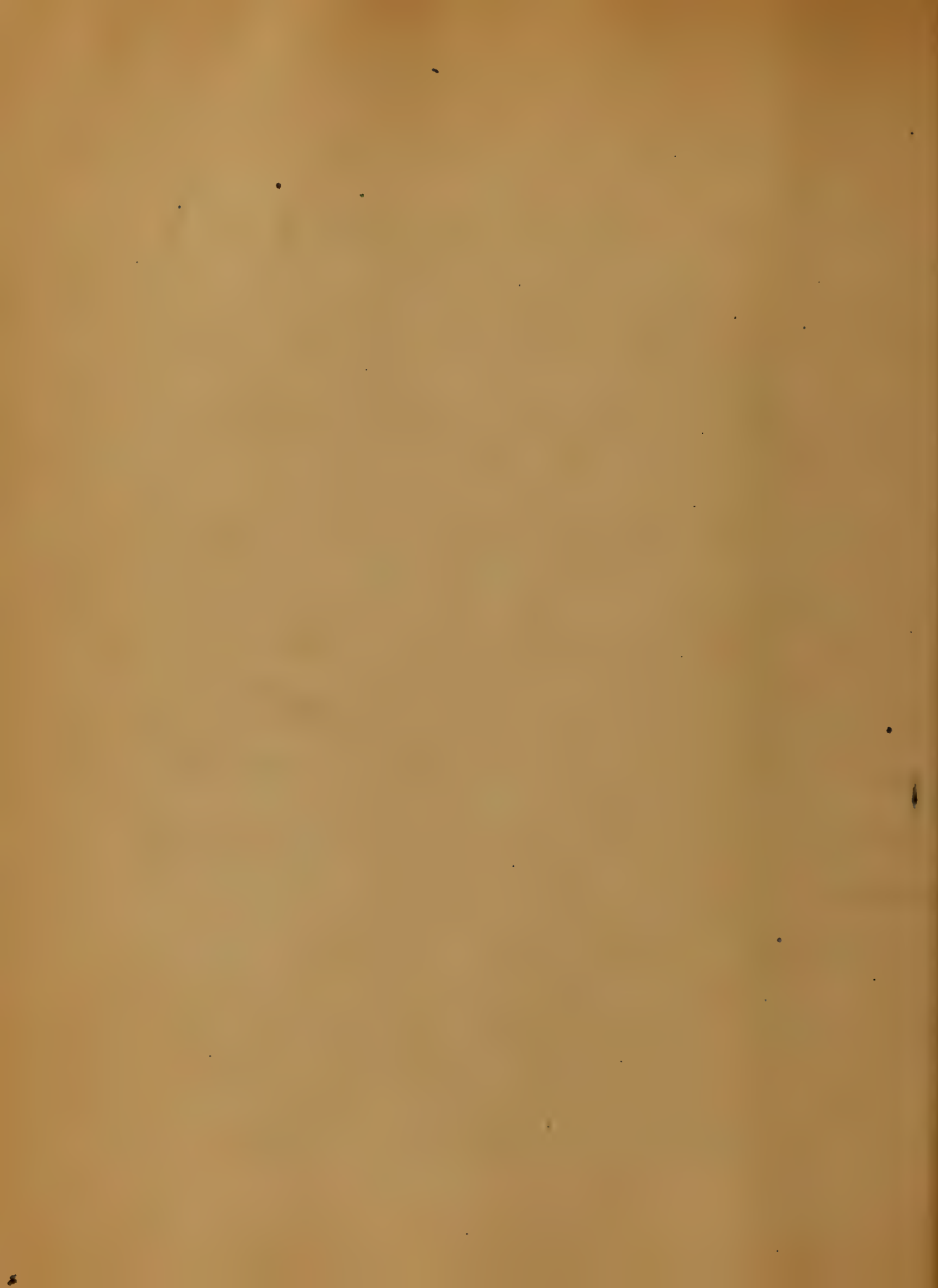
The patient is attacked suddenly, or after having complained for some indefinite period of lassitude, head ache, muscular pain, and epigastric disturbance.

When the paroxysm is complete, it consists of three distinct periods or stages: viz., the cold, the hot, and the sweating stage.

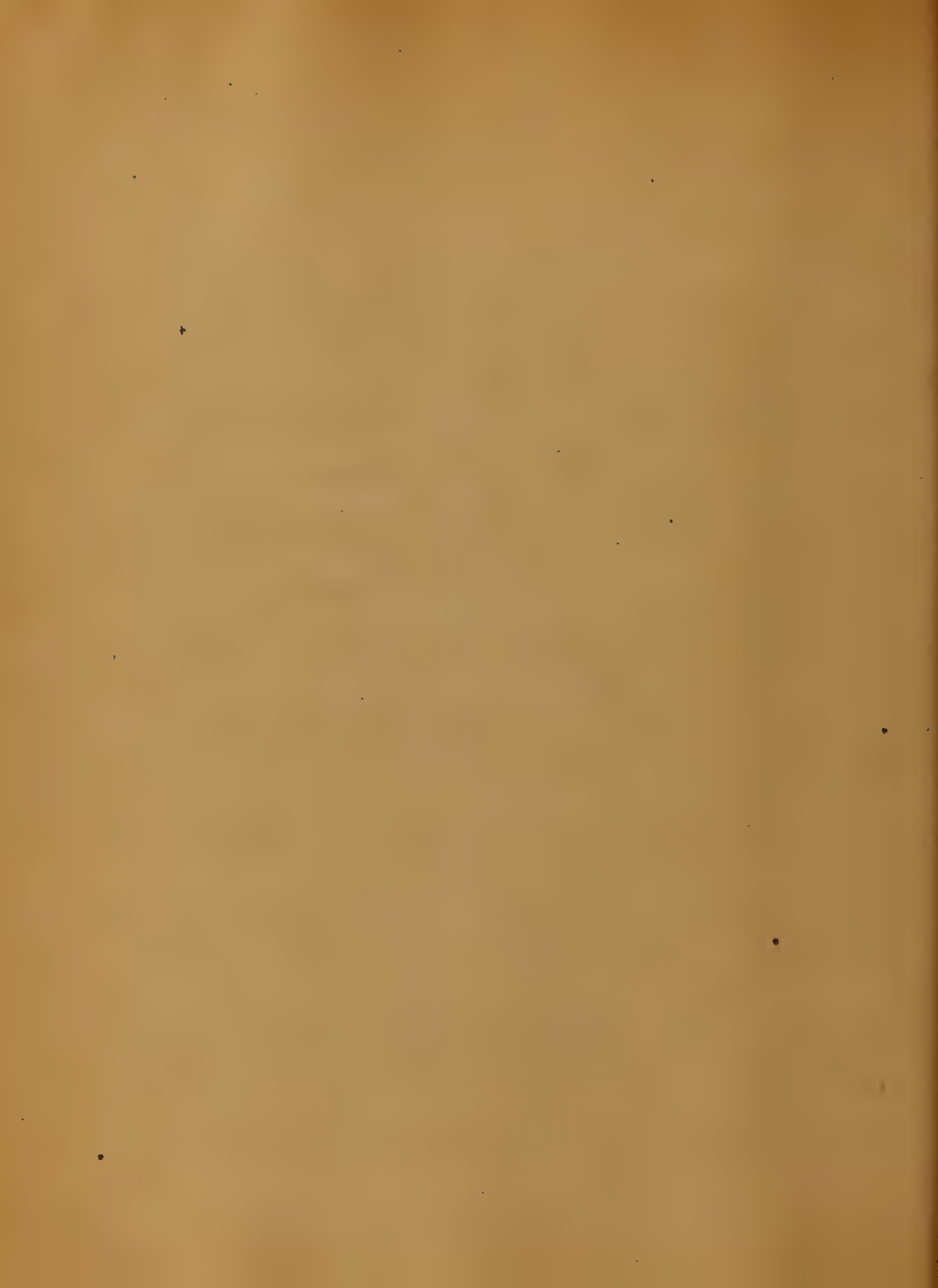
The cold stage is ushered in with languor and shivering, followed by a sensation of coldness, often creeping and shivering,



with a chattering of the teeth, and tremulous movements. The lips and fingers ends of toes become blue. The temperature is found to be above normal, upon applying the thermometer to the axilla, mouth or rectum. There is occasionally, vomiting accompanied with loss of appetite, and thirst. Depression of spirits, headache, and drowsiness are common. The urine has a low specific gravity and is abundant and nearly colorless. While perspiration is absent. The average duration of the chill is about three-quarters of an hour although it varies



from ten minutes to several hours.  
The shivering subsides slowly as a  
feeling of warmth gradually dif-  
fuses outwardly. A flush succeeds  
the palor, the pulse becomes fuller  
and stronger, the lips become red,  
the face full instead of retracted.  
The pain in the limbs disappears,  
but the headache is rather increas-  
ed with a throbbing of the temples.  
Respiration becomes more free and  
easy; a buzzing noise in the ears;  
vertigo and nausea are produced  
on the attempt to rise. The usual  
symptoms attending this fever-  
ish state are thirst, a dry mouth,  
constipation, high colored and





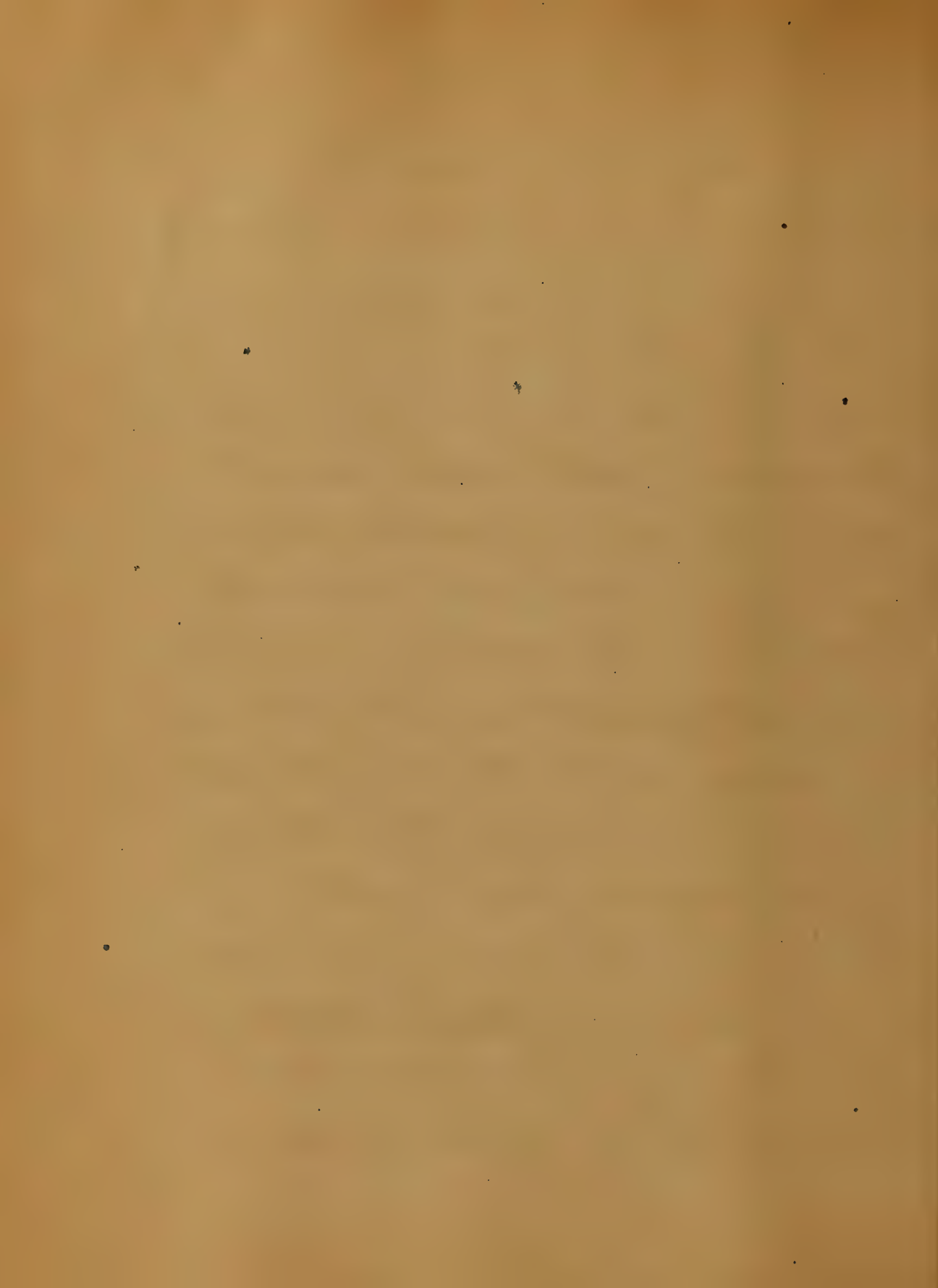
scanty, and acid urine. The temperature sometimes reaching  $105^{\circ}$  to  $110^{\circ}$ ; but is seldom above  $108^{\circ}$ . This stage lasts from an hour or two to twelve or fourteen hours.

The hot stage is succeeded by the third, or sweating stage. While the fever is raging, a gentle moisture appears on the forehead and face. Presently the moisture gradually increases to drops, and finally flows off wetting the clothing and sheets. The fever declines, the tension of the pulse is lowered; the muscular soreness, headache,



and other pains cease; the mouth becomes moist; the thirst is lessened; the respiration becomes easy, and the patient (although exhausted, experiences a feeling of comfort and often goes to sleep and sweats profusely all over. The urine is freely passed and deposits a brick-dust-like sediment. There is no definite length of time to be assigned to the sweating stage.

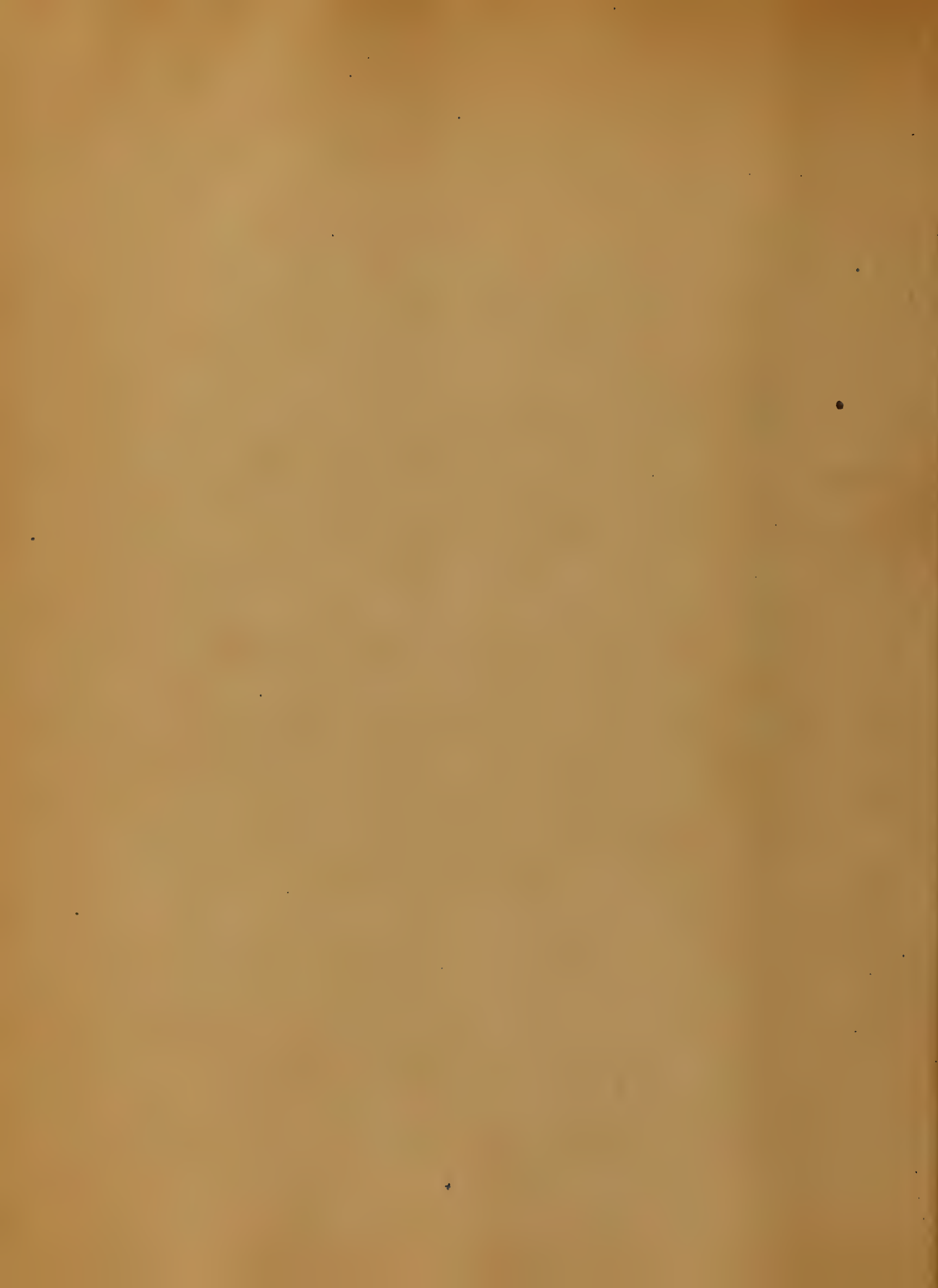
One or more of these three stages may be wanting. There is then only a chill, or a fever, or a sweat occurring daily, or every other day, at the same hour. Or the patient may be seized



with a paroxysm of pain with  
the same regularity, as in "brow-  
ague". Where the chill is absent  
or obscure, and the other symptoms  
recurring periodically, is what is  
properly known as "Quint Ague".  
Any part of the body or any  
member may go through all  
of the three stages, the cold,  
the hot, and the sweating; the  
rest of the body being unaffected.

All complaints are apt to  
take on an intermittent form  
after the patient has once had  
an attack of intermittent fever;  
as intermittent neuralgia.

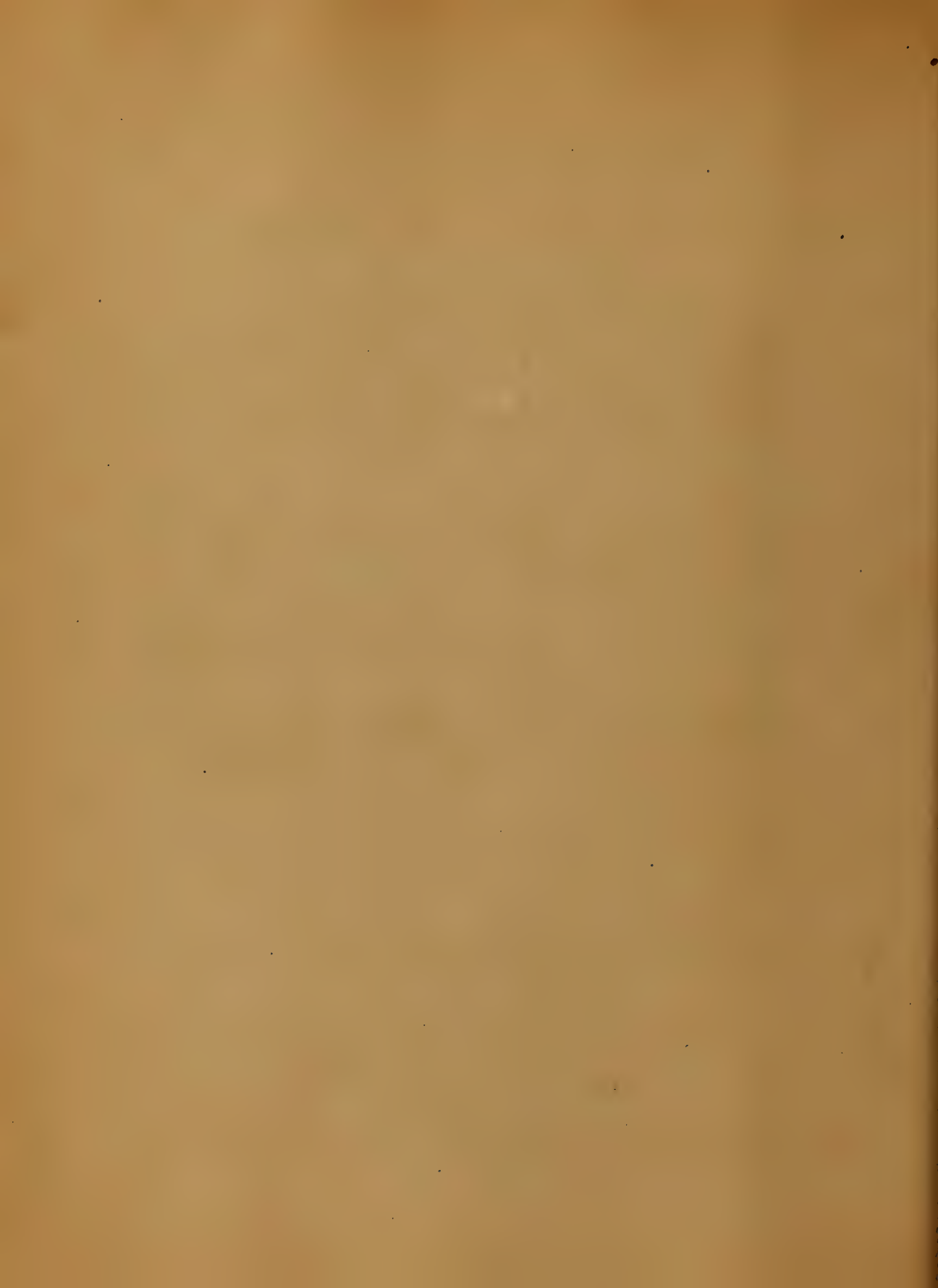
The paroxysms are most com-



noon in the daytime.

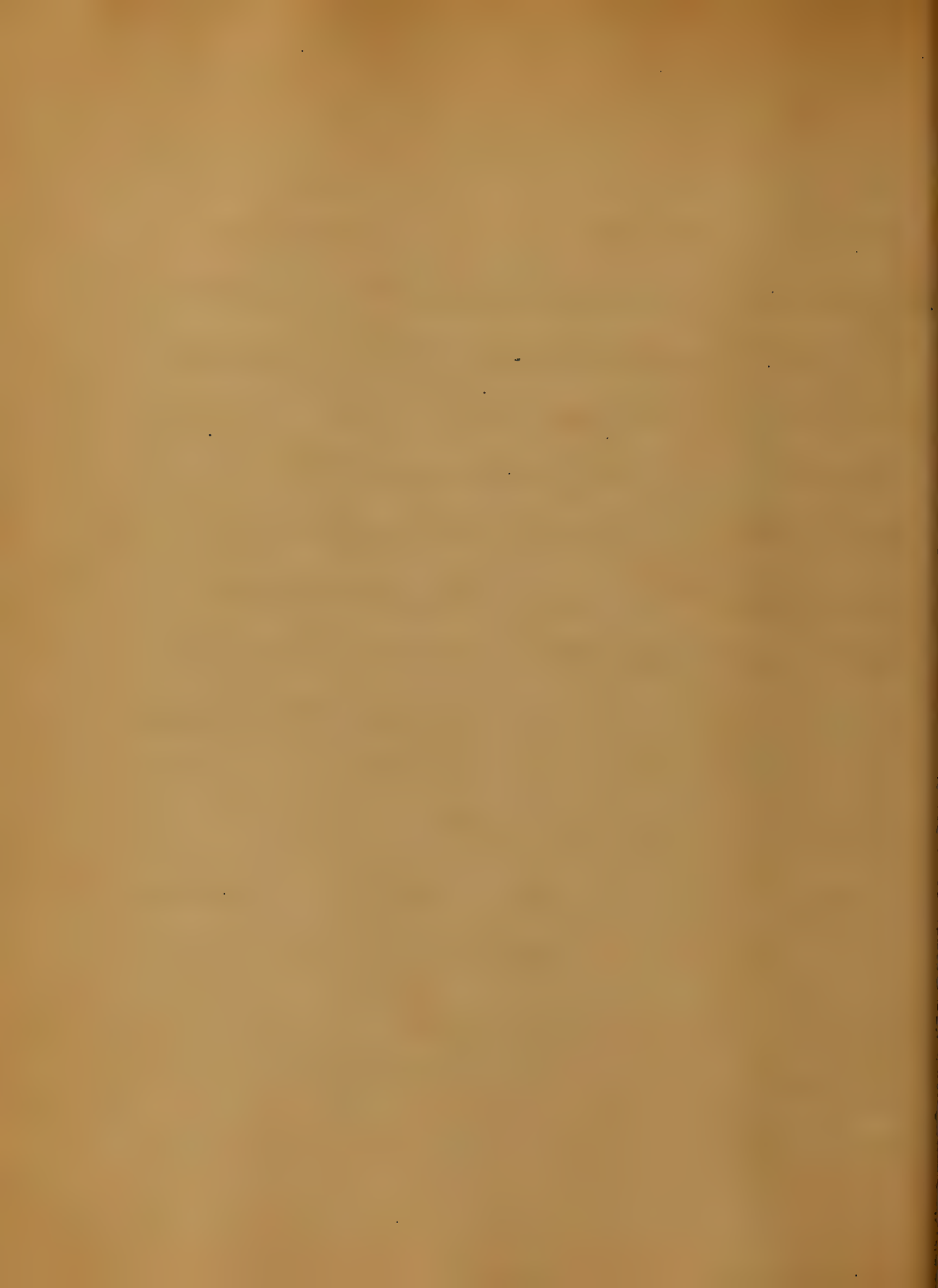
An attack beginning with one form, may be changed into another form. An intermittent may become a remittent and vice versa.

Sequelae. - When a case of intermittent has been properly treated, and the paroxysms abated there is a liability to recurrence of the attack on the multiple day of the first or former attack. These relapses are due to the persistence of the condition which determined the first seizure. Long continued malarial poison lessens the red globules



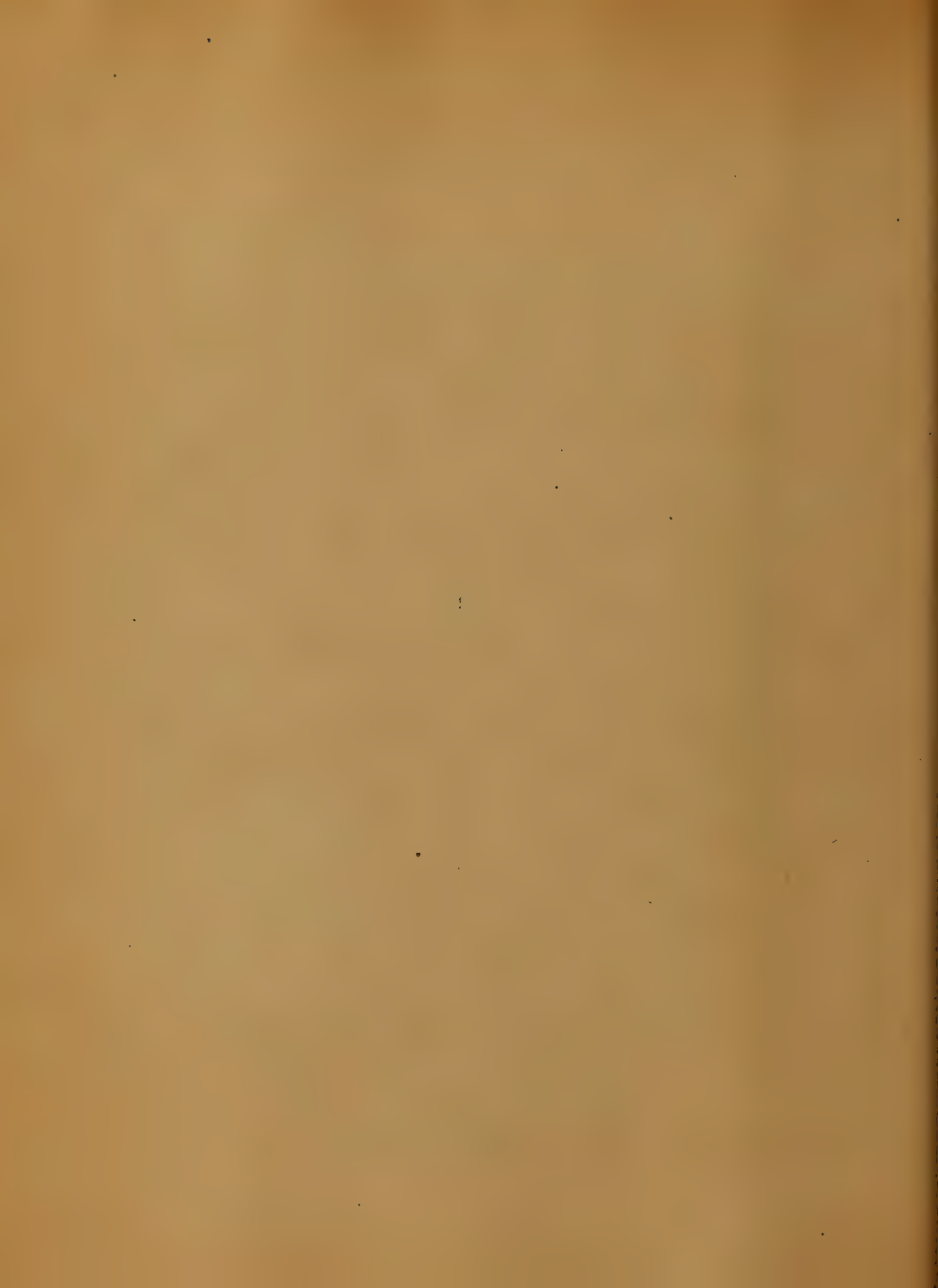


in the blood, while the white are diminished in size and increased in number, the ankles become oedematous; the liver and spleen enlarge; the skin is jaundiced; the body emaciated; the appetite is poor; the digestion feeble. The urine contains albumen and is deeply colored with bile-pigment; fluid accumulates in the peritoneal cavity. There is a palpitation of the heart and a venous hum, which is caused from the watery state of the blood, which may cause epistaxis. This condition is brought about by the morbid state of the blood-making



organs, especially to the destruction  
in the spleen of the red blood  
globules, and the conversion of  
haematin into pigment. Among  
other sequelae which may have  
their origin in malarial cachex-  
ia, are nephritis, amyloid de-  
generation of the liver, spleen,  
kidneys, and intestinal glands;  
sclerosis of the liver, anaemia, dropsy,  
tuberculosis, neuralgia, epilepsy,  
hemiplegia, and mania.

Morbid Anatomy. - Melanaemia,  
or pigmentary degeneration of the  
blood corpuscles, with deposit of  
pigment granules in the liver,  
spleen, kidneys, brain, &c., is almost



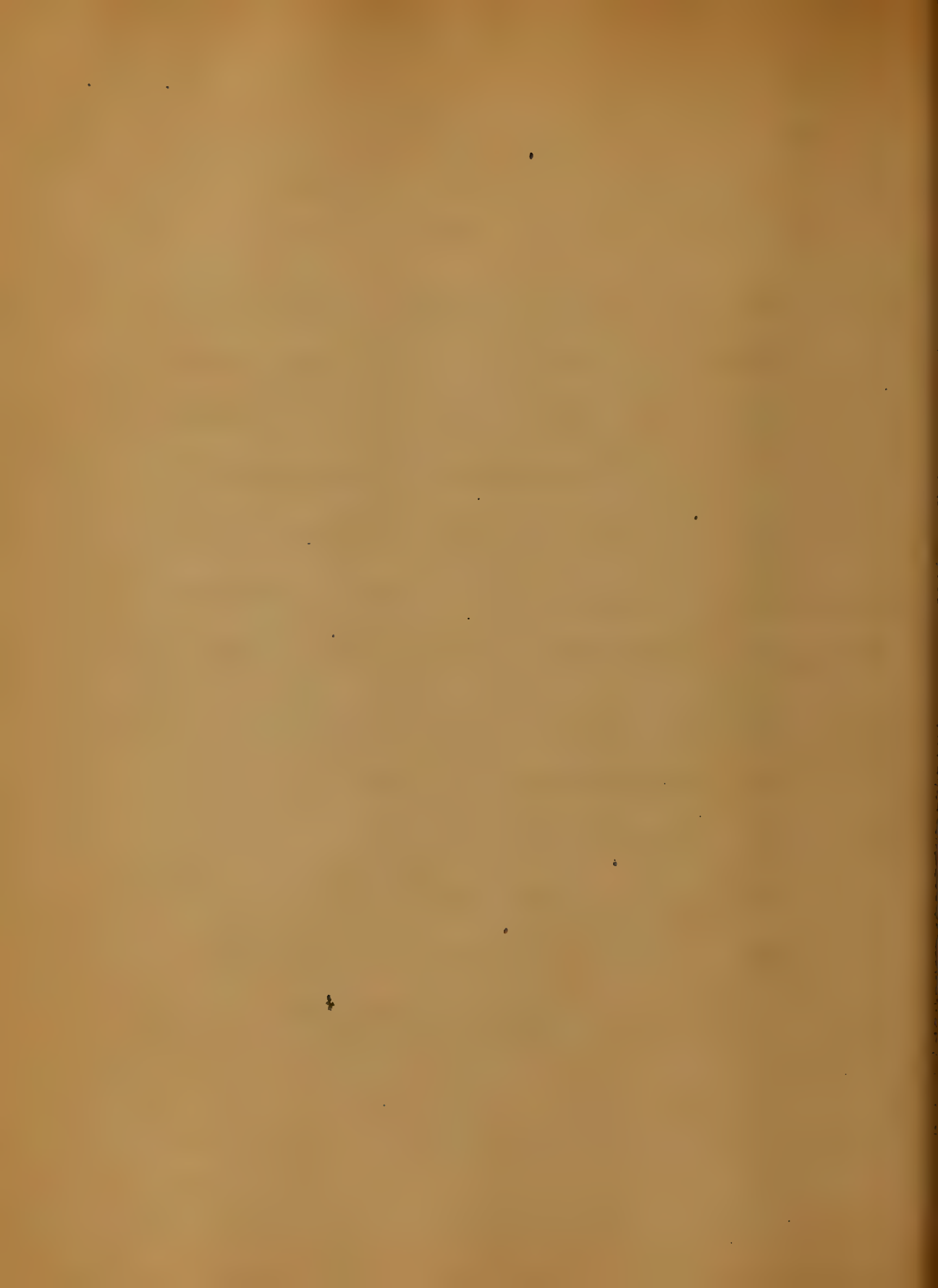
characteristic of the malarial disease. Enlargement and softening of the spleen and engorgement of the liver, with a bronzed appearance of it, are the only other peculiar changes in structure."

Diagnosis. - This fever, can hardly be mistaken when you once have a correct account of the history of the case in question. One paroxysm is not sufficient to determine whether, or not it is intermittent fever, because very many acute disorders begin with a paroxysm. But by repeated attacks at regular intervals, the physician is enabled to make a correct diagnosis.



It may be mistaken for pyemia, in which we have all three stages with an afebrile interval. It differs from pyemia in its origin and course. Intermittent is due to exposure to miasm - pyemia to wounds. Intermittent is regular - pyemia irregular in its course. Intermittent is promptly cured by anti-malarials, - pyemia is a fatal disease, over which quinine has no influence.

Prognosis. - Simple intermittent if left alone, will get well of itself. Since the discovery of the properties of Peruvian bark, it almost never happens that death

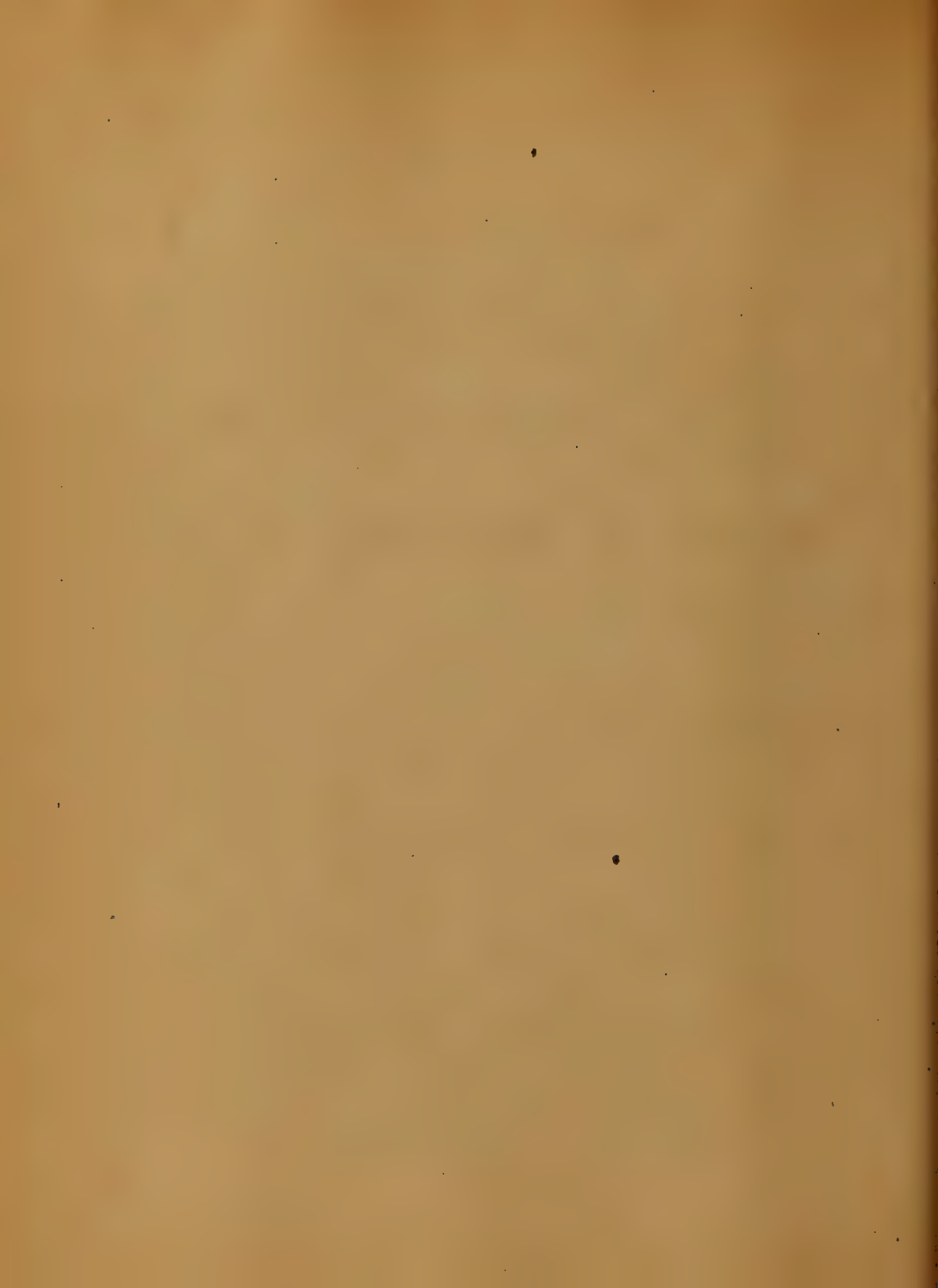




occurs from an ordinary attack of intermittent. It is a good sign for succeeding paroxysms to appear later in the day. Though the paroxysms are abated, they are liable to recur.

Treatment. - Preventive, abative, and curative.

Persons living in malarious districts and those who are subjects of the infection should, before breakfast, regularly take about five grains of one of the alkalis of China bark. The patient should at the same time observe strict hygienic rules. The patient should guard against exposure to early



morning and night air, as well  
as against excesses of every kind  
exposure to heat, fatigue, and rapid  
alterations of temperature.

The chill may be abated, where  
it is necessary, by hypodermic in-  
jection of morphia, or of amyl  
inhibitions; chloroform adminis-  
tered by inhalation, or a half drachm  
fluid ounce sweetened water, by the  
stomach, will usually arrest the  
chill.

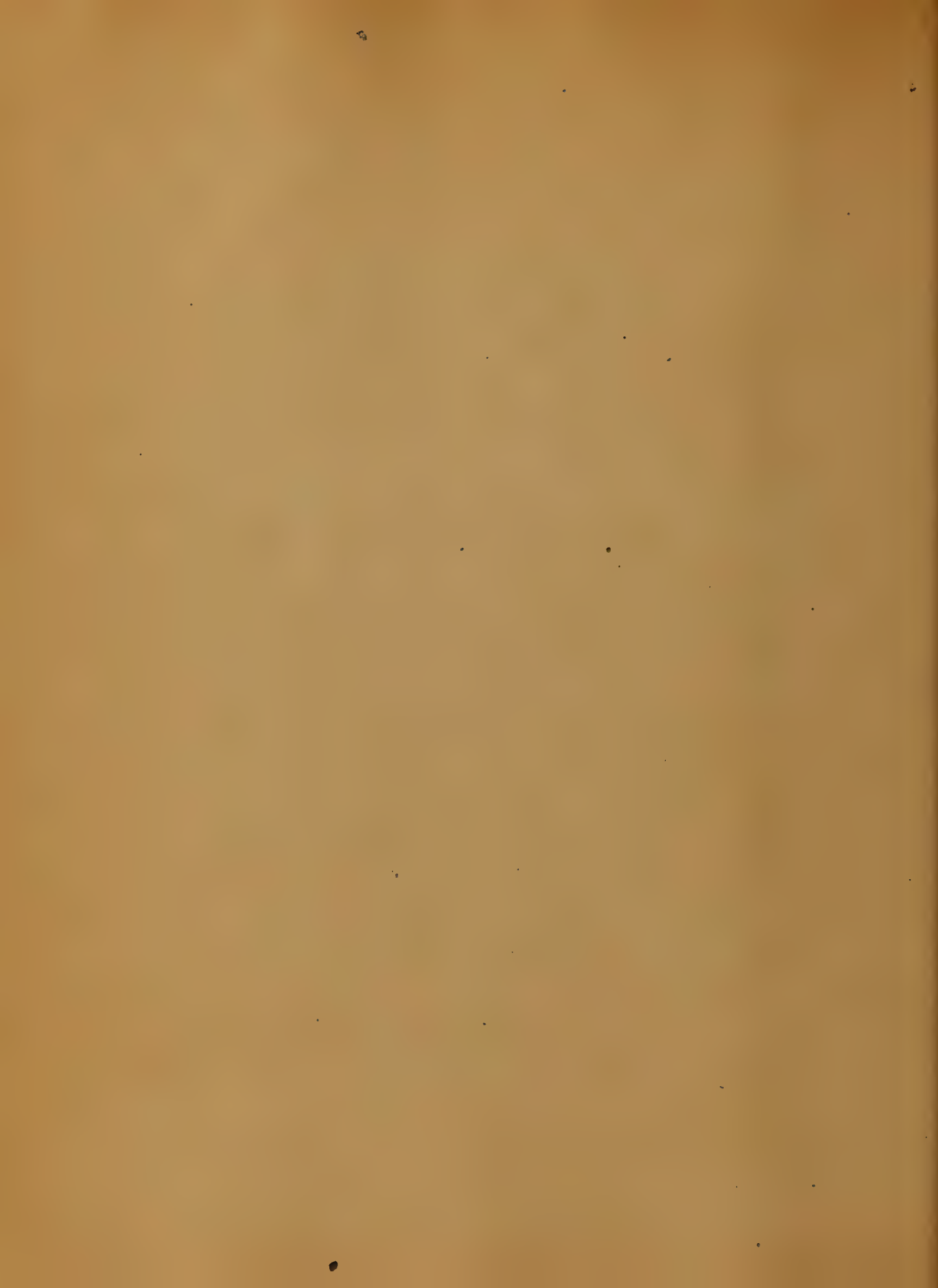
Quinine. - There is no one article  
the whole catalogue of the materia-  
medica is equal. cinchona bark or  
one of its essential constituents in  
the cure of malaria. It can be



given at any stage with safety,  
unless it be during the height of  
the pyrexia. If the patient be  
costive, give a blue pill (three or five  
grains) before administering  
quinine.

During the chill the patient  
should be made as comfortable as  
possible by external warmth, and  
by hot drinks, if they are not too  
stimulating.

During the hot stage efflu-  
vescing, and cold water draughts  
may be freely taken to palliate.  
It is better not to begin adminis-  
tering cinchona, quinine, or bark  
until the sweating has fully begun.



Of all of the preparations of  
Cinchona bark, the most reliable  
is the sulphate of quinine. It is  
prescribed in variable quantities  
from one to thirty grains and upward.  
It is in my experience of more  
benefit when given in from  
three to five grain doses, every three  
or four hours. The most beneficial  
method of administering it is  
in solution, on account of its  
being more readily absorbed. It  
may be given in coffee or water.  
Quinine is also given in powder  
and in pill form.

We often meet with patients who  
object to taking quinine, we can





give some of the other alkaloids of  
the bark, as cinchonina, cinchonidina, &c.  
When cinchonina is given it should  
be in increased amounts.

Many other remedies have a  
considerable amount of influence  
over malaria, but none are so  
marked and certain as the alkaloids  
of Peruvian bark.

Among the secondary reme-  
dies, we have opium which, if  
given a short time before the  
expected chill will often abort it.

Fowler's solution of arsenic (in  
ten drop doses) three times a day  
will produce the desired result.

Tincture of lodine, potassium bromide



Sulphate of copper, nitric acid &c., have also been used with more or less success.

We should endeavor to build up the general health with tonics and good food and prevent the recurrence of future attacks by administering some remedy on the seventh, fourteenth, and twenty first days.

The sequelae should be treated as they present themselves.



1400

J. Stone 1877, 80 & 81.  
11



Thesis On

Forest  
as a topographical agent.

By

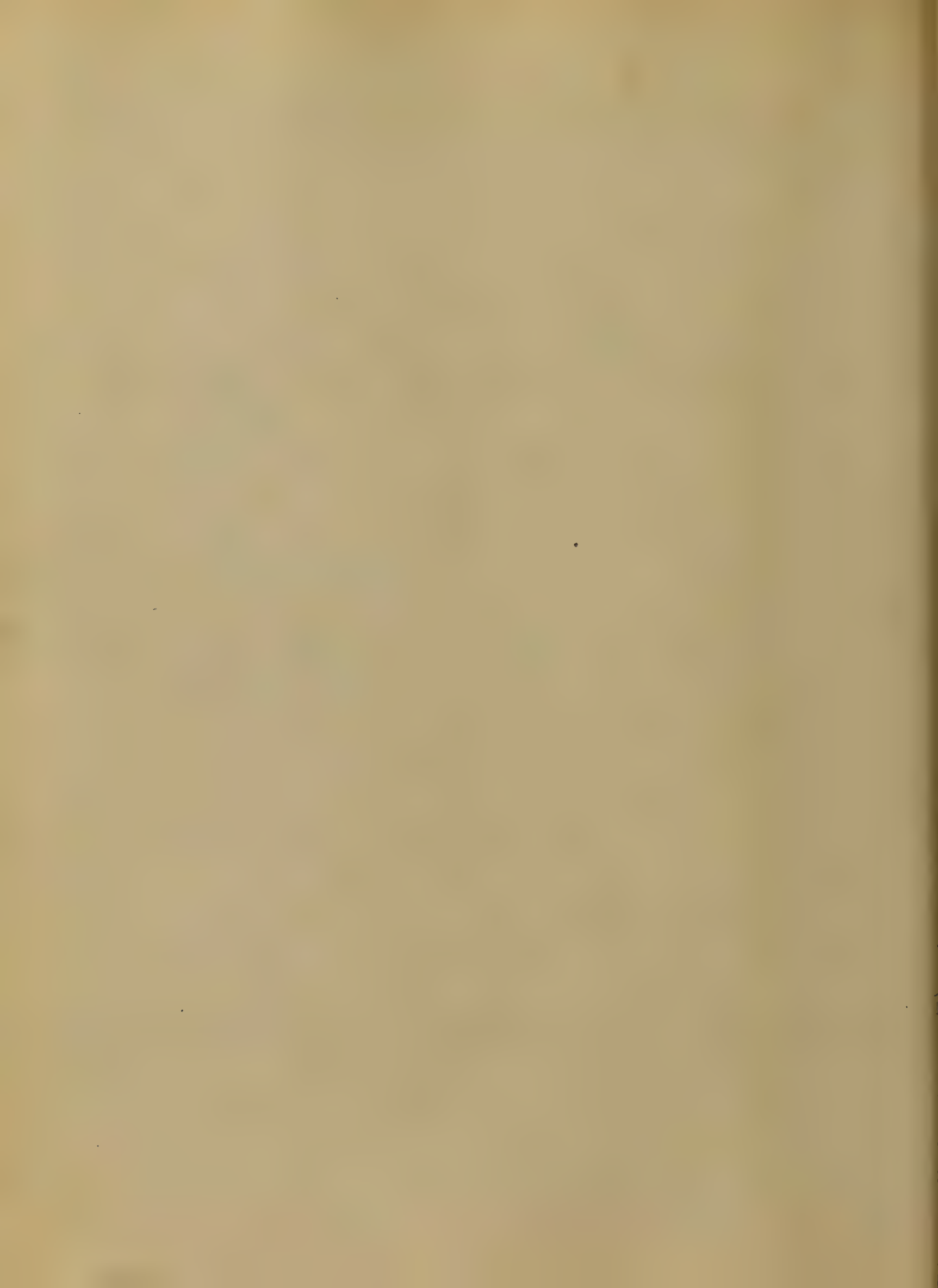
Edwin S. Partridge,

For

the faculty of the  
University of Maryland.

Sessions 1877, 80 + 81.

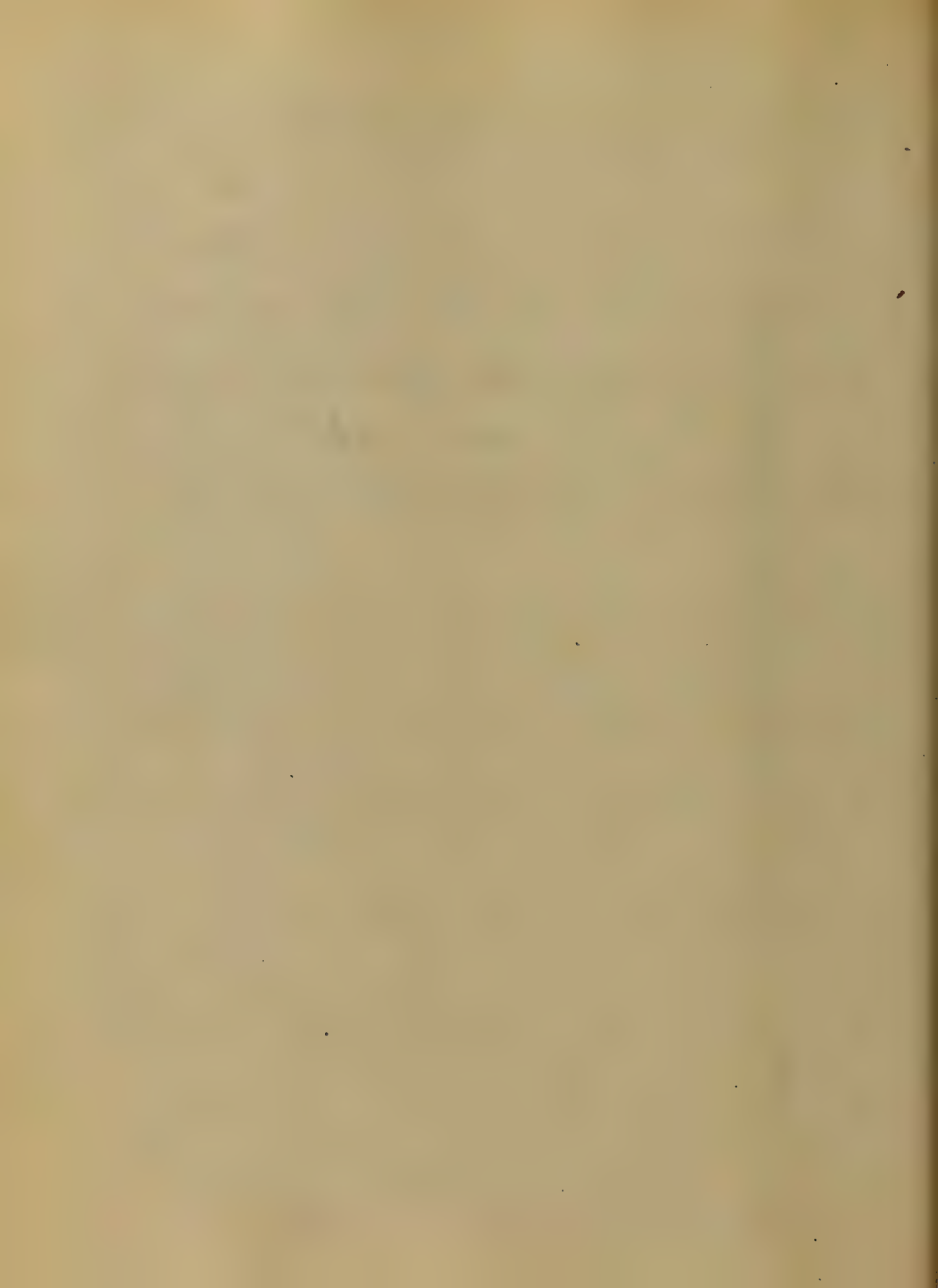
"





Rest as a theoretical agent.  
To the Hon. S. Tucker Norris,  
Provost, and the Faculty of the  
University of Maryland, I submit  
my thesis for examination on  
Rest as a theoretical agent.

which implies cessation from action,  
cannot be absolute, but is only  
relative. Absolute rest or quietude  
is inconsistent with the laws of  
nature's works, and can never  
be attained, unless the result of  
universal action, decay and death.  
We must have some appreciation  
of the counterpart, viz, action, in  
order that we may attain to  
a reasonable conception of the



importance of rest. And as we discover, and other discoveries have been made, that the ultimate particles, not only of water, air and light, but of the crude ores, and the most beautiful crystals the eye can behold, are also incessantly in motion; it can also be readily understood, that in organic life, there is behind all its functions, whether vital or physical, a process of activity, and as yet largely incomprehensible. Very little does it matter whether we look upon the beautiful landscape with its green fields, and beautiful meadows, its overhanging vines, the lowering and lofty peaks, and the sounds of other



objects of interest and attraction;  
or whether we gaze upon the  
mountains with their lofty cliffs,  
and overhanging rocks, under  
which can be found, beds of coal  
and precious metals; every where  
we go beyond the power of the  
naked eye to discern, is the exist-  
ence of universal and endless motion.  
Now, every where, where this end-  
less motion is going on, there is  
also the wear and tear going on,  
and every hand beneath the recog-  
nized phenomena of physical and  
vital force. All these organisms, so  
far as they relate to the structure  
of man, have a counterpart to cover  
in relation to their motion, such  
as the brain, spinal cord, lungs,



ever, heart and every organized  
substance that exists in the system.  
This brings me back in reporting  
the subject of rest in its highest,  
dearest and best relation to practical  
and looking at it, by the aid of  
my feeble penitence, the time  
when God ordained that man  
had to live by the sweat of his  
brow, as a punishment for his  
disobedience; and beside pleased  
Him in the plenty of His  
unspeakable benevolence, to permit  
man's fatigue and exhaustion to  
be followed by his greatest earthly  
solace, the blessing of rest and  
repose, by calm and peaceful sleep,  
and again nature has brooded her  
best efforts during this period





of rest, and to <sup>re</sup>gain those powers  
which had undergone exhaustion,  
to recreate the strength of the body,  
and to restore the mental vigour,  
and enable him to resume his  
daily labors with renewed strength.  
Every function of the body, whether  
physiological, dynamic or intellectual,  
is not only the source of all organic  
structure, but the means also by  
which every function is enabled  
to find expression. There are some  
thoughts and suggestions in  
connection with this question all  
life, essential to a proper apprecia-  
tion of rest, not only in health,  
but especially in disease. As found  
in the course, the prolepsis of  
animal organic life, is confined



of matter in its essentiality.

Here the ultimate particles of carbon, oxygen, hydrogen and nitrogen partially organized and partially free, are constantly in motion, awaiting the approach of a new element, to awaken the principles of life, and give to their motion a specific form of action.

The first process in life then is the formation of but a primary cell, which in itself soon becomes divided, or as we call it, segmented and is further capable of division and subdivision, until finally that primary cell has subdivided into hundreds, may even say thousands of cells for every organ and tissue in the body. Each cell when once



formed products, other cells of the  
same kind; that is to say, the  
brain cells produce brain cells, the  
nerve cells produce nerve cells, etc.  
By this process of cell life, nourished  
and fed by the proteoplasm of  
animal organic life, we have the  
source of incessant labor and toil.  
The phenomena of cell life imply  
a condition of death and decay;  
and hence, in the process of cell  
life and activity, there is incessantly  
also a process of cell death. So  
we see with the production of cell  
life, there is also a corresponding  
cell loss. Take for instance child-  
hood, or during the period for the  
growth and development of the  
body, all life is mere physical



their physiological, and hence by  
their rapid growth, we have beside  
the enlargement of all the organs  
and their neural growth. The  
child is naturally active and  
energetic; a thousand objects are  
constantly at hand to awaken  
its interest and admiration, and  
call forth its activity. But it  
just as naturally and instinctively  
seeks its rest, as it is impulsively  
active. A monstrous mistake in  
system is that of social life, which  
under the high pressure of either  
the workshop or the schoolroom,  
demands of our boys and girls  
the attainments of mature years.  
That is to crowd the brain in  
childhood with statistics, or force





1  
Six to ten hours daily in the  
school room and study, is much  
and unwise, for it exhausts the  
cell forces, and dwarfs both body  
and mind. and then if you  
want to look for a well developed  
brain or muscle, without rest and  
repose, you simply to seek fruit  
from a lifeless tree. Premature  
exhaustion of cell life and cell  
force, is premature death and  
decay. With the transition of  
life from youth to mature age,  
and in all the phenomena of  
riper years, the functions of cell  
life are materially and constantly  
changing. Each cell is thus a  
microcosm for the general organ-  
ism, and in it long, earlier



motion, and activity shows in  
time exhaustion and death. In  
this vital-physiological process,  
therefore, all action, in the  
process of their life, and in this  
both lies the ground for the  
activity and the function of every  
organ and tissue in the body.  
The essential proximate character  
of the body in their normal  
conditions therefore is that of  
 ceaseless motion. In this motion,  
as I have already stated in the  
beginning of my thesis, we have  
the exhaustion of all life, and  
the expenditure of all force, and  
upon this all force, attainable  
only at the expenditure of all  
structure, depends also every physical



phenomena connected with excitation and action. Rest is the cause of all the voluntary movements of the muscles of the body, and most undoubtedly of all the involuntary motions of the diaphragm and muscles of the chest, as in unconscious respiration. And from this general aspect of the importance of rest, who shall estimate for this organism the human body, ever under the ordinary circumstances of health the importance of rest? And is it a matter of surprise, if the wear and tear, incident to the ordinary functions of life are not compensated for by judicious rest, that disease, suffering, and disease



are inevitable? Symptomatology  
 and knowledge are the best means  
 of treating any given lesion,  
 however important in themselves;  
 constitutes after all a functional  
 part of the objective conditions,  
 essential to the proper apprehension  
 of the case. In one case there  
 may be the sthenic form of disease  
 in which inflammation will run  
 high, and very marked force  
 may tend rapidly in the way  
 of destruction; and in another  
 the asthenic variety, when vital-  
 ability will supervene, and the  
 tendency will be to absorption.  
 One is the general ground for  
 true science, and its end will  
 be attained except as the result





of physiological observation.

