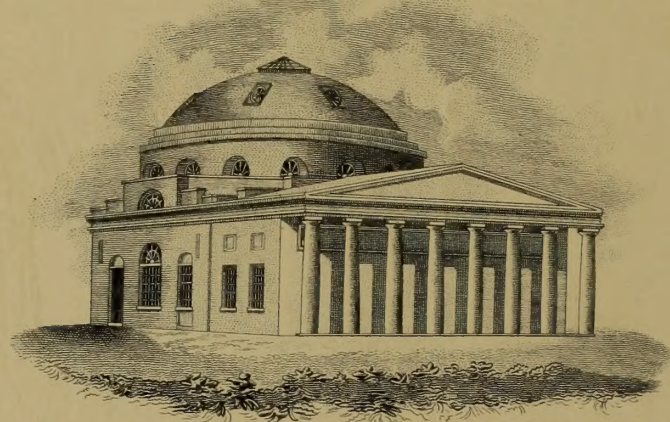


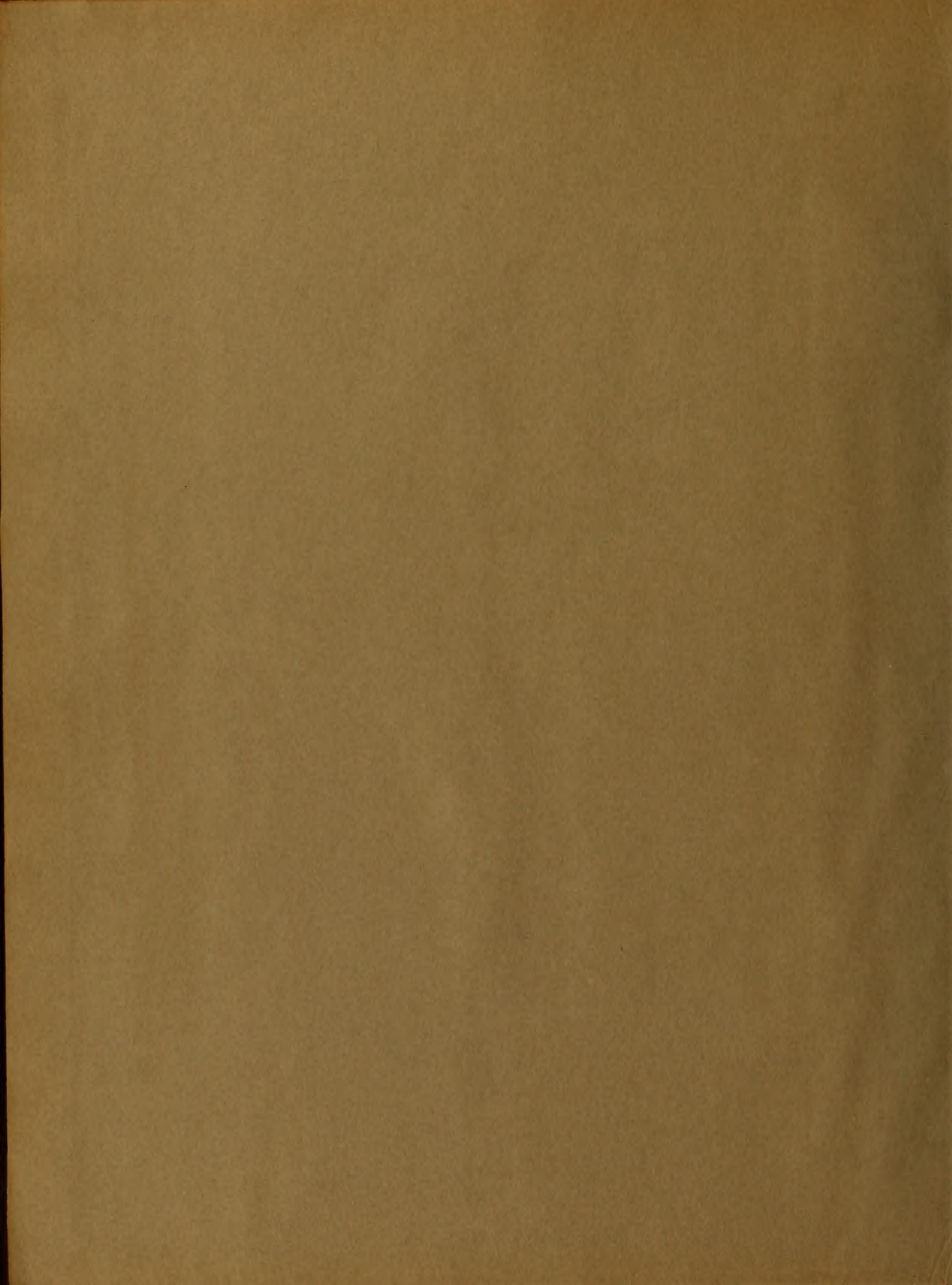
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University of Maryland



University of Maryland System

Early Doctor of Medicine and its role in Public Administration with
Cambridge University's records

The manuscripts described in this list of Cambridge Dissertations or an historical study were presented to the University of Cambridge for the Degree of Doctor of Medicine and/or Doctor of Public Health, between 1800 and 1850. The dissertations described were located together during the 1970's. The original titles of the dissertations listed below include subjects published and subjects given to authors' names which, in some years. To appear these names in a historical "Cambridge Table of Contents" has been included in the beginning of this volume.

The project team who investigated and collected the titles of dissertations were: Richard J. Bellon, Director of the University's Records Office, John M. Fink, Metadata Management Director, Angela Carpinone and Carol Harding Stearns, Records Division, Special Collections. Also: John and Megan Swift, Services Division.

These dissertations were digitized in 2011 and are available in the 19th Century Digital Archive (<http://www.library.utoronto.ca/19cda/>) and the University of Cambridge's website (<http://www.library.utoronto.ca/19cda/>).

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) and the Internet Archive (www.archive.org).

(CORRECTED TABLE OF CONTENTS)

UNIVERSITY OF MARYLAND

THESES

1867 (b)

Author	Title
Dudley, Samuel C.	Gastritis
Strother, Edwin F.	Effects of Cheerfulness on Health
Howard, Henry S.	Opium
Finley, Samuel C.	Pneumonia
Crawford, George B.	Rheumatism
Haefner, Gustavus A.	Pneumonia
Lawson, Lemuel S.	Development of Bilious Remittent Fever
Darling, Henry	Clinical Report
Green, Hugh R.	Typhoid Fever
Fowler, Allen	Asiatic Cholera
Bell, Daniel F.	Typhoid Fever
Wood, R. V.	Dysentery
Caulk, William	Melancholy
Baldwin, Silas	Anaesthesia
Marbury, William A.	Excrementitious Principles in the Causation of Disease
Magruder, Thomas L. C.	Scarlatina
Gerry, Elbridge H.	Development of the Osseous System
Cotten, Joe	Veratrundo Viride

Author	Title
Jones, George H. W.	Medicatrix Naturae
White, Alward	Respiration
Wilson, Iasiah B. B.	Typhoid Fever

UNIVERSITY OF MARYLAND

THESES

1867

Dudley, ^{Samuel} S. C.	Gastritis	24p.
Strother, ^{Edwin} E. F.	Effects of Cheerfulness on Health	27p.
Howard, ^{Henry S.} W. A.	Opium	35p.
Finley, ^{Samuel} S. C.	Pneumonia	38p.
Crawford, ^{George} Geo. B.	Rheumatism	28p.
Haefner, ^{Gustavus} S. A.	Pneumonia	35p.
Lawson, ^{Lemuel} L. S.	Development of Bilious Remittent Fever	32p.
Darling, Henry	Clinical Report	30p.
Green, Hugh R.	Typhoid Fever	24p.
Fowler, Allen	Asiatic Cholera	18p.
Bell, ^{Daniel} Dan F.	Typhoid Fever	22p.
Wood, R. V.	Dysentery	24p.
Caulk, ^{William} Wm.	Melancholy	17p.
Baldwin, Silas	Anaesthesia	27p.
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Gerry, ^{Elbridge} E. H.	Development of the Osseous System	24p.
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Jones, ^{George H.} G. N. W.	Medicatrix Naturae	29p.
White, Alward	Respiration	24p.
Wilson, ^{Isiah} Y. B. B.	Typhoid Fever	14p.

1842

THE

MEMOIR



AN

Inaugural Dissertation

ON

Gastritis

SUBMITTED TO THE EXAMINATION

of the

Provost, Regents and Faculty

of

PHYSIC,

of the

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

Doctor of Medicine,

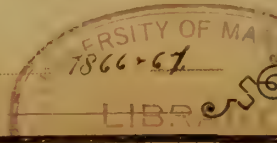
by

Samuel C. Dudley

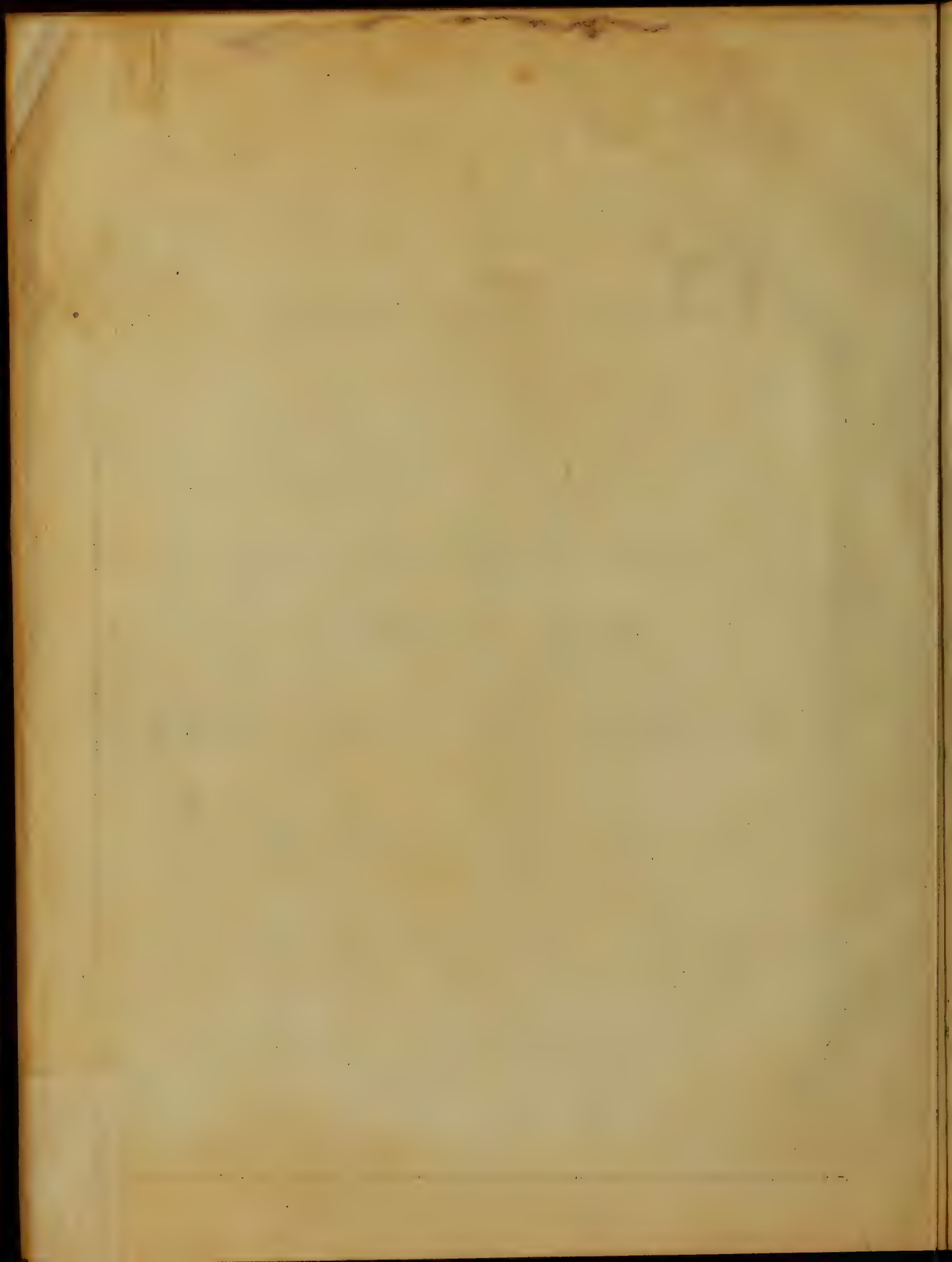
of

State of Maryland,

Session Fifty Ninth.



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Castilla

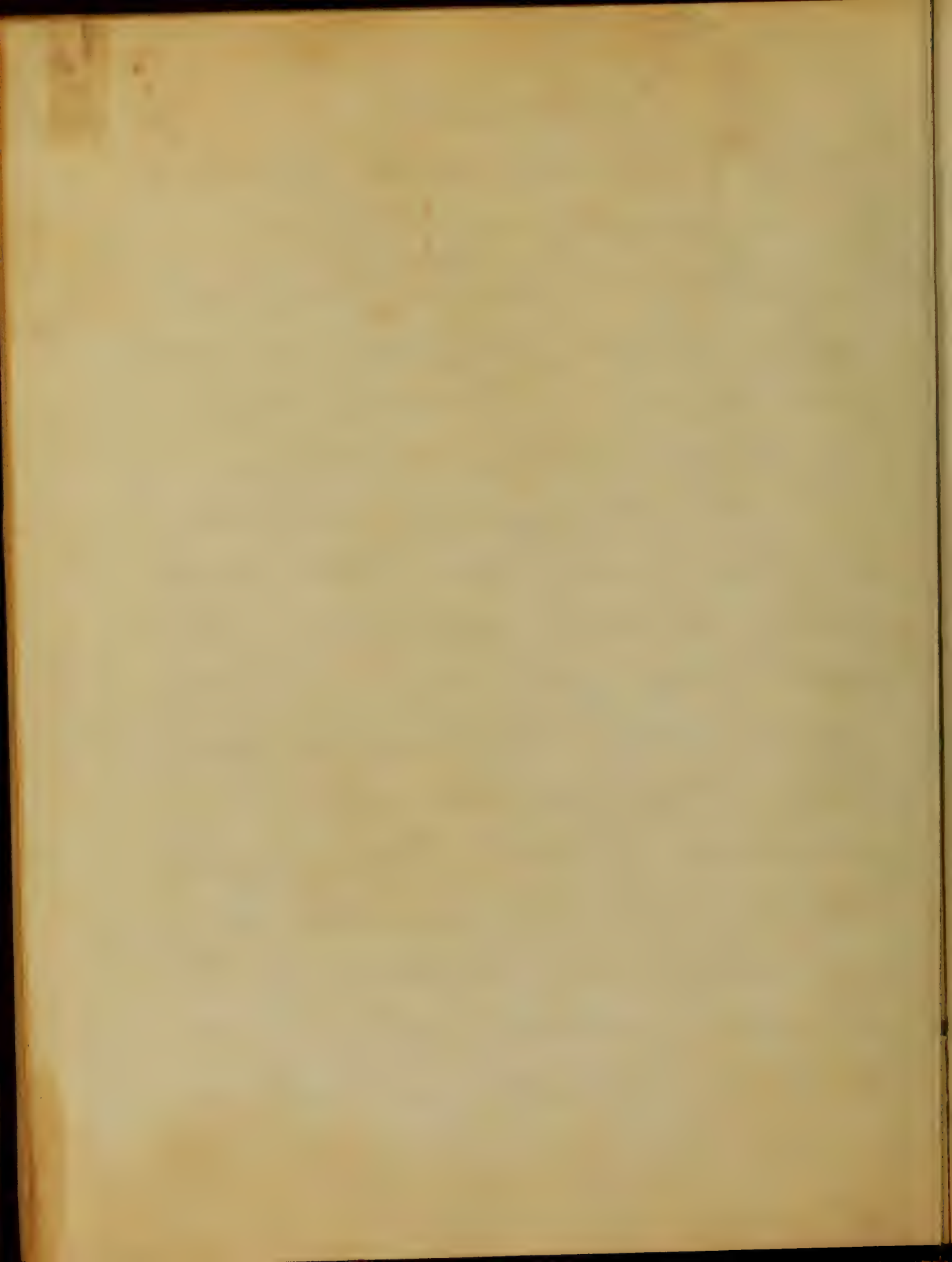
Castilla

Castilla



Gravitation

As it is necessary in an account
of the gravitating bodies to make a
description of them, & of the
many interesting subjects connected
with the study of gravitation, I shall
in this dissertation of the gravitation,
I shall also make an attempt to explain
it, by the Newtonian method, two general
forms, the first and second, the
latter being often met with in
practice while the former is rare.
The various phenomena and the
sublimity of nature, & the
idea of the nature of gravitation in
the theory, the gravitation
is seldom exclusively affected except
in case of great particularities in



Which disease is often inflammation
of that sort, rapidly changing, & is
acute & fatal, & is often very much
attended to find in our own observation
how often the stomach & bowels
of inflammation are also the organs
most nearly connected with it, & have
been examined in the most delicate
It is readily recognized by the presence
of severe pain at the pit of the
stomach with a sense of heat or
burning and considerable oppression, nausea
and vomiting, the pain is increased
by external pressure and by a deep
inspiration, and is often associated
in the case of vomiting, The gastric
substances are at first found in large



and afterwards like a mucus and is
often more or less tinged with blood
there is an anxiety and oppression
of spirits with weakness, sinking and
a peculiar and striking prostration
of strength. The thirst is intense and
the patient is constantly craving for
cold water, though if taken too freely
it produces uneasiness and oppression
by the distension of the stomach and
is frequently immediately rejected.
The tongue is at first smooth at
the middle and back part with
a whitish fur, its tip & sides are red,
but sometimes it is red, smooth, dry
and without fur from the Commencement
The pulse is at first tense and is weak



The patient is not particularly ill, the eye is not
 much affected, the head is almost entirely
 quiet, and unless the patient is
 the inflammation is not as they
 are looser than in death, the patient
 lies on his back is generally very quiet
 and well, cheerful, with an expression
 of face indicating anxiety and distress.
 The admittance of air, circulation
 languishes, respiration becomes more
 and more difficult and harsh.
 Cruciate the sufferings of the
 patient is a tedious standing from
 a few hours to five or six days.
 The prognosis of the death character
 is rather unfavorable, it depends
 somewhat on the probable circumstances



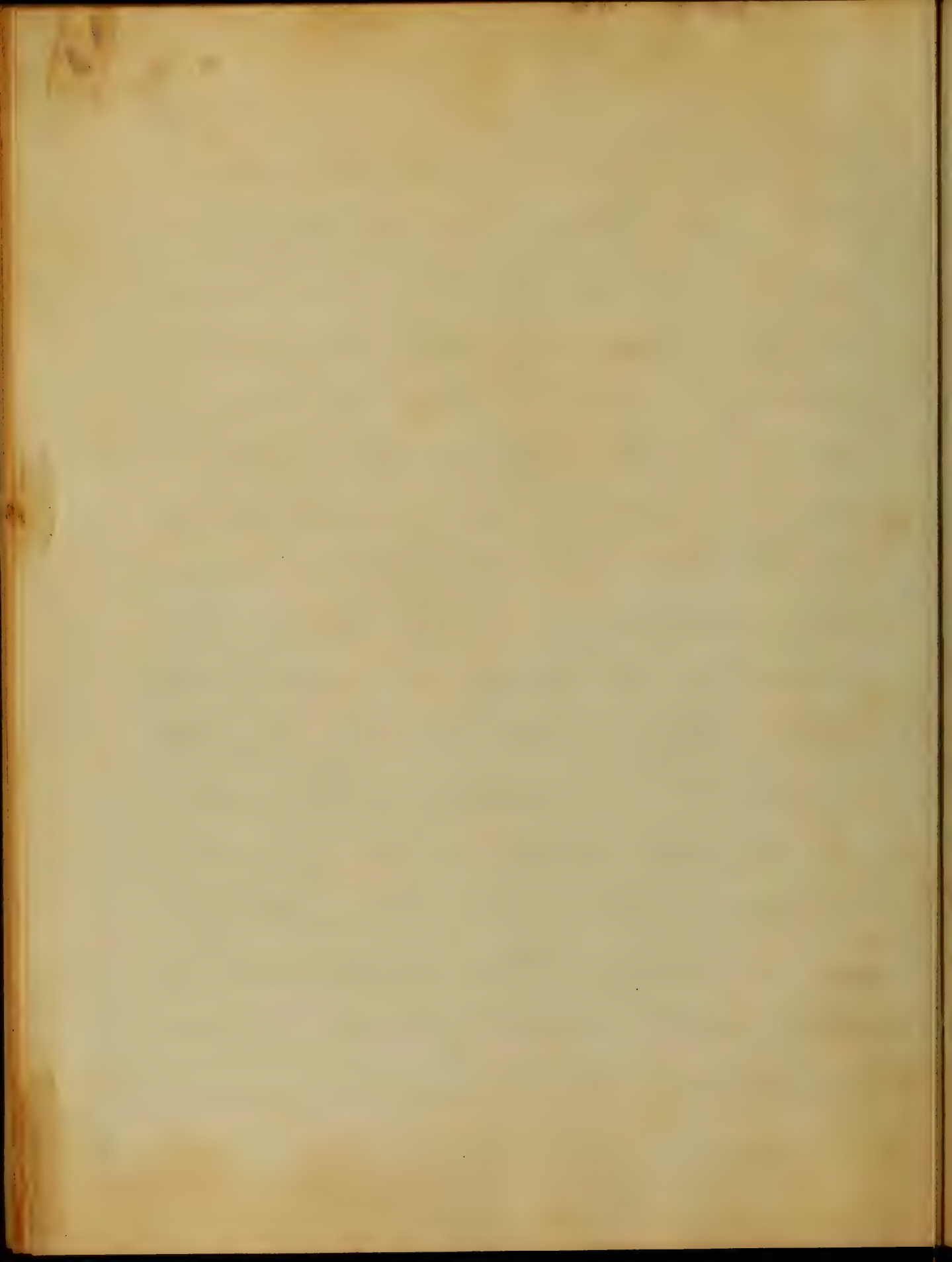
has given rise to the attack and the
 former condition of the patient.
 If it has appeared upon a sudden
 effusion of any fluid there
 is great reason to dread a fatal
 result. The cause of such affections
 is ascertained without much difficulty.
 The cause of the former is usually
 minimal and to be met frequently
 in hospital. External violence is
 by some termed the circumstances
 which it has been ascribed, exposure
 to sudden and improper changes of
 temperature, the inordinate use of
 articles of food and drink, violent
 exertion especially. The disease occurs
 much more frequently in an attendant



upon other diseases than as an independ-
 ent affection. It generally occurs in
 the course of idiopathic dyspepsia, particu-
 larly the yellow and bilious varieties
 ferous and obstructive the exanthematic
 & phlegmatic. The Autopsies have shown
 the vessels of the stomach rigid and
 the whole surface of the villi coat
 covered with a rednet or deep crimson
 tint. The stomach is more or less con-
 tracted, the whole mucous membrane
 is often much wrinkled and sometimes
 covered with a viscid or fibrinous
 mucus upon the remnant of which
 it exhibits the usual marks of
 inflammation. Excess is not unfre-
 quent, usually in patches, sometimes



in isolated spots in the subcutaneous
 tissue producing small prominences
 on the surface, and small ulcers
 which frequently even when
 formerly ascribed to be the cause
 of increasing development of the
 mucous tubercles. The indication in
 the treatment of such tubercles is obvious
 and undisputed. If the disease is
 caused by a corrosive or acrid juice
 and if the stratum is not yet fully
 evacuated we should first remove
 the offending matter either by means
 of emetics or copious draughts of
 warm water. If the middle portion of
 the vegetable class, as opium, is the
 act quickly enough and a small



Jeop be at hand, I would wish out
them, saying the intention, that of
the medicine and ~~the~~ the strength
thereof, but I would be most
particularly upon the time administering
it the more time substance, especially
to act as antidotes of vomiting and
purging, and after the stomach has been
thoroughly evacuated, sulphate of
Magnesia or Castor oil should be
given with the antidote so as to
evacuate any poison which may have
passed into the bowels, and the state
of the patient be not less particularly
attended to and the system is not
under the influence of some powerful
depressing agent as in typhoid fever



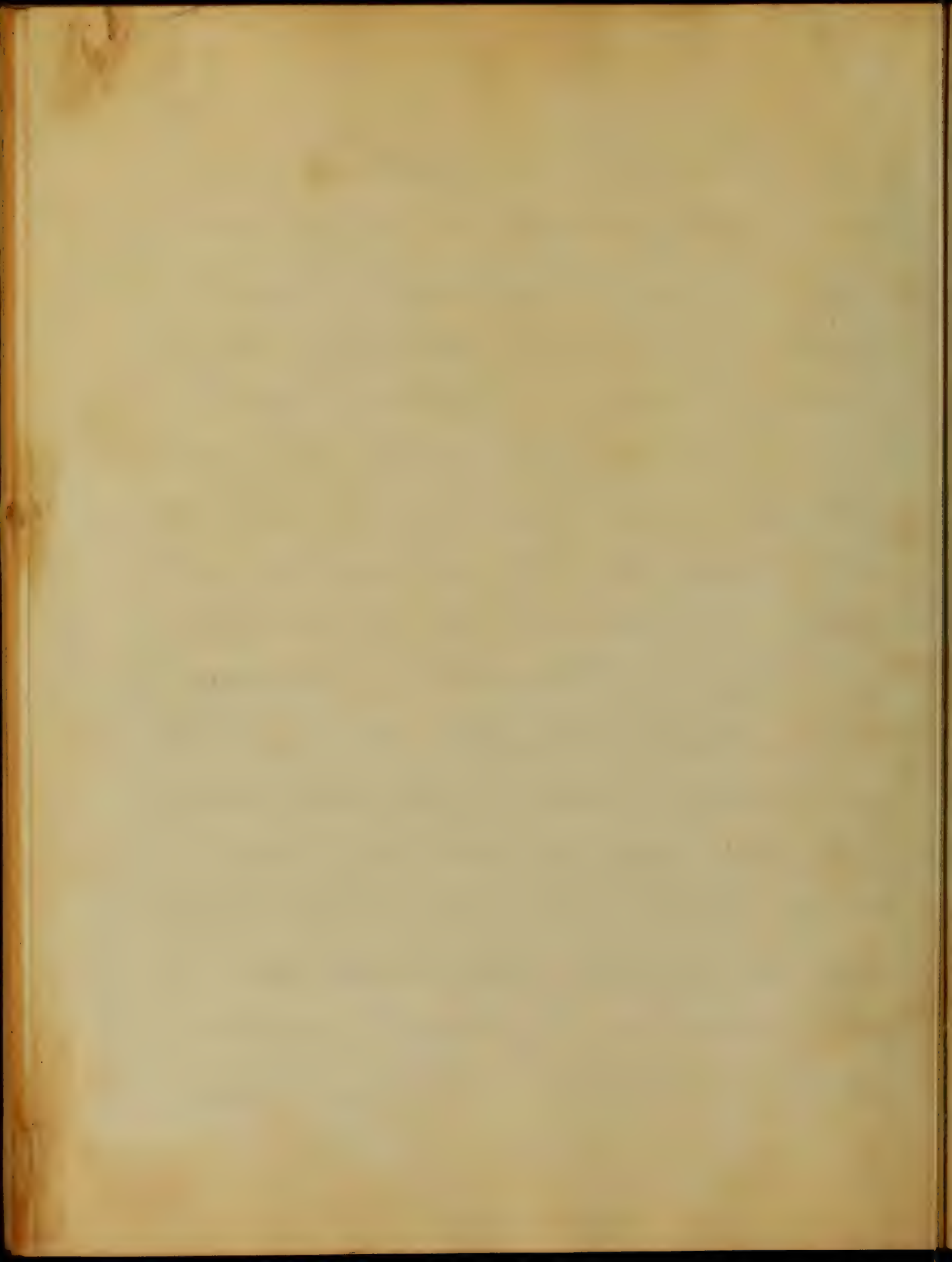
will be one of certain persons, that
 should be taken care of from the time, and
 if the strength and power do not fail
 under the loss the bleeding may be abated
 with a decided impression is made
 on the disease. Convulsion is not so
 long in the patient, as it is not infrequently
 does, and becomes more dreadful
 under the least. Convulsion would appear
 to be indicated as convulsion is an
 almost uniform attendant on convulsion
 and strabismus, but medicine, of any
 kind taken internally are almost always
 rejected or apt to aggravate the affec-
 tion, and most authors recommend
 since their very frequent employment
 or in total abstinence from them



The patient is not likely of a violent
 nature's Stage, after the use of the
 This constitution is not likely of a violent
 instant to the inflamed membrane
 and frequently causes the throat
 when small particles of cold water
 have been applied. It also diminishes
 competition of the stomach by contracting
 the great vein through the section
 of lili. Afterwards the lili should be
 kept open by the frequent use of Eucalyptus
 After the first violence of inflammation
 has subsided, opium or one of the rest
 of napsine may be administered. A
 full dose may be given at bedtime
 and repeated in an hour or two
 if it should not procure rest.



The disease does not appear to yield
 to depletion, various remedies with
 caution may be resorted to with
 intervals as to bring the system under
 under the mercurial influence. Half a
 grain is a grain of calomel with or
 one grain of calomel in the form of
 pills repeated every four six or eight
 hours will probably be sufficient for
 the purpose. Stimulating pediluvia
 are employed throughout the complaint
 for exciting action in the lower ex-
 trities where there are cold and stagnation.
 In the last and most protracted stage
 when the symptoms indicate what is
 perhaps the most efficient remedy is
 oil of turpentine with Laudanum.



given frequently in small doses. The
 patient will derive relief from a
 small quantity of water, or from keeping
 ice in the mouth, but should not
 be allowed to drink largely. In
 the early stages no other diet
 should be allowed than a solution
 of Gum Arabic, weak barley water
 or wine, or colligations or fannaceous
 drinks, but when there is great debility
 fresh meat mixed with some wine
 will be found both grateful and useful.
 In a still more advanced stage,
 chicken broth, plain cream or whey,
 or may be cautiously given.

The Epistaxis is one of the most



report on the ...
 This should be ...
 and immediately ...
 is deemed unnecessary or inadmissible,
 and should be repeated ...
 until the symptoms ...
 in ...
 or cataplasms should be applied ...
 the ... of the ...
 very ... by their weight, and
 applications and ...
 recommended as ...
 fomentations. ...
 mended in the advanced stage ...
 advantage may be taken of the ...
 surface thus obtained to hasten ...
 ... by ...



disturbance of muscular contractility
the nature of the disturbance is of
arterial or venous origin.

Chronic tubercle is a form of
infarct common especially
existing for a considerable length of
time without being suspected. There
is no distinct line of division between
this and the former variety of tubercle.

It is one among the ordinary consequences
of long continued dyspnoea such that
the patient and perhaps his friends
can still recognize it. The first

symptoms are usually some weakness
in the region of the stomach after eating,
more or less enlargement of the right lobe
and a feeling of general discomfort.



1
during digestion with occasional head-
ache and ~~nausea~~ ~~vomiting~~ in
the first months, nausea and vomiting
occur at the commencement. The
symptoms gradually increase in intensity
and severity and the disease put
on a local variety of aspects dependent
on the degree, extent, cause, nature and
character of the inflammation, the
tissue of the part affected, the
constitution and habits of the patient
and the amount in finite diversity of
symptomatic derangement. This diversity
amounts to pain which however is
seldom variable, being sometimes
acute lancinating or spasmodic,
sometimes slight and little



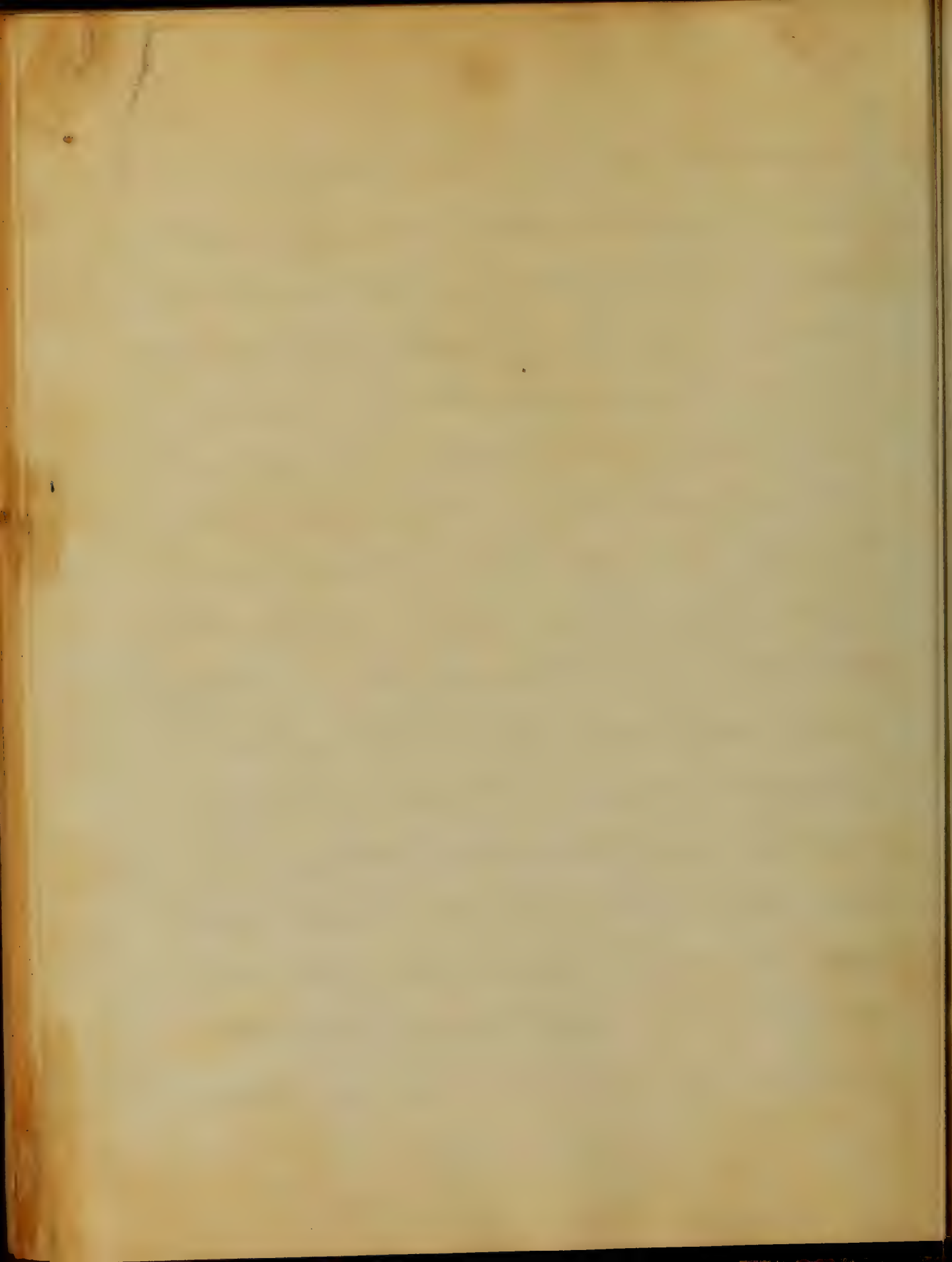
more than a year, sometimes the patient
 complains of uneasiness on both sides
 and the air and water the same
 in other cases it is confined to one
 spot. The appetite is variable, generally
 more or less diminished, occasionally it
 is little affected and in such cases
 there is reason to think that the in-
 flammation is confined to a comparatively
 small portion of the stomach. There is
 usually thirst with a desire for cold
 drinks which if moderately taken
 afford great relief. While heat and
 stimulation lasts increase the uneasiness.
 Belching is frequently occasioned
 by large quantities of gas being col-
 lected in the stomach. The case is in



some instances evadens in other parts
 and irritating, vomiting is also a frequent
 attendant, The matter united in food
 bile, mucus, serum and coagulated lymph,
 which serve to excite the throat in
 their passage, Frequently in the
 vomit and upon expiration with a
 dark matter in mucus coffee ground
 is discharged from the stomach and
 is also found in the urine in some
 cases, The discharge of these substances
 is often attended great relief to the
 patient, Crustification frequently exists
 except in cases where the inflammation
 is the least, The tongue is frequently
 coated with a white or yellow
 fur with the redness of papillae



functions, and it is not constant. The
 force is variable, usually more frequent than
 when in health and may be even more
 irregularly, it is however not intermittent
 usually however increased in frequency
 and tension. The contents are almost
 always more or less changed, the
 saline generally more, the bile scanty,
 superabundant or changed, and the
 urine variously altered. There is generally
 great emaciation. The centres of the
 sympathetic nervous system are infinitely
 numerous and diversified. Among the
 more common may be enumerated head-
 aches, faints, vertigo, nausea, in the
 sea and a dry hard cough, dyspnoea,
 palpitation in the praecordia. The



white mass, darkly purple but is
 liable to frequent change. The patient sometimes
 approaching to recovery, and then relapsing,
 and going through the uterine evacuation
 before recovery is obtained. Under favorable cir-
 cumstances of condition, position & treatment
 the disease commonly terminates favorably.
 Anatomical Characters. The uterus membrane
 which has been inflamed exhibits a brown or
 blackish color, the color is sometimes, that
 sandy, red. Innumerable minute black
 spots are seen in some instances or close to
 others which give the whole surface of the
 membrane a dark grayish appearance.
 Ulceration is not unusual though less common.
 When in inflammation of the disease it is,
 the color of the blood remaining on the



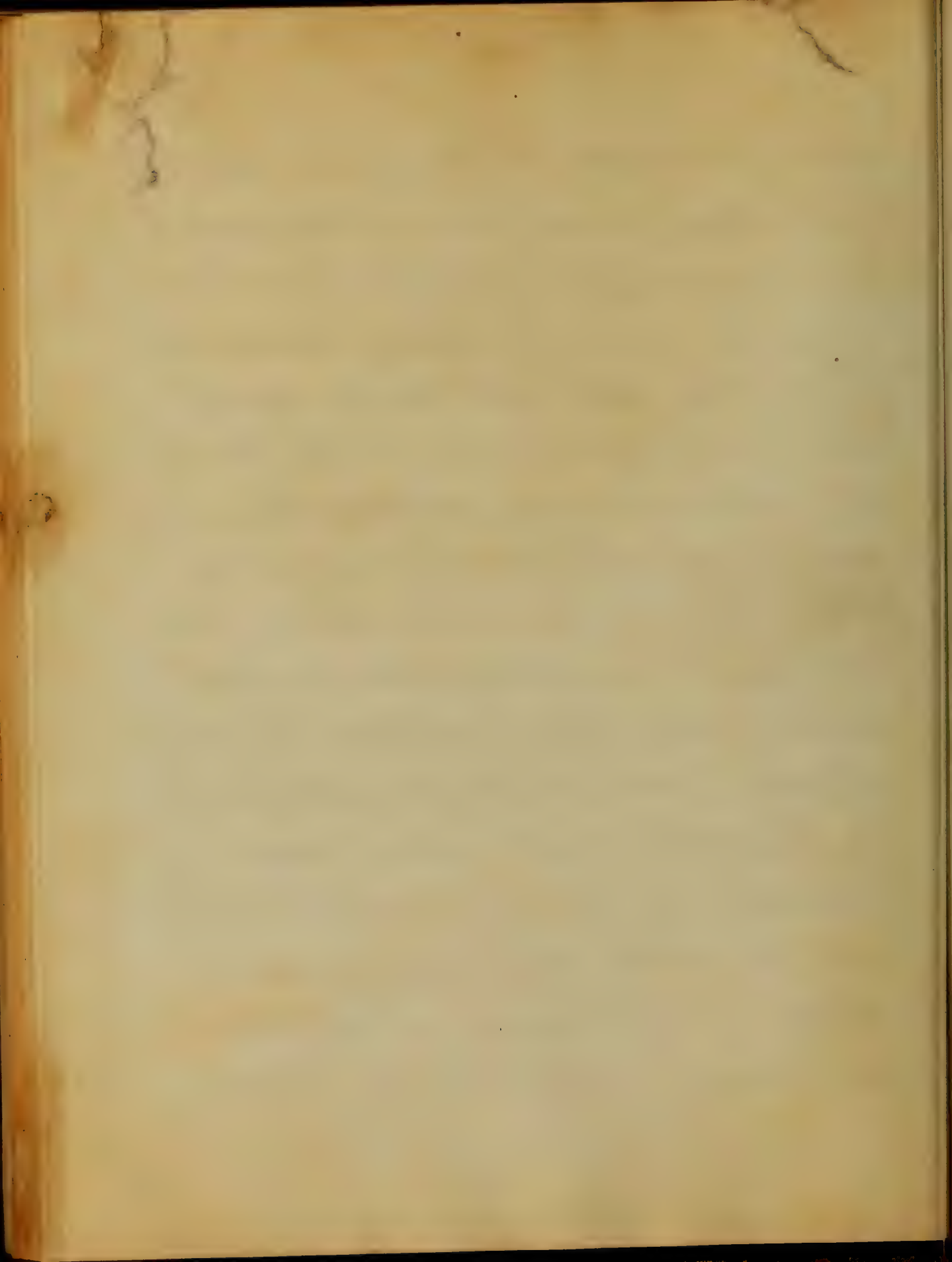
words of the stomach is often indicated by
 the fact that it is much smaller than of other
 mullin. It has been ascertained that effusion
 and real destruction of the coat of the stomach
 might take place after death from the action
 of the gastric juice. The disease is the
 most malignant of ours and almost
 affection, but it occasionally follows
 the coat. The Russian use of medicine,
 alone of about the liquor, & actual
 is seldom seen among the most frequent
 causes. The only complaint not what
 human existence is death to be understood
 an excessive and other organic affection
 of the stomach, gastralgia, & vomiting
 nervous affection and dyspepsia. The
 treatment is very similar to that which has



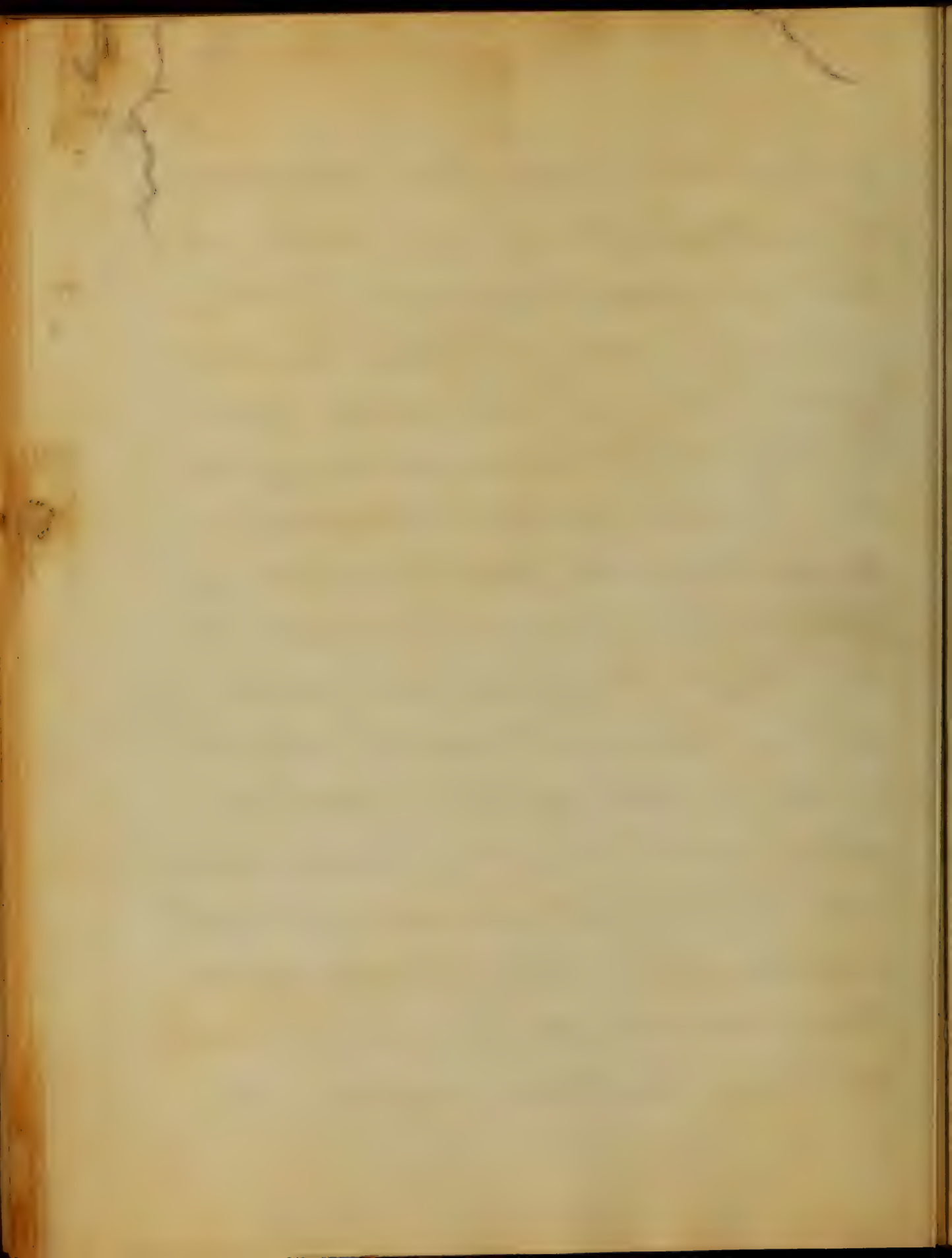
been studied as respects to the management
 of acute strabismus. The first and most
 strict indication in the treatment of
 chronic strabismus is the removal of the cause.
 General bloodletting is not often admissible
 at the late period at which patients apply
 for relief but topical depletion is almost
 always useful. Bleeding is especially
 useful in suppurated conjunctivitis, as the
 disease in most instances either arises from
 irritating impurities or is sustained by them
 and in all instances is aggravated by this
 cause it is necessary to subject the patient
 to strict dietetic regulations. But the same
 diet is not applicable to all positions of
 the disease. It is necessary in suppurated
 to have ~~found~~ to have reference to the



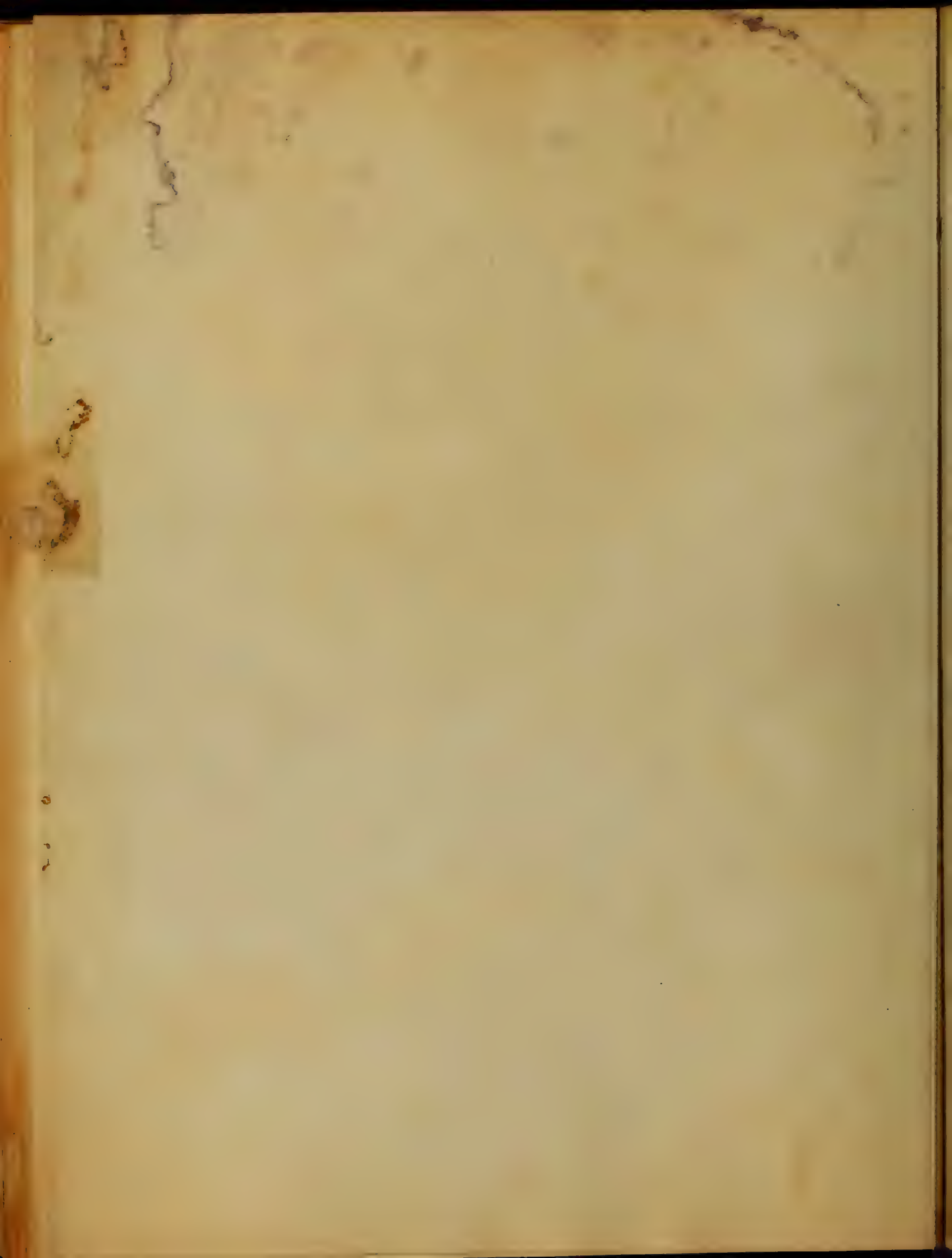
Stage of the system. The food should be
 laid down in the stomach except
 that in case the food allowed should be of
 the kind not easily digested as indigestible
 food whether highly nutritious or not
 act as a powerful irritant to the stomach
 The mildest and most unstimulating
 nutriment must be selected. Stimulants are
 generally refused, but in some cases they cannot
 be done, as unweaned milk is fermentative
 and this becomes highly irritating. In cases
 of general debility the diet may be improved
 by the addition of milk or fresh cream.
 The milk may in some instances be mixed
 with lemonade, as the system is
 broken and bread may be used with
 and lemonade and the latter ingredient may



Robbery, with it, in an attempt to do that
it becomes necessary to use a more violent
dial, soft oil of eggs, extra, and a
moist, yellow, & Castile's being always
about only these sorts which are being treated
Castile's should be avoided by means of Casta-
lie or Castanets or mate or best contained.
The gentle Castile's should be avoided and
sparingly used, magnesia is one of the best
as it answers the purpose of an antiseptic
which is often wanted, Castile Oil, Sulfur,
& Sulfur, humors may also be employed.
Attention should be paid to the skin, Britain
with the flat land, the same or hot bath,
according to the degree of excitement, and
frequent rest to the skin are also very
when there is great local suffering, with



usual attacks small doses of pure preparation
of Mercutio may be given with advantage. If
the measures above given do not answer
relieve may be had to the extent of the
sweats of pure pure Stepper, and the nitrate
and oxide of silver may all be safely employ-
ed. In some obstinate cases attended with
incessant vomiting, a system of strict abstinence
of food by the stomach, the strength being
supported by rumex salt or without an opiate
addition has often proved successful. Perhaps the most
effective measure next to a proper regulation of the
diet is local bleeding from the pharynx by leeches
or cups. Rubricin by means of small blisters on the
pharynx frequently repeated, or of belladonna or
Iodine tincture applied so as to produce is
highly useful



AN

Inaugural Dissertation

ON

The effects of Chloroform on death.

SUBMITTED TO THE EXAMINATION

of the

Provost, Regents and Faculty

of

PHYSIC,

of the

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

Doctor of Medicine,

by

Edwin F. Holten,

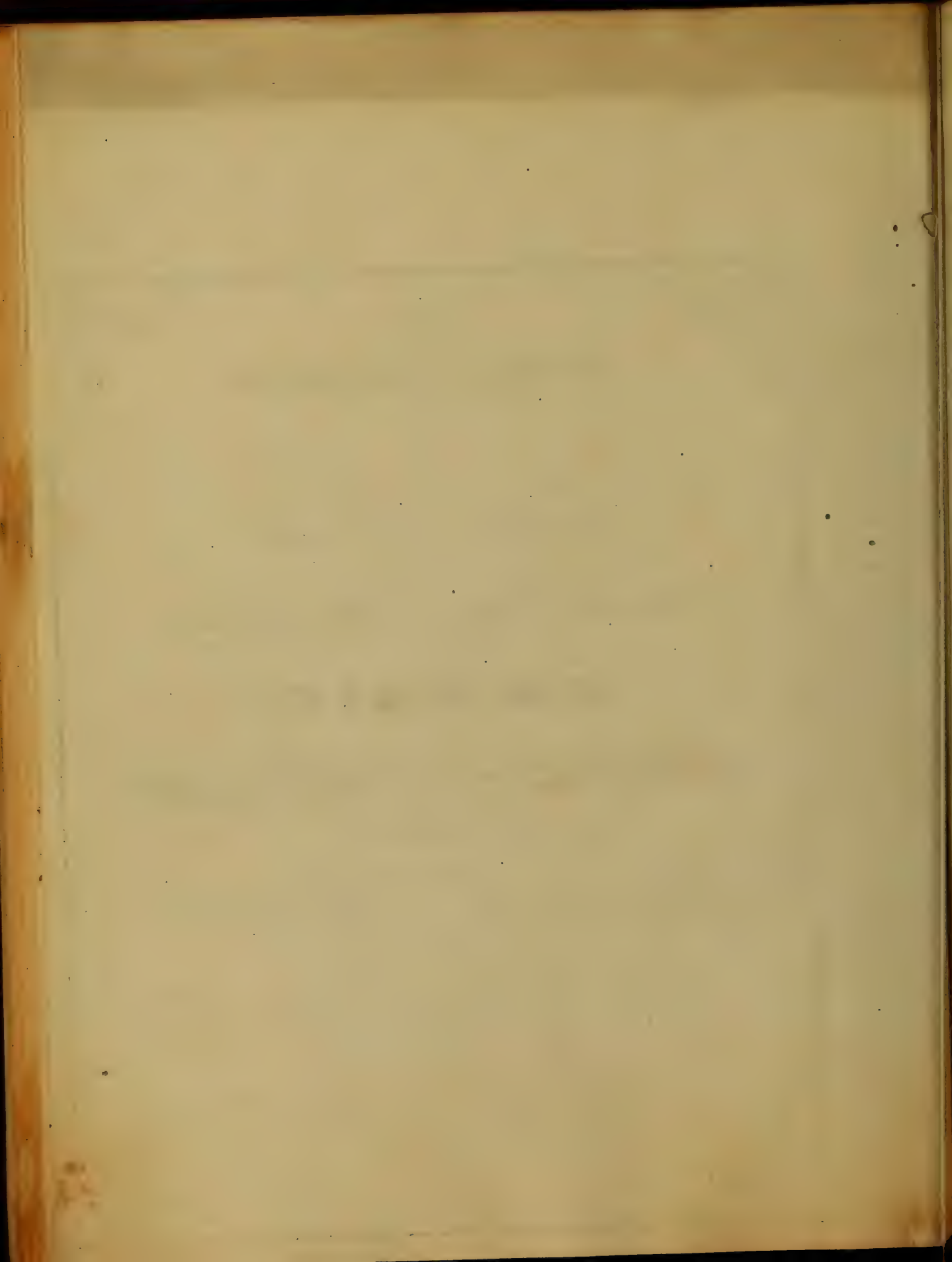
of

South Carolina.

Session

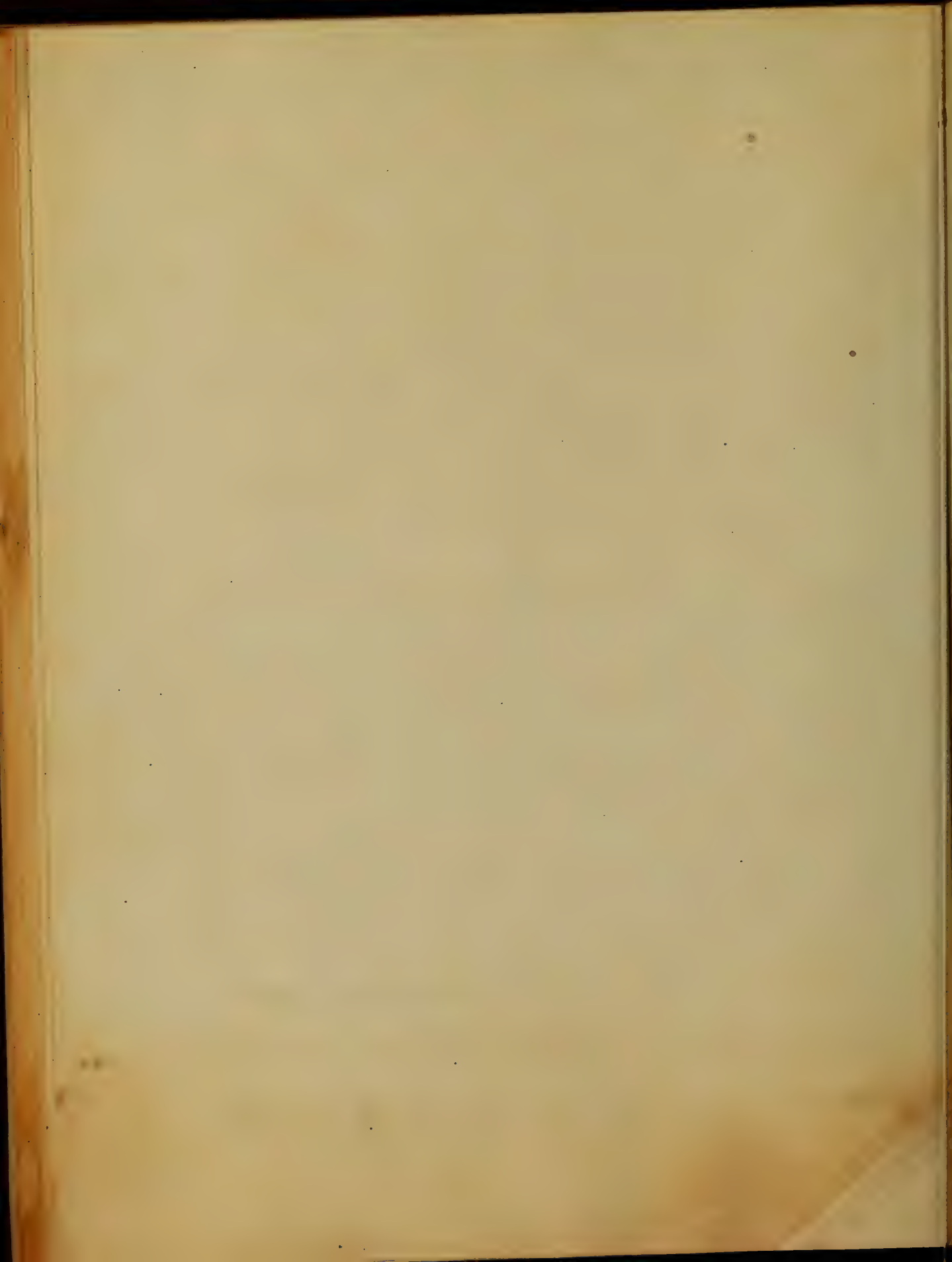
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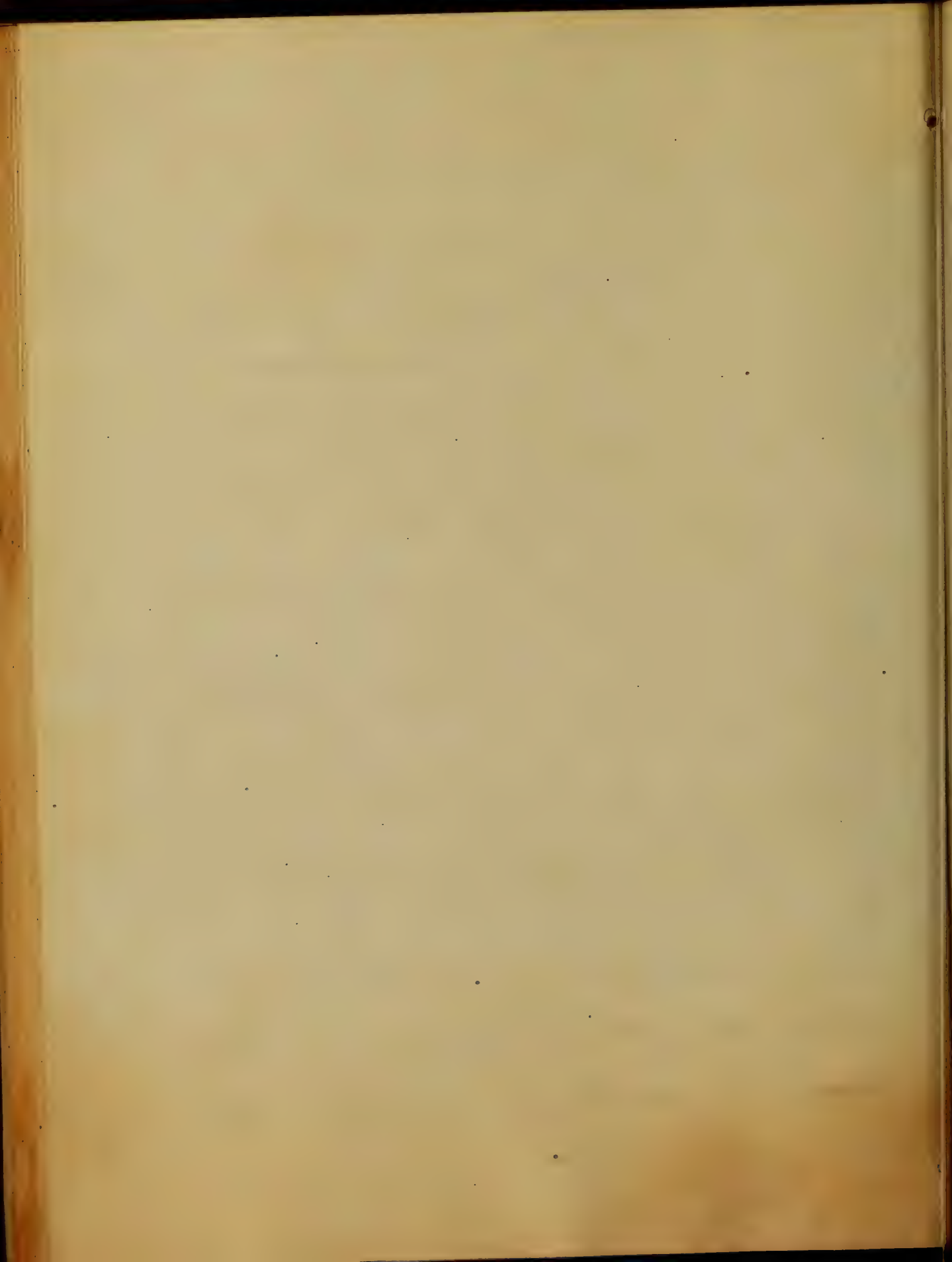


Effects of Cheerfulness on Health.

It may seem strange to a casual observer, that I have taken this subject to write upon; but it is in my humble judgement one of the most essential remedies, in the treatment of all the diseases. That the human body is heir to: "Be of good cheer" was the first injunction of the great Physician of souls, to those that came to Him to be healed, of all manner of diseases. The wisdom of such a course of treatment, must be apparent to every intelligent Practitioner.



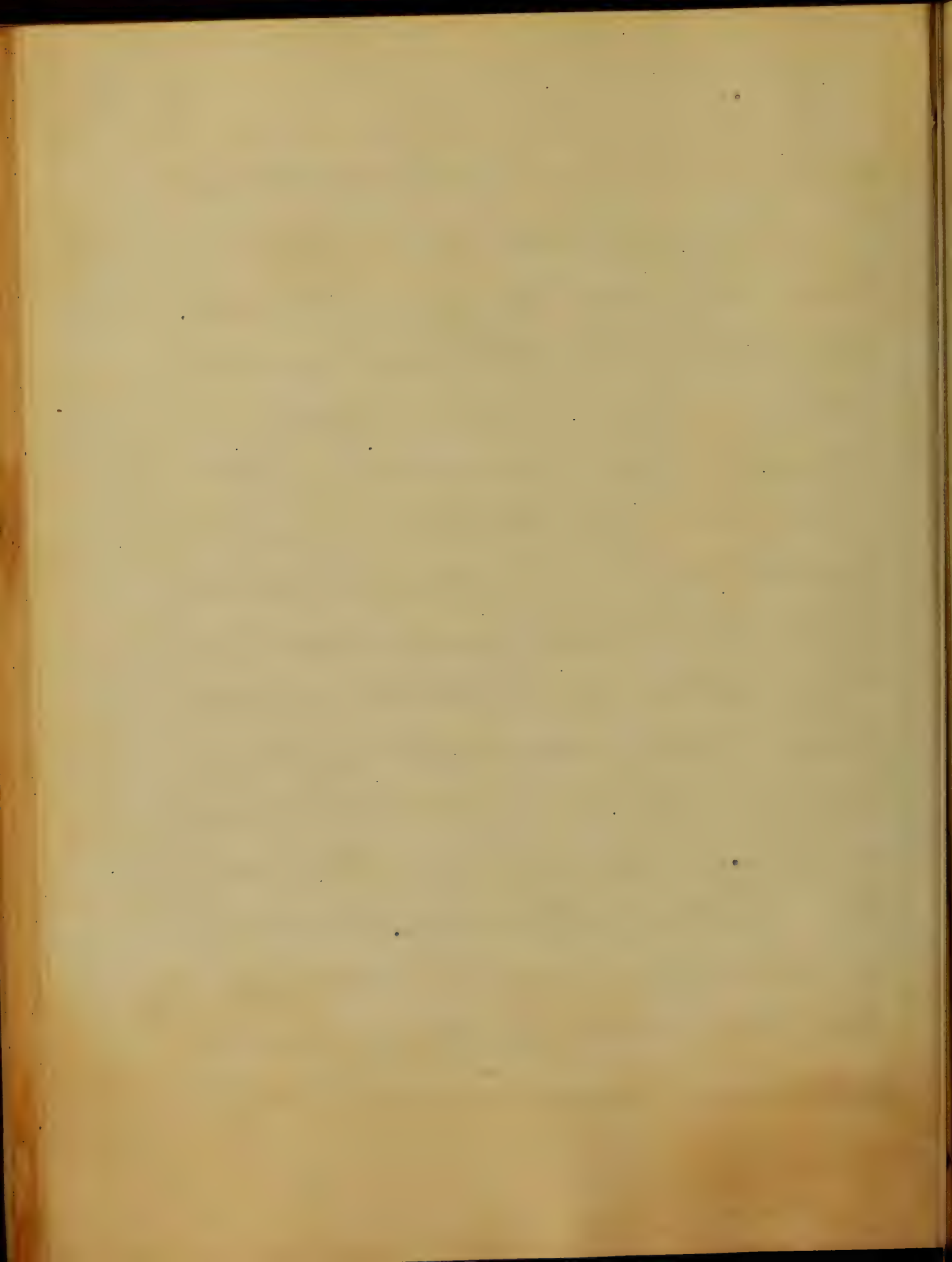
without-taking into consideration
the high authority, - from which it
emanates. Although the day of
miracles has long since passed,
it is a well known fact, that
faith in the ability of Physicians, and
a cheerful state of mind, are very
important, if not essential in the
treatment of all the maladies of
the present day. We know that these
fearful maladies require the most
desperate remedies to eradicate them
Yet how beautifully does cheerfulness
in their actions, aid them. I believe
that cheerfulness will invigorate
those that are struggling in the
arms of death. Yes one look of



cheerfulness, one smile of gladness
on the countenance of by-standers,
will make his feeble pulse stronger.
This was very beautifully illustrated
to me, a few days ago, by a very
eminent-Physician of this city, who
was called in consultation, to see
a patient, who was laboring
under a fatal disease. All gave
a favorable opinion except him-
self, he told the man that the
chances were against him, time
and again, after several weeks
he again carefully examined him,
and found that he was improv-
ing, he told him, his symptoms were
much better, and the chances were



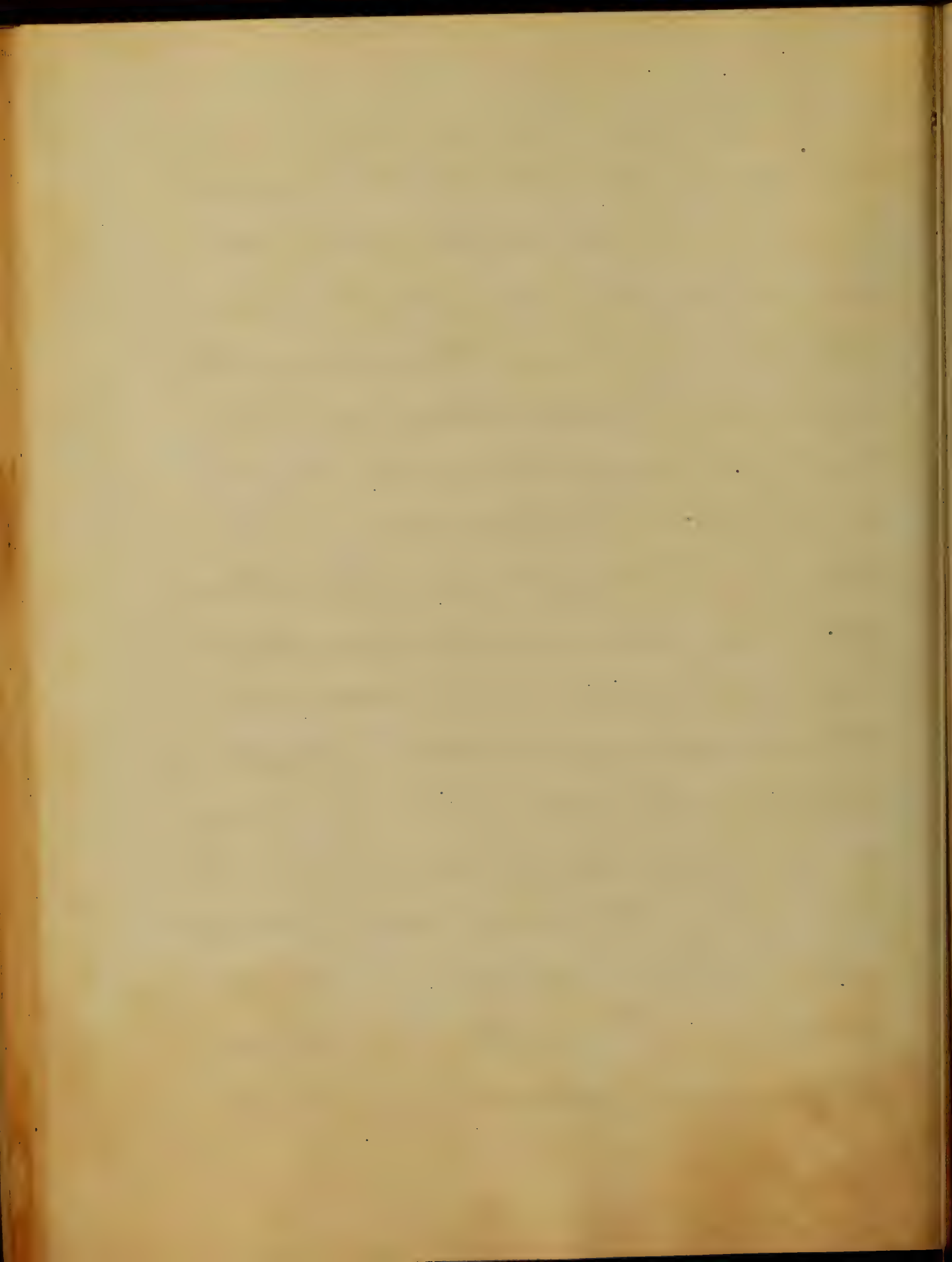
now in his favour, his countenance
at once brightened up, & it seemed
as if his lease of life had been
renewed. The Physician above all
others, should have a cheerful
disposition. I don't mean that
he should be cheerful to gaudy;
but that his countenance should
wear a cheerful aspect of hope.
How often are the sick ones re-
vived, by the words and countenance
of the Physician. All sick rooms
have enough to make them aw-
ful, without the awful countenance
of the Physician. So wonderful
and mysterious are the intimate
relations of mind and body, that



neither can be seriously impaired with-
out affecting both, nor the one ever
be perfectly restored to health, while
the other is in a languishing state.
Many very remarkable physical re-
sults have been obtained, through
the agency of mental actions, and
much here might be accomplished
by the judicious application of
this mysterious power. All are doubt-
less acquainted with the facts re-
corded of criminals who have
actually died from the effects
of an impression made upon
their minds. Cases are often found
who have been hopelessly prostrated &
thus rendered the easy subjects of



diseases by mental shock or depression. I cannot in the space allotted me, on the present occasion attempt to discuss the whole of this important & interesting subject, but will confine myself for the present to the Therapeutics of Churgulness. I dare assert that those who will give it a thorough trial, will not only find it a valuable Therapeutic agent within itself, but an indispensable adjuvant - in many cases, to all other Anesthetics. But first how is it obtained, it is a product of nature, and springs up spontaneously wherever human beings are found to cherish and protect



it against the insidious encroach-
ments of contracting causes. Much may
be gained by proper cultivation
for this purpose. Go armed with
a clear conscience and a fixed
laudable purpose, root-out as far
as possible the noxious weeds of
vice and substitution, endeavor at
all times to have something to do,
something to love and something
to hope for, and when you meet
with trials and disappointments,
as every one must, dont fly into a
passion, then relax into melan-
choly, dont be cast-down by trifles,
look at the bright-side & be thank-
ful & march cheerfully on, & console



yourself by thinking it might of
been worse, never live over past trou-
bles, but endeavor to make amends
for the failures of the past; by con-
tinual and increased diligence in
the future, counterbalancing material
losses by the increased knowledge
gained. These few simple directions
if carefully followed will enable
the most-humble in life to pro-
cure a sufficiency of the generous
article for all practicable pur-
poses. There is no danger of taking
an over dose, you can take it either
alone, or in combination with
some other remedy. Physiological
effects. It is a stimulant-tonic, &c.



rific, catalytic, anti-scorbutic and prophylactic. I will not attempt to explain the "modus operandi" of its actions, so that would carry me deeper into the subject than I am prepared to go. The facts are however sufficient for practical purposes. First - Then it is a stimulant; it enrouces quickness and invigorates the vital actions and energies, it is preferable to all other stimulants, because its effects are more permanent; secondly, it will not lose its effects by long continued use, Thirdly, it is not followed by any unpleasant reaction, which too often counteracts the good effects of the stimulant.



Fourthly. It is in the reach of all who will take the trouble, or more properly the pleasure of obtaining it.

Fifthly. It enables those who use it habitually through life, to pass through its arduous paths, with more ease and comfort to themselves and more pleasure to those around them.