Every organ in the body performs its function through the activity of its cells. Some force so important in health and in disease, is generated through the agency of nerve cells. The mind acting through the brain is indebted to its cells for every thought and emotion. And when the energies and the activities which underlie this vast expenditure of force are intensified by the incenseivable wastes, connected with all forms of inflammatory, and especially zymotic diseases, unless they can be compensated for by suitable food, fresh air, and the most important rest, the integrity of life must



be seriously impaired. On this  
 principal of ceaseless toil and labor,  
 whether physical or intellectual, are  
 incompatible with health, and  
 when disease invades the body,  
 can never be compensated for  
 by any system of therapeutics,  
 which has not for its underlying  
 principal, as first and last, and  
 infinitely more important than  
 immediate and continued rest.  
 And according to growth, which  
 is the antitype of repair. I  
 may here say, that so intimate  
 is the association between rest  
 and growth, as to make them  
 appear on a superficial view to  
 stand to each other in the relation  
 of cause and effect, and growth



as a rule seems to proceed  
 pari-passu with physiological  
 an illustration may be made  
 from the child, it is said and  
 is a fact, that in infancy the  
 child who sleeps much, mostly  
 throes. And on the other hand  
 observations are equally true, that  
 the wakeful, restless child, seldom  
 displays the evidence of so active  
 a metabolism as does the child  
 on the other hand. Oculists,  
 all will admit, that in infancy,  
 development is in its highest  
 state of activity, and the evi-  
 dences are, that the healthful  
 infant passes the greater portion  
 of its life in a state of rest  
 and repose, not as we have seen



Botanists, that all plants or  
 vegetables require rest. But how  
 do they get that rest which is  
 so requisite for all? In most coun-  
 tries by the rigors of winter, and  
 others by the scorching heat of  
 summer. Why do cultivators so  
 often fail in attempts to grow  
 certain plants? Because they do  
 not pay proper attention to this  
 essential point. Plants in hot  
 countries, for instance, have their  
 rest in the dry season, as for  
 an example, the blue water lily  
 of the country of Egypt, which  
 abounds in the canals of Alexa-  
 ndria, which at certain seasons  
 becomes dry, the beds of which  
 quickly become almost as hard





as bricks, and are then used  
 as roads. But when the water  
 is again admitted, the plants  
 resume their growth with redou-  
 pled vigor. According to this we  
 see that most plants (as all other  
 beings should have in case, especially  
 in disease), have their periods of  
 growth and rest. So is also the  
 case with the human being.  
 In childhood or infancy, where  
 we have the most rest and repose,  
 that is the time when we have  
 the most growth or development.  
 Why should we not then also in  
 disease, give rest to favor the  
 process of repair to the parts  
 which have undergone deterioration  
 from health? We all know how



17  
surgically rest is sought for by the  
lower classes of animals, especially  
in periods of suffering from inju-  
ries or disease; how they endeavor  
to escape from the prying curio-  
sity of man, in order that the  
injury may be the more speedily  
repaired. What I have here endeavored  
to inculcate, is that growth has  
an exact relation to physiological  
rest, both local and general. Although  
it is, I think, impossible to explain  
what are the relations which are  
associated with repair and growth.  
These marvellous renewals of life  
and strength, resulting from repair  
and rest, practically, the maximum  
of the result, is equal with the  
minimum of disturbance. Thus



not means the great scale of  
 growth. It is stated in some books  
 (on disease of children especially) that  
 ten percent of the children born  
 die in the first month after  
 birth, that is a fearful fact to  
 contemplate, and one well calculated  
 to alarm parents. Then the question  
 may arise, Why is the mortality  
 so great among infants? I do  
 honestly believe, that many had  
 to agree with me, that is because  
 their food is not adapted (as is  
 so many families, especially among  
 the poor) for their proper nutriment  
 and preservation of health. And  
 how can an infant, with its  
 stomach overloaded with indigestible  
 food, flourish, as does the infant with

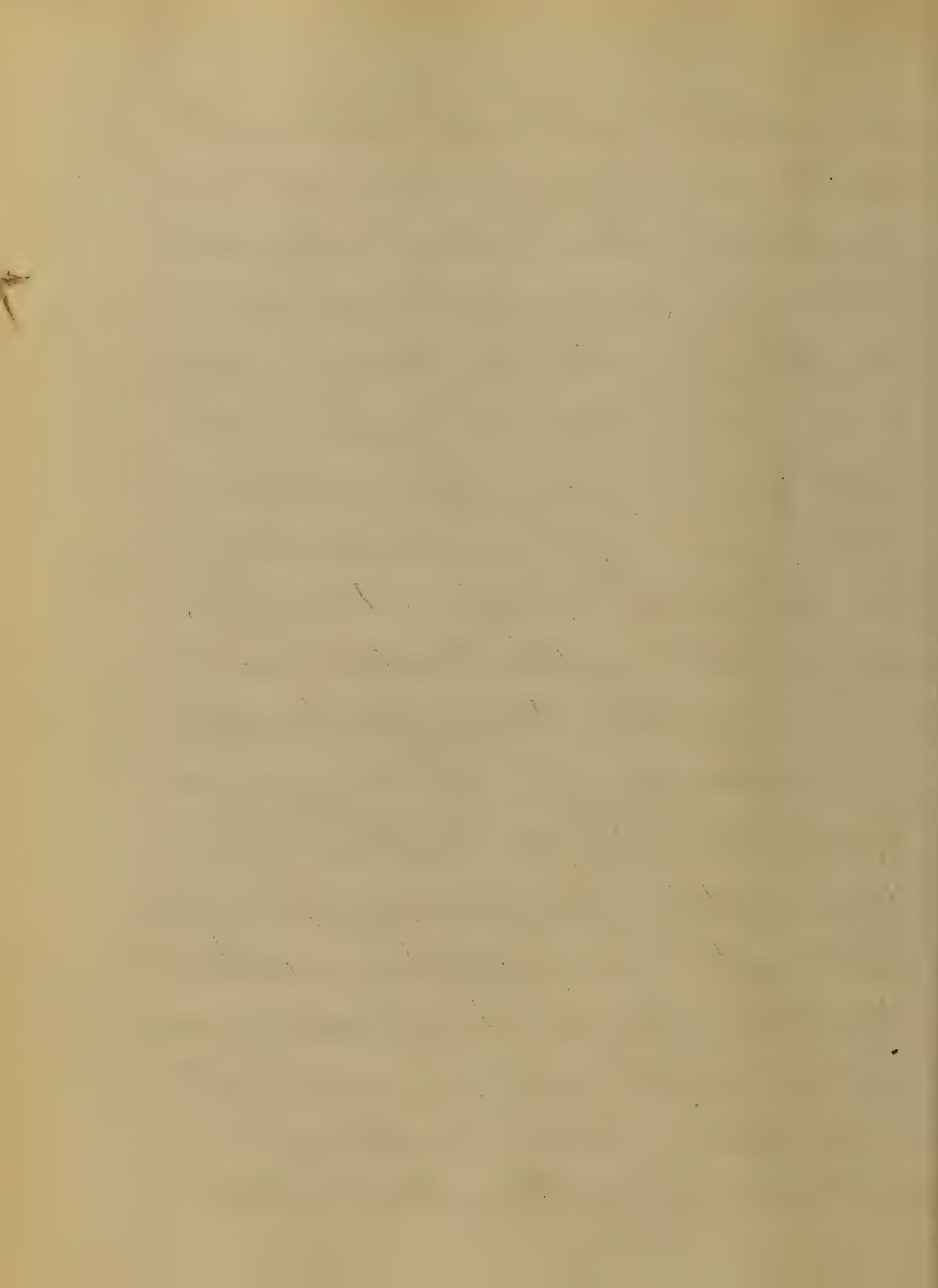


proper food. Certainly, most of the  
 food should be digestible, would the  
 proper amount of secretion take  
 place in infancy as in after life,  
 which favors the most readily digestion.  
 Is with the removal of some parts,  
 and the over development of  
 others. Surely thus to claim rest  
 as its helpmate. Rest is the  
 necessary antecedent to the healthy  
 accomplishment of both repair  
 and growth. The same elements  
 and the same kindred conditions  
 are necessary to the same result.  
 This surely is the natural sug-  
 gestion of a means toward an  
 end which should never be lost  
 sight of by the physician and  
 Surgeon. For an example, children





who are ill and lose their rest  
 waste very rapidly, more so in  
 proportion than those who are  
 advanced in age; but as soon  
 as the morbid condition subsides  
 and rest asserts its power, the  
 recovery or repair becomes extremely  
 active, generally accompanied by  
 an increased tendency to sleep.  
 In a well authenticated case  
 which I had the opportunity  
 of witnessing (with my friend  
 J. Allen Esq. of the H. B.) in which  
 the mother was nursing her child  
 but with so marked inaction  
 that it led us to the examination  
 of her milk, (as we were well  
 aware that nothing could exist in  
 that case to produce that state



of evacuation.) which revealed  
 to us the great amount of  
 coecum secreted, which was  
 the sole cause of its restlessness,  
 and the following of evacuation.  
 But after taking the child from  
 the breast of its mother, and resort-  
 ing to the proper means of art-  
 ificial feeding, the child very soon  
 began to improve in strength  
 and weight. Not that I believe in  
 artificial feeding, would not resort  
 to it under any circumstances  
 unless absolutely necessary.  
 But before the cause was ascer-  
 tained the child was exceedingly  
 restless and fretful, sleeping very  
 little, which induced extreme  
 evacuation, causing the child



about the verge of death.  
 But how marked, almost immedi-  
 ediate on the removal of the  
 cause, by giving rest to the  
 feeble organs and consequent con-  
 stitutional rest to the general  
 system, did the child increase  
 in weight and general appearance.  
 The interruption of rest by a  
 local or constitutional disease  
 occurring to persons in the middle  
 periods of life, does not cause the  
 same degree of exhaustion and  
 wasting, as in the infant or  
 child, they bear the loss of sleep  
 better, because their constitution  
 has not to bear both repair  
 and development, but that of  
 repair only, hence their recovery



is slower, because they have to  
bear both repair and development.  
their subsequent sleep is not so  
profound nor so prolonged, nor  
their rest so complete. Similar  
cases might be cited, as in an  
overworked member of any profes-  
sion, in which there is great  
mental worry or labor, and in  
those who are engaged in im-  
portant calculations, engaged in  
financial transactions, on a large  
scale. What should be the treat-  
ment for such cases? Should they  
be allowed to continue business?  
I should say no; their restoration  
to health should be made complete  
by mental leisure, by discontinuing  
their occupation, in taking plenty





of exercise, giving rest to the brain to repair the impaired mental disturbance. In such cases he is in fact calling into activity the latent or suspended functions of the cerebral cortex, leaving the higher, the intellectual part of the brain, work out its own recovery from overfatigue or exhaustion by rest and repose. After a time he returns completely invigorated, improved in general appearance, active and full of mental vigor.

In connection with the last illustrative example, the result of repair due to rest; I might cite another well authenticated case of the kind. Mr. John, C., age about 23, served as bookkeeper in a store. He was a



robust and healthy looking man,  
of a well dispensed disposition,  
previous to his attack of illness.  
But beside (to make the case still  
worse) he studied, or was preparing  
for college to become a minister.  
Before or previous to the suspension  
of business, he experienced slight  
attacks of mental derangement,  
sometimes so much as to attract  
the attention of his friends,  
But never paid any attention to  
it as to treatment or resign  
from business in which he was  
engaged; But continued business  
and studies until at last (unable  
to support the equilibrium of his  
brain) his mind became so der-  
anged, that he had to suspend



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business and studies entirely, and  
required constant watch and care.

He was taken home, away from  
his books, put among good society,  
given rest, and as good care  
and hygiene as could possibly  
be rendered under any such cir-  
cumstances. After a time he re-  
turned completely invigorated, im-  
proved in general appearance, active  
and full of mental vigor. The  
conditions of such cases attested  
the applicability of these remarks  
by their mental and physical  
exhaustion, by their depression of  
spirits, and by their want of  
self-confidence. Yet in such cases  
the restoration to health has  
been made complete by giving



rest to the intellectual faculties,  
exercise in the open air, and  
abstaining from the real distur-  
bing cause, their business. On  
this principal of repair, therefore,  
depends largely the integrity of  
every function of the body, whether  
physical or emotional. All kinds  
of tissues, and organs of the body  
require the alternate condition  
of activity and rest, to keep them  
vigorous and in good health. If  
this condition be not observed or  
attained to, structural changes,  
and deteriorations of functions  
are sure to follow. In reference to  
the etiology of the diseases of  
individual organs, it may be asserted  
that a large proportion of these





diseases originate in circumstances which deprived the organ of that rest which nature has rendered necessary for the performance of its healthy function. This subject of rest at first sight may appear to have but a small application in practice, especially when looked at through the biased vision of those who think that in the treatment of disease or accident everything is to be treated by medical or surgical aid. But I feel convinced that under the most favorable circumstances all that we can do or accomplish is to give rest to the parts, and enable nature through her own efforts, steadily to play her part.



whilst we, as nature's willing ser-  
vants, act in the hope, that  
by the use of appropriate mech-  
anical applications, aided, if nec-  
essary, by soothing medicines, and  
by the use of proper adapted  
diet, we may facilitate her efforts  
to repair the injury she may  
have sustained. In fact nearly  
all our best operations are done  
for the purpose of making it  
possible to keep the structure  
at rest, or forcing nature from  
the disturbing cause, which is  
exhausting her powers, or making  
her repeated attempts at repair  
unavailing. We might say, the  
operation does not cure; it only  
makes recovery possible, where



without the aid of the hand  
 or head of the surgeon, nature  
 would have ceased her competition  
 with the results of the injury,  
 or succumbed to the exhausting  
 influence of disease. I think I  
 do not err, if I say that aneurisms  
 are cured by rest; nature herself  
 actually cured the disease, simply  
 by immediate and continued rest.  
 as for example, that well authenticated  
 case of aneurism of the aorta, which  
 our worthy Prof. S. L. Chew M.D.  
 had presented to us students (see  
 1871 and 72) in its various stages of  
 cure, by simply, as I have stated  
 before, giving pressure to the part,  
 or in other words rest. Numerous other



such cases might be cited in which  
we have to resort to rest for the  
underlying principle for their cure,  
as for example if a portion of  
bone be pressed in upon the brain,  
we have only to remove the obstacle,  
and the brain will repair itself  
through the underlying principle.  
It is not the operation that cures  
the injury, but by removing the  
disturbing cause, we make it pos-  
sible for nature to cure the injury.  
I might allude also to the operation  
of lithotomy, the stone is not the  
disease, although it is the cause of  
the symptoms which accompany  
stone in the bladder. The patient  
does not complain of stone, but of  
the pain and constant irritation.





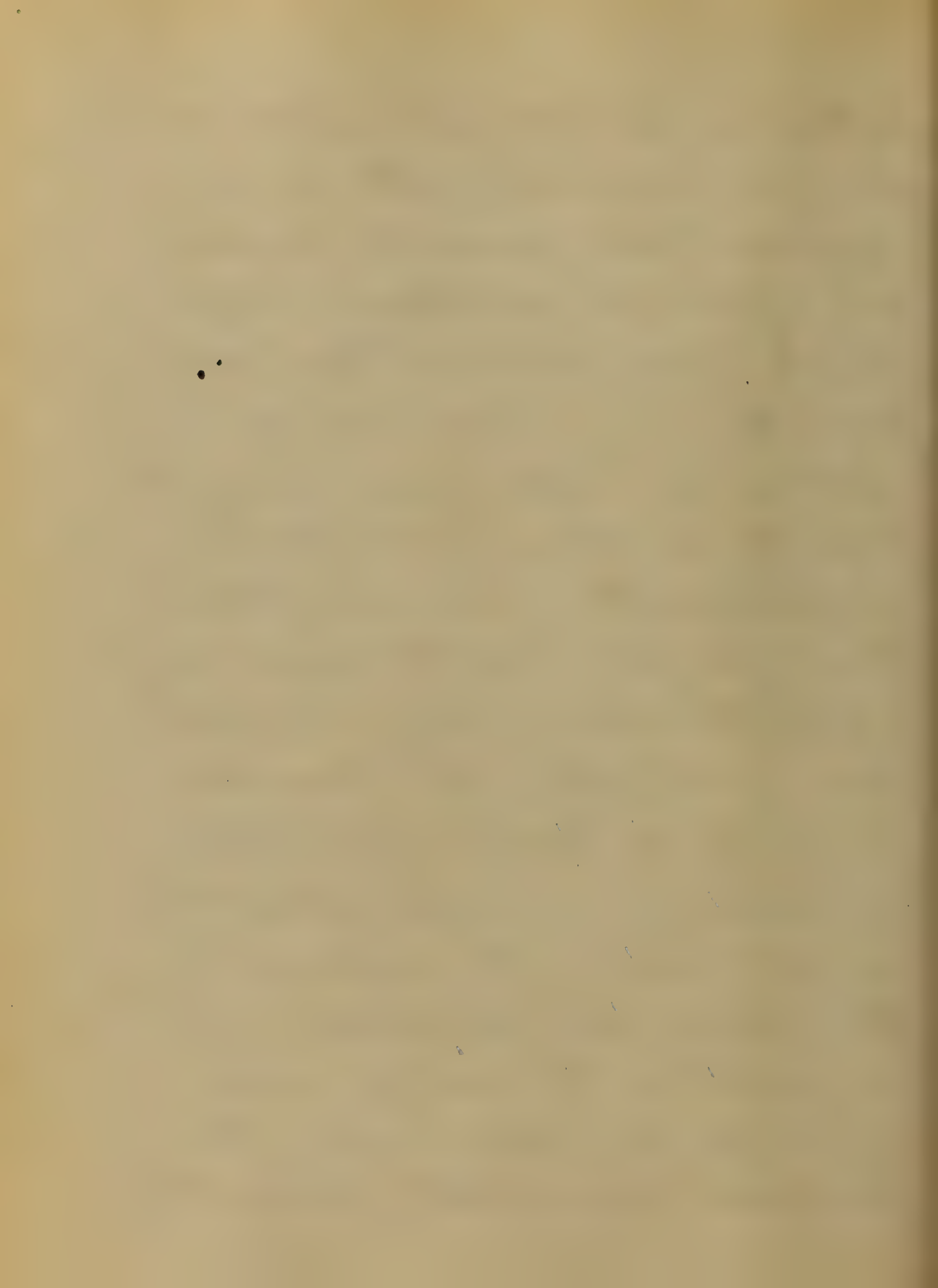
which the calculus induces within  
 the bladder. But these symptoms  
 might be symptoms of some other  
 lesions. No surgeon can positively  
 tell whether it is stone or not  
 untill he has made a physical  
 examination. Then if the physical  
 signs are made out, and the  
 diagnosis established, treatment  
 would be simply, to remove the  
 foreign body make it possible for  
 nature to bring about cure by rest.  
 Stone then is a foreign body requir-  
 ing operation for its removal, because  
 it induces a derangement of the  
 structures, producing painful irritation,  
 and by removing the cause, the  
 parts recover - first through the as-  
 sistance of the surgeon, but afterwards



through the medium of nature.  
I have herein endeavored to show  
that rest is a most valuable and  
important therapeutic agent in  
the cure of accidents and diseases  
especially surgical in nature. To  
illustrate the varied applications  
of this principal rest, I first  
surveyed, as fully as I could, the  
marvelous contrivances which  
nature has employed for securing  
rest to the different organs of  
the body when in disease. Brain,  
the monitor, and rest the cure,  
are starting-points for contem-  
plation which should ever be  
present to the mind of the sur-  
geon in reference to his treatment.  
(During a severe illness, when the



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patient is harassed with pain or fever, he occasionally, after having enjoyed a due amount of bodily rest, experiences sensations not far remote from pleasure. His very prostration may have a charm about it. Rest and repose being at such times the highest objects of his ambition, when he obtains them he feels a contentment nearly allied to actual enjoyment. But however, delightful the transition from life to death, it would be a period of mourning and distress almost exceeding the suffering of the illness itself. It parallels very to be found in the case of various ailments, for instance, when the blood has been accidentally prevented



from circulating freely in one of  
 our limbs, an inflammation is ex-  
 perimented, but when the vital fluid  
 again reflows, great discomfort  
 and pricking sensations succeed.  
 So in severe illness, there may be  
 periods of pseudo-pleasure, while  
 the restoration to health may be  
 irksome in the extreme. Curious  
 during convalescence become scenes  
 of contention, between strength  
 and weakness, each of which struggle  
 hard for the mastery.





Rest for hand for low and best,  
For fingers, feet and brain;  
Rest repose, as long as you,  
From labor and from pain.

Rest and peace thy all the best,  
For things that are below,  
Be soft repose from rest and best,  
That none should seek to know.  
E. P. R.



Having many opportunities for observing the actions and effects of the aromatics particularly that of the benzoic acid and at the same time being much interested in all my etc. impressions on the human frame, I have very naturally chosen it for the subject of my thesis.



# Bromine of Potassium.

Potassium, the base of the salt we have now under consideration, was first discovered at the beginning of the nineteenth century, by the decomposition of its hydrate by a powerful galvanic current, the metal appearing at the negative pole, the oxygen at the positive. Bromine, as it is called by Balard in 1826, it is now obtained in large quantities from the residue of salt works.



decomposed by the action  
of the magnet, even though  
it contains, the bromine is  
set free and is taken  
up by ether. By the addition of  
potassium, it is added in  
excess and the bromide  
and bromate of potassium  
are formed. The solu-  
tion is evaporated to  
dryness, the salts are then  
decomposed by sublima-  
tion in the presence  
of the flask, and of course  
the bromine is  
collected, and is col-  
lected, under a glass.





The U.S. Dispensatory  
directs two methods of pre-  
paration of the salt  
First, by the decomposition  
of the binmate of ammonia  
carbonate of potassium,  
the bases change places  
and the insoluble car-  
bonate of ammonia is fil-  
tered off, and the solution  
allowed to evaporate.  
The iron of the binmate  
is precipitated by the  
oxygen of the carbonate  
and then combines with  
the carbon dioxide of  
the carbonate to form



The potassium of iron,  
which is free of lead,  
while the liberated  
iron and potassium  
uniting remain in the  
solution as the bromide  
of potassium.

In the second method  
the hydrate of potas-  
sium is added directly  
to the liquid bromine,  
bromide and bromate  
of Potassium are formed  
and the bromate is  
converted into bromide  
by heat in the presence  
of carbon by which it



is compelled to give up  
its oxygen.

Little prepares, a more  
what complex method  
of making the substance  
however does not seem  
to possess any advan-  
tage over the ordinary  
ones; Amorphous phos-  
phorus is added to an  
proper quantity of water,  
bromine is gradu-  
ally added and intimately  
mixed with the phos-  
phorus the liquid is  
then heated and when  
clear is poured off from



It is precipitated from  
solutions and neutralized  
with barium carbonate  
the insoluble  
barium phosphate  
then filtered, off and  
the filtrate now con-  
tains nothing but the  
barium bromide, which  
when treated with potas-  
sium sulphate yields  
insoluble barium sul-  
phate and pure potas-  
sium bromide.

The salt itself is color-  
less, anhydrous perma-  
nent in the air and non-





but in reaction.

It crystallizes in the form of quadrangular prisms and cubes, much like those of common salt, but unlike the latter much more soluble in hot, than in cold water. Thirty five grains dissolving in a tumbler of cold water double that amount in the same quantity of boiling water. The latter is soluble in all solvents but peroxide of hydrogen, that of the so called chloride and is to many



persons rather a greater  
than otherwise.

The principle impure-  
ties found in the commer-  
cial article, were tested  
the nitrate of potassium  
and the chloride of sodi-  
um, both of which may  
easily be detected by  
the usual tests for  
iodine and chlorine,  
namely, by the starch  
paper for iodine, and  
the silver nitrate for  
chlorine, or a precipi-  
tate produced by the  
latter of potassium chloride.



it will dissolve in ammonia-  
nia water, if a bromide  
it will not, an iodide  
of an alkali. Iodine may  
also be detected by the  
chromate of potassium  
which precipitates iodine  
in the form of iodide of  
potassium, while the  
bromide of the metal  
remains in solution.

Bromide of potassium  
is an alternative,  
though not equal to  
the iodide in, this res-  
pect, its value is much  
less depending chief



by its, and also a complete  
in the of the present  
time. The present of the  
to the patient's  
in the enormous  
of three four and five  
trans it produced  
note accompanied by  
betude, a sense of  
dumbness, not  
but which so often  
in families typhoid fever,  
disorders of sight and  
hearing, a decided weak-  
ness of memory and  
standing, but rarely  
any delirium. The

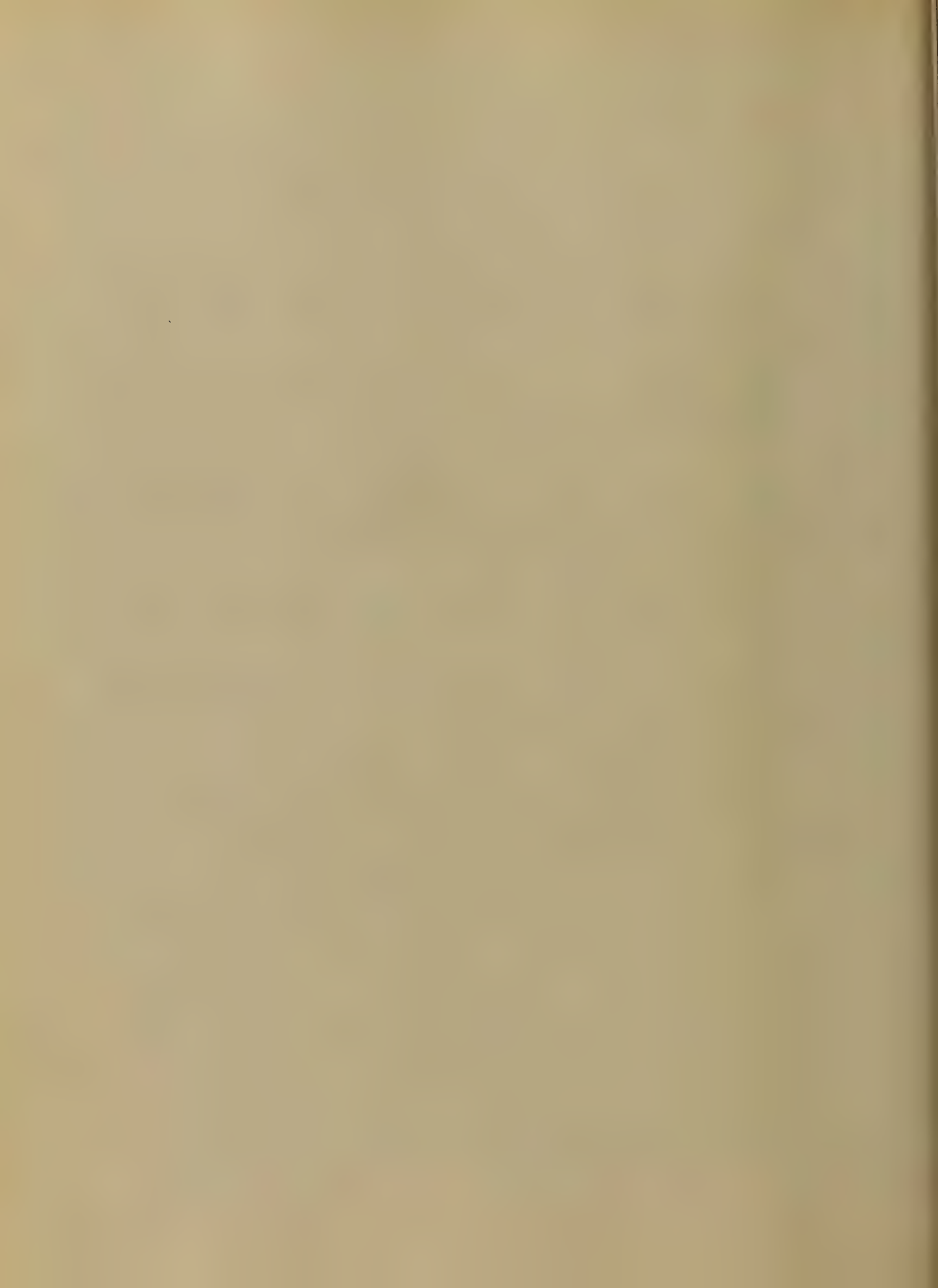




also a remarkable tendency  
in to strutting, and after  
these patients would be hard  
to keep on their legs, some  
rigidity and reflex ac-  
tion were greatly abated  
so that the patient could  
even be put without  
being fully aware of what  
was being done.

These effects passed  
off in a few days leav-  
ing the patients in their  
former state of health.

There seems to be no  
real justification for  
the popular opinion



that trauma produces  
permanent cerebral dis-  
turbance. Hammond, Se-  
gner and our own Profes-  
sor of Nervous Diseases all  
agree that they have never  
seen it produce any  
permanent bad effect,  
though they have often  
reduced patients to idiot-  
cy by it. on the contrary  
Hammer in his work  
on Nervous Diseases states  
that memory may remain  
impaired for an indef-  
inite time by a trauma  
also. In his large scope



ic investigations it is frequently made use of to diminish the reflex movements of the muscles, according to Dr. Traquair, this action is not in any way due to a paralyzing action on the nervous supply, but merely to its anæsthetic influence. Gastric colic is one of the diseases to be remembered in the Aroto, caused by the long administration of the salt, but when properly diluted it



seldom passes at all  
by many of the patients  
in the previous clinic,  
where irritability of the  
stomach is very seldom  
complained of by these  
patients who have been  
taking it ever for years  
continuously. The action  
of the heart is slowed  
and arterial tension  
lowered by the compound  
and according to some  
authors a slight fall  
in temperature occurs  
after the removal or tra-  
tion of these salts.





Excitement produced by  
hemorrhages is exceedingly  
rare. The writer states that  
he has never seen but  
one well marked case  
of it. Although it would  
scarcely it does occur.

There is a peculiar struc-  
tural change in the  
organs of the  
sympathetic system which is  
a considerable amount  
in the development of  
maturity. It also ac-  
tively participates in  
reflex power of the  
sympathetic system and



was under review.

When long administered  
benzides produce a  
peculiar state of  
temperature. Benzides has  
been given, patients  
are affected very dif-  
ferently by it, in some  
it merely shows itself by  
an abundant crop of  
acne over the face and  
shoulders, in others by  
nausea, headache,  
cerebral symptoms, a  
more or less of the ac-  
tion of the heart, and  
other symptoms.



ting general depression,  
all of which pass off  
in a few days if the  
salt be discontinued,  
and tonics used.

Combinations of the usu-  
al of potash with the  
binide have been  
proposed to remove the  
disagreeable symptoms.  
Binide in large  
or doses seems to have  
a depressant action  
being a very slow result  
in the body, unlike the  
binide of other salts  
readily decomposed by



The tissues, it acts as  
an irritant to the  
tissues, and is  
killed for ever.

Smith's case is because  
children narrates a case  
in which half a dram  
was given by mistake  
to a child of eight  
months, suffering from  
cholera. The only  
effect being the prompt  
cessation of the vomit-  
ing. Moreover, the  
vomide does not seem  
to have any effect on  
the patient, in a case





large doses have been  
given to epileptic wo-  
men during their preg-  
nancies, the children  
being born apparently  
perfectly healthy.

Cases like these would  
show the total want of  
lethal power of D. in  
midles.

Elimination takes place  
slowly through the  
urinary & all cases of  
the brain the fauces  
and intestinal canal,  
through the skin, but  
chiefly by the bowels.



from the secretion of  
which a large propor-  
tion may be recovered.

Since its discovery  
bromide of potass. has been  
used in a vast number  
of diseases, chiefly those  
of the vascular and ner-  
vous systems, uses in  
which its sedative ac-  
tion is best displayed.

In epilepsy bromides  
are the chief anchors of  
the profession. They  
have in fact nearly sup-  
planted all the other  
methods of treatment that



with the best results, un-  
fortunately it has numer-  
ous limitations. It would  
appear as a general rule  
that it is only in the  
more recent cases of func-  
tional epilepsy. Before  
this method that it has  
been fully compared,  
and in those cases of ep-  
ilepsy from cerebral  
which approach in char-  
acter more nearly to the  
hysterical, or those depend-  
ing on some form of organic  
disorder of the system  
irritation of the stomach



One cannot, unfortunately,  
expect a cure can be ex-  
pected from the usual  
cure, in established ca-  
ses, come close probably  
with some course organ  
lesion of the brain. Though  
it may be inadequate  
to cure yet it often re-  
ceives a most happy  
effect over the disease  
in diminishing the num-  
ber of the convulsions  
and by otherwise im-  
proving the condition  
of the patient, but the  
remedy will not pre-





ment the gradual deterioration of the functions of the brain, that nearly always accompanies epilepsy. It is a curious fact that attacks of menstrual epilepsy and slight petit mal are generally not so much benefited as those of the regular grand mal.

Cases of epilepsy due to some uterine malformation are perhaps the more curable than any other form we have to deal with.



Sprinkles, are by some  
supposed to have a greater  
effect in softening the  
uterus than camphor water.  
In puerperal fevers both of  
the puerperal woman  
and of the infant, the  
medic particularly in  
combination with the  
chloral hydrate are of  
less use, with the first  
stages of the disease, indeed,  
it is a most excellent  
remedy in puerperal  
epidemic disease, even uterine.  
Many of the rose water  
distillances, as flesh



ings of the face, numbness, palpitation of the heart, or depression at the feet ings in the hypogastrium are quickly relieved by the Serruades.

Some nervousness of the respiratory organs, exhibiting cough, spasmodic asthma, or asthma, results from irritation of the stomach, intestines, uterus, or vagina, and after it has been quickly benefited by some narcotic; Gargles of benzoide powder, or simple



found for the benefit of  
patients, but we would  
be inclined to suspect  
that such a result  
would be obtained  
not from any power  
of the bundle to give  
energy but probably  
only from its anes-  
thetic effect on the  
joints.

In regard to the power  
of the bundle to overcome  
normal emissions and  
at normal pressure  
certain there seems  
to be a good deal of dis

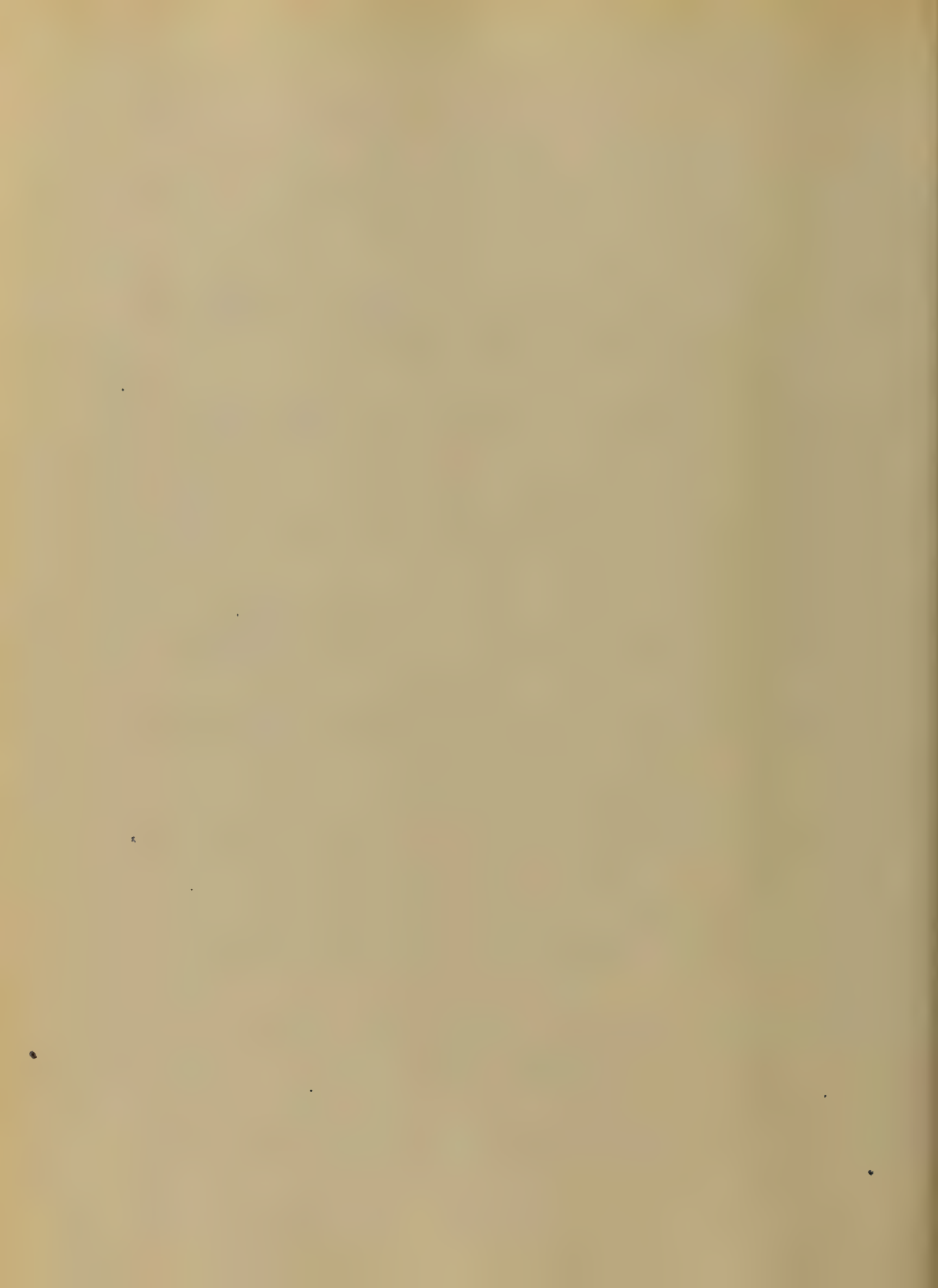




putation, and taking on  
and all together it would  
seem that it is generally  
agreed that the most  
nearly the approach to  
the plethoric condition  
that the patient has  
the more powerful will  
be its anaphrodisiac effect.  
Lectures on the Williams  
states that whether the  
male or female was  
treated an improvement  
in their health is  
the use of the bromide  
even in the largest  
doses in epilepsies



addicted to masturbation  
time the effect has not  
been very marked, and  
some authors as Voisin  
state that they have  
met with patients  
subjected, to several  
operations and several  
courses produced by the  
administration of potassium  
and really it does not  
seem as if the  
feeling that prompts  
the act of self pollution  
has its origin in  
the genital, but most  
likely lies in a morbid



state of that point almost  
regard the prostration, however  
in some cases, as to more  
general use, and thereby  
improving the blood suffi-  
ciently helps to do away with  
these morbid humors  
Scurvy, however, it  
has been found to  
use this bromides  
diabetes, the paper  
relation being that a  
good effect will be  
produced by its ad-  
ministration in  
the morbid.

And this, however, in



which the arteries are  
at present found to be used  
is inflammation, it can only  
be of benefit in that  
form due to the spasmodic  
nature of the central  
vessels produced by  
mental overwork, fatigue  
etc., its action in  
these cases being to stop  
the heart and upon  
the vase itself is  
slowing its action and  
thereby diminishing the  
intercranial pressure.  
On the other  
hand in an an of





business will, stimulation  
would produce much  
better results.

The recent, you may say,  
of pregnancy, and various  
etc. due to irritation of  
the sympathetic on the  
you are allayed by the  
bromides. Dr. Park, urges  
the use of the bromides  
particularly that of  
ammonium bromide  
stimulation, as the  
only with good effect.  
But other practitioners  
have not been so  
successful as that now



These salts are never  
used in this disease.

Triglyceride, paralytic  
as may be seen when of an  
ingestive type are often  
quickly relieved by the  
mild. But in other  
paralytic cases, as in  
some, it does not have  
the slightest influence.

We have now treated, of  
nearly all the most im-  
portant uses and ac-  
tions of the salt, we have  
chosen for our subject.



but to go deeply into  
all its effects on the  
system would be a  
work of much time and  
labor, and you think  
it best to close our few  
remarks with respect  
at this juncture. We  
trust that they may prove  
acceptable.

Respectfully,

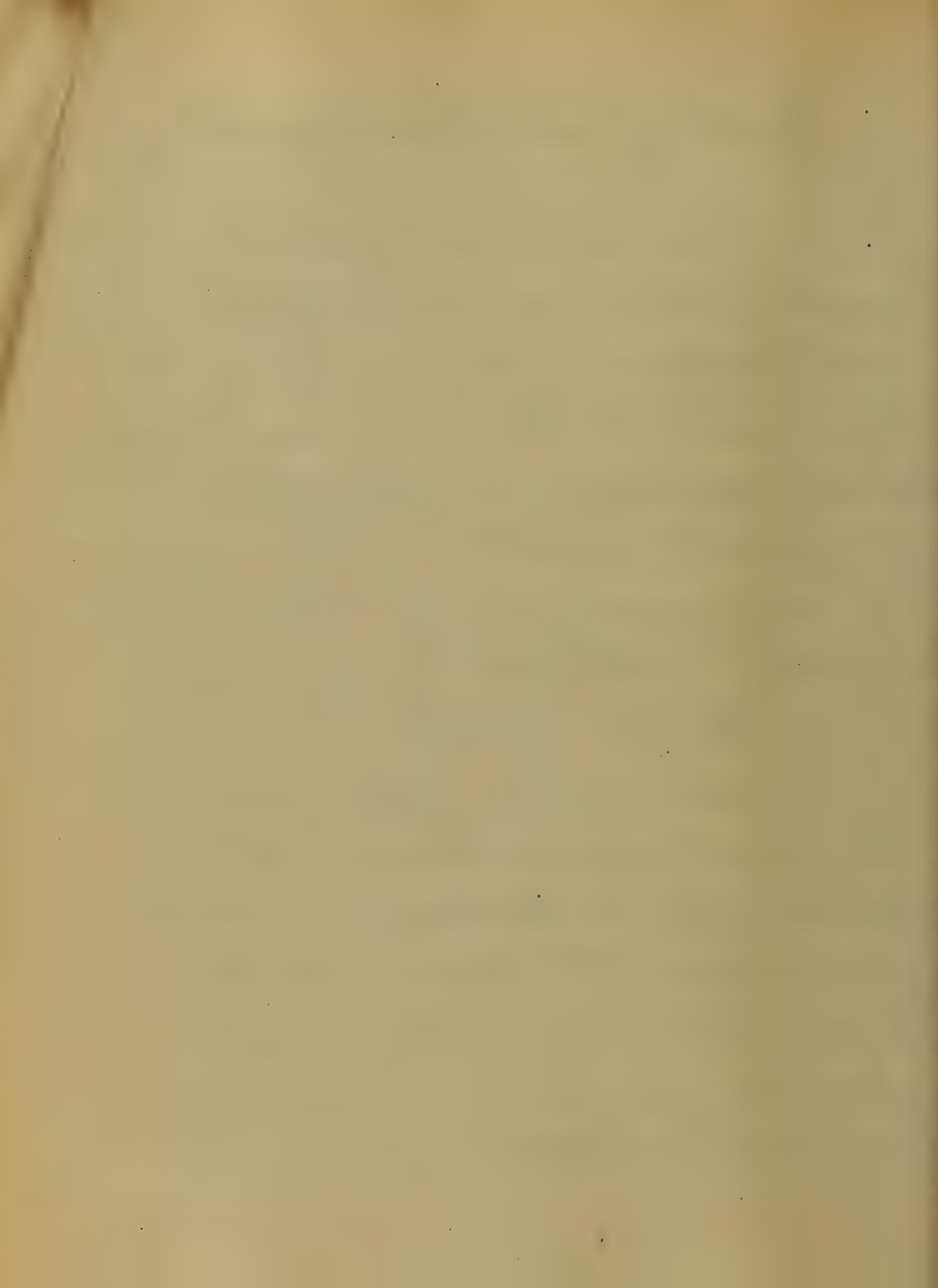
Henry J. Burdette

Dec. 21, 1876



# Cerebrospinal meningitis

The term cerebrospinal meningitis is used to define an acute, diffuse inflammation of the pia mater of the brain, and spinal cord, with deposit of a fibrine-purulent exudation. The symptoms are very numerous, viz, cerebrospinal typhus, spotted fever, congestive fever, etc. The infectious character of the cause of the affection (whatever that may be) has been well shown by the numerous recorded epidemics of the disease, which have prevailed at different periods, among the various nations of Europe, and in this





country. The first epidemic of which we have any reliable information occurred in Geneva, and prevailed from February to April 1835.

Then followed in quick succession, the epidemics of Grenoble,

Besoul, Dorsten, and <sup>L</sup>ispe.

After a long interval of comparative freedom from the disease,

Europe, again experienced its ravages in the year 1842.

The epidemic first made its appearance in France, and thence

spread rapidly over the various countries of the continent,

bringing death and dismay with it, passing over the channel,

it visited the British



Isles, and finally appeared on this side of the Atlantic. The etiology of the disease is very obscure. Notwithstanding, the past twenty years have presented abundant opportunities for the study of the disease, and although all the data gathered in regard to the origin and spread of the different epidemics have been carefully, and thoroughly investigated, still we are nearly entirely ignorant of the original source from whence it sprang. The inflammation, and exudation which first strike the eye, would almost lead one to regard the

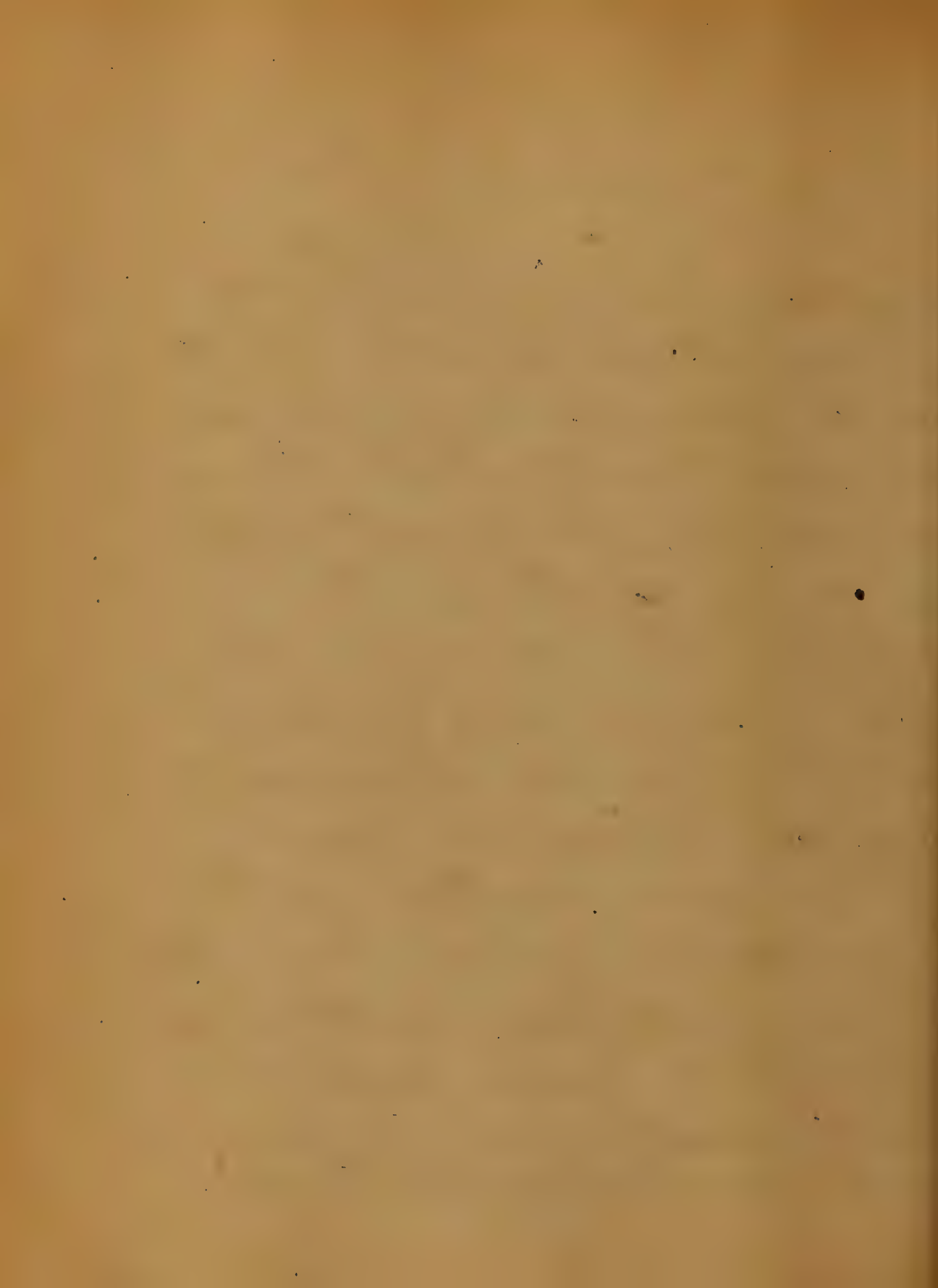


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whole process as a simple inflammation, but when a more careful examination is made, a different view is entertained. After a just consideration of the nature of the affection, based upon the following constant conditions; namely, occurring, until recently, very rarely, and then most often sporadically, the disease has since spread as an epidemic over entire countries—over districts over two continents; sometimes progressing uniformly from one place to another. Sometimes ceasing in this country to appear with increased severity in that; the symptoms and lesions being alike in



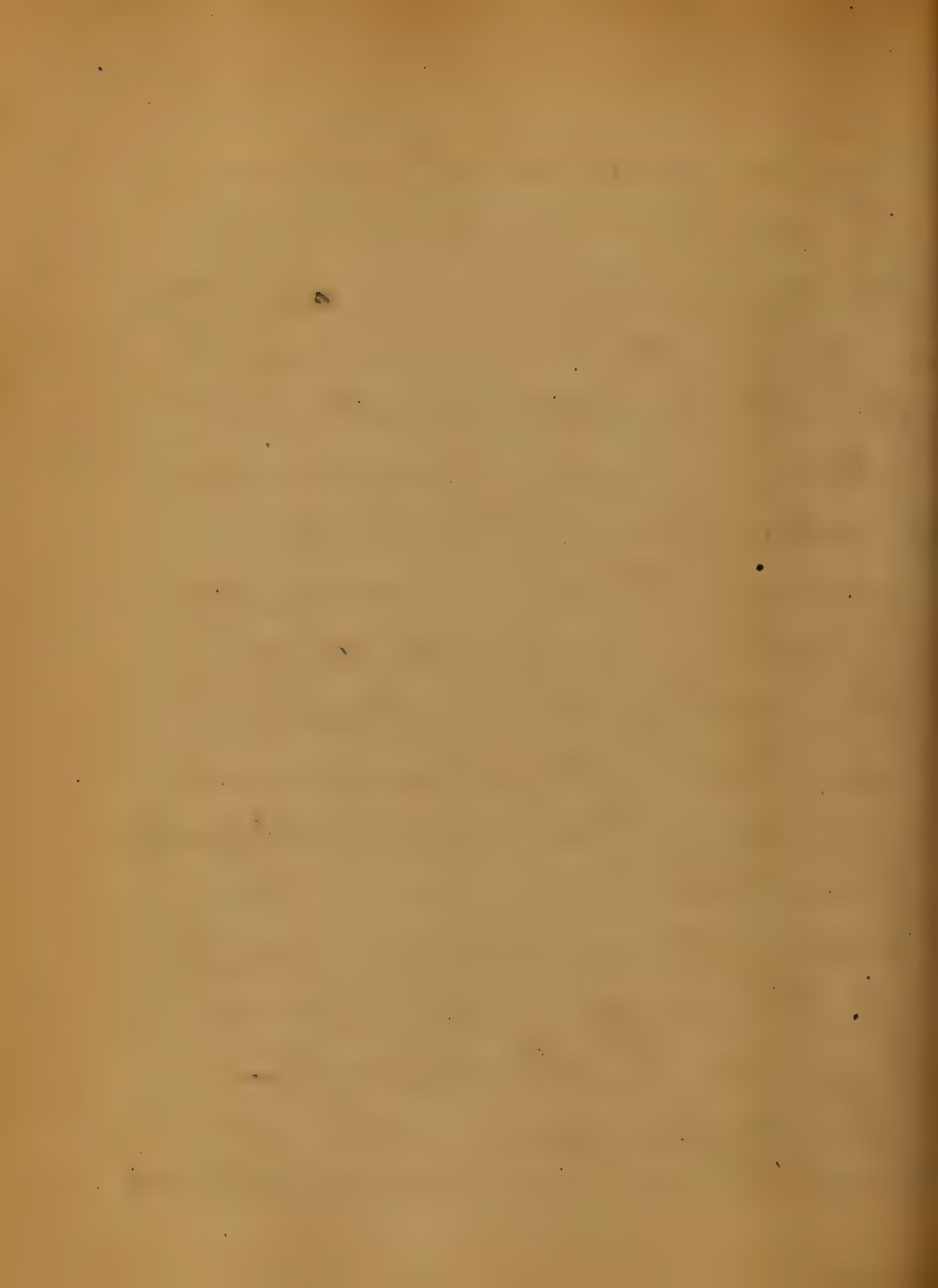
the mild, moderate, and severe  
 cases, only in degree differing;  
 eruptions, and enlargement of the  
 spleen, alterations in the blood,  
 and muscular changes being all  
 common to most infectious diseases,  
 and all being found continually  
 and prominently in this  
 affection, the conviction of  
 its epidemic character, forces  
 itself upon one. Some eminent  
 English, Italian, and French  
 Physicians maintain with  
 considerable logical force, that  
 it has no individual identity, but  
 that it is a disease identical  
 with exanthematous typhus,  
 or the so-called cerebral typhus.



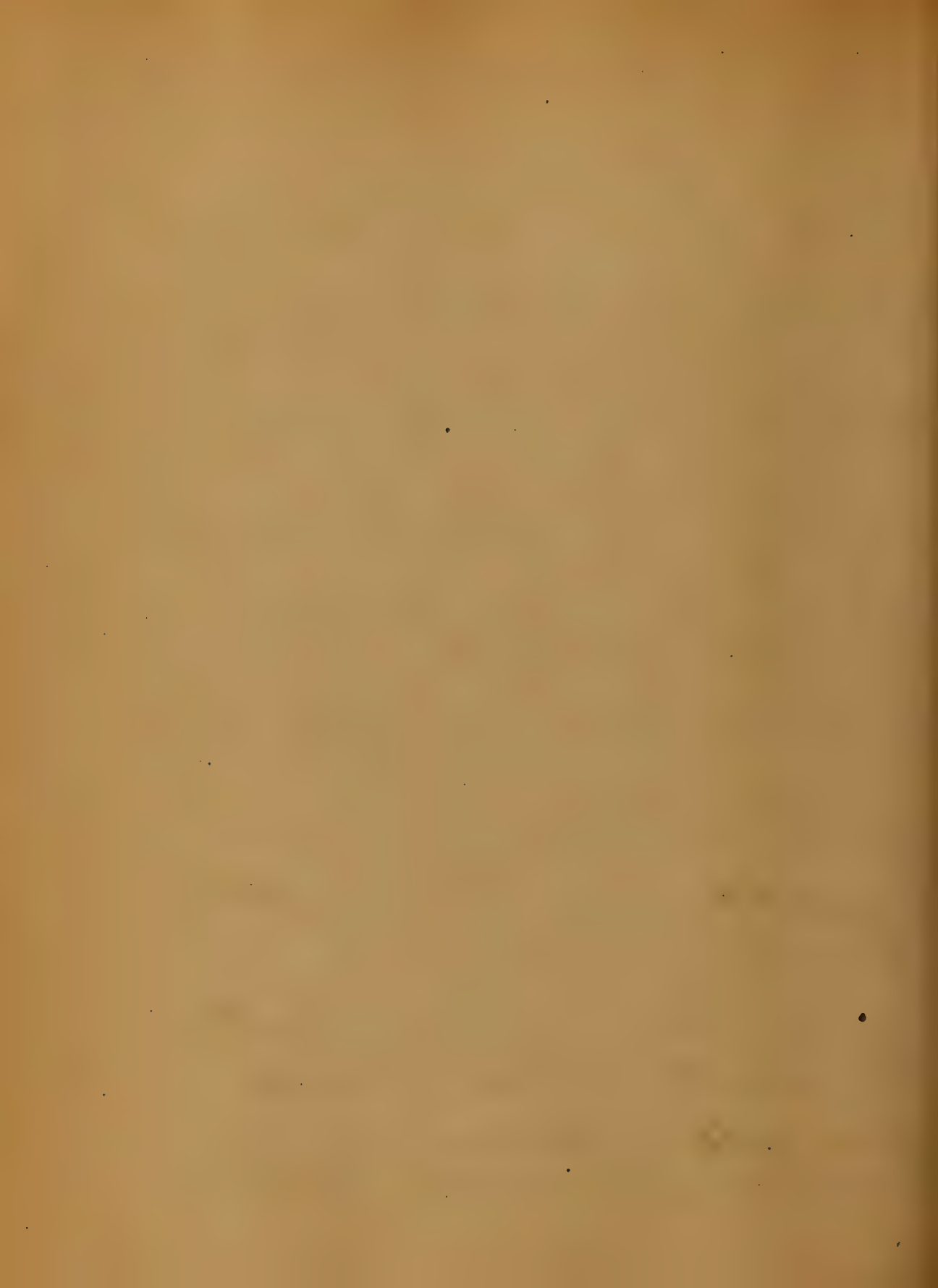


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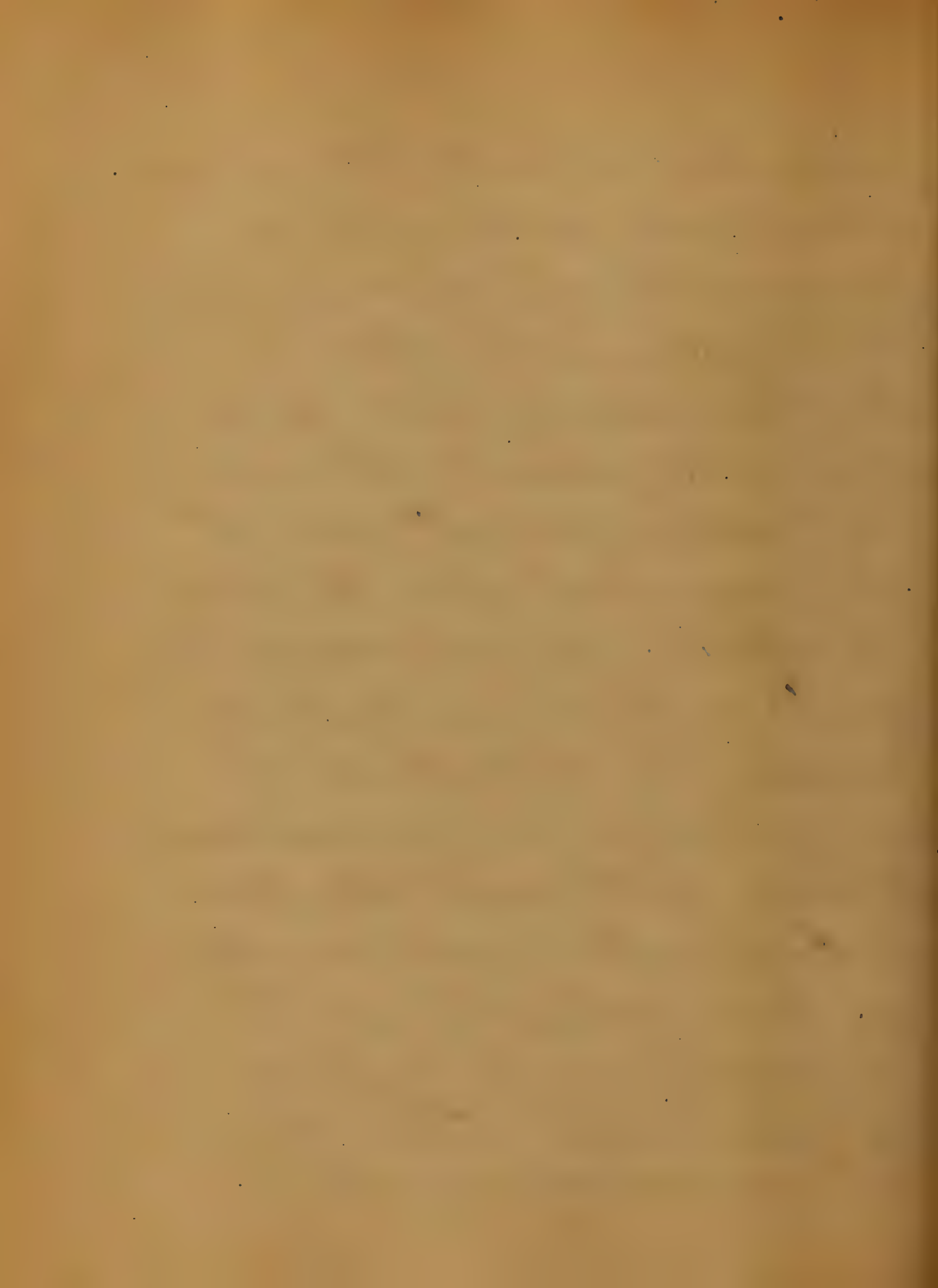
There are facts which go to prove  
the nonidentity of the two diseases;  
for instance, Typhus is distinctly  
contagious, that is, communicable  
from the patient to his attendant,  
or to any one who approaches within  
a certain radius of the bed;  
moreover the cause of meningitis  
appears in country districts of  
the most healthy situation,  
where a case of Typhus has never  
been seen. It can also be satisfactorily  
shown, that there is no relationship  
between the infecting principle  
of this disease, and that of  
malaria. In the first place,  
the affection seems rather to  
avoid, than to seek malarious districts.



and on the other hand, shows a decided preference for dry, sandy, elevated places, such as the high plateaus of Franconia, where epidemic after epidemic raged with the greatest virulence; Secondly, it does not prefer the season of the year, when the malarious principle is most active, viz, Summer, but rather selects the cold months of winter; finally, when it does appear in a malarious region, its malignancy is not exaggerated, nor is the intermittent character of the fever, and inflammation increased. Recently, the connection between epidemic meningitis and malaria was irrefutably disproved by Bonhaing.



who noticed that the *Bola* epidemic  
 did not seek out the malarious  
 portion of the city; that during  
 its prevalence, and after its  
 disappearance, malarial fevers  
 were entirely absent; moreover,  
 that quinine did not seem to  
 have any effect upon the disease.  
 The affection generally occurs in  
 winter, and spring least in  
 summer. The observations of  
 many German physicians seem  
 to show that great variations  
 in temperature and moisture  
 are more influential in the  
 production and support  
 of the disease than the  
 extreme, unvarying cold



of winter. As regards individual  
predisposition, age is of much  
importance, sex of very little.  
The statistics of Sanderson show  
164 cases among males, and 157  
among females. Age, however,  
influences not only the individual  
susceptibility, but also the  
severity of the disease. Childhood  
suffers most, the first two decades  
of life receiving the disease  
most frequently and most  
violently, but no period of  
life is exempt from its  
fearful visitations. Still, it is not  
very often met with after  
the fortieth year of age. The  
mortality from this disease





is very great. The proportion of deaths was sixty per cent, during the epidemic observed by Fourdes; and Ames gives the same proportion in the Alabama epidemic. From the statistics given by those who were present during the different epidemics, there would seem to be a gradual diminution in the proportion of deaths from each succeeding epidemic of the disease. This goes to prove one of two things, either, the treatment instituted now is superior to that employed in former epidemics, or, the epidemic cause is wearing itself

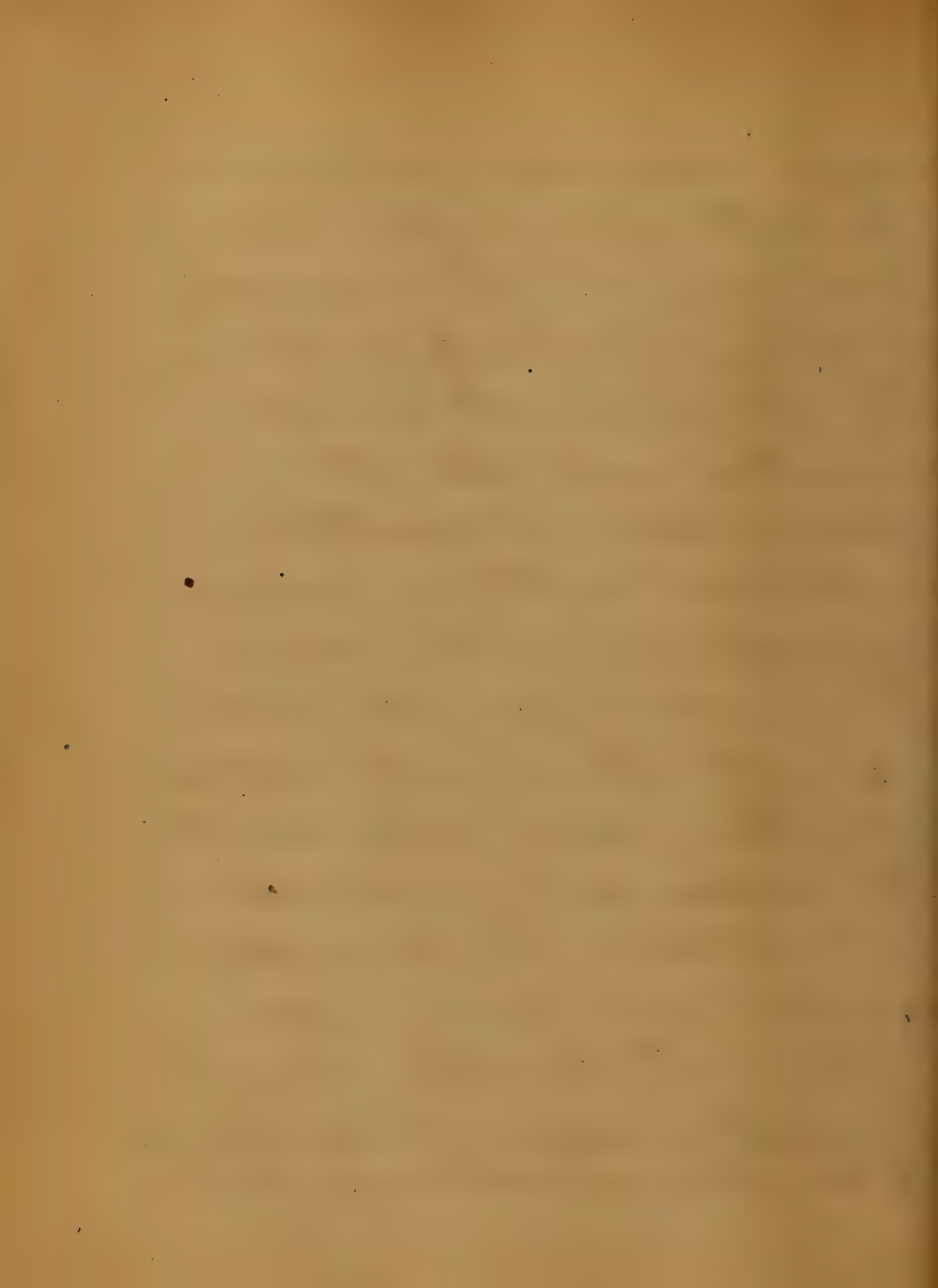


out, whichever it may be, I hardly venture to say, experience alone;

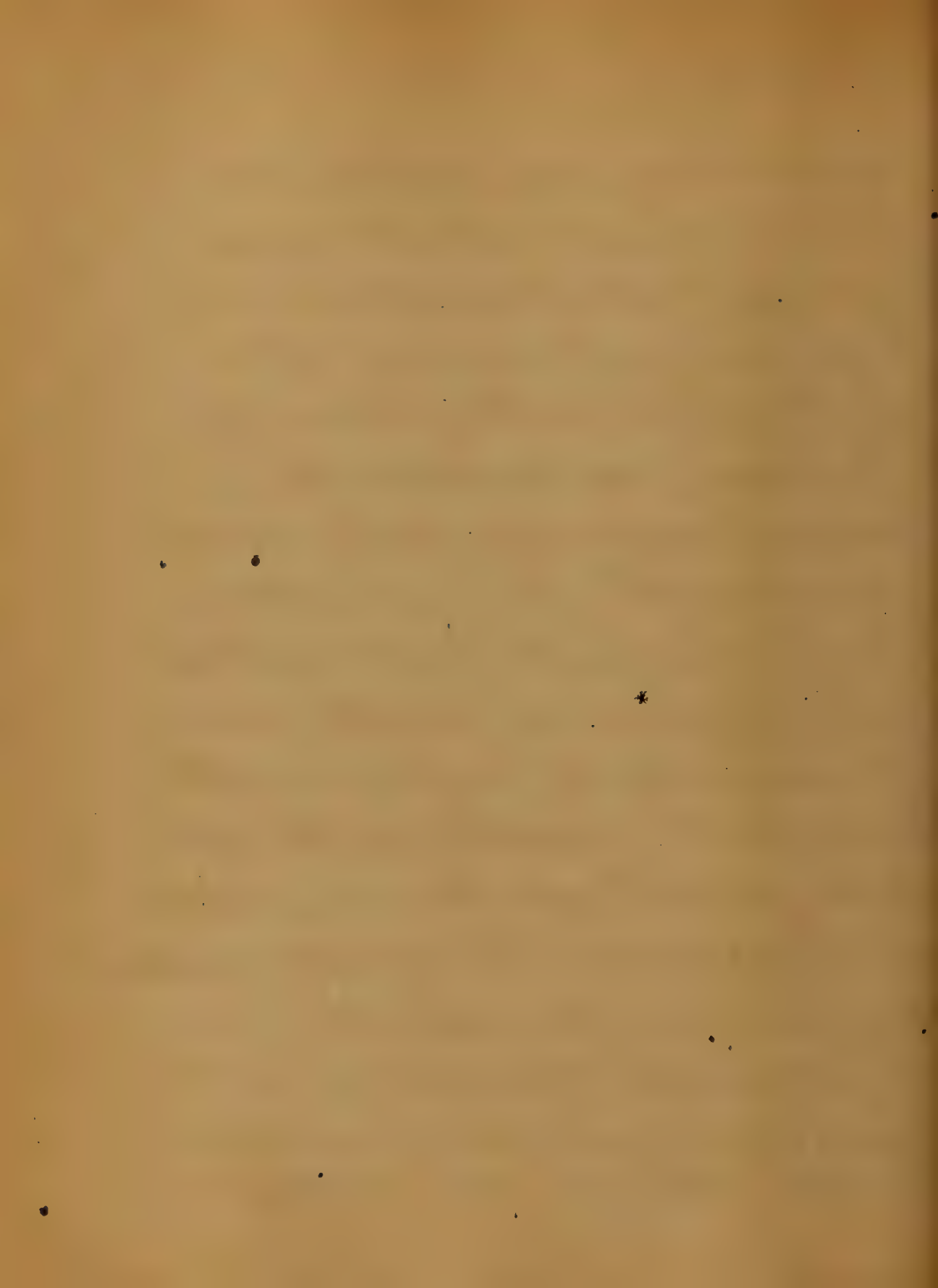
I suppose, will solve the difficult question, but if it were possible to form a correct judgment from reading alone, I would rather support the supposition of Stille, viz. that, the morbid cause of meningitis, at some future day, will not be the active, and intractable one it is. The external influences of life, which favor the outbreak of the affection, are bad hygienic conditions, which furnish a proper nidus for the development of the morbid germs, such as, poverty, poor, and insufficient nourishment, and damp



unclean, overcrowded ground floors.  
The better classes suffer but  
little from it. The overcrowding  
of sleeping apartments by filling  
the atmosphere with animal  
excretions, and often, the  
decomposition of vegetable  
and animal matter, are perhaps,  
efficient causes of the disease.  
It is a well known fact, that  
frequently the private citizens  
of a town would escape, while  
the soldiers in their barracks  
were attacked. The overcrowded  
workhouses of France were  
often hotbeds of the disease.  
During the prevalence of some epidemics  
it was observed, that only certain



rows of houses were affected with the disease, and when the cause was sought out, it was either found to spring from the bad condition of the streets, or the filthiness of the houses, and sometimes the personal uncleanness of the inmates was responsible. It would not be proper, however, to conclude, that bad hygienics are the sole causes of the disease, they only prepare a suitable soil for the vegetation of the fatal seed; for although the same condition of things remains, the affection sometimes ceases, and even does not appear in places much worse, as far as laws of hygiene are concerned. Bodily condition does not seem

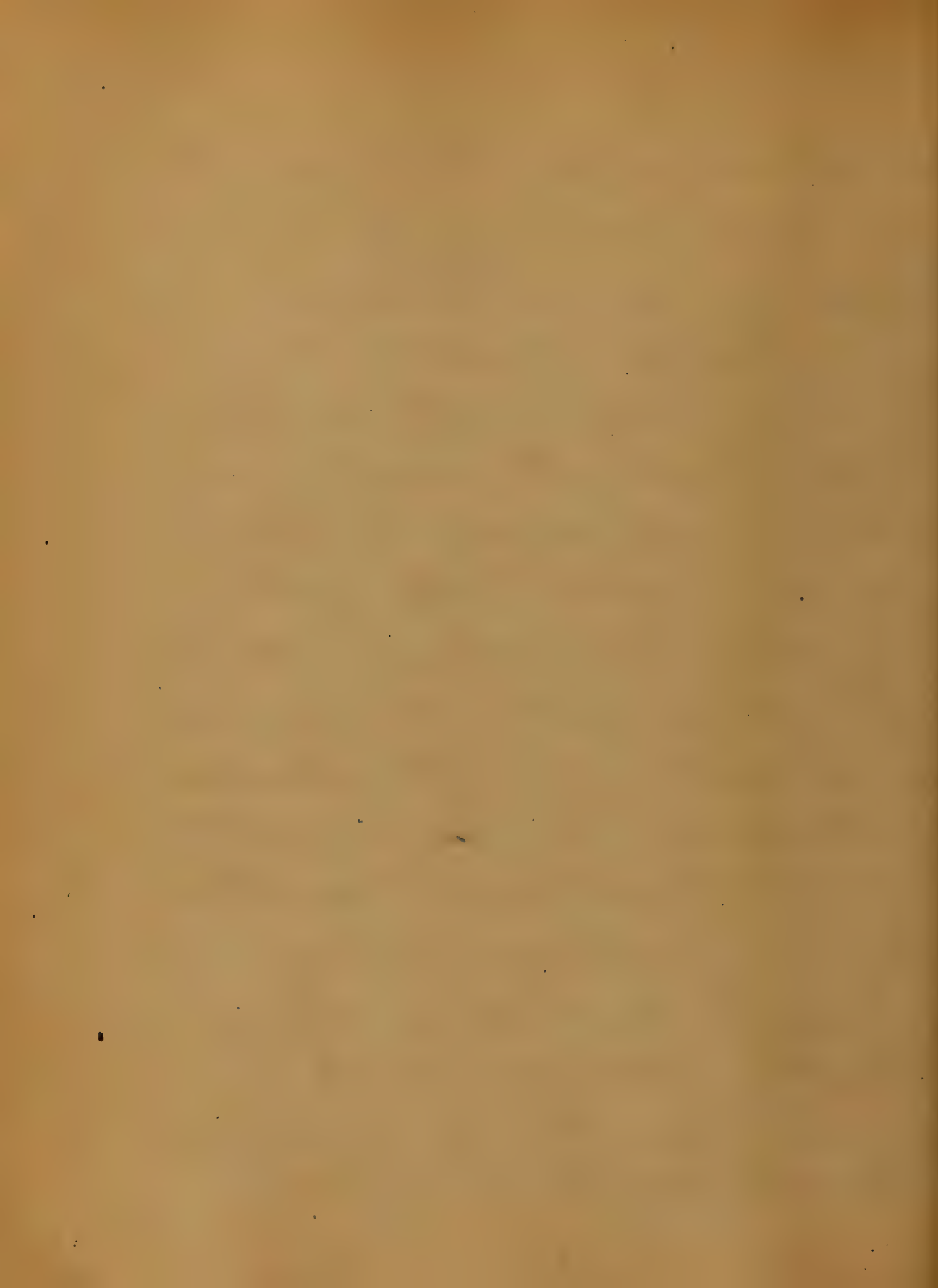




to have much influence, since a great proportion of those attacked are hearty, robust children, and yet there does appear to be a susceptibility to the disease, shown by persons suffering from chronic diseases, and especially those laboring under a longstanding affection of the air passages. Whether the poisonous material is a miasm or a contagium has not yet been settled by pathologists. The majority of writers reject the strict sense of the term contagious as applied to this affection. The disease does not spread in regular order from one person to another.



as this term implies, but according to the views expressed by many able French physicians, who have had ample opportunities for observation in a number of epidemics of the disease; "We have to deal with a morbidic germ, which primarily arises in the human body, and infects healthy neighbors, only, when it has undergone a certain, still unknown, modification by means of cultivation in suitable intermediate individuals." This theory is worthy of deep thought, since it owes its birth to men of great research, and experience. Meningitis almost always begins abruptly, without any distinct prodromal stage. When there are prodromata, they will consist of headache,



exhaustion, anorexia, nausea, and  
flying pains. Previous to the onset  
of the disease, there was an interval  
of several hours during which the  
patient felt perfectly well.