Cherfulness has also a tonic effect, this may be due partly to the general stimulation, but more especially to increased digestion and stimulation. That the state of mind does exert a very powerful influence over these functions, there can be no possible doubt. We may sit down to the table with a keen appetite, and if nothing oc-



ours to disturb the tranquility of the
mind, we may eat bountifully of
whatever is before us, but - let a dis-
agreeable conversation arise, or some
sad intelligence be received, or any-
thing occur to disturb the spirits, and
cast a gloom over the mind, at once
all desire for food is gone, the stom-
ach now loathing the very food which
it a few moments before so much
craved. Who ever saw a person who
was habitually merry suffer from
Dyspepsia. We see moreover that
those from habit: necessity - or motives
of avarice, who allow themselves
no time for amusements - or recreation
but swallow their meals hastily, and



Then hurry off to business, their
Minds in a continual strain &
who suffer themselves to become vexed
or excited about trifles or dejected
and melancholy, or as it were to
raise the flood gates of sorrow
and despair for a mere trif-
ling offence, which ought to
be passed over unnoticed and
uncared for, such persons as
a general rule become the early
subjects of Dyspepsia or general
debility; It is true these habits
may produce depression and
melancholy, yet it is equally true
that melancholy will produce in-
digestion. & thus they go on produ-



cing and reproducing each other,
until the whole system both men-
tal and physical is prostrated,
I will here assert that the habitual
practice of devoting one hour
after meals to some cheerful
amusement, or pleasant conver-
sation, or anything that tends to
gladness or cheer the heart, and
at the same time relax the labors
of the mind and body, will in
my opinion promote digestion
more than all the medicines on
the shelves of the Apothecaries.

It acts also as a soporific, it
enables the patient the full ben-
efit of kind "natura sicut ustoria"



"Calmy sleep", the absence of which ac-
cording to Headland more than any
other symptom exhausts the patient
and hastens him to an early grave.
It may serve as a sedative, that
is it produces a good result by its
presence, like the presence of a Lan-
lord among laborers, he may do
nothing at all, yet his mere pres-
ence will make a wonderful dif-
ference, in the amount of work
done, It is an antiscorbutic, Sur-
geons of ships who have been on
long sea voyages, where scurvy
often times prevails to an alarming
extent - tell us that where all the
usual remedies had failed. The mere



announcement - that they were about to return home, has produced a marked change, and all of those who were affected with this horrible disease the mere thought of returning to their families and loved ones, have entirely recovered before reaching home without any other treatment. One instance is recorded in which all the fresh meats and vegetables were exhausted, prophylactics that are essential as a prevention of scurvy, yet that dreadful disease was successfully combated by the establishment of games, gymnastics, and various amusements in which all on board participated daily. We were once



To the most interesting feature of this
all other remedies viz. prophylactic in-
fluence, it is an old maxim that an
"ounce of prevention, is worth a pound
of cure," as a prophylactic our coun-
try has no superior, we see this
demonstrated in every day life, es-
pecially during epidemics when
we see the timid and fearful who
live in constant dread and under
the depressing influence of fear,
are often the first to be attacked,
while others go fearlessly amid the
scenes of its ravages, animated
by the urgency of the occasion
are defied with impunity the
most infectious disease. We have



is a good illustration of this fact in
the fable where the Angel of Death, was
bearing the orders to make a levy on
some great city - just before entering
the city, he met a man going to visit.
The man asked him whether he was
going, he said I am going to bear
his order to your city, that ten
thousand of its inhabitants shall
die before living - four hours with
Cholera. On leaving the city he met
the man near the same place, he
asked the angel if the order had
been executed, he replied yes, that
twenty thousand had died, ten
thousand from Cholera and ten
thousand from fear. We see on



every side numbers who are rarely ever
sick, as long as peace and prosper-
ity crown their efforts, but when
misfortune overtakes them and
suddenly blights their earthly hopes
and prospects, they often become
hopelessly prostrated, "True it says,
"hope refused maketh the heart sick"
Yes, they become the early prey of
every disease that happens to be
prevailing. We see this fact beau-
tifully verified, if we look at the
history of the post-war. We see
in nearly every instance that the
successful army while in fine
spirits, and success crowning
their efforts and victories being won



on every side they are scarcely ever at-
tacked with Scoury, Diarrhea and
other diseases that the unsuccessful
armies are so often troubled with.
Now if you allow the scene to change
and the successful army become the
unsuccessful, if defeated time and
again, and their spirits become dejected
and their minds troubled, then
you see the diseases commence. Now
it seems that the state of mind has
a great influence over the body, prevent-
ing or warding off, and sometimes
to really cure the disease. We see in
the time of Queen Anne and as late as
King George III of England and Louis
the XII of France, that the people had



great faith in the royal touch in the
cure of scrofula, and it is said, that
a great many were cured, their faith
being so strong in the belief of it:
Now it seems that patients should have
faith in the medicines they take, in
order to hasten the cure of disease,
Dr Samuel Dixon tells us that he
has often administered bread pills
to his patients, and they would come
back for a milder Cathartic, We see
then that health and happiness are
normal conditions, while disease
and death are abnormal and never
could have existed without an
exciting cause, were it possible to
find out and remove the cause the



effect-would of course be arrested.

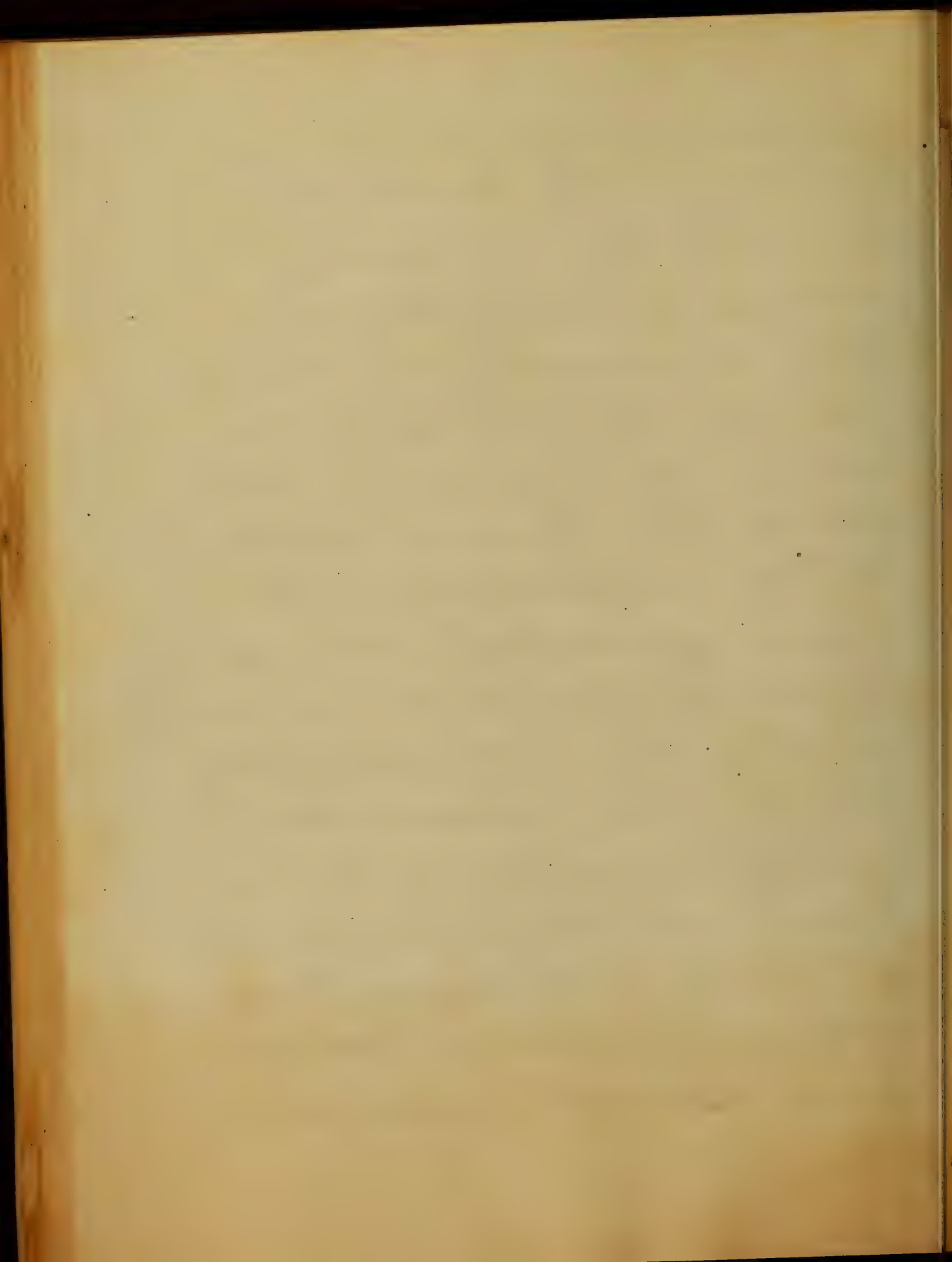
Let us now look back at the history of our fallen race and see whether we can discover the primary cause of the innumerable diseases that now effect-mankind. Man was created pure, up-right and happy, and had he continued in that state of innocence, he certainly never would of needed a Physician for how was it-possible for disease to gain admittance in that delightful Paradise where all was joy and bliss, requiring no apparel to protect them from the scorching rays of the "Summer sun, nor the chilling blast of winters storm" then



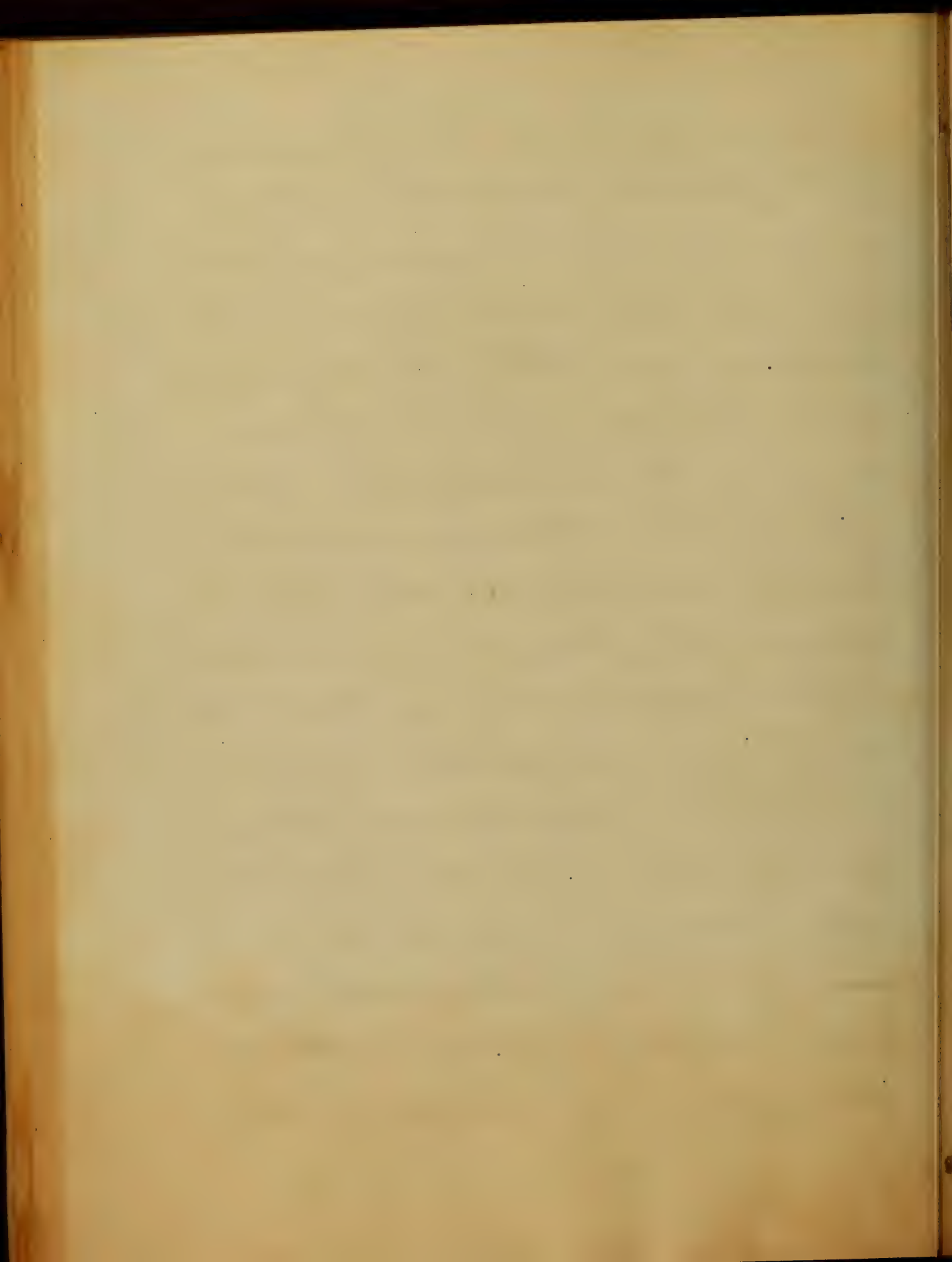
only labor was the agreeable task of beautifying the garden, adapting it to their own taste, Hunger and thirst only increase their pleasure by inviting them to partake of the delicious fruits that grew so luxuriantly around them, and to eat and drink of the cooling water that burst as clear as crystal from every hill side. Beasts of every variety spotted around them, and the air filled with melodious sounds from the sweet songs of birds of beautiful plumage, while the most lovely flowers and herbs shed their fragrance on every side, in short all nature seemed to strive in one grand effort to cheer and gladden



Reflecting on this, how much are we
led to appreciate and admire the
workings of "nature and nature's
God" What do we see here that could
act either as a predisposing or ex-
citing cause of disease. But as time
rolls on, being driven out of the gar-
den, they wandered out into the
wild wilderness, where the earth
yielded her fruits no longer spon-
taneously, they must necessarily pro-
cure their bread by toilsome labor,
Here they are continually harassed
by cares and disappointments of
life, as well as the stinging pangs
of a guilty conscience, filled with
shame and self reproach for



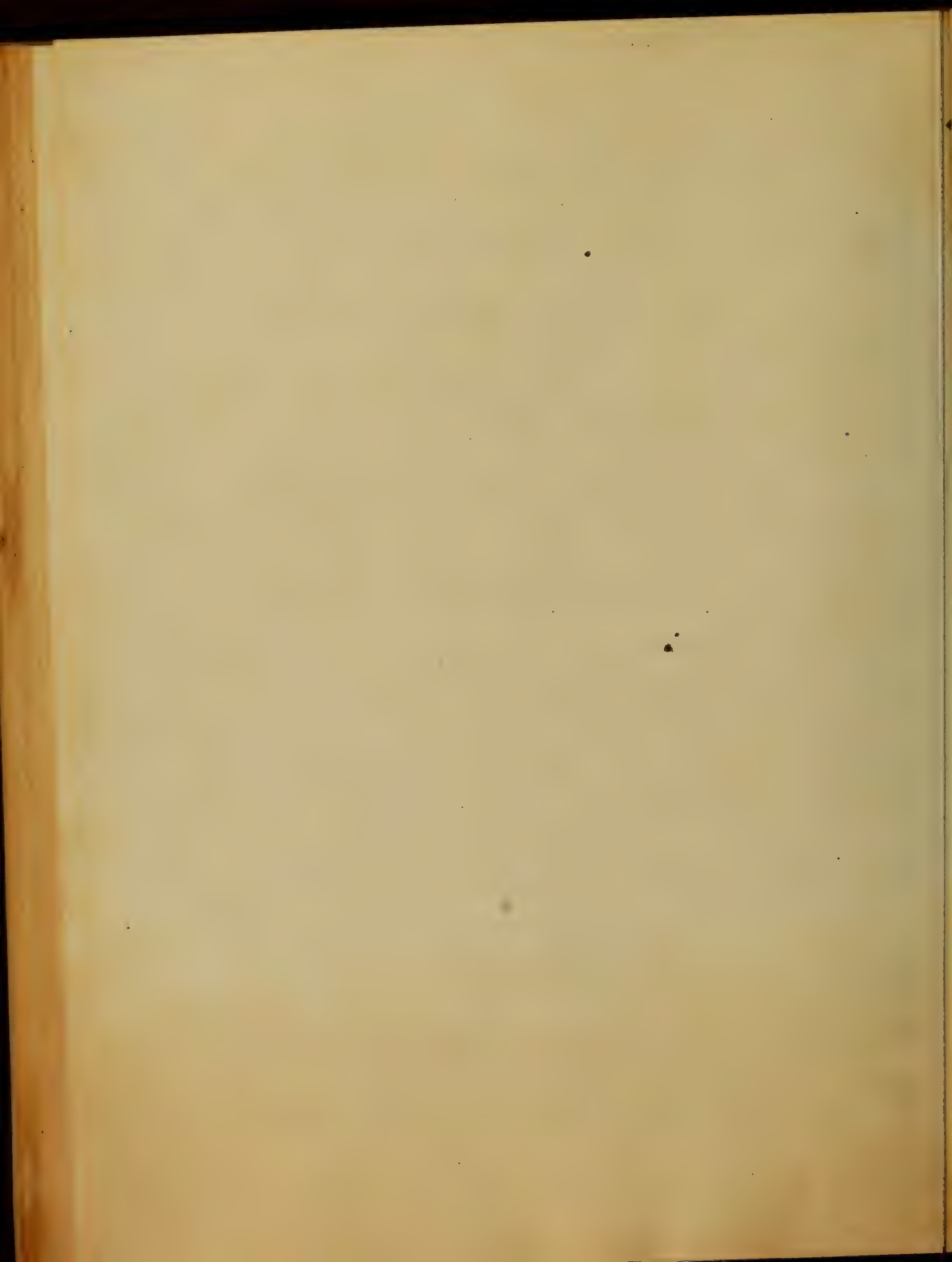
Having fulfilled a condition of never
ending bliss for a momentary grat-
ification of one trivial desire, de-
pressed by fear they shrink with
terror and dismay from the pres-
ence of a sin avenging God, those
animals that had been a scene of
delight and pleasure, now only in-
creased their fears and added care
to their depressed minds. This scene
is one of great reflection, when we
are living a cheerful and happy
life we should be contented. We
often see men trying from the
time of maturity until death endeavor-
ing to collect stores of wealth which
often prove an additional tax



to their already over-burden minds, we
also often see men in their vain at-
tempt to drown the troubles and suf-
ferings of an over-burden mind, not
unfrequently plunge into excess, de-
bauchery and intoxication, from which
he arises only to find that his trou-
bles have been aggravated by a momen-
tary relief, yet he repeats the attempt
and thus continues until both
mind and body are hopelessly
prostrated, not only thus in-
creasing his own misery, but very
often the happiness of friends
and relatives are forever destroyed,
Here one may find abundant
success either remote or proximate



For almost all the diseases, that
affect our sin-stricken and af-
flicted race. Now were it possible
to restore man to his normal condi-
tion, we might dispense with
Physicians, this we cannot hope
to accomplish, yet we ought to
strive so to do, instead of getting
better, we see it growing worse every
day, new and more fatal dis-
eases attacking man constant-
ly. Now will I say to the men
of our profession for us to be
cheerful kind and generous to
mankind, and let it be our
motto to work faithfully for
the good of humanity; next-



arm yourself with the Physicians
best-Medicines, and the Surgeons
equipments, and know how to
use them, to an advantage, then
you will not need a white marble
stone for your epitaph with
inscriptions upon it; for it
will be written in the hearts of
the People.





AN
Inaugural Dissertation

ON

Cæium

SUBMITTED TO THE EXAMINATION

of the

Provost, Regents and Faculty

of

PHYSIC,

of the

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

Doctor of Medicine,

by

Henry S. Howard
of

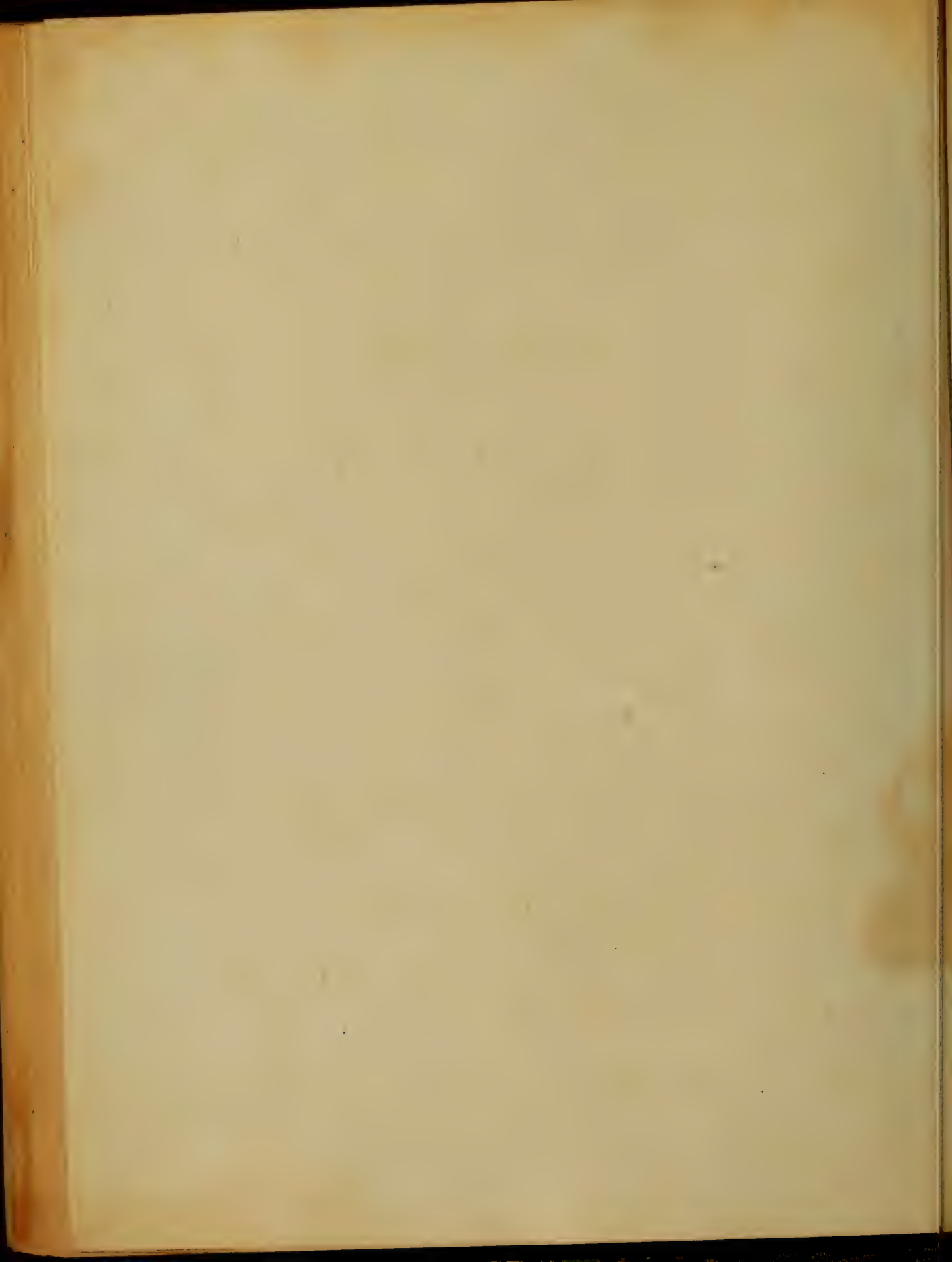
Montgomery Alabama

Session

1866-7







As I have had some little personal experience in raising the Poppy, and in the manufacture of Opium during this last, and unfortunate war, I will treat of Opium, and its culture in East Alabama. I believe there are only two

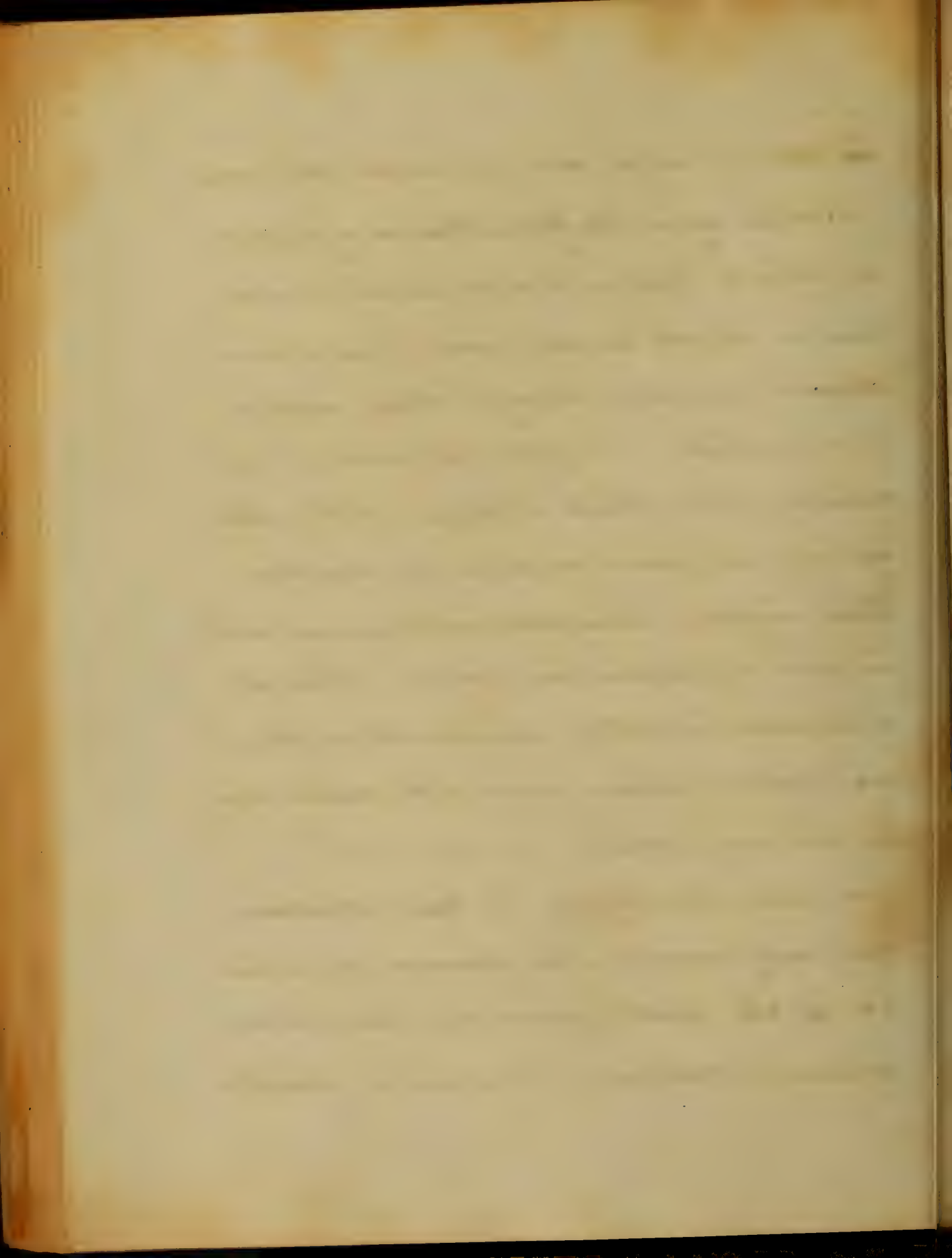
kinds of Poppy recognized by the U. S. Pharmacopœia. The White and the Black; but the varieties are innumerable. I myself have seen as many as twenty five.

There is first the single white, of four petals, (and of which I will treat most particularly) Then the double white, the half double white; the fringed edge white; and the white with large and small petals. Now there are not only these

varieties of white, but of several other colors.

Works upon Materia Medica speak of the Black Poppy, I dont think I ever saw a Black variety, but I have seen a dark purple, though much inferior to the white. I have alluded to the varieties of the White Poppy, But these are also the same varieties of the Red, Dark Purple, Variegated and several others, in fact of almost any color. But I will now (imitating the work on Materia Medica) throw them all aside, reserving the single white.

To raise the Poppy in East-Alabama with any success, it should be planted in the fall, from the first to the middle of October. It can be planted



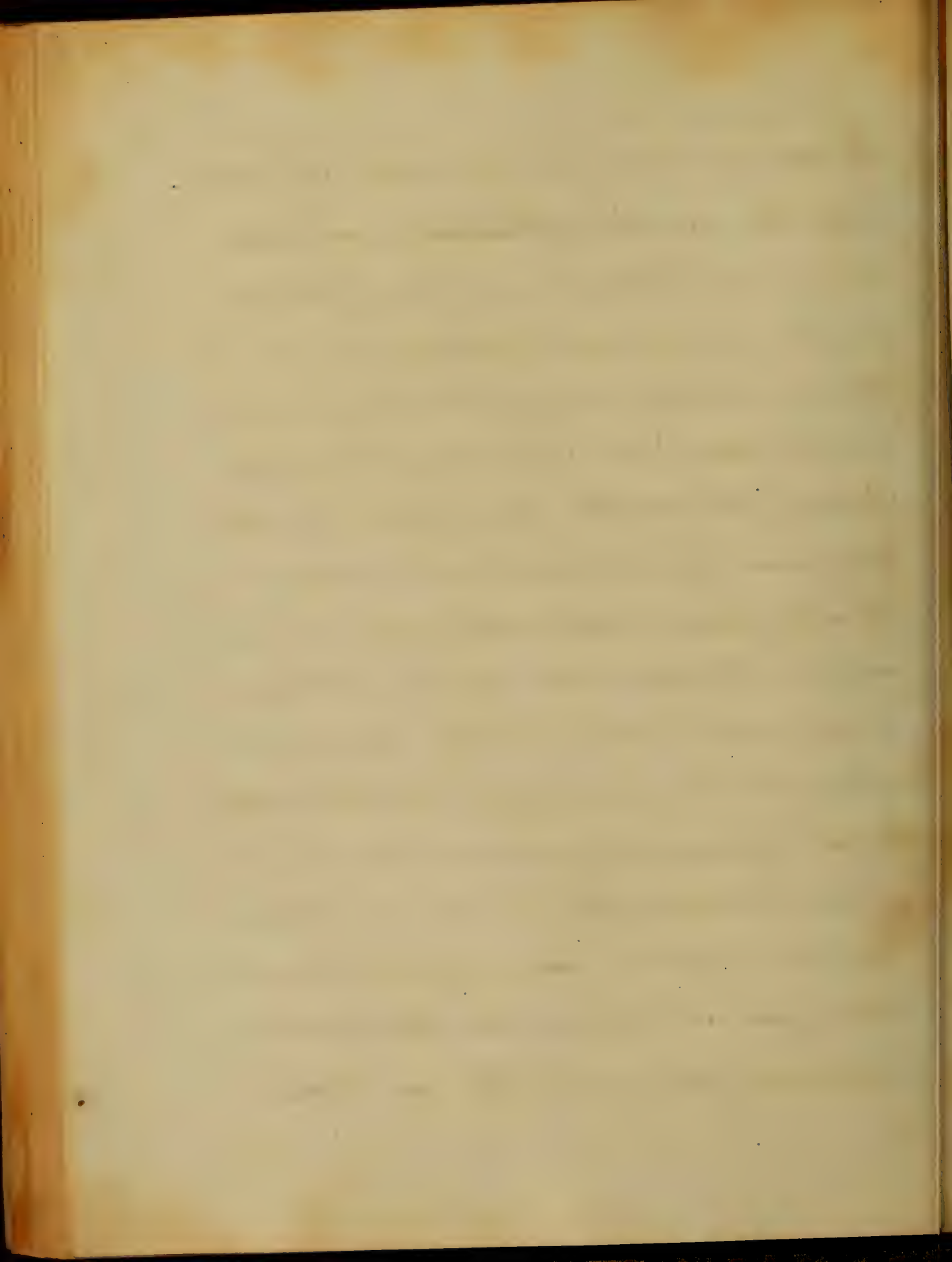
in March, but it does not reach the same perfection, as when planted in the fall.

To begin the cultivation of the Poppy, the ground should be richly manured, The plant will come up in the course of two weeks or more, but will not grow higher than a foot; or that high until the next spring; unless the winter is very warm.

It is a plant that neither cold nor rain injures, that is in the Southern climate.

I have seen it look a little blasted from a long continued spell of cold weather, but it immediately recovered upon the decline of the weather. I should state

that the leaves which is upon the stalk during the winter (not more than four) never become any wider than my little



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finger, and not quite so long until spring
when they begin to mature with the stalk.

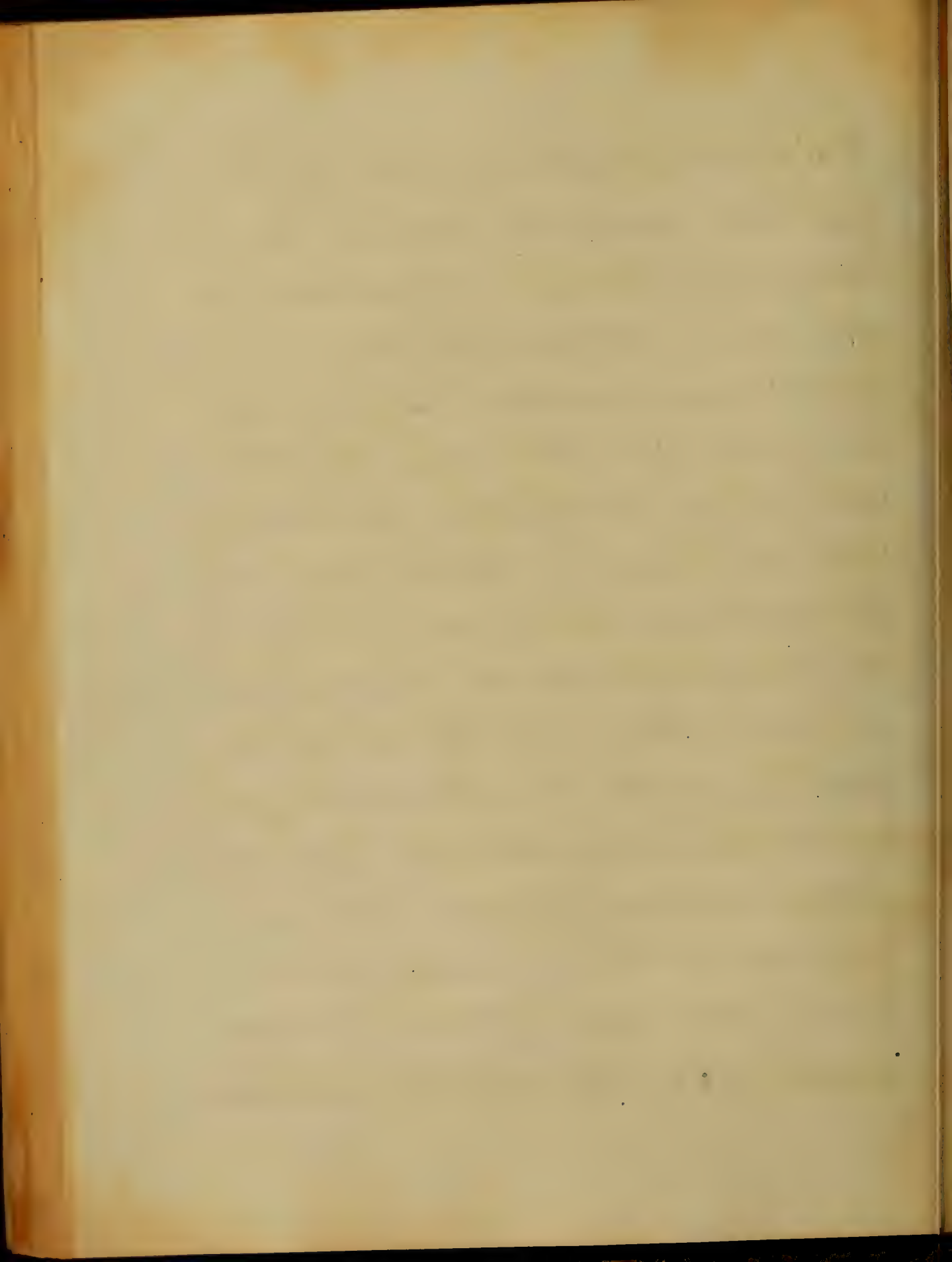
It is a plant as I have just stated, that
the southern climate does not injure, but
it seems, after it has grown to the height
and its leaves have come out to the extent
I have just mentioned, it comes to a stand-
-and, and so remains until the next spring,
the stalk alone increasing a little in size,
unless, as I have stated the winter is ex-
-ceedingly warm, when it shoots up to the
height of two to five feet; and then sends
forth a flower, which has much the ch-
-aracteristic odor of Opium.

After the petals have dropped from
the head, it is then that the capsule is
sufficiently matured to gather the Opium.



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I began the cultivation of Opium in the year 1862, seventy three miles east of Montgomery Alabama. I cultivated fifteen acres of Poppies the 1st year, ten of which were planted in drills, and five sowed broad cast. But they do not become so fully developed or matured when sowed broad cast. I should have said that I planted all varieties the 1st year, but I soon discarded all except the single white; though then ignorant of the different qualities that the varieties yielded, as I had not at that time begun the study of Medicine, but from the mere fact that the single yielded the most gum. Our mode of ^{gathering} Opium is a little different from that stated in works upon



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Materia Medica; there we are told to let the gum remain on the capsule for 24 hours or more before being scraped off. Now we have to gather it immediately, as it runs out at once on incision; We also collect from the same cut about eight hours afterward, as it keeps accumulating. Then we cut off the top of the stalk and gather what runs from that, (which is only one or two drops.

After we have collected a sufficient quantity, we roll it into one mass and wrap it up in poppy leaves.

I may as well state here, that when I began the cultivation of Opium, it was only selling at \$200.00 an ounce in "Confederate money". A peculiarity



in collecting Opium, is the effects produced upon persons gathering it. It does not affect every one, or every one in the same way, though there are very few who escape the effects of the emanations. I never could gather it myself nor, become accustomed to it, as others did.

It even gave me a drowsy feeling to ride through the field.

Gathering opium always gave me a severe head-ache, some felt a relaxation of the system, and others symptoms of irregular nervous action, which soon passed off. But in my own case, it generally lasted me for several days.

As I have given my own experience in raising the Poppy, and gathering



the Opium, I will now treat of Opium
Medicinally and describe its History as
furnished us in most of our best Books.

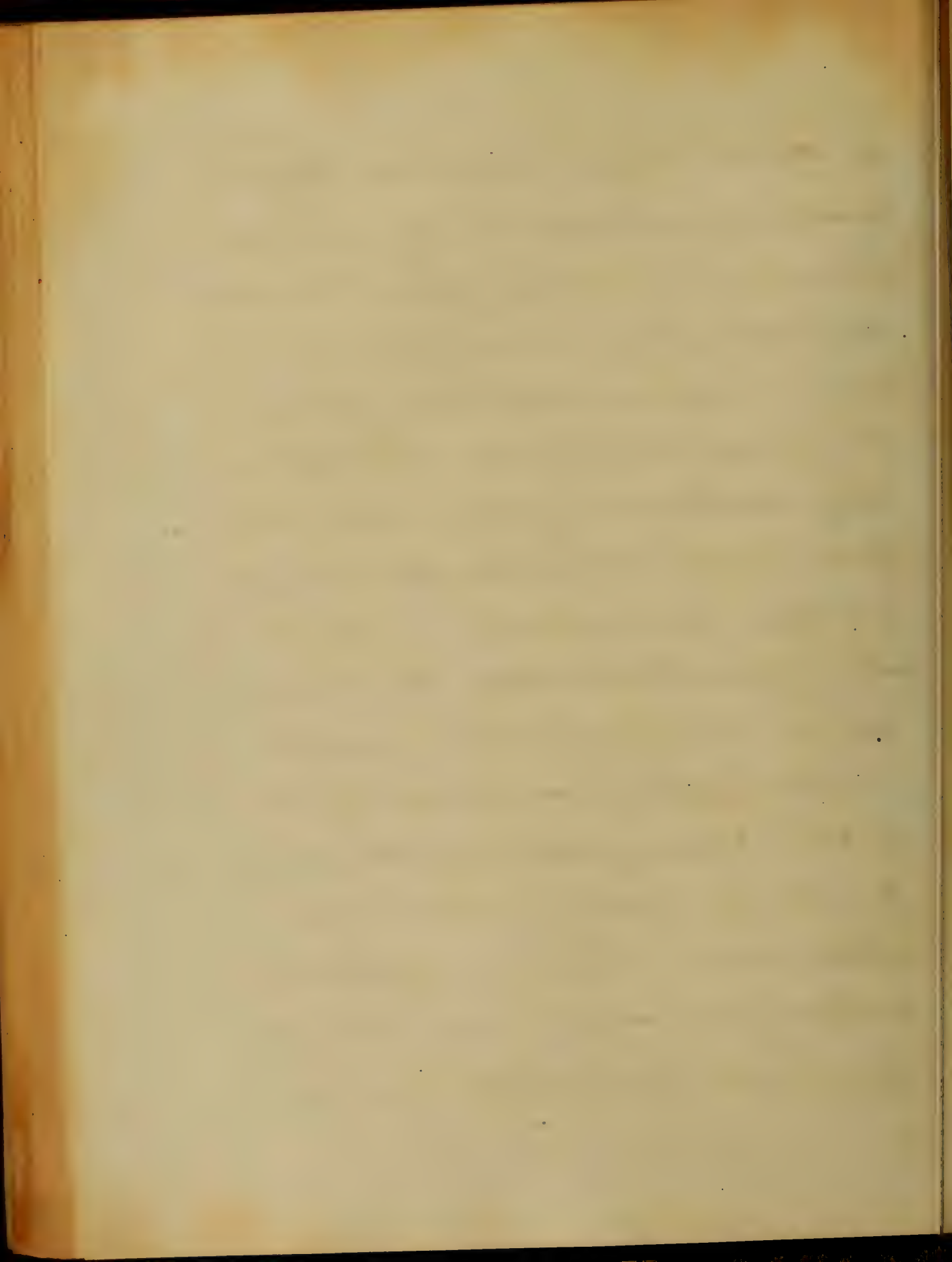
The White Poppy is one the most an-
ciently known, and described plants:

It appears to have been cultivated as
early as the age in which Homer lived.

It is uncertain at what period it was
introduced into medicine.

Hippoc-
rates appears to have been the first who
used it for its medicinal qualities.

The Poppy is an annual herb,
with a tapering root; a stem from
two to five feet high, as I have
stated before; leaves large, and of
a dark green color. Any single
poppy has four petals, and they



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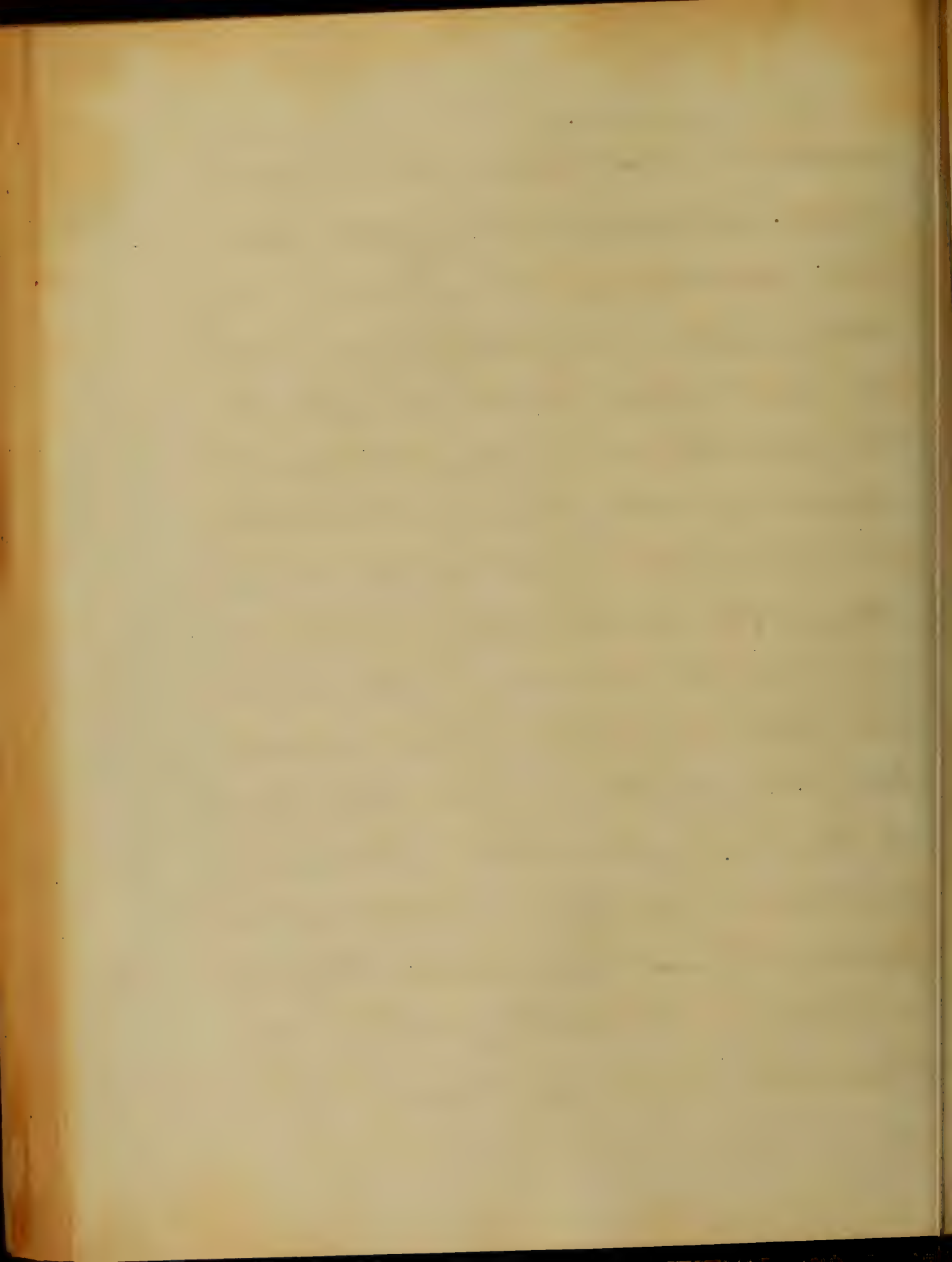
are of the color that distinguishes their variety, though the White and Black are only recognized as fit for medicinal purposes. The White has white seed, and petals, the Black, red violet, and according to Pariera even white. These varieties are grown in Persia, Turkey, Egypt, various parts of Europe, and the United States. The White as I have already stated is deemed the best of the two, or of all.

The young plants were used by the Persians as an article of food.

I have my-self seen negroes in the Eastern part of Alabama eat the leaves as they would eat greens. The Romans used the seed in the preparations of

dainties. The oil made from the seed resembles olive oil, and is often used as a substitute for it in culinary and pharmaceutical purposes; in painting, and in the manufacture of soap. I have used the oil in painting, but I cannot say that it is a full substitute for olive oil.

In the north of France the Black Poppy is extensively raised for the seed alone. In the United States it is raised as an ornamental flower mostly. In many parts of Europe it grows wild. I have mentioned in my experience, that the capsule is the part from which the opium is procured. The mode of gathering it, I don't think I fully explained, it is



as follows, in a day or two after the flower has dropped, or the petals have fallen from the capsule, incisions are made in the head or capsule, care being taken that they do not enter the internal cavity. Immediately upon incision a white milky concrete juice flows out, which is allowed to remain (except in the south, that being such a warm climate, it drips from the capsule instead of becoming dry as it accumulates at the incision) for a space of 24 hours, and it is then scraped off and kneaded into a cake or ball with saliva instead of water, which latter agent causes it to spoil. Each capsule yields opi-



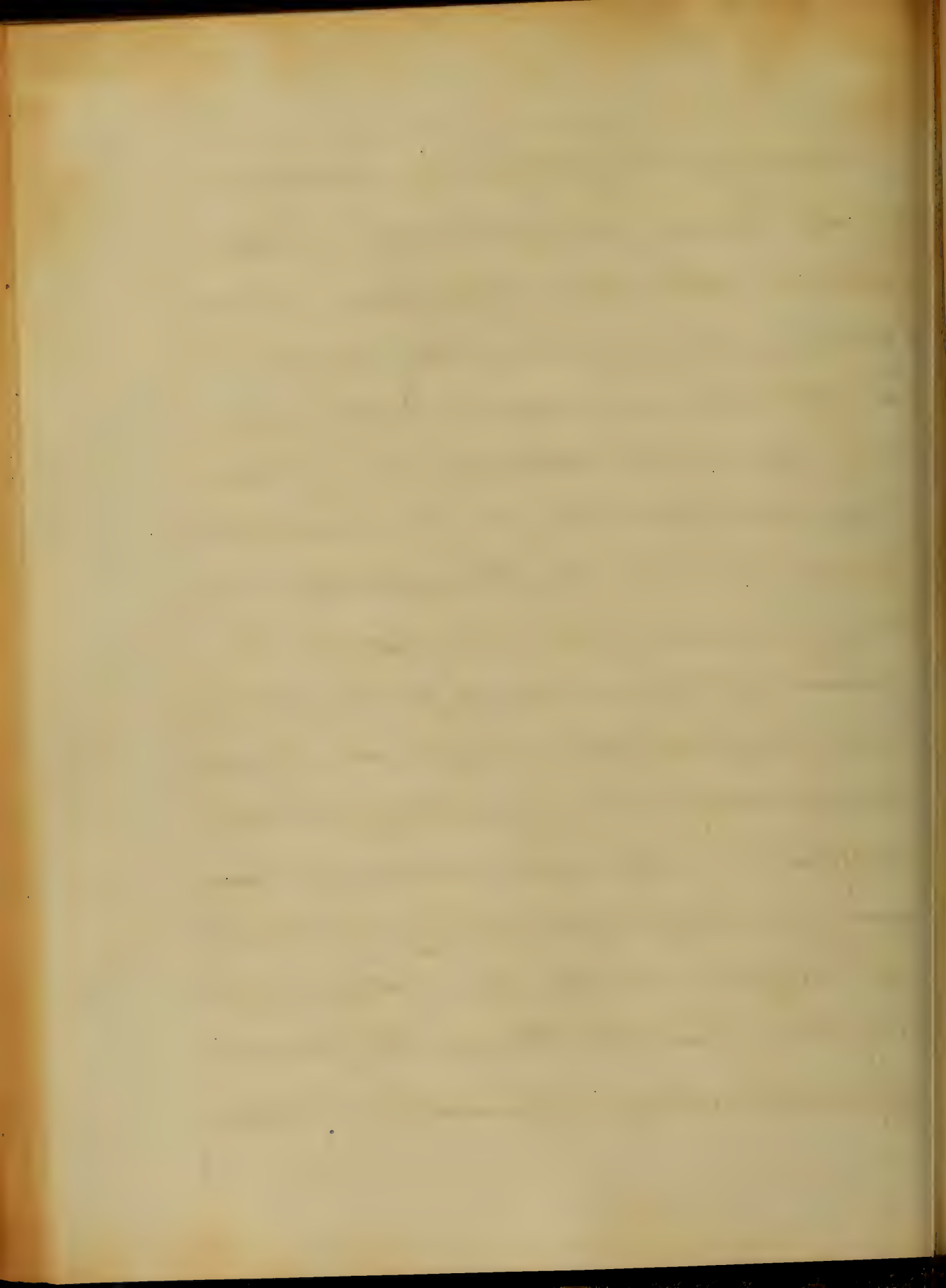
-um only once. There is another kind of Opium
 made by bruising the capsules in water,
 after all the juice that could be extrac-
 -ted in the usual manner, it is inspiss-
 -ated, and thus an inferior quality of
 Opium is obtained. Opium is adul-
 -terated in many ways, various substan-
 ces are incorporated with it, the stems
 and leaves, pieces of metal, different
 kind of gums &c. In commerce sever-
 -al kinds are known. 1st from Turkey,
 two varieties, Smyrna and Constantinople
 The former yielding 13 per cent of Mor-
 -phia, and is the best we have. The Con-
 -stantinople is almost identical with the
 Smyrna. 2nd Egyptian, inferior to
 either of the former, containing only

6 or 7 per-cent of Morphia. 3rd India
 Opium, of two varieties, 1st Bengal or
 Patna, contains about 1/8 less Morphia
 (about 8 per cent) than Persian, 2nd Malwa,
 contains about 9 per cent of Morphia.
 Pereira has two kinds of this, besides
 that made in Bombay, which he calls C-
 utth, and yet-another, Kandist. 4th Per-
 sian or Trebezond, according to Wood &
 Baché has 3 per-cent of Morphia, but by
 Pereira it is said to contain only 1 per-
 cent. 5th German, yields 1 per-cent
 of Morphia. 6th French, said to con-
 tain as high as 22 per-cent of Morphia.

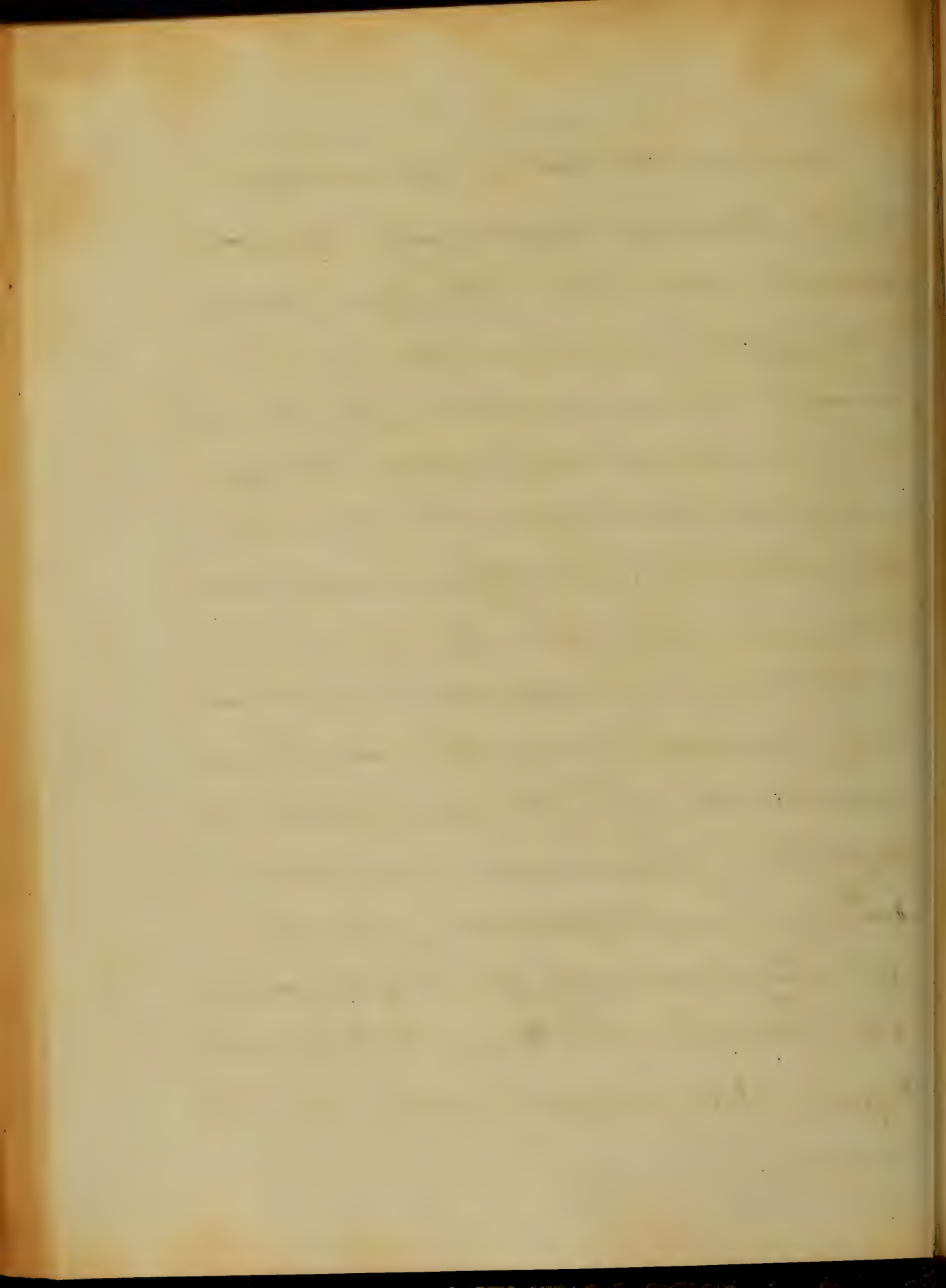
Opium is considered as inferior when
 it is of a blackish color, weak smell, swe-
 et-instead of a nauseous and, bitter taste,



It should not impart a deep brown color to the saliva, nor form a thick viscid solution with water. The properties of good Opium are a peculiar strong narcotic odour, a bitter some what acrid taste, when long chewed it irritates the mouth and, may even blister it. When drawn over paper it leaves an interrupted trace of a light-brown colour. On exposure it become brittle, and being pulverized it makes a yellowish brown powder. Opium burns readily and, is partially soluble in alcohol, water, ether, wine, and vinegar, imparting to all a deep brown colour. Opium contains the following principles, 1st a volatile odorous principle of which nothing is known. 2nd Codeia

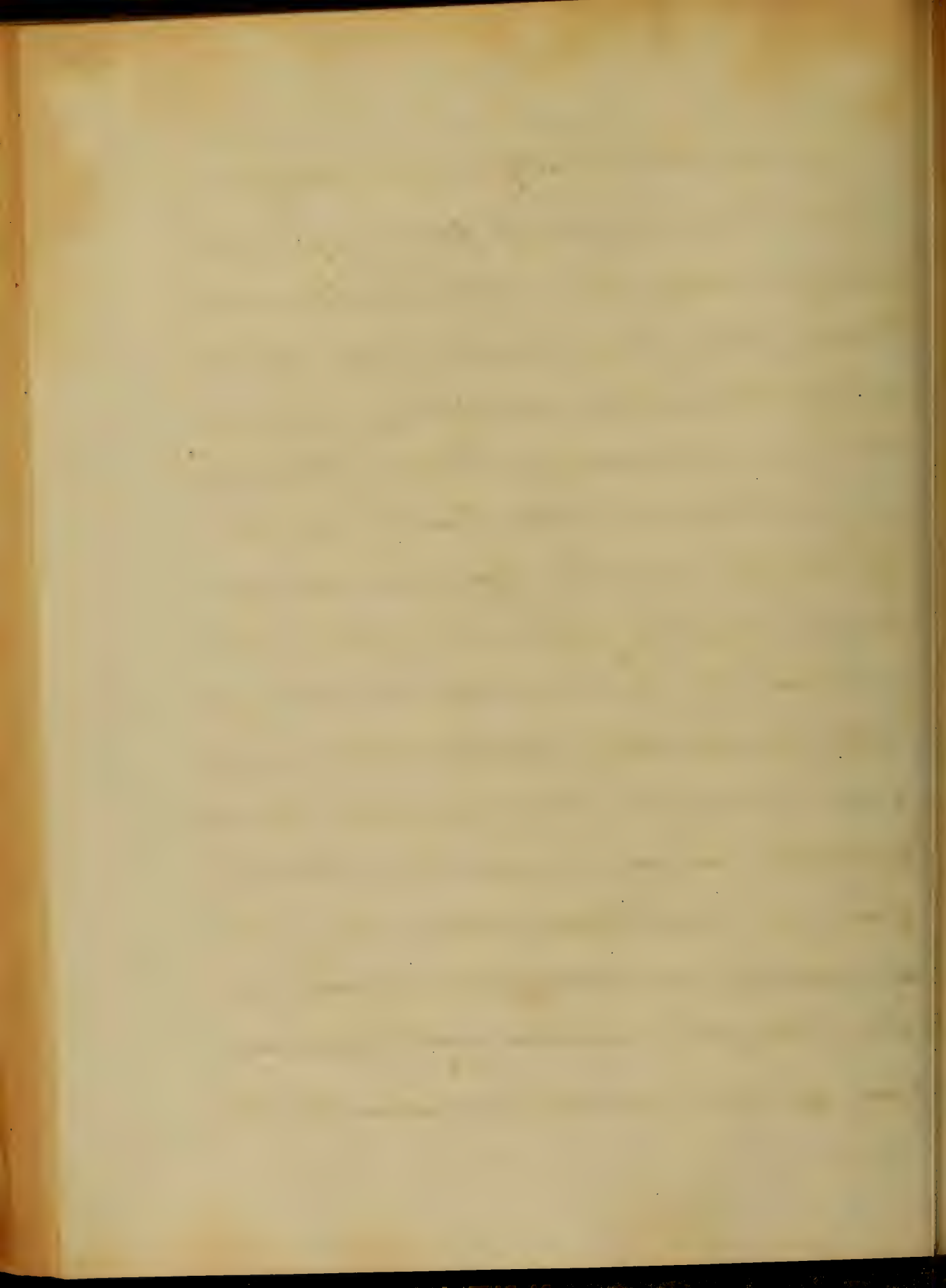


Its salts are the Nitrate, Tartrate and
 Hydrochlorate of Morphia and, Codeia; Co-
 -deia has more of the stiffening or paraly-
 -zing effects of Opium, one grain of it
 is equal to $\frac{1}{2}$ of Morphia. 3rd Narcoti-
 -na; possesses but little activity, 4th Narcein,
 it is believed to be inert. 5th Meconine
 thought to be inert. 6th Thebaine or Par-
 -amorphia, one grain injected into the
 jugular vein of a dog acts like Strych-
 -nia, producing Tetanus, and, death in a
 few minutes. 7th Pseudomorphia, prob-
 -ably some preparation of Morphia in
 which it has ^{with} its poisonous properties.
 8th Porphyroxin, of this, nothing defin-
 -ite is known. 9th Resin. 10th Extractive
 supposed to be one of the active principles

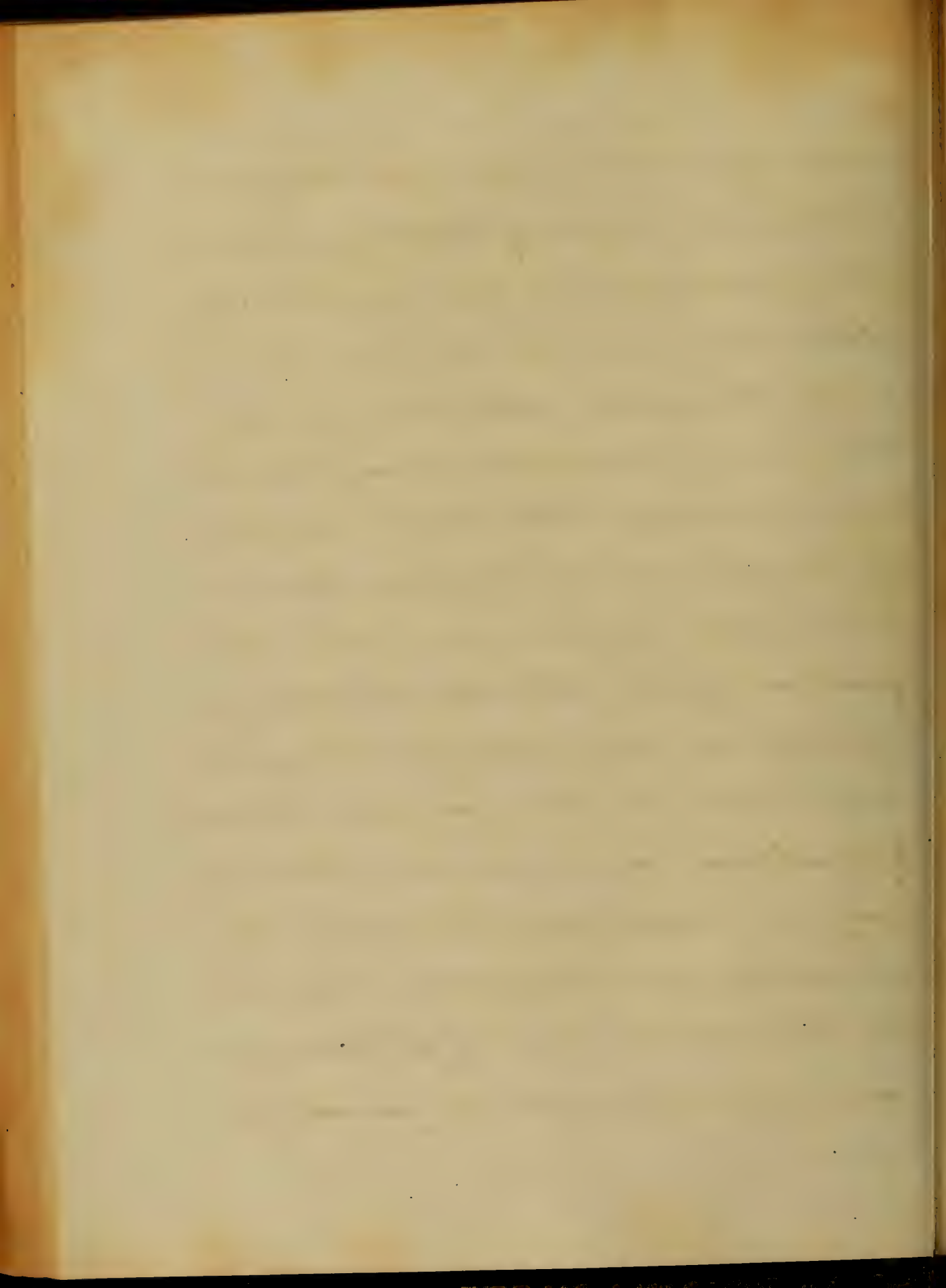


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of Opium. 11th Fatty Matter, which is united with alkalies to form soaps. 12th Meconic Acid, an inert substance. 13th Morphia, the only one of its constituents, which figures to any great extent in Pharmacy. It was discovered by Serturner, a German Chemist: To this principle Opium owes almost its entire strength. It is insoluble in cold, but soluble in water at 212° Fahrenheit, slightly soluble in cold and, freely so in boiling alcohol, which deposits it again on cooling. With the Acids it forms salts which are generally soluble and decomposed by the alkalies. Morphia and its salts, by the action of Nitric Acid assume a blood red



colour, and a blue colour with Sesquioxide
 of Iron. It is precipitated from it sa-
 lly by an infusion of Galls or other veg-
 etable astringents, but not by an infusion
 of Gallic Acid. Morphia assumes
 the form of small white crystals with-
 out smell and of bitter taste. The Salts
 of Morphia are the Sulphate, Muriate,
 and Acetate, very similar in their thera-
 peutical effects. They have the anodyne
 soporific and diaphoretic powers of Op-
 ium, but are less stimulant, and less apt
 to constipate, and leave behind ill ef-
 fects, as nausea and head-ache, They
 are usually more acceptable to an irri-
 table stomach, and are applicable in all
 cases where a narcotic is desired, but



are less efficient in the suppression of morbid discharges, and as stimulants in low forms of disease. They are peculiarly applicable (in cases which do not admit of their internal administration) in being spread (in trifling doses) on an abraded surface, acting as when administered internally. It is also used extensively by some, hypodermically in dose from $\frac{1}{8}$ to $\frac{1}{4}$ of a grain. They are particularly suitable in neuralgic affections, and in obstinate sickness of the stomach, applied on the Epigastrium they act on the system at large. If the effect is to be local they should be applied as near the affected part as possible. In over doses they produce symptoms of narcotic poisoning.

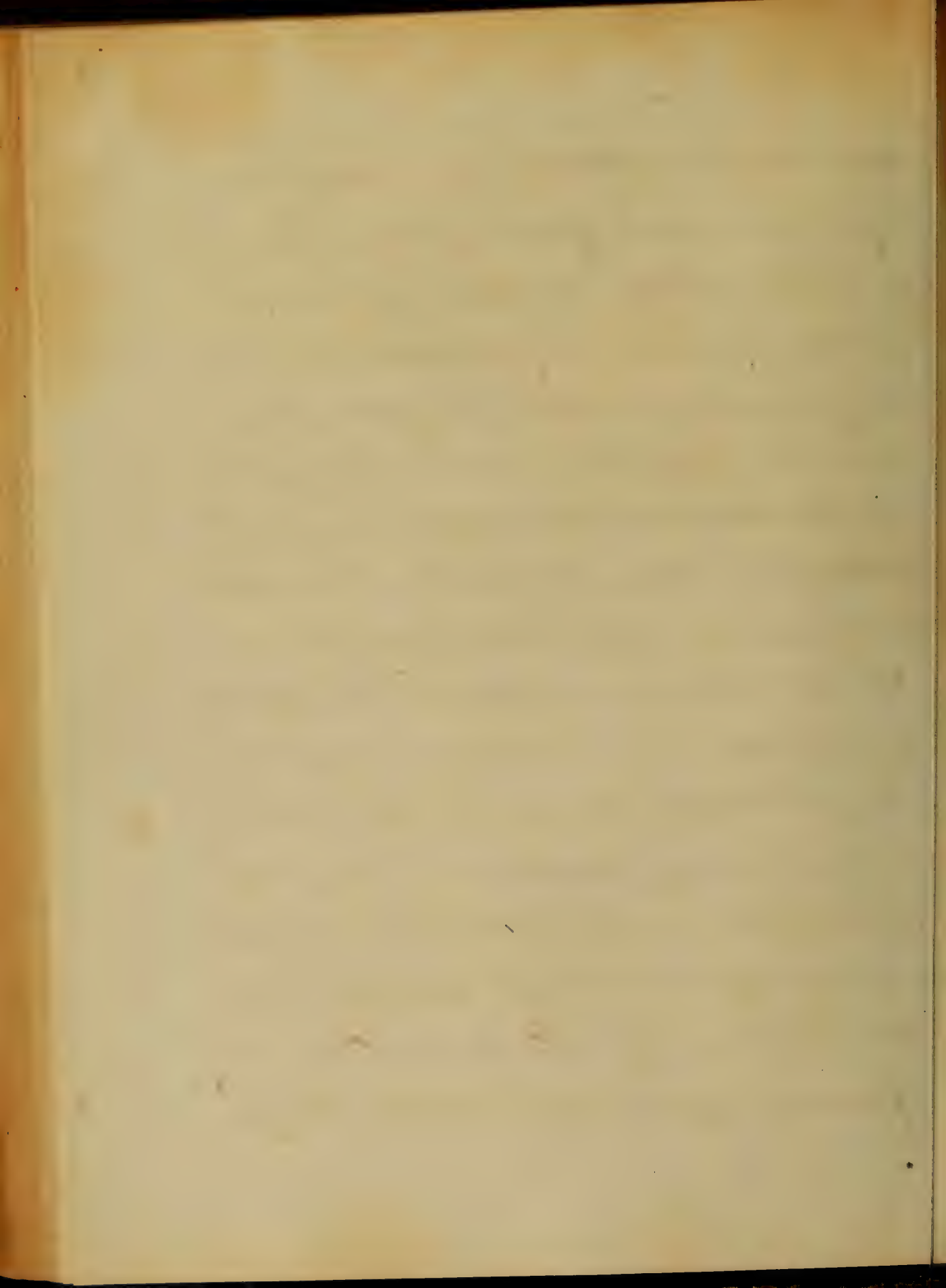


Should an over dose of these agents be taken, Emetics call for immediately on account of their prompt action. Sulfate of Zinc or Tartar Emetic &c. The patient should not be allowed to sleep. To overcome the debility arising from the poisoning, Carbonate of Ammonia may be employed internally, with sincipiens, and friction to the surface.

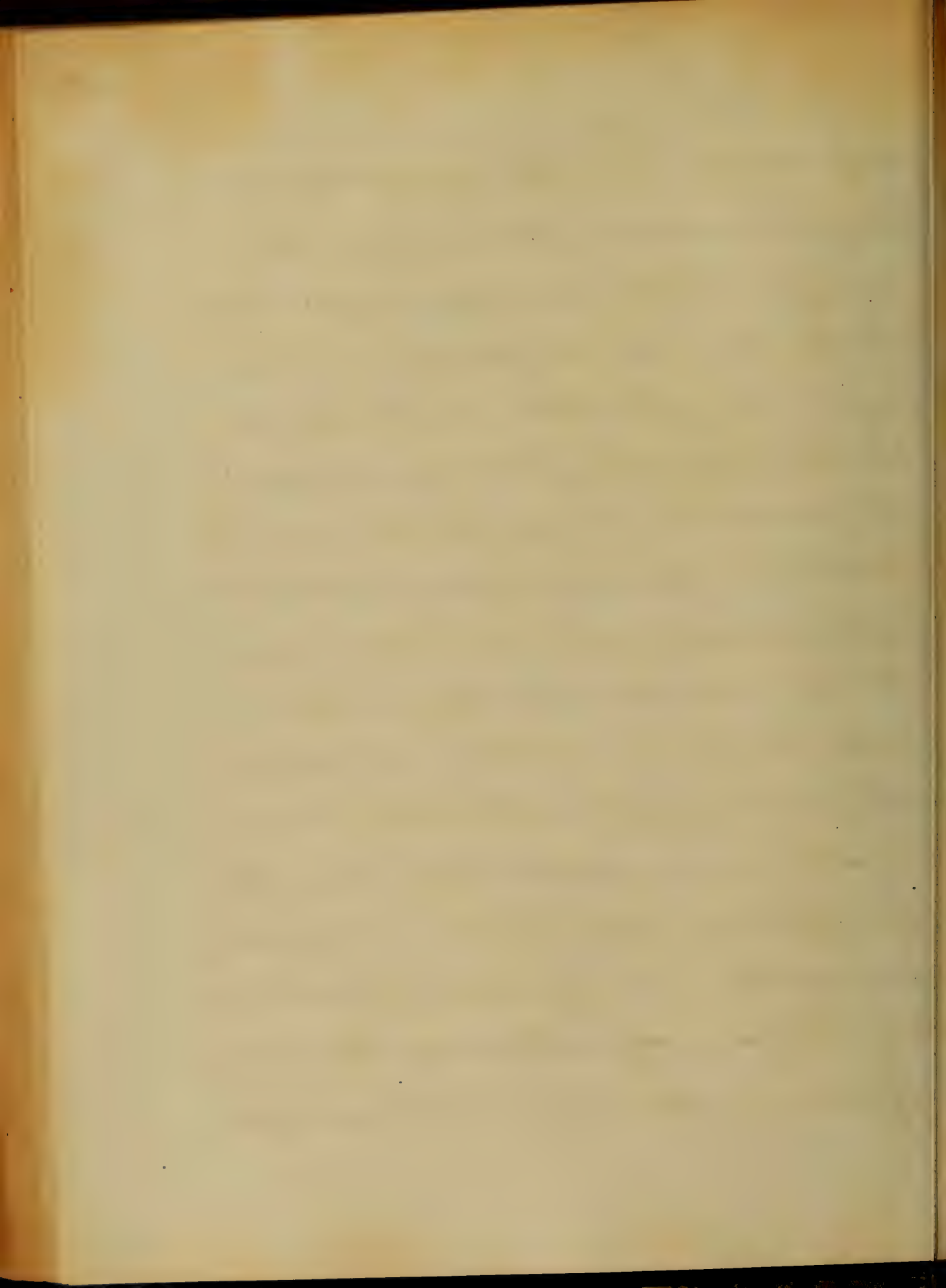
Death takes place by the Lungs; in consequence of a suspension of the cerebral influence necessary to sustain the respiratory functions. One grain is equivalent to six grains of Opium. Dose from $\frac{1}{4}$ to $\frac{1}{2}$ gr, although as much as two grains may be taken with no ill effects. The incompatibles are the alkalis.



and all the vegetable infusions contain-
ing Tannic and Gallic Acid. Opium
is a stimulating narcotic. Taken by a
person in health, it increases the force,
frequency, and fulness of the pulse, Aug-
ments the temperature of the skin, quick-
ens the senses and animates the spirits,
exciting the brain almost to intoxication
or delirium. In a short time this cea-
ses, and the mind becomes delightfully
placid, the individual submit-
ting himself to a current of sweet-
and pleasing fancies. At the end
of half an hour he loses all conscious-
ness in a quiet and peaceful slum-
ber, lasting eight hours or more.
On awaking he suffers from head-



ache, nausea and other symptoms of irregular nervous actions, which soon pass off. All the secretions except that of the skin are suspended or diminished. The peristaltic motion of the bowels is lessened, pain is allayed, the muscles are relaxed, and nervous irritation is relieved. Opium seems to exert a deadly effect on certain plants. The Mimosa, soon dies if watered with an aqueous solution of Opium. The effects of Opium on the animal kingdom have a relation to the degree of development, and influence of the nervous system. In small doses from $\frac{1}{4}$ to $\frac{1}{2}$ gr it generally acts as a stimulant. Given in a full medicinal dose (2 to 4 gr)

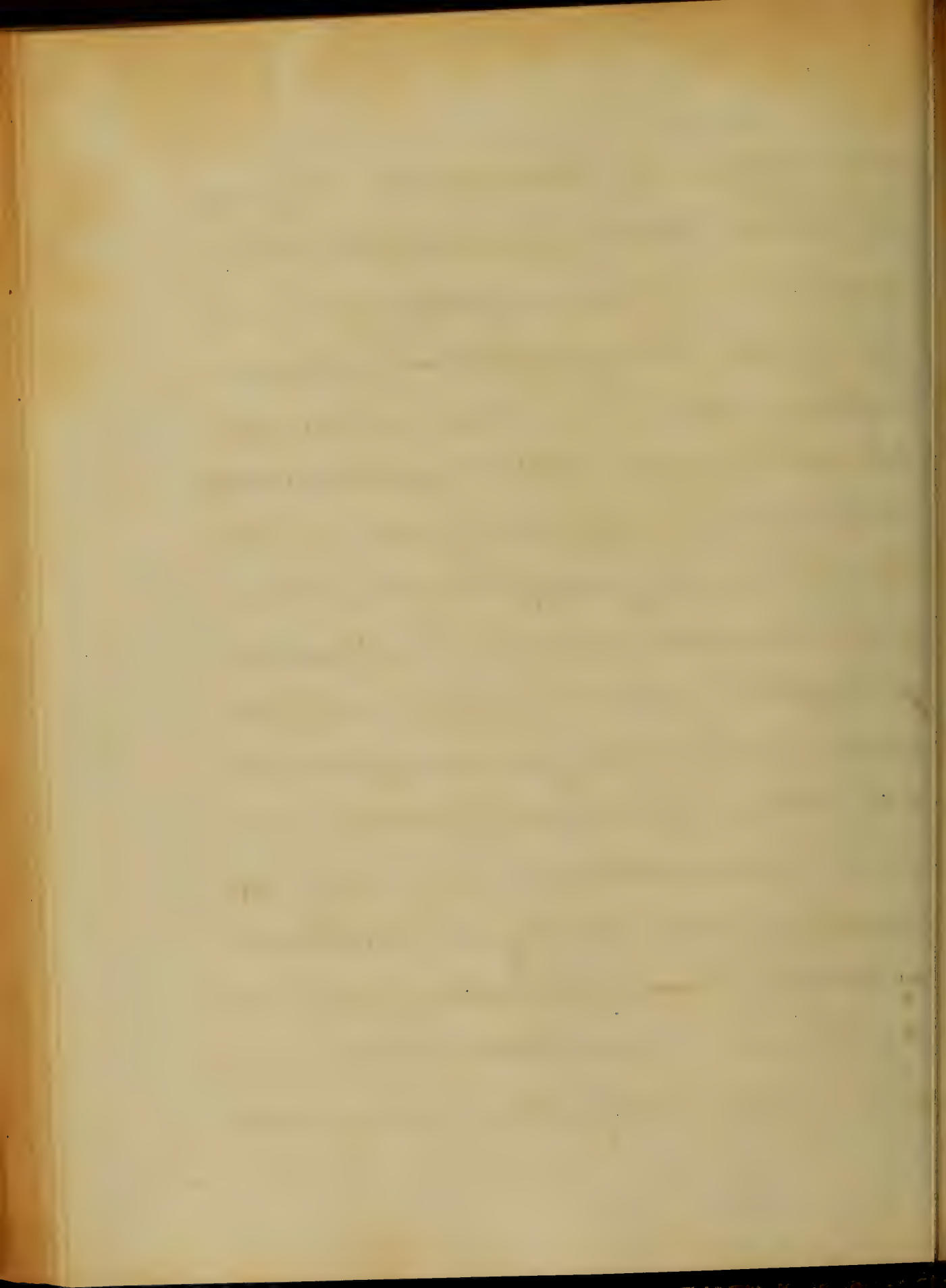


it generally acts as an excitant which is soon followed by that of depression.