The initial symptoms always present  
a violent character; a severe chill,  
extreme malaise, which drives the  
patient at once to bed, raging  
headache, and excessive vomiting,  
which recurs whenever the patient raises  
himself. In severe cases there occurs at  
once coma, or delirium, convulsions, and  
the characteristic stiffness of the  
neck, which in a few hours may  
develop into a tonic contraction of  
all the extensors of the spinal column.  
In moderate cases there is only the



stiffness of the neck, without complete loss of consciousness, but some somnolence, with great restlessness.

When spoken to the patient will answer generally correctly, but not very intelligibly. His most common complaint is of the headache, and even when unconscious, he shows the intensity of his sufferings by the agony which every feature expresses.

The disease develops rapidly.

The fever is most often moderate, irregular, and has no typical character. The pulse is either normal, or slightly accelerated, but undergoes great changes in frequency. The pulse is not a reliable guide in this disease. During the delirium, and

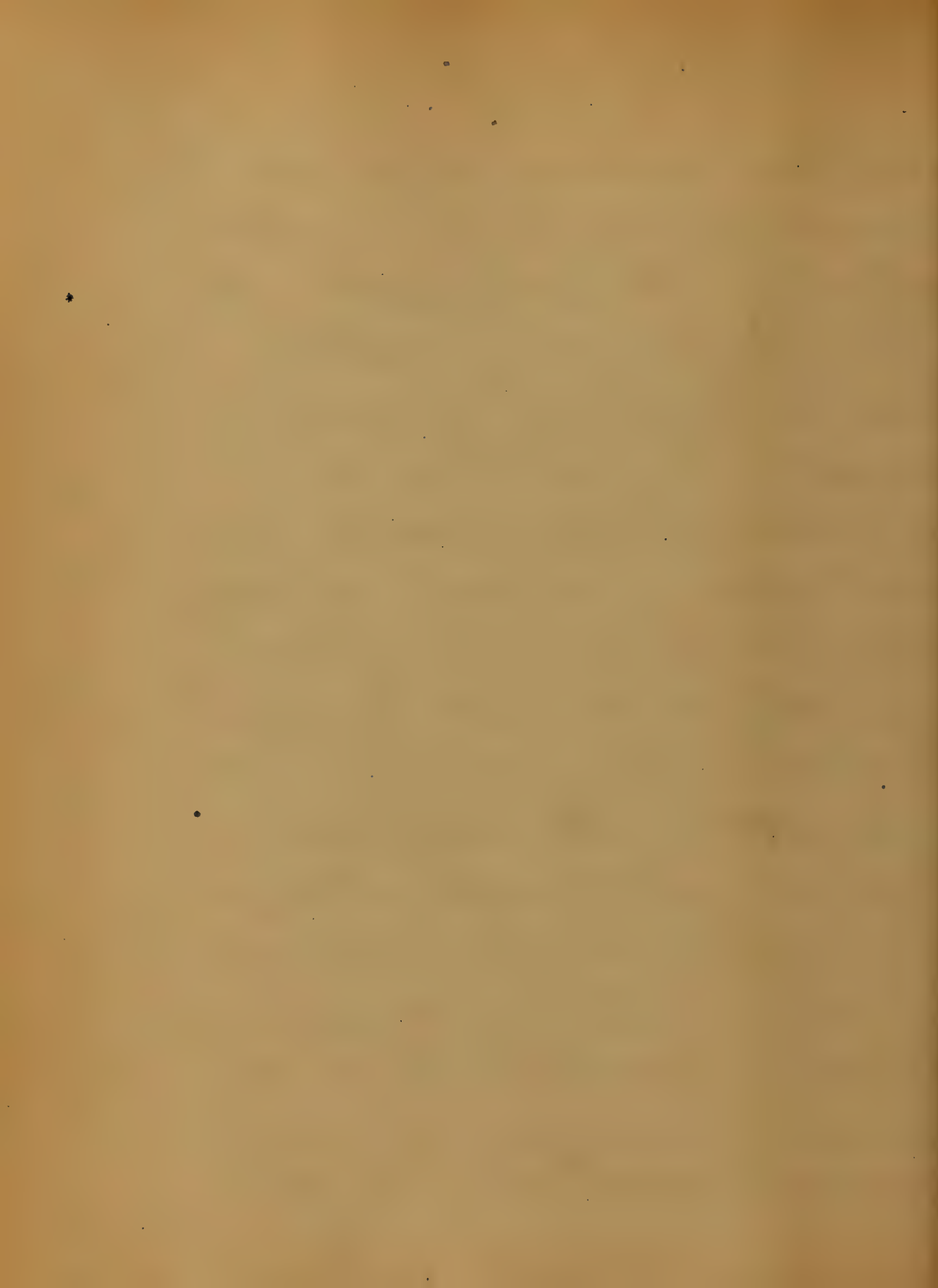




while the restlessness still continues, the skin becomes hyperaesthetic, followed by the same condition in the soft parts, and finally in the joints, so that every movement the patient makes, even raising the bed clothes, will elicit a cry of anguish from him. Now come on various cutaneous eruptions; herpes upon the face, and sometimes upon the extremities, arranged very often symmetrically on both sides of the body; then erythema, roseola, urticaria, and petechiae. From the third to the fifth day, the tongue becomes dry and cracked, the appetite, which sometimes continues till now, fails, constipation exists, but now and then there is



diarrhoea, and more rarely involuntary  
 evacuations from the bowels. If the  
 attack is to terminate fatally, the  
 symptoms of nervous irritation  
 cease, while those of depression  
 increase. The patient lies in  
 complete unconsciousness, the urine  
 and faeces are voided involuntarily,  
 the pulse becomes very rapid,  
 and towards the end too rapid  
 to count - small and barely  
 perceptible - the temperature  
 is very highly elevated, there are  
 convulsive muscular movements  
 paralysis of the cranial nerves,  
 paresis of one half the body,  
 general convulsions, ending in  
 coma and death. In the other

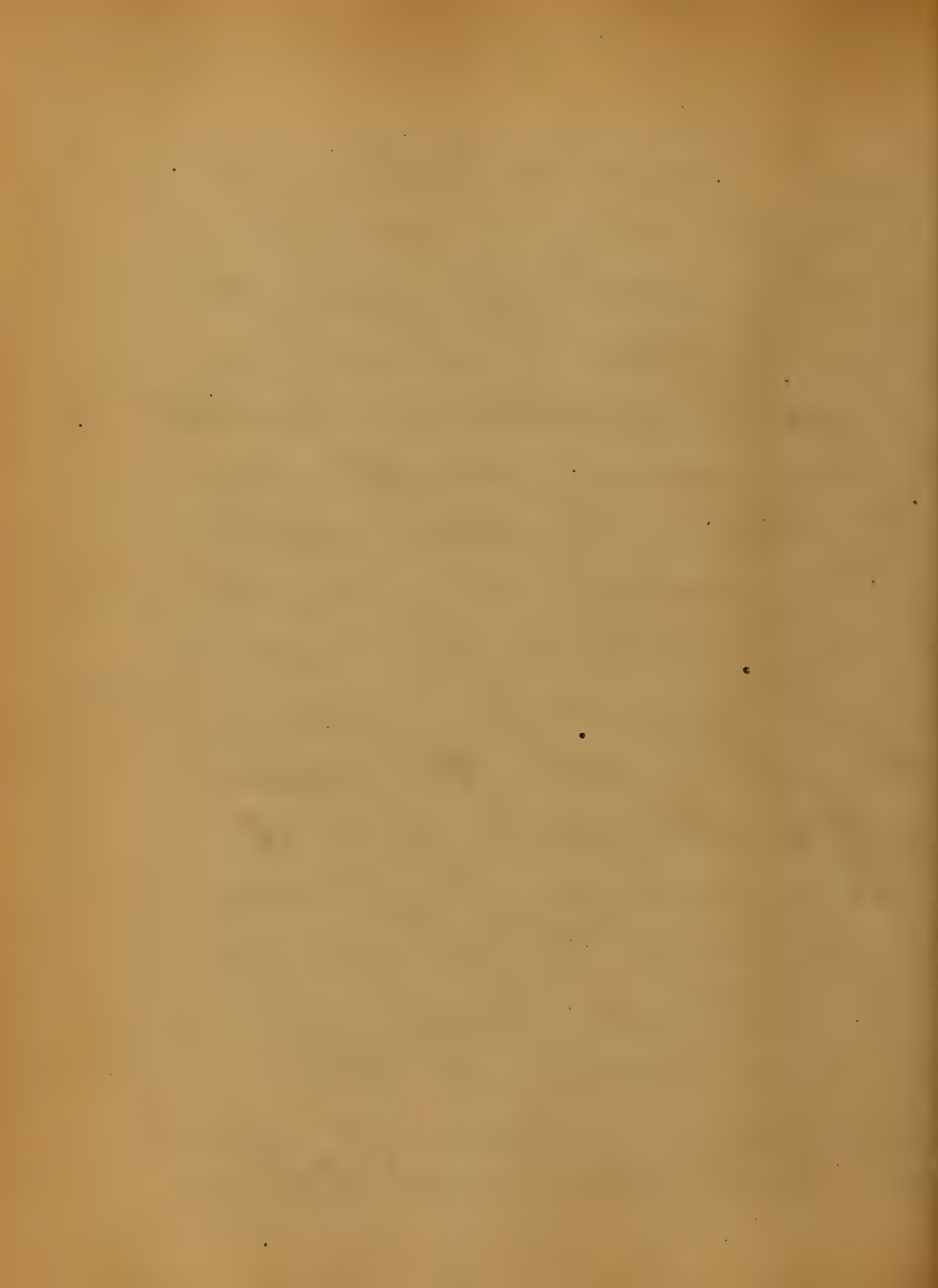


hand, if the case is to end favorably.  
The symptoms of depression do not  
occur, or if they do, they soon  
subside. The patient continually  
complains of the terrible pain  
in his head, also of the pain in  
his spinal column and extremities;  
The eyes will not bear light,  
nor the ear's noise; the vomiting  
subsides after five or six days;  
the headache and stiffness of  
the neck gradually diminish;  
finally, convalescence is generally  
declared in from one to two weeks,  
but it sometimes, deferred beyond  
this period. The lesions of Meningitis  
are very constant. They are found  
in nearly every autopsy, and only



vary in the degree of development.

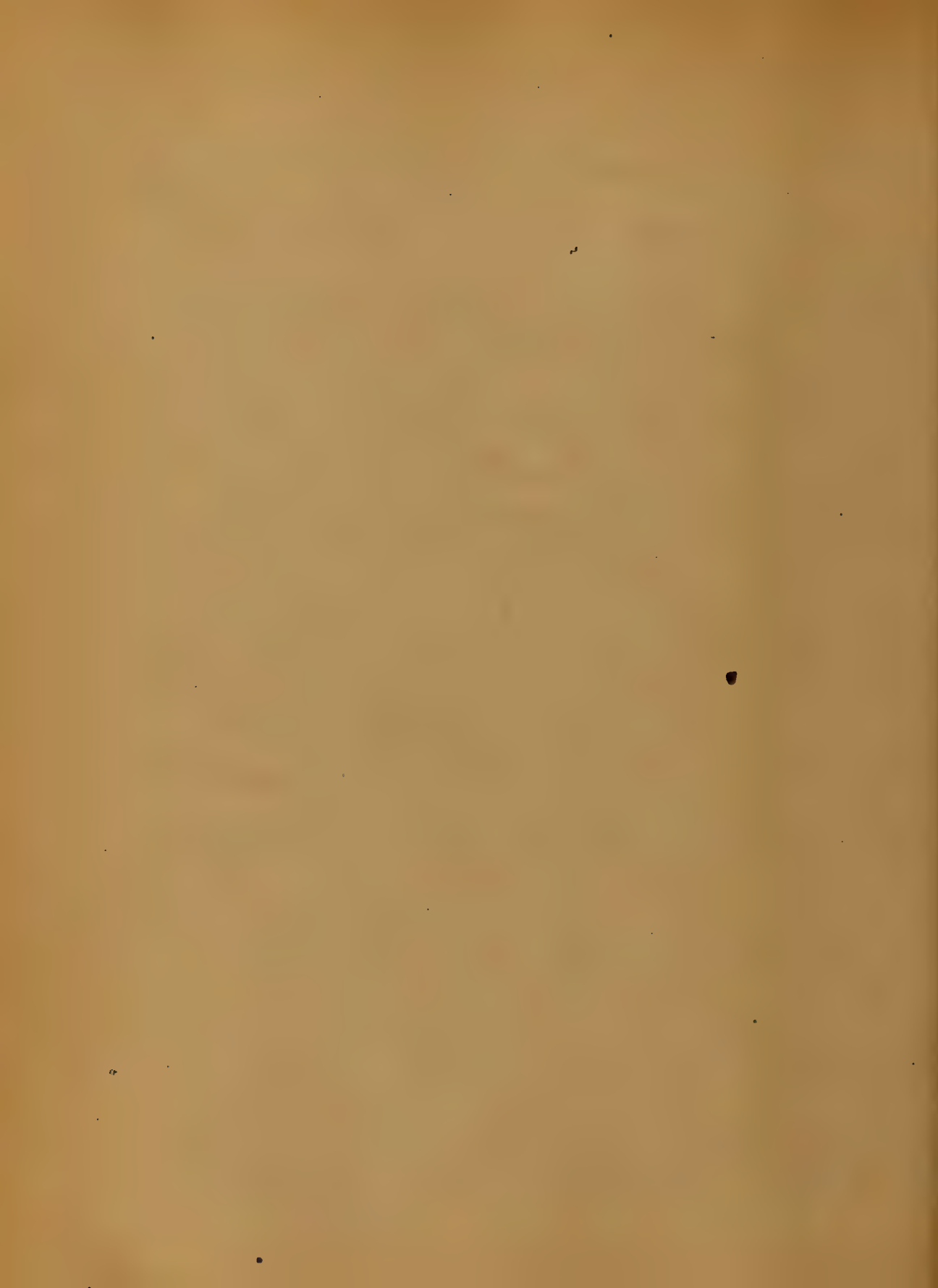
The emaciation in cases of long duration is great. Rigor mortis exists for a long time. The calvarium is frequently congested in a punctate or linear manner, especially along the sutures. The dura mater is often exceedingly tense, smooth on its external surface, and in parts, here and there, united to the vitreous table. It is sometimes dotted with specks of blood. The inner surface is hyperaemic, and adherent to the arachnoid. The arachnoid is sometimes found quite normal, at others hyperaemic, and frequently, after a protracted illness much thickened.





The pia mater is almost always hyperaemic, with scattered spots of capillary extravasations. It is also often thickened by the inflammatory exudation. It becomes so intimately adherent to the brain, as to present some difficulty in its removal.

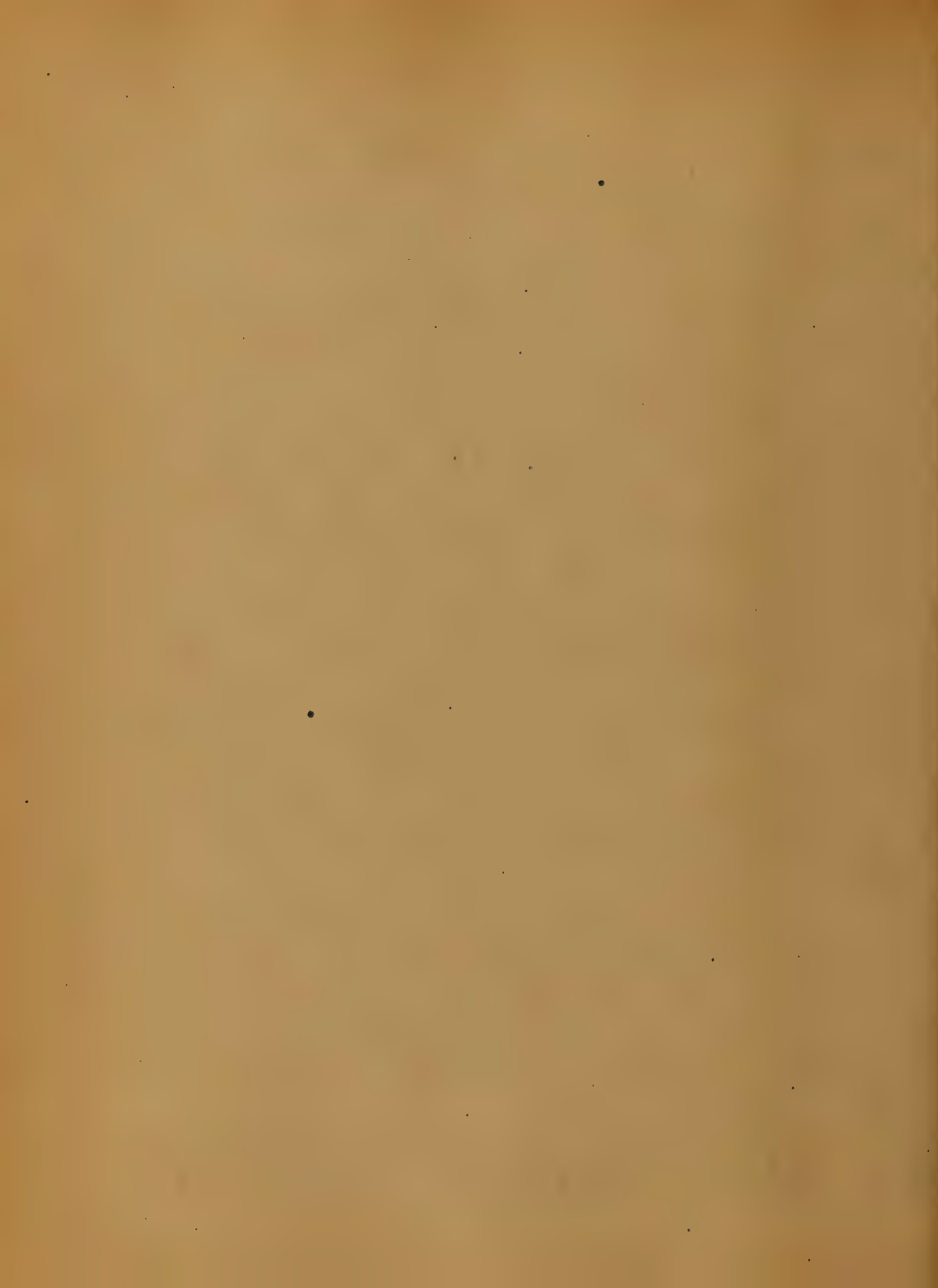
In the sinuses, are found thin, fluid, blood, with loose or firm post mortem clots. The more acute the case is the less free exudation is found between the pia mater and the arachnoid. In the fulminant cases there is no exudation at all, and the only changes found in the pia mater, are microscopic, which consist in a dense infiltration



of cells, more numerous along the course of the bloodvessels. Where there is free exudation in the subarachnoid space, it appears there in from the first to the second day of the attack. It presents the appearance of a cloudy serum. When the disease has lasted from two to three days, the exudation is distinctly purulent and of a gelatinous consistency. Sometimes it has a bloody tinge. It is deposited upon the convexity as well as the base of the brain, and shows a preference for the course of the vessels, the folds, and depressions of the brain. The fissure of Sylvius, between



the pons varolii and the chiasma,  
also upon the pons and cerebellum.  
The membranes of the spinal  
cord are found in much the  
same condition, save in one  
respect, the exudation, which appears  
as a cloudy serum upon the brain,  
becomes here a thick fibrinous pus,  
which still later changes to a uniform  
stratum of pus, deposited in layers,  
chiefly in the lumbar region,  
very little comparatively in  
the cervical region; moreover,  
it seems to be confined nearly  
exclusively to the posterior  
surface of the cord. The roots of  
the spinal nerves are often buried in  
pus. The brain substance is congested,



with punctiform extravasations,  
which in places have undergone  
softening. In suppurative cases  
the brain substance is very smooth  
and level, but on section has  
an oedematous appearance;  
more rarely the substance is of  
a tough consistency. In many  
cases the ventricles contain a  
turbid serum, or perhaps, pus  
itself. The plexus is much  
infected, and very often, covered  
with a layer of fibrinous  
These conditions are not very  
frequent in the third and  
fourth ventricles. The neighborhood  
of the ventricles has very  
often undergone softening.





Frequently, when the disease has been more than usually protracted, the quantity of serous effusion becomes so great, as to cause eccentric atrophy of the brain, flattening of the convolutions, and sometimes by great pressure oedema of the brain and spinal cord. Rarely, there is a caseous degeneration of the epudation between the membranes. In the substance of the spinal cord the same changes will have taken place, only less marked. Very often the other organs of the body exhibit changes. Sometimes it is the lungs which suffer, being simply hyperaemic, or



They may present Secondary atelectases, and even pneumonic infiltration, lobar, or lobular. Often the pleurae and pericardium are inflamed, and covered with a purulent exudation. The heart sometimes is flabby, and contains dark, thin, serous blood, with loose post mortem coagula, or more rarely firm fibrinous clots. The liver, Spleen, Stomach, Kidneys, large and small intestine with the urinary bladder, are less often affected. The auditory apparatus is frequently injured, the eye not so often. Very rarely the organs of taste and smell are either perverted, or entirely



destroyed. The disturbance in the functions of the latter senses, is probably due to the pressure exerted by the exudation upon their respective nerves at the base of the skull. The lesions of the eye most frequently met with are, (according to Knapp), "Choroiditis, with consecutive detachment of the retina."

In the ear, Heller says, purulent inflammation of the labyrinth and tympanum occur most often. The diagnosis of meningitis will present no difficulties if it occur primarily, and during the prevalence of an epidemic. The acute onset,



with, or without prodromata the symptoms of violent disturbance of the cerebrospinal system, especially, the furious headache, rachialgia, vomiting, contraction of the cervical muscles, general hyperaesthesia, alternation of somnolence and delirium, eruptions, particularly, herpes facialis, all, are sufficiently characteristic symptoms, even for one who had never seen the disease.

The diagnosis presents obstacles only when it appears seldom and sporadically, then it will lay most often between tubercular basilar meningitis and typhoid fever. In a case of of tubercular





Basilar meningitis there may  
 be considerable stiffness of the  
 neck, the same headache, loss  
 of consciousness, great restlessness,  
 with similar irregularity, and  
 moderate height of fever:  
 But the tuberculous nature of  
 the affection can be distinguished  
 by the duration of the prodromal  
 period, which is nearly always  
 present, by the less furious  
 onset of the attack, by the  
 very slow pulse, together with  
 the absence of eruptions, finally  
 by the marked tendency to  
 tuberculosis, as well as the  
 family history of scrofulous  
 and phthisical affections;



A differential diagnosis between meningitis and typhus fever presents not a few perplexities to the inexperienced practitioner. In the outset the symptoms so closely resemble those of meningitis, as to render a positive diagnosis impossible. A correct diagnosis may be made, if after repeated observations, we still find the characteristic fever, the absence of enlargement of the spleen, and the appearance of herpes facialis, a symptom of the greatest rarity in typhus fever. A positive prognosis cannot be made in individual cases. One might



Say the fulminant cases will die, while, in all probability, the mild and abortive cases will recover. In severe, and moderately severe cases a prognosis must be withheld for the first few days, until further developments.

The disease is most apt to prove fatal to infants, persons of middle age and to those advanced in life. Many competent writers state that the proportion of deaths is greater among females than males. The mode of dying is by asphyxia in those cases where coma and death follow quickly, when the disease



is protracted beyond a few days, the patient generally dies of a<sup>nt</sup>hemia. Through our ignorance of the etiological laws of the disease we can recommend prophylactic measures only in a general way. The linen, or other articles, that may be used by the patient, should be disinfected or better still, burned. Persons who are much alarmed, during the progress of an epidemic should be advised to leave the infected neighborhood, as the only sure means of safety. There is no abortive treatment of the disease. Bloodletting has been largely practised, but





in the majority of cases without good result but I think we can very readily account for this seeming failure of the measure by the indiscriminate manner in which it has been employed.

First Cases. When the patient has a pulse denoting great heart power with considerable febrile movement, the indications are not only in favor of bloodletting but urgently demand it.

If these simple rules were more strictly adhered to, bloodletting would take its proper place, as the most valuable remedial measure we have at our command to combat the zymotic influence.



of the disease. Leeches applied behind the ears, and wet cups to the back of the neck, are the most appropriate situations from which blood may be abstracted in these cases. Local abstractions of blood, even when often repeated, give almost always a decidedly beneficial result. They are especially indicated at the exacerbations of the inflammation and fever. The diminution of the intracerebral hyperaemia is seen by the relief of headache, restlessness and delirium, even sometimes by the return of consciousness. The application of ice bags to the head is of prime importance; very often



it quiets the restlessness, soothes the  
 pain, and sometimes brings sleep  
 to the wearied sufferer. The best  
 time for their application is during  
 the exacerbations of the symptoms;  
 and when there is marked  
 diminution in their severity,  
 the ice bags should be withdrawn  
 for a while. Mercury in the  
 form of calomel, or mercurial  
 ointment is part of the usual  
 treatment. It is given for the  
 purpose of cutting short the  
 inflammation, and checking  
 the exudation. Since the remedy  
 is used in conjunction with  
 other measures, it is not easy  
 to ascertain its efficacy, but when



used alone its power to effect good was by no means established.

Calomel is often given in large doses with jalap to act freely upon the bowels, and in this way to produce an active determination of blood to the intestinal mucus membrane.

To prevent stomatitis, the mouth is washed every half hour with pure water, and with a solution of chlorate of potash, about twenty five grains to the ounce. The empyreumatic treatment by cold baths, and large doses of quinine is indicated in few cases, inasmuch as there is usually a moderate fever.





and more especially, as death is not due to high temperature.

Quinine may be used with great advantage in those rare cases where temperature runs high.

Narcotics are of paramount importance through the whole course of the disease. The incessant headache, restlessness, and sleeplessness, are alone sufficient to demand the administration of opium, or its alkaloid, morphia; and it acts most efficiently when given hypodermically. Where a speedy effect is desired we may give to adults large doses  $\frac{1}{3}$  to  $\frac{1}{2}$  grain with no fear



of evil. If it be used immediately after local bloodletting, the most furious delirium often gives way to quiet and sleep, lasting for some hours. Morphine is justly regarded as one of our indispensable resources in the treatment of epidemic meningitis. Ether sprayed upon the back of the head and neck, and also chloroform liniment applied with friction, are useful palliative measures.

Inhalations of chloroform, or ether have been recommended by some writers; some have spoken favorably of large doses of chloral. In protracted cases the administration of



iodide of potassium will be of great service in producing absorption of the exudation. The diet must naturally be regulated according to the degree of the fever, when the fever has ceased, a nutritious, but fluid diet must be adopted, in consequence of the fact, that great emaciation and prostration take place in cases of this disease, even when the patient has been confined to the bed, but for a short time.

Respt.

J. Horner Hoffman



Following the textbook  
order of writing upon this dis-  
ease, as I am not writing for  
the purpose of teaching others  
but feel that the object of the  
faculty in requiring a student  
to write a thesis is that they  
may determine, whether or  
not he has gained from  
books and lectures, such  
practical knowledge as will  
justify them in giving him  
a diploma which is his permit  
to practice and study his pro-  
fession.

The first and most





important duty at the bedside  
is to make a diagnosis, not so  
important is it to name the  
disease as to measure action  
& form an opinion of the  
condition of the patient  
what great systems of the  
organism are deranged?

Then what that derange-  
ment is whether functional  
or organic.

This of course calls  
into action or application  
knowledge of the principles  
of the profession gained at  
college.

But theoretical knowledge



is not all that is required;  
without it the practitioner  
would be but an empiric, but  
with it, and nothing else he  
would be only a bookworm,  
better suited to the study than  
to the bedside.

What then is this additional  
prerequisite? Good common  
sense, the power of sound  
judgment; if he have this,  
he will neither pronounce  
too quickly, nor trifle too  
long.

Now in no case is  
the application of sound judgment  
more required than when the



patient has typhoid fever;  
especially if the case is sporadic.

If the disease is prevailing in the neighborhood, or if the family have other members down with it, or just recovered, then the diagnosis is plain, in fact the family has already made it before the Physician is summoned. But if there has not been a case for months, there is more difficulty.

We can not be influenced by season as with bilious & malarial fevers, for unlike them, it is common to all seasons; we can not be guided by place, for it is not limited.



By latitude; We can not  
be governed by former phys-  
ical condition, for the robust  
& healthy are made its prey,  
as frequently as the weak  
and afflicted. Then we must  
go into the history of the case  
before us.

When we find that  
the patient has been feeling  
badly for several days, on arising  
in the morning was a dizziness  
& lassitude, causing great effort  
to keep the mental powers  
coordinated; with difficulty  
he attended to the business  
duties of the day; & when





might returned the bed instead  
of being the medium for res-  
toration and relief to the worn  
out faculties. was only a cross  
and a disappointment

The patient after feeling  
for a few days that there is "some  
thing the matter" concludes  
that he is "very sick" and unfortu-  
nately for himself and the  
physician, whom he afterwards  
calls, he takes "some medicine"  
which is most frequently an  
active cathartic and after  
discovering his mistake in  
supposing that he was only  
a little bilious he sends for



the doctor: We then find him with a furred tongue, dull frontal headache, aching in back and limbs, great debility, but at this stage very quiet.

The symptoms at this stage resemble those of Typhus from <sup>which</sup> disease enteric fever has lately been distinguished

Prof. Wood has the credit of calling the attention of the medical world to the enteric complications and features of what we now know as Typhoid fever

Da Costa shows that typhoid fever may be confounded



at its beginning with General debility, Typhoid conditions Enteritis Peritonitis Meningitis and acute Pulmonary affections

Now I will try to say how I would reason upon a case before me in diagnosing between Typhoid fever & each of these several conditions

General Debility. Has the attack been weeks or days in progress? Are you much more prostrated to day than yesterday? Are you mentally confused? Are the bowels loose? Is there tenderness over the abdomen? or can we find small red



spots resembling flea bites on  
the abdomen. If the nervous  
system has shown sudden  
depression, and if all the  
direct questions are answered  
affirmatively — the case is  
not General Debility.

But is it only a Typhoid  
condition? Now there are  
many cases in practice called  
Typhoid fever which have  
nothing in common with  
genuine enteric fever except  
its continuance into the  
third or fourth week.

Typhoid fever is a convenient  
name to call a protracted





disease and is one frequently used for its convenience. But the Physician however willing he may be to satisfy the friends by a direct answer to the question, "What is the matter?" feels it his duty to himself & to his patient to measure the condition before him.

Have we other symptoms beside vital depression?

Has he been suffering with some other disease that has undermined his vitality?

Has he diarrhoea, tympanitis, epistaxis, an eruption, and special manifestations of disturbance?



of the nervous system? Now  
all these symptoms bear no  
direct relation to adynamia, &  
thus serve as valuable distinctive  
marks.

Here too we may examine  
the urine, and the temperature  
also bears some testimony.

If there is in the first week  
a difference of 1. to 2 degrees in the  
temperature, between morning  
and evening, & 2 to 3 degrees in  
the second week with 3 to 4 deg.  
difference in the third week, it  
is not symptomatic of a simple  
Typhoid condition.

Then is it Enteritis? Now in



enteritis. the abdominal condition is the disease; in Typhoid fever the abdominal tenderness, diarrhoea & flatulence are only symptoms which in addition to the slowness of the attack, the confusion of the mental coordination, the eruption & epistaxis, only help to make up a diagnosis.

Peritonitis; Now what I have already said upon Enteritis is applicable also to Peritonitis;

We have Enteritis generally & Peritonitis frequently with Typhoid fever, but we never have



Typhoid fever as a symptom  
of Enteritis, & Peritonitis, but these  
diseases when coming alone  
are generally much more  
prominent, than when only  
symptoms of Typhoid fever.

Meningitis — is a disease of  
the brain Typhoid fever is  
a disease of the whole system  
involving the brain

When there is  
Meningeal inflammation, there  
is greater violence of the brain,  
Symptoms & absence of the  
abdominal & cutaneous  
symptoms.





## Acute Pulmonary Affections

I must confess that I can not see why La Costa should mention acute Pulmonary Affections as likely to be mistaken for Typhoid fever; There is in a large majority of cases of the fever, a cough, dependent upon an affection of the bronchial tubes. But the bronchial inflammation is of a much more moderate type than that in acute Bronchitis, sometimes too in Typhoid fever the blood gravitates to the most dependent parts of the lungs and the resonance over the lower lobes is impaired.



But there is a vast difference  
between this & the congestion  
of Pneumonia.

Even if we do  
not take the other Symptoms  
into consideration, I think  
we could discover the difference  
between the excessive action  
of the Pneumonic fever and  
the slow burning of Typhoid.

Moreover: in Pneumonia, there  
excessive pain, not always present  
but generally enough to be distinctive  
Whereas in Typhoid fever we seldom  
if ever have pain & difficult  
respiration & when the first  
week has passed in Pneumonia



& red hepatization occurs the rusty colored sputum would scarcely be called sordid.

But here I suppose the fact so often stated by practitioners of experience; that diseases so often run into each other, that is cases are so apt to take a medium course in disregard of text book descriptions and the embarrassment of young doctors may be applied as a reason for calling our attention to the diagnostic differences between acute pulmonary affections & Typhoid fever

I fear there would be some



trouble in my diagnosing Typhoid fever from Typhus. Only a few years ago eminent physicians considered both the same disease, but claimed that what we now call Typhoid fevers were cases of Typhus which presented abdominal symptoms to excess while in the remainder of cases the cerebral symptoms predominate.

Typhus fever very rarely occurs sporadically.

It is a highly contagious disease almost always met with in an epidemic form, & generally, among those whose systems are





depressed or blood impoverished.

The eye in typhus is much injected  
the bowels instead of being susceptible  
to the action of cathartics are from  
the beginning constipated &  
there is a vast difference in the  
description of the eruption from  
the eruption of Typhoid

So that Typhus is from extravasation  
of blood into the Pappillaries of  
the skin, called Spotted fever

The attack of Typhus is  
generally sudden while that  
of Typhoid is generally insidious

The duration of Typhoid is  
generally several weeks while that  
of Typhus is some what shorter



not often prolonged beyond the second week for death is most apt to step in before this and discharge the physician, and relieve the patient of his sufferings

But the greatest difference between the two diseases and that on which I rest most hope of making a proper diagnosis, is the prominence of abdominal symptoms in the one and their absence in the other

Typhoid is essentially an enteric fever, for Post. Mortem examination has revealed



The morbid state of the glands of Peyer, the enlargement of the mesenteric glands, ulceration of mucous coat of the intestines &c while in Typhus there are no constant Post mortem appearances.

The points of contrast as above stated are so manifest that it seems impossible to mistake the one for the other.

But when I come to remember it is possible to have diarrhoea in Typhus and Constipation in Typhoid & the eruption may be curiously mixed, I tremble at the prospect of being called



upon to pronounce but hope  
to be able to depend more upon  
conditions than names and  
thereby make the proper applica-  
tions of remedial Agents?

Having now dwelt  
at some length upon the  
diagnosis we will speak of the  
causes:

The conscientious Practitioner  
wishes always when possible to  
discover the cause of disease, that  
not only by its removal the  
effects may cease and better  
the chances of saving his  
patient, but, that society may be  
protected from the ravages of man





greatest enemy

Many theories exist relative to the cause of Typhoid.

Some make the cause identical with those producing Typhus.

But it would seem reasonable that a given cause or Malarial Morbi acting upon like Constitutions would produce like results, and if there is not something in the subject determining the disease to the abdomen, when the effects of crowd and bad ventilation produces illness Typhus would always be the result.

But we find Typhoid



in the open country as well  
as in the crowded city, in the  
palatial residence as well  
as the dark cellar, Sporadically,  
and in epidemic

We must conclude  
then that whenever the  
system becomes viciated  
from any cause and the  
morbid poison is taken  
from decaying animal or  
vegetable matter the disease  
will appear

The writer knew of a  
case that was doubtless produced  
by inhaling the vapor or odor  
arising from rotting potatoes



The Anatomical lesions of this  
malady have been most closely  
studied as bearing on the controverted  
questions of its nature and  
pathology.

"There is scarcely a  
single organ of the body" says  
Prof. Wood "in which signs of  
inflammation are not some  
times found after death from  
Enteric Fever."

The brain we would  
expect to find more or less  
turgid or injected with blood  
The lung would be more or  
less engorged especially in those  
protracted cases having more



of a typhus cast.

Wickson says, "The heart is usually softened and flabby; the blood is dark and not prompt to coagulate and much defibrinated."

Flint says "The internal surface of the stomach" in a case described by him "presented several patches ecchymosis and there were in others punctured redness."

But it is to the small intestines we look for the lesion alleged as peculiar characteristic and diagnostic of this form of fever.

This consists in "an affection of the elliptical patches of aggregated mucous follicles in the ileum."





denominated the glands of Peyer  
It is said by some investigators  
that these patches become first  
prominent, & thickened; they  
are elevated somewhat and  
beneath in the submucous  
cellular tissue will be found  
a layer of yellowish white smooth  
matter as firm when cut as cheese.  
This is what speculators call  
"Typhosis" or Typhus deposit of Vogel.  
Whether this last is only supposition  
or not I can not say. Sufficient for  
us is the fact that destructive  
ulceration takes place in some  
cases and is threatened in all  
and should be kept in mind.



from the onset of the attack

This brings us to the consideration of the treatment.

Those who have paid strictest attention to the pathology of this disease advise us to abstain from all active medication.

Wickson of Phila. speaks of cutting short the disease with Emetics and Cathartics, but judging from the evidence of more prominent men he has mistaken something else for enteric fever or he has cut short the life as well as the disease of his patient. It is a disease that has to be guided to a favorable termination.



if possible. If Diarrhoea commences early no Cathartic is indicated but generally 1 gr of Blue mass followed by tea spoonful oil begins the treatment, then 1/2 gr Blue mass & 1/2 gr. Specac. . . frequently enough to clear the complexion during the first few days will prove of advantage.

I think I would give ʒi. Nit. Ether. frequently whenever there was much Heat of skin and if bowels sufficiently loose, would give moderate dose of Pulv. Specac. Comp. at bedtime each night

Thus I would treat along



on the expectant plan watching  
always for the dry cracked  
appearance of the tongue,  
which about the middle  
of second week announces  
the beginning of enteric  
ulcerations and calls for  
Turpentine, which I would  
give in mucilage of gum  
Arabic in quantities to suit  
indications

Many Authorities  
advise the administration  
of acids these with or without  
quinia will form a part of  
the treatment of nearly all  
cases at some time of its





duration

Support is sometimes demanded early in the attack and from the long strain upon the vital energies I would think it best to keep up strength as much as prudent but all these considerations must be modified by the circumstances of each individual case

E. P. Cohen

1881



A Thesis  
on  
Typhoid Fever  
Respectfully submitted  
to the  
Faculty of Medicine  
of the  
University of Maryland  
by  
H. H. Den  
Crimmerland  
Md.  
1881







## Typhoid Fever.

In accordance with the  
requirements of the Act didact.  
for the degree of Doctor of Medi-  
cine of the University of Mary-  
land School of Medicine,  
I will endeavor to write an  
essay, on Typhoid fever.

This disease in past medical  
literature has a great variety  
of names. Other names than  
typhoid, at the present day,  
are enteric and pythogenic  
fever, the former referring refer-  
ence to the characteristic intes-  
tinal lesions and the latter  
to its supposed causative con-  
nection with putrescent matters.





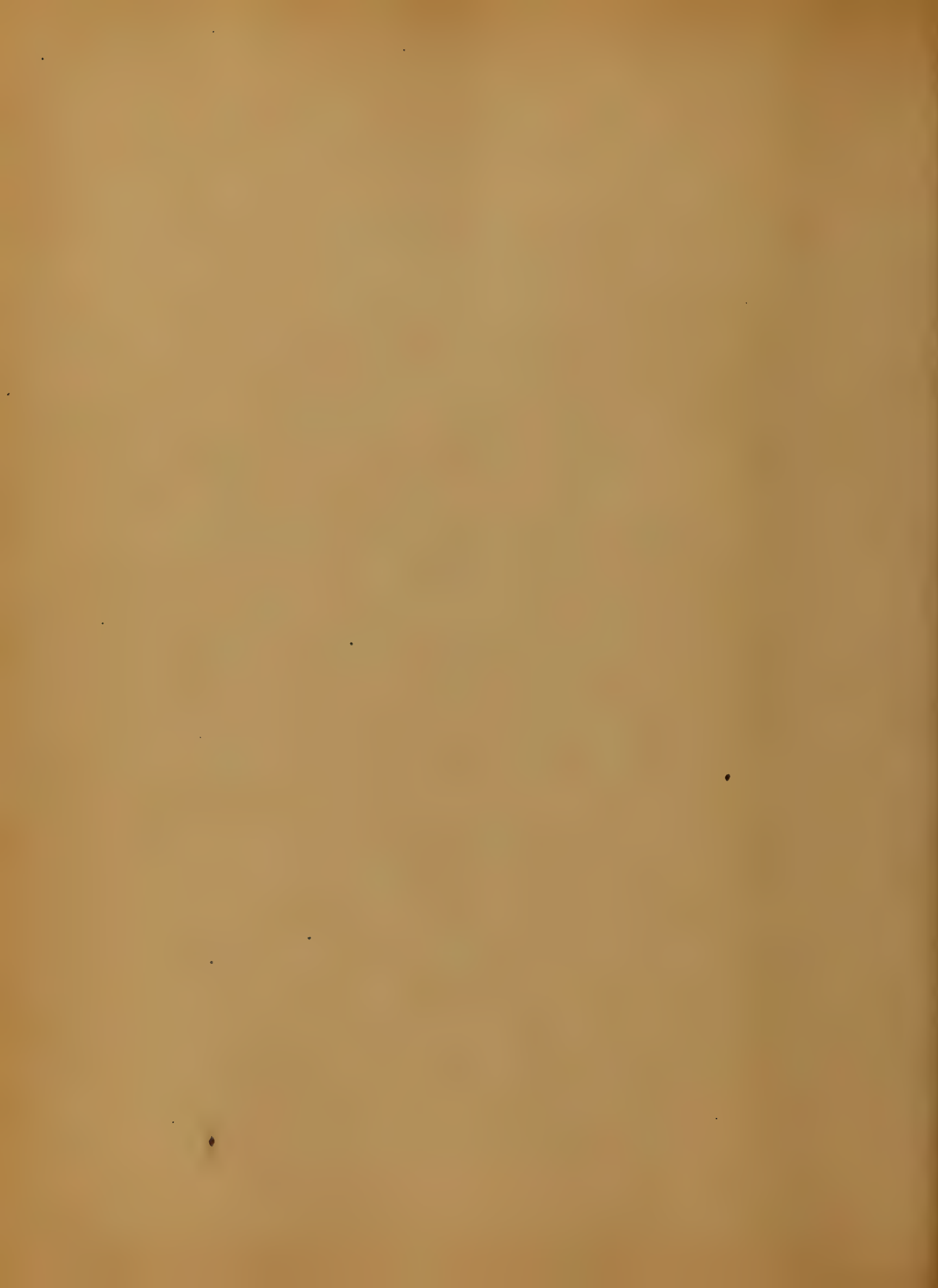
By some writers it is termed  
abdominal typhus, slow nervous  
and continued fever;  
but I suppose the name  
typhoid, although inappropriate,  
will probably continue in use  
for time immemorial. Their  
opinion as to the propriety  
of the foregoing nomenclature of the disease  
is now under consideration.  
Nevertheless I will not enter into  
a discussion as to the suitability  
of a name, but at once  
proceed to the more interesting  
topics of my subject.  
The disease of which I propose



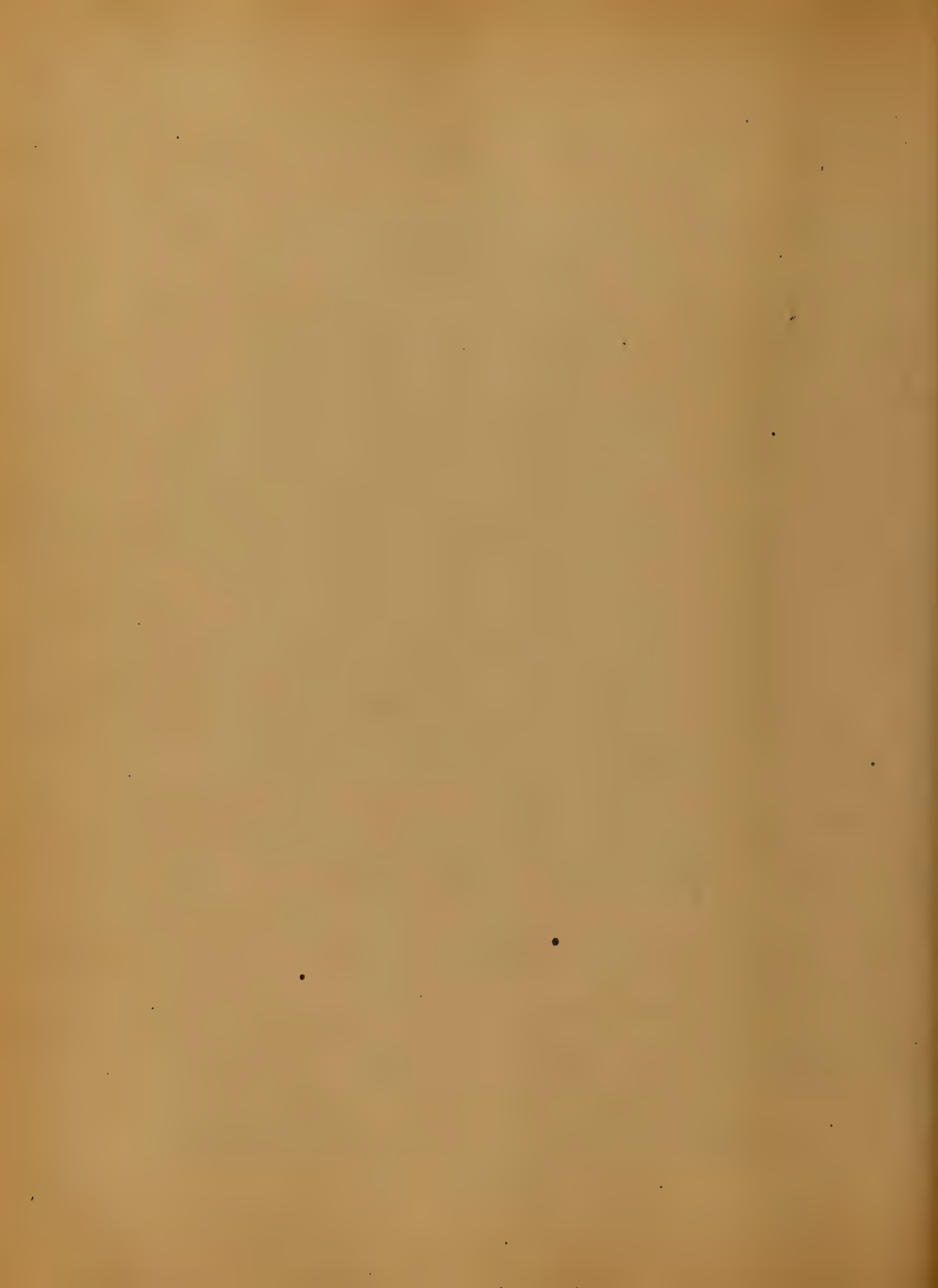
to treat, is a febrile disorder  
characterized by an inflammatory  
affection of the acini and  
and serular glands of the  
intestines, gastric intestine  
disturbance, and a peculiar  
cuticular rose-colored rash.  
It is generally of an endemic  
form, but may occasionally  
take the form of a genuine  
epidemic. It seems to have no  
special connection with poverty,  
overcrowding, badly ventilated  
houses, but seems to attack  
the denizens of town and  
country, rich and poor, with  
singular impartiality.



Sex is without influence upon  
it, but the age of onset is from the  
age of fifteen to twenty five  
years, and much more liable to  
it than those of men at a cor-  
age. More doubt seems to  
exist as to the cause of typh-  
fever. I suppose that any  
other common disorder, if  
it will occur in the entire  
absence of all known or  
supposed known causes.  
No locality limits it, all  
climates allow it, from the  
Arctic region to those border-  
ing upon the tropics, from  
the Atlantic to the Pacific ocean.



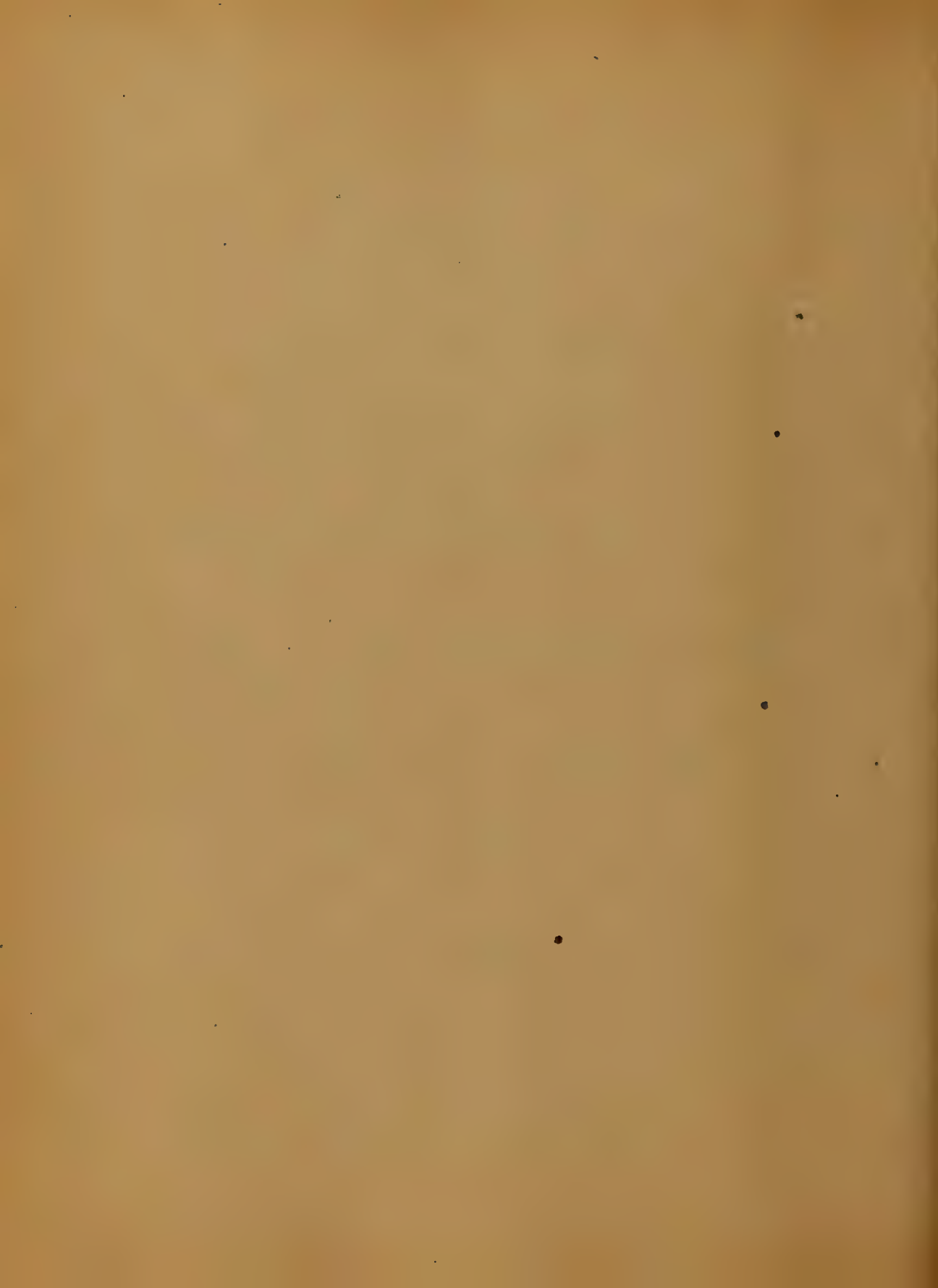
The "mucous fever" of the  
mountain in the far west was  
found in the autopsies made  
by Dr. Hammond to present  
the lesions of Peyer's patches  
and other mesenteric glands.  
I shall not attempt to give the  
cause or causes of enteric  
fever, since the most learned  
and experienced of the pro-  
fession differs so widely  
in their opinion concerning  
its true cause, although I  
must confess that I am  
strongly inclined to the opin-  
ion that its causation gen-  
erally depends on a miasmatic





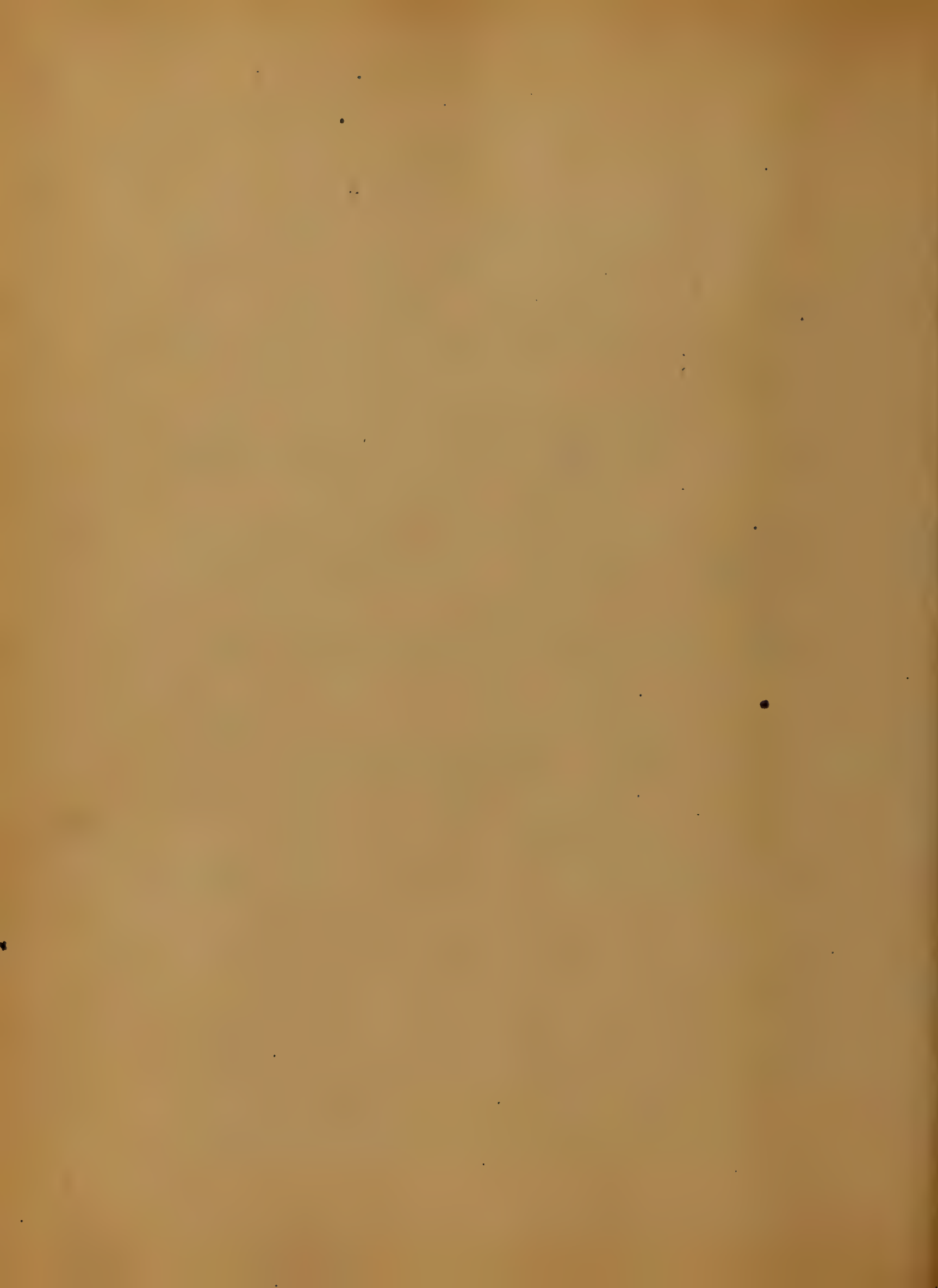
agent derived from human  
fecal excrement, which in  
some way contaminates the  
water used for drinking  
purposes or other articles of  
food, or by fœtid gases which  
escape from cesspools, defec-  
tive drains &c.

Prof. Richard McSherry, M.D.,  
in his valuable work on "Health  
and how to promote it," in  
speaking of sewers and cess-  
pools, says, "There can be no  
doubt as to the pernicious  
influence of the gases arising  
therefrom." And in another  
place he says, "Dogs and other



a person has been made to  
inhabit it, and contracted a  
form of continued fever with  
with enteric disease and that  
human beings exposed to it  
are liable to typhoid or ent-  
eric fever". During former  
preceptor Dr. W. J. Traiger,  
does not believe in the above  
for in an article which app-  
eared in the Medical and  
Surgical Reporter of Phila.  
Vol. XLII, No. V, he says, "I have  
no faith in the sewer gas  
theory."