The pulse is reduced below the natural standard, the mouth and throat become dry, the appetite diminishes, thirst increases, and frequently nausea and vomiting are produced. The symptoms of excitement soon pass away and a state of torpor succeeds. The patient is listless and his ideas become confused. He is ceased with an irresistible desire to sleep, which is frequently attended by dreams, some times, of a pleasing and at others of a frightful nature. These effects are usually succeeded by a furred tongue, head-ache and listlessness. Given in a poisonous dose it produces giddiness,



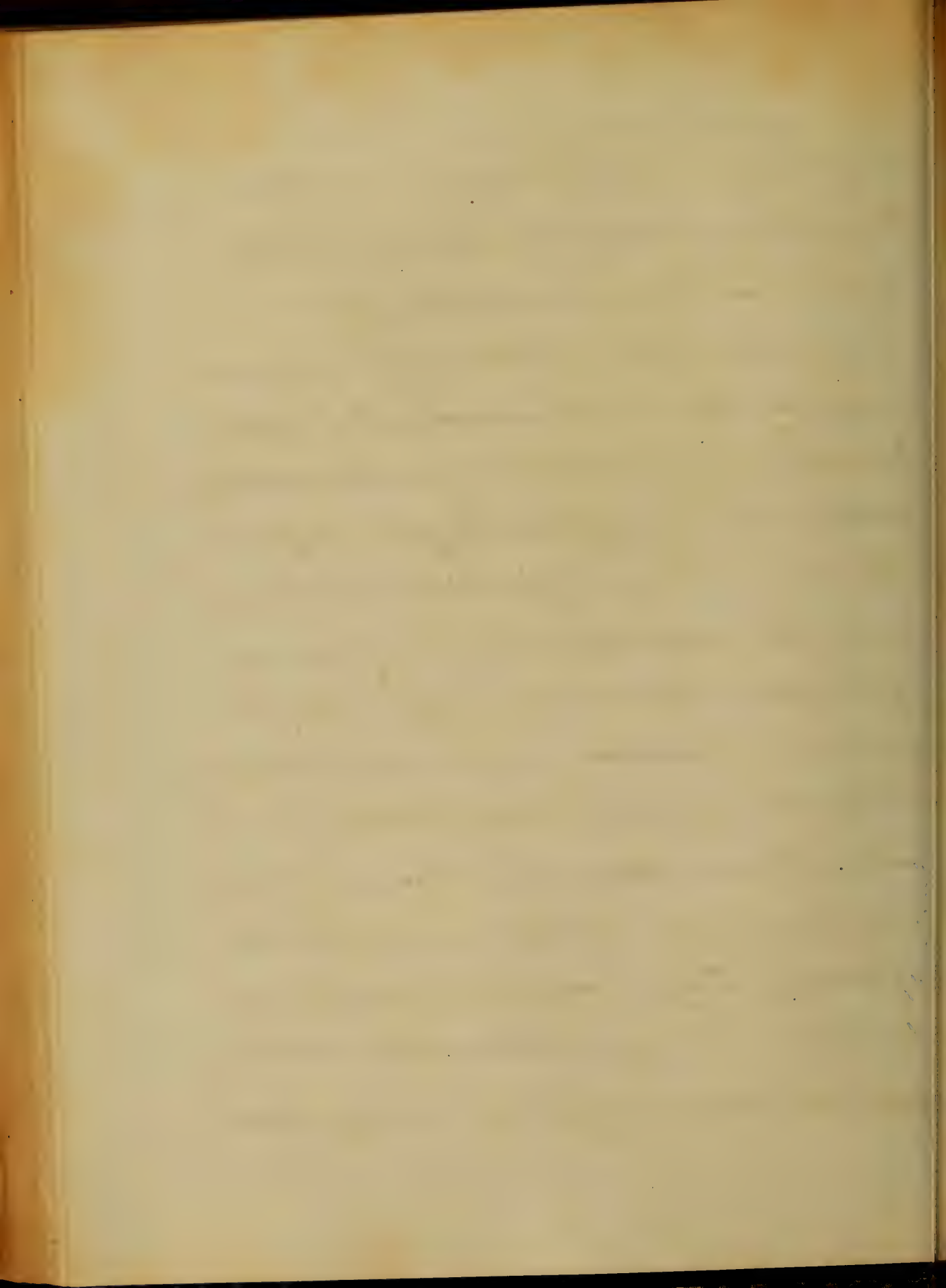
and stupor; the latter rapidly increasing the patient becoming motionless and insensible to external impressions, breathing shortly with eyes shut and pupils contracted, and the whole expression of the countenance, that of perfect-repose. As the deadly effects increase, the features assume a ghastly hue, the pulse very much reduced, so much so as to be almost unperceptible, the muscles relaxing and unless timely aid be procured, speedy death ensues. Should the patient recover the critical danger, it is followed by prolonged sleep, lasting 24 to 36 hours after which nausea, vomiting and loathing of food. In the East, Opium is used in the place of Alcoholic spirits; which



is forbidden by the religion of that country, yet the inhabitants will stupefy themselves by chewing and smoking Opium.

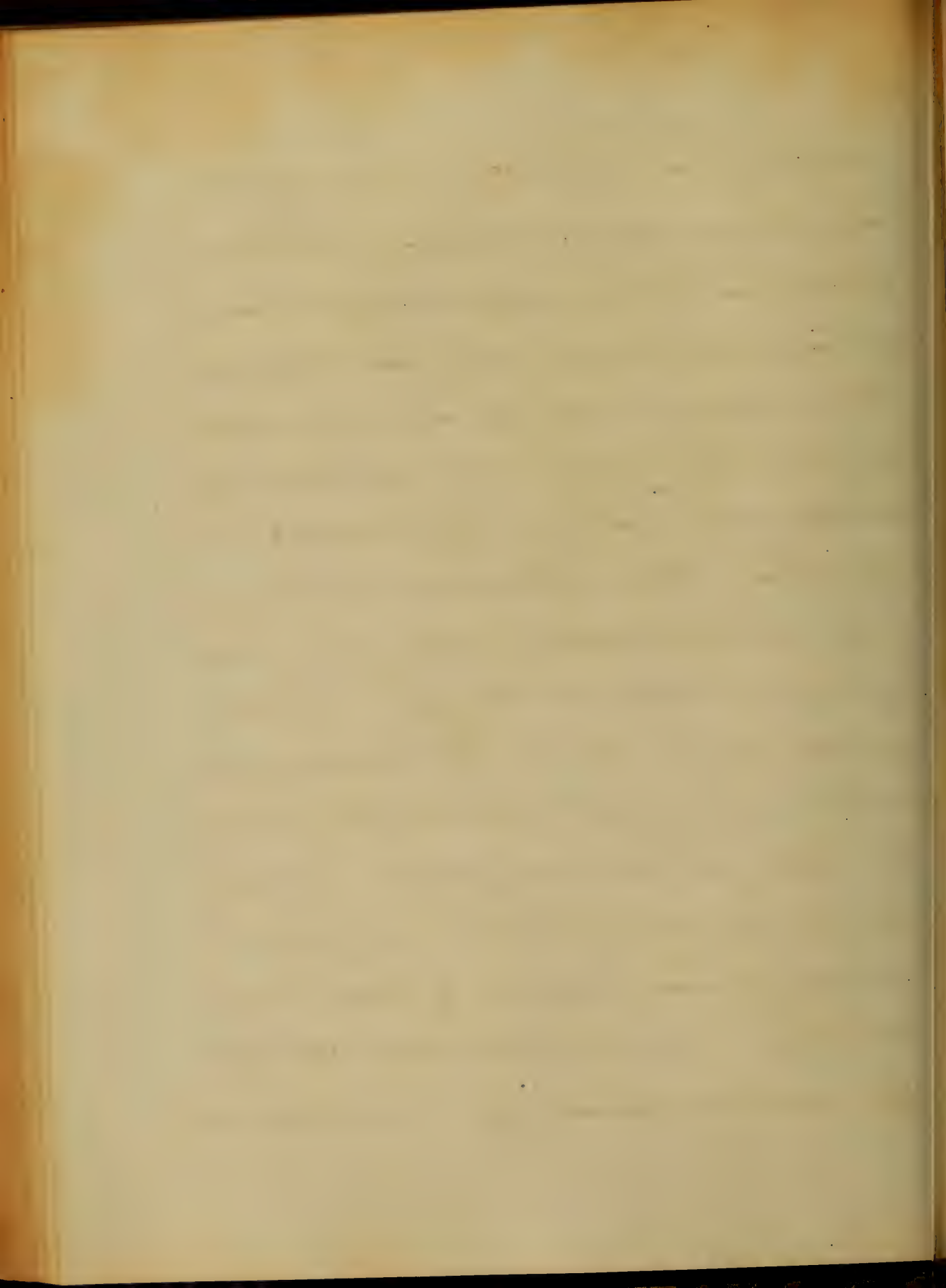
The effects on the system are powerful and lasting. The smoker is affected by deterioration of the mental faculties, debility, emaciation, appetite destroyed or depraved.

In the morning the poor creature has a most-wretched appearance; apparently not at all refreshed by sleep of the previous night; however profound. There is a repetition of the smoke called for, which if not indulged in, causes great suffering viz: the sufferer is attacked by vertigo, torpor, and discharge of water from the eyes. Pains are felt all over the body, A general feeling of wr-

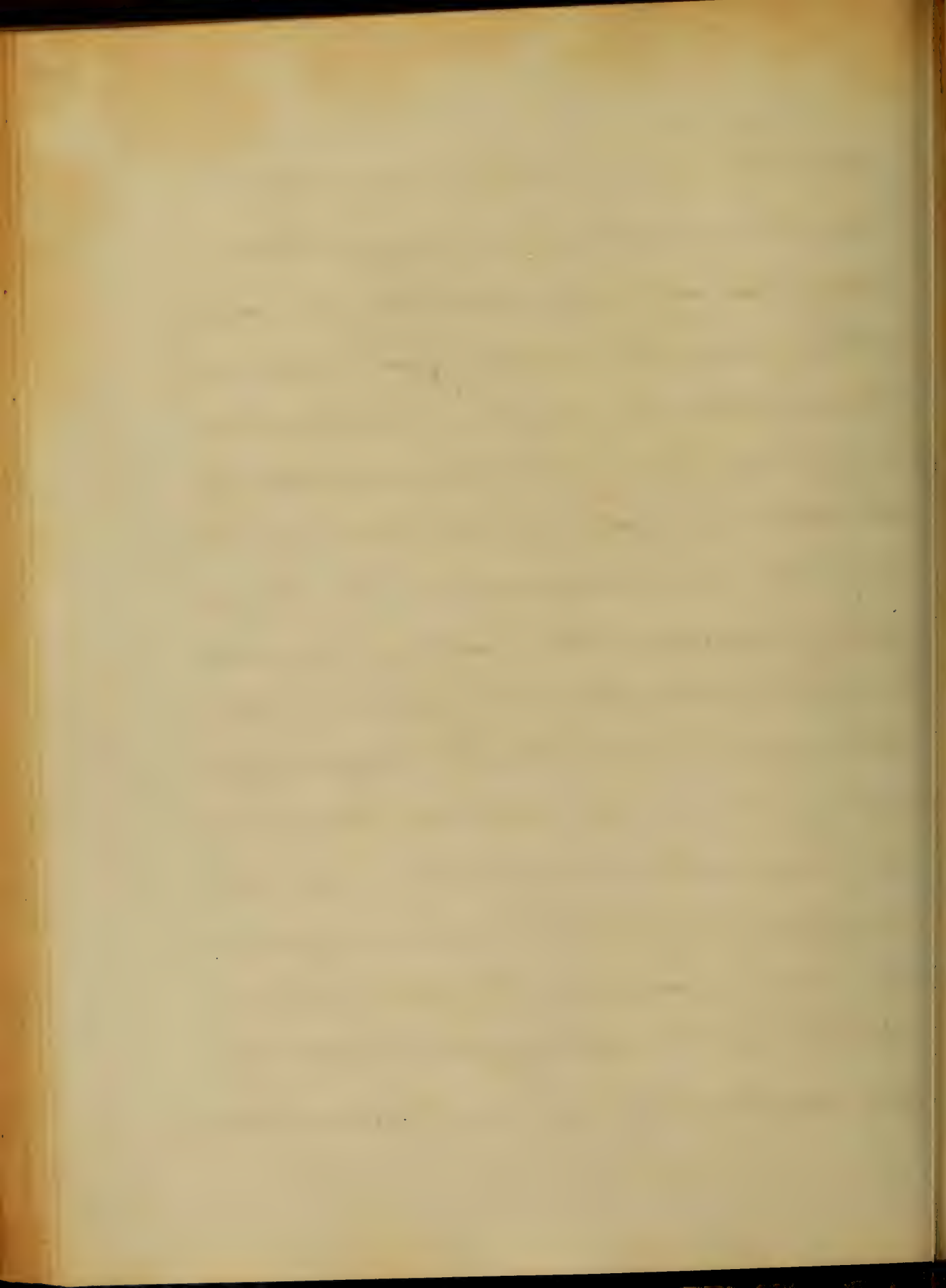


elthiness come on and if he be not allowed to indulge in what has now become to him a necessary, rather than a luxury. (his smoke) he speedily dies. The offspring of Opium eaters are stunted, and weakly. The habitual Opium eater is easily recognized by his appearance.

He has a total attenuation of body, a lame gait; a bending of the spine and glossy and deep sunken eyes. His digestive organs are in the highest degree distended, his mental and bodily powers are destroyed, he is impotent. After long indulgence he becomes subject to violent pains, to which Opium brings no relief. If an Opium eater contracts the habit at an early age, he seldom or



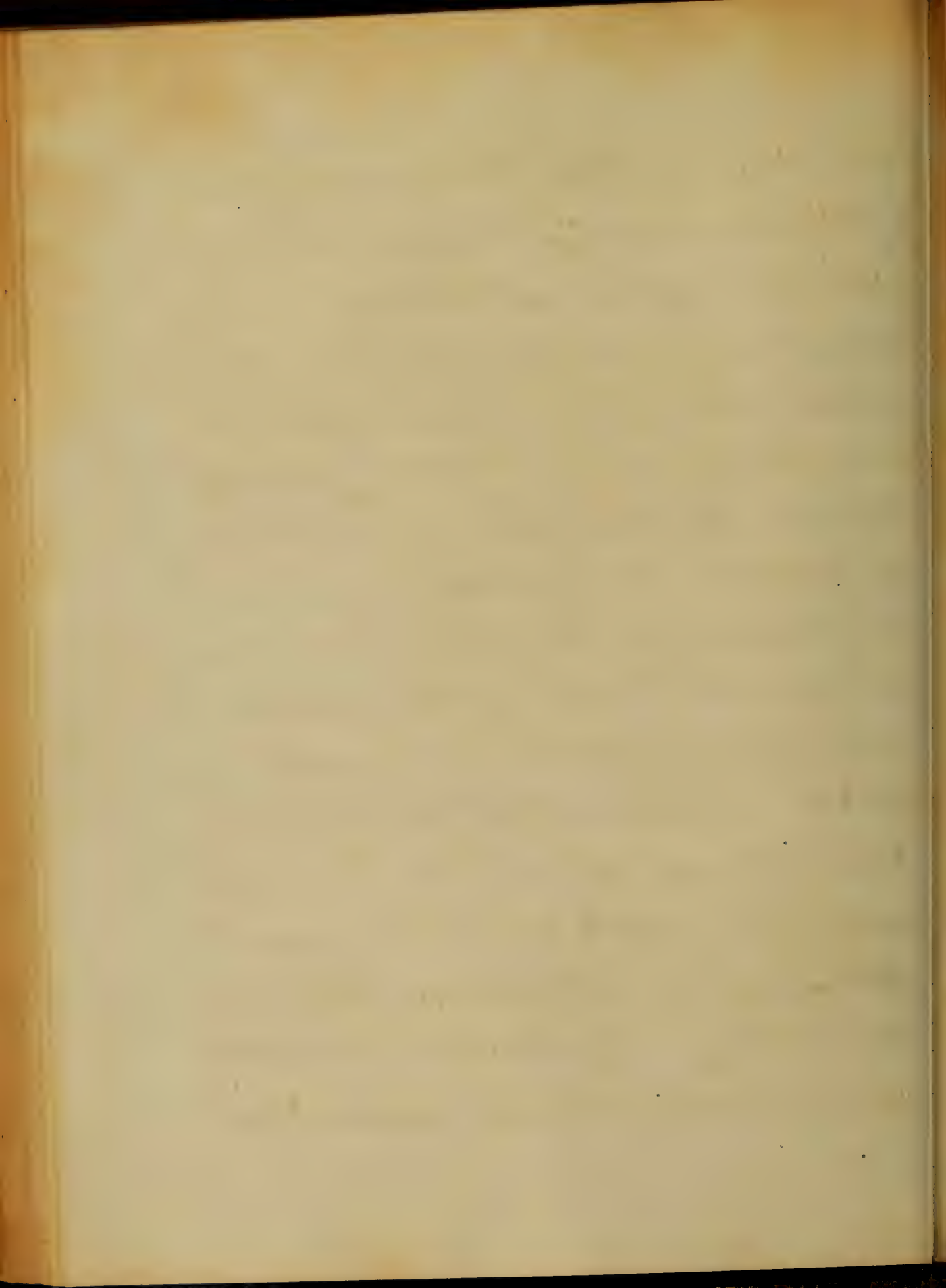
river at the age of forty. It appears that those Chinese who are in easy circumstances, do not suffer from this vice as much as those who live in poverty and distress. Taken in small or moderate doses, Opium first produces excitement of the vascular system of the brain, which is followed by depression. In large or poisonous doses, the leading symptom is sopor, from which the patient can be aroused. In the latter stage of poisoning, the patient is in a state of coma from which he can not be aroused. Another effect, is diminished sensibility. The eyes are insensible to light, and the ears to sound. The effects on the digestion are, that it diminishes secretion, and



exhalation from the whole alimentary ca-
 -nal, it causes dryness of the mouth, and
 lessens the appetite, or confines the bow-
 -els. Opium by means of its sedative in-
 -fluence, possesses some power over the he-
 -art, which being a muscle, is relaxed
 and thereby weakened; hence the in cre-
 -ased, and diminished force of the pau-
 -se. It acts on the respiratory muscles
 as it does on muscles generally: 1st by
 stimulation and then followed by
 depression. It is said that it checks
 arterialization of the blood, by dimin-
 -ishing the supply of nervous agency
 by means of which it is carbonized.
 It is said to have some power also, over
 the membrane lining the trachea, bron-

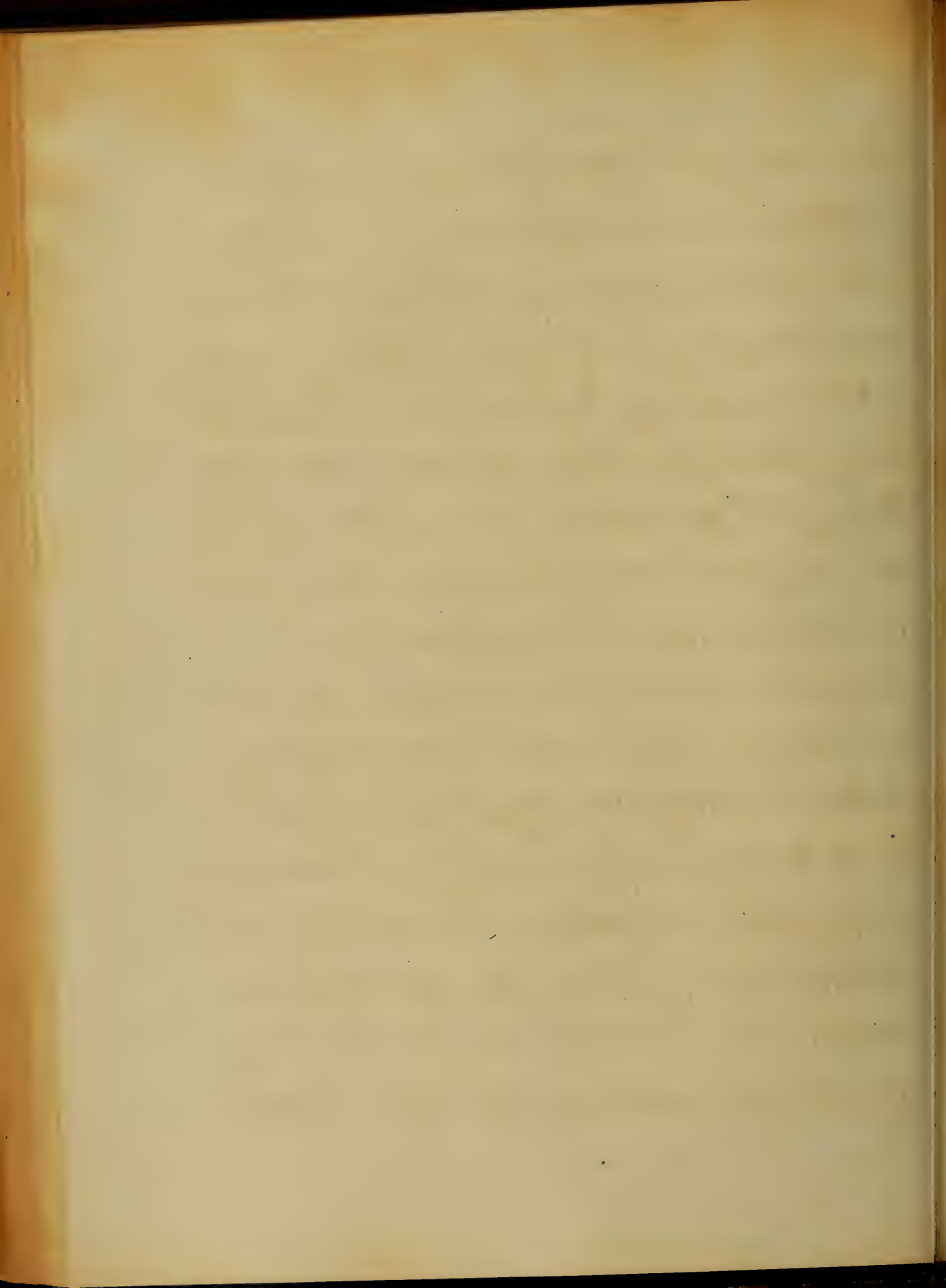


chial tubes and cells. The amount of influence exercised on the kidneys, by Opium has not been ascertained; some authors being of the opinion that it increases, others that it diminishes the secretion of urine. It is generally believed however, that if small doses be taken, the quantity of urine will be small, turbid and thick. In some conditions of the system, Opium does certainly lessen the quantity secreted. In some of the Eastern countries, it is used as an aphrodisiac. Opium is conceded to be the most valuable remedy in the whole class of remedies. Frequently in the administration of remedies, if we are unable to ob-



tain the exact medicine, we use a substitute. But for Opium there is none.

One great point gained in the administration of Opium is, that we do not have long to wait for its effects. But perceive them almost immediately. Its operation too is attended with no pain, or discomfort (unless an over dose be taken) It is used in almost every ailment to which suffering man is liable. It is used, to relieve pain, to check profuse mucus discharges, to promote perspiration, to induce sleep, and in fractional doses to induce wakefulness. From the effect of Opium on the brain we find that it is contra indicated in Apoplexy. Thruene

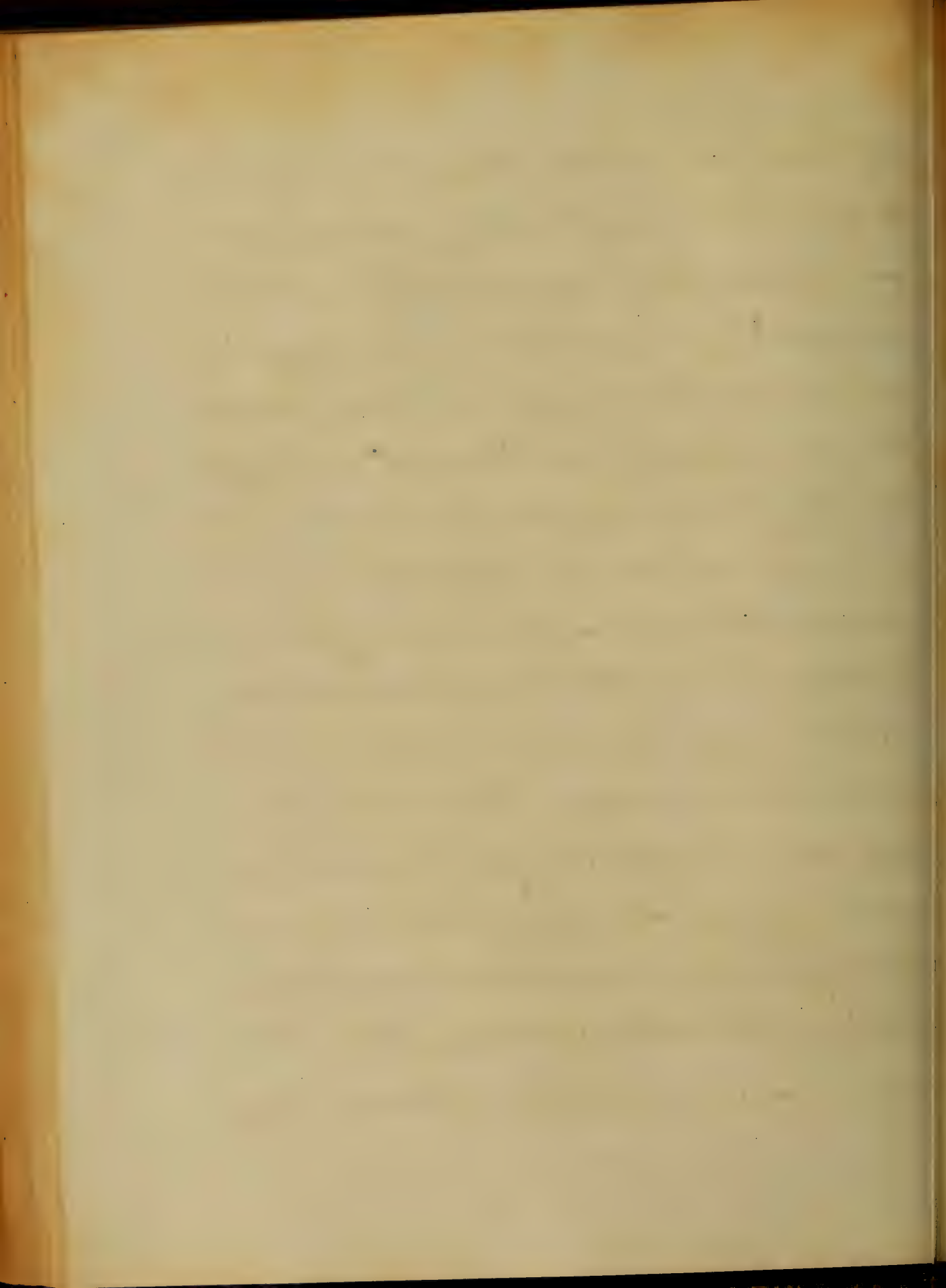


-tis, Paralysis, and all kindred diseases.

In Delirium Furens, it is "Fear excellant" the remedy, given with a view to promote sleep, for without sleep, your patient labouring under this most-distressing malady must-inevitably die. Upon taking a dose of some preparation of Opium he goes into a peaceful slumber, and awakes an almost-well man; in this disease we could not-get-on without it. From the manner in which it-operates on the digestive organs, we may be induced to make the following deductions; that Opium is objectionable in diminished secretion from the Gastro Intestinal membrane, in extreme thirst, in loss of appetite, weak digestion, and diminish-



ed secretion of bile. It is admirable to diminish hunger; to allay pains, (if not accompanied by inflammation), to diminish the sensibilities of the digestive organs, in the passage of Biliary calculi, in vascular excitement with great loss of power, as after hemorrhage; and in various morbid conditions of the pulse, attended with acute pain or spasm, but without visceral inflammation. Opium often proves to be a serviceable remedy. From the known influence exerted by Opium on the respiratory organs, we infer, that it is contra indicated where there is any difficulty of breathing, arising from the want of a due supply of nervous energy.



Opium is a stimulating narcotic. Taken in quantities sufficient to destroy life, we find after a brief period of excitement; the pulse reduced in frequency though not in force. The muscles relaxed, a feeling of drowsiness supervenes, which ends in a deep apoplectic sleep, the respiration stertorous, the countenance of a dark hue, and almost total insensibility to persons, and things.

Should you be able to arouse him (which is with difficulty) he soon relaxes into his former lethargic state. After the lapse of six or eight hours you will find him with a cool clammy skin, extremities cold, a feeble, thread like pulse, a slow and almost gasping



respiration, and a torpor almost-like death. Death soon takes place unless relief be afforded. The proper means to be employed to give relief are, to employ the stomach pump, or, if the instrument be not-attainable, an Emetic should be administered, Sulphate of Zinc on account of its prompt-action is preferable. The operation of the emetic should be hastened by warm drinks. The patient should be kept in motion. If the Opium be taken in pill, the emetic is better as the tube may be too small to admit the pill or bolus. The poison having been removed from the stomach, the next indication is to relieve the debility, which may be alarming or even fatal. For this



purpose the Carbonate of Ammonia with wine
 whey, and sinapisms and frictions to the su-
 rface. Opium is usually administered in
 substance, or tincture; when given in sub-
 stance it should be given in the form of pe-
 ill, which should be made of the powder,
 rather than a piece broken from the cake
 as this is more readily dissolved by the li-
 quids in the stomach, and therefore acts
 more speedily and readily. The dose of O-
 pium is very variable. In catarrh, we give
 $\frac{1}{2}$ grain, while in Tetanus we sometimes
 give as much as two drachms in 24 hours.

Wood and Pache mentions a case of car-
 cinoma of the uterus in which the patient
 took three ounces, or its equivalent in the
 course of 24 hours. Opium is employed



in substance as an anodyne in the form of a cataplasm in Gout and Rheumatism. Death has been known to occur from a cataplasm having been applied to the epigastrium. The dose of Laudanum is from 15 to 30 grs, yet a much larger quantity may be taken without any immediate unpleasant effects showing themselves. The celebrated English Opium eater, Dr. Guiney, was in the habit of consuming $\mathcal{O} \text{ iij}$ daily. There are many preparations of Opium. Targoric, the wine, Vinegar Extract &c &c.