Symptoms. The course of  
the disease is of the



not easily determined with  
precision. It may be ushered  
in by a chill, more frequently  
however it comes on slow  
and insidiously and increases  
gradually, so that it is often  
impossible to fix the precise  
time of its commencement.  
The first symptoms are  
slight, and gradually incre-  
ase, the patient taking to  
the bed in from five to ten  
days. Symptoms prior to  
going to bed are, anorexia,  
nausea cephalalgia, chilli-  
sensations, looseness of the  
bowels, weakness and general



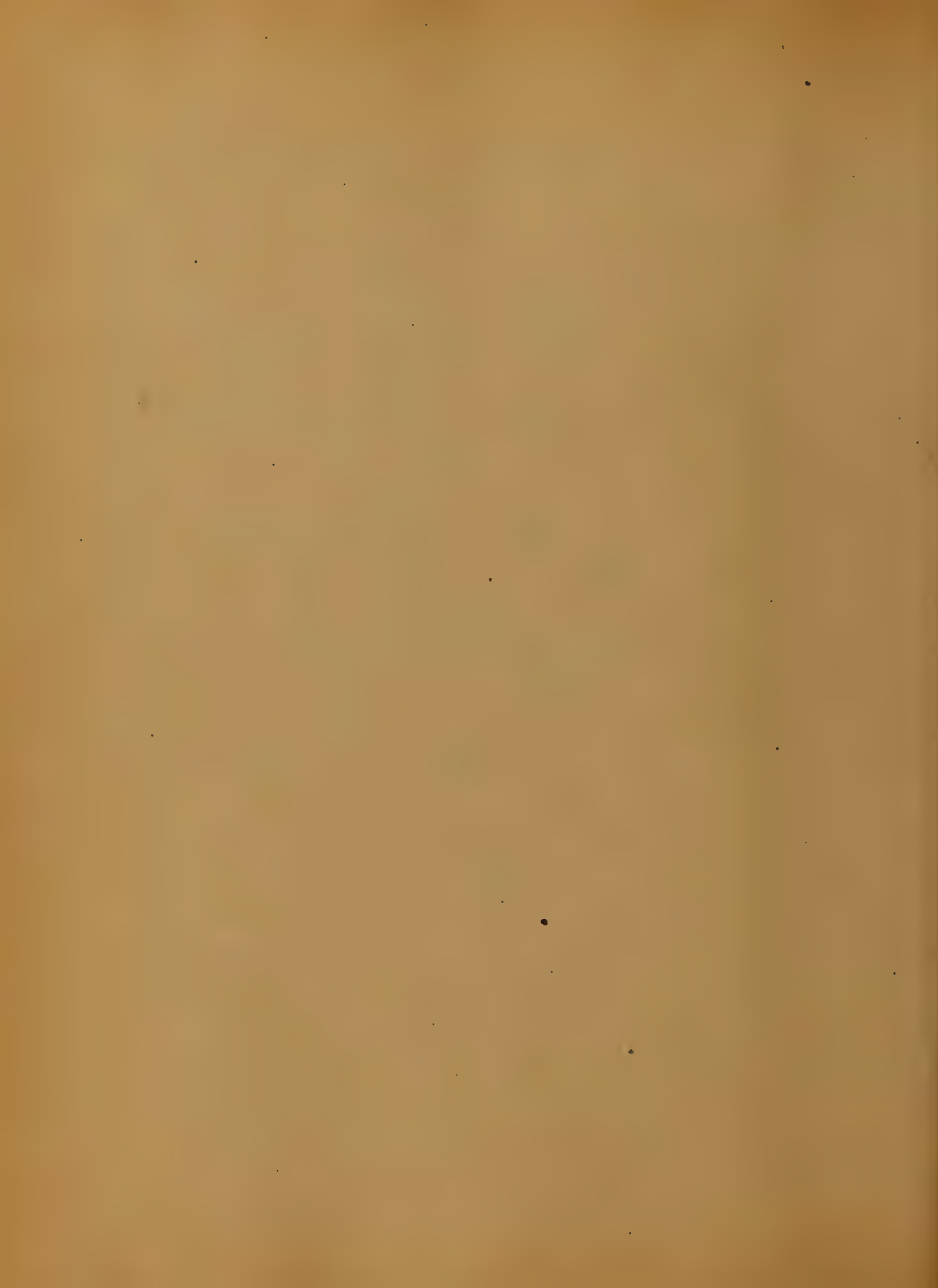
malaise. Epistaxis is present  
in about three fourths of the  
cases, which when accompa-  
-ied with a bronchial cough  
are almost pathognomonic  
symptoms. During the first  
eight or ten days of confine-  
ment to the bed, the patient  
complains chiefly of head-  
ache, sleeplessness, and  
lassitude. Diarrhoea is  
more or less prominent, and  
the stools have a yellowish  
or brownish color. The abdo-  
men is swollen and yields  
a tympanitic resonance on  
percussion. Tenderness on





pressure in the right iliac region, and gurgling is often heard on pressure. The spleen is generally found enlarged on percussing, and sometimes to an enormous size.

The flesh of the face is of a purplish tint, when absent a dusky hue of the complexion with a heaviness or dullness of expression which is very striking in some instances, in others but slight. The pulse is increased in frequency, and variate sometimes triply or one hundred and firm, which in other



eases especially females it  
is frequent and thready,  
beating from one hundred  
and ten to one hundred <sup>and</sup>  
twenty per minute. The  
temperature rises gradually  
becoming at the end of the  
first week  $103^{\circ}$  or  $104^{\circ}$  in the  
evening, and from one to  
two degrees lower in the  
morning. An attack of disease  
in which on the first or sec-  
ond day the temperature is  
found to be  $104^{\circ}$  is not typhoid  
fever; the same applies if  
from the fifth to the tenth  
day the temperature falls



below  $103^{\circ}$  in the axilla.

The named tendency to a morning fall and evening rise of temperature is about a sure sign of typhoid fever.

At the end of week a week lowering of the heat below  $103^{\circ}$  is always favorable, if remaining at  $104^{\circ}$  to  $106^{\circ}$ , the case is a doubtful one.

Sudden increase of temperature indicates some inflammatory complication - as pneumoniae. Profuse diarrhoea, epistaxis or hæmorrhage causes the temperature to fall.

At the beginning of the second



when the rose colored lentil-  
ular spots (Jaunes rouges) is  
apparent, generally few in  
number, but may be numerous,  
mostly seen on the abdomen  
but may present on the back.  
The spots move & finally disap-  
pearing on pressure, a cumu-  
lating form. They are from  
half a line to a line or a  
half in diameter. The patient  
lies dozing, perhaps  
muttering, under delirium all  
day, but is more or less rational  
and delirious at night, but is  
easily aroused, relapsing again  
into somnolency. The tongue





in most cases is coated with  
a moist fur, but whether coat-  
ed or clean, it is discolored  
and presents cracks or  
fissures, mostly transverse,  
and the edges are reddened.  
The pupils are generally  
dilated. The abdominal  
symptoms continue, and are  
more marked than during  
the first week. Sordes is apt  
to collect on the teeth and  
if not removed, on the lips.  
The urine throughout the  
attack, is commonly scanty,  
high-colored, excessive in  
the amount of urea, deficient



in the choroides and a some  
times contains albumen  
in severe cases, and is of  
a high specific gravity.  
Retention of the urine may  
take place, although there  
is a constant dribbling, or it  
may be passed with the fecal  
evacuations in the bed, not  
from paralysis of the sphinc-  
ters, but from indifference.  
The stupor about this time  
is more marked. Subsultus  
tendinum, picking at the  
bed clothes, and picking at  
invisible objects in the air, are  
frequent and generally last

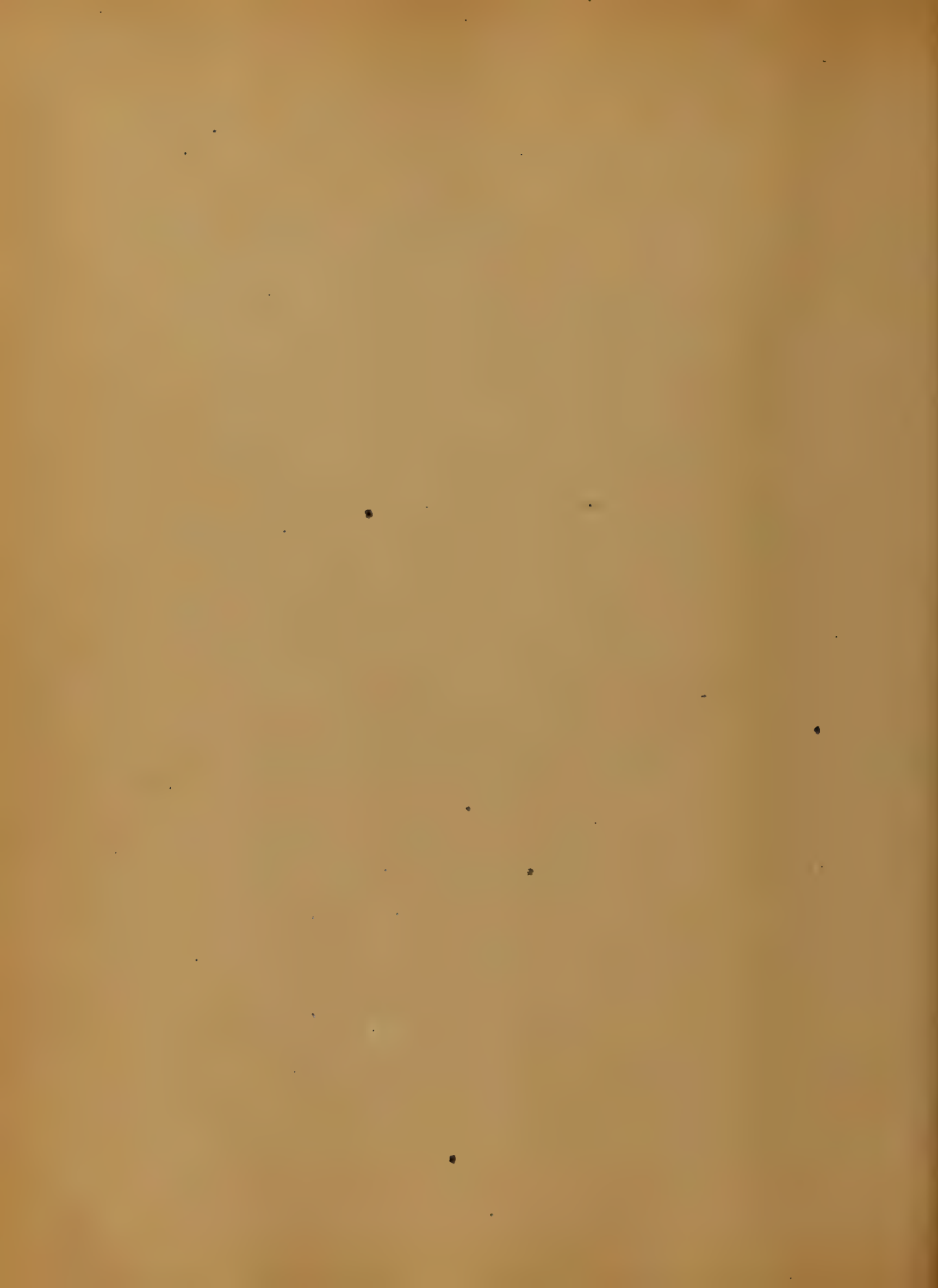


symptoms. The perceptions  
are obliterated, and the patient  
asks for nothing and ceases  
to complain of pain, and  
when not attempting to get  
out of bed lies on the back  
constantly, without any desire  
for change of position. This  
should be prevented by the  
nurse changing the position  
of the patient frequently so  
as to prevent the formation  
of bed sores, which is apt to  
form, owing to the constant  
pressure upon the parts.

The frequency of the pulse  
is in proportion to the gravity



of the case. It is quite com-  
pressive, and is to be dis-  
to the tongue. Respiration fre-  
quently occurs, followed by  
diminished frequency of the  
pulse. These symptoms con-  
tinue to the end of the febrile  
career. The rash comes on  
and during the whole course  
of the fever, the diarrhoea  
persists. The tongue becomes  
dry and brown, and is often  
protruded slowly, and when  
protruded the patient does  
not withdraw it until requi-  
ested, or about this time the  
coatings of the tongue may



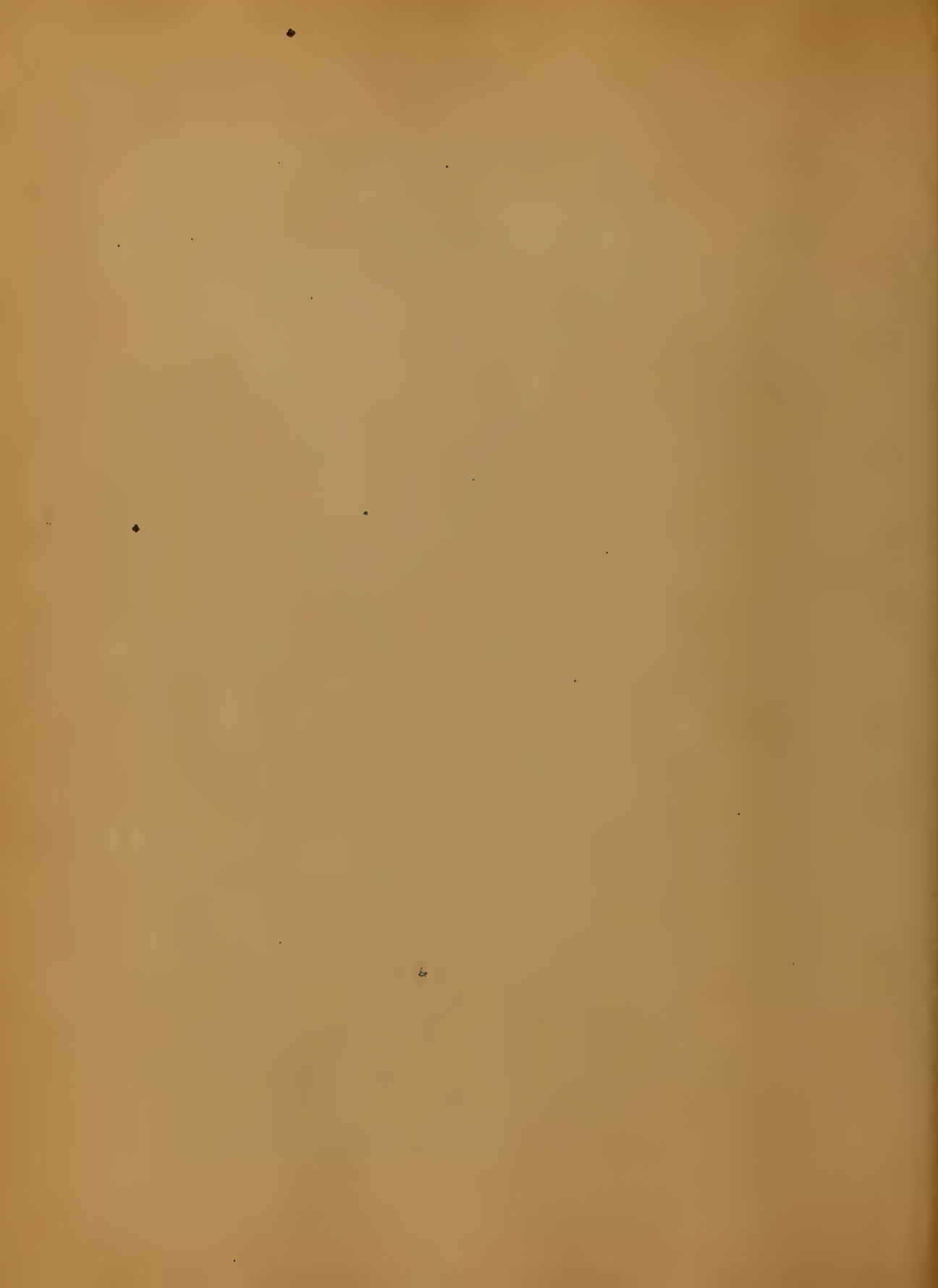


be thrown off, leaving the  
surface smooth and clear,  
again coating it with  
it may do for several times.

And now to be a little  
more than the excuse  
for referring them chiefly  
upon the more primitive  
features of the disease -  
Such as diarrhoea, dyspepsia,  
itch, the rose coloured eruption,  
sudamina, cough and  
trichial irritations, urrage,  
hardness of hearing, retention  
of urine, etc., any of which  
would afford a material for  
more discourse than I can



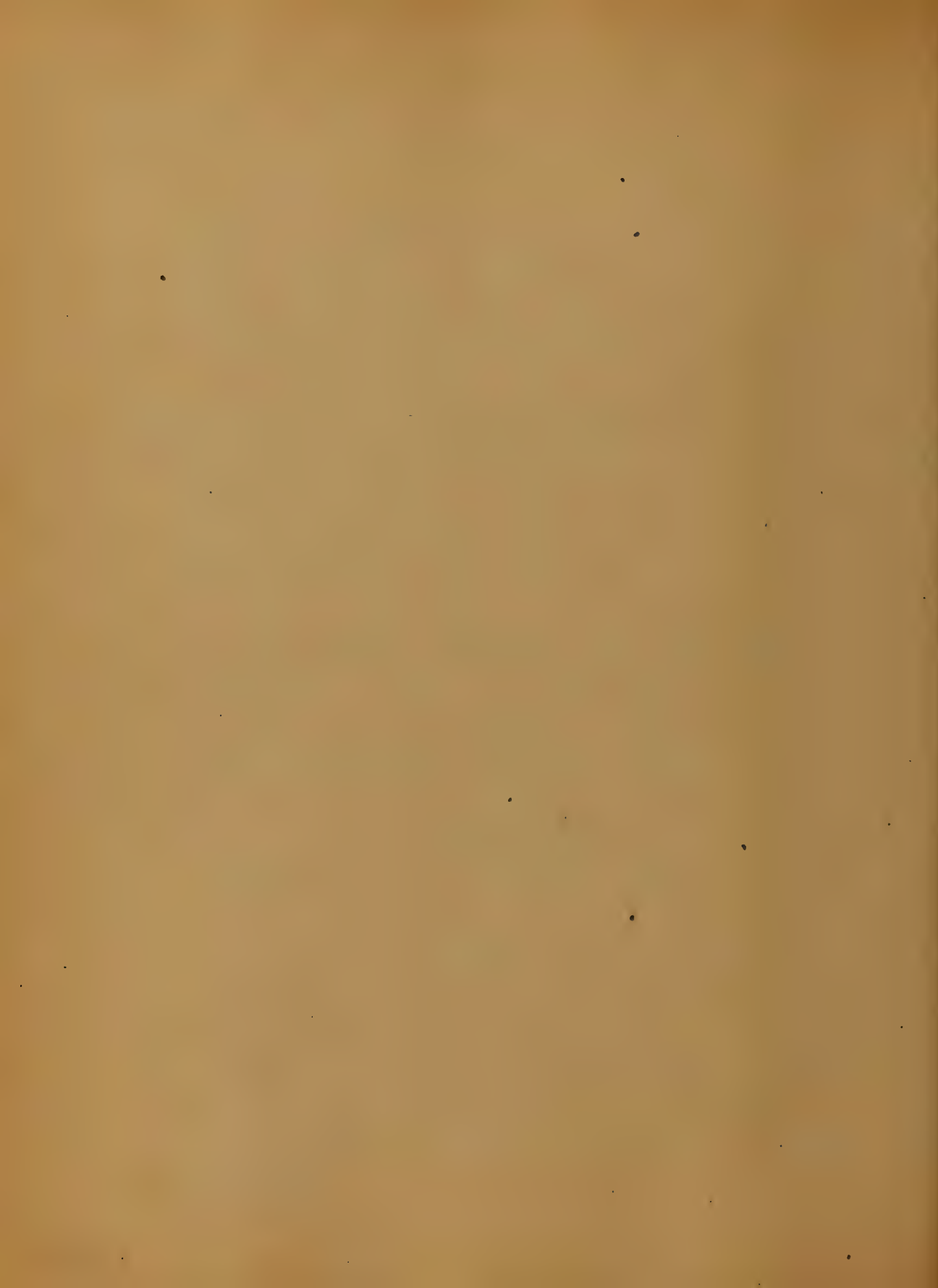
were guide to, and all  
then unless previous accor-  
ding to the severity of the  
disease. This rose colored  
eruption may be confounded  
with petechiae, the latter  
however can be detected  
by their more livid color  
and their not projecting  
above the surface. They  
appear to be caused by an  
extravasation of blood be-  
neath the skin. They do  
not disappear on pressure  
and are also common to  
other fevers, while the former  
is limited to typhus disorder.



appearing generally from  
the seventh to the tenth  
day, they are round or infundibular  
about a line in diameter,  
sometimes larger, projecting  
above the surface. They dis-  
appear upon pressure but  
reappear as soon as the  
pressure is removed. They  
generally appear first on  
the abdomen, extending  
afterwards to different parts  
of the body. They also subside  
about the fourth day after  
formation and are replaced  
by others. The duration  
of this disease is variable but



or more protracted. Death  
sometimes occurs as early  
as the seventh or ninth day  
at other times during the  
second, third and as late  
seventh week. The disease  
is also variable, but most  
generally sets in about the  
twenty first day, but some-  
times as late as the fifth or  
sixth week, and again we  
may have commencement  
early as the seventh or even  
tenth day, but on an  
average I should think  
about the twenty first  
day.

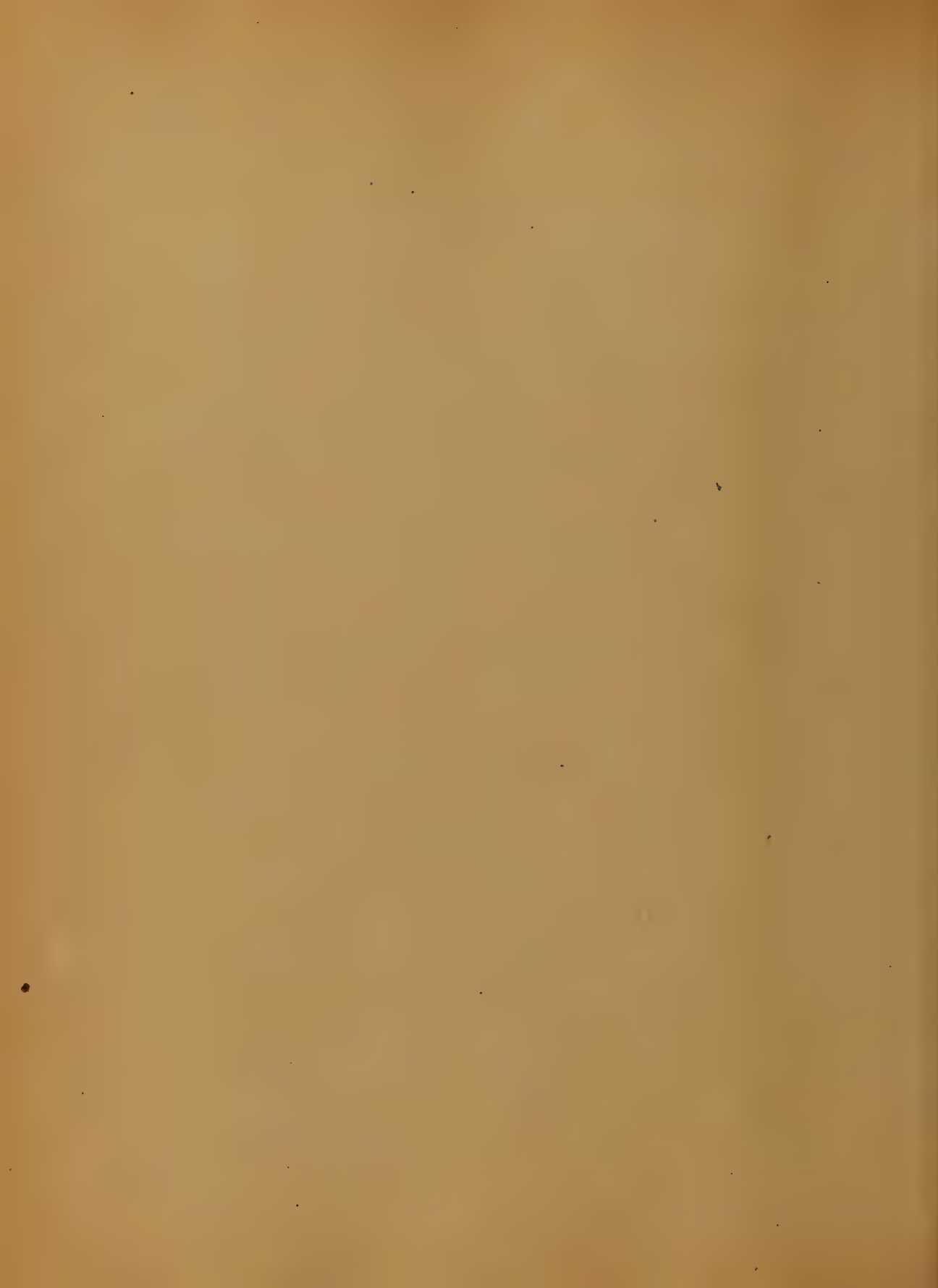




Complications. - Pneumonia is the most frequent, although it has been denied by some writers that true pneumonia, anything more than passive congestion, occurs in these cases.

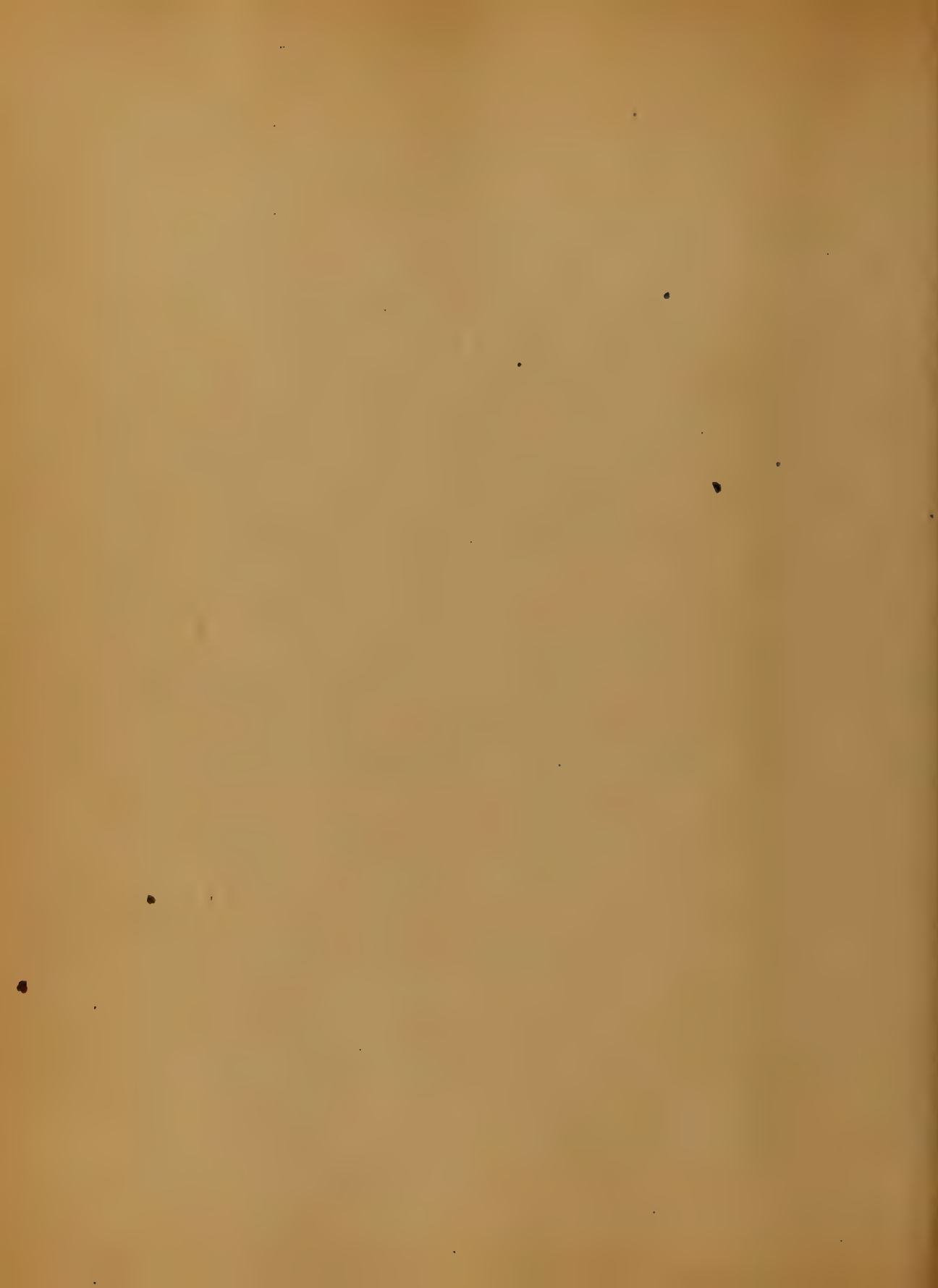
Inflammation of the brain may complicate typhoid, but is not common. Dilatation of the heart, perforation of the bowels with peritonitis, which is almost always the case especially when the ileum is perforated.

Sequelae. - The mental faculties are sometimes

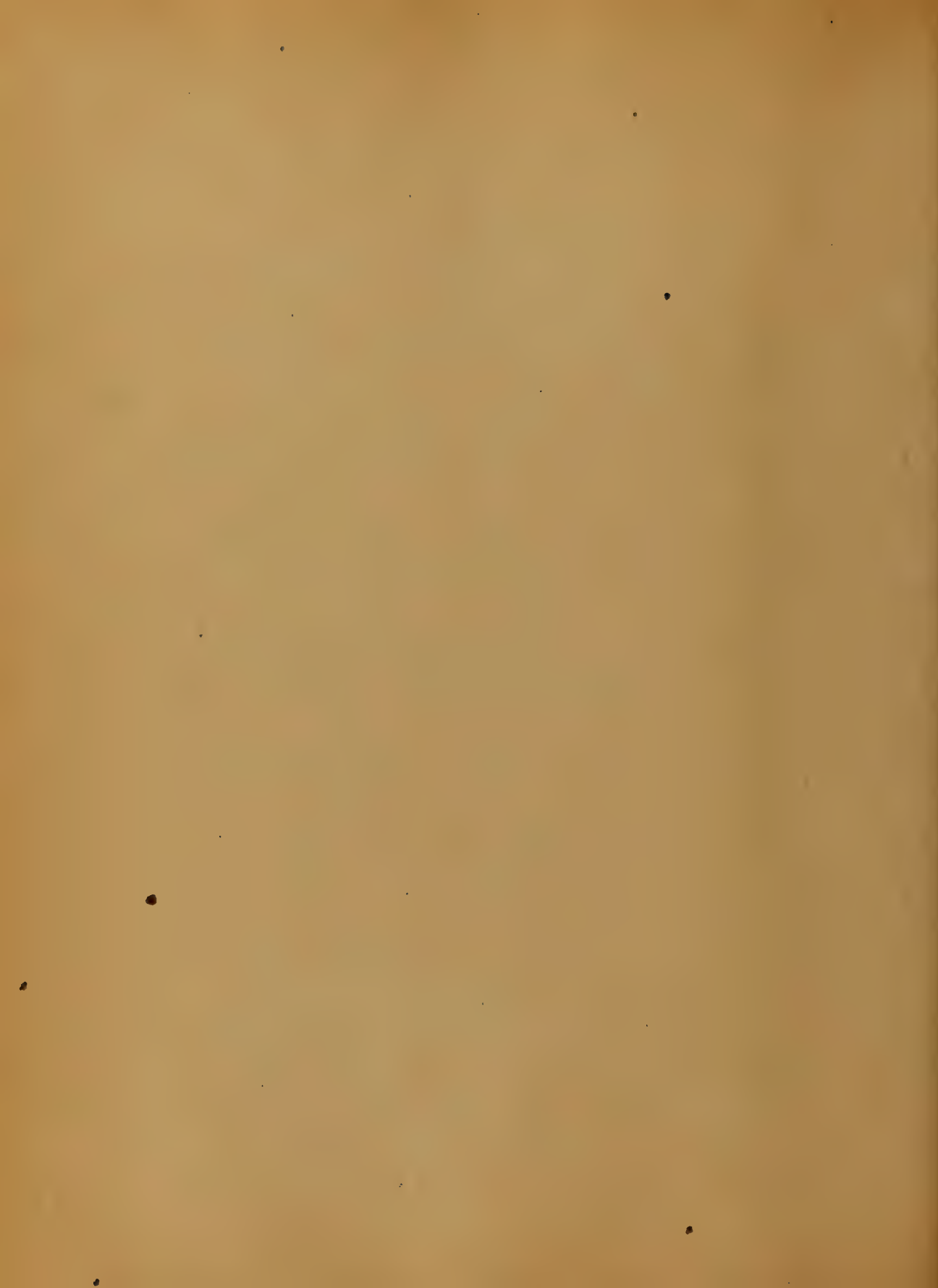


Experienced for a considerable  
time. Prolonged debility is  
a very slow convalescence is  
common. Paralysis is an  
occasional result. Periverti-  
tis, followed by necrosis of  
the femur tibia, or humerus  
may happen, but is very  
uncommon.

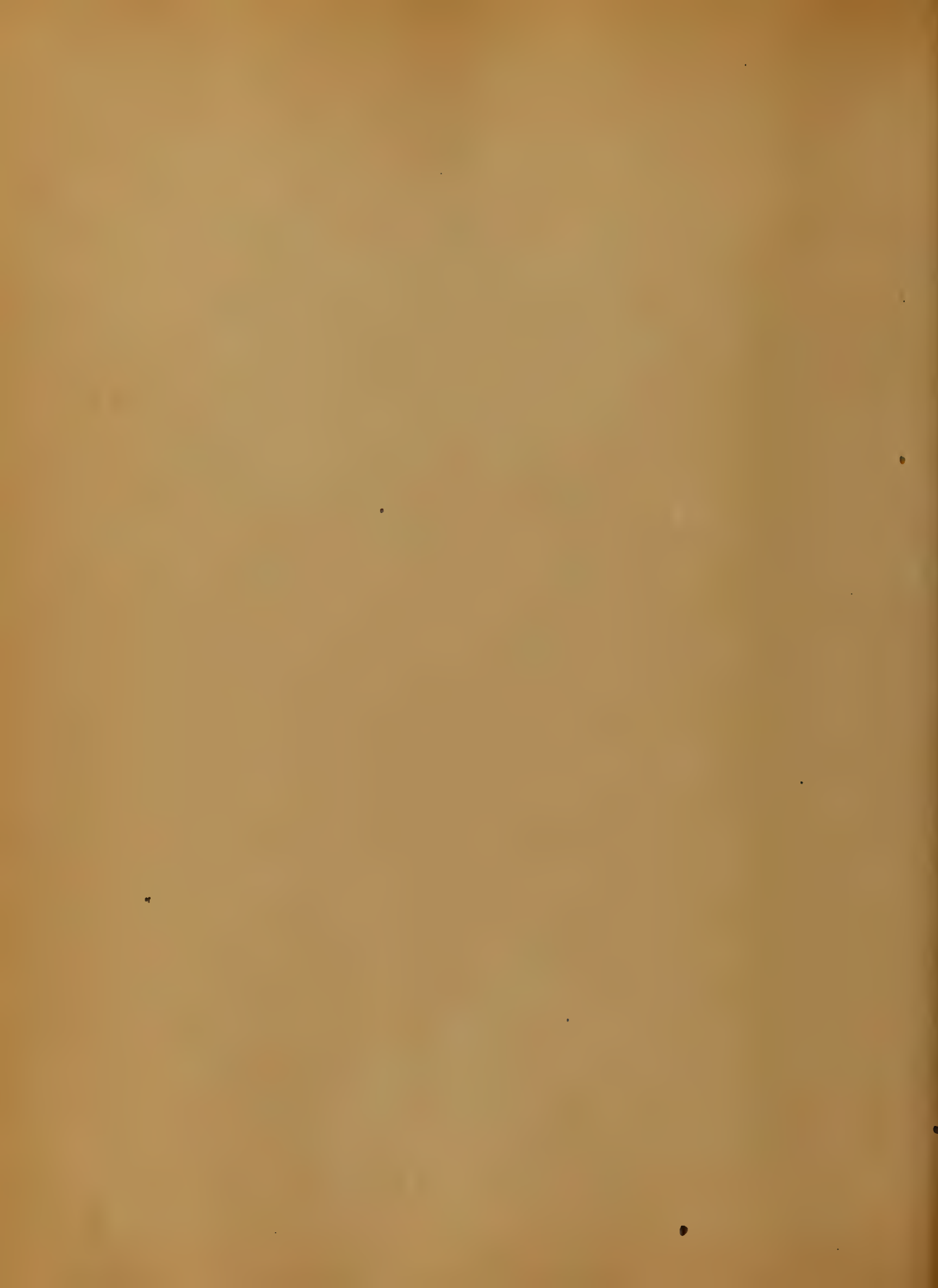
Morbida Anatomic. - Typhoid  
fever is always attended  
with characteristic anatomi-  
cal lesions, affecting the  
agminated gland system  
of Peyer in the small intes-  
tines, and the mesenteric  
glands in direct relation



with them, and the spleen  
which is generally found  
much enlarged. These lesions  
consist in an apparently  
simple hyperplasia of the  
alveolar elements, in virtue  
of which the organ undergoes  
rapid enlargement, and  
then either slowly subsides  
returning to their normal  
condition, or undergoes soft-  
ening or suppuration, necro-  
sation or gangrene. These  
morbid processes appear to  
begin with the first symp-  
toms of the patient's illness,  
at all events it has been



found well advanced in those who have died during the first few days. The intestinal lesions are in many cases limited almost entirely to Peyer's glands, of which sometimes two or three only, sometimes the whole number are involved. The glands at first thickened and become elevated from one to three lines above the mucous membrane. They are at first reddened, but with a variable depth of nec. After this a sort of induration occurs;





in other instances softening  
and finally ulceration  
affects many, though not  
all of the affected glands.  
Perforation of the intestine  
may follow, but only in  
those cases which have  
already perforated the mu-  
cous wall. Healing of the  
ulcer by granulation is  
the general rule.

Prof. Niemeyer, in his work  
on "Practical Medicine", vol. II  
page 581, in speaking of  
the cicatrization of typhus  
ulcers says, "They never re-  
stricture of the intestine."



and as the ulcer near the  
mesenteric glands returns to  
their normal size, and often  
shrinks to a small, firm, flat  
gray bodies. Some also be-  
come caseous and subse-  
quently calcareous."

Whether these morbid processes  
be confined to the aggregated  
glands or involve the solitary  
glands as well, is always  
most extensive and most  
advanced in the ileum  
immediately above the illeo-  
caecal valve, where it gradu-  
ally diminishes upwards.  
The solitary glands are rarely



expected to a greater distance  
than two or three feet above  
the caecum, Peyer's patches rarely  
above the lower half of the ileum.  
The disease implicates the soli-  
tary of the large intestine in  
about one third of the cases,  
and is always most advanced  
in the caecum, rarely extending  
below the ascending colon.  
Perforation occurs in the great  
majority of cases in the lower  
two feet of the ileum; but is  
occasionally met with much  
higher up. It rarely occurs in  
the caecal appendage or in  
the colon. When perforation

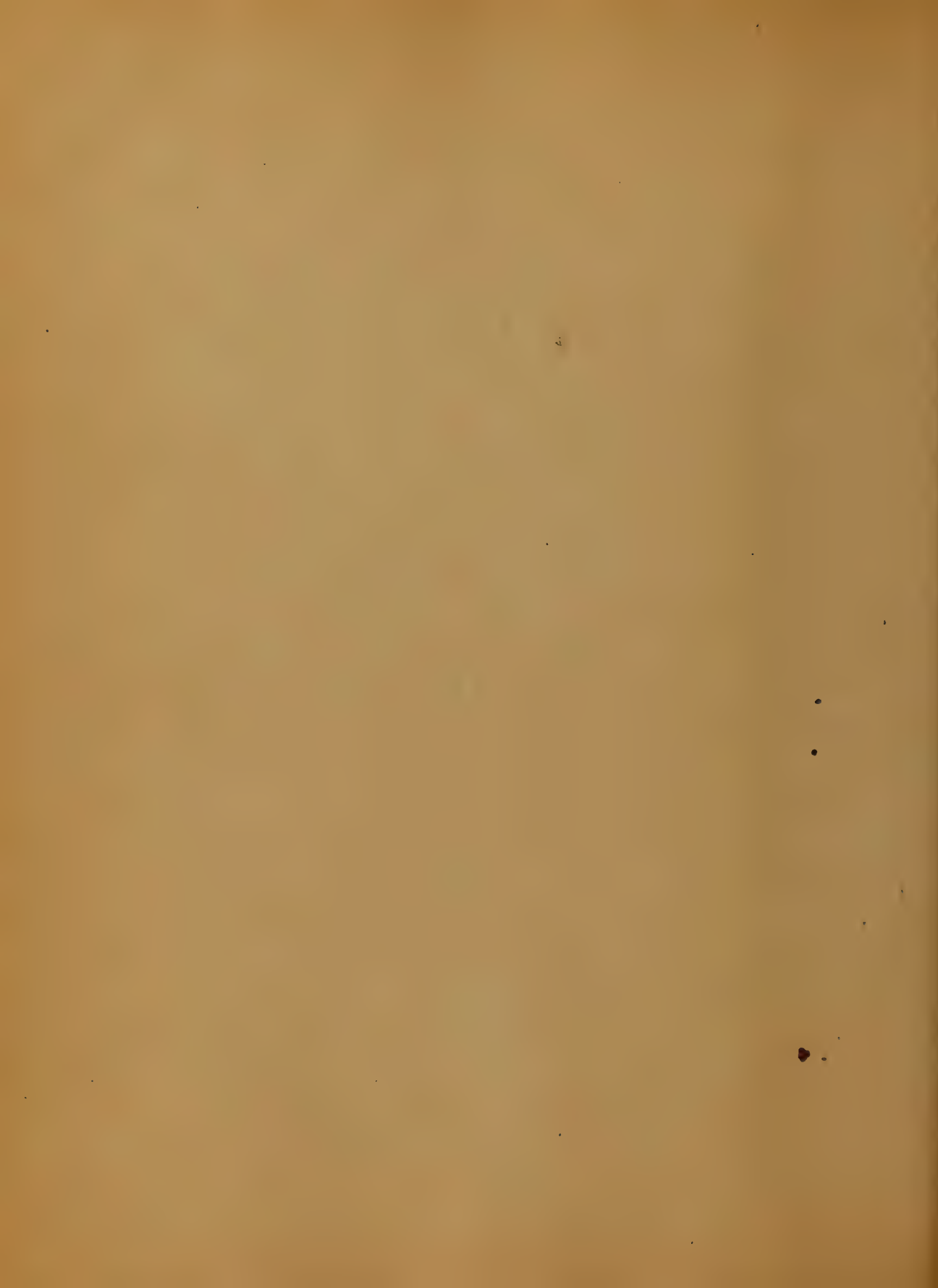


of the intestines occur and fecal matter escapes into the abdominal cavity, peritonitis is the result, which is almost always fatal. The spleen is enlarged and congested, and when the patient dies during the ulcerative stage of the disease, the contents of the bowels are generally found to be something like peasoup, and the large intestine inflated with gas. Most other lesions in enteric fever, such as bronchitis, pneumonia and pleurisy have no specific character and need no description.





Treatment. - Knowing or  
supposing as we now do the  
causation of typhoid fever,  
it warrants the assertion that  
it is a preventable disease, and  
it therefore becomes our  
duty, nor is it difficult, to  
adopt suitable precautionary  
measures against the conta-  
mination of water and atmos-  
pheric air, and against the  
exposure of persons breathing  
air containing effluvia from  
decomposing human fecal  
excrement, and especially  
those coming from typhoid  
patients. Such evacuations



Should at once be disinfected  
with carbonic acid in proportion  
of one part to forty parts of  
water. By the order of his  
objectionable, the sulphate of  
iron or chloride of lime is  
a good substitute, and both  
of which has the advantage  
of cheapness over such prepa-  
rations as Burnett's or Condy's  
fluid. I think sea water  
would answer a much better  
purpose than many of the  
disinfectants which are gen-  
erally used and which very  
vigorously liberate the germs which  
after impregnating the atmo-



-or more of the ice, so as  
to be renewed by a fresh supply  
of air, while the earth  
will absorb the same in winter.

Clothing and articles soiled  
by the dejections should  
be disinfected, or buried.

Water-closets and drains  
should be kept clean, well  
flushed and ventilated,  
and all communication  
between them and the inter-  
ior of the house cut off.

Wells should be so situa-  
ted, in relation to the water  
springs, or streams from  
which water is obtained,



that no possible case to which  
can take place.

Prof. Austin Flint, says in  
speaking of the prevention  
of enteric fever, "that the  
extinction of this disease  
is within the reach of some-  
day science".

Self-limited as enteric fever  
is, no cutting short of it is  
possible. We must then con-  
duct the patient through  
it as safely as possible, and  
for this but little medication  
with good nursing will suffice.  
Our chief aim, however, in  
the treatment of this disease





must consist in the guarding  
against, and the prevention  
of the many sources of dan-  
ger which attend it, and  
in treating symptoms as  
they arise. The condition  
of the bowels must be carefully  
watched, and under no  
circumstances should drast-  
ic purgatives be given.  
If the bowels are costive,  
there can be no harm, per-  
haps, in giving a mild  
cathartic, such as castor  
oil or rhubarb during the  
first week of the disease  
and before ulceration has



laxative place, but even then  
it is generally safer to em-  
ploy enemata.

When diarrhoea is present  
and the dejections exceed  
two or three per day, it  
should be restrained by the  
use of opium, to which some  
one of the vegetable astring-  
ents as tannin, rhubarb,  
&c. etc., may be added,  
or some such remedy; or by  
opium suppositories.

Dysphagia in the early part  
of the disease is most effect-  
ually relieved by the cold  
douches and the ice cap.



The patient generally loses  
his hair, which regrows in  
replenished more beautiful  
than previously, and to render  
these measurements efficient  
and prompt removal of the  
head, the hair should be  
cleared out, as soon as it is  
evident that the patient  
must pass through the  
febrile career.

When hemorrhage from the  
source takes place measures  
should be adopted to arrest it.  
For this, some have great faith  
in the use of tannin, tannic  
acid, ergot, or other forms of

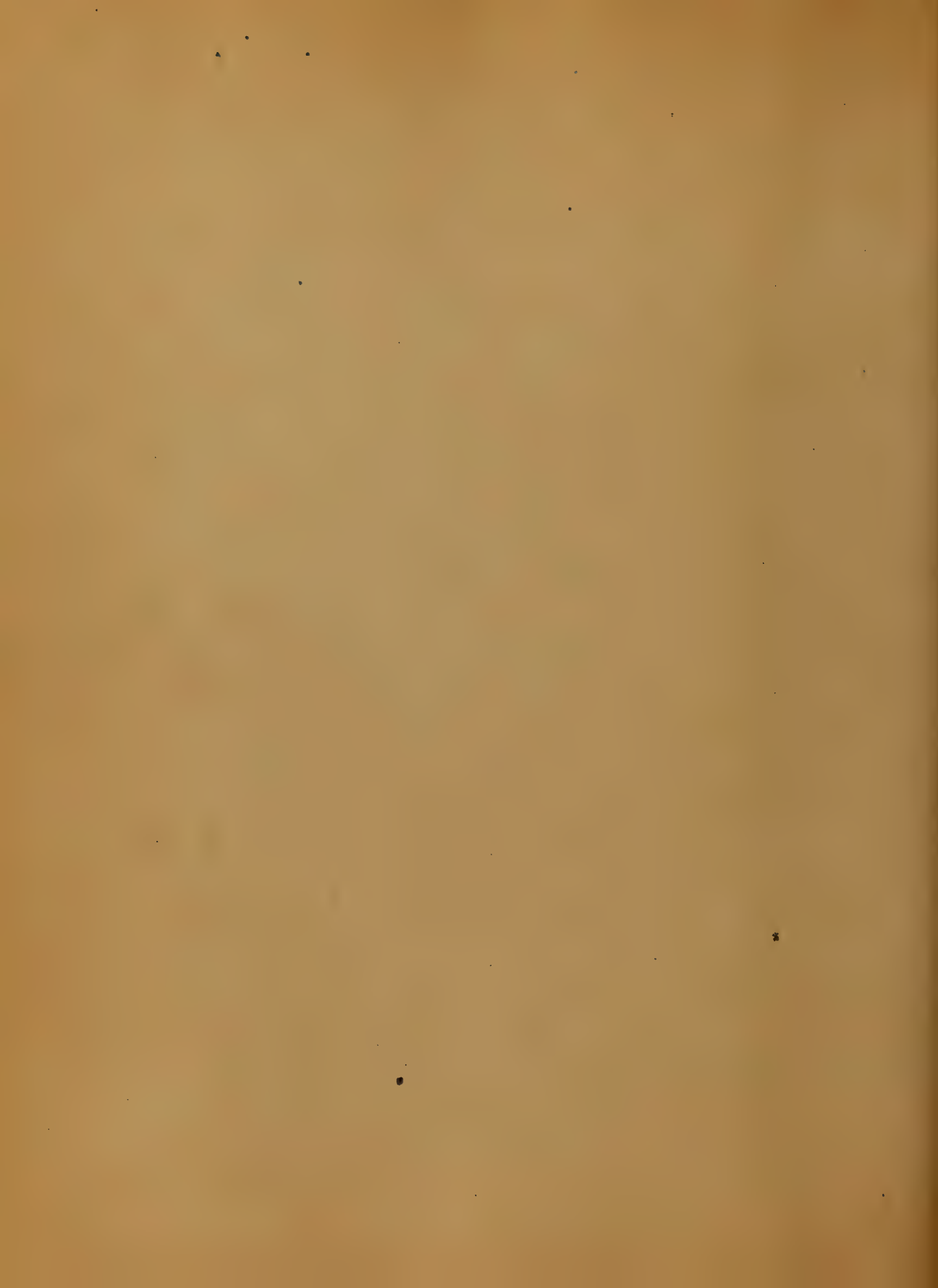


astriſt. Symp<sup>ts</sup>. if  
ſufficient to produce unea-  
ſeſ and interfere with the  
movements of the diaſph<sup>ragm</sup>  
may be relieved by turpentine  
internally and externally.  
Stimulating enemata or hot  
fomentations to the abdomen.  
One of the beſt forms to admin-  
iſter turpentine in, is I think  
that recommended by Prof.  
Owen. Syrup of lemon and  
Syrup of gum acacia equal  
parts and ſpirits of turpentine  
ſufficient quantity ſo that  
each deſert ſpoonful will  
contain the doſe required.

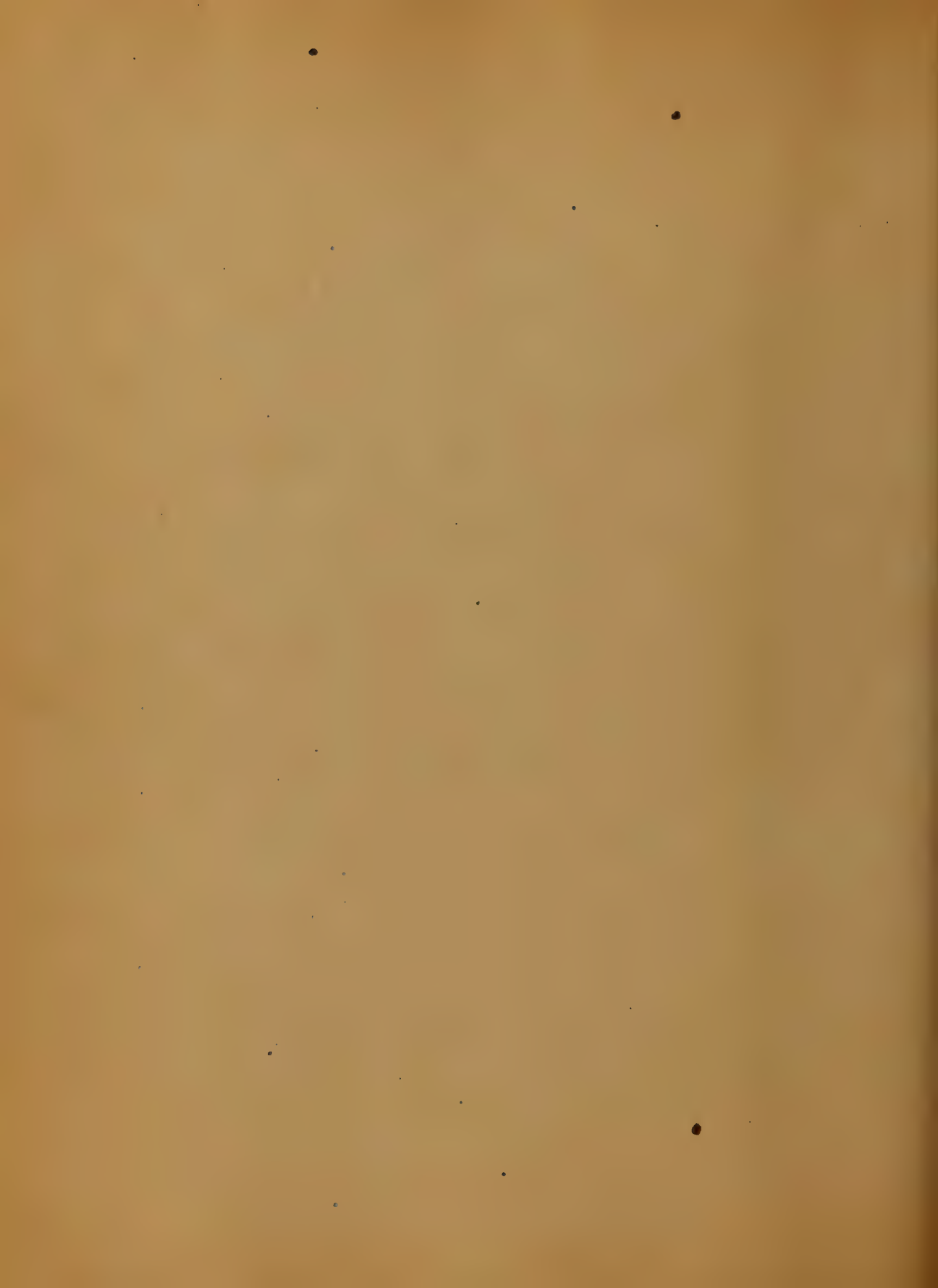




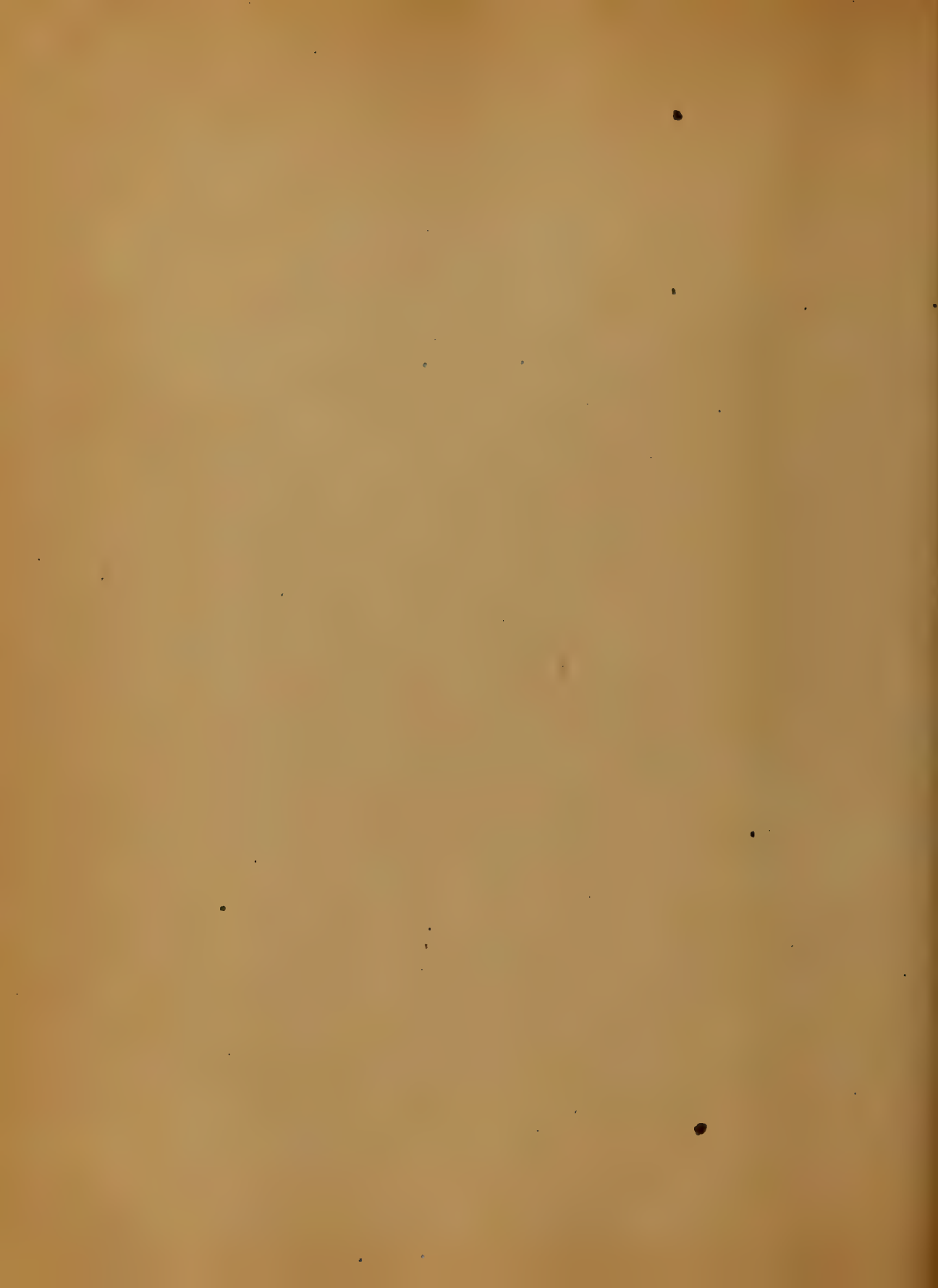
Boiling or Sick Stomach  
may be relieved by the use  
of lime water and milk,  
vis. with ice or by electric  
irritation over the stomach.  
When such symptoms appear  
as subcutaneous tenderness, and  
cephalgia, I would give  
moschus (musk) in doses of  
ten grains, every two hours.  
If indications of perforation  
of the bowels manifest them-  
selves on any hope lies in  
keeping the patient under  
the influence of opium or  
morphia; The dose and fre-  
quency of its administration



we determine the part  
of the patient to age but  
chiefly its effects.  
Care to the extent to  
there is to the formation of  
red sores it is very import-  
ant to keep the patient  
clean and dry and the  
skin as smooth as possible  
and to obviate or remove  
oil under pressure and  
if precursory redness  
marks its appearance  
anoint the parts with some  
stimulating or protective  
application, such as white  
spirit of camphor, mixed

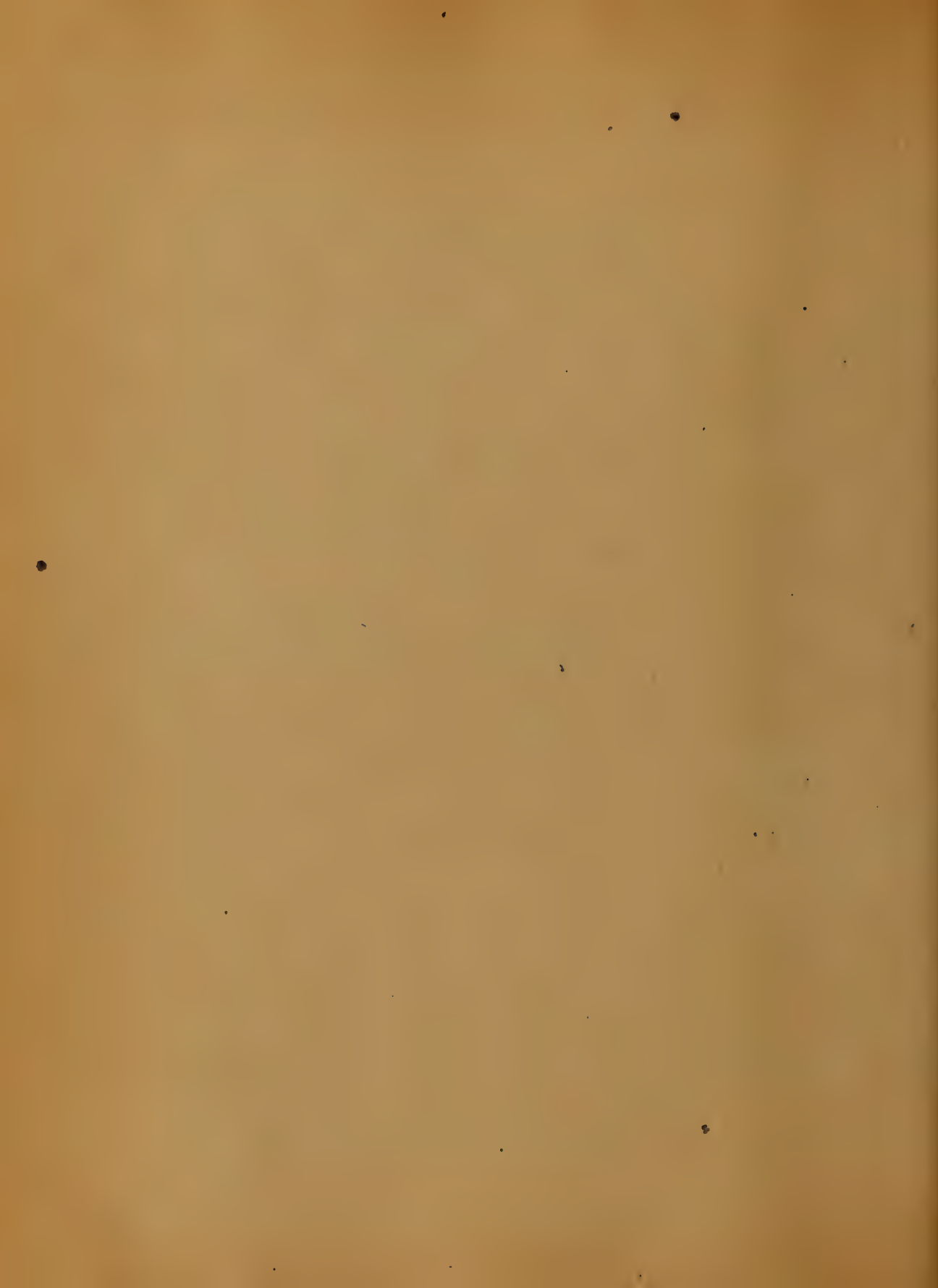


with olive or cast oil on the  
part, may be protected  
by a piece of nit spread  
smoothly with soap paste.  
Quinine, I am satisfied  
has no place as a curative  
agent in this disease, but  
it is useful as a tonic and  
febrifuge after the critical  
period or height of the fever  
has passed. I would not  
give more than ten or twelve  
grains in the twenty four  
hours, divided in two  
equal doses. If the temper-  
ature should reach or exceed  
 $104^{\circ}$  or  $105^{\circ}$ , I would reduce



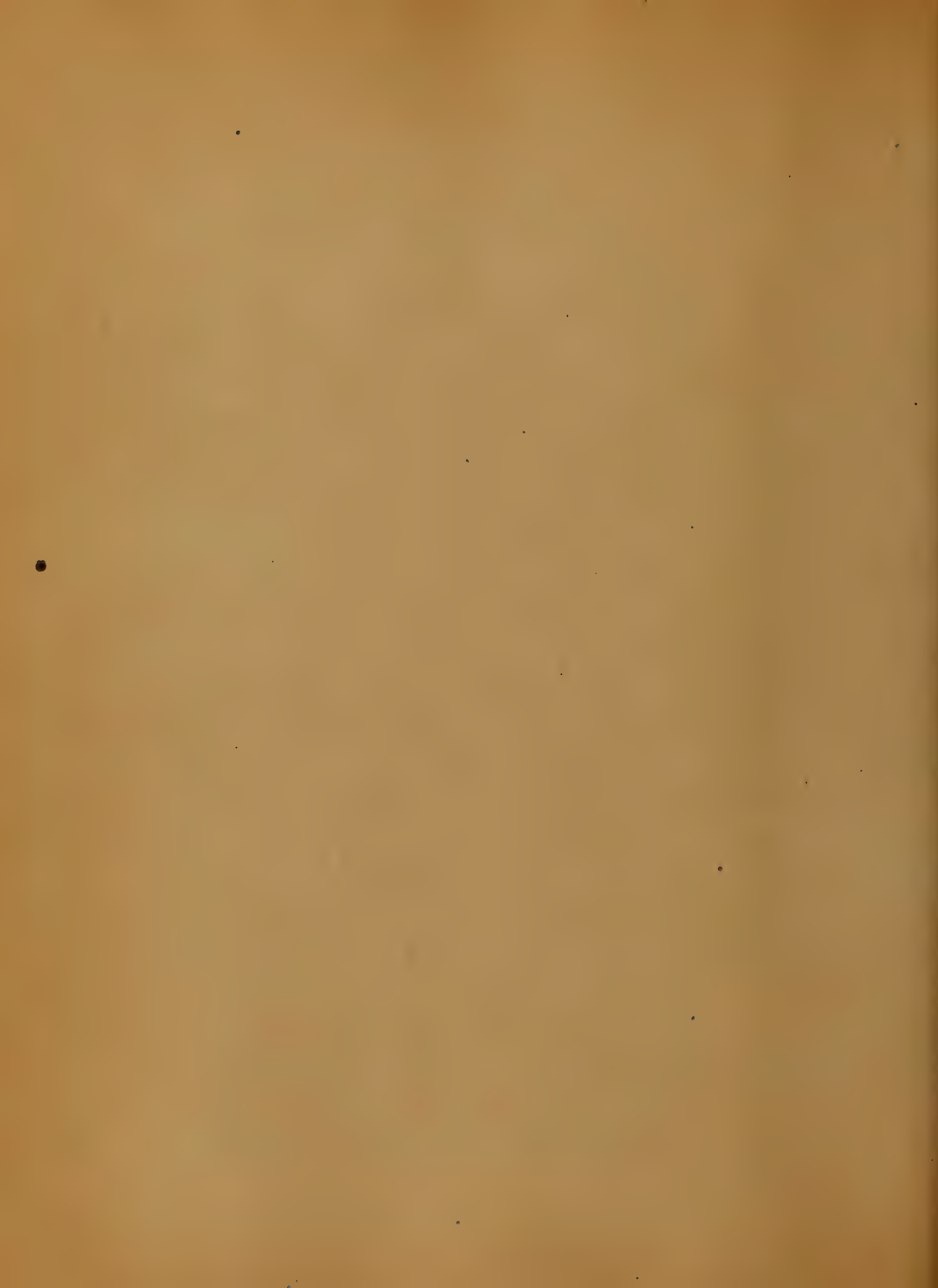
it by spraying the surface  
of the body with tepid  
water and whiskey or cold  
water, which will nearly  
always reduce the temper-  
ature very satisfactorily,  
and if done in the evening  
will promote sleep.

If the case was a very severe  
one and the spraying would  
not answer, I would use  
the bath, "Ziemssen's gradual  
method," immersing the pati-  
ent in a bath at  $95^{\circ}$ , the  
temperature of which is  
gradually lowered to  $70^{\circ}$  or  
 $75^{\circ}$ , according to the effect.





produced. In this way the  
temperature may be lowered,  
without shock or undue  
depression. I have no faith  
in the cold bath in this dis-  
ease; having seen bad results  
from its use. I would also  
give the patient ice to  
eat and a quantity of cold water  
to drink, and effervescent  
draughts with the view of  
lowering the temperature.  
The strength and vital power  
of the patient should be kept  
up and supported by the  
sustaining treatment, which  
consists chiefly of climate



and the use of alcoholic  
stimulants, but not in the  
cases, require Stimulants,  
not more than one half.  
I should say, Sarsaparilla  
tincture of bark, is useful  
and should be given as a  
tonic and stimulant. Some  
of the diluted mineral acids  
should also be given as  
tonics and refrigerants. The  
rest of which I think is  
the sulphuric.

Great care should be given  
to the diet, which should con-  
sist of fluid and easily  
digestible food, given every



tion or two, in small quanti-  
ties. The best aliment is  
milk, gruel, barley-water,  
rice-water, toast-water and  
such like; but chicken-broth,  
weak-tea and eggs should  
also be given. During con-  
valescence much care is also  
necessary. The great debility  
which endures so long de-  
mands the use of tonics,  
and an abundance of  
nutritious food. But on  
account of the danger of  
perforation of the bowels,  
which may last for two or  
three months, mercury is speci-



and important that the food  
should be such as is easily  
digested, and not of such  
a character as to derange  
the action of the bowels.

Exposure and fatigue should  
be avoided since the great  
vulnerability to the super-  
vention of pulmonary inflammation  
and of tuberculosis render  
it particularly liable to be  
injurious. Change of air  
is often extremely beneficial.

The room of the patient  
should be freely ventilated,  
repeatedly during each day  
by opening the windows as





widely applicable. The fact  
that a few patients can  
"catch cold", who can be recu-  
perated by physicians so often  
that eventually it may  
become a popular house-  
hold axiom.

Respectfully

H. H. Den

Cambridge

Ms.



To The Medical Faculty  
of the University of  
Maryland.

By W. H. Hetherington  
Session 1880-81



1  
Session 1850 & 51.

Since my only store house of study  
age would be Flint, or some other,  
practice of medicine I will not  
take advantage of copying a thesis,  
but endeavour to report, as best I can,  
some of the clinical cases that it  
has been my fortune to see.

The first that I will attempt to  
report is one that so often lands  
the physician in the jail, and with-  
out a knowledge of which the prac-  
tising physician would be in a most  
embarrassing position. I mean syphi-  
lis. The names of the troubles caused  
by this disease are legion. It is  
written that The sin of the fathers  
shall be visited upon the children  
unto the third and fourth generation.



we may be called upon to diagnose a disease whose origin may, not only be traced back for years, but generations. The case in question was a young woman, aged twenty three, with an eruption on the face, otherwise, apparently, in good health. On close examination we found scar tissue on the lower lip, which indicated that there had, <sup>been</sup> repeated trouble of the same nature before the patient came under our observation. On examination of the throat we found, likewise, well defined scar tissue, showing that ulceration had taken place at an earlier period of life. The teeth were of the periostrion shape, and presented the gapped appearance so characteristic of inherited syphilis.





The gaps in the teeth were not of the fine "sawtooth" appearance you so often see in persons badly roused, but of a deep decided gap. On questioning her was told that she had suffered very much when about nineteen years old, with her eyes, that for two years was entirely blind. She also stated that she had two sisters, who were affected as she was, and they, too, had suffered with their eyes.

With the symptoms taken with the history of the patient, with that of her family we ventured to make out <sup>our</sup> diagnosis "inherited syphilis," and had the satisfaction of seeing a decided improvement under the administration of Mercury and iodine.



Case 11 - A young girl aged eleven years, living in a malarious climate, presented the following symptoms.

When seen the skin was hot dry, and harsh; pulse 150 beats per minute, respiration hurried although free. All the secretions were more or less suspended, great thirst, bowels constipated, with severe pain in the head and back. The mental faculties disturbed, no delirium and talking in a wild and disconnected manner, and now more or less calm.

The tongue was covered with fur. The patient <sup>was</sup> ravenous with desire for food. On questioning the mother of the child, was told that three days before it was taken with



a chill, with decided rigors, was put to bed, and about eight or ten hours after became more easy. But that the next day it had a ~~with~~ chill and had been getting worse ever since.

Satisfying myself that it was a case of ~~intermittent fever~~ <sup>of remittent fever</sup> ~~to which~~ we had to deal and that the liver <sup>was</sup> not performing its function, administered a dose of blue pill to be followed by a saline purgative. And gave the great "malaria specific" Quinine from which good results were gotten -

Case III. Mrs - aged thirty five, she too being in a ~~malarious~~ <sup>malarious</sup> ~~condition~~ and having suffered for a long time with ~~intermittent~~ <sup>intermittent</sup> fever.



when seen presented the follow-  
ing - The pulse small, rapid, and  
compressible, the appetite poor, and  
the patient very much emaciated.  
On questioning her was told she  
had not had her "course" for several  
months, and that about the time  
they ought to have made their ap-  
pearance she suffered intensely  
with pain in the head and face.  
With extreme depression of the  
mental powers, giddiness and cere-  
bralgia. These fainting spells be-  
came so bad that the patient could  
not leave her <sup>bed</sup> for fear of doing  
damage to her self from a fall  
while in one of these attacks, which,  
though not as sudden as in epilepsy,





came on without the patient being aware of their approach in time to return to her bed. Knowing that the woman had not passed the menopause, and not being able to find any mechanical cause why the woman should not menstruate, was driven to the conclusion that the woman was not ill because she did not menstruate, but did not menstruate because she was ill. Believing that these fainting spells were not due to a superabundance of blood being sent to the brain, caused by the usual amount of blood not being stimulated by the uterus, but that they were due to nature's efforts to re-establish the catamenial flow, the uterus



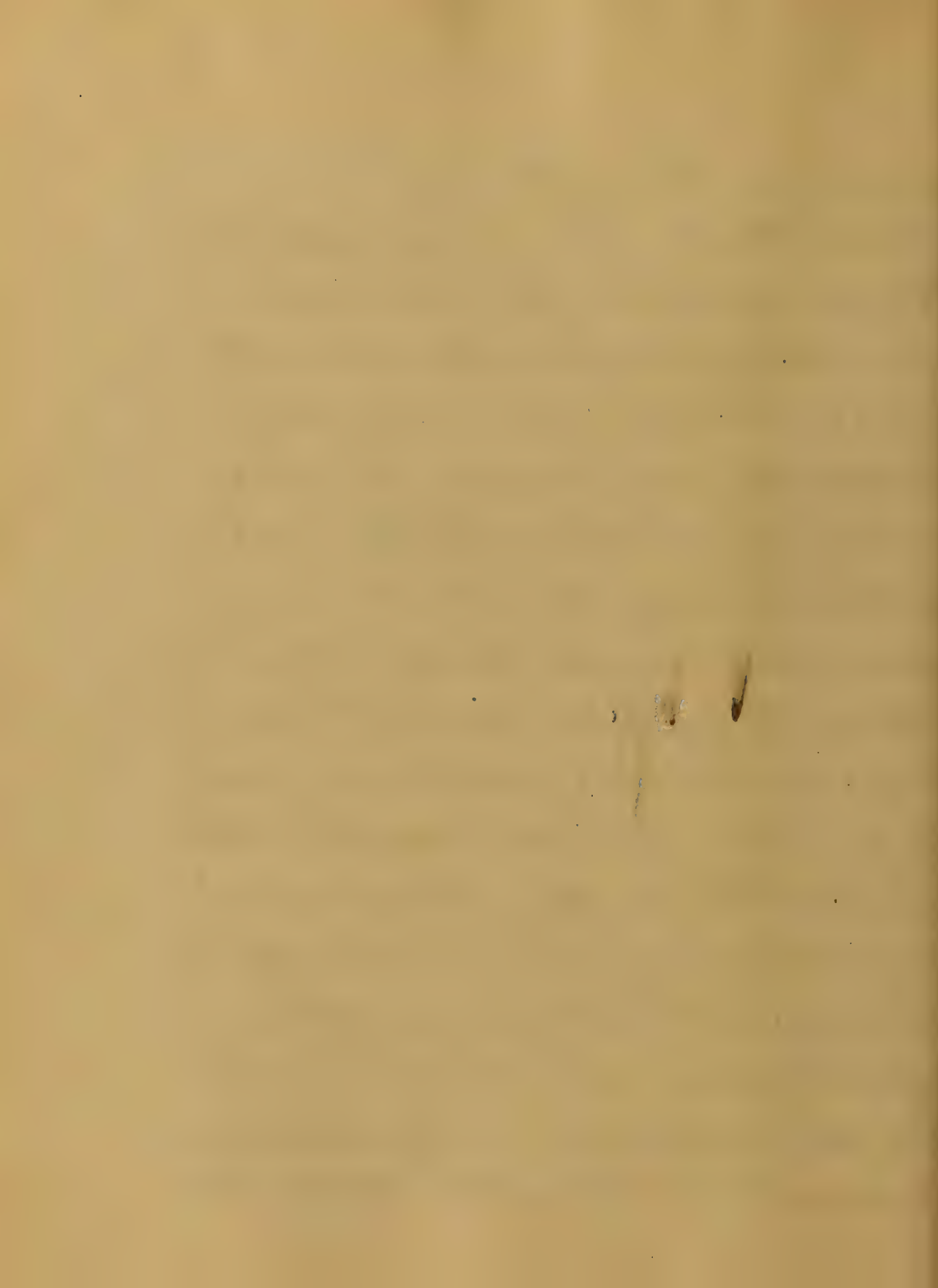
being engorged with blood there was not blood enough left in the system to carry on the functions of the brain, consequently syncope was the result. Having made out our diagnosis "anaemia" the patient was put on tonic and good diet, with the satisfaction of seeing the catamenia reestablished with a general improvement of health.

Case IV. Mr. A. aged twenty two, previous to present illness, stout and in good health, though somewhat indolent in his habits. While engaged in his daily avocation, was taken with a chill, carried home, and about thirty six hours after the chill



presented the following:

Pulse full, Strong and rapid.  
Temperature high. Respiration  
hurried, and accompanied with  
more or less pain. The left  
cheek was very much flushed,  
could be easily detected not-  
withstanding the whole face  
was very much flushed by the  
severity of the fever. The  
eyes were dull and heavy look-  
ing. The patient was also both-  
ered with cough, it was dry  
and hacking in its character,  
though, at that time, the  
sputa was not characteristic  
of pneumonia. Physical ex-  
amination revealed moderate



dullness on percussion over the left lung. The fine crepitant rale could be heard on auscultation over the lower lobe of the left lung. Having diagnosed pneumonia in its first stage, treatment was instituted with the hope of aborting the attack, but failed. Twenty four hours later the dullness on percussion was more decided. The fine crepitant rale had given place to the bronchial respiration and the rusty colored sputa, so characteristic of pneumonia, were present.

Case V. Mrs B. living in that degree of ignorance that it was





Hard to say whether, or not  
the statement given by her, as  
to her age, was true. Found  
in the lower walks of life where  
the necessities of <sup>life</sup> were limited, and  
where we so often find the  
monster disease stepping in to make  
more miserable the lives of the unfortu-  
nate creature. The case in question,  
when seen, presented the following.

Severe pain, in the head and  
back, tongue dry and brown, and  
the pulse was weak and frequent.  
The patient was often uncon-  
scious, but while in her right  
mind complained much of suf-  
fering with nausea. On close exam-



ination found on the calf of  
<sup>the</sup> leg a spot tense, red, swollen,  
 and painful. Was told that  
 the day before the patient  
 was taken with a chill, nau-  
 sea, and severe pain in the head  
 and back. Having satisfied  
 myself that it was a case of  
 Erysipelas, and as erysipelas is  
 only a form of inflammation,  
 the first thing to be thought  
 of in the treatment would  
 be position. Having elevated  
 and put at rest the part, lead  
 water and Laudanum were  
 applied locally to the part, and  
 tincture of Iron, twenty drops  
 every two hours, was admin-



istised internally.

Case vi. The case which I will now attempt to report is one which it was my fortune to see in its first stage and follow through its entire course.

The patient, after several days of more or less languor, pain in the head, nausea, and bleeding at the nose, was taken with a slight chill followed by fever of considerable severity. As the disease advanced the face acquired a dark purplish flush and a blank expression. The mental faculties soon became involved, he lay dozing or muttering to him-



self, unless disturbed when he would be easily aroused, but as soon as left to himself would return to the same condition as before. About the end of the first-week of the attack the patient became more indifferent as to things around him, a little hard of hearing, and rather wakeful and delirious at night. By this time the fever had <sup>reached</sup> a very great height, ranging from one hundred and four to one hundred five degrees; and the diarrhoea became troublesome. Scattered over the abdomen were to be seen red or rose colored spots,





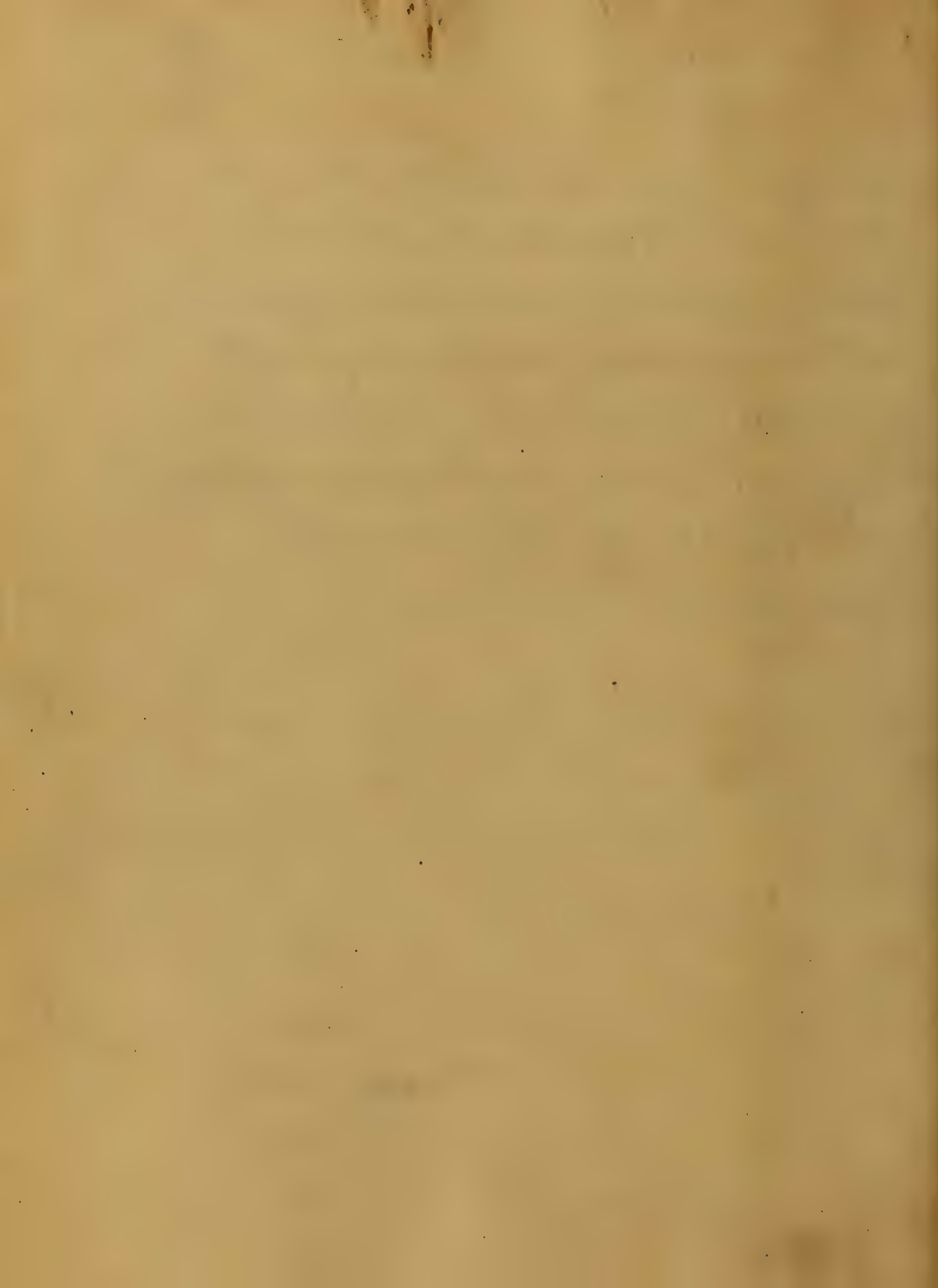
which, on passing the hand over the abdomen, could be felt - slightly elevated above the surrounding skin. The spots under pressure entirely disappeared, but on removing the pressure they reappeared. These spots were of short duration, while some were coming others were fading away, and thus it was kept up for some time. The abdomen was swollen and tympanitic.

But at time the fever was exceedingly high, the pulse small and rapid, and the diarrhoea exhausting. The patient gave evidence of pain



when pressure was made over the region of the ileo caecal valve.

Being quite sure that our patient was suffering with typhoid fever the expectant treatment was adopted and symptoms treated as they presented themselves.



A Thesis

on

Ascariatina.

Submitted to

The Faculty  
of the

University of Maryland.

by

Hansford L. Walls

of

West Virginia.



# Scarlet Fever.

(Scarlatina. Febris Rubra.)

Definition.— An acute, specific, contagious, and frequently epidemic disease characterized by a continued fever, a general uniform scarlet eruption, and inflammation of the fauces & tonsils.

History & Causation.—

The earliest source of this disease is said to be traceable to Arabia, & until the sixteenth or seventeenth century it was confounded with measles. However, it may originally, <sup>have</sup> been limited it now





prevails throughout the world, in every climate and all seasons of the year. It is found among all classes, but, most commonly among the poor, as its development seems to be favored by overcrowding & poverty.

It may occur at any age but is far the most common in childhood being most frequent in children under five years. It very rarely occurs a second time in the same individual though it sometimes does.

Scarlatina is highly contagious, & may be communicated by the atmosphere and,

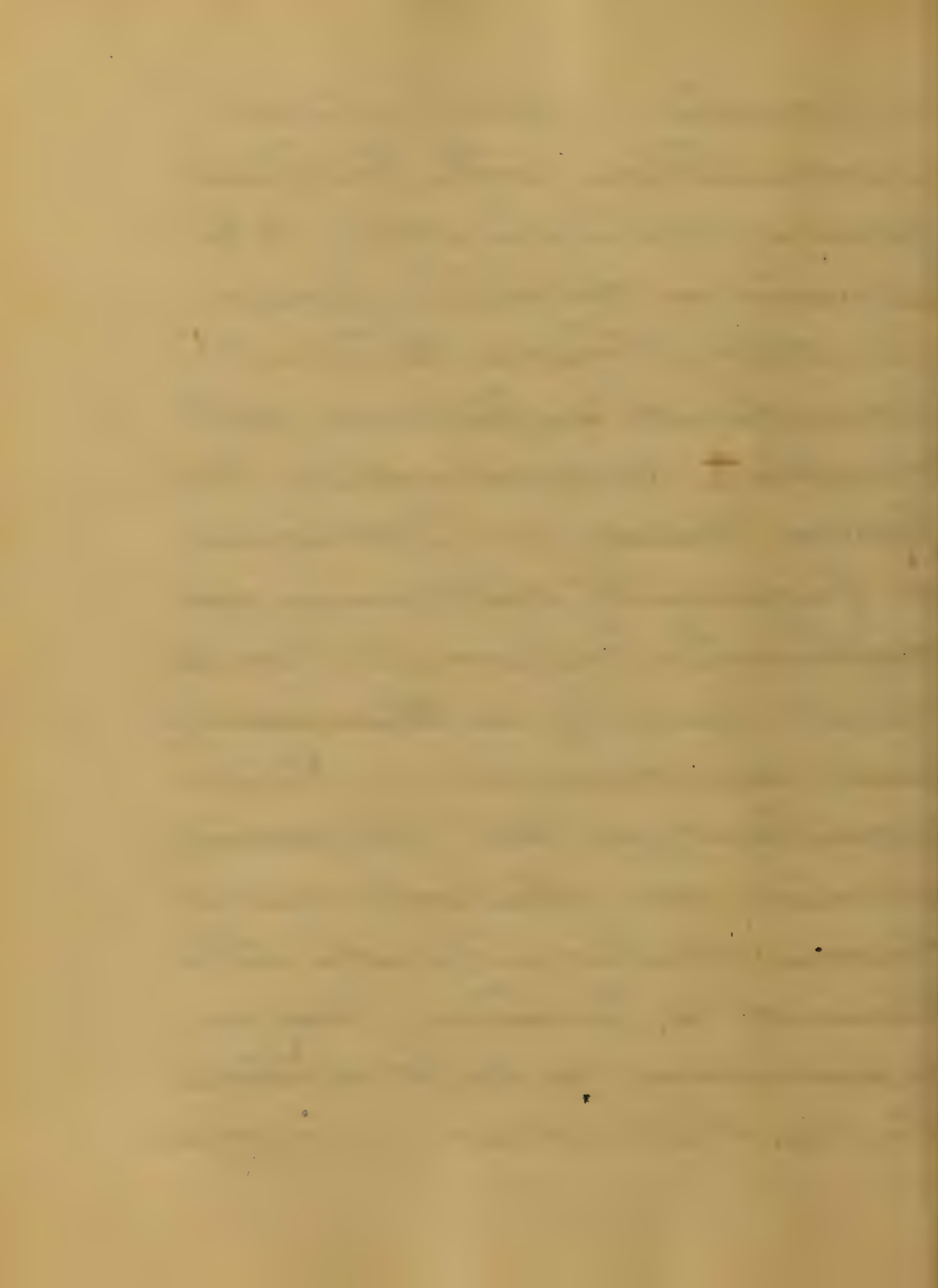


by fomites, & also, by direct  
inoculation with the fluid  
from a miliaria vesicle or the  
secretions from the Lances.

A scarlet fever patient is  
considered infectious until  
complete desquamation has  
taken place. Scarlatina

is frequently epidemic, and  
different epidemics present  
great variety in their severity  
and phenomena. It is

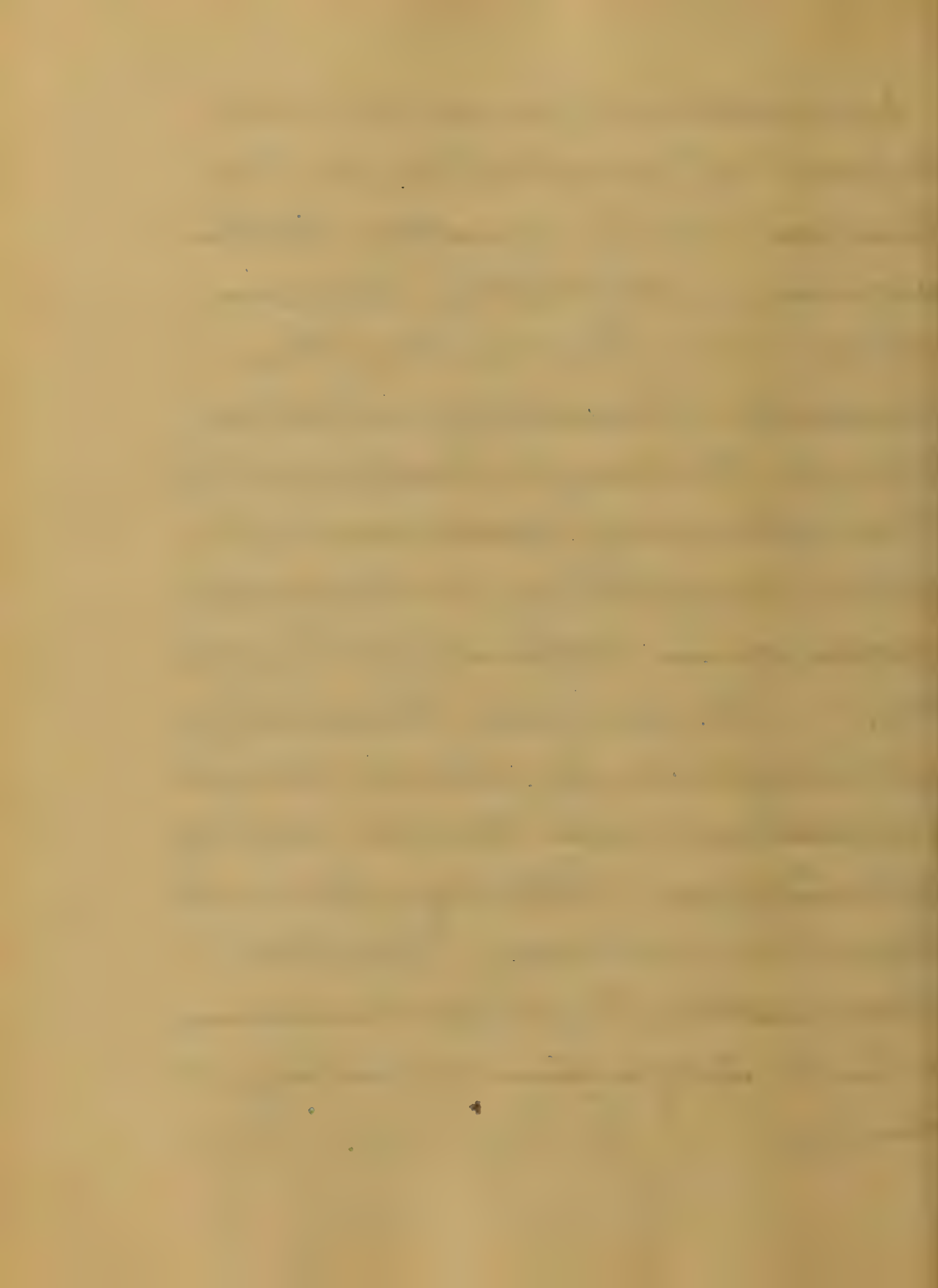
said by some that pregnant  
women are especially exempt  
from infection; though at the  
time of parturition they are  
peculiarly predisposed to take  
it, & in which cases it is very fatal.



Symptoms & Course. — The period of incubation in this disease varies greatly, but the average is probably six or seven days.

The onset of the disease is usually sudden, though it may be preceded by the ordinary prodromes of febrile affections, — languor, drowsiness, aching of the limbs, &c.

The disease is usually ushered in by chills, nausea & vomiting, sore throat, coating of the tongue, hot, dry skin, with thirst & anorexia, frontal headache, hurried breathing, a high temperature & very frequent pulse. Of these symptoms



The most constant & marked  
are - The great frequency of  
the pulse; The marked rise  
in the temperature, which may  
be  $104^{\circ}$  or  $105^{\circ}$  on the first day;  
The sore Throat, & vomiting  
which is often distressing.

The eruption appears, usual-  
ly, on the second, at first on the  
face neck & chest, but soon  
covering the whole body.

It consists at first of innum-  
erable minute red points, which  
discrete at first, soon become  
confluent, producing a gene-  
ral scarlet or brick-red hue  
which is of a deeper tint upon  
the hips & loins & in places of



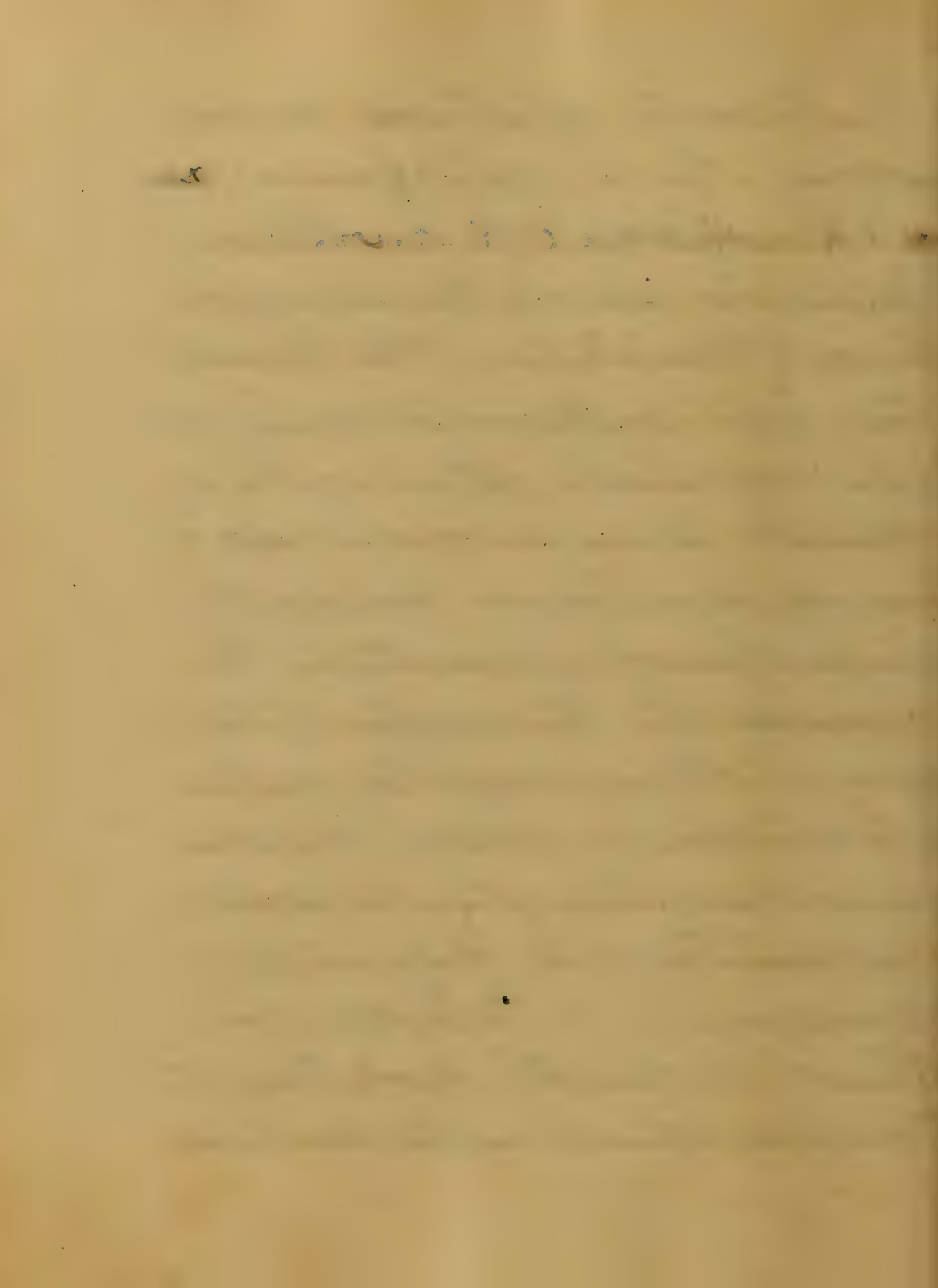


The joints. There is usually some infiltration of the skin giving it a swollen appearance. & there may also be an itching & soreness with great heat of the skin. The rash is, usually, at its maximum on the third or fourth day of the disease, & begins to fade about the fifth or sixth, disappearing entirely within three or five days, when desquamation begins.

Unlike some other diseases of like nature, the fever does not abate upon the appearance of the eruption, but is aggravated. The temperature & frequency of the pulse, are much increased.



The throat affection becomes worse, the throat & fauces are much inflamed & swollen & presents much the same of hue of the skin. The tonsils are also inflamed & enlarged & covered often with a thick tenacious mucus & may sometimes present superficial ulceration. The glands at the angle of the jaw & others nearby are tender & swollen. From the soreness & swelling of the parts deglutition is difficult & painful. About the third or fourth day the tongue which up to this time



has been coated with a yellowish white fur, now cleans off & assumes a deep red color with swollen & projecting papillae, constituting the characteristic "straw-berri tongue".

The vomiting is not so frequent as the disease progresses as in the beginning.

The nervous symptoms become aggravated, delirium increases & in the severe cases may run into stupor & coma. Either

diarrhea or constipation may be present but the latter seems to be the most usual.

There is usually complete anorexia though in some cases the appetite may not be affected.



About the fifth or sixth day, if the case be favorable, the symptoms begin to show an abatement, & to gradually decline, with the fading of the rash. The temperature diminishes; the pulse becomes fuller & slower; the Throat affection improves; the delirium disappears; the appetite is regained, & the patient soon regains his health, provided none of the many & serious sequelae protract the convalescence.

But if the case be not going on so well about this time the change is apt to be for the worse, & most of the symptoms are aggravated, & the prognosis is grave.





The throat eruption becomes  
cessant. The tonsils may ulcer-  
ate or suppurate, there may be  
pseudomembranous deposits  
on the fauces & throat, abumen-  
uria appears, the patient sinks  
into a typhoid state, the delir-  
ium takes the low muttering  
form, & the case is terminated  
by convulsions & coma.

As the eruption fades des-  
quamation begins, taking  
place in the order of invasion  
of the oozle, & varies from  
a few days to two weeks more  
in duration. It is often  
accompanied by much  
itching & soreness of the skin



It is during the period of  
disquamation that some  
of the more virous cases  
are apt to make their ab-  
sence, & it also at this  
time that the disease is  
thought to be most infectious.

So far we have had only  
a general view of the course  
& symptoms of scarlet fever;  
& I think it will be well to  
consider more in particu-  
lar the more important  
& characteristic features  
of the disease.

One of the most marked  
symptoms of this disease,  
is great elevation of temperature.



which is often as much  
as  $103^{\circ}$  or  $104^{\circ}$  on the first day  
and later in the attack  
it not unfrequently reach-  
es  $106^{\circ}$ . Though the average  
range is probably from  
 $102^{\circ}$  to  $104^{\circ}$ . It is said to  
"occasionally rise to  $110^{\circ}$  or  
even  $112^{\circ}$ ". It begins to  
gradually decline with the  
fading of the rash. usu-  
ally showing more decided  
fall on the fifth, tenth &  
fifteenth days. A daily  
remission in the mornings  
when well unmasked is con-  
sidered a favorable sign.  
When <sup>the temperature</sup> again rises after any



decided fall some cases  
may be suspected to be  
commencing to devolve.

Another very characteristic  
symptom of this disease, is  
the remarkable increase in  
the frequency of the pulse, which  
runs up very high even, on the  
first day, & increasing in  
frequency with the appar-  
ence of the eruption; it may  
reach a rate of 120 to 160 or  
even more. But this great  
frequency alone, does not  
affect the prognosis to any great  
extent, unless there be also  
great weakness. In favor-  
able case there is a gradual





fall in the rate of the pulse  
from the beginning of the  
fading of the rash.

The most constant & very  
often the most dangerous  
feature of this disease is the  
inflammation involving  
the tonsils, fauces, pharynx  
& rarely the larynx. In some  
cases the affection of the  
throat is very slight but  
in the majority of cases it  
is the most serious & trouble-  
some feature of the case. The  
tonsils become enlarged &  
softened, sometimes break-  
ing down under the finger, &  
often present superficial



ulceration, & sometimes, in  
the malignant cases. The  
suppurate or slough, or false  
membrane forms upon  
them, & soon involves the  
other parts. There is very  
rarely ulceration of any other  
portion of the mouth & throat  
except in the malignant  
form of the disease. The salivary  
glands are usually en-  
larged, & in some very bad  
cases may suppurate. On ac-  
count of the swelling & sore-  
ness of the parts there is usual-  
ly much pain & difficulty in  
deglutition, & there is sometimes  
noticed a short dry cough due



to the facial inflammation.

The neck is usually swollen & stiff. The sore throat is very important & should always be carefully examined especially in children as a child may die without making any complaint of its throat.

The appearance of the tongue in scarlet fever is very characteristic; it is at first covered with a brownish white fur, excepting the tip & edges which are of a deep red tint, but about the third or fourth day it cleans & presents a deep red hue with projecting



papillae which constitutes the  
"strawberry tongue". In some  
very mild cases however it  
may be but little furred & clean  
with out ever presenting the straw-  
berry character, & again in very  
severe cases it may become very  
dry & black, with scabs appear-  
ing on the teeth.

The bowels are usually not  
much disturbed; there may be  
diarrhea in the early stage but  
there is usually a tendency to  
constipation later. Vomiting  
is very common in the first  
stage but does not continue  
troublesome after the first  
one or two days.





The urine, as in other bilious affections is scanty & high colored. The chlorides are diminished, & the uric acid is retained during the fever & voided in excess on its subsidence.

Albuminuria is frequent both as a concomitant & a sequel. It usually appears about the third week, but may make its appearance almost any time during the attack.

It does not seem to have much dependence on the severity of the case, as in the worst cases may never appear, while some of our mildest



may prove fatal on account  
of it. If the urine be exam-  
ined, it will be found albumi-  
nous, & smoky very often in appear-  
ance, & under the microscope  
are seen epithelial & granular  
casts & usually, blood corpuscles.

There is nearly always more  
or less disturbance of the nervous  
system; in the milder cases  
restlessness, & wakefulness &  
frontal headache & may be  
some little delirium; but in  
the more severe cases the  
delirium begins early & be-  
comes very violent, convul-  
sions often appear early in  
grave cases in children.



Coma, delirium, or convulsions  
usually precede a fatal  
termination.

There are few diseases that  
vary so much as Scarlet  
Fever, both in the severity  
of the attacks & the pheno-  
mena they present; & from  
this fact, it is divided,  
by most writers, for con-  
venience of description & better  
direction of treatment, in-  
to the three following varieties-  
S. Simplex, S. Anginosa, &  
S. Maligna, to which some  
add a fourth - S. Latens.  
Scarlatina simplex, - in  
this variety the fever is



moderate, the eruption is  
ly makes its appearance, & there  
is little or no inflammation  
of the throat. The attack is  
frequently as slight as not  
to confine the patient to bed.

Scarlatina Anginosa - In this  
the stress falls upon the throat.  
The neck is swollen & stiff,  
the tonsils are swollen & greatly  
ly, & ulcerate or subpurate, or  
may be covered with a fibrinous-  
membranous deposit which  
coming away leaves a ulcers  
ous surface. There may be  
ulceration or sloughing of the  
fauces or pharynx or posterior  
pharyngeal abscess; there





great difficulty & pain in deglutition. The inflammation frequently extends thence to the Eustachian to the tympanum, setting up a purulent discharge which may result in permanent deafness.

Scarlatina Maligna. - This name is given to those extremely severe & fatal cases in which the patient seems at once overwhelmed by the violence of the attack. Most of the usual symptoms are greatly aggravated, the vomiting may be very distressing, severe chills or rigors may be present, the temperature



reaches an extraordinary  
intensity. The pulse is quick  
& feeble. The prostration &  
debility are great. There may  
be violent diarrhoea from  
the first, ending convulsions  
or coma which usually termi-  
nates in death. The eruption  
may not appear or only par-  
tially, & then recede or become  
level in hue. The throat  
may be very much or a little  
affected. There may be  
diarrhoea & hæmorrhage from  
the bowels. Death may  
take place in the most violent  
form within the first twenty  
four hours, but it usually



occurs with in the first three or four days. The proportion of the malignant - & others is about one to five.

Scarlatina Latens - This is the mildest form of the disease, & occurs most frequently in those who have had the disease & are again exposed to the contagion.

It is so slight that it would likely not be suspected were it not that it occurs where scarlet fever is prevalent.

There is only some very slight febrile disturbance, with some redness of the throat & may be a slight trace of the rash, or often none at all.



Sequelae.- There are few diseases that are followed by so many & serious sequelae as scarlatina. It is not easy to distinguish between complications, & what may be strictly termed sequelae so for the sake of convenience some affections already mentioned will be noticed here. First may be mentioned, Ulceration & sloughing of the of fauces, tonsils & pharynx, retro-pharyngeal abscess, & suppuration of the cellular tissue & glands of the neck & at angle of the jaw. Secondly we may have not infrequently

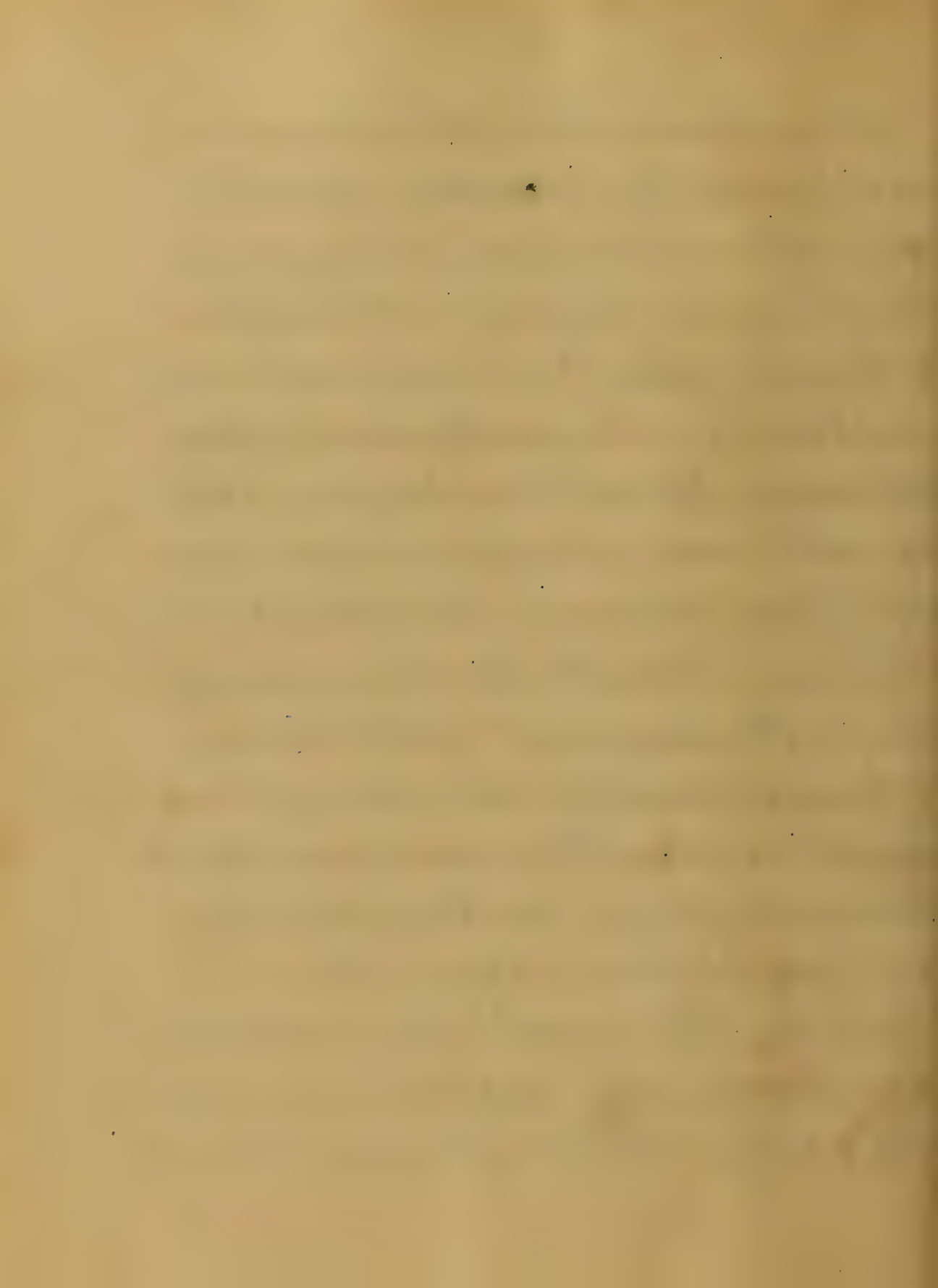




conjunctivitis, sometimes  
followed by serious results;  
or often, strabismus, may be re-  
sulting in permanent diplopia,  
& here may be mentioned vag-  
initis or a muco-purulent dis-  
charge from the vagina, which  
is not very uncommon, but  
is often passed over without notice.

Third. Bronchitis & pneumonia  
are not frequent, but pleurisy,  
& pericarditis are more common.  
Diarrhea is often a serious sequela.  
Rheumatism is frequently  
a troublesome sequela.

Fourth. The most common &  
important sequela is renal  
dropsy. Albuminuria is usually



The first symptom, & may make  
its appearance as early as the  
first week or not till the third,  
but usually about beginning of  
third. This albuminuria  
occurs in the majority of cases  
to some extent but generally  
passes off without any bad result.  
The fatal cases are usually  
terminated by convulsions  
from uraemic poisoning. The  
character of the urine need  
not be mentioned here as  
they have already been de-  
scribed. Exposure to cold  
or a chill during disquama-  
tion is the common cause.



Diagnosis. The two diseases  
which it may be mistaken  
for are measles & roseola.

It is distinguished from  
measles by the eruption  
making its appearance on  
the second day, the absence  
of catarrhal symptoms, &  
the presence of sore throat,  
& by the rash being gener-  
ally diffused & of brighter hue.

From roseola it is known  
by the sore throat & febrile  
symptoms, & by the rash  
in roseola being in patches  
& of a rose color. It is not  
likely to be confounded with  
any other affections, except in  
the first day, before the rash



Prognosis.- is in all cases uncertain, but cases of the simple form usually get well, the danger in this form is the liability to some of the serious sequelae, among which dropsy especially follows mild cases as frequently as the reverse. The prognosis of angina is grave & recovery from the attack is the exception. Scorbula is almost always fatal in the tropical zone. Treatment.- In the mild cases little medication is needed. The patient should be put to bed in a large well

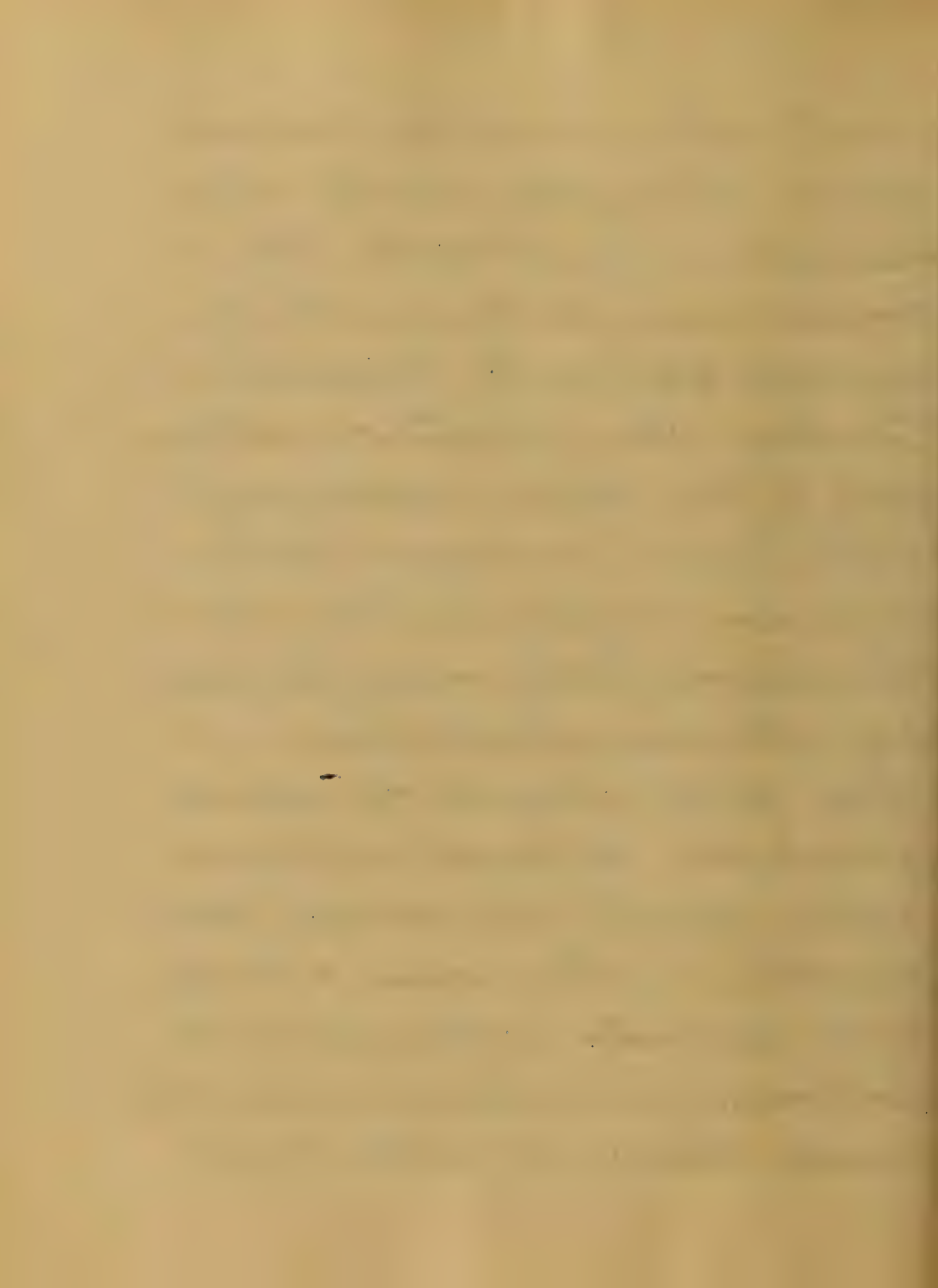




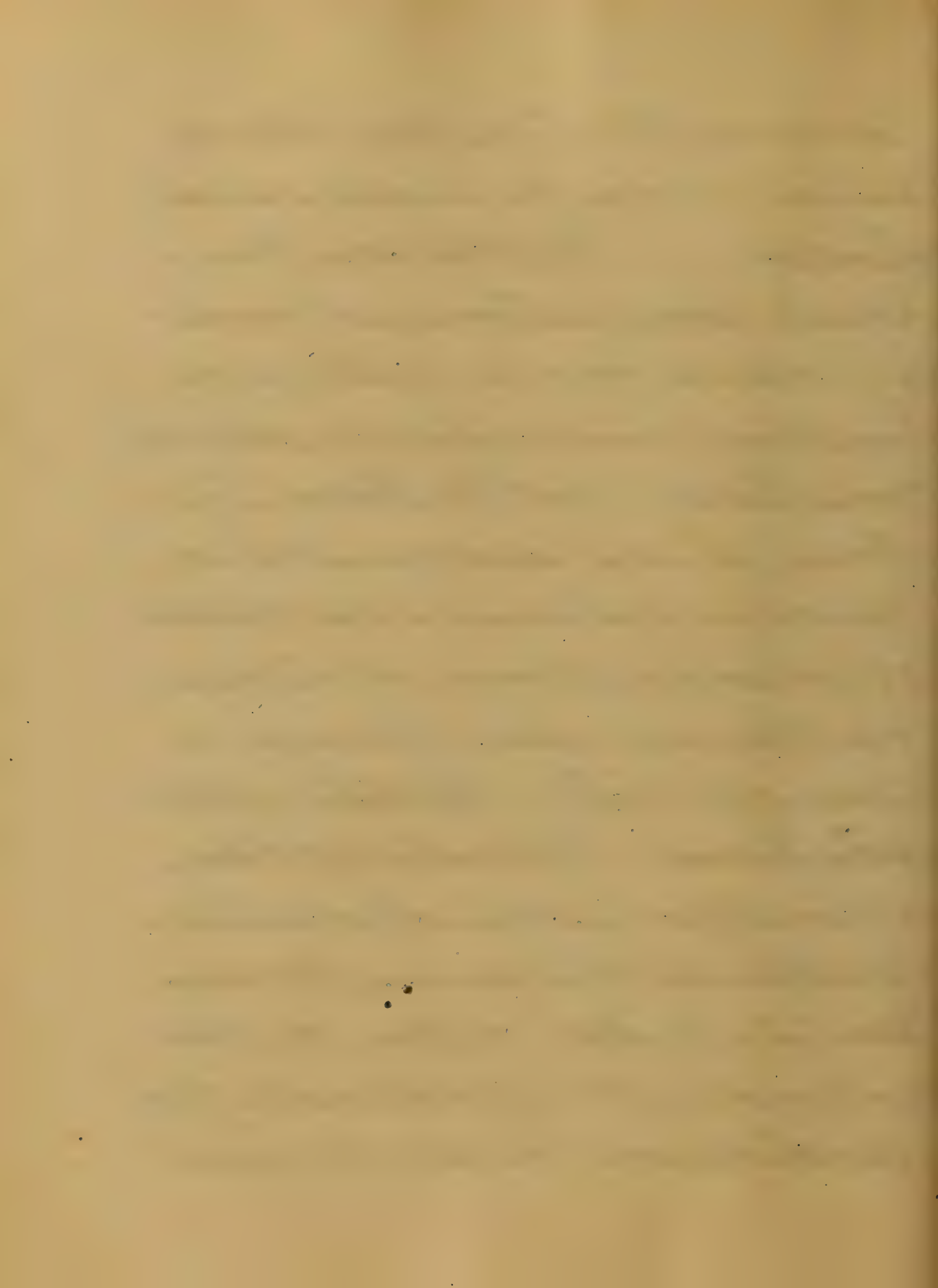
antiseptic room, but protected  
from draughts, & with a tem-  
perature of  $35^{\circ}$  to  $70^{\circ}$  F. The  
bowels may be opened by a  
mild aperient, if needed.

To allay the irritation & itch-  
ing of the skin, sponging  
with tepid vinegar & water,  
or cream & glycerine. The  
whole body may be greas-  
ed with unsalted lard.

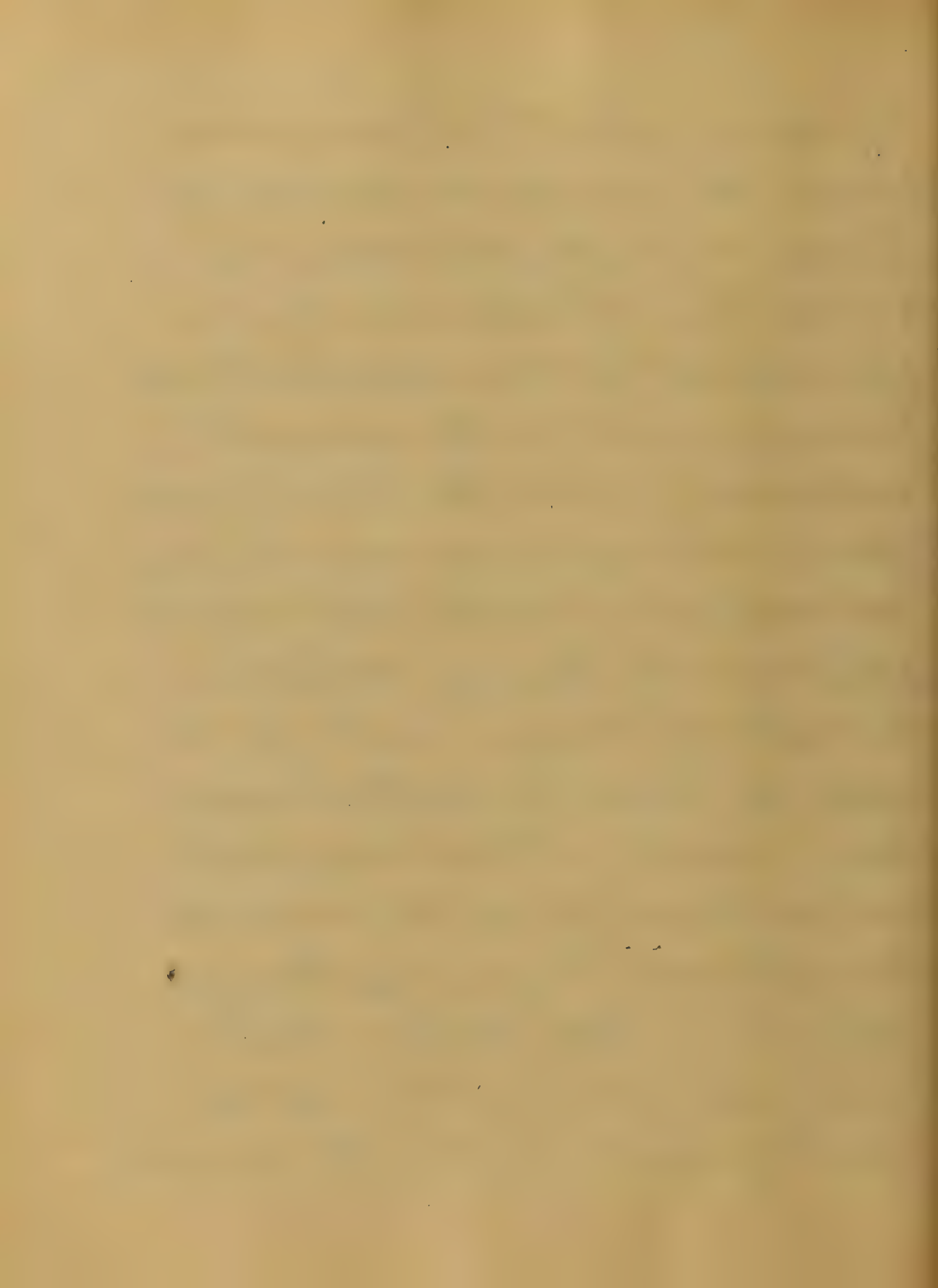
The diet should be plain  
& simple; at first, milk &  
water, gruel lemonade, toast  
& water, later when a tenden-  
cy to debility is present it  
should be more nourishing  
milk, chicken broth, beef



Tea - nutton tea &c. Both  
drinks may be allowed in all  
stages. For the sore throat  
local applications extremely  
warm fomentations, as  
bressed meal, yeast or oat meal  
poultices, inhalations of  
steam are recommended.  
Among medicines the chlorate  
of potassa stands at the head,  
the throat may be sponged or  
sprayed with solution of potash  
solutions. Chlorate of potash  
& honey is a good application.  
Sulphate of Quinine to reduce  
the temperature, & when the pulse  
is frequent & of moderate force  
varatum viscidum is used.



by some with it is said good effect. & acornite is likewise used. Sulphite of sodium & tincture of chlorides of iron are used in the constitutional treatment with much success. In the malignant form stimulants are needed. In ulcerous sore throat applications of strong solutions nitrate of silver, or the perchloride of iron, or nitric acid are used. Carbolic acid in solution is used as an application to throat with good effect. Hot baths beginning at  $100^{\circ}$  or  $95^{\circ}$  & cooled slowly down to  $70^{\circ}$  are resorted



to be so much efficacy when  
there is hyperpyrexia.

Care should be taken not to  
allow the patient to get chilled  
during the disquamation, as  
this is a most frequent  
cause of dropsy.

Belladonna is reputed to  
possess a prophylactic power  
in protecting from scarlet  
fever, but there is much  
doubt as to much of the as-  
sertion, & we have not evi-  
dence sufficient to say any-  
thing positive in regard to it.













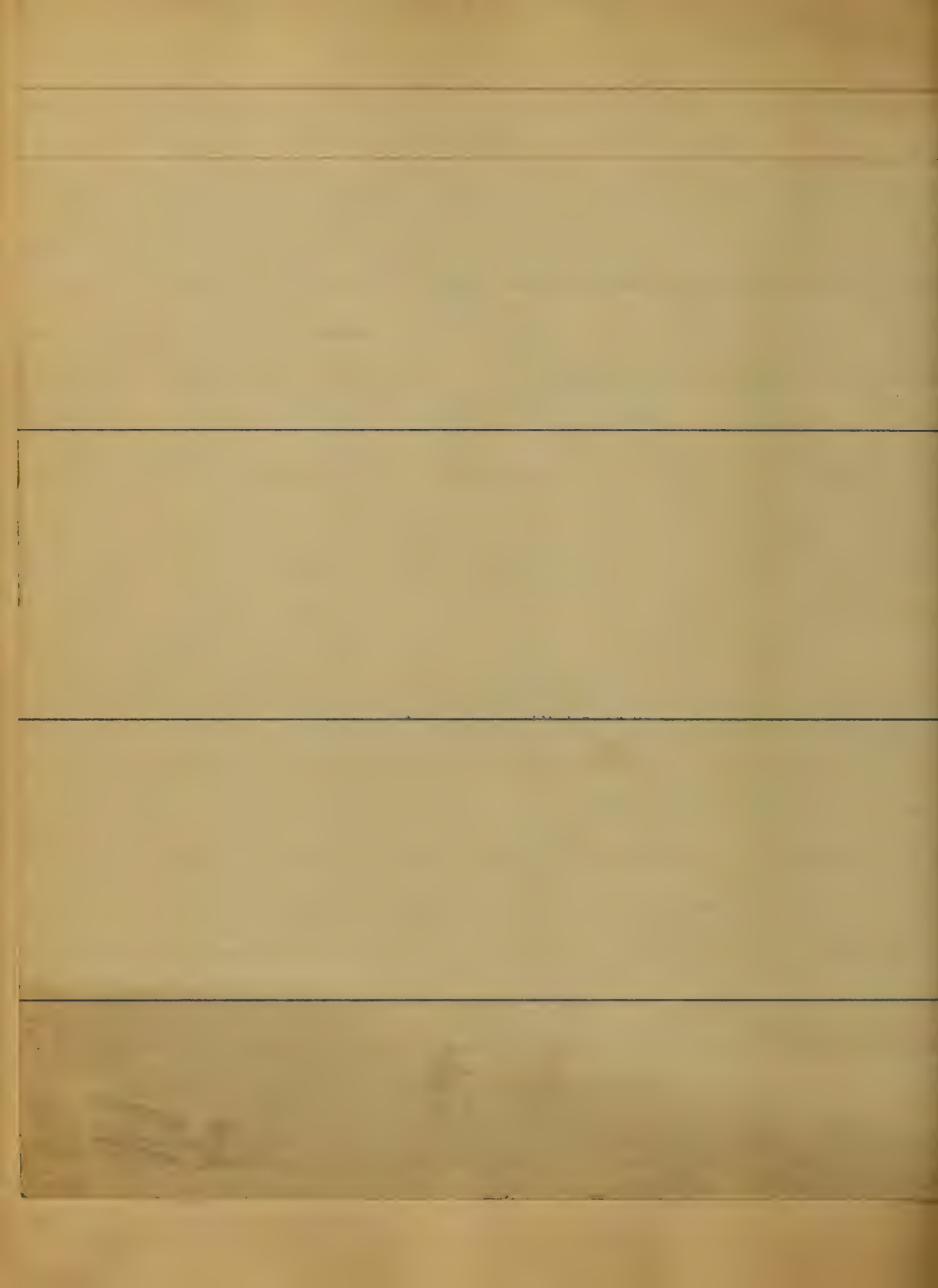




1851  
The course of the disease is usually  
diagnosed by its progress. The

This disease is a disease of the  
the course of the disease is usually  
a more chronic which is present  
in most cases, as regards the  
fatality. In its milder form it is  
not fatal, in its more severe form  
it is fatal. In the milder form  
it is usually accompanied by  
fever, sore throat, and  
and sometimes by  
and in the more severe form it is  
usually accompanied by  
and sometimes by  
are not constant, however,  
in the disease, a simple  
to mild and severe. Sometimes  
it is

tonical character. The symptoms are  
ice and a prostration of the  
with the constitutional character of  
the disease.