H. S. Howard



1867

AN
Inaugural Dissertation

ON
Pneumonia
Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

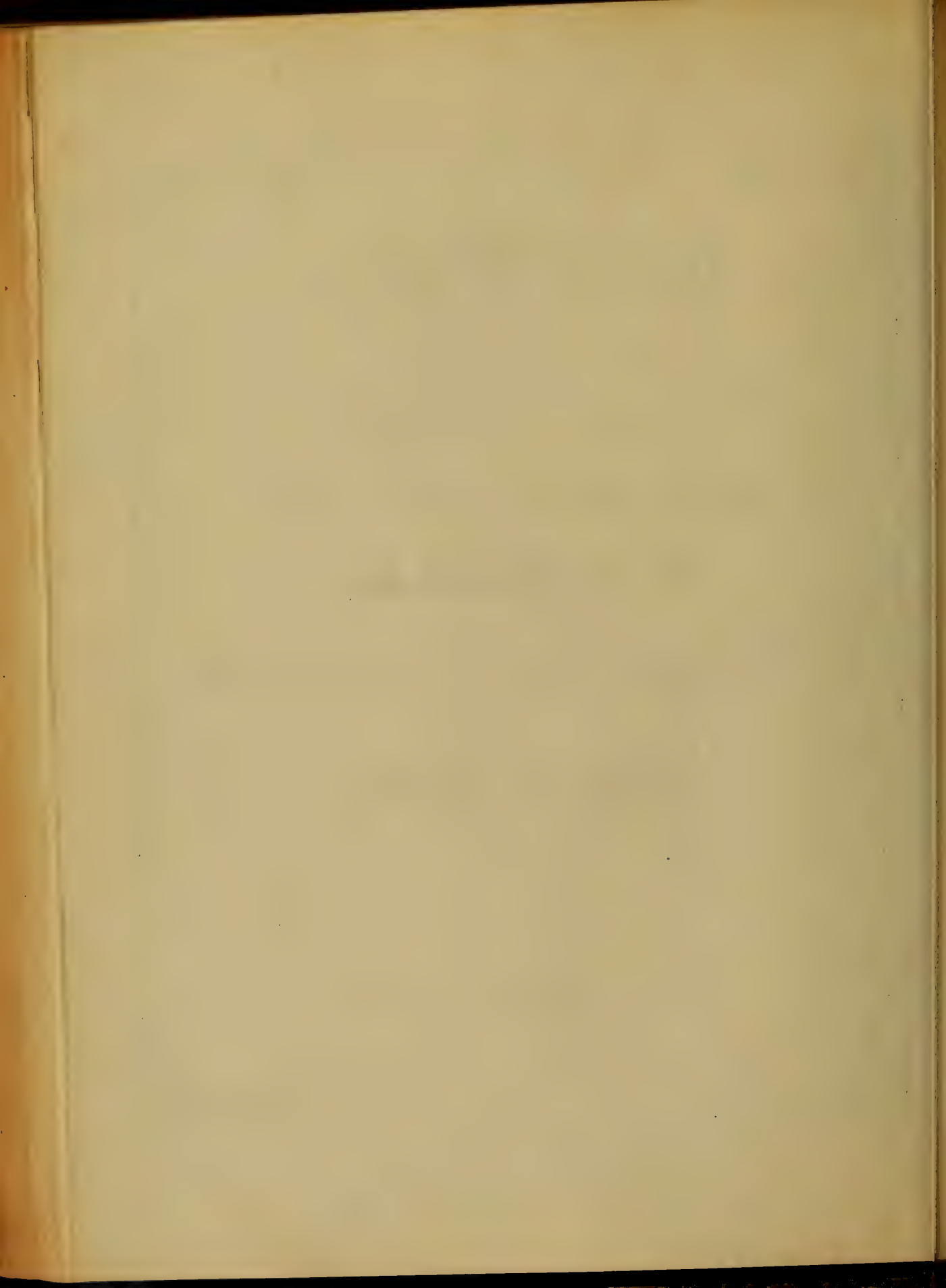
DOCTOR OF MEDICINE,

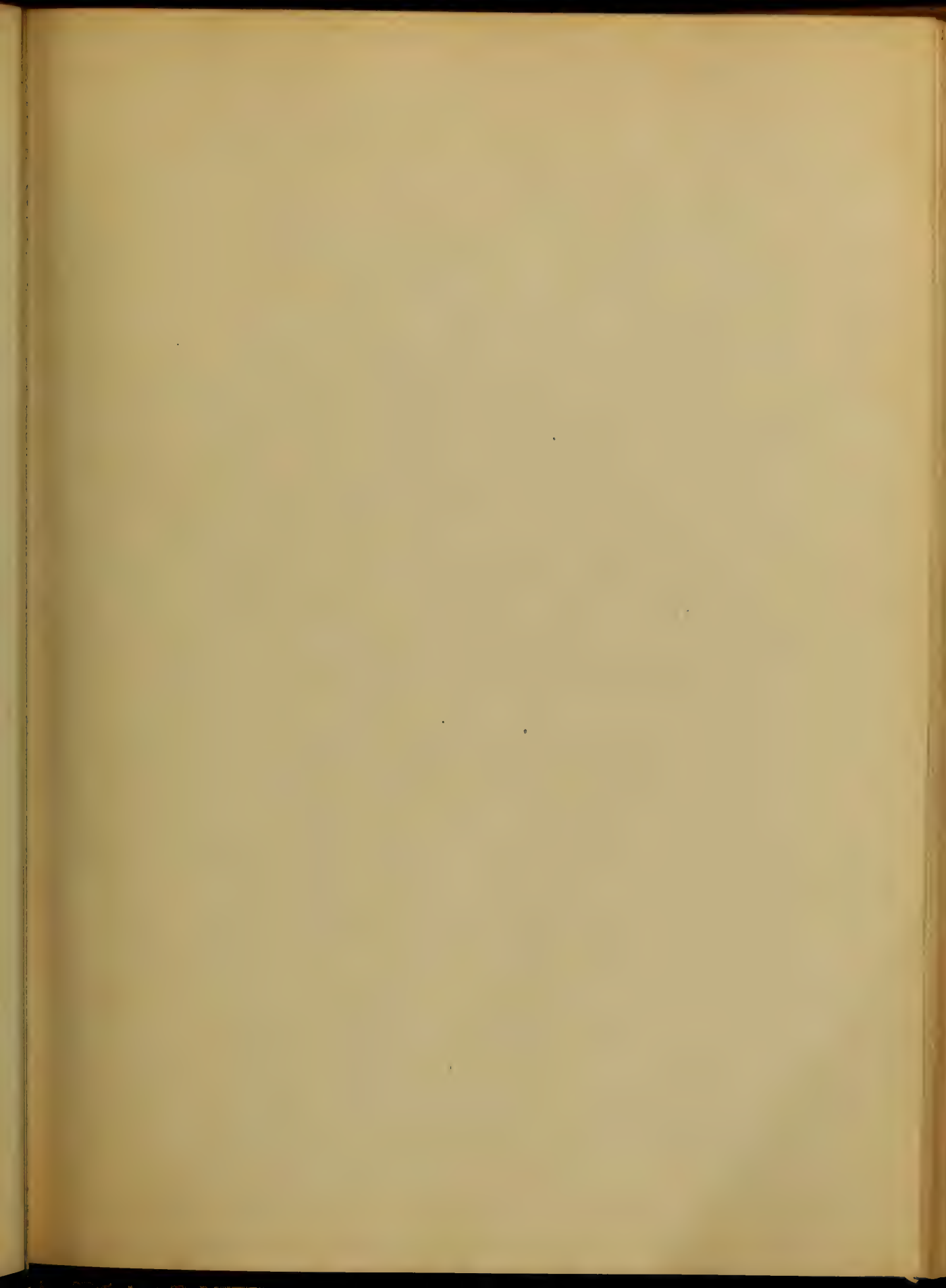
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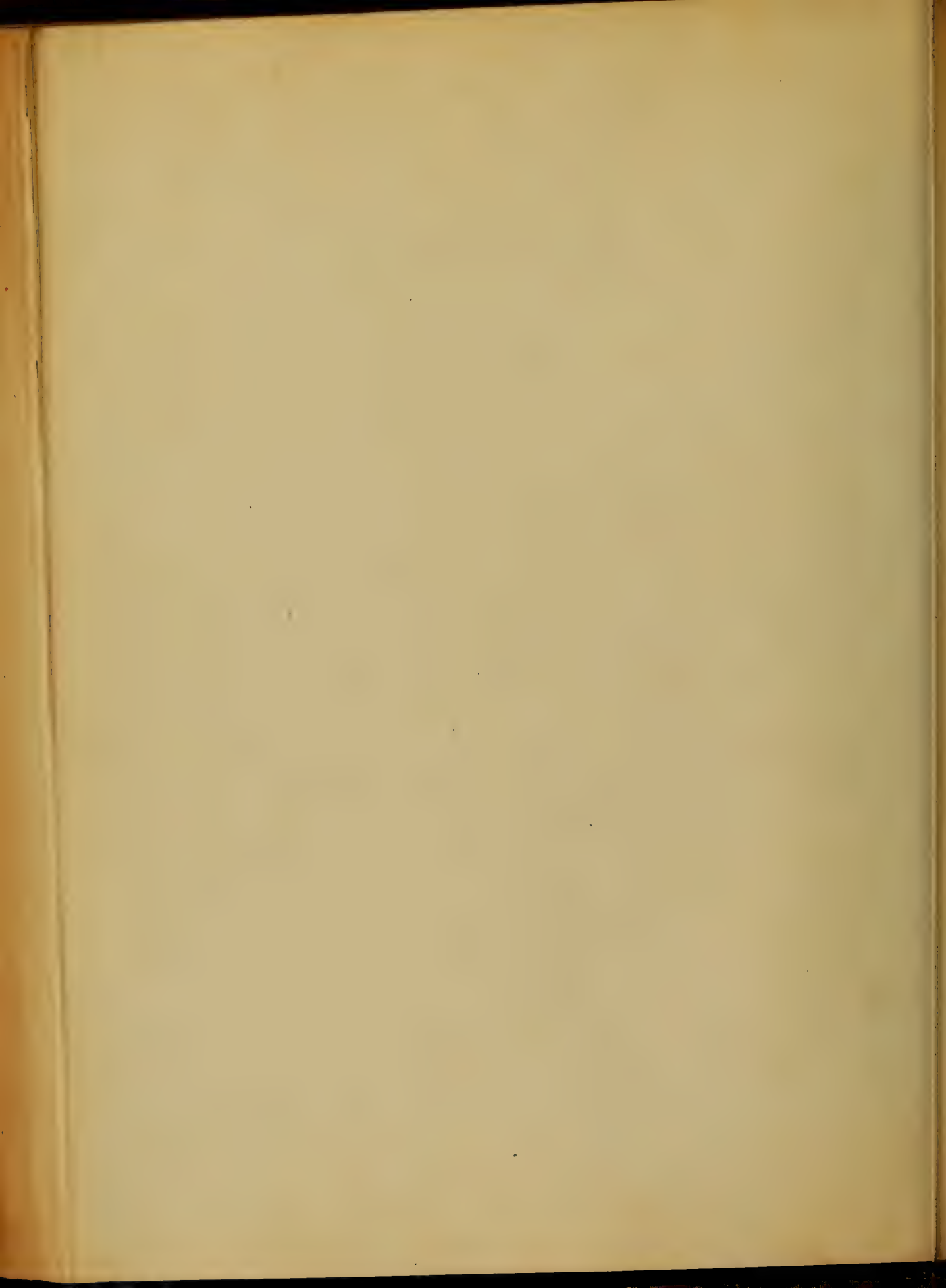
Samuel C. Finley,
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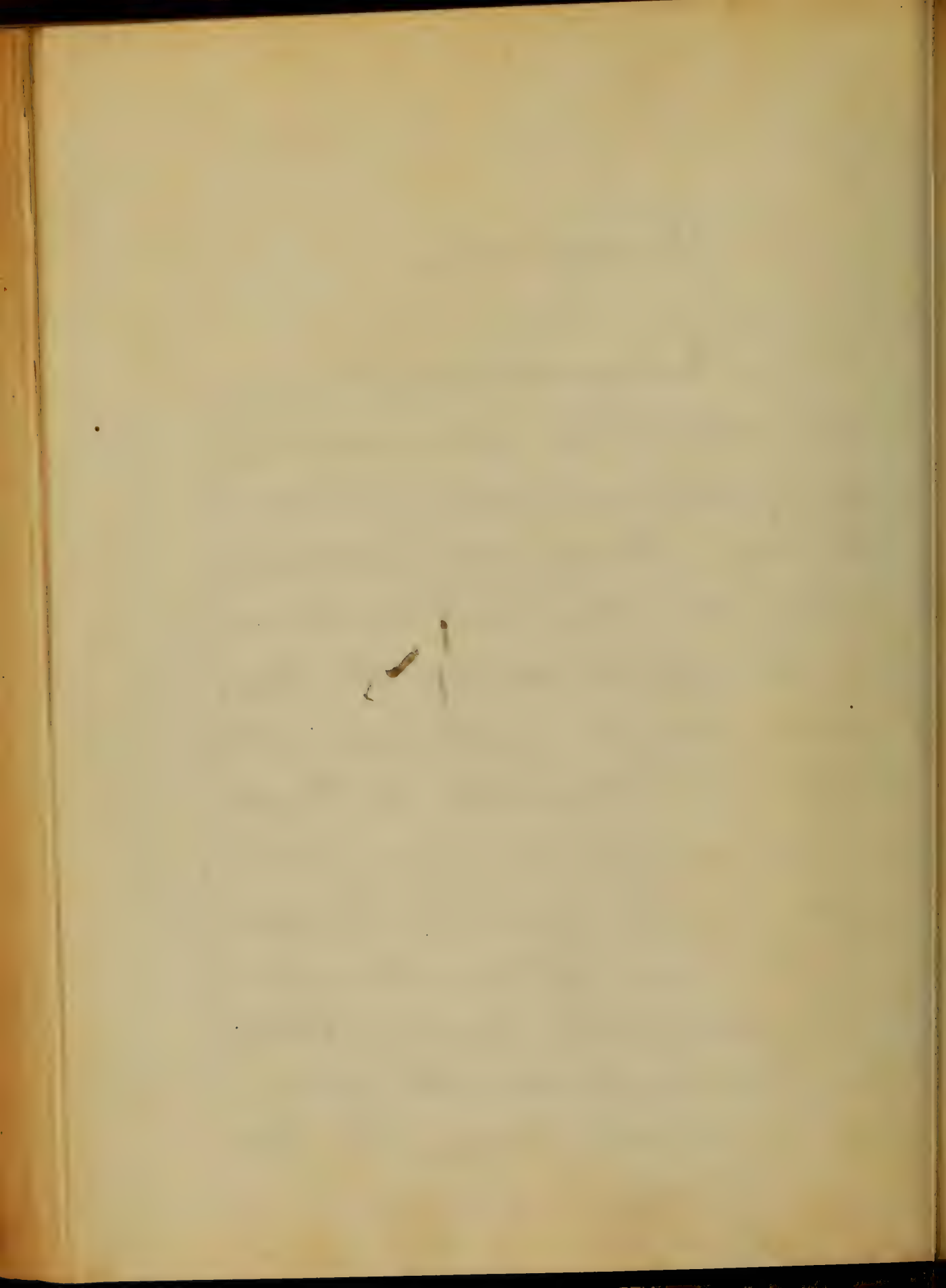






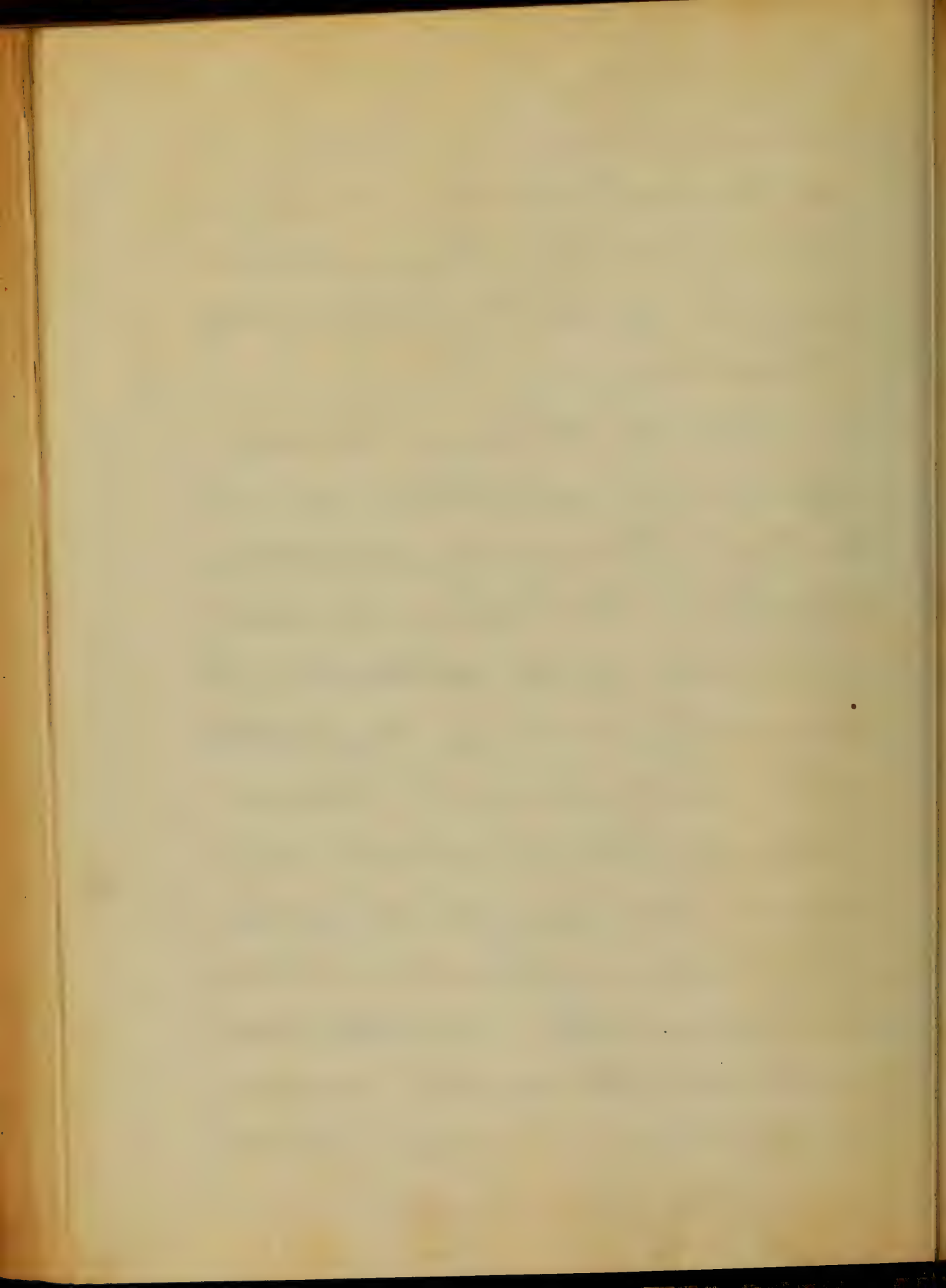
Pneumonia.

Pneumonia signifies in the mildest sense, inflammation of the parenchyma, or spongy tissue of the lung. There are several varieties of pneumonia which are founded upon the different parts of the lung which may be inflamed, and upon the character of the accompanying fever, or general state of the system. The inflammation may affect a considerable part of the lung, occupying a lobe or even the whole of one or both lungs. The lobar



is the most common variety and the one which I have selected for the subject of the following remarks.

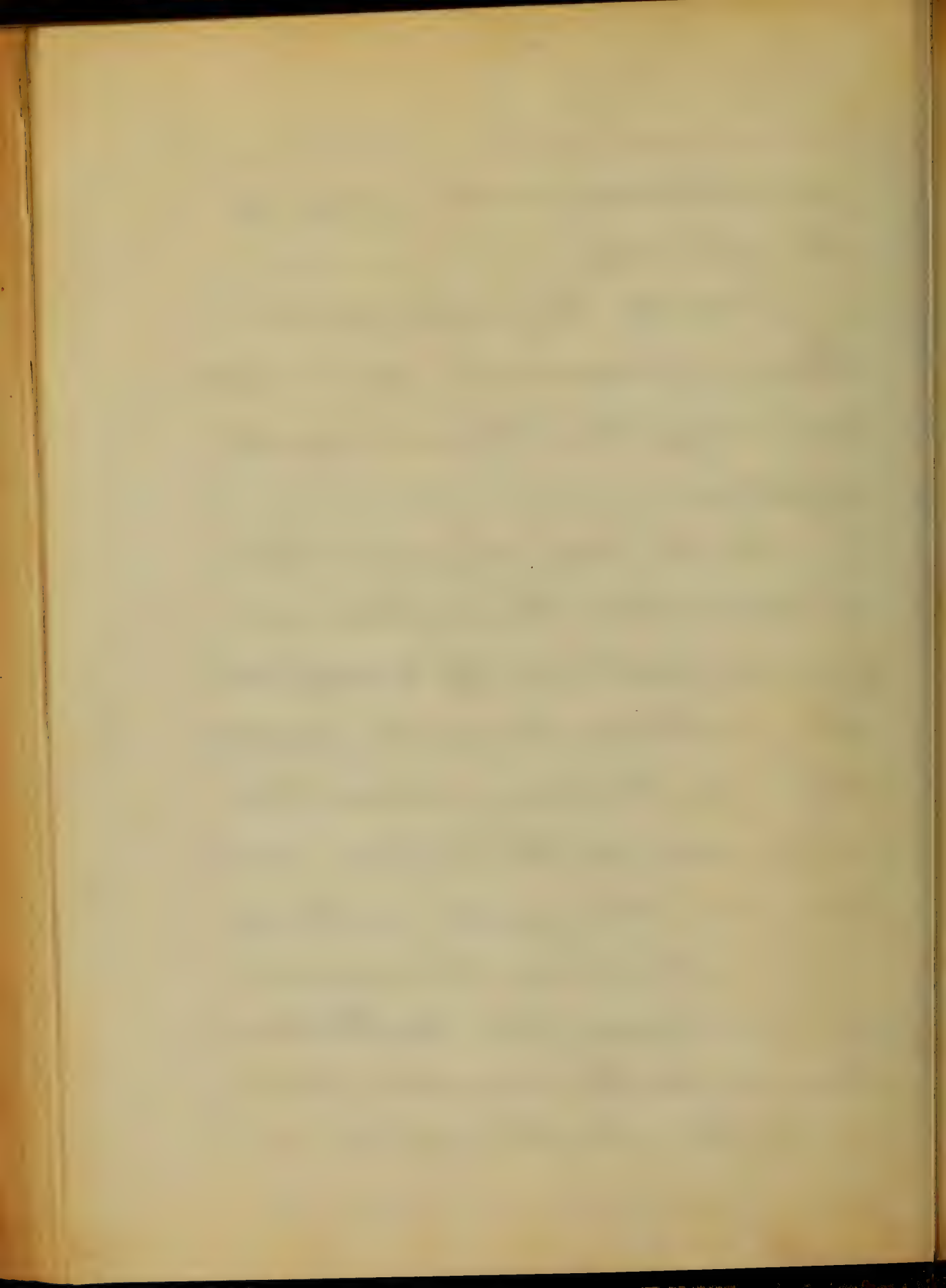
As we obtain a knowledge of the situation and extent of Pneumonia, and all the symptoms that give us the surest information of the character of the disease, by means of Auscultation and Percussion, it becomes necessary that we should first become familiar with those changes which are wrought in the lung by inflammation, in order to understand the morbid anatomy of pneumonia, as a groundwork



for obtaining a knowledge of its pathology.

There are three well marked stages of pneumonia, named respectively Congestion, Red and Gray Hepatization.

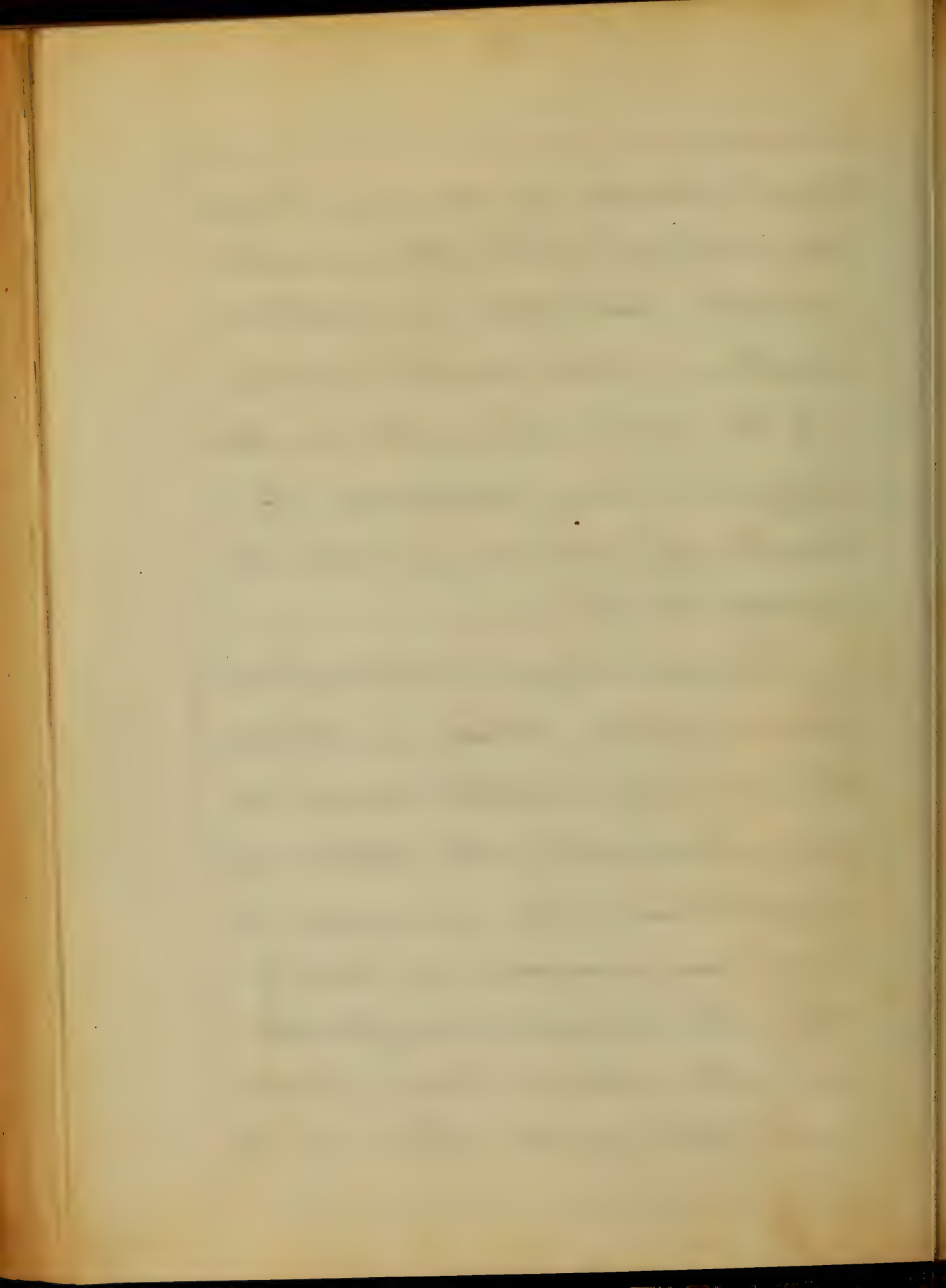
In the first stage or that of Congestion the portion of lung affected is of a deep red color, crepulates less under pressure than sound lung, retains the impression of the finger, and when cut there exudes a bloody and frothy serum. It is more solid and heavy, but less tenacious than in health, and still floats in water notwithstanding its



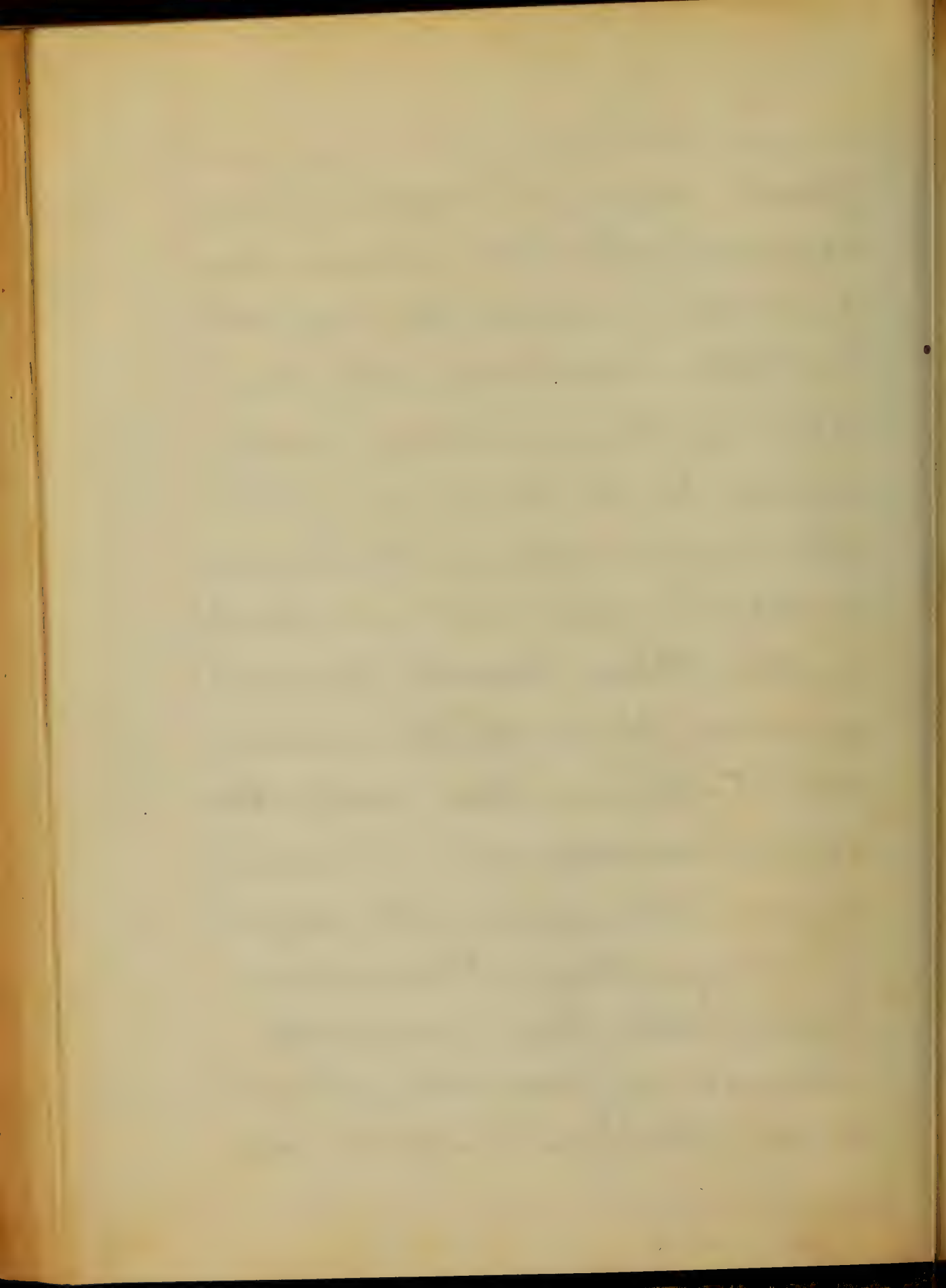
great increase of density. The cells are not yet obliterated, and, tho' greatly obstructed by extravasation, still contain air.

If the disease is arrested in this stage, the lung reassumes its healthy appearance, if not it passes into the —

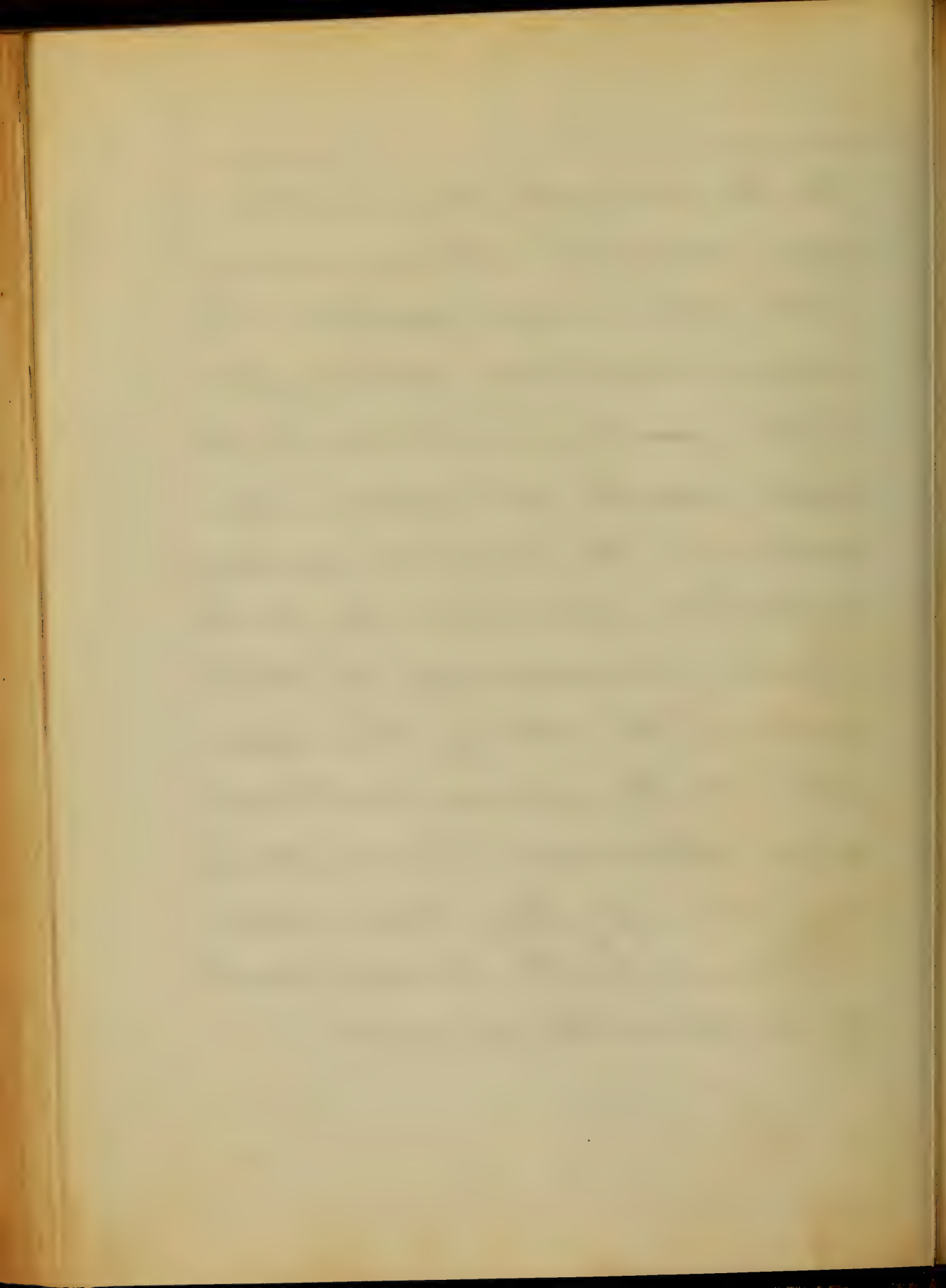
Second stage, or that of red hepatization, which is characterized by a reddish-brown or grayish-red color; the absence of crepitation under pressure; by such an increase of density that the diseased lung sinks in water, and a loss of cohesion still greater than in the



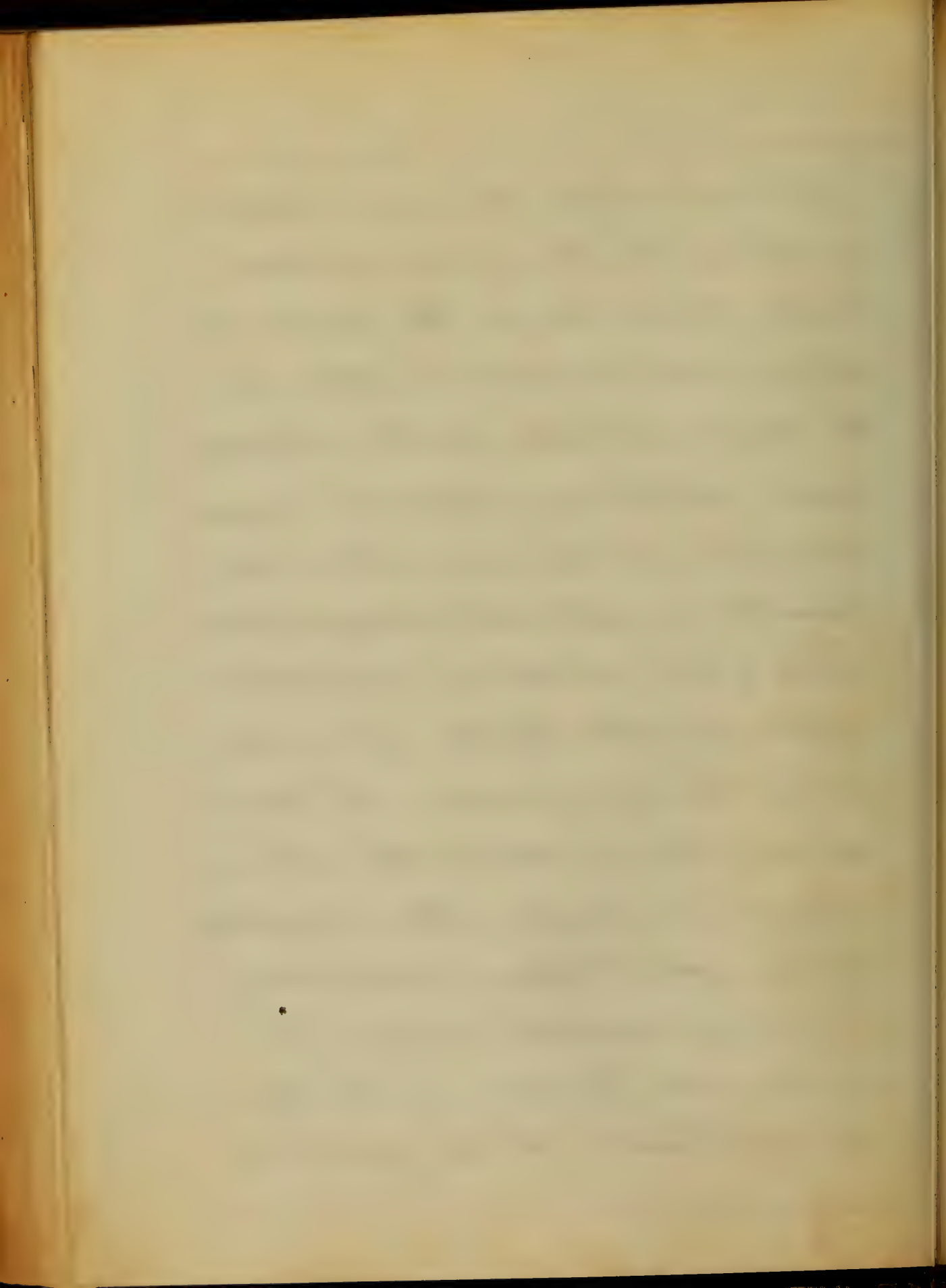
first stage. The softening is so great, that the finger may be passed through the lung with but little resistance; when cut, the lung bears a close resemblance to the liver, and from this circumstance it has received the name of red hepatization. When pressed, it exudes a reddish fluid, which is more consistent, and less frothy, than that observed under similar circumstances in the stage of congestion. The cut surface of the lung generally presents a granular appearance, which is probably due



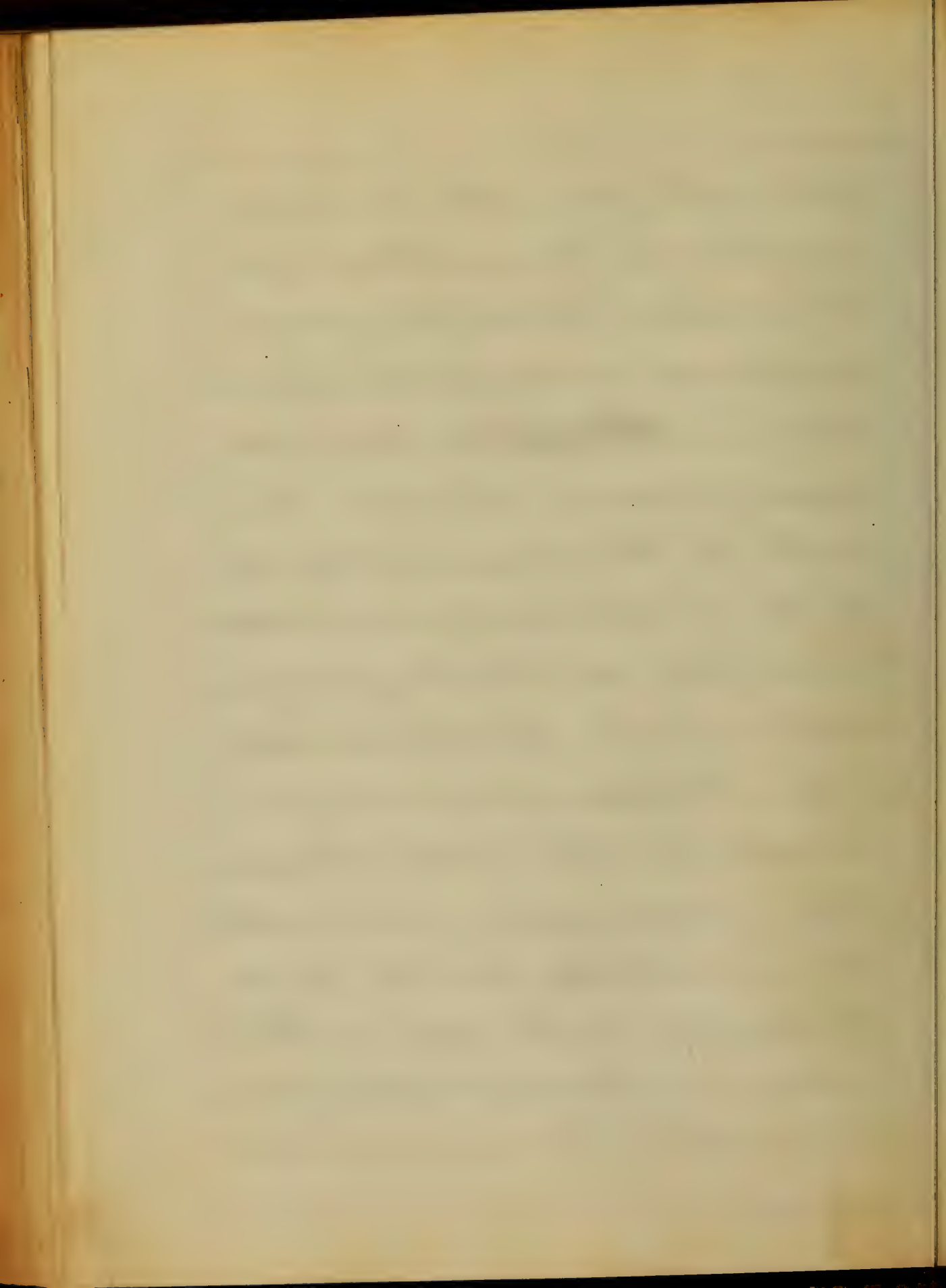
to the air cells being filled and distended with a concrete and albuminous secretion. The surface sometimes instead of being granular, is observed to be quite smooth and uniform, especially in the pneumonia of infancy and that of advanced life, probably in consequence of the obliteration of the cells by the pressure of the effused matter; the same appearance is presented when a portion of lung has become inflamed by the pressure caused by a pleuritic effusion.