Several months, and the patient  
usually better in a week. These cases  
are rare, but sometimes in the winter  
when is generally accompanied by  
cough in children, with dry or  
cough of course, oppression, the  
pulse is notably greater than in  
other respiratory cases, oppression is  
uncommon, recovery of the patient,  
in the winter, may generally be seen  
his stage, rather better, a low  
rate of temperature, and pulse rate  
of 100, and dry cough, the  
of dryness, the dryness of the  
it is due to the dryness of the  
as in this situation of the  
patient, the dryness of the  
rate of pulse 100, and  
rather to dryness, the dryness  
much. In very mild cases the  
not take to bed. The  
is due to dryness, the  
system usually occurs in the  
a considerable time, the  
are to some complication.









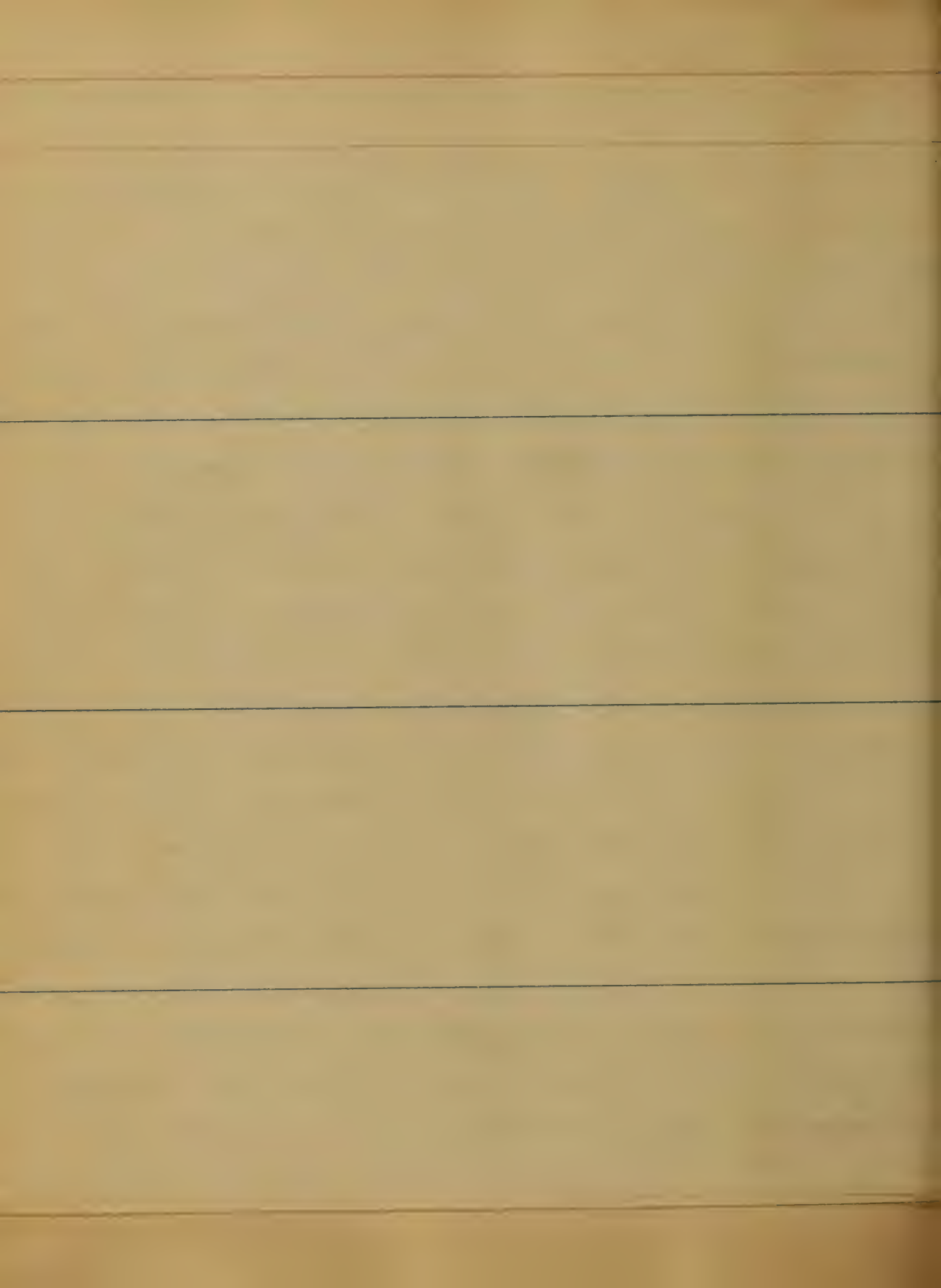


tongue is very red & swollen & generally  
 red, thin & little & very dry, the patient  
 complains through it that it is very  
 numerous red points. The secretion of the  
 mucous glands of the tongue is very  
 all over the surface, appearance is  
 more in secret ion, but the tongue  
 in disease, the coating is white & the  
 surface of the tongue clean & red  
 the papillae being enlarged, the ap-  
 pearance much like that of a raspberry.  
 Strawberry like tongue is a pathognomonic  
 sign, it is peculiar to this disease  
 & the movement is somewhat  
 based on the appearance of the tongue  
 the frequency of the pulse & increase  
 of skin are more marked in the  
 primary of the fever. The pulse varies  
 from 140 to 160 & very large, open  
 string, not compressible. The temperature  
 of the axilla shows an increase of temperature  
 & in some cases it may reach 112°  
 during the remission stage. The  
 string is not compressible.

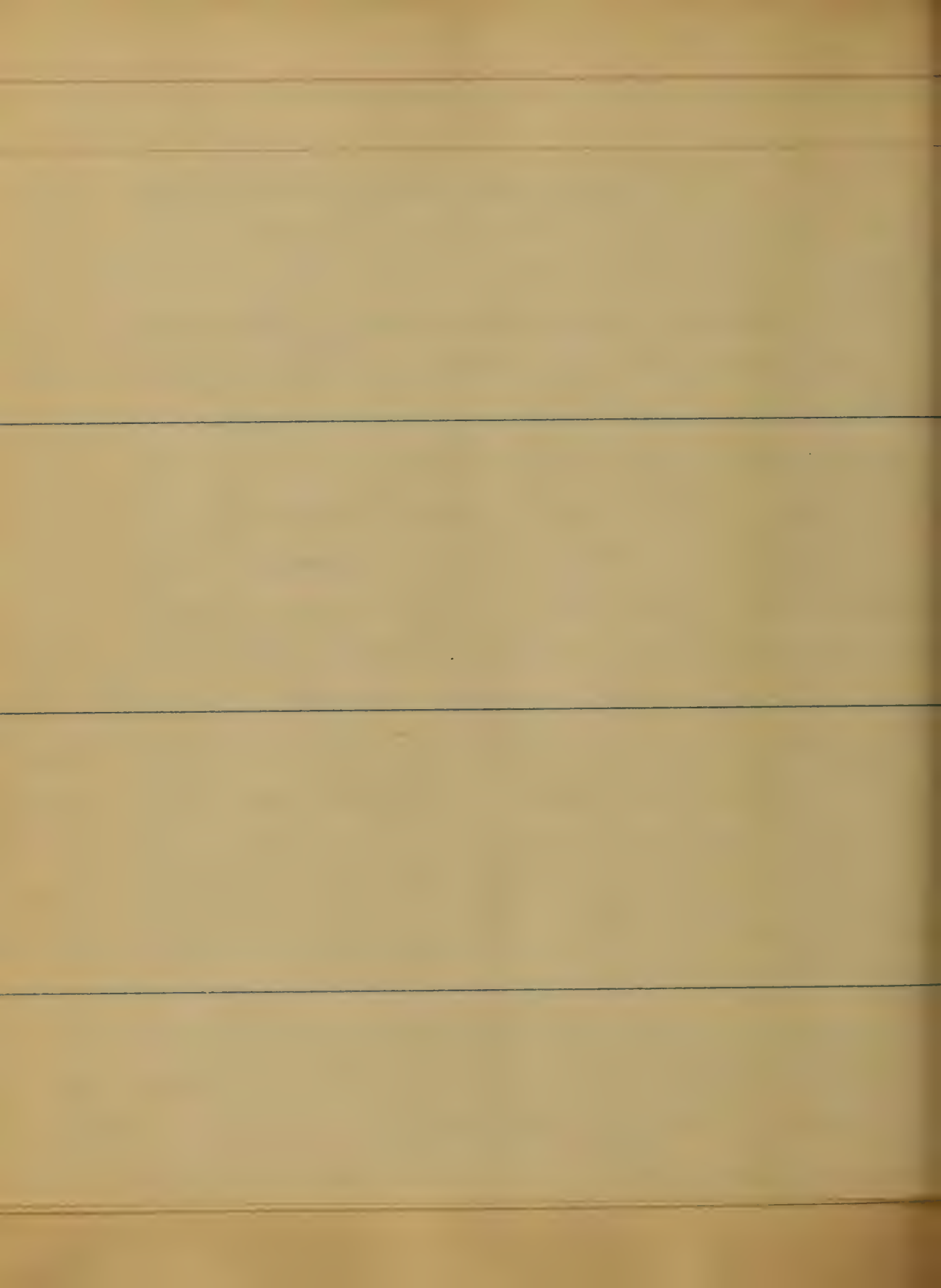




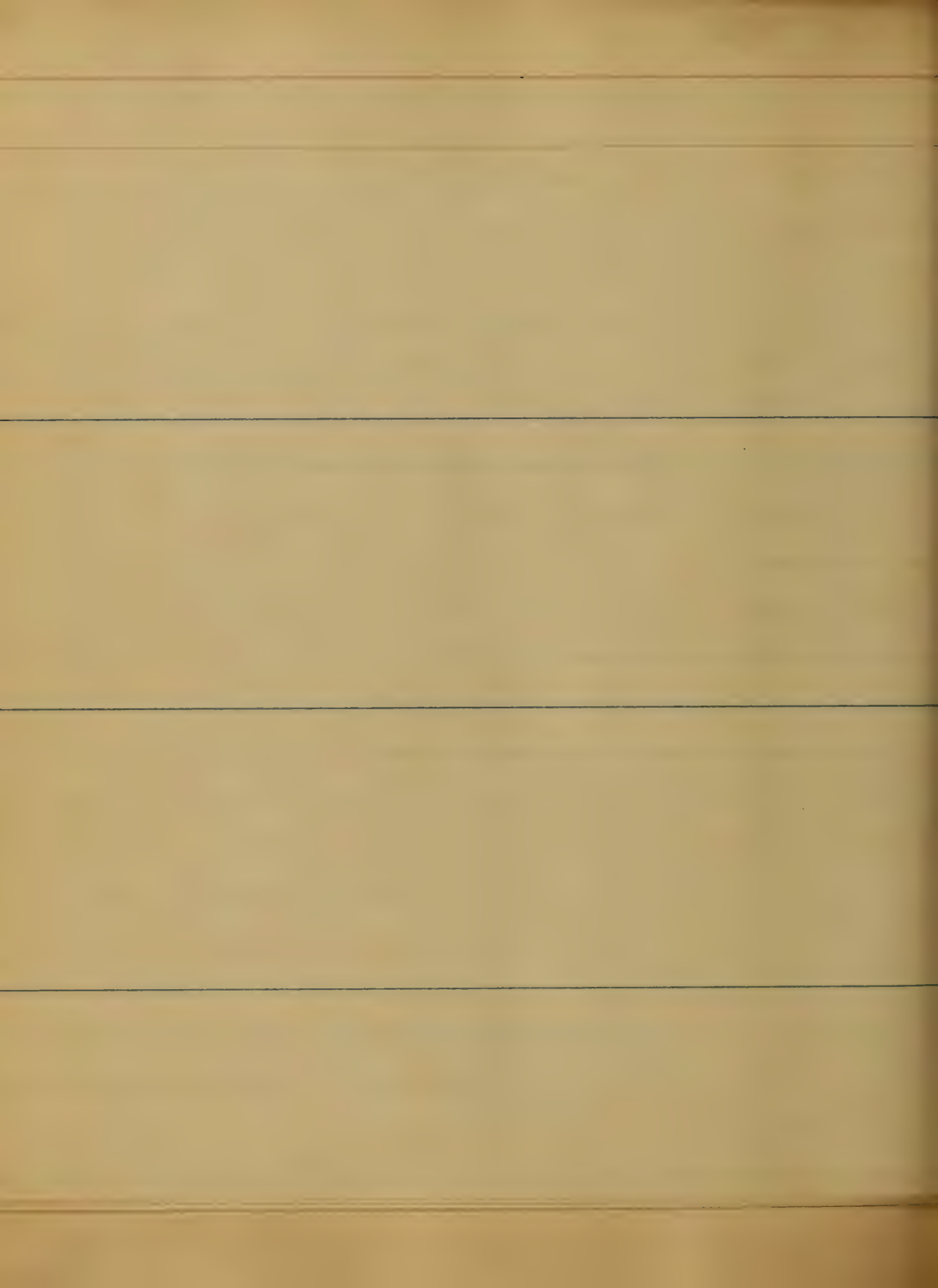




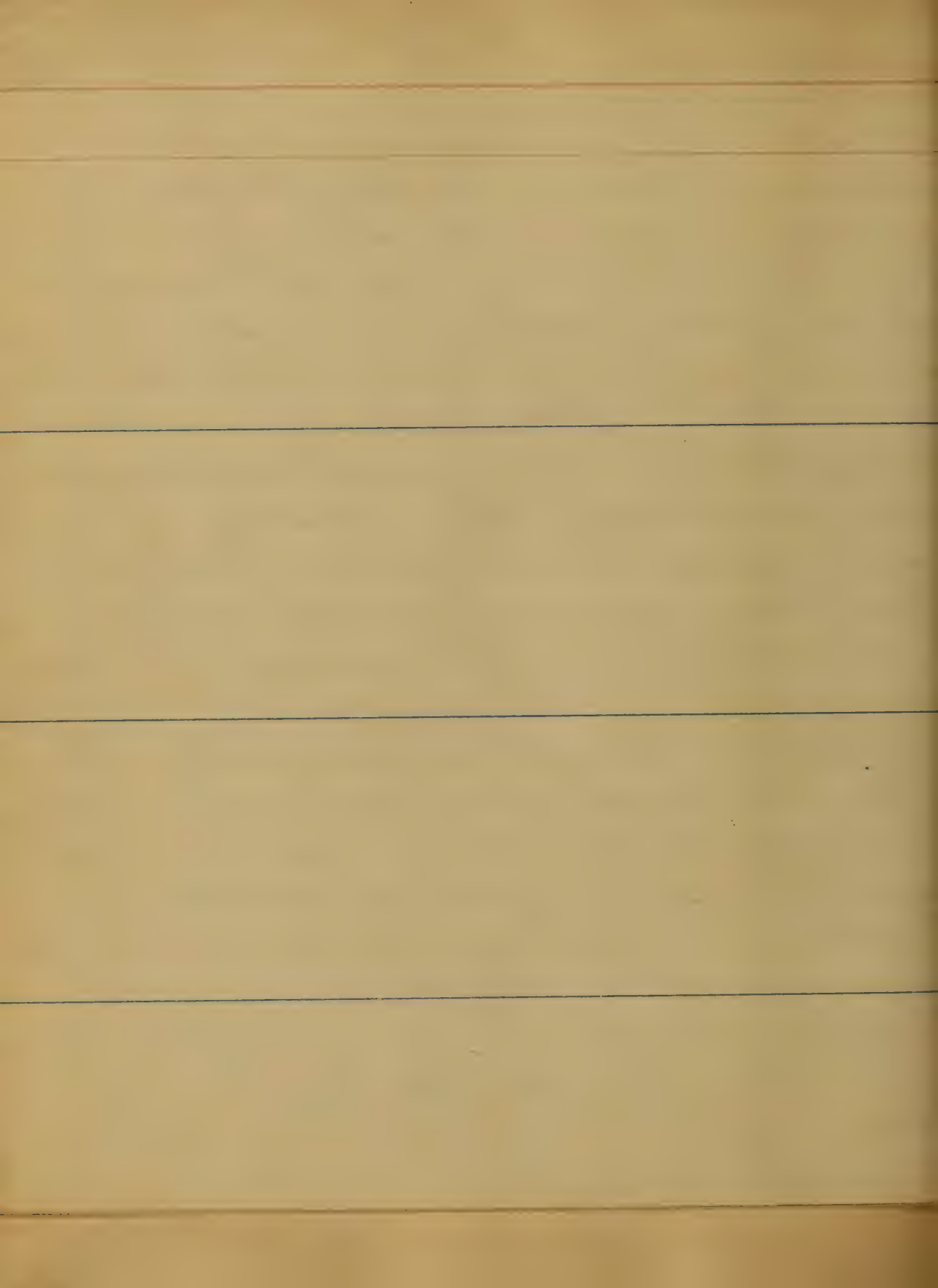
and that produce a general  
pale, sometimes there is a  
at off, improvement in other  
large pale, Convulsions is  
ing the stage of Desquamation.  
dormia occurs more frequently  
this, than any other stage  
desquamation is usually con-  
sists 10 to 12 days, sometimes it  
times for several weeks, Certain  
of adult persons are characterized by  
the danger of the symptoms at the  
set of the disease. The pulse becomes  
frequent from 110 to 160 per minute  
temperature very high. Great restlessness  
rises, Coma, Sometimes convulsions  
Symptoms denoting severity of the  
are, The vital forces seem to be exhausted  
which may take place in one or two in-  
which result may occur before the  
them appear upon the skin, or in-  
ry redness of the throat is apparent  
disease, in such cases is truly alarming



... to be transmitted from  
person to person, although  
... a greater number of persons  
... in contact with the  
... than those who are  
... It may be noted, that  
... by means of  
... The  
... disease may be caused  
... of the ... disease  
... is ... in the ...  
... in determining  
... cases in which cases have  
... of the ... disease  
... in the ... of  
... of life. As a rule  
... out ...  
... of the ...  
...  
... The short duration of the  
... of the ... of the  
... of the ... of the  
... of the ... of the  
... of the ... of the



...the disease is not complete, the nature  
of the symptoms, the progress, and  
the manner of passage of the disease  
...the appearance of the symptoms  
...There is perhaps no disease  
the practice of medicine, which presents  
different cases of different extremes as equa-  
ly, than carcinoma, Dermatology  
...the disease is rapidly fatal, the  
...is unusually severe in cases  
which the throat affection is con-  
at. It is extremely unfavorable if  
sthesia become developed, rather than  
progress of the disease, or as a sequent  
...a fatal result is to  
pected. Great enlargement and  
inflammation of the glands of the neck,  
complicated with diphtheritic inflamma-  
...of the fauces, denote great danger  
...of throat or mouth occur, being  
...doubtful





... - Cause of ...  
... measures of  
... treatment, ...  
... of some ...  
... disease renders ...  
... waiting. With respect to this as well  
... other ... fevers, it is to be  
... that there are no  
... specific remedies by means of which  
... to be arrested, but the impression by us  
... follows that some measures of  
... treatment may not do much towards  
... making relief & diminishing the  
... ability from the disease. Certain  
... of treatment have been found  
... bloodletting, active purgatives,  
... emetics, such treatment is usually  
... for. In the majority of cases the  
... treatment is also called for  
... in ...  
... and light nourishment,  
... hygienic treatment should ...  
... to maintain the functions of the



view of the fact that the usual disease, or  
complication or sequel, is a disease of  
systemic character, attention should be  
directed to the mild way in which the  
bath can be used, or three daily may  
be recommended, if the bath be not  
dreaded, repeated sponging of the body  
is employed in its stead. There is no  
necessity of an application of the  
bath, either during or after the disease,  
some would also be avoided, but in the  
latter case the program used in the  
case in this respect should not prevent  
antislavery. Vigorance & restlessness  
is relieved by the use of the bath, the  
sponging may induce necessary  
relaxation to be relieved by simple  
means; their symptoms may be relieved by  
other remedies, for the affection of the  
stomach of Pottam may be relieved  
usually as a gargle. To relieve the  
water is much used, see it as given  
in Pottam room. The temperature is  
reduced by these means & may be <sup>as often as the temp. increases</sup> increased.



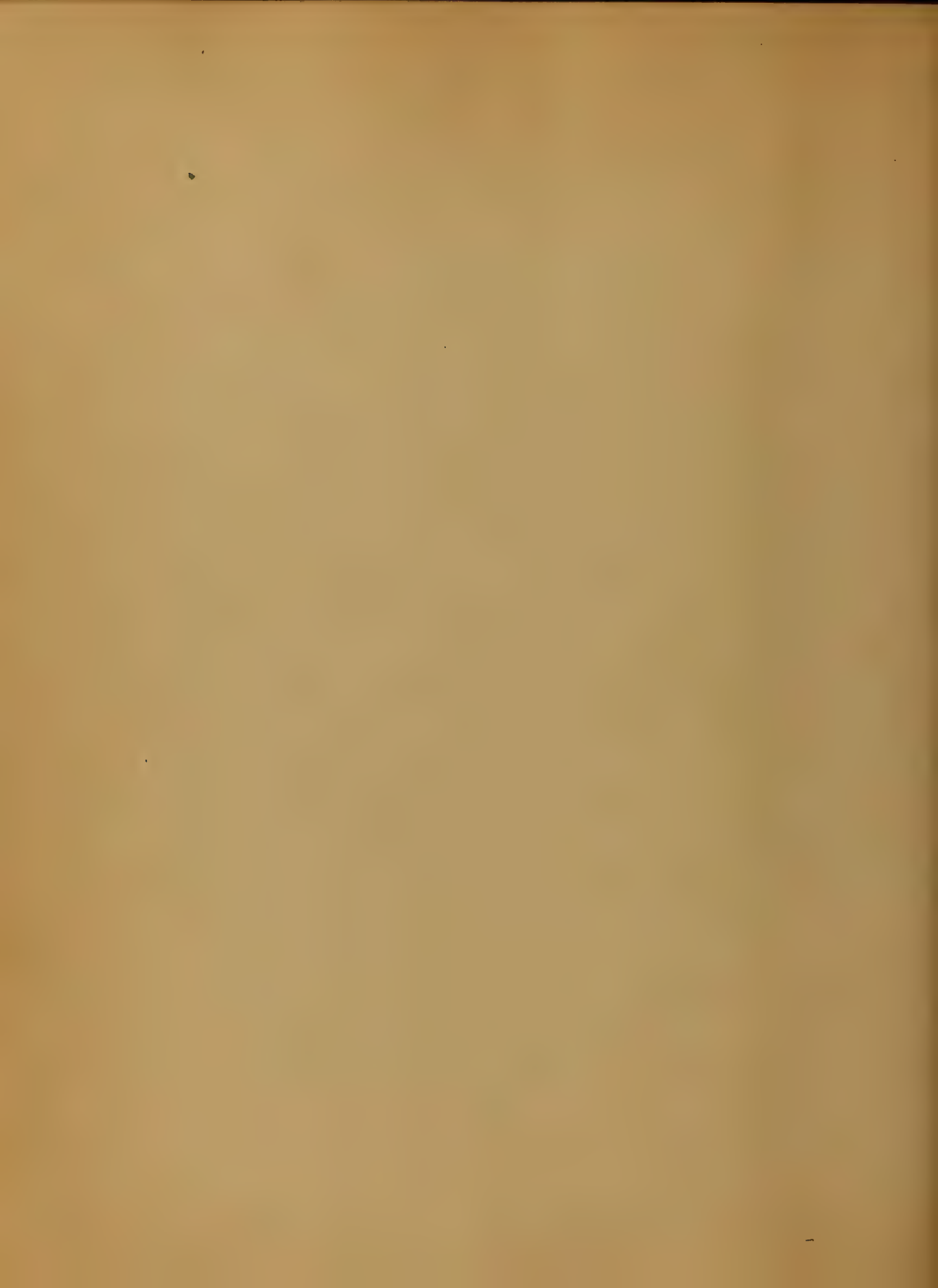


1881

*[Faint, illegible handwriting, possibly bleed-through from the reverse side of the page]*

Secret

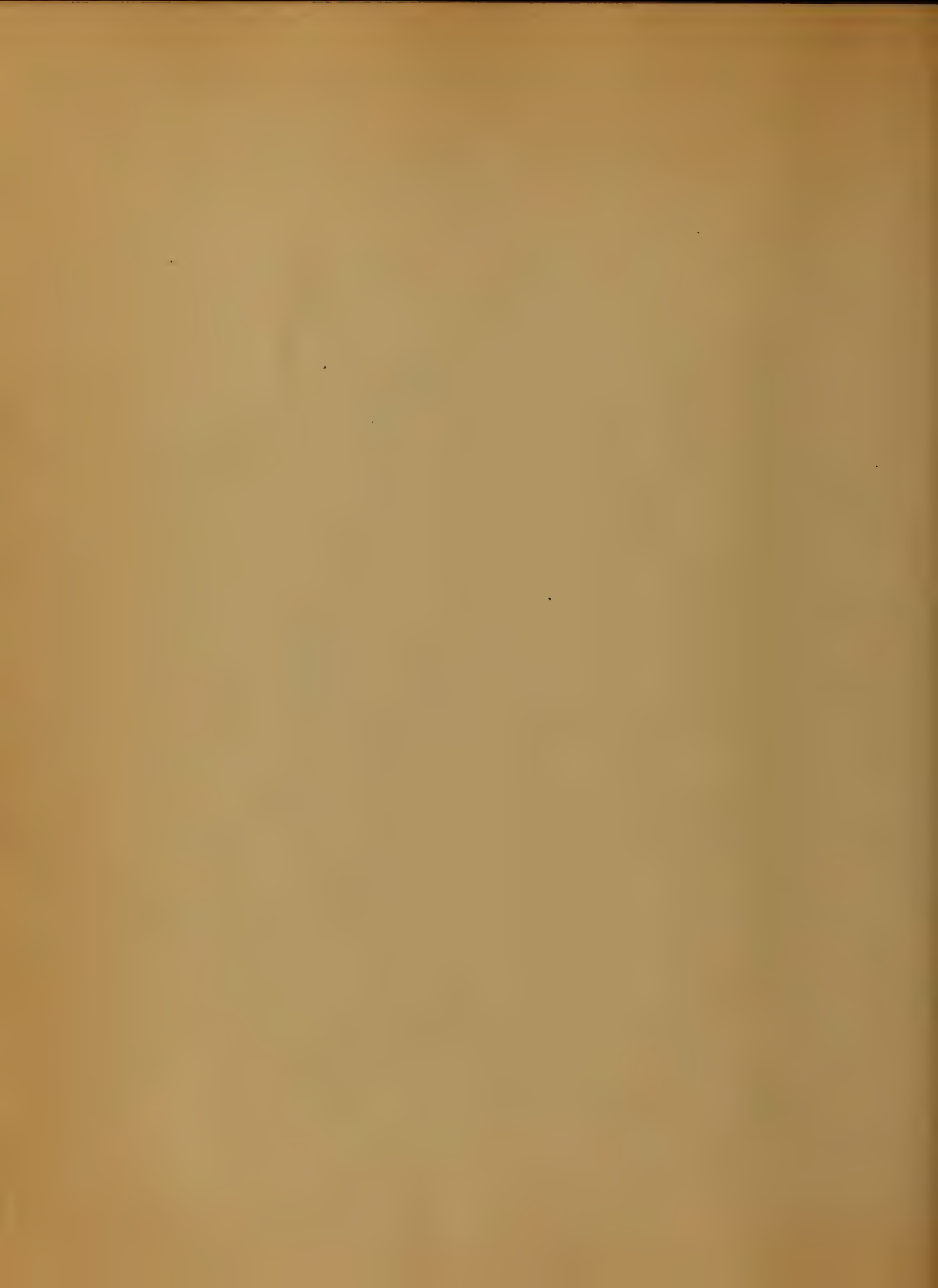
1821





7  
I wish by looking from the top of the page  
more seen to there than the current one  
was so clearly on the subject as far as  
I understand seem to be a part of the  
that hardly for the student with the  
can't help to think out the conditions of the  
invention apparently to be a part of the  
the really mathematical principles of  
considering each as a new subject  
in the theorem.

IX  
The singularly new and original idea  
to the mathematical principles of  
be mathematical principles of







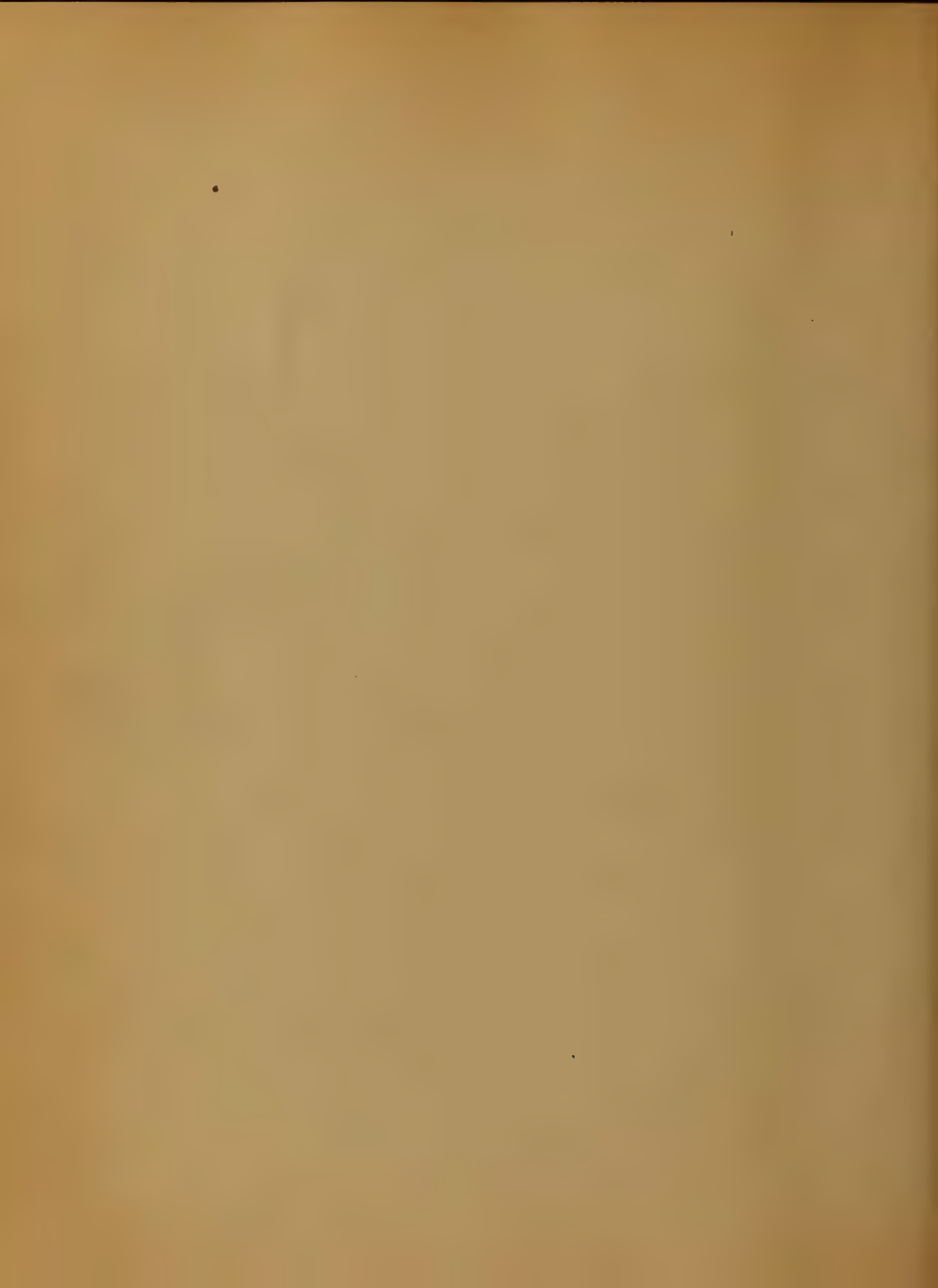
...the ...  
...has ...  
...than all others ...

...  
...with disease.

...  
...in certain ...

X  
...  
...in the space of a few years, ...

...  
...reference to the ...  
...of ...



and imperfect manner. The  
activities, secretions, organs are in  
some way modified by influences from  
their origin in the central nervous system.  
The fact that the pached mouth is, per se  
is not understood at long ages before the  
most ordinary structure even being imagined.  
The fact that wants distance to follow close  
the nature of the phenomena which he was  
unable to explain so many years.

He has astonished at the witness  
of the study of the processes  
of the brain as considered in the  
most recent and most complete  
of the world in a systematic manner  
to be able to see the present part of the













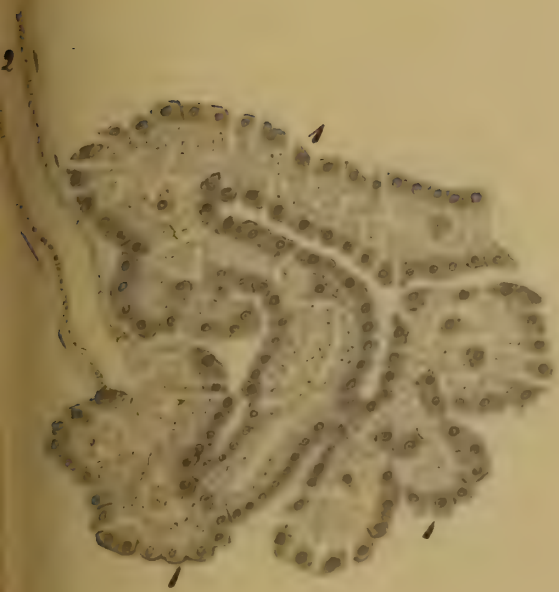












1. The ducts are lined with transparent  
 epithelium. The cells are arranged in two zones to plain  
 2. Terminal part of gland ducts are lined with columnar epithelium.  
 The strie are not shown. The spaces seen bet  
 cells are capillary secreting channels emptying into the intralobular duct.

(After Weira & Smith)







... a resting fungus stained with  
... placed under the microscope with  
... divided, without a defined  
... into two unequal parts, the  
... matter, the larger one  
... which is filled with minute  
granules.

OX

... the granular part will have taken  
the color of the granules.

... after a full meal. ...

OX

... a combination is striking. The whole cell  
appears reduced in size, the relative proportions  
of the two granules ...









... of ... is diminished, the non-granular ... being relatively but not proportionately increased in size and the ...  
... the change in the ... is quite the reverse of those observed in the former ...

The cell begins to grow in size the ... <sup>almost</sup> the entire cell.

... of ...

... the ...



some waste of the inner Gove, wholly disproportionate  
to encroachment of outer Gove, and to general  
waste of the cell. From these we may  
generalize as follows; the Gove furnishes to  
the cell a material which, in the outer Gove, is  
worked up into the granular substance which  
appears in the inner Gove, then to be transported  
to the true ferment, and discharged from the cell.  
It is susceptible and I do not think it is important  
to know the precise state of the knowledge  
whether the transformation of the Gove granules  
takes place, more immediately before or after its  
expulsion from the cell. We know that the  
change cannot take place until a certain  
stimulus is applied, and that the granular  
content of the cell are the material necessary  
to the change. Baidoulan has been



By the union that the activity of the gland  
is directly proportional to the presence  
of the cells. The ~~glandular~~  
in a ~~directly~~ satisfactory manner the various  
cells are ~~in our~~ understood in the ~~cases of~~  
secretion.

The secretion of the pancreas is not poured forth  
continuously, but is intermittent, and is excited  
in a reflex manner, by the presence of food  
in the stomach. It is further known that  
the gland's activities are increased by stimulation  
of the nerves. It is ~~more~~ ~~than~~ ~~probable~~ ~~that~~  
that the nerve which governs the secretion is  
unconscious, though our observations so far have  
shown us ~~to be~~ ~~in~~ ~~the~~ ~~case~~ ~~of~~ ~~secretion~~

It is ~~not~~ ~~naturally~~ ~~to~~ ~~the~~ ~~consideration~~ ~~of~~  
the second question, what influences regulate the



sciences & several years, but for a time  
invented not. In defective knowledge of  
the immortality of the soul, and the  
difficulty of experimental dissection of the organ

belonging to the glands or osseous & this  
was done. It was then in a few days  
a few minutes & the ordinary glands.

In structure the ordinary glands are similar to  
the pancreas. They are acinar glands and  
are found throughout the muscular  
tissue, in various locations.

As regards to the size they are large  
in the stomach liver pancreas in various  
locations.

They appear white to the naked eye in the  
interior of the stomach, as a mass of  
white matter.

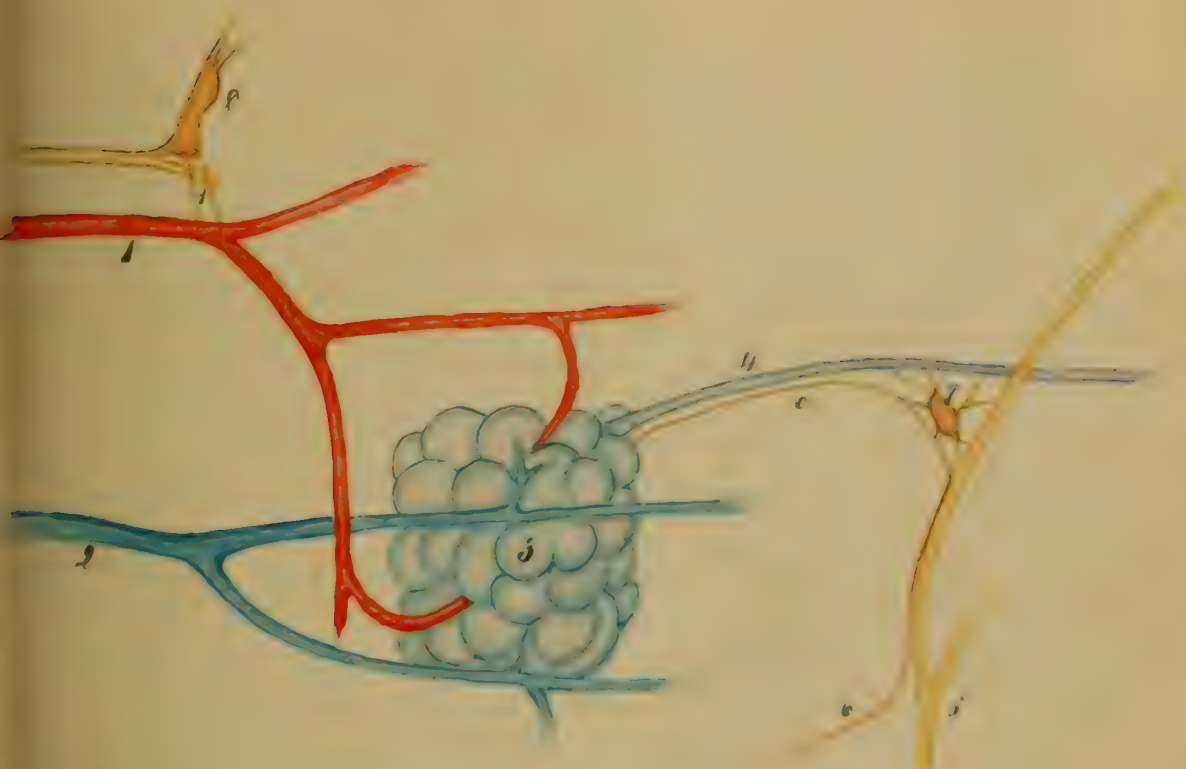




which the sublingual of man or the subman-  
dibular of the dog may be taken as a type. The  
size varies, <sup>each</sup> with a complexity of structure. They  
are covered with an transparent and columnar  
epithelium, a well less intricate arrangement  
with the nuclei containing a dense network  
placed usually at the projecting end near  
the membrane proper. They also show  
at various points along the <sup>outer</sup> margins of the  
alveoli next to the membrane proper, groups  
of parietal cells, which have been named the  
polyhedral cells, these have cells in rows of  
2-3 layers. They are smaller polyhedral cells  
containing a spherical nucleus.  
The mucous glands secrete a viscid substance  
consists little or no amylolytic power.  
The mucous is particularly viscous the more

They are also found in the  
in a, then which a few, tubes.





1. Submaxillary artery. 2. Jugular vein. 3. The duct. 4. Duct of the gland.  
 5. Submaxillary nerve. 6. Chorda tympani. 7. Submaxillary ganglion.  
 8. Junction of cervical sympathetic. 9. Branch of sympathetic which  
 innervates the gland.

(Plate 100)



...the ... of ...

...gland such as the parotid ... short columnar cells with a ... The ... is highly simplistic.

...the ...

...the ...

...the ...

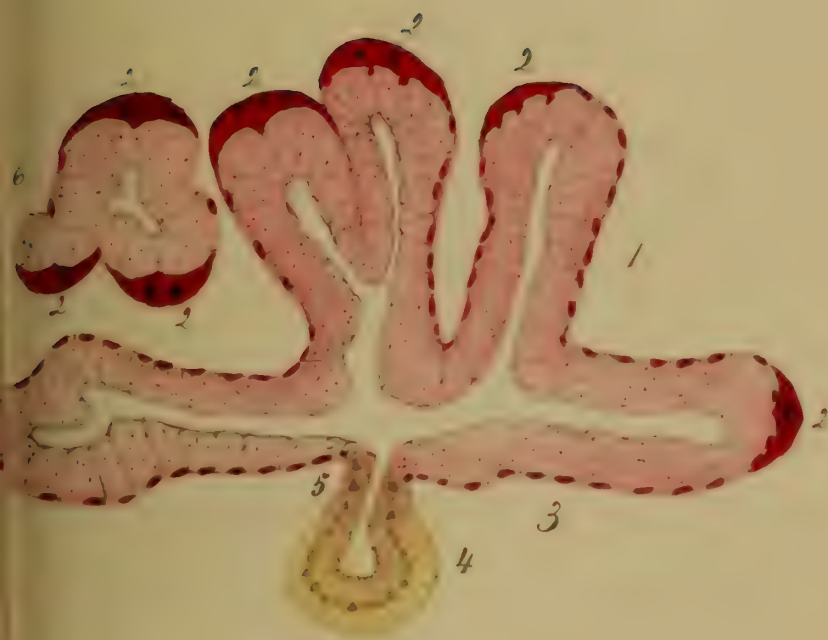
...the ... from the cerebro-spinal system and from the sympathetic ... a most important bearing on the progress of an











of the mantle of the dog, magnified about 400 diam's  
 1. Epithelium of the mantle cavity  
 2. Epithelium of the gill  
 3. Epithelium of the foot  
 4. Epithelium of the siphon  
 5. Epithelium of the mantle edge  
 6. Epithelium of the head

**a**



In the case of the eye of the mucous gland,  
secretory fibres from the sympathetic along the gland arteries,  
and from the brain through the chorda, join in  
a trunk at the mouth, which, <sup>off</sup> giving the lingual  
nerve, divides into two branches, one of which  
gives off a small branch which runs into the  
gland along the coat. The other branch gives  
off a trunk, which is to be seen in the gland, the  
evidence of a secretory substance in the secretion  
is not observed in the gland.

It is not inside the lingual nerve as in its course.  
It is known that stimulation of this nerve ordinarily  
increases the flow of the secretion in the gland.  
But by the <sup>electric</sup> stimulus after the section  
in the nerve in effect whatever? Questions us  
how this is to be explained in relation to the

note it seems in the case of the eye, the  
secretory fibres from the sympathetic along the gland arteries,  
and from the brain through the chorda, join in a trunk at the mouth,



... number of ...  
... the ...  
... the ...

... the ...  
... the ...

... the ...  
... the ...

... the ...  
... the ...





Longitudinal section of *Agropyron maritimum*  
 about 40 micrometers. 1 Dist. 2 Transverse  
 section of *Agropyron maritimum*  
 showing the vascular bundle





... comes in ... to ... of  
increase ... ..

... a sudden light breaks on us and we are  
... to stop our investigation, and declare the  
... ..  
... ..  
... ..  
... when the pressure in the glass had become  
equal to the ...-pressure within the globe.

But this is ... ..  
... ..  
... ..  
... ..  
... ..  
... ..  
... ..  
... ..  
... ..











... on the gland cells. To this we reply that stimulation of the cervical sympathetic will produce a ... in the atropinized animal, which would not take place if the ...

Stimulation of the sympathetic is followed by ... in the circulation in the gland, ... the ... of ... in ... the ... of ... to each other.

Further ... the ... the ... are stimulated ... the ... increasing strength of the stimulating current ... that the ... and saline constituents bear a strong relation to the strength of the stimulus, while the amount of ...





... and then ...

... therefore we ... as ...  
... the ...  
...  
...  
... and discharging them by ...

... does not however quite elucidate the matter.

...  
... as ... with ...

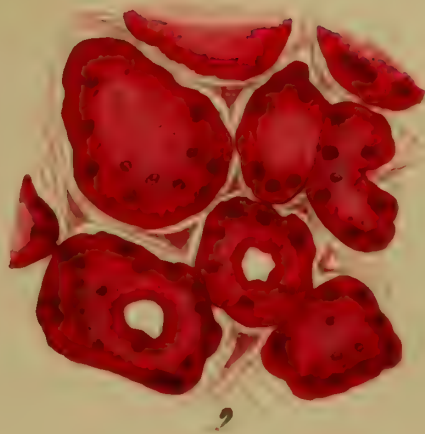
... quite ...  
... <sup>we will have our attention</sup> ... the ...

... receives news from the ...  
... though the ...

...  
... which ...

... of the ...  
... abundant ...





1. 2. 3. 3s. 2.



in the case of the sympathetic, and the  
in the case of the matter. This action is accom-  
panied by a certain

Distinction of the sympathetic, in the other  
hand, and is usually a scant flow of a  
small size, and having a large proportion of  
organic products, and having high amplitude for  
the action of the sympathetic. The sympathetic  
in the case of stimulation may be followed  
by a reaction in the ordinary rule.  
This is the ordinary rule.

In the case of the sympathetic, the  
stimulation of the sympathetic always  
in the case of stimulation in the sympathetic  
is the prolonged stimulation of the sympathetic  
the character of the stimulation. The sympathetic  
in all the cases of stimulation in the



The effect of a particular stimulus upon the  
excitability of the sympathetic  
nervous system, however, is not the subject of  
stimulation through the sympathetic nervous  
system, and in their relations to examine.

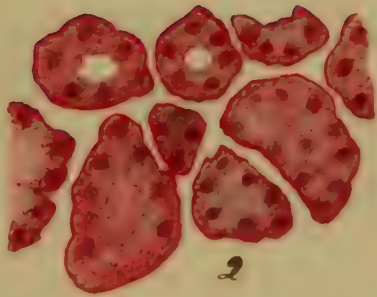
The gland which has been subjected to a sympathetic  
stimulation is the pancreas.

The secretion of the sympathetic stimulation  
cannot be due to the same construction of  
the nerve fibers, the same by the way  
which would cut off the sympathetic activity is  
in fact not to be seen the same effect, and  
secretion has been by changing the nature  
of the secretion the nature of the secretion  
itself will be the true interpretation of the  
above supply. It must therefore conclude

that the sympathetic activity is the same













The activity and saline elements, the saline,  
which influence in all these cases, and  
likely, of some power to bring about such change  
in the molecular arrangement of the living body  
of cell protoplasm as will permit the formation  
of these various ions that then prevail in the  
environment, a set of ions which, in turn, are  
the residue on the cell protoplasm in response to  
the action of these specific soluble ions, and this  
action in the same sense, so, some being retained  
in these ions to all, as these elements are formed.  
Of course, the first kind are called "secondary".  
Their activities are chiefly physical.  
I mean, the same kind are called "tertiary" ~~X~~  
Their activities are chiefly chemical.  
Thus we say the chloride type ion has various  
secondary and, as to the other, because

\* In the same way, the same kind are called "tertiary"



its function seems to be the secretion of what is  
usually called mucus in the epithelial cells, or any small  
space to make new matter. While a part of the  
epithelium is, it contains many tubular and few  
secretory of the mucous because while its contractile  
to contract the epithelial cell, it has, as shown  
to pass the matter prepared out of the cell.

It is now seen that the life of a secretory cell  
is understood by the light of a new function.  
The cell begins with the existing cell, whose contents  
contents are, in the ordinary progress of cell life,  
undergoing a change which results in the production  
of a new substance, having a strong affinity for water  
this matter, which is the appearance of mucus  
in the part of the cell next the lumen.

During the process of formation the cell is constantly  
absorbing water and saline matter through the





secretions, ...  
This will continue till the ...  
of the membrane ...

In the other ...  
in the limiting layer of ...  
The cell is now ready for work, and will remain  
in a quiescent state until something happens to  
disturb its equilibrium.

Now let the proper nervous impulses enter the  
gland. The secretory fibres bring about an  
immediate alteration in the ...  
of the limiting layer, by means of which the  
water channels ...  
... the cell ...  
the translocation ...  
spaces, is ...  
of the ...

X This ...  
of the ... by Kühn



The tension within the cell is reduced and  
the osmotic force is again set free.

At the same time impulses from the central  
nervous system enter the globe by way of the  
trophic fibres. These impulses induce  
chemical change in the protoplasm of the  
cells, by which the waste of the glycogen is  
repaired, and the osmotic force further augmented.

The passage of water and salines into the cell,  
and the protoplasmic changes thus engendered,  
act in proportion to the strength of the stimulus.

Coinciding with these phenomena, there is increased  
activity of the secretory cells, by which the  
in the lymph stream are promptly ejected.

It is known that a certain amount of

so much time is required for

the lactic acid secretions, & time is also



with... in... 1844...  
light...  
all the...  
or similar influences.

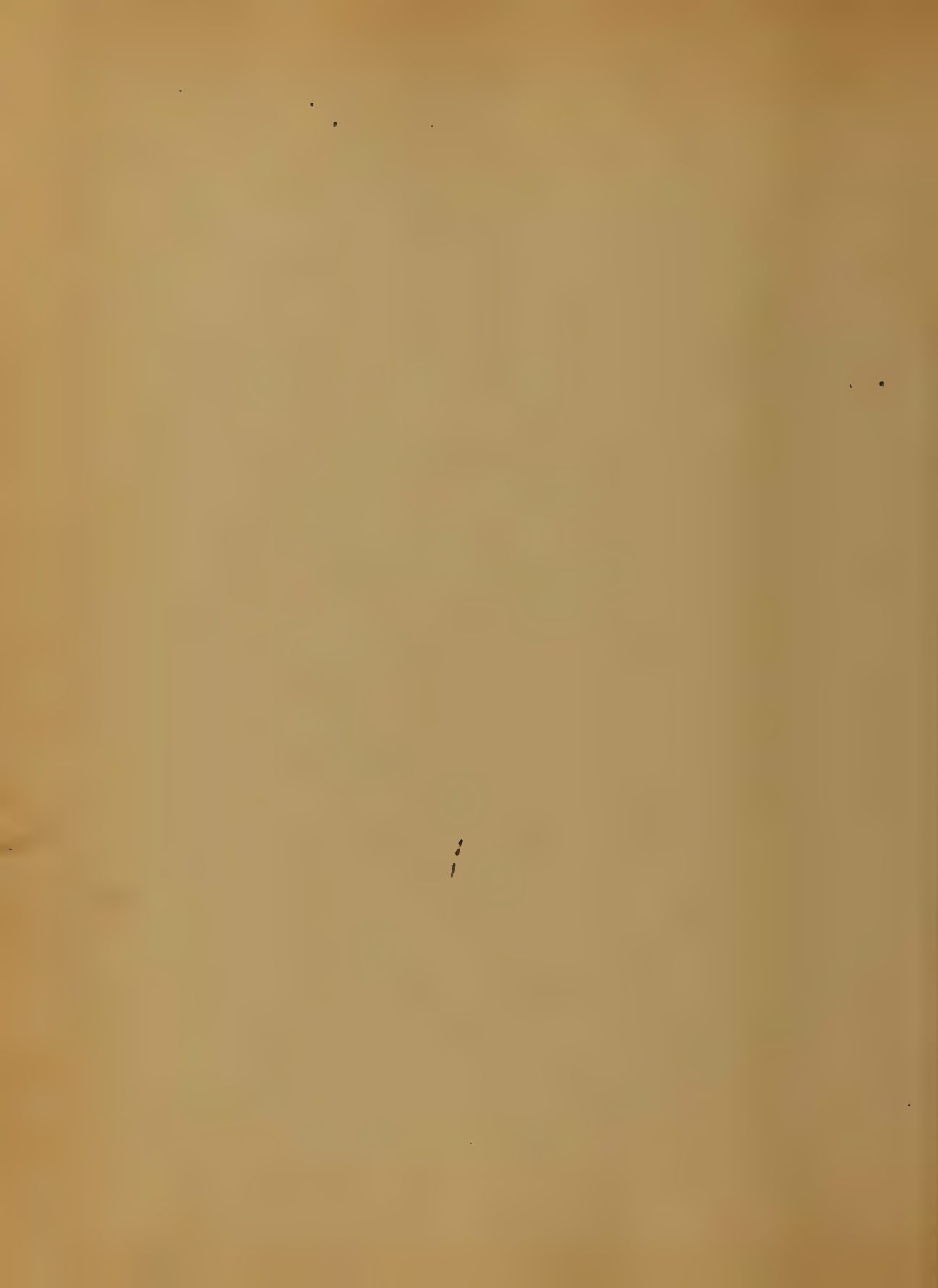
Even such a gland as the Pancreas with its double  
circulation and its complex fluid...  
is...  
return...  
controlled by...  
is wholly different from those...  
the pathological...  
can hardly be over-estimated.

The...  
in those glands which we can see with the  
natural eye...  
is quite...  
this distribution

1.  
2. The...  
it...  
interesting questions...





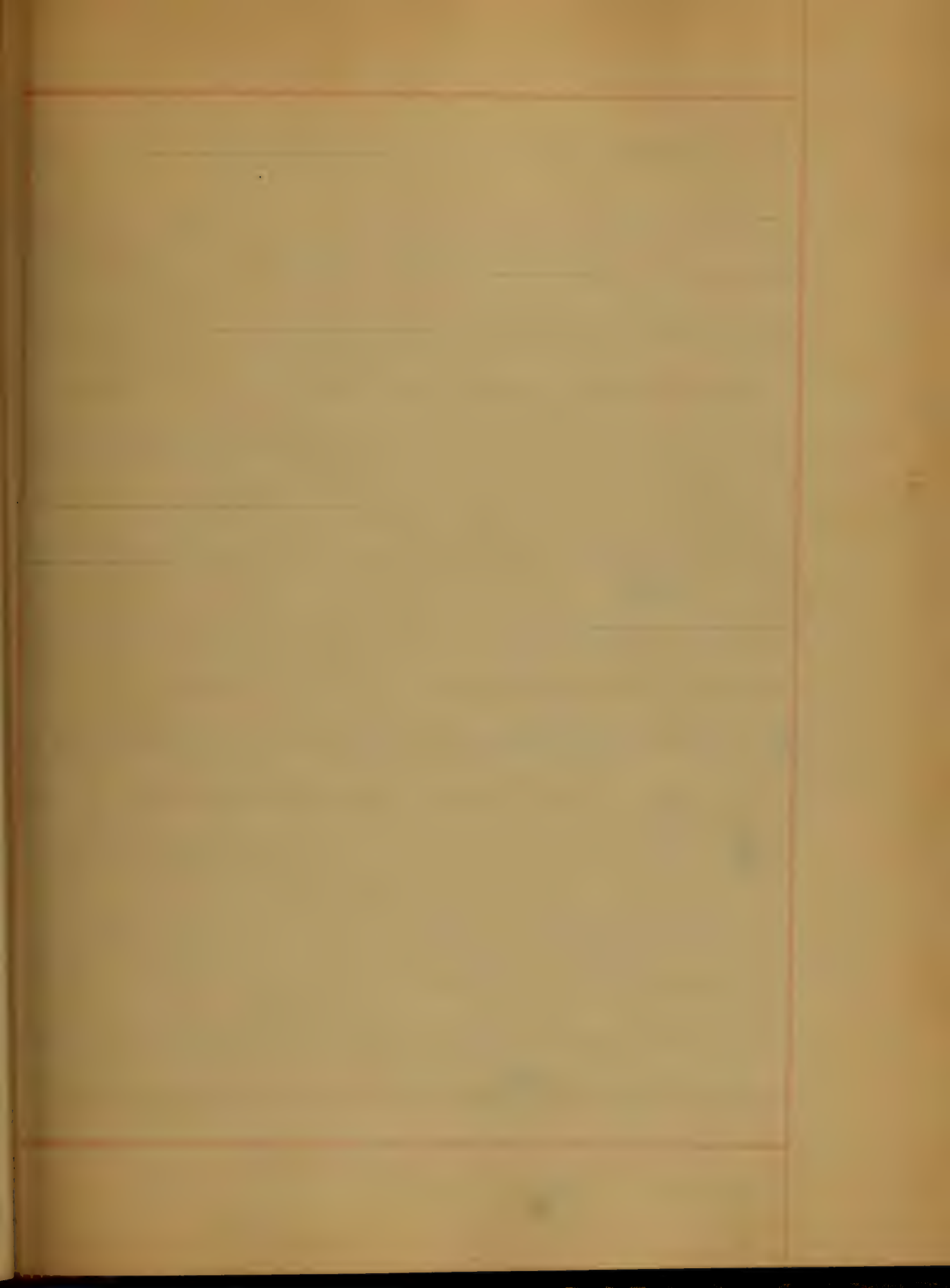




The attention of medical men will soon be  
directed to the study of the  
nature of the disease, & the  
of the humors of the nervous system may  
be more important in considering the subject  
of the pathology of the nervous system.  
The nervous system is a system of  
nerves which is the system of the  
body. The nervous system is the  
study of the nervous system.

John S. Fulton







Thesis.

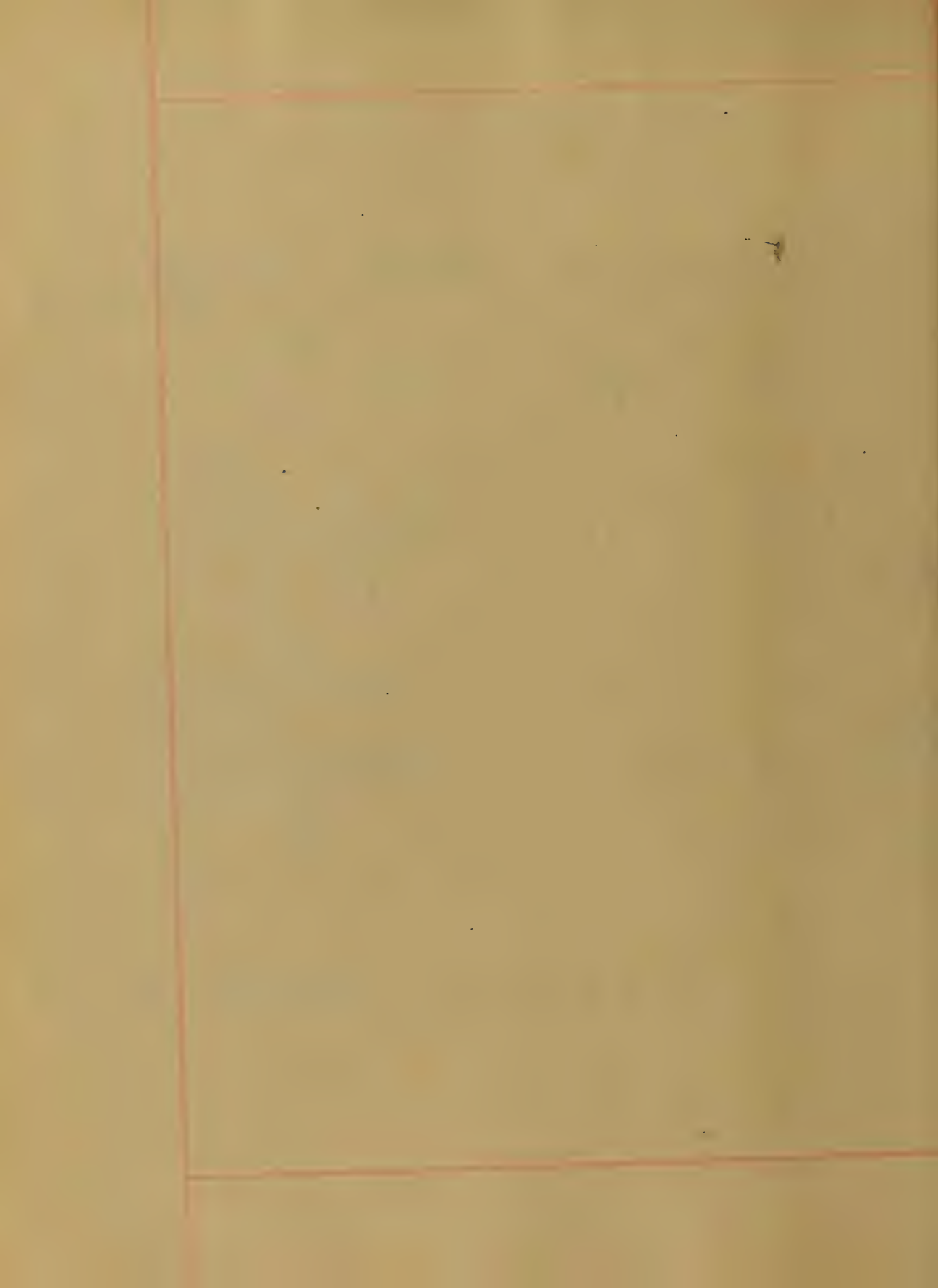
Therapeutic Action of Quinine,

by

J. Tom. Holley,

University of Maryland

Session 1880-81.



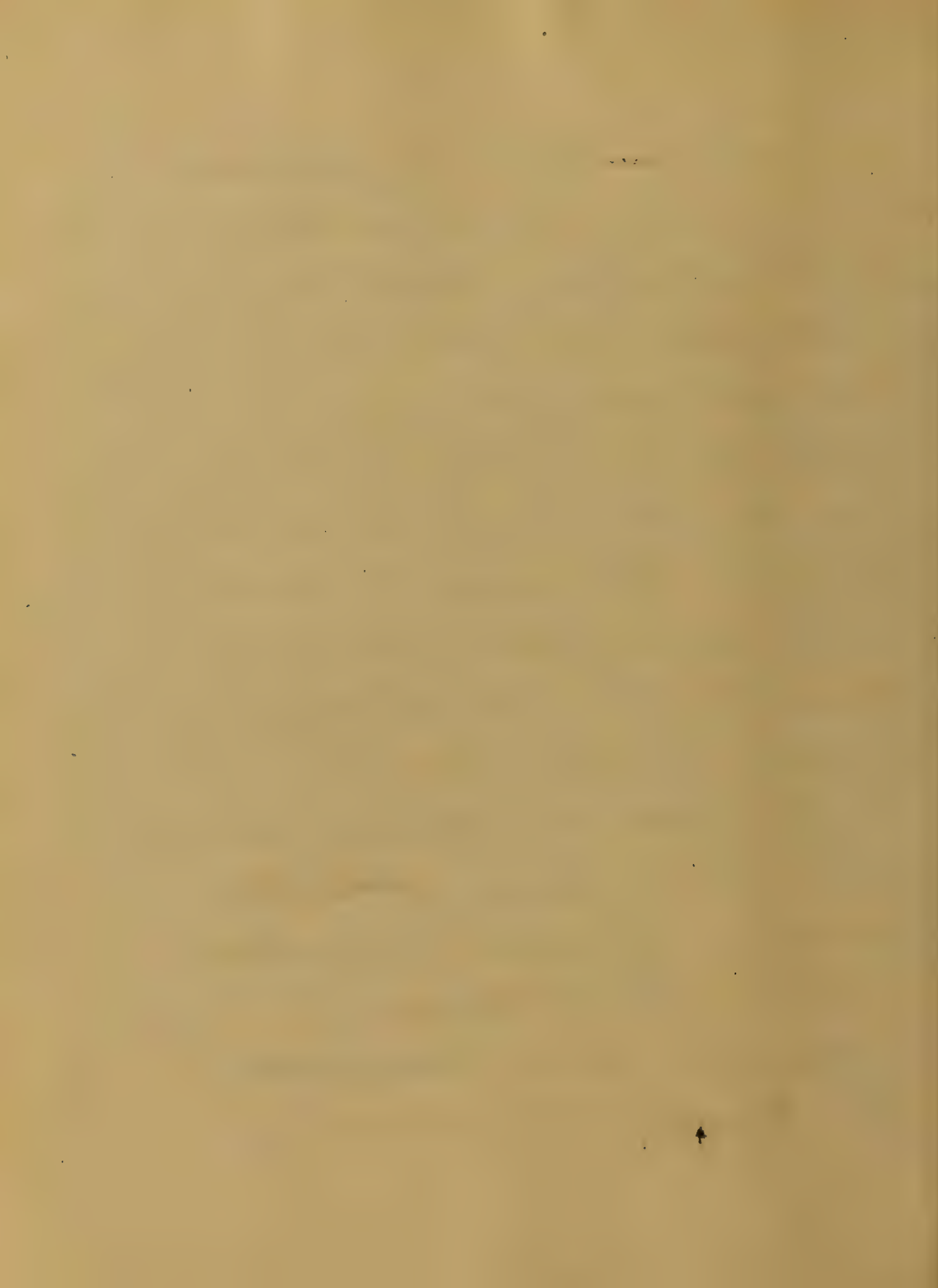
1

The action of Quinine  
as a curative agent in disease  
has for sometime been recognized  
as second to no medicinal agent  
of the Pharmacopoeia.

With the exception of Opium  
and its preparations, it is  
perhaps the most valuable  
and most often resorted to  
agent of the physician  
in his practice.

Unlike its great rival  
Opium, it exerts decided  
curative effects over disease.

From their various  
influences over morbid  
affections of the economy





different names have been awarded  
 to it, according to each  
 special action, such as  
 Antimiasmatic,  
 antiseptic, antipathogenic  
 and the special  
 control it exerts over the  
 nervous system,

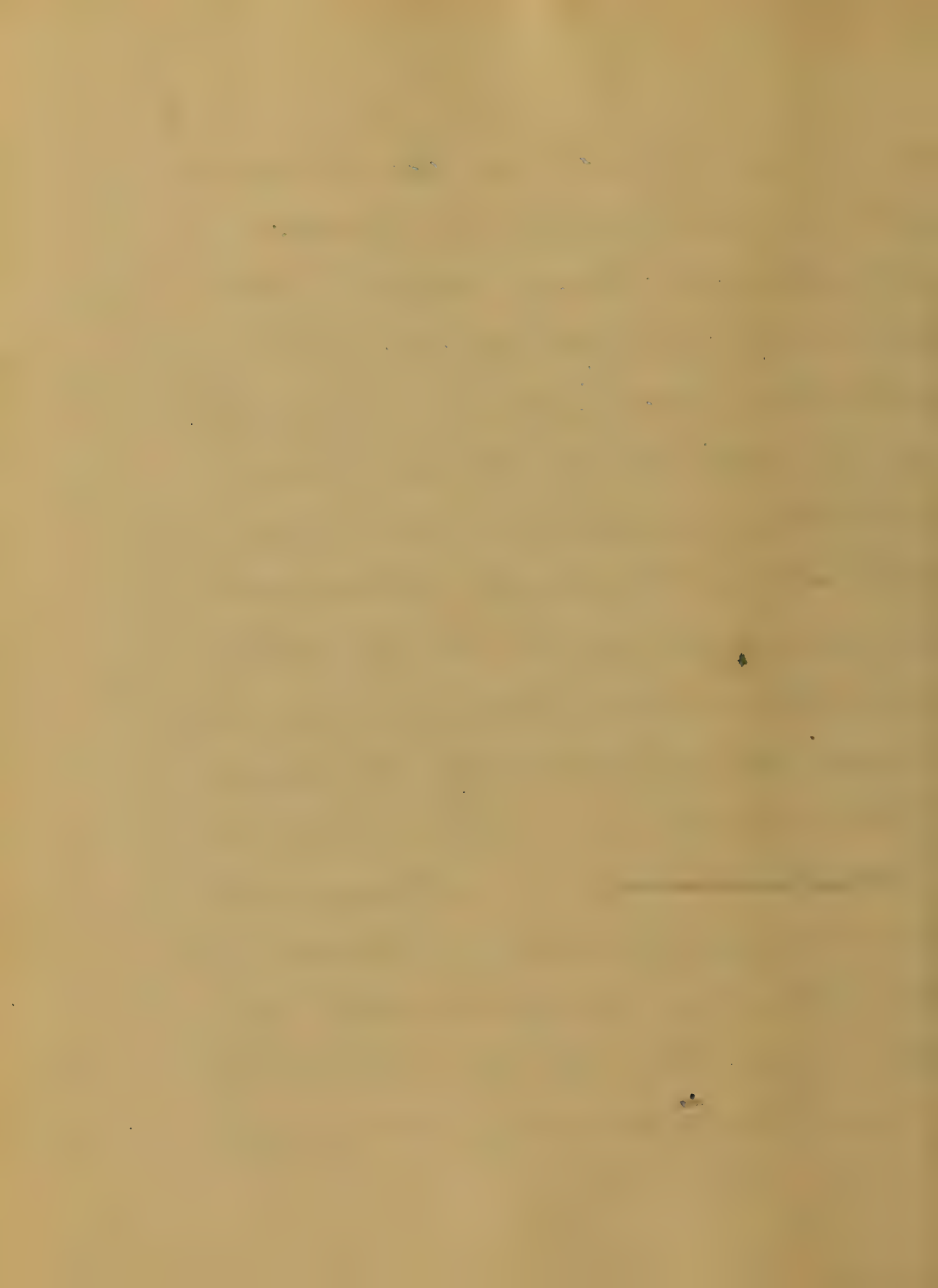
Some authors have  
 attributed to it an Oxytocic  
 power over the uterus,

The most interesting, and  
 perhaps the most valuable  
 action of Quinine, is that  
 which it exerts over  
 miasmatic poisoning, through  
 its moderating operation.



in their affection is unknown, it is nevertheless a well established fact, that it does possess some power through which it controls their affections more satisfactorily to the physician, than any other remedial agent. There are many theories as to its action in Salivary poisoning, but none are sufficiently satisfactory to be adopted as a positive

means. Among them and perhaps as probable and reliable as any, is that of Binger. He believes that in salivary poisoning, consists of



Or is conveyed by low organisms  
 which enter the body, and  
 increase and multiply in the blood;  
 And that the antimitic action  
 of Opium consists in  
 its destroying, slowing down,  
 the development and multi-  
 -plication of the organisms?

The paper being in the  
 writer's, whose clinical experience  
 must needs be very limited,  
 appears as follows as a reply.

The opinion that Opium  
 exerts a curative influence  
 on miasmatic diseases has  
 its opponents, though it is a  
 much needed remedy.



whether the various opinions  
of some of our the disciples  
of the organism are correct.

It would be interesting  
to know whether these views  
are entirely correct or  
in fact they are opposed by  
many able pathologists.

The things "logically" and  
"logically" nature of organisms  
which have been proposed  
"logically", never have been  
placed before the medical  
profession for their consideration,  
and have been accepted and  
accepted by many authors.

Notwithstanding the various





of Opium to the great quantity  
being admitted into the market  
we continue to believe that  
the curative action of Opium  
in morbid Diseases is due  
to the power it possesses to  
diminish the proliferation of the  
organism. We shall now  
take a view of the practical  
use of Opium in the most  
common forms of morbid  
Diseases, particularly those of the  
Bowel.

The manner of adminis-  
tering, and the quantity of  
Opium administered in these  
affections, has given rise to a  
great deal of discussion.



Among medical men,

Some practitioners adhere  
to constant and free use  
during all stages of the disease,  
Others to free use immediately  
succeeding a paroxysm,  
Another the use of the agent  
leaves the termination of case  
to the beginning of the next  
paroxysm, while another  
moderate use of the remedy,  
In fact there has been much  
discussion as to the quantity  
that should be administered,  
and the time of administration,  
Probably many modes of admin-  
-istration by which the agent is



of the country would be  
 absent during the day would  
 answer all requirements in a  
 majority of cases.

The writer prefers the  
 administration of ten or fifteen  
 grain doses immediately after  
 the paroxysm, and to be  
 continued to within a short  
 period before the return  
 of the succeeding paroxysm.  
 As the remedy would not  
 meet with the resistance  
 from the anal sac, poisoning  
 during that period is com-  
 monly during the same  
 illness. In some cases of



intermittent fever, the treatment  
 with in the Tropics, it is often  
 necessary to administer large  
 doses of the drug during the  
 intermissions, and also during  
 the paroxysms.

In the paroxysmal form  
 of intermittent fever it is often  
 necessary to give quinine in  
 single grain doses two or three  
 times a day without special  
 consideration or regard to absence  
 or presence of the paroxysms.

As quinine is now considered  
 one of the most reliable and  
 active of febrifuges, there can  
 be no question as to its





administration at any period  
of the disease, especially if  
the symptoms are all returning.

To saturate the system  
with quinine is the most  
effective way to destroy the  
organisms supposed to be  
the cause of the malarial.

And to lay aside the  
Malarial theory, it is a well  
known fact that in a large  
majority of cases where  
Cinchonism has been pro-  
duced, the prognosis is  
rendered more favorable, as  
it is at once observed by the  
rapid abatement of the fever.



Symptoms, which are more  
marked when it is accompa-  
-nied by profuse perspiration.

It is not only in the typical  
cases of intermittent fever that  
we obtain good results from  
the use of quinine, but in  
complications of this affec-  
-tion also. Among the complica-  
-tions of this disease that  
have been brought by the  
use of quinine are catarrh  
of the spleen and liver  
and the severe cephalalgia  
caused by the excessive temper-  
-ature, an enlargement of  
the spleen, and many others.



ague cake; it cannot be relied upon positively to give relief though it is the most valuable agent known.

In the malarial vomiting caused by gastric irritation, that so frequently attends remittent fever there is no agent superior to quinine to relieve this distressing and debilitating complication.

Though we are perfectly well aware of the excellent results that have attended the heroic use of quinine, we should never make use of such treatment unless as a “dernier resort”.



Some authors have attempted to show ~~the~~ inferior use of Quinine in malarial districts, but a tendency to produce, or at least render the malarial poisoning more acute. This theory the writer cannot adopt. The injudicious use of Quinine may produce agitated symptoms of disease, but they are wholly different to those of malarial poisoning.

In neurosis due to malarial influence, <sup>attacks</sup> that of which are apt to occur periodically Quinine has been found to be of great





value as a remedial agent,

Its administration in this affection should be free to the attack, and in large doses,

When administered it generally excites an expectation and subsides the Passion,

When administered in Neuralgia & Hysteria, it should be given constantly and in small doses, it has been found to be of decided advantage in this affection.

The antiseptic value of quinine is best illustrated in the so called Septicemic fever, or pyemia due to blood poisoning,



Some absorption of septic matter  
either internal or external to the  
economy, causing the most  
prominent of these affections  
in which Quinine has been  
successfully used are  
Pyæmia, Septicæmia  
Crisis, and Bacteriæmia.  
There are other febrile  
diseases that exert a more specific  
influence over the disease  
than Quinine, but there is no  
agent now known, and active  
in reducing temperature, and  
sustaining the system through  
the course of the disease.  
The action of this agent is



The curative stages of those  
 as in the continued fevers, is  
 assisted as a substitutive  
 agent, by the addition of alcohol,

In Syphilis, Syphilis Venerea  
 And other infectious diseases, the  
 remedy has been found to be  
 of most advantage as a tonic,  
 and supporting agent, and  
 has been discovered as an agent  
 in the reduction of temperature,

It also has been found  
 to be a very valuable  
 remedy to relieve the spasms  
 of Hooping Cough, It has  
 also been used successfully  
 in Hay asthma, Catarrh, and



various other affections of the nasal  
respiratory tract.

The local form of a good remedy  
chronic affections in the respiratory  
tract the absorption of active  
matter and consequently has  
been beneficial. The use of  
this remedy, there are  
complications of local form  
that contraindicate the use  
of Adminis "pro bono" as  
gastro and intestinal irritability  
It such is the condition of  
the lungs the drug should be  
administered by subcutaneous  
the best suppositories for the  
mode of administration are the





Urate and hyperuricemia of quinine.

Quinine; it is said, possesses the power to prevent the migratory movement and proliferation of white-blood corpuscles and by some authors to, by sufficient saturation of the blood, destroy their life,

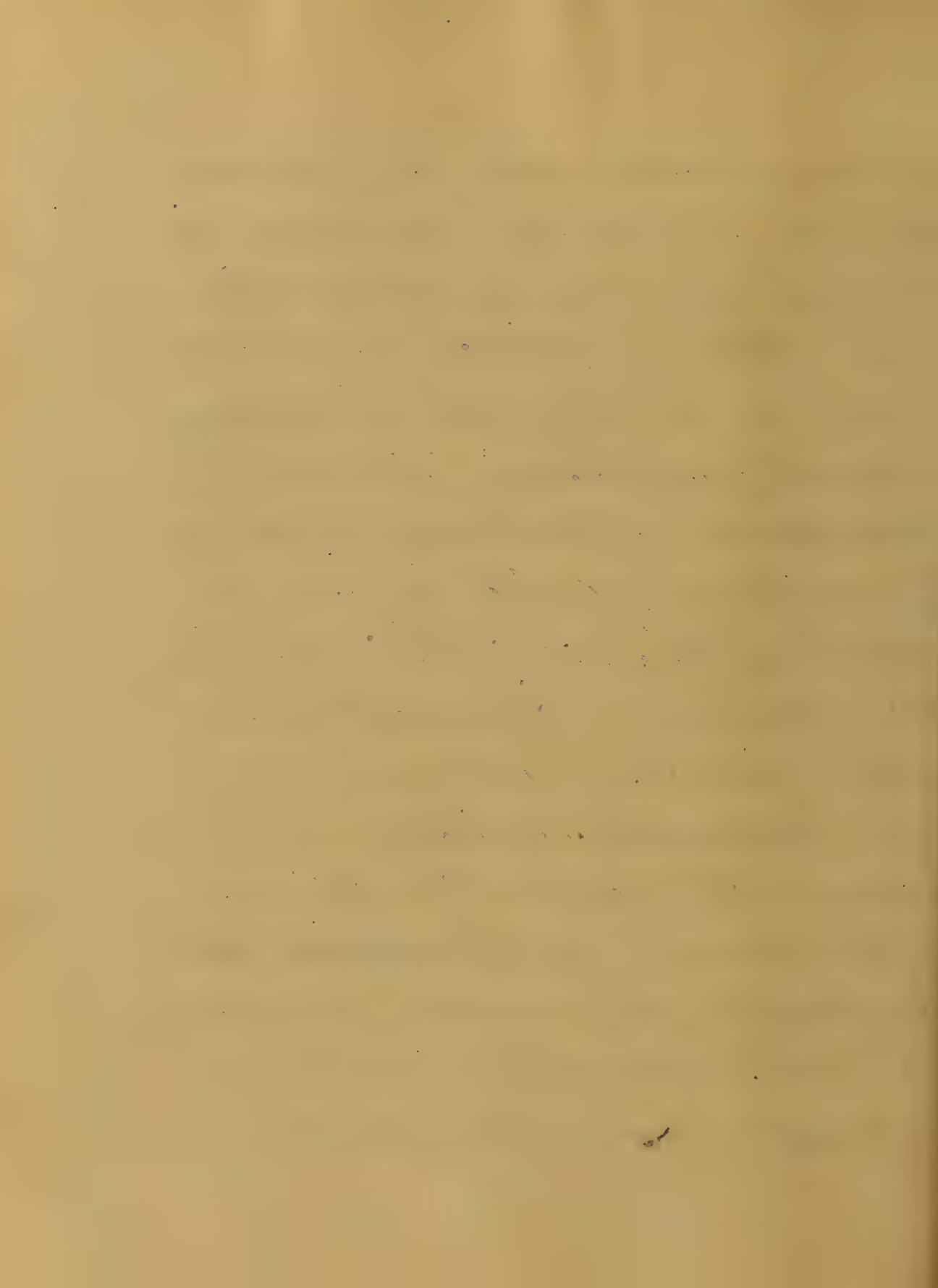
If the drug possesses this power the writer believes it would be of essential service in Leucocytharria,

This remedy has also been used to great advantage in Acute Scurvy to promote the reduction of temperature.

It should be used



in cases where for some purpose,  
 as the temperature is unusually  
 high. In the exhausted stage  
 and often in all cases, the reduc-  
 tion of temperature in inflam-  
 matory affections, has  
 rendered much service, when  
 combined with rest, as a  
 Stimulating agent, is used  
 in delirium, mania, and  
 other similar affections of  
 the nervous system, has  
 been observed to by some  
 Physicians who claim that it  
 aggravates the existing symptoms.  
 Others deny the action of  
 Quinine and have used it



quite successfully,  
 The value of quinine as a  
 curative agent in neuralgia  
 has been a much needed  
 discovery. Some Physicians  
 maintain that it is a very  
 efficacious remedy in simple  
 neuralgia, while others  
 assert that it is ineffectual.  
 A number of practitioners  
 have found it to be of  
 special value in the treat-  
 -ment of neuralgia of the  
 3rd division of the 5th  
 Cranial nerve, when it exerts  
 a curative action over this  
 special region is not well understood.



The writer does not think it always  
 meets the desired influence  
 over this nerve. He has had  
 the opportunity of witnessing its  
 administration for this affec-  
 tion, and in that, best case  
 case, its action was not at  
 all satisfactory.

In its administration for  
 epilepsy, it has given some  
 satisfaction where the disease  
 is not so aggravated by  
 hysteria. Some writers con-  
 sider it to be of value, in the  
 simple non-hysterical form  
 of this disease, but this  
 opinion has not been





endorsed by the majority of the  
profession.

~~The~~ Tetanus quinin is not  
considered as valuable as formerly.  
The tetanus aggravated by malaria  
it can be said often is well  
to great advantage by diminishing  
the malarial febrile state.

The best agents in this  
affection are those that increase  
the power of absorbing, or  
reducing the sensibility.

In fact no remedy is sup-  
posed to exert a curative  
influence over this disease.

The agents employed relieve  
by allowing the patient to



live through the period  
allotted to the disease by  
nature to destroy him.

The use of arsenic in  
Chorea, has not been very  
satisfactory.

In Chronic Alcoholism, and  
some species of insanity,  
where the nervous system  
requires some treatment,  
Arsenic has been found  
to be serviceable.

Given in continued doses it  
has been found to allay  
The Spasms of Laryngismus  
Stridulus.

Administered in combination



with wine it has been success-  
fully used in asthma.

The danger of prostration in  
the affection, from vomiting,  
food, or drink, is very much  
diminished by the use of this  
remedy.

Given with the mineral acids  
it is perhaps the best  
and most efficacious prepara-  
tion used for the relief of  
urticaria.

Its use in dropsical affection  
has been followed by surpris-  
ing results. Cuticle not ac-  
good a remedial agent in  
this trouble as Cuscuta seeds.



Rheumatism, Gout and in fact  
most of the inflammatory  
affections are benefited  
by the use of Opium.

It is one of the chief  
reliances of the Surgeon  
to assist in reducing  
surgical fever.

As to the  
value of Opium as an  
Anæsthetic the writers  
knowledge upon this  
subject is very limited.

We have the honor of  
knowing a medical  
gentleman who claims  
to have used it with





most advantageous in  
Federal contracts,

With the above  
remembrance of the theoretical  
value of opinion the writer  
begs permission to bring his  
papers to an end,



A Thesis on  
Intermittent Fever  
Submitted to the  
Medical Faculty  
of the  
University of Maryland  
for the degree of  
Doctor of Medicine  
by  
W<sup>m</sup> H Ward M C  
Feb 1881



# Intermittent Fever

It is a recurrent fever disease in which all the phenomena are seen in each paroxysm, followed by a period of apyrexia and apparent good health. Varying in duration according to the type it assumes, it is strictly non-contagious and of an endemic nature induced by a poisonous influence termed malarial, which is manufactured in the soil and penetrates certain districts having as a general rule characteristic common features and is scattered more or less over the



whole non-aqueous portion of  
the globe, excepting apparently  
the <sup>or</sup> Frigid Zones that Malaria is  
seen to have been a source  
of malaria and its propagation  
to our more temperate countries  
from the earliest history of its  
existence up to the present day  
but the ~~proof~~ <sup>proof</sup> of this  
has beyond doubt given the  
right direction to the ultimate  
establishment of its real nature  
since it has been such a  
reviving subject to the most  
willing hearts and wisest heads  
of our noble science, it must  
be the right of presumption





and folly for me to do  
more than mention some  
of the conclusions arrived at  
which stand as monuments to  
researchers for their firmness  
in trying to promote the  
amelioration of suffering  
humanity. As yet no hypothesis  
advanced has withstood the  
test of criticism successfully  
enough to become established  
as a fact. The view most  
generally held is that it is  
an organism produced by  
the action of mental selection  
temperature or moist soil  
made porous by containing



The action of vegetable matter  
undergoing decomposition, though  
as yet all attempts to isolate  
and define its properties have  
been utterly futile, as it is  
from the above fact deduced  
from certain effects on the  
human system just as we  
do in the case of other  
specific poisons which  
produce certain specific  
diseases: Low moist situations  
in warm climates abundant  
in vegetable matter as a  
rule are most favorable for  
its production, the quantity  
and quality of it being



governed by distance from  
the Equator for it is a  
known fact that infected  
districts of warm climates  
are more prone to the  
severe effects of the poison  
than those in higher  
latitudes. The natural reaction  
is limited by the mean  
annual summer temperature  
which shows that solar  
heat is a potent factor.  
one author gives great  
credit to this and says  
that solar heat produces  
only a predisposition to  
disease by augmenting



General irritability of the  
system thereby causing  
the susceptibility and that  
terrestrial exhalation call  
into action the principal  
diseases of warm climates."  
If this be true solar  
heat acts a double part  
or not only helping to  
manufacture the miasma  
out by diminishing the  
power to resist its power  
by bringing into action an  
increased functional work  
by irritability and so  
rendering the system less  
able to throw off the





the poison by diminishing  
its vigor from over taxation.  
Malaria is capable of  
drifting along plains to  
a considerable distance  
from its source by the  
wind, it ascends mountains  
to variable heights it is  
modified by bodies of water  
especially salt of not less  
than a mile in breadth  
interposed between habitations  
and the source of its origin  
and both of these placed  
in like manner exercise  
a protective influence  
either by acting as a filter



Or An abundant drainage  
and cultivation of land  
at first causes more  
prevalence of its effect  
but afterwards it stops by  
its manufacturing material  
being exhausted which  
is conclusive as regards  
to cultivation and drainage  
being the best way to get  
rid of the diseases caused  
by it. The material  
poison forms over the  
infected area an invisible  
mist which is dense & more  
latent as we approach  
the ground and then



Certainly if persons seem  
to unfasten their minds  
to proceed for it is a well  
known fact that persons  
who are acclimated which  
render them less susceptible  
to the poison, cannot  
with impunity expose  
themselves at any time  
and this seems to account  
for the fact that the  
poorer class who are  
under bad hygienic influences  
and who have to work  
early & late in the day  
are often and more generally  
affected than those who



wealthy, middle class. It is no  
rare for simple interstitial  
to cause death at least in  
my state. I shall only  
mention a few of the  
most constant pathological  
changes which fall commonly  
on the Spleen & Liver. The  
Spleen is enlarged which  
sometimes reaches an  
enormous size. The change  
is a hypertrophy of the  
trabeculae and hypertrophy  
of the capsule of the organ.  
The color is a granular white.  
The organ is indurated & brittle.  
It undergoes many kinds of degeneration





The Liver is enlarged and indurated and of the same color of the spleen. The color is due to the separation of the Haematin from the Haemoglobin of the red corpuscles which is carried to most of the important organs and deposited by arrest of the capillary circulation in those organs interfering with their nutrition and inducing various organic changes and functional disturbances, wrought through the sympathetic system of nerves. The degeneration of



This disease are so varied,  
ranging from the slight

Intermittent Nervousness to  
the pernicious Congestive  
Chill, that it would take  
too much space to enumerate  
them unless I state the belief  
of the most intelligent

Physicians of my state, that  
every disease is more or  
less tainted with Malaria  
which we have. The most  
common forms are the Quartan  
Tertian, and Quartan. The so  
called Tertian are the most  
common in my section, and  
occur more often than



Intermittent may postpone  
or anticipate which shows  
that they are interfering  
or losing losing hold on the  
system

Symptoms

The attack is <sup>in the</sup> sudden or after  
a few days feeling of faintness  
headache, and general malaise  
with a sense of weariness  
and chilliness, muscular pain  
and epigastric discomfort, the  
chilliness rapidly increases  
into a severe rigor with  
chattering of the teeth and  
trembling of the whole  
frame, <sup>the skin is dry, the</sup>



face becomes shrunken and  
of a dusky hue, the hands  
and feet look dusky and  
withered, the pulse is small  
and frequent and irregular  
respiration is hurried and  
sighing, there is loss of appetite  
and thirst, often increased  
purse tongue pain in the  
limbs & feebleness of mind  
temperature above normal  
Urine pale and abundant  
this is the early stage and  
lasts generally some days  
now after this the redness  
comes on with a faint  
slight flush alternating





More normal skin moist  
and after<sup>+</sup> the patient become  
bathed in a profuse sweat  
the pulse becomes frequent. After  
headache disappears about  
10:00 AM. Urine scanty, the  
patient generally falls into  
a gentle sleep. This stage  
is much shorter than its  
other<sup>one</sup>, which then is almost  
a restoration to a perfect  
perfect health. The period  
between the two attacks  
is called the Intermission  
Treatment.

In the cold stage  
generally resting more.



is required than a warm  
 bed, hot bricks, a bottle to the  
 feet, & Spirit on the hot  
 stage. Ice Effervescing  
 Draughts & Mental Mixture  
 which tends to quiet nausea  
 and promote diaphoresis  
 unless temperature runs  
 high. Then a corresponding  
 dose of Quinine will quiet  
 head symptoms, & control temperature  
 and assist nature to throw  
 off the poison in the  
 sweating stage. In the  
 Intermission a dose of Calomel  
 Blue Mass or some other cathartic  
 may be given until the



purrogens are known to  
 Quinine & Iron especially the  
 Muriated Tincture, as the  
 Acid in it aids digestion  
 and acts to some extent  
 as an alterative on the Liver.  
 Where the Chill comes from  
 Chronic Arteric can be  
 used, giving a full dose of  
 Quinine every seventh day  
 until after the 30<sup>th</sup> day, has  
 passed the above in the  
 way it is treated most  
 successfully with me.

With a  
 Knowledge of the imperfect  
 reasons in which this subject has



been handled I stop with the  
hope that charity will not  
allow this to be criticized





Inaugural Dissertation

on

Pleas

Submitted to the

of the

Board of Regents and Faculty

of

the

University of Maryland

for the

Doctor of Medicine

by

John G. Reid

of

North Carolina

1881



## Reverend Sir,

The present knowledge of  
the pathology of fevers has advanced  
so far that we are enabled to discuss it  
without being compelled to fly to the refuge  
of speculation. It is true that  
wisest and ablest minds have long  
been about it. It is a time that health will  
warrant, for its theory, when to cure it  
we die, we are compelled to conceive  
some safe and distinct ideas.

In truth we can say that it has no  
"out of doors" which is looking to observations  
to treat, but whereas in the North, South  
East and West, many of them and the  
medical fac has pursued him with an  
unfailing instinct, and from the number



of pleuritic adhesions found in our dissecting  
rooms, we can describe the condition, with  
a degree of safety, that it makes its back  
field of operations well correlated with its  
anatomical "situation".

We are warranted in going still  
farther in saying, that it neither restricts size  
or position in life, but with its liquid aide  
by its bones, force us they are toward, com-  
pacts and binds the lung of the prince, prince,  
infant, and the aged, with equal security.

From this wide extent of diffusion of this  
common material we are led to consider  
first an anatomical description of its  
point of collection, in the human organism.  
The pleura is a broad membrane covering  
completely the lungs, and is essentially



Similar to other diseases in various  
situations, that is a condition of the  
into two layers, a single and double  
is composed of yellowish white  
elastic fibres. The four layers are  
the outermost with a fatness. The  
that supply the glands are from the  
inferior thyroid and internal  
mammary. The veins correspond with the  
arteries. They are also supplied with  
lymphatics, but veins are not  
in them.

Being impacked with the disease  
and the deposition of the  
the internal Alveation, to wit  
of a serous membrane that covers the  
of the gland.











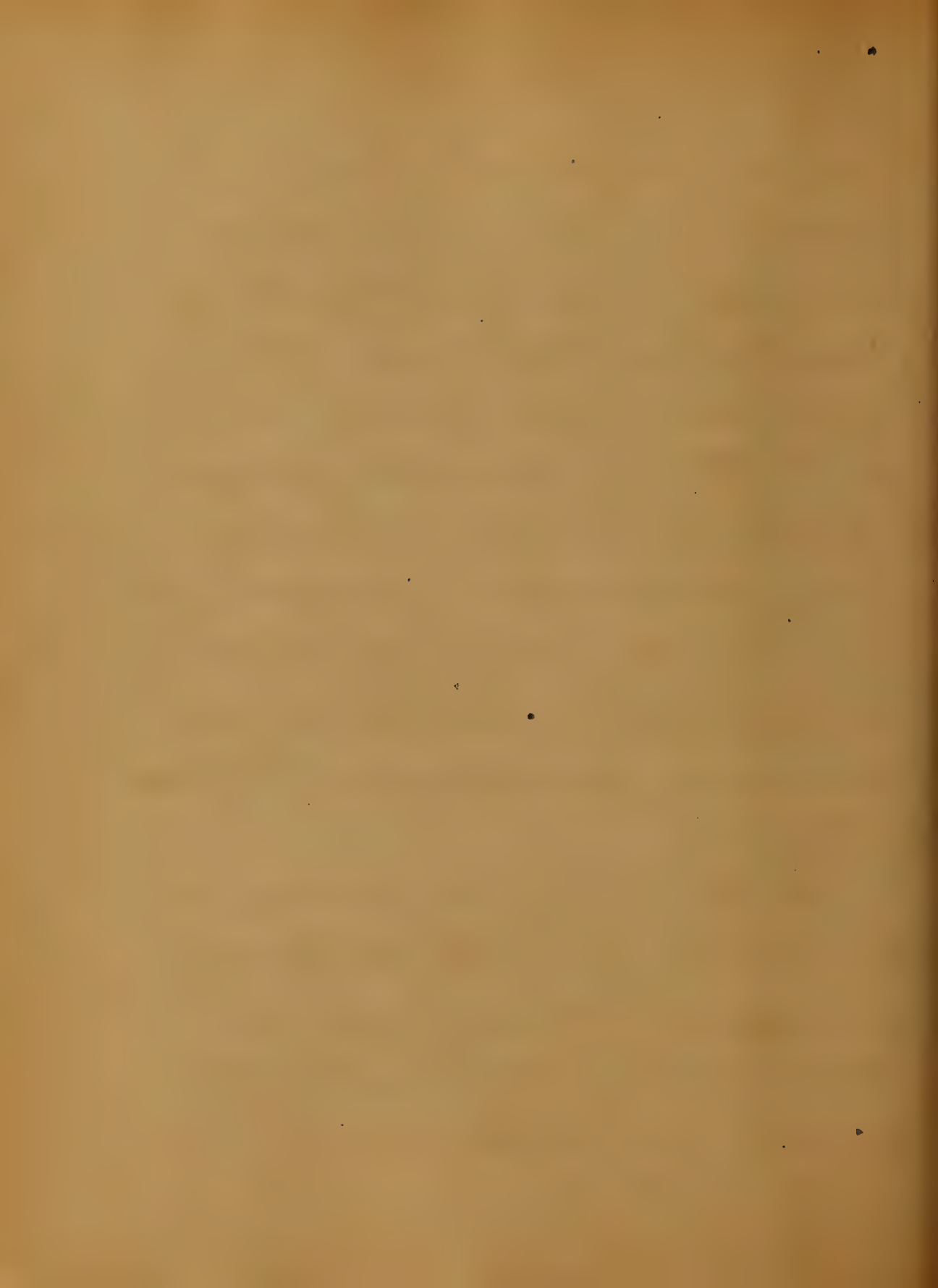


It is believed that some of the  
white matter in the lungs of animals  
is not so much as the amount of  
lipid. In other cases the amount of  
lipid is more or less abundant and  
varies greatly.

The liquid is not everywhere  
clear, into the serum of the blood, or  
a purely serous effusion. The  
effusion is usually clear if the  
body has not been much disturbed  
in opening the chest. But near the bottom  
it is turbid from the admixture of lymphatic  
fluid or lymph. The blood vessels are  
more or less coated with lymph, which  
is soft, white, and smooth. The amount  
of lymph varies considerably in different



cris, its presence is a criterion of  
inflammation. The membrane loses a  
portion of its transparency from  
serous infiltration beneath it, it is  
somewhat swollen, and its adhesion  
is effaciated. A small collection of  
blood is often observed. The same  
distinguished pathologist says, that  
death occurring at a late period of  
the disease the pleural cavity is found  
to contain a moderate amount of liquor, sometimes  
a very small quantity at other times  
several pints with flocculi of lymph  
at the bottom of the liquor. Lymph  
is usually more abundant on the point  
than on the surface. Sometimes it is  
more than at the latter period, and is





is found in layers which present a membraniform appearance without organization. A layer of lymph sufficiently dense to be stripped off, is properly called a false membrane. The density of the lymph and the firmness of its adhesion indicate with unerring certainty, that the disease is not of recent occurrence. With the foregoing description of the morbid anatomy we approach the general symptoms or clinical history.

Authors generally divide acute pleuritis into three stages, the first stage will embrace that period from the attack to the time when a perceptible amount of lymph has taken place.

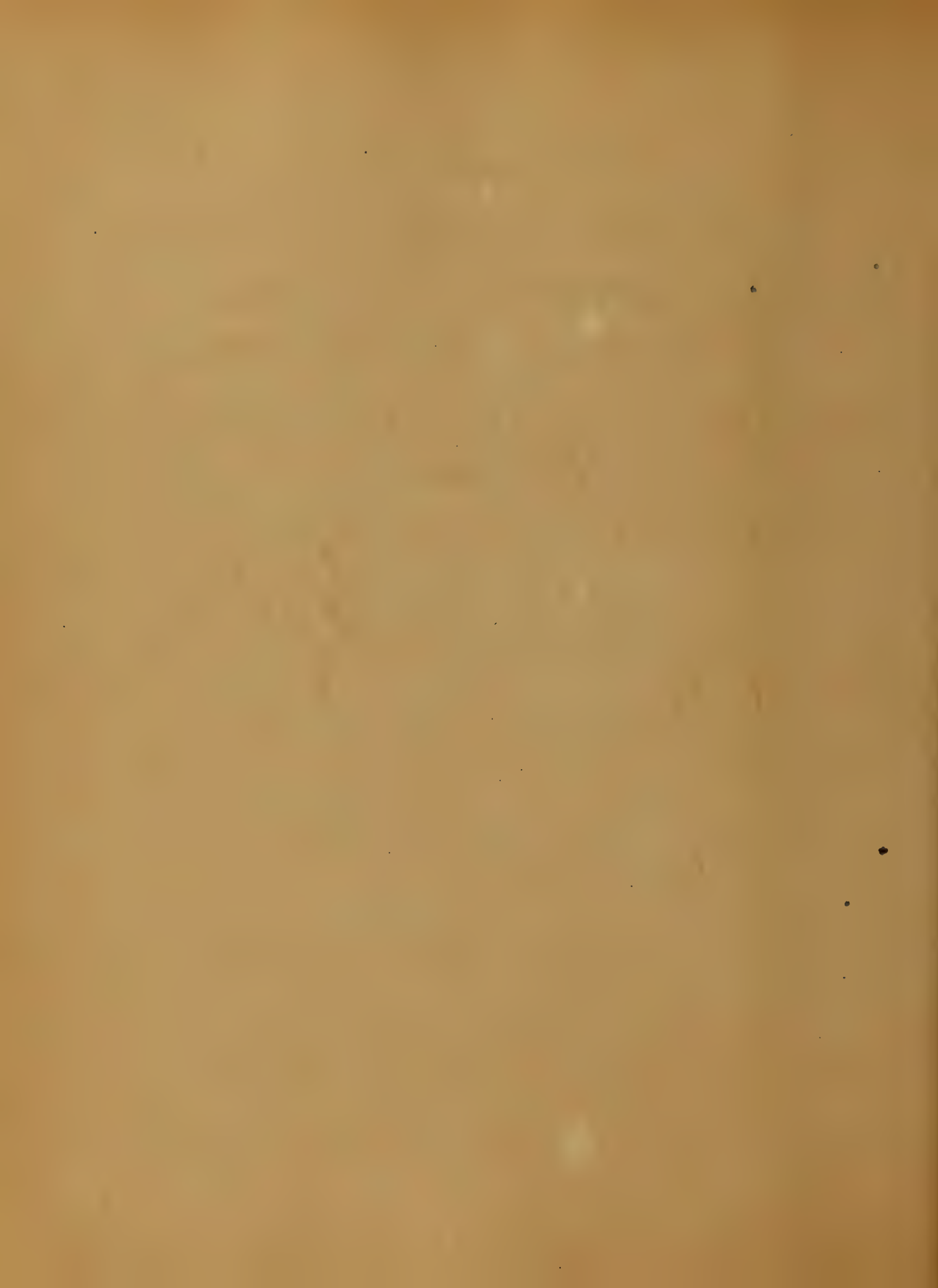


Ends of the great Veins is most  
this period in some cases with the pain  
about, as this great Pathologist detailed  
inography and course of inflammation,  
as well as of the acute pneumonia,  
in one hour after the patient felt the first  
pain in the side. In all cases are  
limited in the opinion that the first stage  
usually extends beyond twenty four hours.  
The second stage is over from the time  
the fluid is first detected with evidence to  
the time when the liquid begins evidently  
to diminish. This stage is of various duration.  
The accumulation of liquid may go on  
with more or less rapidity. When the max-  
imum amount is reached, the quantity may  
be stationary for some time or absorption



may rapidly take. In this stage will  
subside that period from the commencement  
of absorption until health is regained.  
And this, like the convalescence stage, is with-  
out any fixed duration and if a consid-  
erably amount of liquid remains after  
the first fifteen or twenty days the  
time is increased the chronic form.

The local symptoms are well  
marked, the patient suffering with an  
unwearied tenderness in the affected part  
of a "aching, dragging character," is  
greatly exacerbated by coughing, sneezing  
or by forced inspiration, any quiet re-  
sistant movement gives rise to a sensation  
that the patient has a great mass of  
heavy matter to disengage the "lung  
brush."



Because we all agree that the paper is too  
light to be used, and that the higher  
quality may make a large sheet

The sheet in the east majority of cases  
will be found about the same of the  
weight and will be in the paper is  
said to be constant but in many cases,  
and with the of effusion  
it generally ~~disappears~~ entirely

On ordinary days if the effusion  
is given on and, usually the paper will  
be found with the same, the  
weight and is ~~found~~ movement

The dimensions will reach from  
100° S. to 100° N. The paper is ~~found~~ in  
frequency and ~~is~~ straight, thick  
unusually given in the heady line





orthostatic syncope, and  
other symptoms are very frequent.

The expectation is generally slight and  
conscious of simple causes. The symptoms to  
be avoided are complications.

Prof. Simeyer says that while one  
respiration is performed, only four beats of  
the heart occur in place of five.

The symptoms we have mentioned constitute  
the clinical history of the first stage, they  
continue in the second stage, but  
after a certain amount of liquid  
effusion has taken place they are  
usually modified. The pulse if not  
absent is weak, the patient is  
in forced breathing, coughing is  
frequent, and without the characteristic



and judgment, the patient's movement is  
 partially, if not entirely, arrested and  
 the condition a symptom common to  
 the spine. The patient is generally  
 able to sit up, and walk about in the  
 room. The respirations are irregular  
 very largely by the amount of liquid effusion  
 if the effusion be large and greatly compresses  
 the lungs, the respirations will be increased  
 in frequency, if the liquid is rapidly effused  
 the respiration will be painful and compel  
 the patient to maintain the sitting posture  
 but on the other hand if the effusion be  
 slow the patient will not experience much  
 dyspnea only a result of depression  
 which will cause frustration.







Parliament, and the presence of this in the  
intermittent which will be always indicated as  
to his diagnosis. In the first stage, when  
the nervous condition is at first excited,  
the extension of the chest is diminished,  
no measurement will however be taken, and  
sounds is not perceptible, except respiratory  
because of its consequent participation will be  
weak. He may even get the characteristic  
friction sound if caught for in the upper  
manubry or in any of the upper

When the secretion has subsided, in  
in quantity, the signs will soon be  
which the character of the respiratory act  
will be diminished, and the position  
sound will be of a rattling gurgling  
character.









bulge, since the effluent liquid under the  
the lateral cavity, be only partly filled, except  
the area of bulges changed from the  
sitting to the horizontal position.

If however, the cavity, is full of fluid  
we have absolute bulge or plateau,  
that position will not affect, but  
in this condition, the lung is so completely  
compensated by the liquid of tension  
that on turning so respiratory sounds

The liquid surrounding the lungs  
interposes a medium, that obviates the  
resistance of cavity, under tension.  
The resistance of the vessel provides

The obstruction is generally  
slight & only partial.

The respiratory sounds are



Give us if you can into the same  
line information both as to the  
existence of fluids and also whether  
the fluids are because, &c.

### Treatment

A disease occurring so  
frequently and disseminated  
over such a wide extent of territory  
we would naturally expect a great  
array of medical opinions to be held  
against it, and such is the case.

It is true we have no strong prospects  
of great power as China in Malacca  
yet by a judicious use of remedies  
we greatly diminish the suffering  
of the patient and conduct a great



inferiority to health.

The same lesson taught from the  
Chair of Materia Medica that the  
possession of the sulphate of mercury  
if doubted against it in the stage of  
Congestion, is sufficient in many  
cases to abort the disease and  
to be effectual it should be administered  
determinately in full doses, but  
from the same source the value  
of calomel, in the inflammatory  
stage, was impugned upon me.

From the Chair of Practice,  
we have to see a satisfactory result  
from blood-letting, in the first stage  
of disease on point as it should

Should we not avail ourselves





of bloodletting, in any further attempt  
to extract undissolved acid from the  
combination known as "nitrous"  
should last every three or four hours until  
inflammatory symptoms subside.

He will find a valuable auxiliary  
in Counter irritation, which should  
be applied over the affected side. And  
the respiratory motion should be  
restrained, as much as possible, by  
the use of adhesive strips applied  
to enlarge the intercostal spaces.

Should our treatment fail to  
arrest the disease in the first stages;  
we will then have to direct our  
treatment to the absorption of the  
effused liquids, And for this:



... we see in possession of many  
valuable remains, and the most efficient  
will be the stimulus, aided by electricity  
and an occasional hydropneumatic  
Hydropneumatic pump, not used frequently.  
For more active hydropneumatics should be  
employed with much caution, and in  
certain acute cases, but we may  
expect good results from extracts  
of potassium sulphate or extract of mag-  
nesia, without the severity of the former  
remedies.

Quarties are especially best, but  
rapidly effluvia. They effect the  
object with less disturbance of the  
system and are less irritating.  
The union of several stimulants



remedy is more likely to answer officina  
than a single remedy of this class.

The syphilis under treatment may be  
continued with in addition the same  
calls of nature or the use of  
Protococcus may be given dissolved  
in wine infusion of some one of the  
vegetable Amulies.

The regulation of the amount of drink  
ingested is an important point with refer-  
ence to the promotion of absorption.

The stimulation of water by the bowels  
is of little avail if the patient be allowed  
to take fluids into the system voluntarily.

The quantity of liquid of water should  
be small as possible compatible with  
the comfort of the patient.

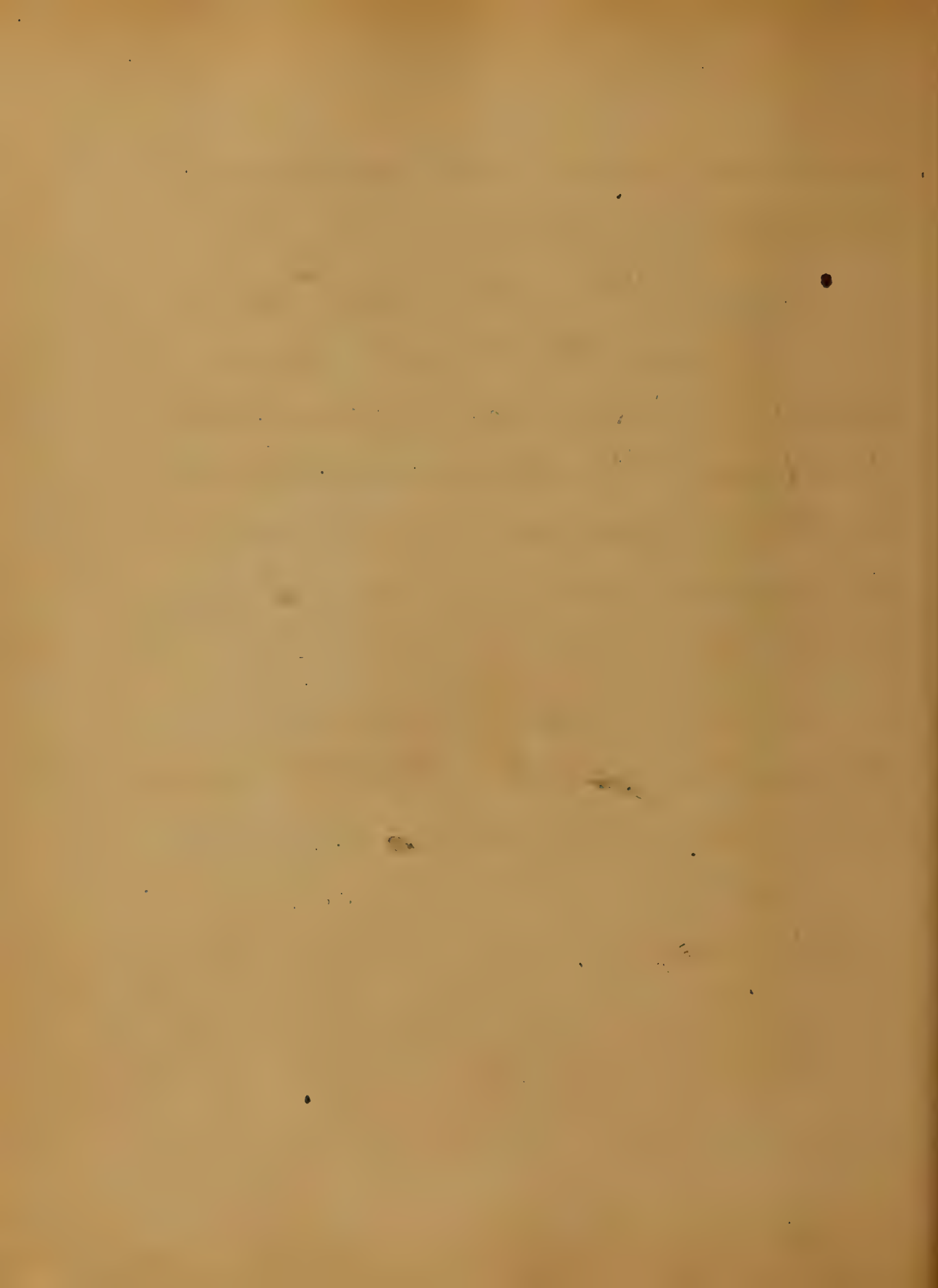


It is very rarely, says a distinguished  
pathologist that this disease leads  
to a fatal ending by itself.

Should such a tendency be manifested  
by the symptoms very frequently with  
subsidence of the fever, moderate rest  
from the measures of active treatment  
the supporting treatment as of course  
indicated.

These measures which form  
the most important part of the treatment  
of disease involving hæmorrhage by asthma  
consist of alcoholic stimulants, moderate  
alimentation and tonic remedies.

Should all these measures fail  
that we have indicated to eliminate  
the effusion, leeches has been a



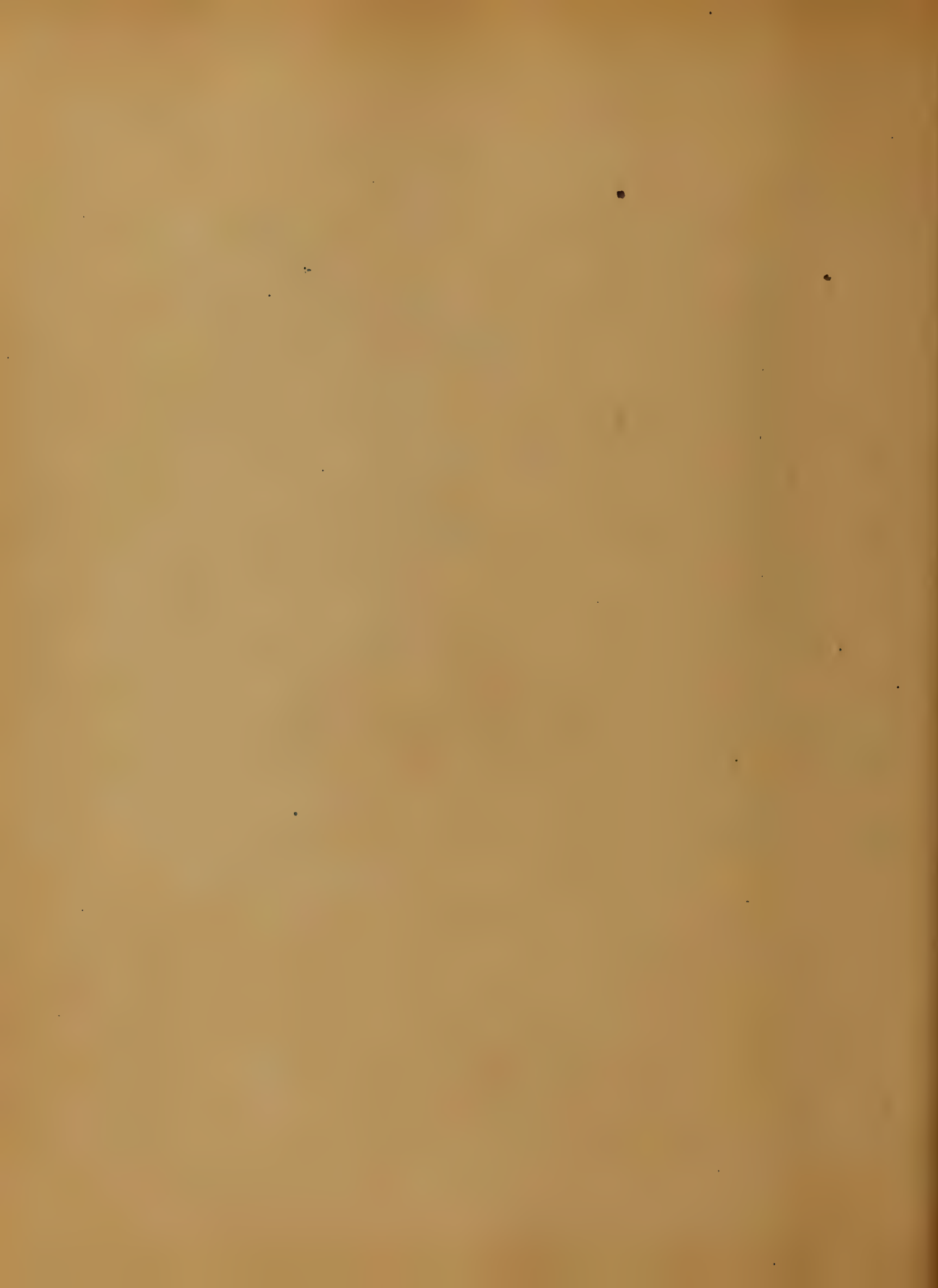


remedial agent, in the form of the  
Aspirator, of great value for

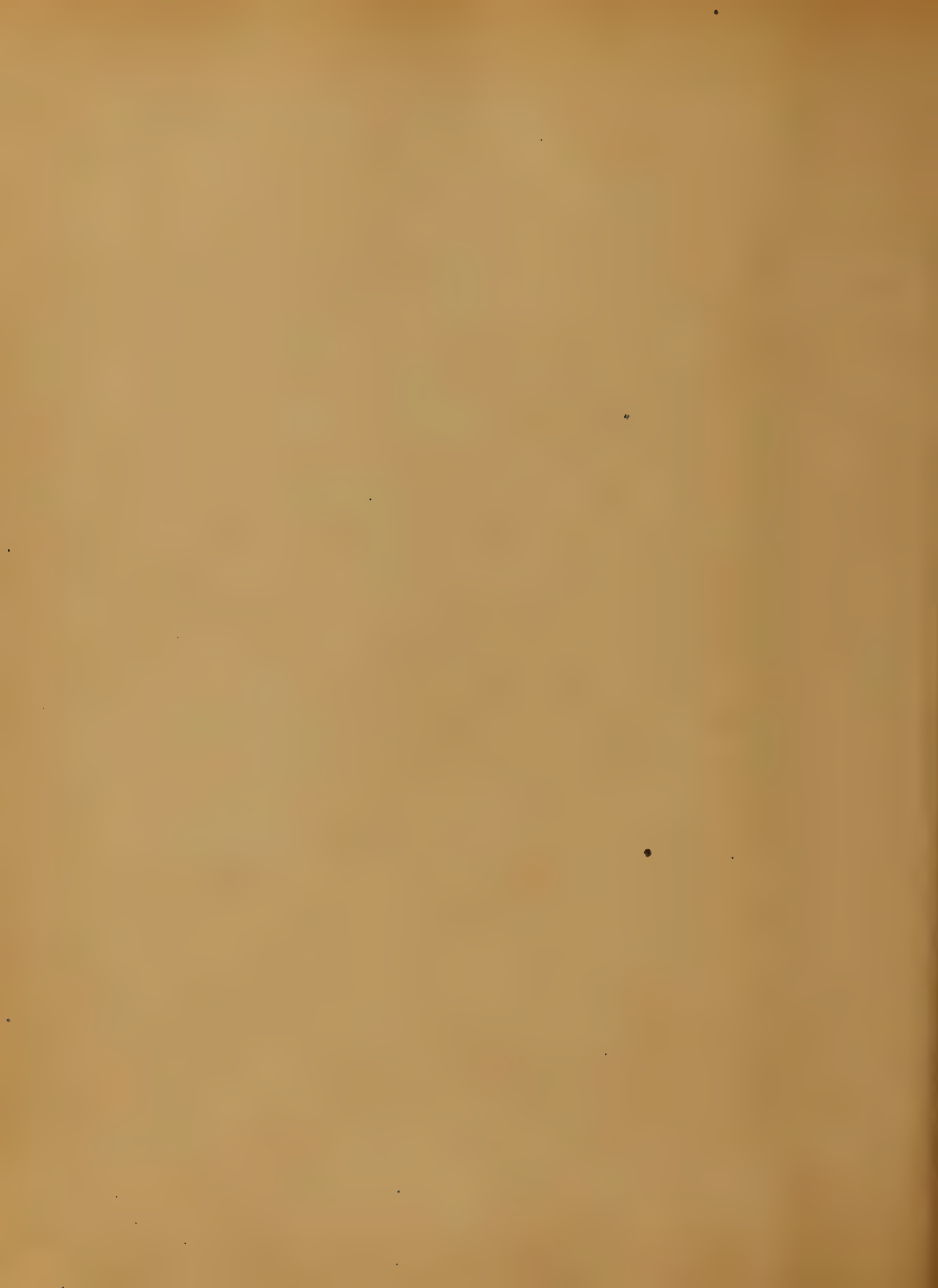
He will never forget  
nor ignore the almost magic  
effects the aspirator accomplished  
for Prof. Donaldson and others  
on their empyemic patients during  
the recent season of the

We have no hesitation in  
enclosing it as a valuable  
therapeutic measure in the treatment  
of Chronic Pleuritis.

Feb 17 1888

















W. T. ...  
W. T. ...

... ..  
... ..

... ..

Henry S. Prentiss  
1855











Dear Mother  
I received your letter of the 11th  
and was glad to hear from you  
and to hear that you were all  
well. I am well at present  
and hope these few lines will  
find you all the same. I have  
not much news to write at  
present. I am still in the  
same place and doing the same  
work. I have not seen any  
of the old friends here.  
I have not seen any of the  
old friends here.

Yours affectionately  
John Smith





1870

*[Faint, illegible handwriting on lined paper]*

*[Faint signature or name]*



The first part of the paper is devoted to a general  
discussion of the various aspects of the  
problem. It is shown that the problem is  
non-trivial and that it is not possible to  
solve it in a closed form. The second part  
of the paper is devoted to a numerical  
solution of the problem. It is shown that  
the numerical solution is in good agreement  
with the analytical solution. The third part  
of the paper is devoted to a discussion of  
the results. It is shown that the numerical  
solution is in good agreement with the  
analytical solution. The fourth part of  
the paper is devoted to a discussion of  
the results. It is shown that the numerical  
solution is in good agreement with the  
analytical solution.

By

Clark G. ...

... ..  
... ..  
... ..  
... ..







10  
The first part of the book is  
devoted to the history of the  
country from the time of the  
discovery of the continent to  
the present day. It is a  
very interesting and useful  
work, and is well adapted  
for the use of schools and  
libraries. The author has  
written in a clear and  
concise style, and has  
given a full and accurate  
account of the progress of  
the country. The book is  
well illustrated, and is  
very attractive in appearance.  
It is a valuable addition to  
any collection of books on  
the history of the United States.