In the stage of gray hepatization, the lung is compact and dense, as in the second stage, but presents instead of the dark red color, both externally and within, a yellowish, or grayish appearance, and when cut exudes a yellowish opaque, pus like fluid, which is sometimes stained with blood. It is so soft, that if pressed, it is almost wholly converted into a purulent fluid, with only shreds of the solid tissue remaining. A very moderate degree of force will produce a cavity in its substance, which gradually

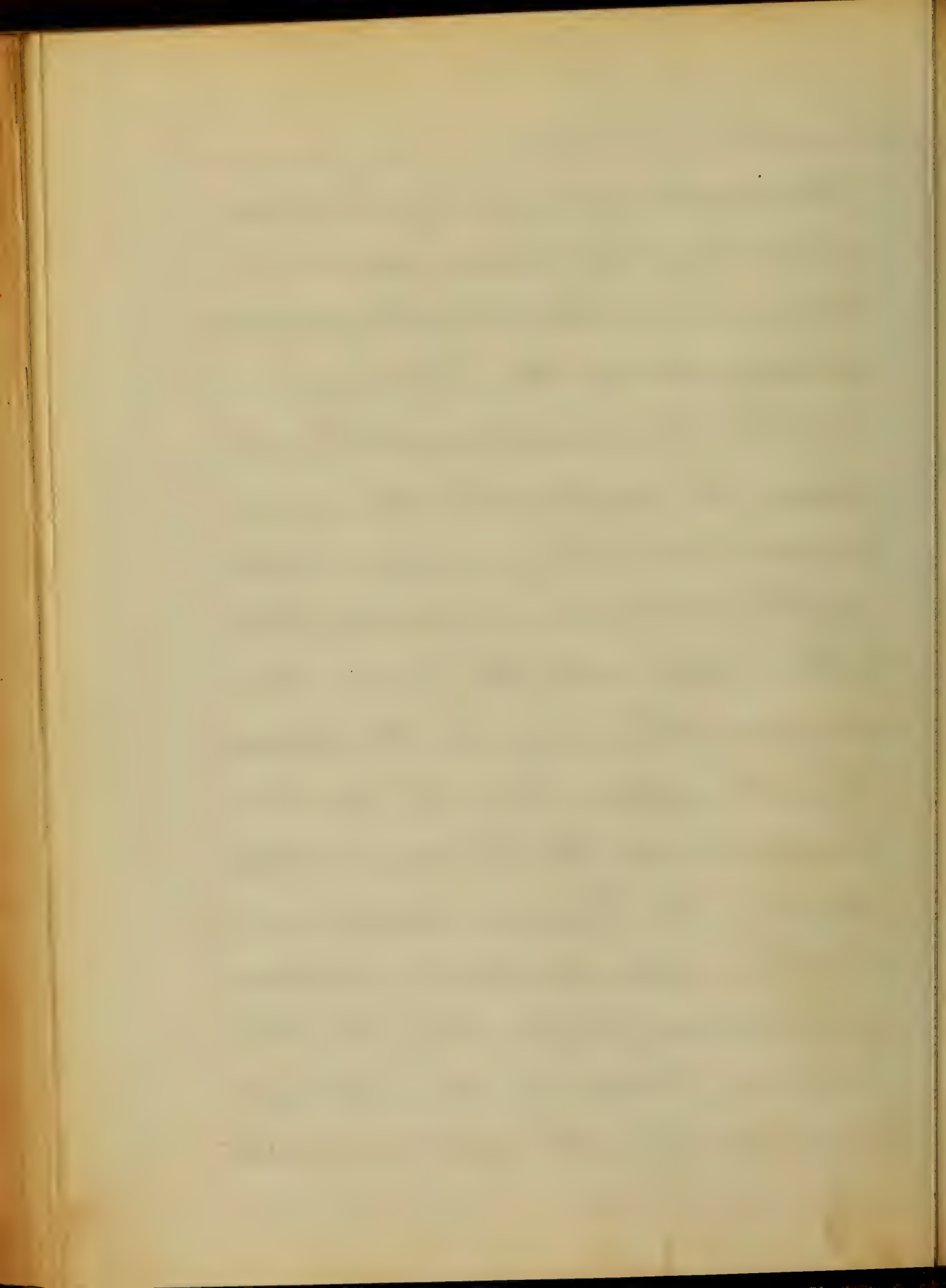


fills with pus, which may very easily be mistaken for abscess. Abscess is a very uncommon consequence of pneumonia, although it does occasionally occur; abscess of parts in the immediate vicinity of the pleural cavity, lies & sometimes opens into the lung, and forms cavities in its substance. Tubercular vomicae and enlarged bronchial tubes filled with pus have occasionally been mistaken for abscess. But it is exceedingly rare to meet with abscess as a consequence of common pneumonia. In several hundred

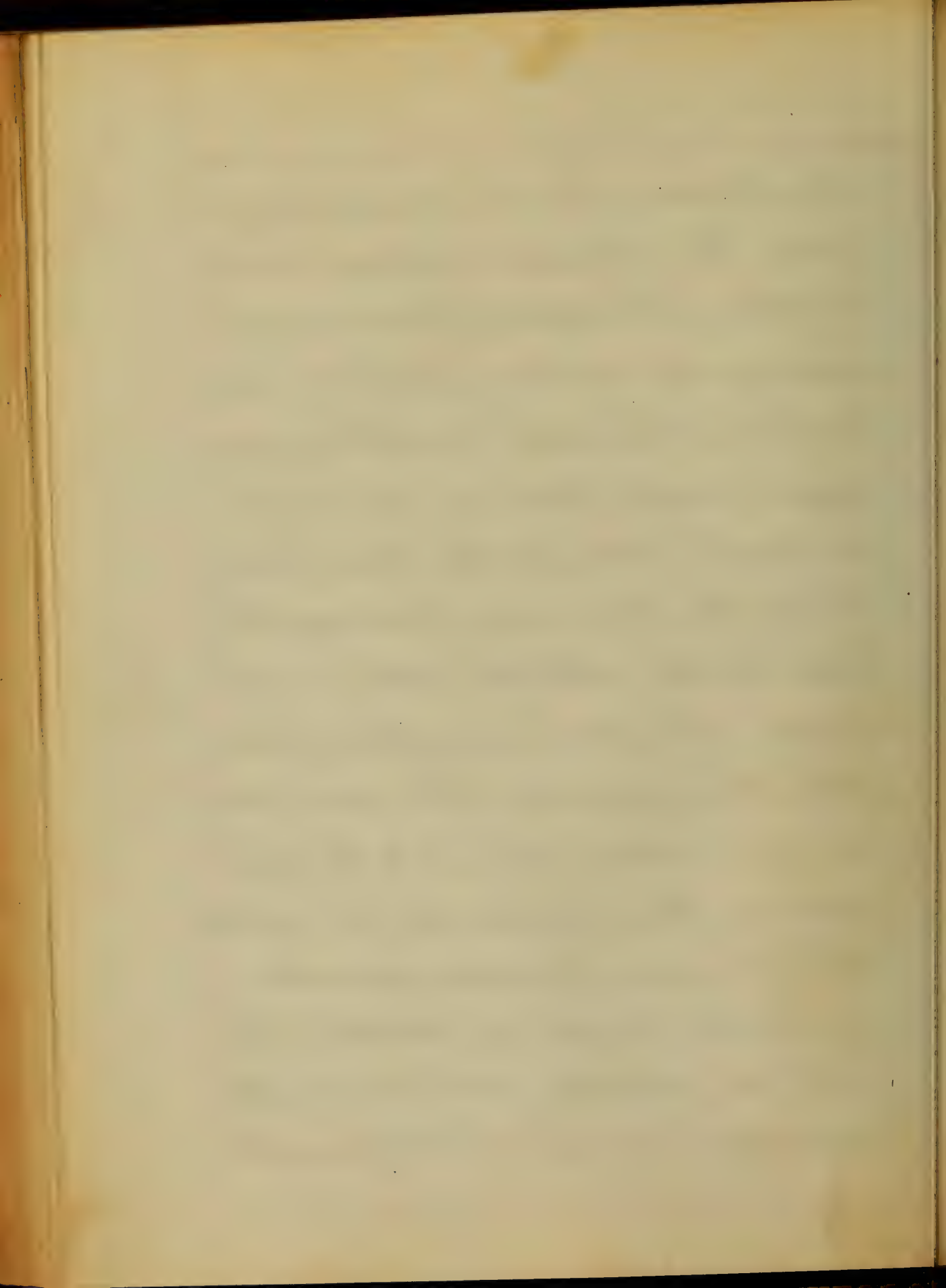


cases, examined by Laennec, of persons who had died of pneumonia, he met with only five or six cases of true abscess.

In the great majority of cases the inflammation is confined to one lung; and to the right much more frequently than to the left; and the lower, also, are more obnoxious to the disease than the upper lobes. Of fourteen hundred and thirty cases collected by M. Grisolle, it appears that the cases of double pneumonia were about 18 per cent. of the whole number, those of the left side 30 per cent. and those of the right side 52 per cent.

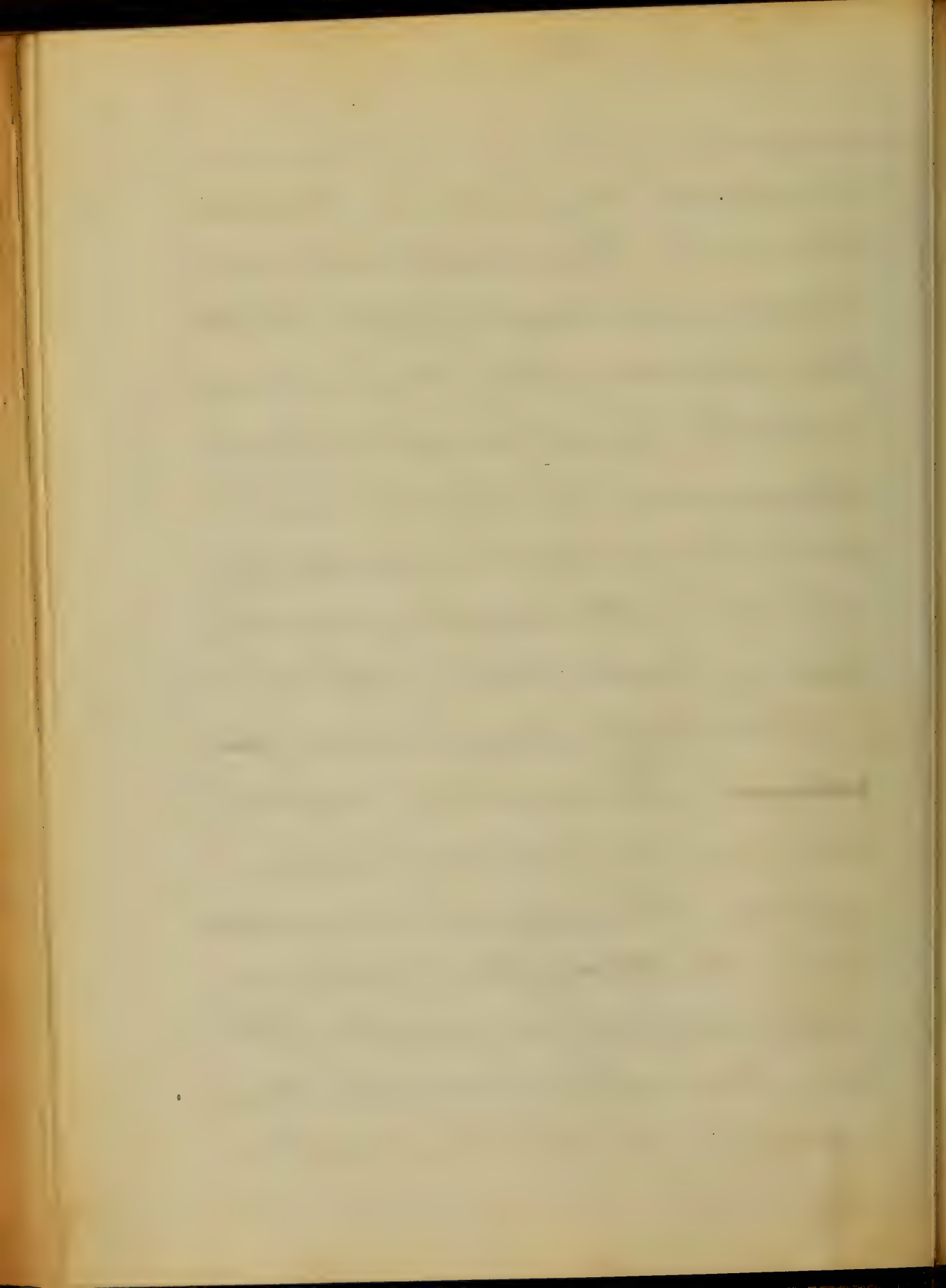


Symptoms.— In the majority of cases, this disease is ushered in with a chill, followed by fever and increased action of the circulation; difficult breathing, cough and acute pain in the side or back part of the chest. Sometimes the fever and local symptoms occur without a chill; and again the local symptoms precede the general. The severe pain of pneumonia appears to be present in those cases only in which the disease is accompanied by some degree of pleurisy. The pain is generally situated in the mammary region, but it may first



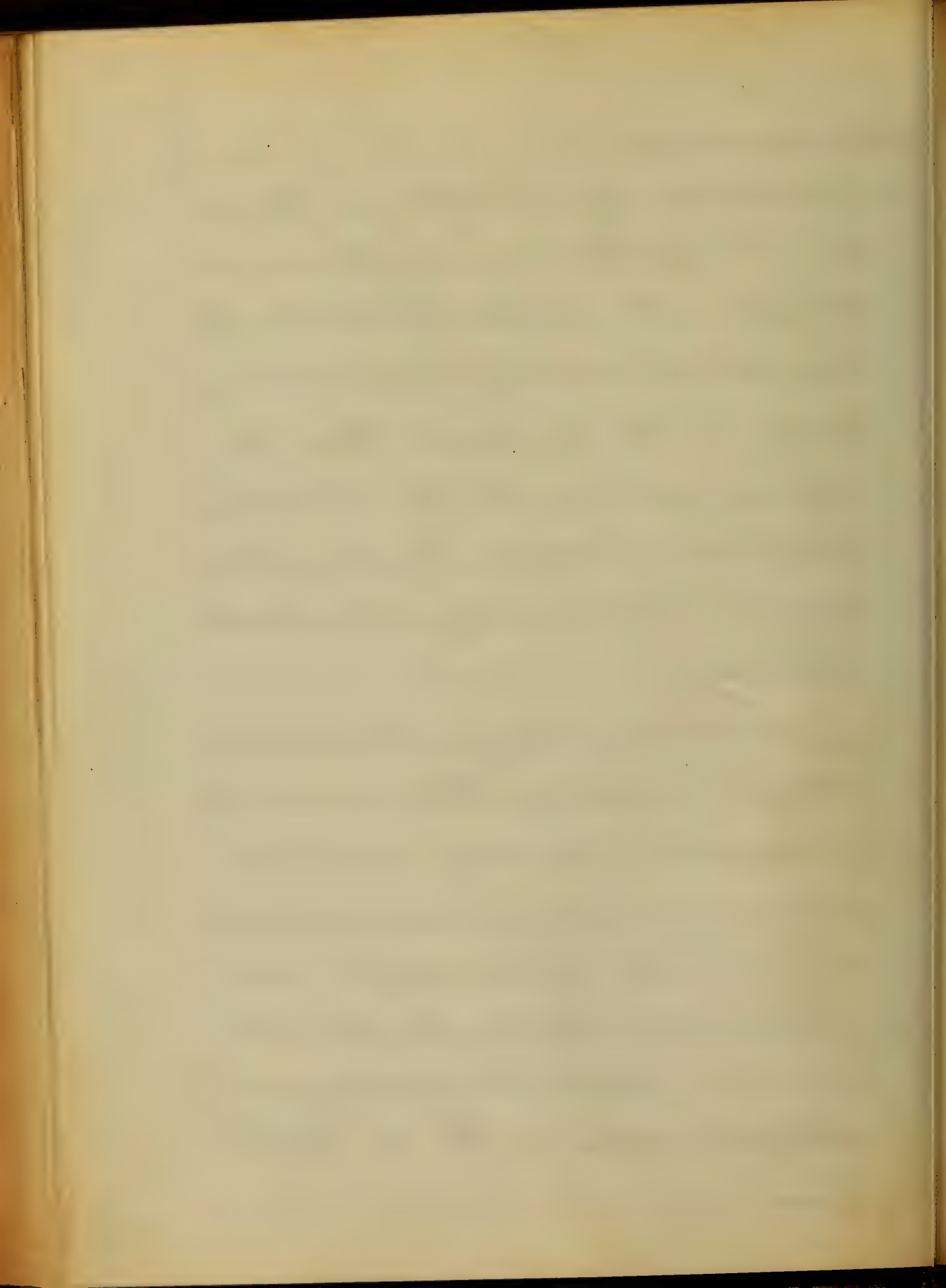
in almost any part of the chest. Commonly it is most violent at the commencement of the attack, but declines gradually, and ceases altogether sometime before the disappearance of the pneumonia. The pain is very much increased by a full breath, coughing, and by pressure made between the ribs.

The respiration is always ~~quicker~~ ^{quickened}. The number of respirations may be increased from eighteen or twenty, - the average number in health, - to thirty forty, or even sixty in a minute. At the same time there is almost always a feeling of oppression which is



increased by speaking or coughing. The dyspnoea is sometimes so slight, as to escape the notice of the patient himself, but at other times it is so great, that the patient is unable to lie down, his face becomes livid or pale, and is expressive of the utmost distress.

There is always more or less cough, present in the course of pneumonia; in some instances it is very violent and painful, in others it is but slight and occasions little or no uneasiness. At first it is dry or attended only with a little



mucus expectoration, but in a day or two, a viscid semi-transparent matter is thrown up, which soon becomes stained with blood in a greater or less degree, so as to present a reddish, or rusty color, sometimes inclining to yellow or green, according to the quantity of blood present. As the disease advances these properties of the sputa become more prominent. The tenacity of the expectorated matter is so great that it adheres to the bottom of the vessel

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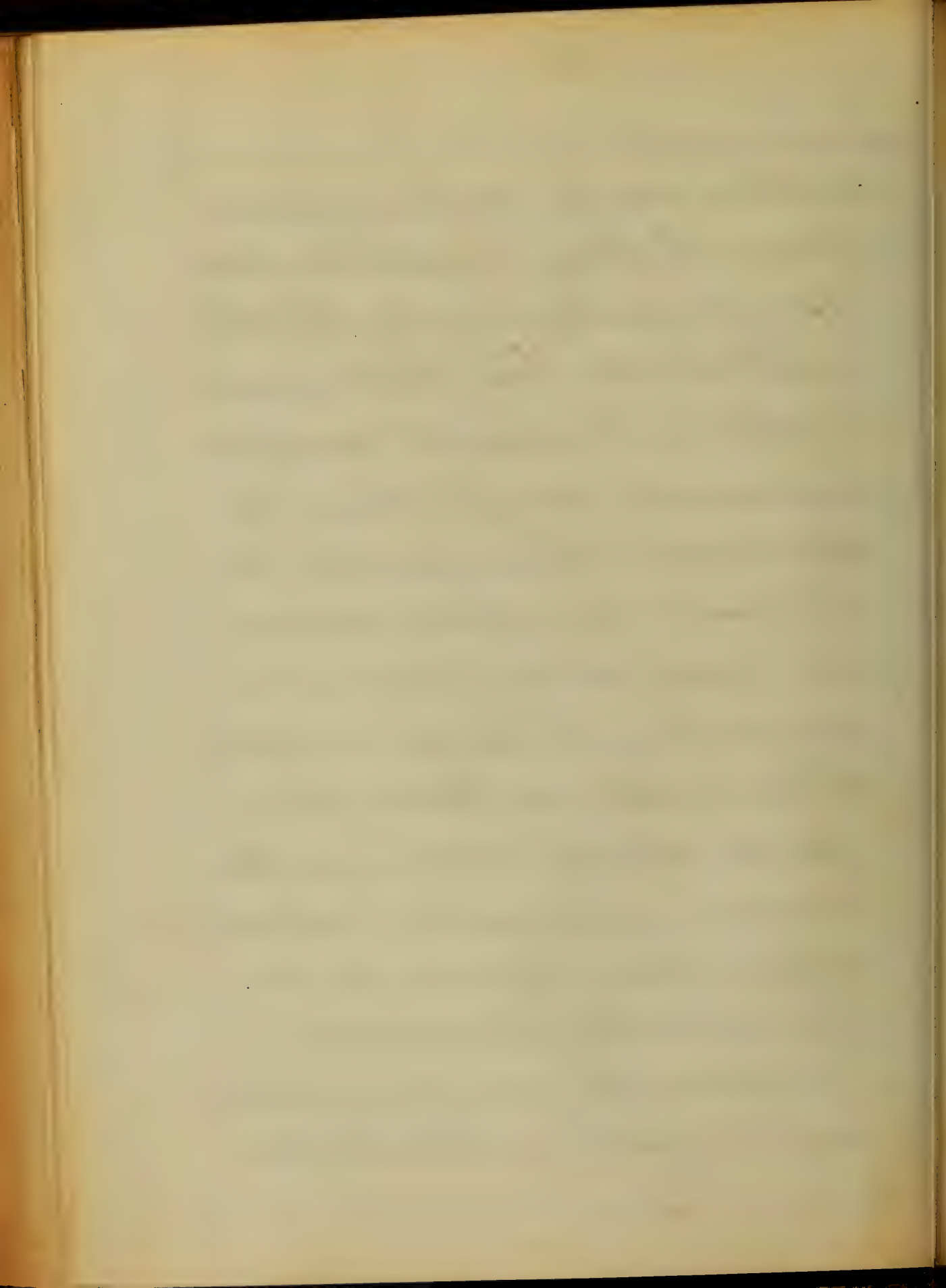
containing it, when this is turned bottom upward; when more copious it runs together and forms a trembling jelly like mass. The viscid and ~~rusty~~ rusty colored expectoration, is on the whole, the most certain diagnostic sign of pneumonia, and very often indicates the presence of inflammation, even when the physical signs fail. In some cases nearly pure blood is expectorated; but generally the blood is intimately mixed with the viscid semi-transparent matter. The sputum

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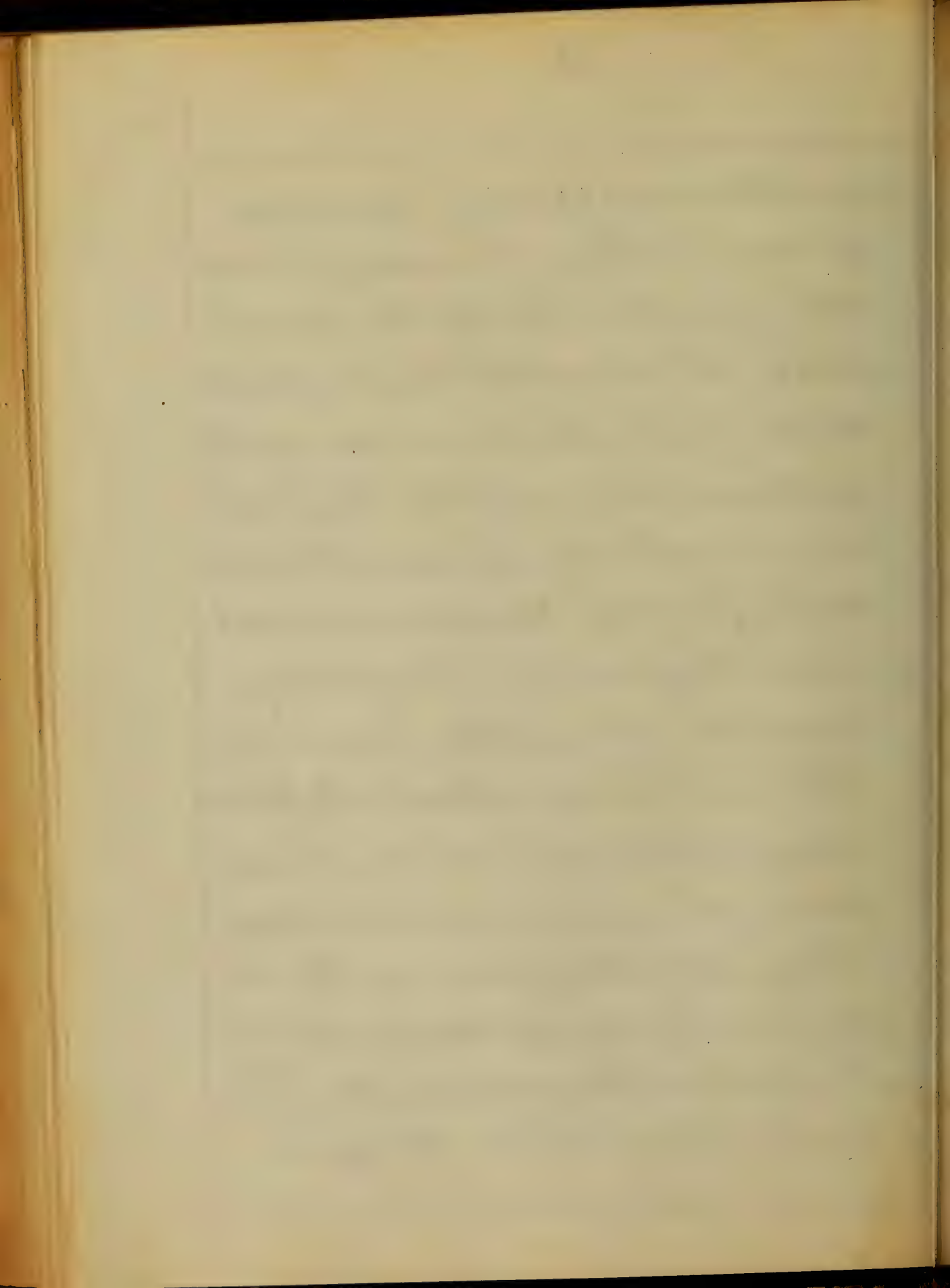
is thus easily distinguished from that of bronchitis, which is generally, merely streaked with blood. The matter expectorated is believed to come from the minute ramifications of the bronchial tubes, and to be the result of a slow exudation from the inflamed vessels, during which the mixture of its constituents take place.

As the disease advances, the secretion increases, but seldom becomes very copious in uncomplicated pneumonia.

Fever is generally present, and in many cases constitutes

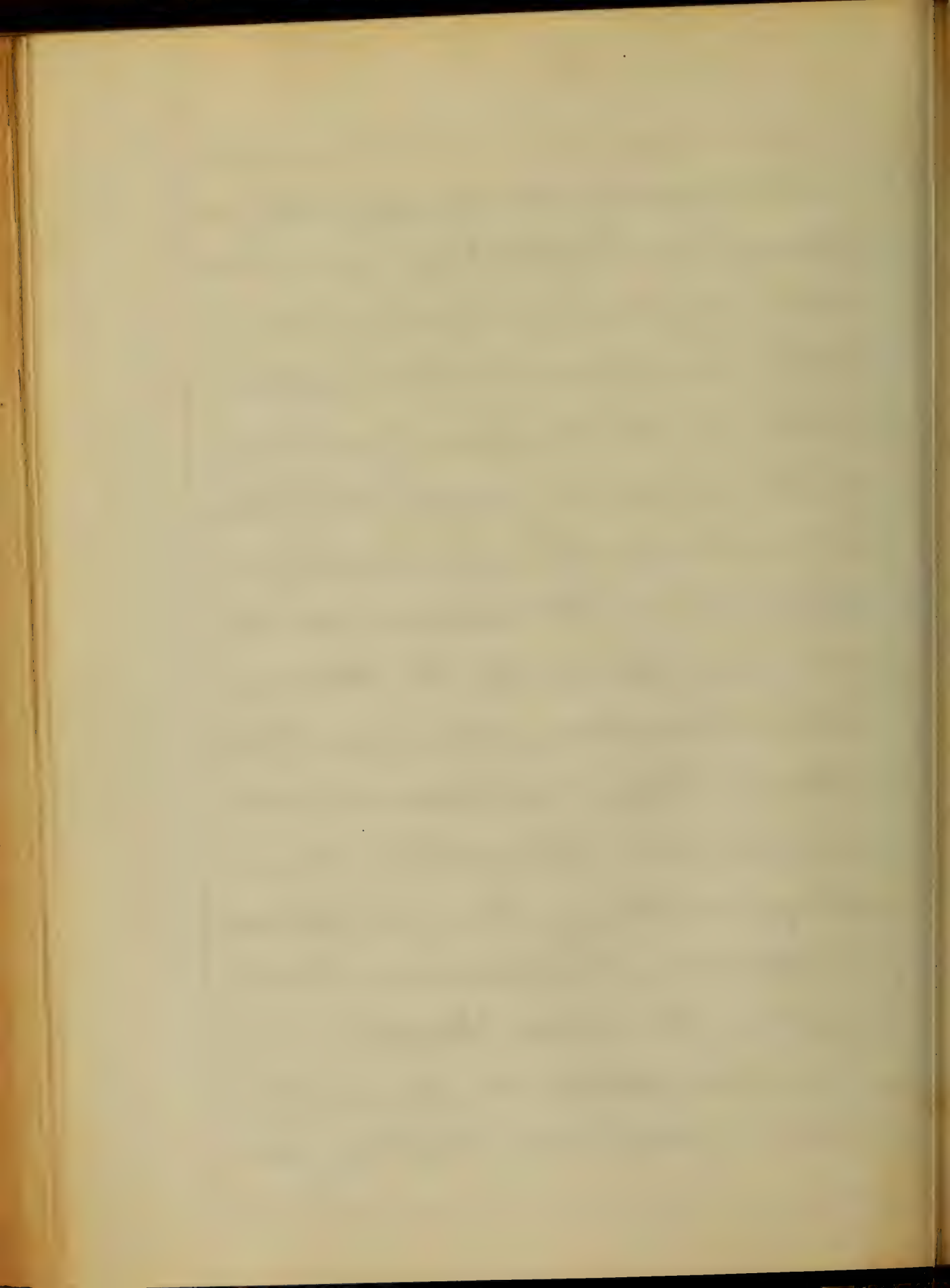


- with increased frequency of respiration - the only observable symptom. Like the dyspnoea, it is sometimes so slight as to escape notice, and at other times it is in the highest degree intense. It is attended with flushed cheeks and headache; the pain is generally located about the brows or forehead, from which the patient may suffer even more than from the pain in the chest. Frequently the pain in the head is the only symptom of which the patient complains for the first two or three days.



Delirium occasionally occurs during an attack of pneumonia, and is a very unfavorable symptom, as it denotes that the due arterialization of the blood is greatly interfered with by the pulmonary affection: It measures as it were, the extent of the damage which has been done in the chest; "and it is a direct evidence that the pectoral mischief is telling, through the circulation of the venous blood, upon the brain." Watson.

The pulse is generally full, strong and slightly in-



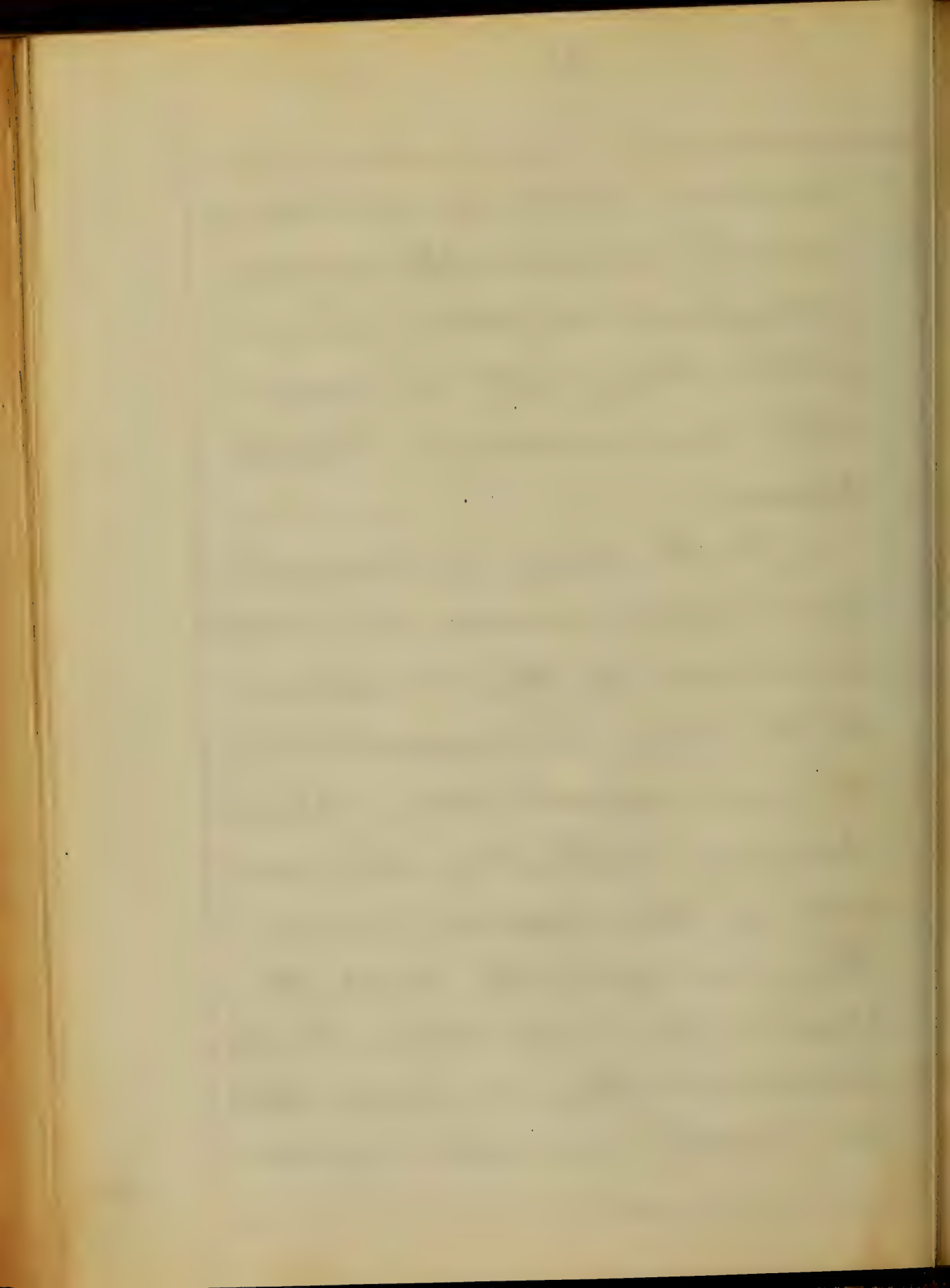
eased in rapidity; but it is not uncommon for it to be very greatly increased in frequency, even from the commencement, in which case it is apt to be smaller and less vigorous; the skin is usually hot and dry. The tongue is very generally moist, and coated with a yellowish-white fur. Diarrhoea and vomiting are occasional symptoms, the former especially in the advanced stage.

The physical signs are of the greatest importance in diagnosing pneumonia. The

disease is sometimes very obscure, the cough and pain are often absent, and fever with headache, and hurried respiration, which are common to many other diseases, are the only notable symptoms. Occasionally even the symptom of the rust colored expectoration is absent. There may either be no expectoration whatever or the sputum is swallowed as in the case of infants. In many cases percussion and auscultation reveals the surest evidence of the nature of the disease.

but even these do not always succeed, as when the disease occupies an interior part of the lung, and is everywhere surrounded by healthy tissue.