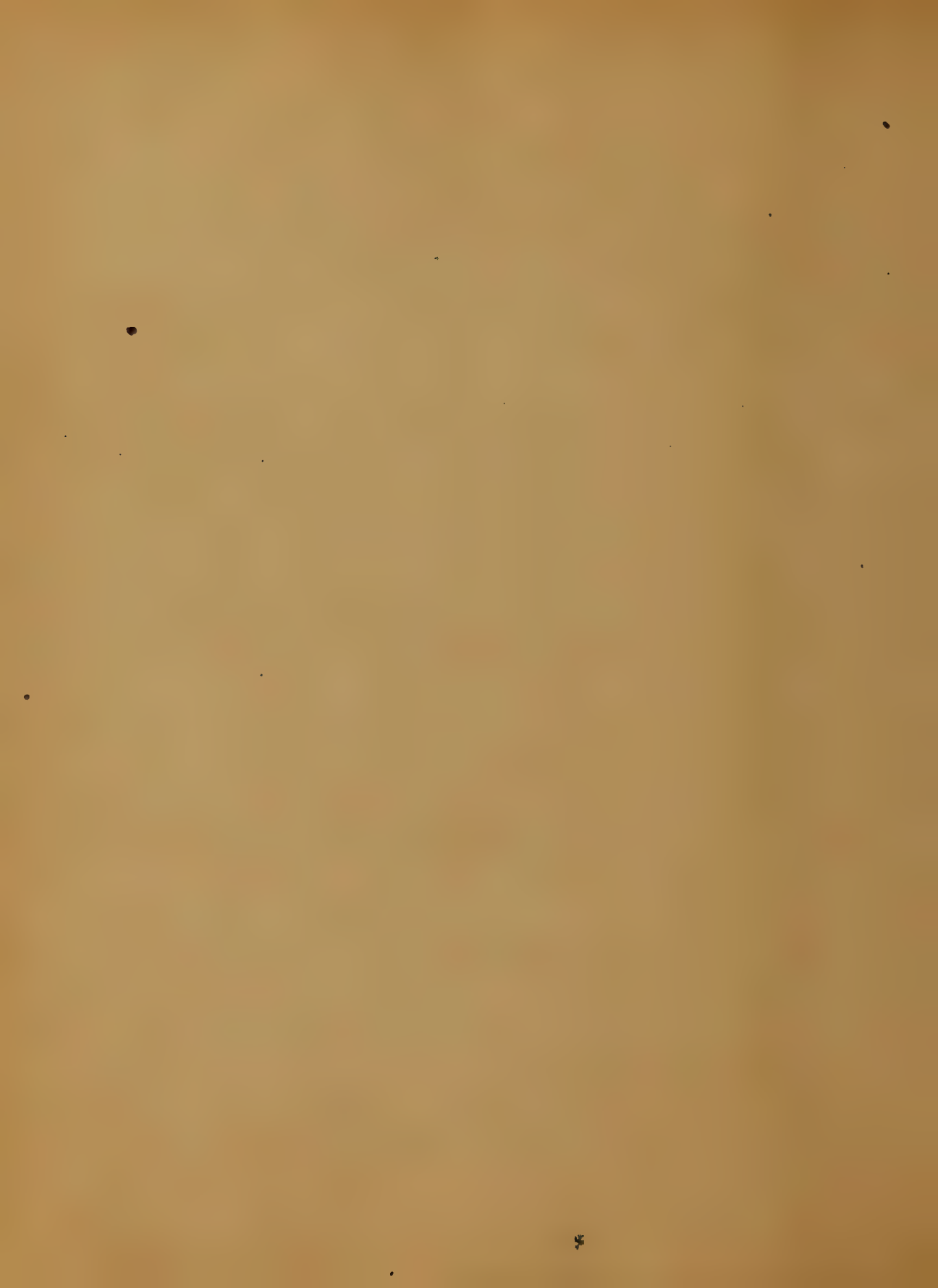






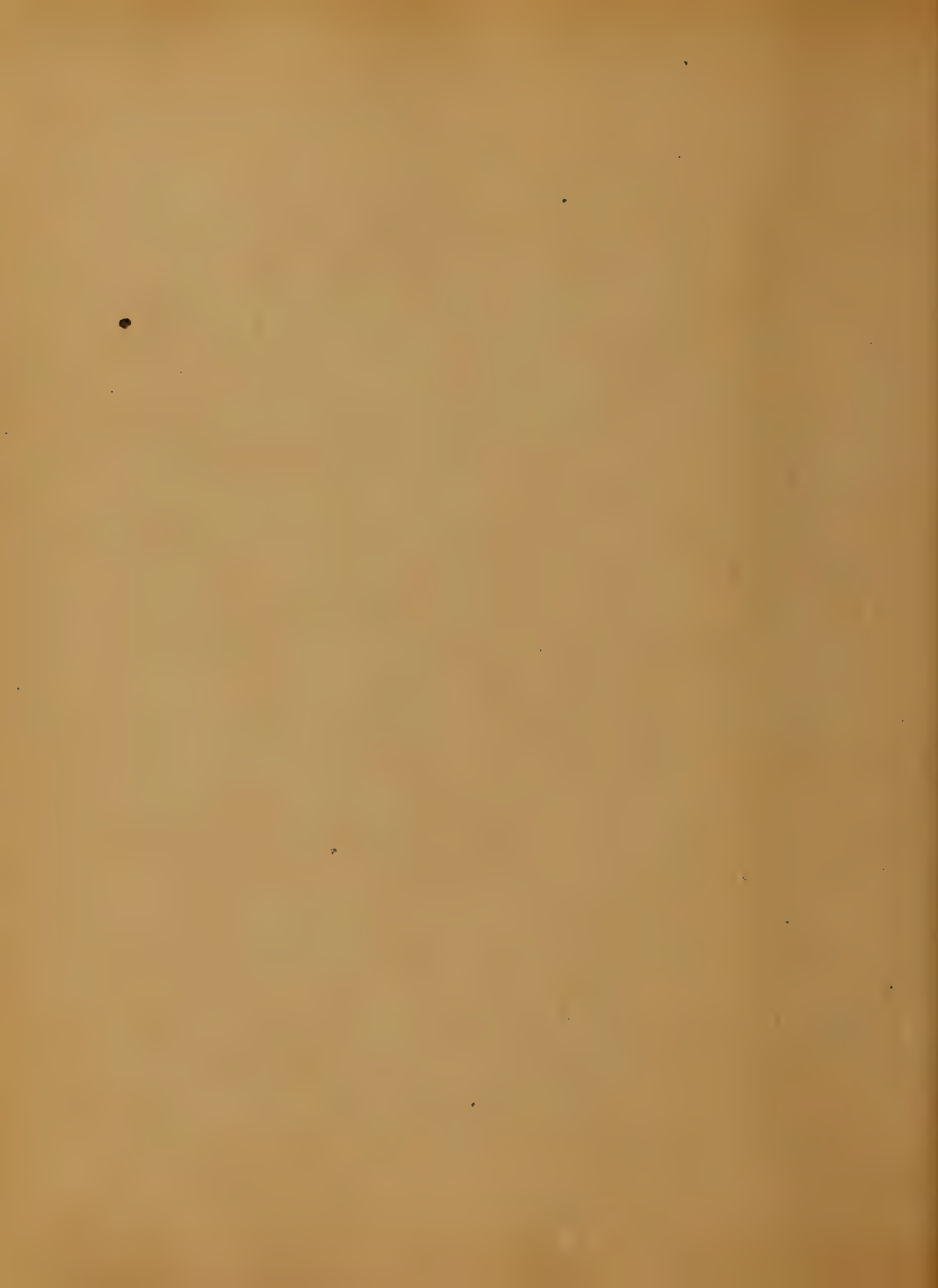




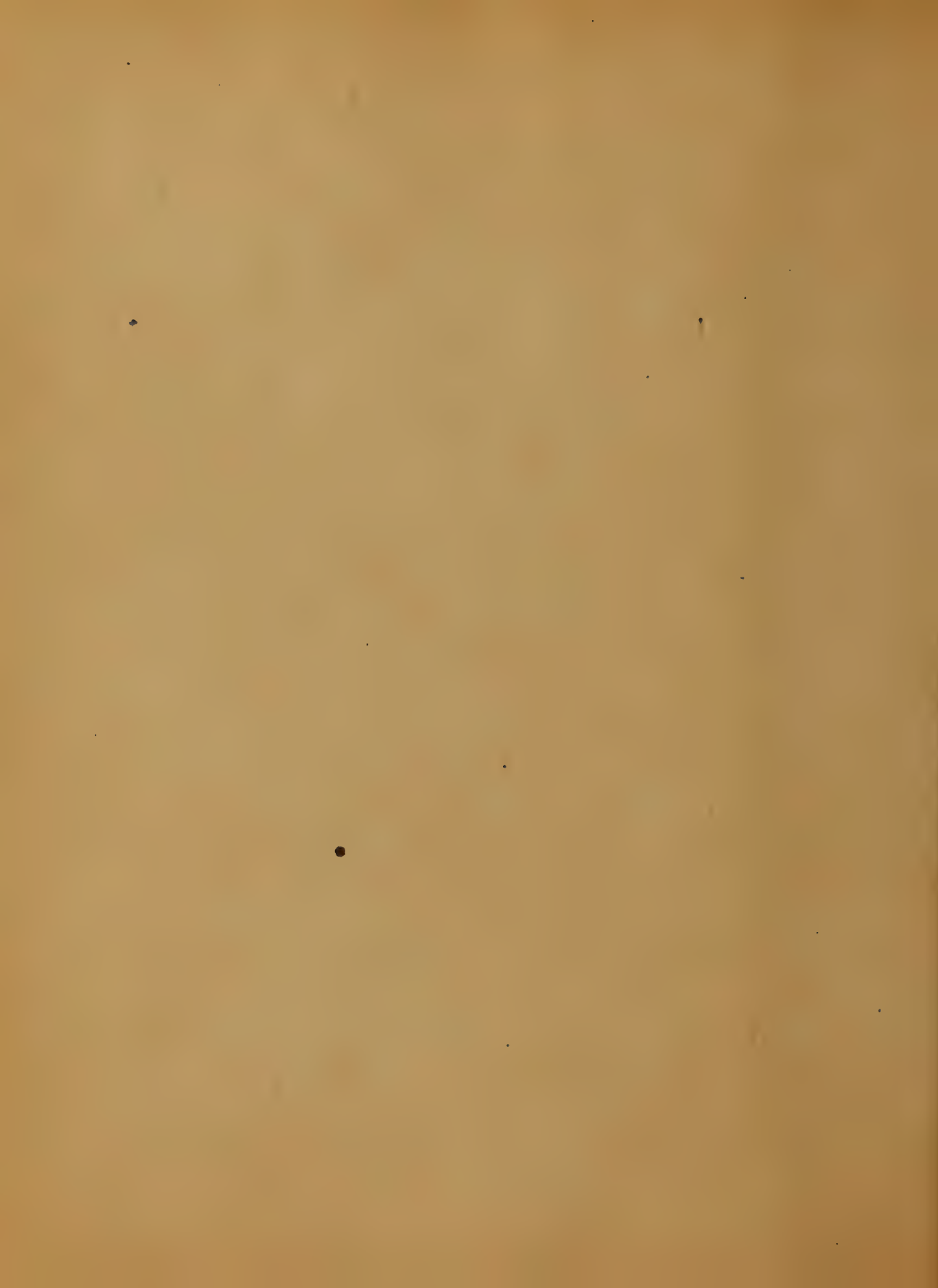




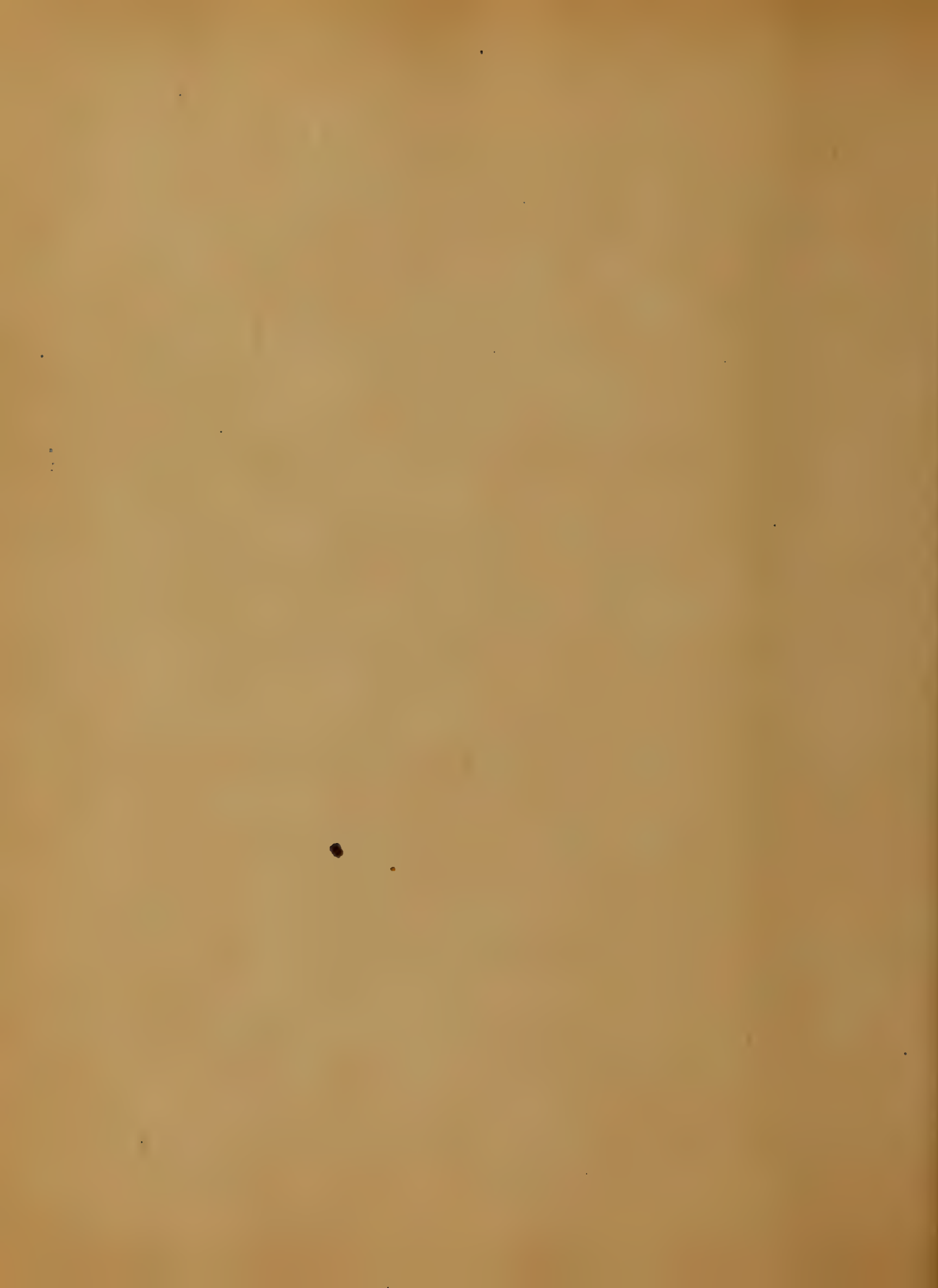














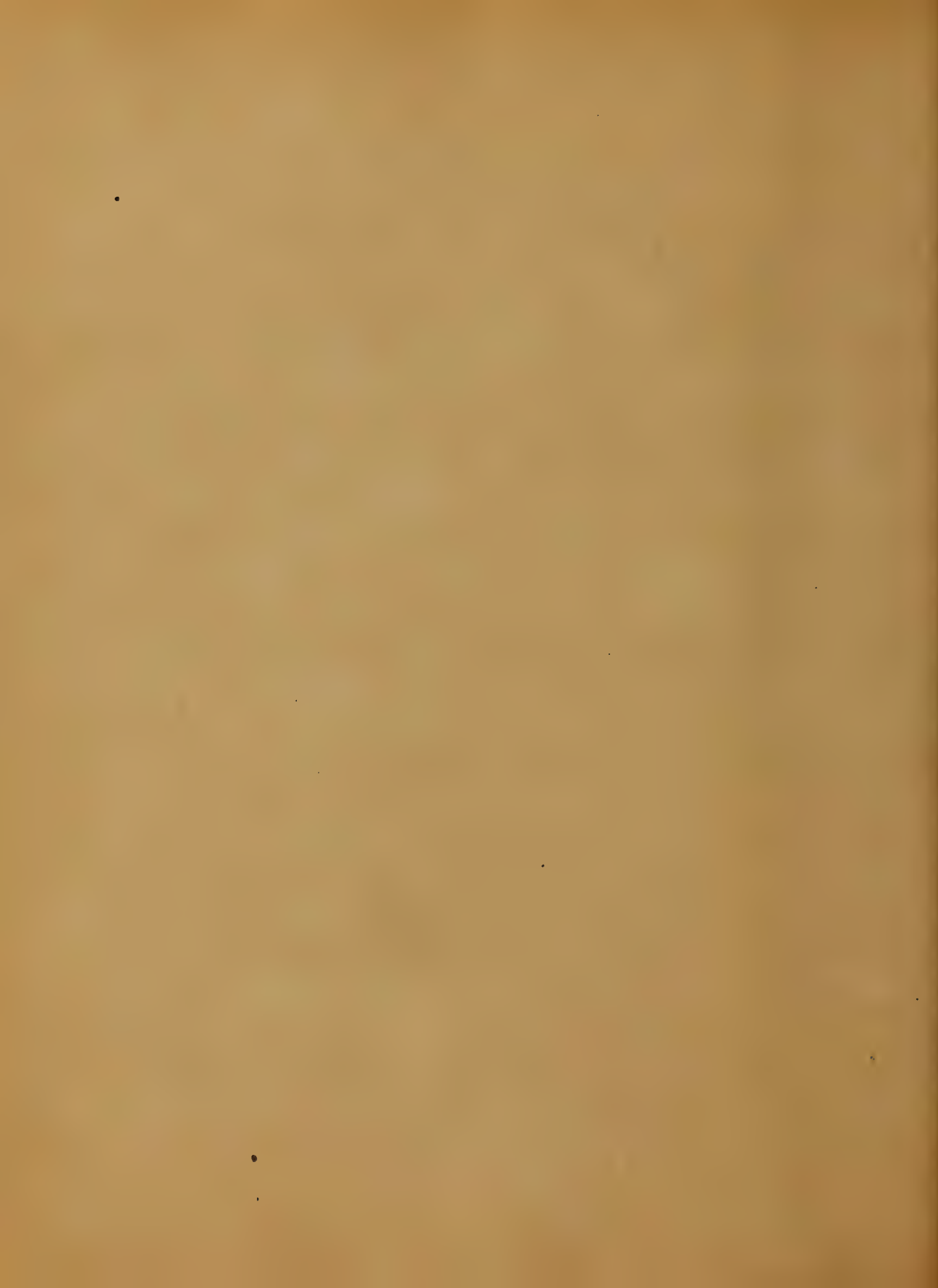




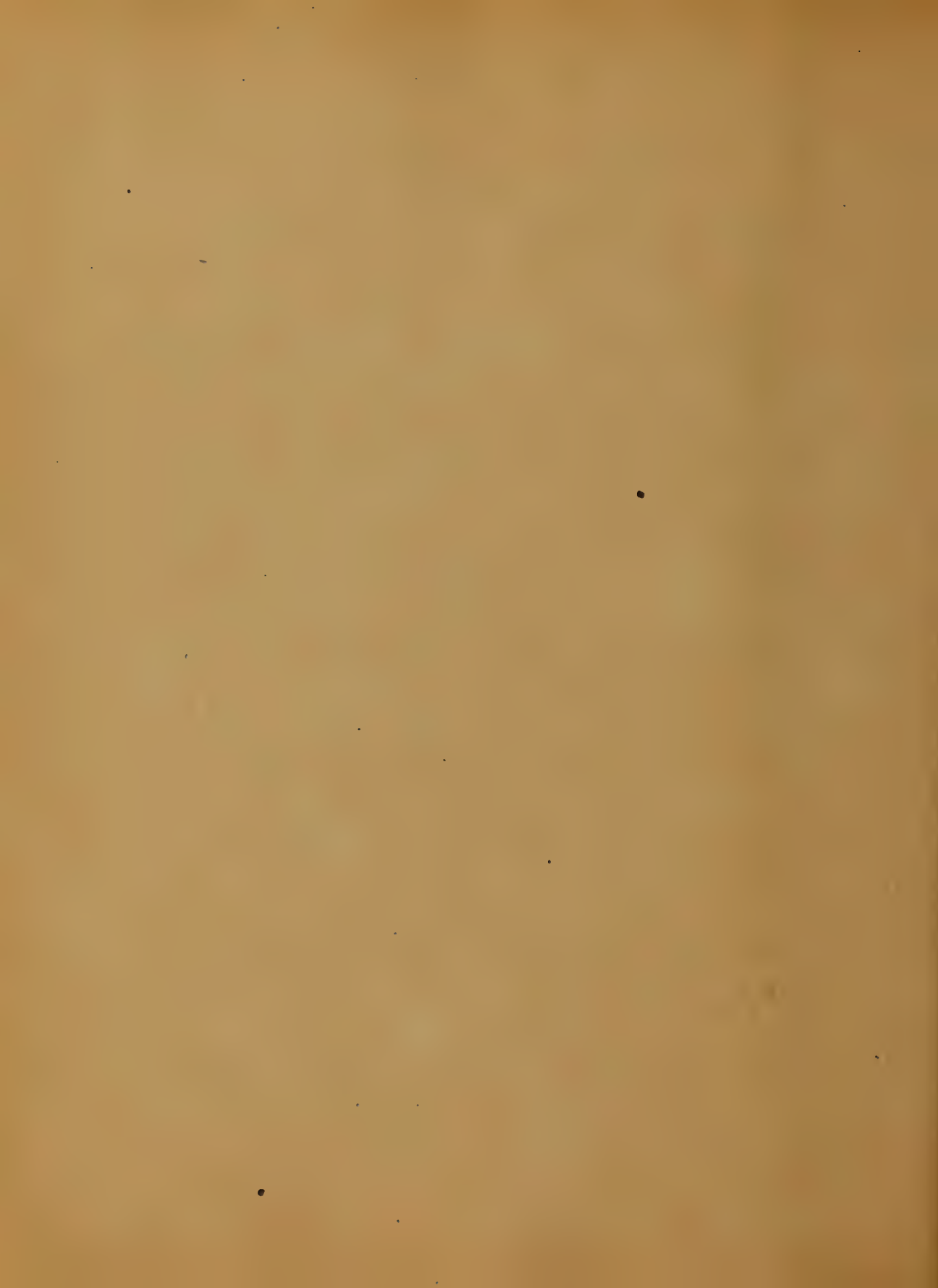












rest of its administration as follows

in such a position that you will be  
well advised to accept of the drug.

Towards; the four hours would it be  
during the rest of the day (2 or 3 days) we

are very very 2 or 3 hours in each day  
the symptoms have all disappeared the  
could continue to take about a dozen of

a week or two days in order to prevent

the rest of the case matter in order  
to the rest of the case matter in order





...the ... ..  
... ..  
... ..

The necessary measures of ... ..  
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... ..



... provided the paper is ...  
... still in possession ...  
... in place. In this case ...  
... is made it should ...  
... the product ...  
... the ...

...  
...  
...

H. L.



Thesis on  
"Puerperal Eclampsia", submitted  
to the Faculty of Maryland University, by  
Charles W. Mitchell of Md.,  
February 1881

These on  
"Natural Calambers,"  
submitted to the Faculty of the  
University of Maryland, for the  
degree "Doctor of Medicine"

## Puerperal Eclampsia.

Of all the diseases with which the medical man is called upon to cope, certainly none merit more careful consideration and earnest endeavor, than those pertaining to the puerperal state.

Among the maladies incidental to gestation, Eclampsia, both on account of its formidable nature and striking characteristics, justly claims a most important place.

Until quite recent years, much obscurity and uncertainty have prevailed concerning this disease; and it has been confounded with many affections which are not, by any means, peculiar to the puerperal condition. It will be well, therefore, to state at the outset, exactly what is to





to understand by "Puerperal Clonus".  
It is an acute affection of the motor ~~parts~~  
~~parts~~ of the spinal cord. It is a disease  
characterized by a series of inordinate,  
exaggerated, involuntary and uncon-  
trollable spasms of all, or nearly all the  
voluntary, and often also of the involun-  
tary muscles of the body, due to an  
abnormally excitable or irritable state  
of the excito-motor regions of the spinal  
cord. These spasms are accompanied  
with, or followed by, a comatose condition,  
more or less marked in degree and  
duration. It is, moreover, a disease  
which occurs only in the puerperal woman.  
Causes.

The fundamental and basic fact  
in the etiology of clonus, is the excited  
and irritable condition of the spinal cord



which is incident to gestation.

For many years it was thought that this condition was brought about by a "morbid" state of the system. For example, Copland in his remarks on the subject, insists that it can only occur in patients who are suffering with Albuminuria. But other observations have proven conclusively that we may have Albuminuria without any morbid condition of the system whatever. At all events, we have always the unstable condition of the secretory motor regions of the cord, however it may be produced. The blood is more or less profusely altered during the existence of pregnancy. This alteration is produced in great part by the improper performance of the functions of excretion. We are all aware of the almost constant and complete constipation



which exists during pregnancy. The  
 mucous membrane of the alimentary  
 canal fails somewhat in its secretory  
 functions. So too, the lungs perform  
 but imperfectly their functions of venar-  
 ousization and oxygenation of the blood.  
 So too the kidneys are often more or less  
 deranged in their action during the  
<sup>puerperal</sup>  
~~puerperal~~ state. Whether this interference  
 with the workings of the bodily mecha-  
 nism, produces the so-called uraemic  
 condition or not, we cannot say.  
 The term "uraemia" is at present  
 rather an indefinite one. It seems to  
 be rather a cloak for ignorance.  
 Some authorities consider that uraemia  
 itself is the agent, producer of urae-  
 mic symptoms, while others, as for  
 example Frerichs, hold that uraemia is



converted into subcutaneous emphysema,  
 which is the poisonous element in  
 "Uraemia". Others again, are of the opinion  
 that certain extractive matters in the  
 blood, of which we are as yet ignorant  
 constitute the most important changes  
 in the circulating medium. If this  
 latter hypothesis be true, we have a  
 parallel to it in the fact, that an  
 atmosphere containing a certain amount  
 of carbonic acid may be breathed with  
 impunity, while air expired from the  
 lungs and containing the same  
 quantity of carbon dioxide, will prove  
 to be a deadly poison.

The "Hypertonia" existing during pregnancy  
 may also contribute somewhat to the  
 abnormal excitement of the spinal cord.  
 But to this condition of the white matter





regions due to some in the blood, or to  
Carbonate of ammonia, or to the presence  
of extractive matter, or to Hydrargyria,  
it matters little in our study of Tetanus  
sic. Suffice it to know that we have  
the condition, however it may be  
brought about.

Any alteration in the state and functions  
of the spinal cord can manifest itself  
in but one way, namely by convul-  
sive action. Physiological experiments  
upon decapitated frogs, and similar  
observations both pathological and  
physiological, have firmly established,  
that abnormal excitability and irri-  
tability of the cord, no matter in what  
way produced, always express them-  
selves in one way. It is of little moment  
therefore to us how the condition of the



Spinal nervous centres in Cramp's is produced, provided we remember the seat of the changes, and the fact that they are essentially spinal and therefore entirely independent of the intellectual and volitional faculties. We must also insist upon the excitability of the excitomotor system, produced by changes in the generative organs of the pregnant woman, however these changes act upon the blood. Having now discussed the essential condition of the nervous centres, upon which the disease depends I will now consider the

Causes proper.

These may be centric and eccentric, according to their action, whether it be directly upon the nervous centres themselves, or indirectly, being conveyed



from the peripheral nerves  
I Centric.

These may be intra-cranial,  
intra vertebral, or both. They may also  
exist as mechanical or psychical  
causes.

A Mechanical.

Any disease or condition  
producing pressure upon the cord,  
as for example meningitis, serous or  
bloody effusions &c, may so irritate it  
as to give rise to a convulsive attack.  
So too, cerebral or spinal hyperaemia  
may light up an attack by its influ-  
ence upon the excited excite motor  
centres.

Anæmia also may also be the centric  
cause of the disease. It may seem  
strange that this entirely opposite



conditions will occur exactly the same phenomena; but we <sup>must</sup> remember that these phenomena are the only means by which spinal excitability can express itself. In Tetanus we have spinal hyperaemia. How does it give its manifestations? ~~How~~ <sup>of</sup> convulsive action. In death produced by hemorrhage, we have, on the other hand, great spinal anaemia. How does this find expression? By exactly the same phenomena.

Besides these changes in the amount of the blood, I will refer again to the alterations in the character of the blood, above mentioned. These changes, whatever be their nature, certainly act as very powerful irritic causes in the production of Puqperal Convulsions. These blood changes, however, should be discussed as





ital, rather than mechanical causes

B. Psychological.

These are also denominated "emotional" causes. Any violent emotion of whatever character, such as fear, grief, anger & shame, may exert its power over the system, by calling forth an attack of convulsions. For example; Statistics teach us that puerperae are most liable to eclampsia. These statistics are mostly obtained from the records of large European hospitals; and we know that a large proportion of hospital-delivered puerperous women are unmarried. It, therefore, seems to me that the shame and removal of such patients must play a very prominent part in the causation of the disease. So also, instances



are on record, where the sudden return of  
a long absent husband or lover, has given  
origin to the convulsions.

## II Eccentric Causes.

These are often so  
slight and obscure as to entirely escape  
the observation of the accoucheur.

### A Generative tract.

Any abnormal irritation  
of the patient's generative organs, either before  
or after delivery, may, by reflex action on  
the already excited nervous centres of the  
cord, be the determining cause of the  
convulsive seizures. Clampsia is most  
common with head presentations, where  
we have the large presenting part of the  
child pressing upon and irritating the  
maternal soft parts; also in primiparae,  
where the tissues of the mother are more



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rigid and unyielding. After the birth  
of the child, retention of the placenta,  
the presence of large clots in the uter-  
us or vagina, and other accidents  
requiring manual interference by the  
practitioner are often productive of  
Eclampsia. Excessive amount of liquor  
amnii, and too frequent vaginal  
examinations, are also to be consid-  
ered as remote causes of the disease.  
In short, any irritation in the genera-  
tive tract may occasion the attacks.  
In a case of Eclampsia which I wit-  
nessed some months ago, the woman  
had suffered from post partum haem-  
orrhage, and the disease seemed to  
be dependent upon the presence of  
large blood clots in the uterus  
and vagina, as well as <sup>the</sup>



introduction of any fluid with ice into the uterine cavity.

B. Menstrual Cause.

The existence of indigestible food in the stomach and intestines, and the presence of large amounts of fecal matter in the bowels, may so irritate the peripheral gastric and intestinal nerves, as to prove the exciting causes of convulsions. Whenever we have premenstrual irritability of the spinal nerve centres, these causes will exert great power. An example, perhaps the most common <sup>cause,</sup> of infantile convulsions is the presence of undigested food in the stomach.

C. Bladder.

The distension of this viscus with urine is to be regarded as an





portant in the etiology of the disease.

D. Osteophytes, tumors &c.

Pressure upon the brain, by these ~~long~~ growths within the cranium, may act as <sup>an</sup> eccentric cause of Eclampsia. We see, therefore, that the brain may be either active as a centric or eccentric agent in the production of the attacks.

E. Conditions of the brain produced by the convulsions themselves.

Changes in the brain, such as apoplexy, serous effusion &c, may be produced by spasm of the cervical muscles, spasm of the glottis and other phenomena of the convulsions; and these changes, so induced, may exist as "secondary eccentric" causes of Eclamptic seizures.



## Pathological Anatomy.

Post mortem examinations yield but little information as to the nature of the disease. But, frequently, serous effusion into the ventricles of the brain, or into the arachnoid cavity, is detected after death. So also, appearances of apoplectic congestion and effusion are seen. But all these changes might be observed after fatal convulsions of any character, and, therefore, are not to be reckoned as of any special value in the elucidation of the pathology of Chlorosis.

Almost constantly, congestion of the internal organs, as the kidneys is manifested by autopsies; but there is no internal lesion which can be considered as peculiar to the disease.



## Symptoms.

The symptoms are ordinarily divided into three classes, viz: those which are premonitory of the convulsions, those observed during the paroxysms, and those manifested in the intervals between the attacks.

### I Premonitory symptoms.

These exist in nearly all cases, though, in some rare instances, they may escape observation. Quite often when observed, their importance is not recognised by the recumbent. By far the most common & striking of these symptoms, are those relating to the cerebro-spinal axis.

Intense cephalalgia is generally present, and is beautifully limited to one side of the head. Afterwardness observe



disturbances, more or less marked, of the intellectual and sensorial faculties. The patient becomes restless, irritable, and seems to tread impending danger. At times, she appears dazed and is apparently unconscious of what is going on around her. She seems lost in abstraction. She suffers from dizziness, desquama, and emesis. A most characteristic symptom, and one which exists in a large majority of cases, is violent and persistent pain in the epigastrium.

The group of symptoms just enumerated certainly point with great distinctness to the essentially neurotic character of the disease; and when carefully studied do much to determine its true pathology.





Subcutaneous oedema, particularly of the face is frequently seen, when albuminuria is present.

If the patient be plethoric, the pulse is found to be exceedingly hard and throbbing; the face flushed and hot. While if she be spanaemic, the pulse is small and contracted, the face pale and cold.

II Symptoms during the attacks.

The phenomena now observed closely resemble those seen during a severe epileptic paroxysm. The attack generally occurs suddenly. At first there is a short interval of tonic spasm, which however, soon gives way to clonic contractions of a violent character. The contractions as a rule commence in the face.



muscles. All the muscles of expression are affected, so that the face assumes a terrible appearance. The eyes are turned up so as to leave only the sclerotic visible; while around the mouth we observe a condition, which closely simulates the "risus Sarcoticus" of Stames. The tongue is pushed forward and is often lacerated by the teeth. Froth issues from the mouth. The arteries of the neck will be found to throbb furiously; the neck is greatly swollen and distended; while its veins stand out like great whip cords upon the surface. The entire face assumes a deep, livid, cyanotic hue.

The muscles of the trunk and extremities soon become affected, and undergo rapid convulsions. The involuntary muscles partake of the general disorder.



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We notice a sudden suspension of breath-  
ing, which is soon followed by irregular  
and accelerated respiratory efforts.

Spasm of the laryngeal muscles often  
occurs, therefore respiration is attended  
by a peculiar whistling sound.

During all this time the consciousness  
is entirely lost, and she is wholly  
devoid of sensation. Relaxation of the Sphincter,

The attacks, as a rule, continue for  
from two to five minutes, though

Cazeaux has recorded one case in  
which they lasted for twenty.

The number of paroxysms and the inter-  
vals between them, vary according to the  
severity of the case. So also, the duration  
of the attacks. The more severe the disease,  
the greater the intensity and duration  
of the attacks, and the shorter the interval.



### III Symptoms between the attacks.

If the intervals be long, the patient, as a rule, recovers consciousness. Her intellect, however is cloudy. She is utterly ignorant of what has transpired, and is at a loss to understand her true condition. More or less coma, due to cerebral congestion, ordinarily supervenes after an attack. If the patient can be roused at all, she soon relapses into stupor. Her condition sometimes resembles the comatose of a dynamic fever. In severe cases, death may occur during coma. After the entire cessation of the convulsions, the patient gradually regains her intellectual faculties. She then complains of great prostration.

Relation of the attacks to labor.

The disease is





very rare prior to the viability of the child, though if it does occur, abortion is the common result. The attacks occur most commonly during labor. The uterus often shares in the general convulsive action, and the child may be born while the attentions of the accoucheur are devoted solely to the mother. The convulsions appear more frequently after, than before, parturition, the interval varying from an hour to several days.

### Diagnosis.

After a careful consideration of the symptoms as given above, there should be no danger of confounding this disease with any other, and therefore, I will not rehearse its diagnostic signs and symptoms.



## Prognosis.

The mortality of this disease has been greatly diminished in recent years. More rational views of its pathology and therapeutics, have done much to rid it of its dire results. In spite of all this, however, it is still a very fatal disease. Probably the mortality at the present day is about fifteen per cent. The prognosis in each case must be guided by the length and severity of the attacks, the condition of the patient between them &c.

Death from asphyxia, produced by the prolonged suspension of respiration, may occur the paroxysm. It is possible also, that the heart may become involved in the general convulsive contraction, and thus death be produced



In the advanced periods of the disease, death may occur from exhaustion.

Of course, all these possibilities should be carefully taken into account in the prognosis of any individual case.

As regards the child, the disease is a dangerous one. Davis records ten deaths out of thirty-six children. Copeland mentions several cases, in which the unborn child was attacked with convulsions. The child, even when healthy at birth, may subsequently <sup>suffer</sup> from the effects of the disease.

Treatment.

General blood-letting is a remedy of prime importance, but it requires care and discretion in its employment. When we have evidence of cerebral congestion and great



vascular tension, when the face is of a deep, livid, & dark color, when the neck is greatly distended and its vessels are seen to stand out and throbb furiously, venesection often works like magic. The amount of blood drawn should be regulated by the effect produced; because bleeding when carried to excess, will produce spinal anaemia, which, <sup>itself</sup> as we have seen above, is frequently a cause of the convulsions. Local depletion is a remedy of value.

When we have evidence of the kidneys being <sup>profundely</sup> involved, a few cups applied to the loins will often be productive of good results. In some cases, leeches may be applied to the back of the neck.

The continued use of cold to the head,





and along the spine should be employed. As a temporary means of preventing cerebral congestion, compression of the carotids during the paroxysms, has been recommended.

In all cases, the condition of the bowels and bladder should be carefully ascertained, and if distended they should be relieved by the proper means. This last rule is a most important one, because there are many cases on record, in which ~~the~~ distension of the bladder seemed to be the sole cause of the convulsions and when that was relieved the attacks immediately ceased.

Of the strictly medicinal means employed in the treatment of Cholera, by far the most important are the



antispasmodic remedies.

Chloroform is an agent of supreme value. It may be given almost continuously, keeping the patient more or less completely under its influence; or it may be used only when we have indications of the immediate onset of an attack, and continued until the paroxysm has ceased. The latter method is the one now commonly followed. When chloroform is used thus intermittently, we should always supplement its action by that of chloral. This last agent has great power and serves, as it were, to maintain the soothing influence of chloroform upon the excited nervous centres. It may be given alone or in combination with the bromide of potassium which is itself of great value as an antispasmodic.



If the patient can swallow she may be given from twenty to thirty grains of chloral with from thirty to forty of the bromide, every four or six hours, pro re nata. If these remedies cannot be taken by the mouth, they may be given per rectum in doses <sup>two or</sup> three times as large.

The hypodermic use of rather large doses of morphia is often attended by good results. Various other remedies, supposed to have some influence over the disease, have been employed from time to time, but they are of uncertain value.

During the paroxysms the patient should be so restrained as to prevent injury to herself. For example, the handle of a spoon wrapped with a towel, should



be inserted between the teeth, to prevent laceration of the tongue.

### Obstetric management.

Some authorities advise completion of labor as soon as possible; others, that the case be left entirely to Nature. No general rule can be formulated in his regard. The attendant should be guided by the circumstances of each case. When the paroxysms occur during parturition, the progress of the labor is often perfectly natural and attended of itself by little or no danger, either to the mother or child. Obviously, in such cases, ~~no~~ interference is wholly unnecessary. In most cases, however, rupture of the membranes and evacuation of the waters is of great advantage. If the os is partially dilated, and somewhat





~~rigid, Barnes' legs may be employed~~  
 Version may or may not be performed,  
 according to the exigencies of the case.  
 If the labor, from any cause whatever, is  
 evidently a source of increased danger  
 to the mother or child, more active inter-  
 ference is necessary. We should always  
 recollect, however, that active interfe-  
 rence may prove a source of great  
 irritation, and thus act directly as  
 an eccentric cause of the convulsions

The question to be decided in each case is:  
 Will interference add to or diminish  
 the irritated state of the generative tract?  
 If the former, the case should be left alone;  
 if the latter, active means to complete  
 labor are not only admissible, but are  
 demanded. If, therefore, the artificial  
 completion of labor is likely to be



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greater source of irritation than leaving  
the case to Nature, interference is unjusti-  
fiable.

After this necessarily crude and inac-  
curate account of Puerperal Eclampsia,  
I wish to urge the importance of the  
disease to every member of the medical  
profession. Certainly no task devolving  
upon Man, can demand more know-  
ledge and skill, greater prudence  
and sagacity, more earnestness and  
entire devotion to duty, than the  
professional care of a woman, who  
in the fulfillment of the highest  
function of her existence, has fallen  
victim to this terrible disease.



Thesis  
The Good and True

A. J. [unclear]  
[unclear]



# Typhoid Fever.

Synonymes - Slow Nervous Fever -  
Enteric Fever - Abdominal Typhus

Definition - Typhoid is a continued fever, characterized by the presence of rose-colored spots, and specific lesion of the small intestine, and solitaire glands.

Etiology - The belief that Typhus is a simple, and Typhoid a complicated form of the same disease; that in Typhoid, there are not only changes in the blood which are met with in Typhus; but are also changes in other organs directly concerned in the formation of the





blood, in the intestinal and mesenteric glands, seems to lack all foundation. 'Tis true there is a certain resemblance between the symptoms of the two diseases; but this is not perfect; hence it is not justifiable to regard the changes of the blood in the two diseases as being the same, or that the poison producing the one is the same as that causing the other. While the fact that patients with varioloid often infect others with variola, and vice versa, shows us that variola poison and varioloid poison are identical;

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the fact that that persons infected by patients with Typhus always have that disease, never Typhoid, shows us that the poison inducing the former is not identical with that of the latter, and that, in spite of similarity of symptoms the two diseases are of a different nature. The contagion of Typhoid is not so intense as that of Typhus fever. Some authorities assert that if at all contagious it is very feebly so. It appears that nurses and physicians

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are more liable to become infected by inhaling the fetid odor arising from the dejections of the patient than by coming in direct contact with the patient himself.

Persons living in remote territories, and where no cases of Typhoid have occurred for years, and where not the slightest suspicion of a contagious origin exists, have become the subjects of this dreaded malady; hence the miasmatic origin of Typhoid is rendered probable. During vegetation, and decomposed animal matter

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seem to be conditions favorable to the origin and development of this poison. The germs are principally conveyed into the system by the air passages, and absorbed by the lungs, and thus taken into the blood; but there are well authenticated cases where persons have become effected by drinking water from a well communicating with a privy. Vitiating water, then may be the means by which the poisonous germs are introduced into the system.





The soil of large cities always contains quantities of decomposed and putrid animal matter; therefore cities are especially favorable to the development and increase of the germ by whose influence the fever is brought about. Moisture of the soil has more or less influence over the decomposition of animal substances, and consequently effects the production of Typhoid germs. Persons living in a locality where Typhoid fever has prevailed for an indefinite length of time, are not



so liable to be effected by the Typhoid poison as those who have recently made this place which is peculiarly liable to the disease the-ir home. Infants and old persons, according to statistics, are rarely attacked by Typhoid; middle aged persons are most liable to it; males are attacked oftener than females; strong, well-nourished persons oftener than weak, badly-nourished ones, and that the disease is proportionately more frequent among the poor, than among



the well to do classes. Tuberculous patients are rarely attacked by this disease.

Pregnancy gives almost absolute immunity to it. Variations of hygienic laws may induce it. We may say, and upon good authority, that the Typhoid fever causes are obscure.

### Symptoms and Course. -

Premontory symptoms of an indefinite nature often precede the evident commencement of the disease, and although at the time do not enable us to determine or identify the

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malady; they do often assist us in distinguishing Typhoid fever from other affections that begin suddenly, without premonitory symptoms. The patient experiences general illness, loss of appetite, indigestion, lassiness, headache, pains in the limbs, which have a tendency to wander, and are sometimes considered rheumatic.

The disease is itself ushered in by a chill. The tongue becomes furrowed and dry. The patient is very sensitive in the right iliac fossa. From day to day the temperature increases.





The pulse ranges from 110 to 115 beats per minute. In three-fourths of the cases we find rose-colored spots present. Sudamina, or sweat vesicles are met with in a great many cases. Pruritus, or picking at the bed clothes is seen with many patients. We have one degree of rise of temperature to ten of the pulse. In early stages we have epistaxis. Insomnia often gives rise to much trouble.

The urine often contains albumen. Coma may be present. Hemorrhage from the bowel indicates perforation of the intestine. A clammy sweat generally



indicates the approach of death.  
Typhoid fever commonly lasts  
from three to four weeks.

In this disease there are a great  
many variations. There is great  
thirst, no appetite, and many  
patients complain of a slimy or  
bitter taste in the mouth.

The epistaxis met with in the  
first stage, partly overcomes the head-  
ache, and thus relieves the sufferer.  
About the end of the first week  
enlargement of the spleen is  
ordinarily manifest. As the disease  
progresses the dizziness and ringing  
in the ears increases. The patient  
becomes excessively weak; he can



not sit up alone; and if the bed be inclined he slides down towards the foot of it as often as he is lifted up. About the beginning of the third week there is apt to be an increase of the temperature and of the pulse.

Fatal termination is most common about the third week.

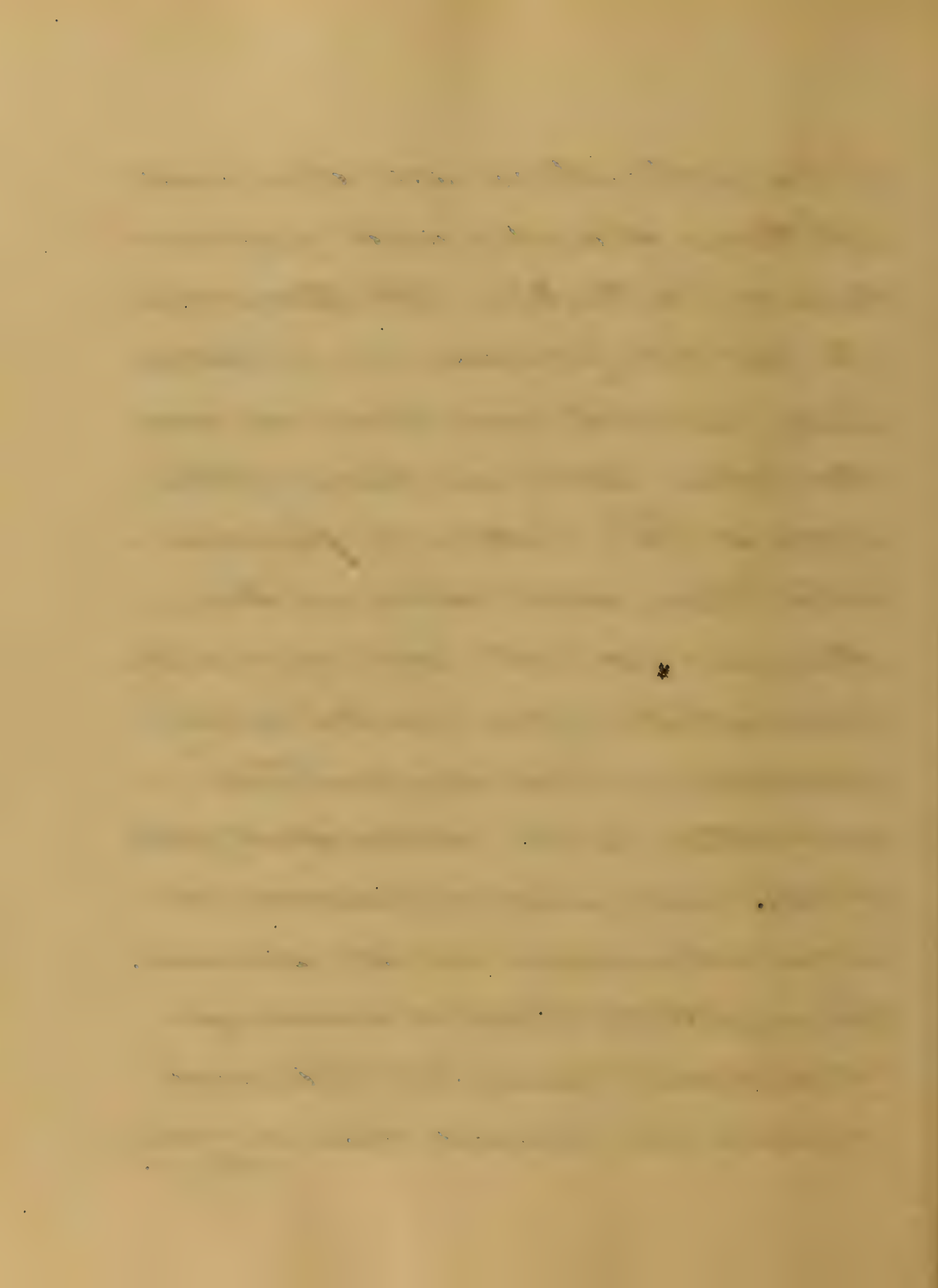
The more respiration is affected the sooner and more readily paralysis of the heart occurs.

### Anatomical Appearances. -

Brain diseased, kidney affected, spleen enlarged and softened. These changes are not necessarily <sup>active</sup> characteristics of this fever.



Characteristics are diseased  
solitaire glands and perfora-  
tion of intestine. Solitaire gland-  
s in old persons are reduced,  
hence can not find them in some  
developed state as those of the  
young. The bodies of persons  
who have died early in the  
disease do not appear greatly  
emaciated; rigor mortis is very  
marked; we find hypostatic  
congestion in the dependent parts  
of the body, and occasional bed-  
sores commencing over the sacrum.  
The nostrils have a smoky ap-  
pearance, and the teeth and  
gums are covered with a black  
coating.





There are often sudamina, or sweat vesicles on the skin. When the body is opened the muscles present a very dark-red, hard, and dry appearance. The heart and large vessels are found filled with thick dark-colored blood, which contains little, loose, blackish-red coagula, rarely a small amount of discolored fibrin. After the Typhoid has continued sometime the blood is consumed, and becomes poor in albumen and blood-corpuscles. The brain when examined is sometimes found to contain more, sometimes less blood, and varies in consistence. In all cases changes are



found in the respiratory organs.

There are always signs of extensive catarrh, even in the smaller bronchi, marked by dark redness of the mucous membrane, and scanty, tough secretion. The lungs are found in a more or less congested condition.

In some cases we find lobular pneumonia. The bronchial glands are swollen, vascular, and sometimes have a medullary appearance.

The heart is found to be in a state of relaxation, its muscles pale, or of a dirty red color. The endocardium and lining membrane of the vessels are infiltrated red, and discolored.



The spleen is greatly enlarged, occasionally twice, or even five or six times its natural size, its capsule is tense, its parenchyma of a dark violet, or of a blackish red color. In rare cases we find the capsule of the spleen ruptured and the blood poured forth into the peritoneal sac. The mucous membrane of the stomach sometimes appears to be dark red, from injection of the smaller vessels and relaxed from infiltration after death. The most important changes occur in the small intestine. Kowitansky divides these changes into four stages.



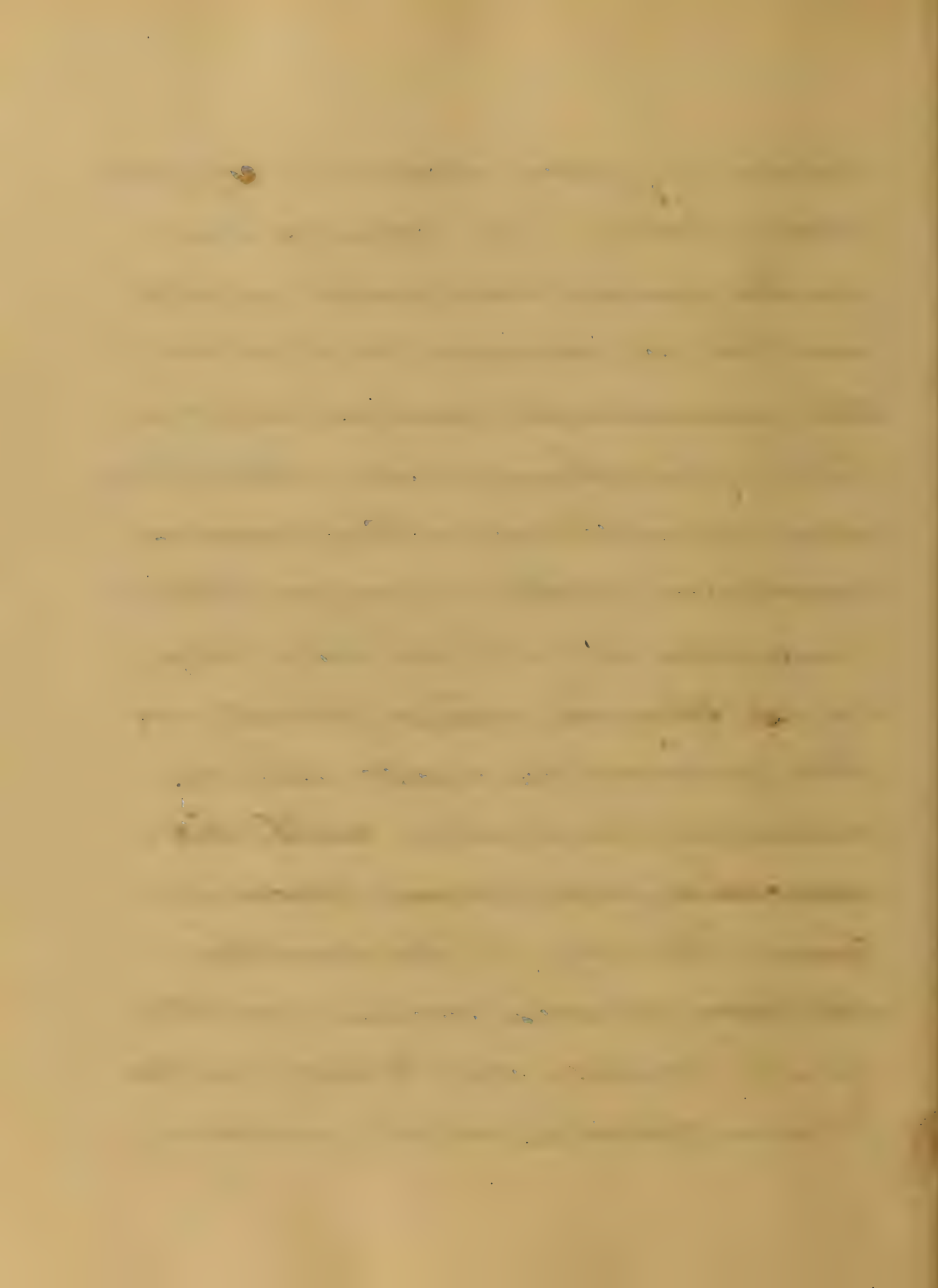
In the first or congestive stage the mucous membrane of the small intestine is the seat of great hyperaemia. It appears swollen, relaxed, cloudy, covered with mucous and epithelial masses. The mesenteric glands are moderately swollen, soft, vascular and dark-coloured.

In the second stage, or that of infiltration, the general redness and swelling of the mucous membrane increases, and concentrates on the parts around the solitary and Peyer's glands in the lower part of the ileum. In these tissues there are very important changes,





which are pathognomonic of Typhoid  
more or less of the glands and  
parts around them, swell so as to  
rise half a line or a line above  
the surrounding mucous membrane.  
These prominences are rather hard,  
and show through the mucous  
membrane with a gray or yellowish  
- red color; they have flat or steep  
edges; they are seated firmly on  
the muscular coat; and are  
intimately connected with the  
mucous membrane covering  
them. The size of the swollen  
solitary glands varies from that  
of a millet-seed to that of a pea.  
Peyer's patches, on the contrary,



form patches from the size of a silver grochen, to that of a dollar; they are generally oval in shape, and in the vicinity of the valve they usually coalesce, so that at this point they usually cover a strip of intestine several inches long. On the cut surface it looks as if the diseased intestinal glands were infiltrated with a soft, grayish white, or pale reddish cerebroid mass, and although it has of late been found that in Typhoid disease the intestinal glands are not infiltrated with amorphous exudation, but that there is an increase



of their cellular elements, which, even under normal circumstances are peculiar, still the expression "medullary infiltration" has almost universally been preserved.

Occasionally the degeneration extends beyond the follicles, and there is a "medullary infiltration" of the connective tissue of the mucous membrane in their vicinity, a cellular neoplasm originating from the connective-tissue corpuscles. In this stage the mesenteric glands are smaller to the size of a bean, or a hazel-nut; are of a grayish color, and quite hard.



On the third stage or that of relaxation, softening and breaking down the changes in the affected glands vary greatly in different cases. Not unfrequently the process becomes retrogressive, without the occurrence of destruction of the wall of the follicle, or of the mucous membrane covering it: the swelling of the glands subsides, while their contents are reabsorbed after the cellular elements have been destroyed by fatty metamorphosis. In other cases the covering of the follicles is changed to a fatty, fibrinous slough,





colored yellow by the faeces.  
This slough sometimes extends  
over the whole of the gland, so  
that its form and size correspond  
to those of the plague, sometimes  
it is limited to part of the  
covering, and the slough has  
an irregular, angular, or  
roundish form. In still other  
cases the individual glands  
composing Dever's patches,  
rupture, and empty their  
contents outwards, without  
the covering sloughing. As a  
result of this the surface of  
the plague looks as if full  
of holes, or has a net-like



Appearance. The mesenteric are most swollen in this stage; some of them attain the size of a pigeon's, or even of a hen's egg.

On the fourth stage, or that of ulceration, the sloughs formed on the plaques or solitary glands are either thrown off in mass, or, after precedent disintegration, and a loss of substance, a typhoid ulcer remains. As soon as the slough is detached the swelling of the mesenteric glands begins to subside, but they long remain larger and more vascular than normal.

There are however, many deviations

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from this customary course of  
the disease on the mucous  
membrane. Typhoid fever  
may be known from Typhus  
in the following ways. In Typhoid  
a rose-colored rash appears,  
in Typhus the rash is of a  
mulberry color. Typhoid usually  
attacks young persons (between  
ages of 15 and 45 years), Typhus  
attacks old persons. In Typhoid  
there is ulceration, in Typhus  
there generally is no ulceration.  
Prognosis. Typhoid fever the  
is not by any means necessarily a  
fatal disease. In one case in  
twenty peritonitis is met with.

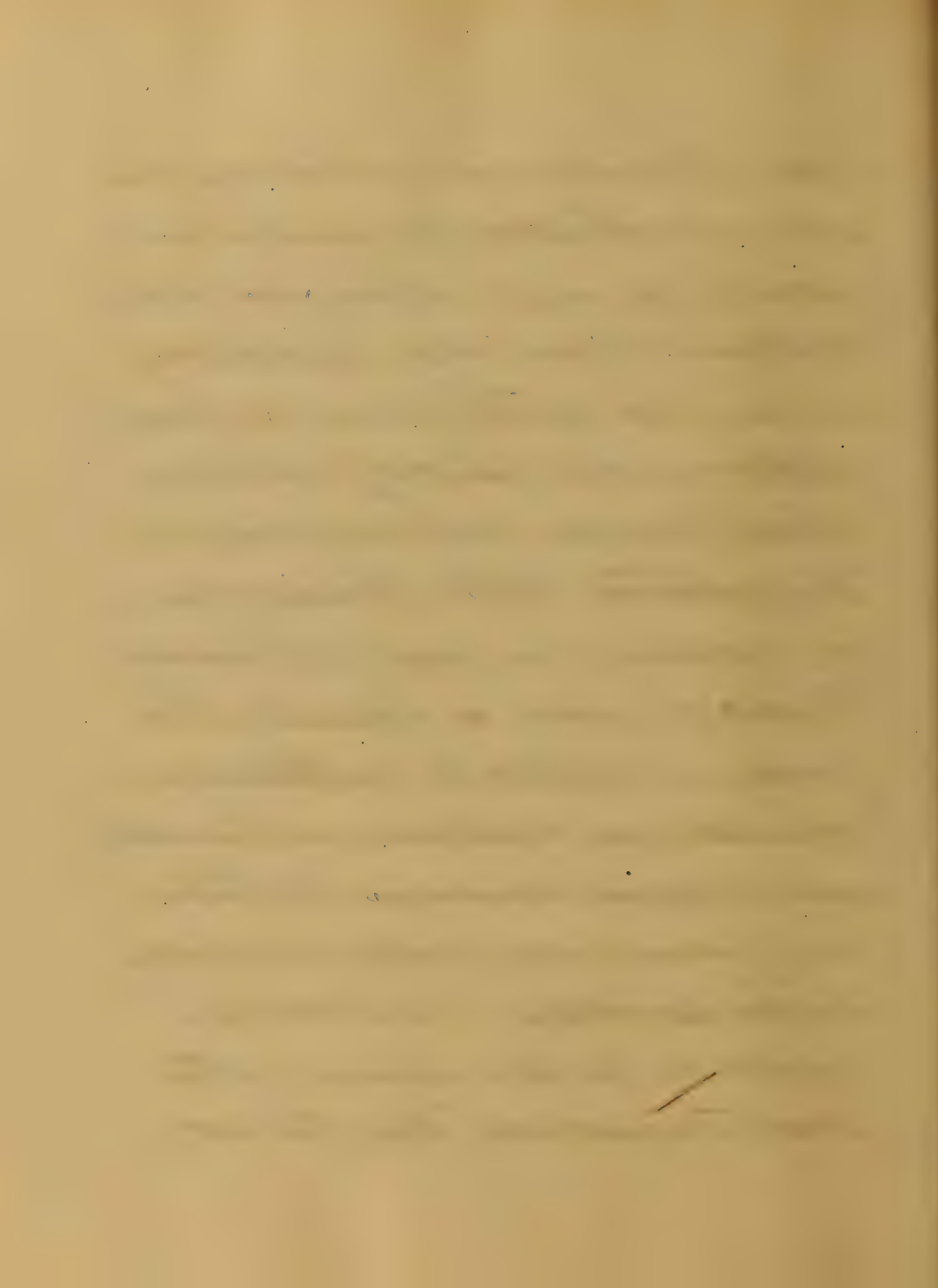


and this complication of course  
adds to the danger of the patient.  
Treatment. - In Typhoid fever  
the treatment is both expectant and  
active. If the bowels be con-  
-stipated we must clear them in  
the first, not the last stage.  
A mild aperient should be  
administered. Castor oil, a Seid-  
-litz Powder, Rhubarb and  
Magnesia will answer every  
purpose. A loaded stomach  
must be relieved by an emetic.  
Care must be taken not to  
repress the patient.  
The tendency from the first is  
downward, hence must stimulate



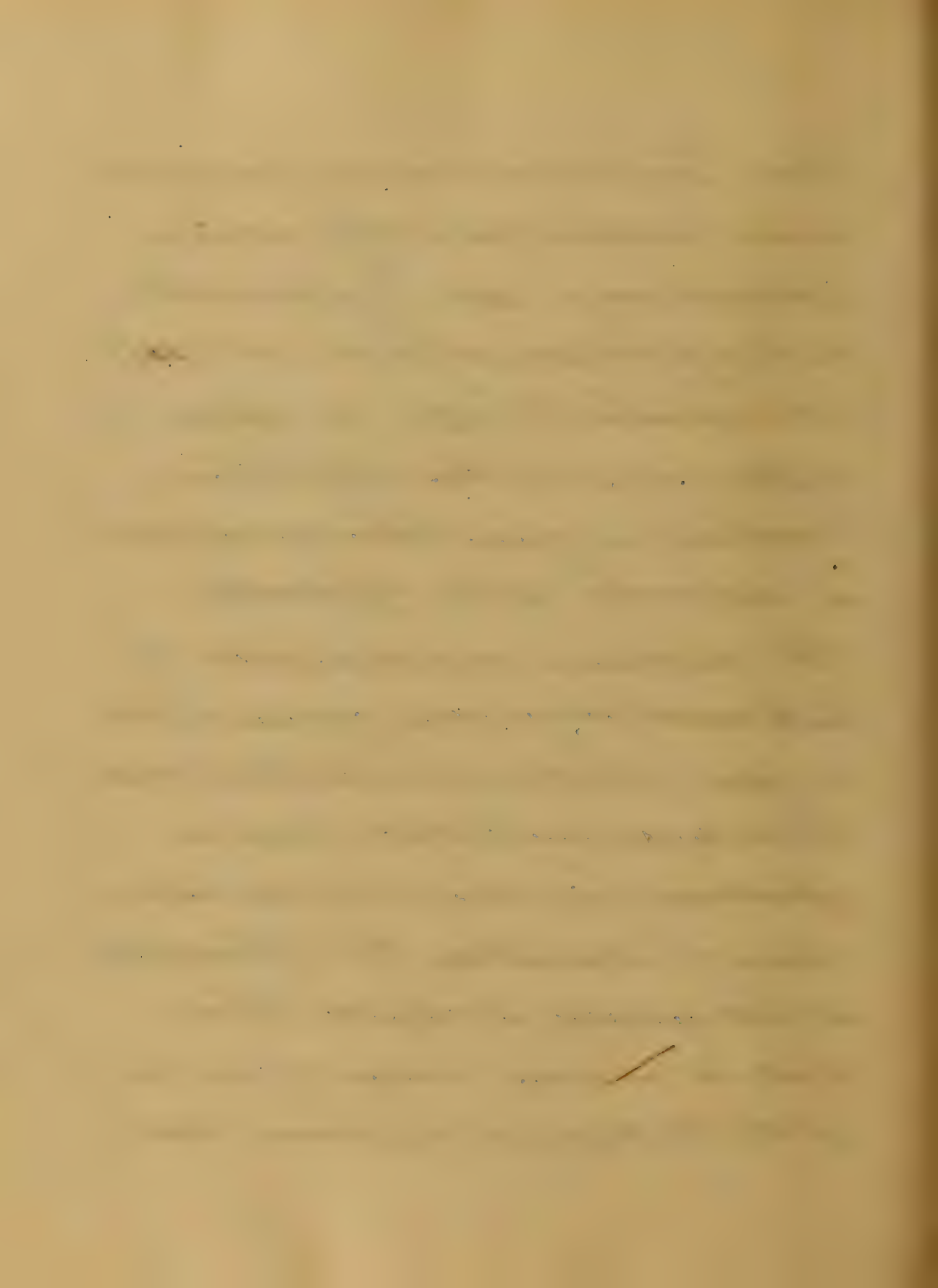


Wine, Brandy and Whiskey often  
serve as admirable remedies to  
give life and strength to the  
sufferer. Wine when made by  
boiling two parts of milk, and  
adding one part of wine is  
often found very beneficial to  
the patient. Milk Punch made  
by adding one part of Brandy  
to two of milk is equally as  
good. In febrile excitement  
crushed ice dissolved in the mouth  
and *Liquor ammonii acetatis*  
are found very useful in lowering  
the temperature. Wet cloths  
applied to the head often  
serve to reduce the heat.

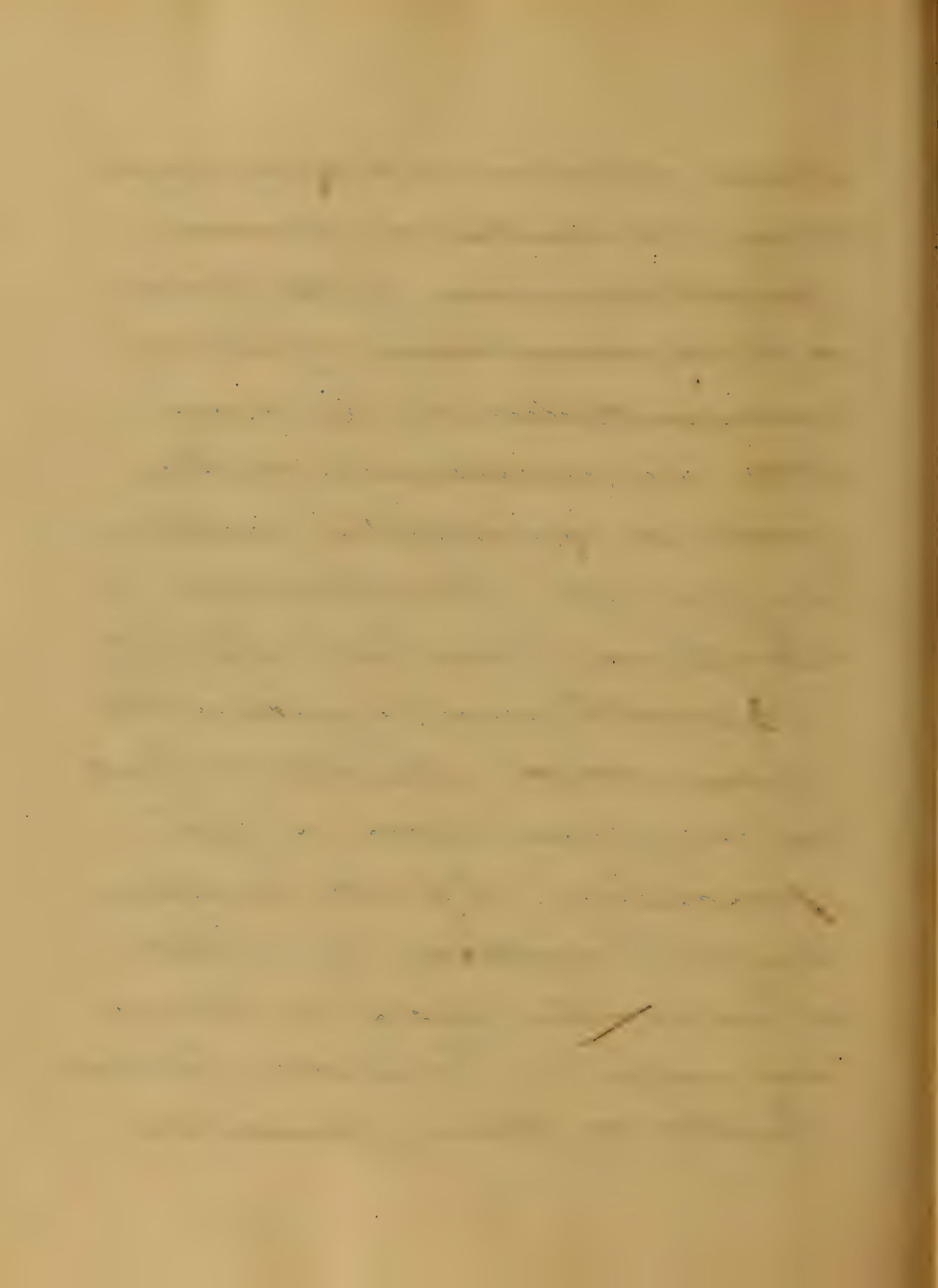


These <sup>cold</sup> applications should only be used however, when the skin is hot and dry. In Typhoid the hyperpyrexia is from  $105^{\circ}$  to  $107^{\circ}$ . Hutchins's Tincture of Bark is much given in this affection. Quinine is given because malaria is supposed to be present.

In mania accompanied by hot and dry skin, opium should be given combined with Blue-Mass. Red and dry tongue, pain in abdomen and so forth are indications of ulceration. Oil of Turpentine is best remedy to oppose this. Give it in doses varying from ten to thirty drops in emulsion with



Gum Arabic and Loaf Sugar  
Where peritonitis is present  
perfect quiescence of the bowels  
is to be maintained by the  
administration of Opium.  
The more the movement of the  
bowels in peritonitis greater is  
the danger. In diarrhoea of  
Typhoid fever Sub-nitrate of  
Bismuth may be given in ten  
grain doses. Acetate of Lead  
in one grain doses is often  
prescribed. Chalk Mixture  
and Tincture of Kino  
in teaspoonful doses are found  
very useful. Typhoid fever is  
treated on general principles.



Good food is of much importance. The lives of many patients have been saved by removing them to the open air, or by placing them in tents where they would have free access to the pure air.