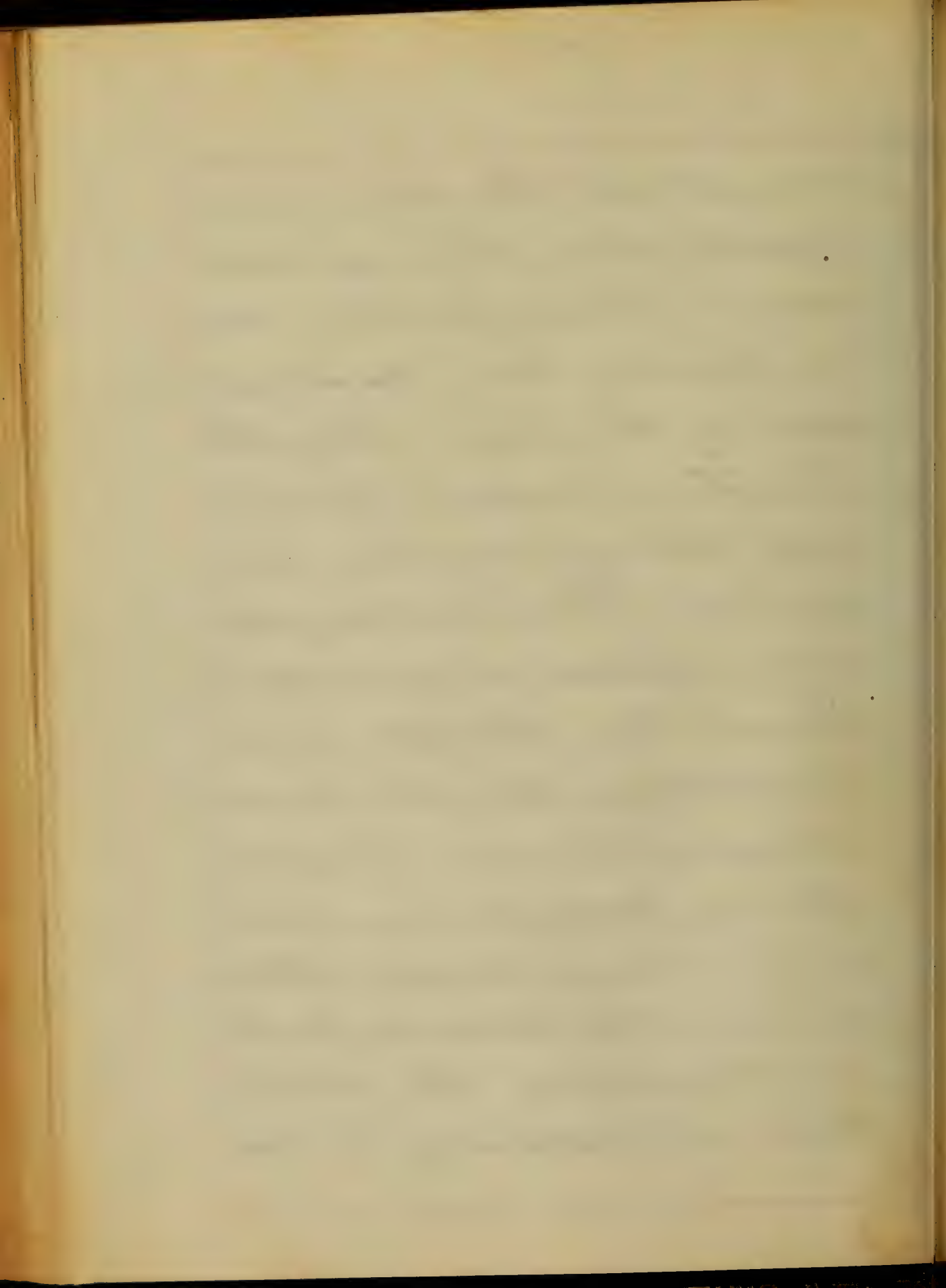
In the stage of congestion percussion reveals but little evidence of the condition of the lung. By auscultation we gain much more decisive knowledge respecting the condition of the respiratory organs. When we apply the ear to the chest in the early stage of the inflammation, we find that the healthy vesicular murmur



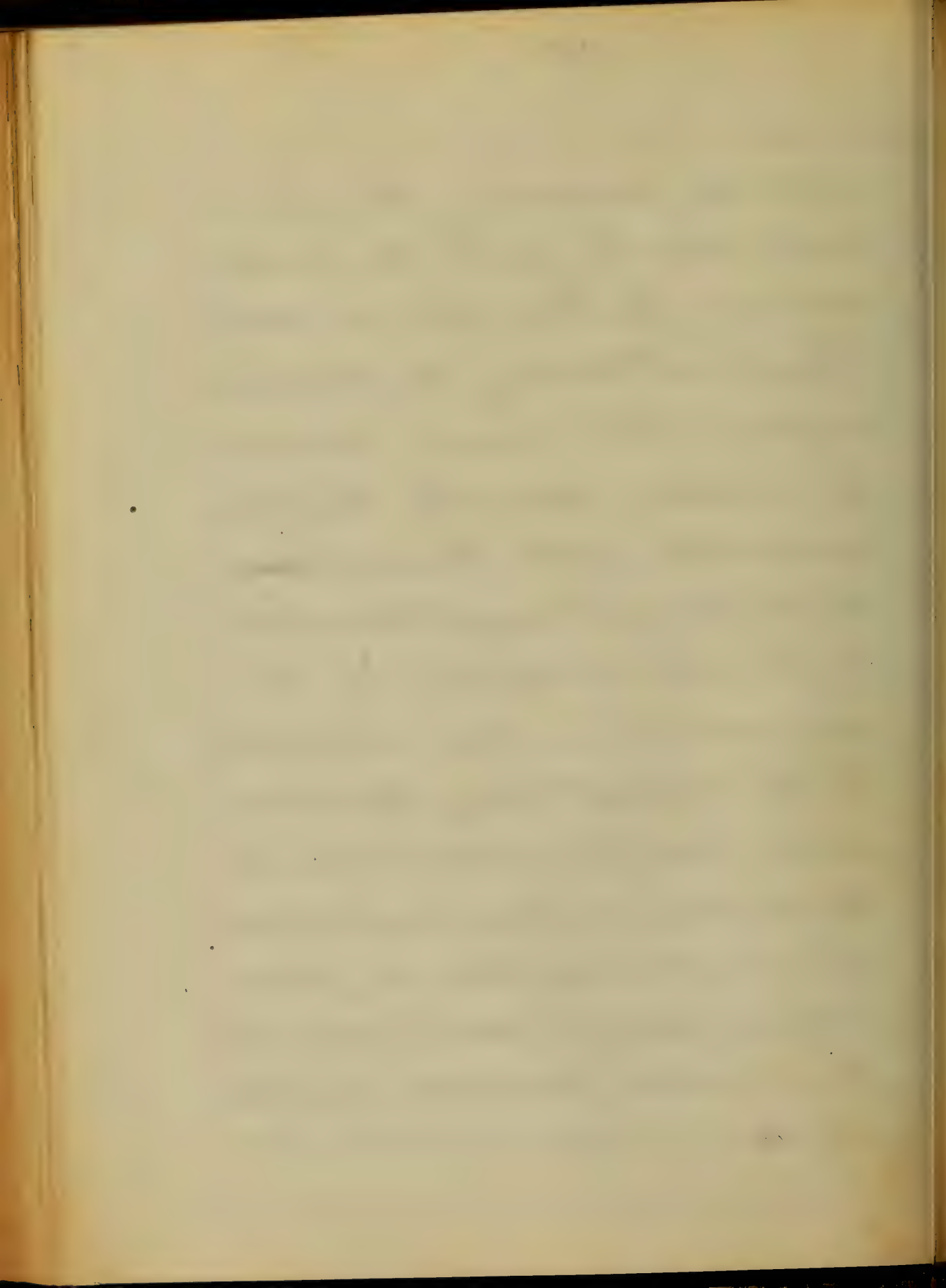
is somewhat obscured by what Dr. Watson calls "minute crepitation." The crepitation is more audible, the nearer the disease is to the surface of the lung. This is the most characteristic sound of pneumonia; and when it is heard it almost positively indicates the existence of inflammation of the pulmonary substance; and the progress of the disease can be pretty correctly made out, by observing the progress of the attendant sound.

When the disease has ad-

vanced into the stage of so-called hepatization, the crepitation ceases; the respiratory murmur having been destroyed during the first stage, there is either no sound heard, or only that of bronchial respiration. There is also generally dullness on percussion; though this depends in a great degree upon the circumstances of the case; if a portion of permeable lung, even a thin layer should intervene between the diseased parts and the walls of the chest, there will naturally be clear-

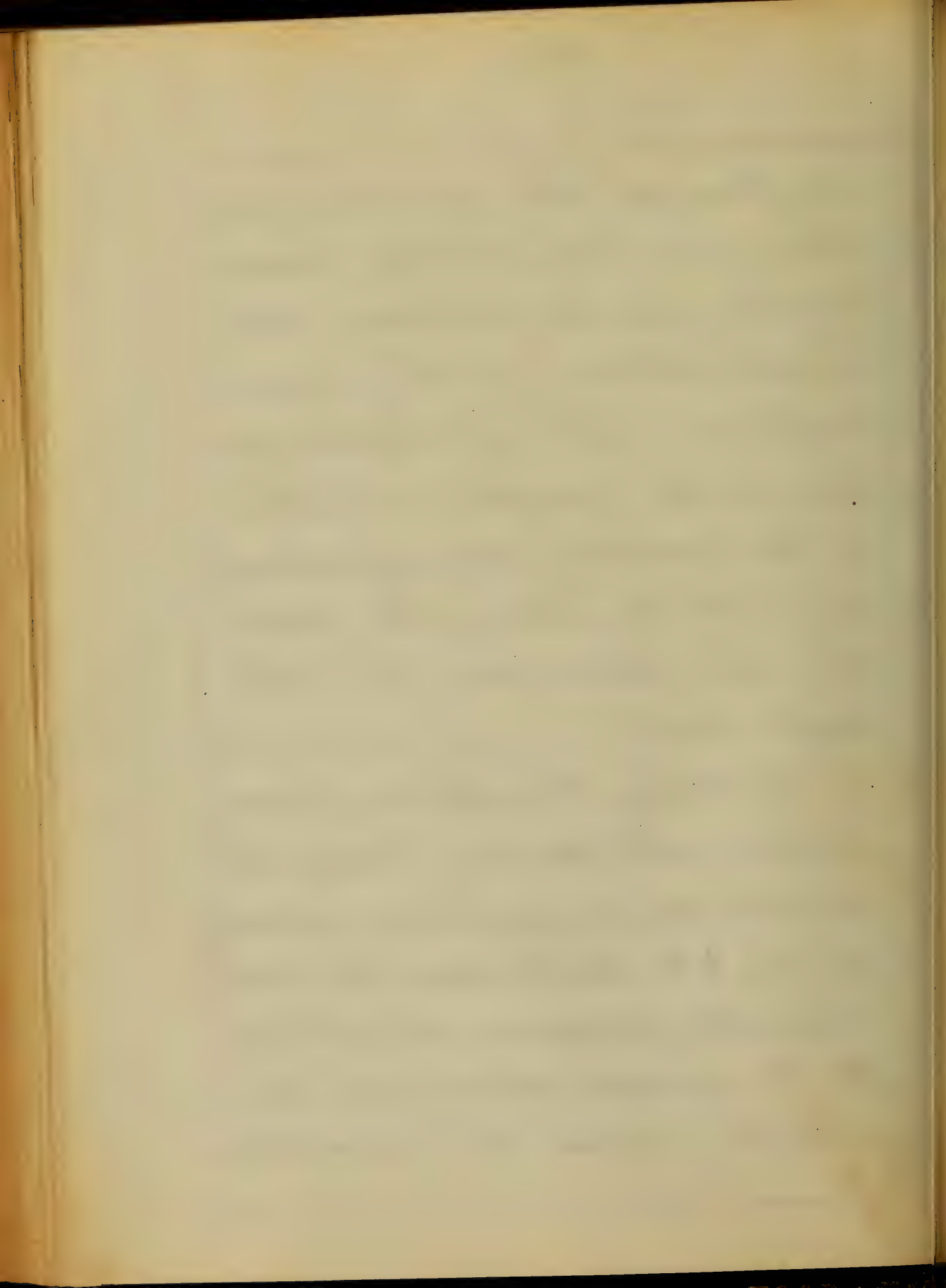


ness on percussion, though it will not be quite the healthy sound. If there is no sound lung intervening, we will have a dull flat sound produced by striking upon the chest. In connection with this, we hear in the sound lung, if the whole of the other is affected by the inflammation; or in those parts of the diseased lung that are sound, puerile respiration. In the hepatized stage, besides bronchial respiration, there is generally a stronger vocal resonance, the vibration produced in speaking, being conducted more readily.



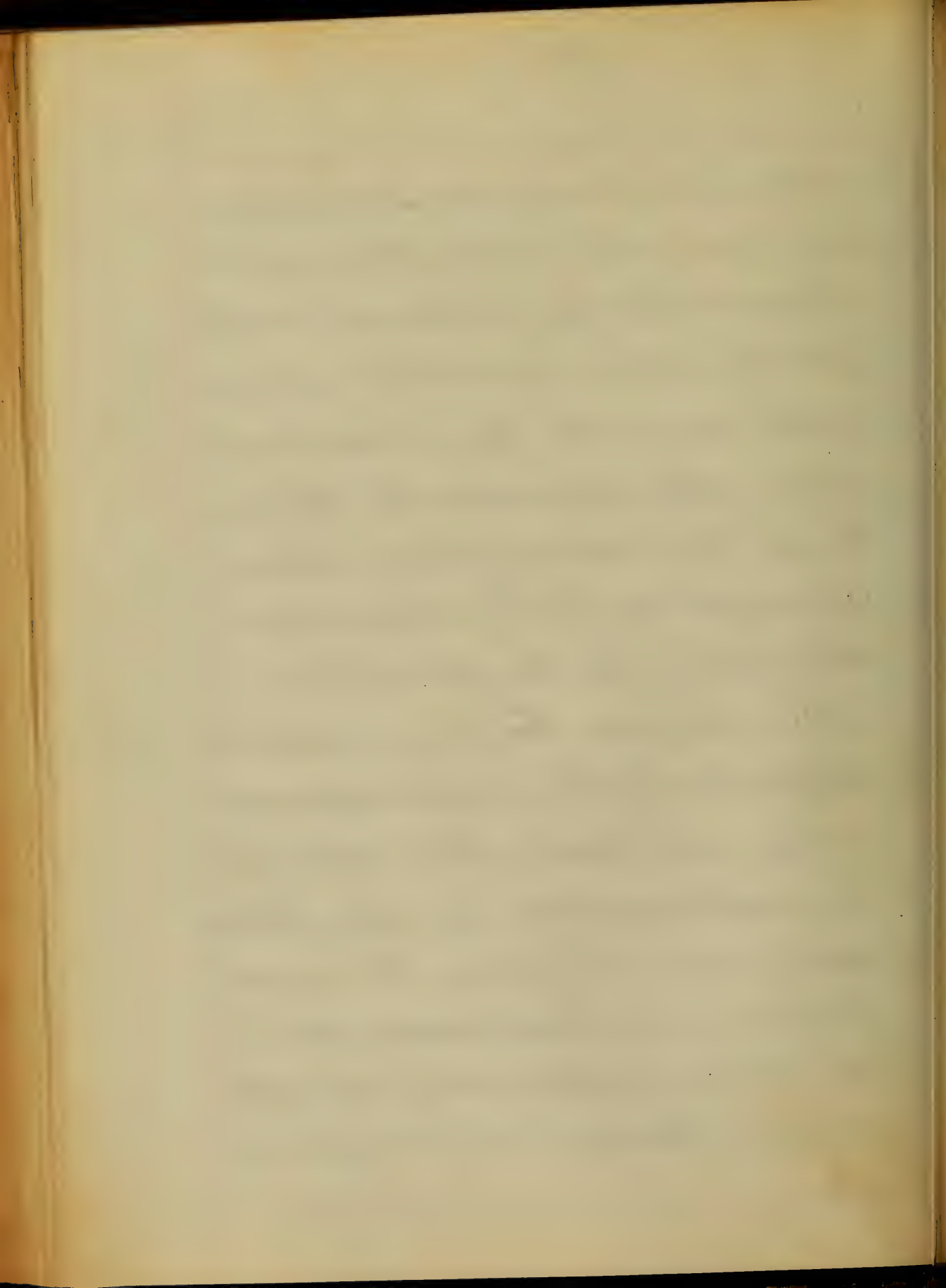
ily through the solidified lung. This gives rise to the characteristic sound denominated bronchophony. Another important character of hepatisation, is the greater vibration of the walls of the chest, sensibly felt by placing the hand upon the chest over the diseased part.

If during the stage of congestion, the disease is arrested, the minute crepitation gradually ceases to be heard, and the healthy respiratory murmur is restored. If the disease should extend into the second the second stage



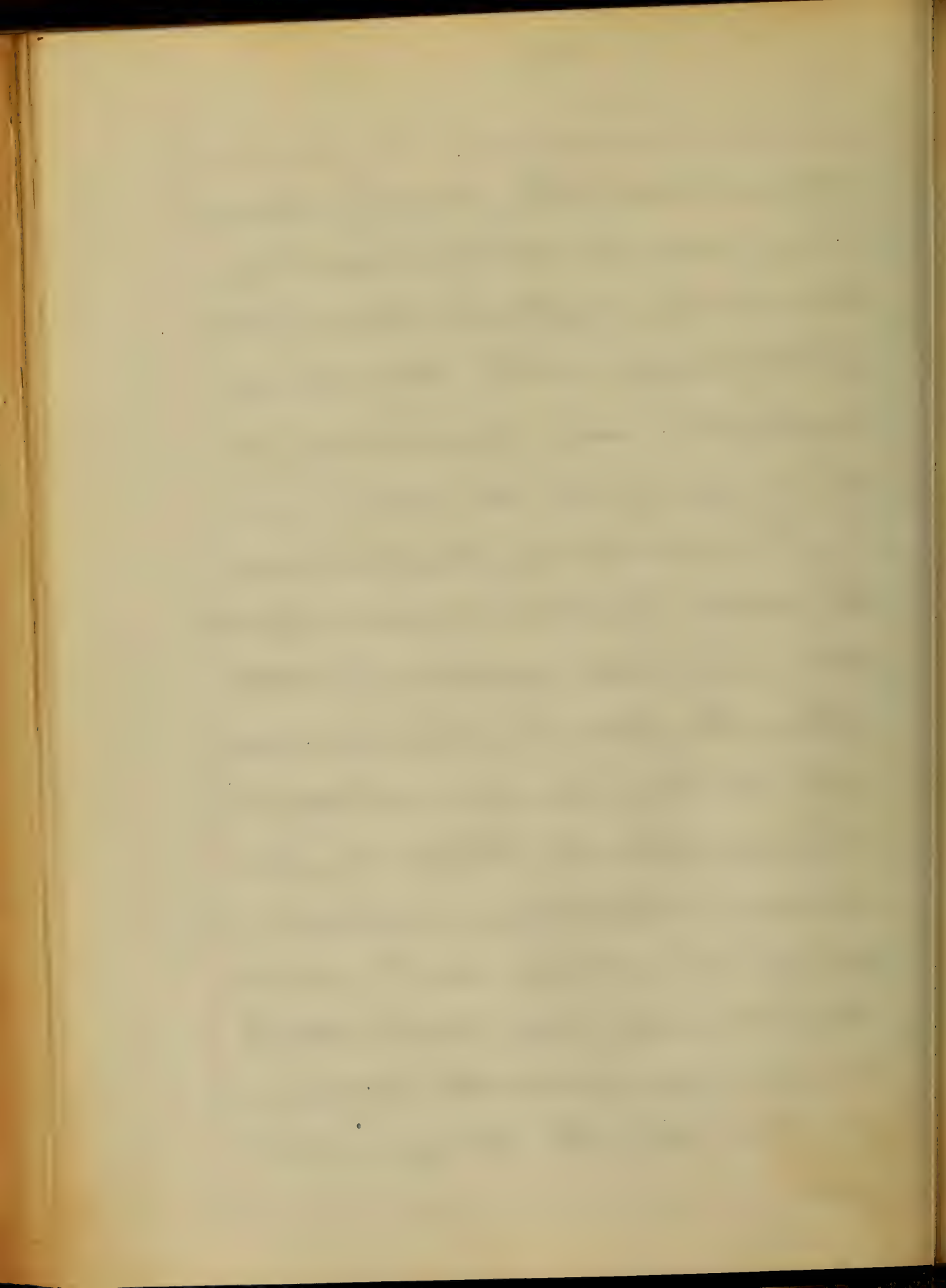
before its progress is arrested, the bronchial respiration and bronchophony gradually disappear, and the crepitation returns, but generally somewhat modified, and assumes the character of the subsephant rale, in consequence of the more fluid character of the secretion.

So long as the pus remains diffused in the pulmonary substance, the third stage cannot be distinguished by the physical signs. It gives the same flatness on percussion and the same respiratory sounds. If an abscess has formed and



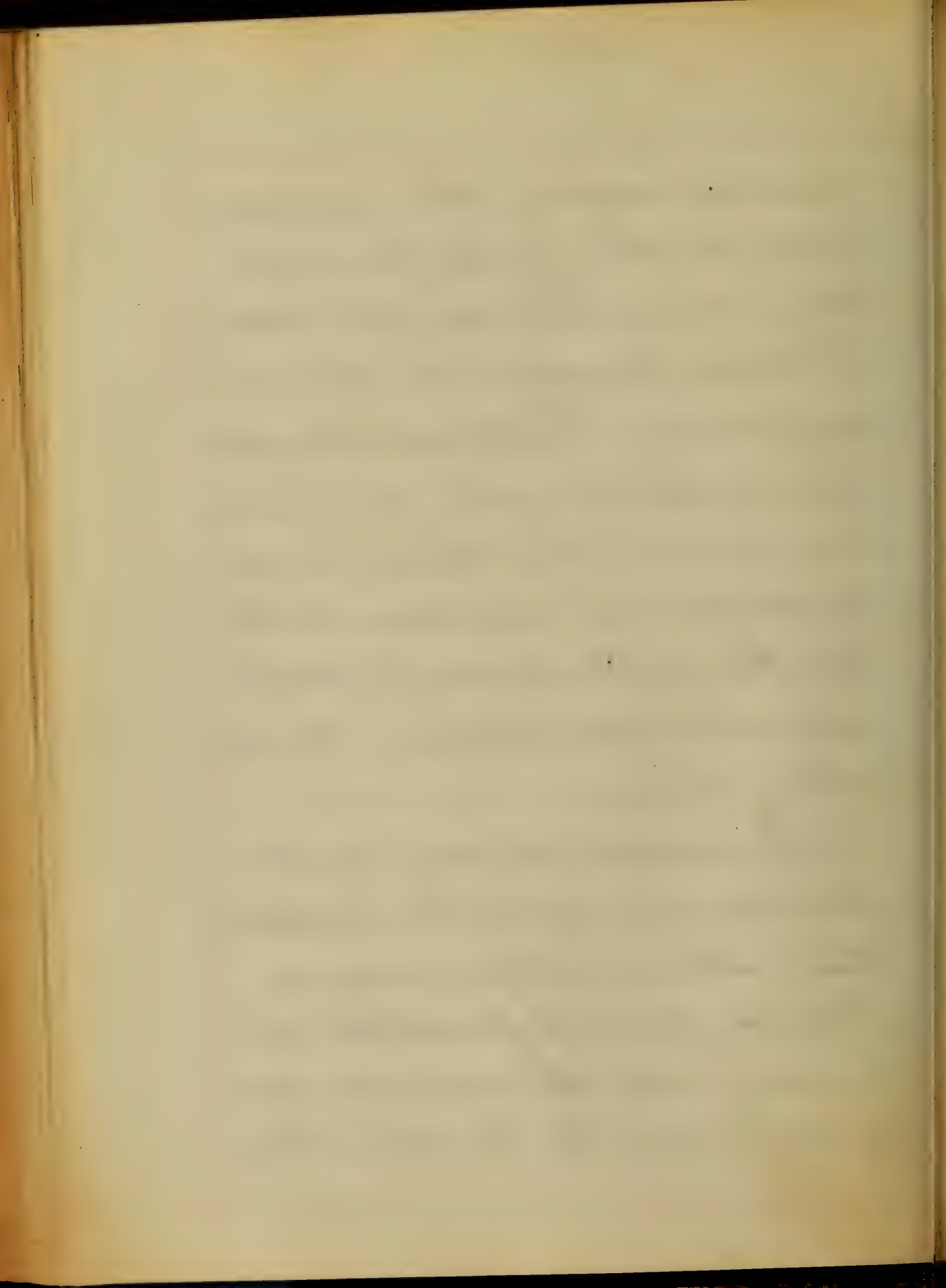
opened into the bronchia a gurgling sound will be heard, if the cavity contains liquid; and pectoriloquy with cavernous respiration, and resonance of the voice, if it is empty.

Vicissitudes of weather are the most frequent causes of pneumonia; Sudden exposure to cold when the body is heated is very apt to bring on an attack of the complaint. Violence, poisonous inhalations, excessive use of the voice, and great exertion of any kind which causes an accumulation of blood in the lungs, are

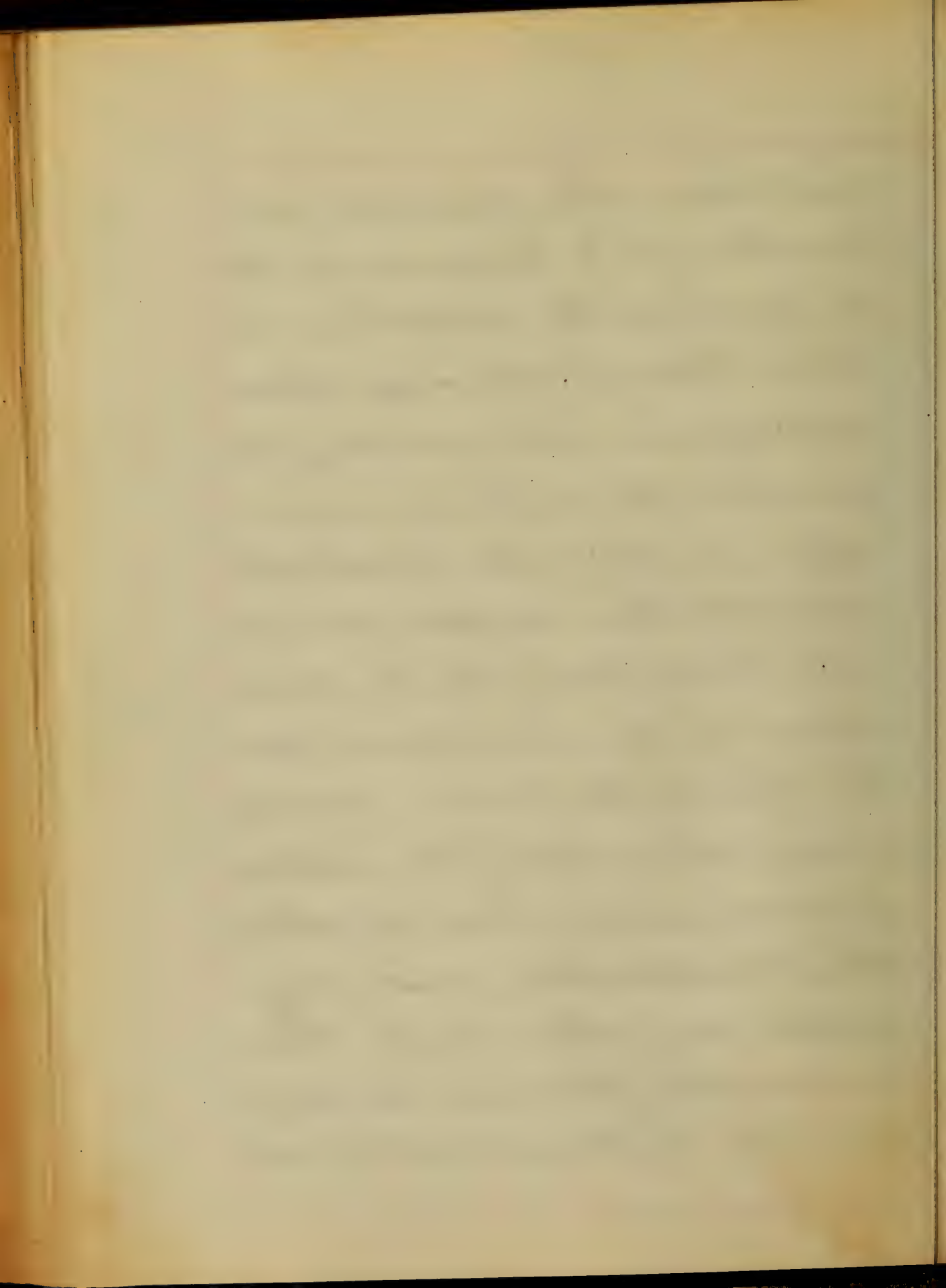


ranked among the causes. Cold is the great predisposing cause; hence the disease is most frequent in the colder seasons. Those occupations which expose the lungs to injury from over exertion, and which render necessary an exposure to the weather, without due protection are also reckoned among the exciting causes.

Pneumonia is more liable to be confounded with bronchitis than with any other disease. It is in cases of bronchitis extending into the minute ramifications of the bronchial tubes

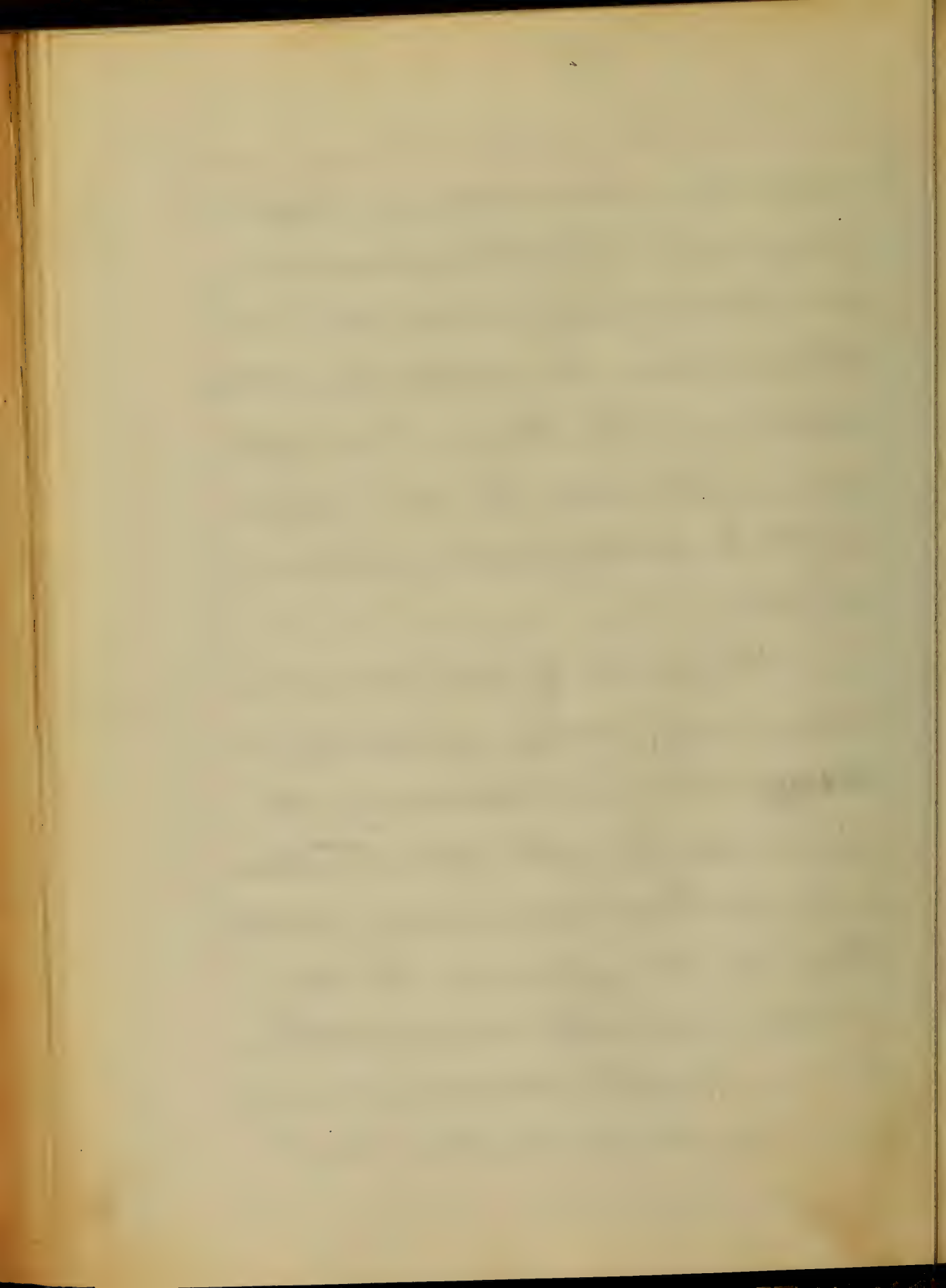


that bears the greatest resemblance to pneumonia. But in bronchitis, the sensations are more those of soreness than acute pain, and usually referred to the anterior and upper part of the chest; the expectoration is merely mixed with blood, not intimately combined, as in pneumonia; neither has it the viscid and tenacious character of the sputum of pneumonia. There is no bronchial respiration, and very seldom any absence of the respiratory murmur in any part of the chest, and but little dull-

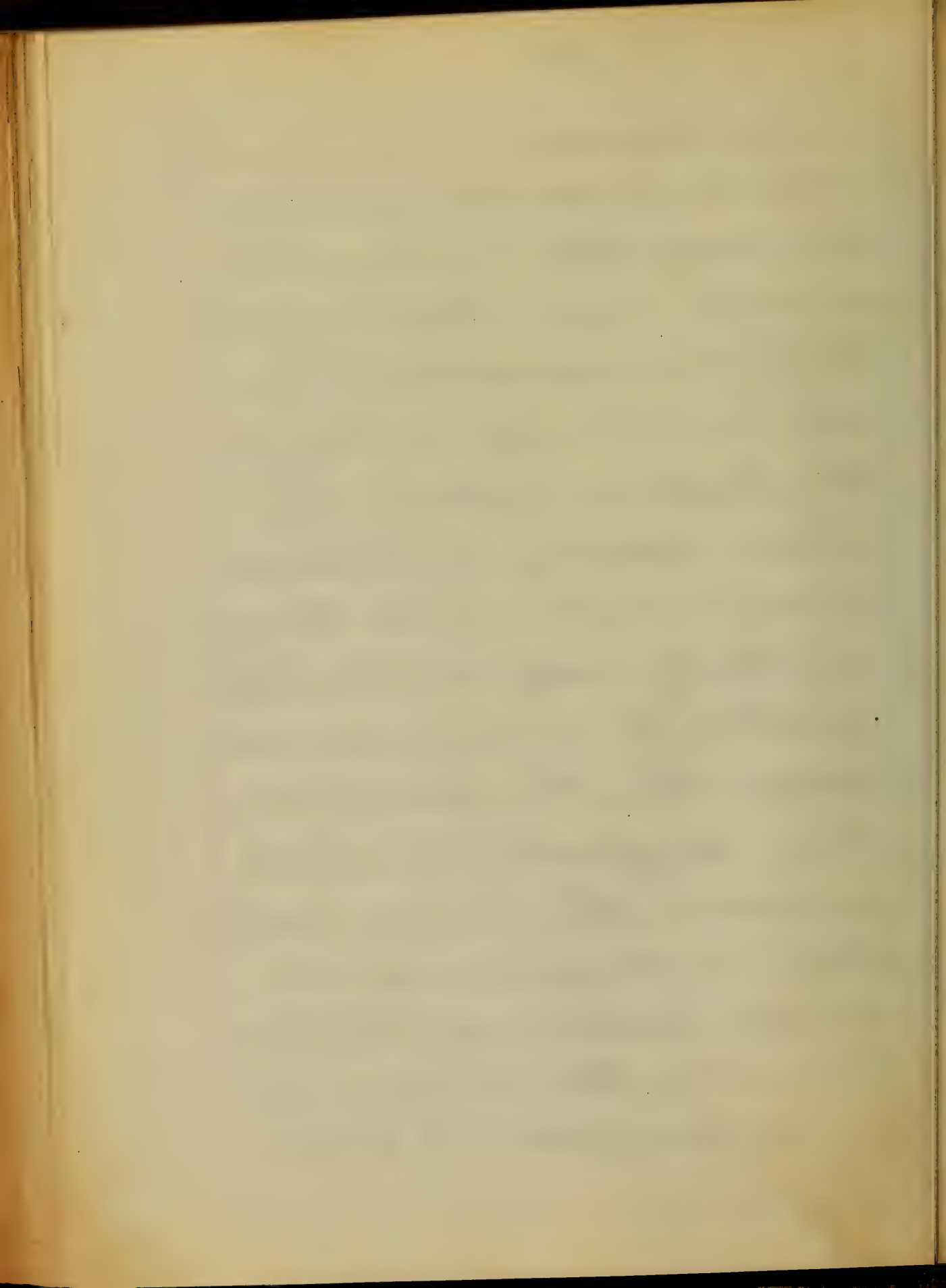


ness on percussion. But frequently the two diseases are combined; and when the pneumonia is confined to the center of the lung, it is often very difficult, if not impossible to distinguish between the two.

In cases of inflammation occupying only a part of a single lung, occurring in persons of good constitution, and without any complications, there is every reason to hope for a favorable issue; such cases almost always end in recovery, under proper treat-

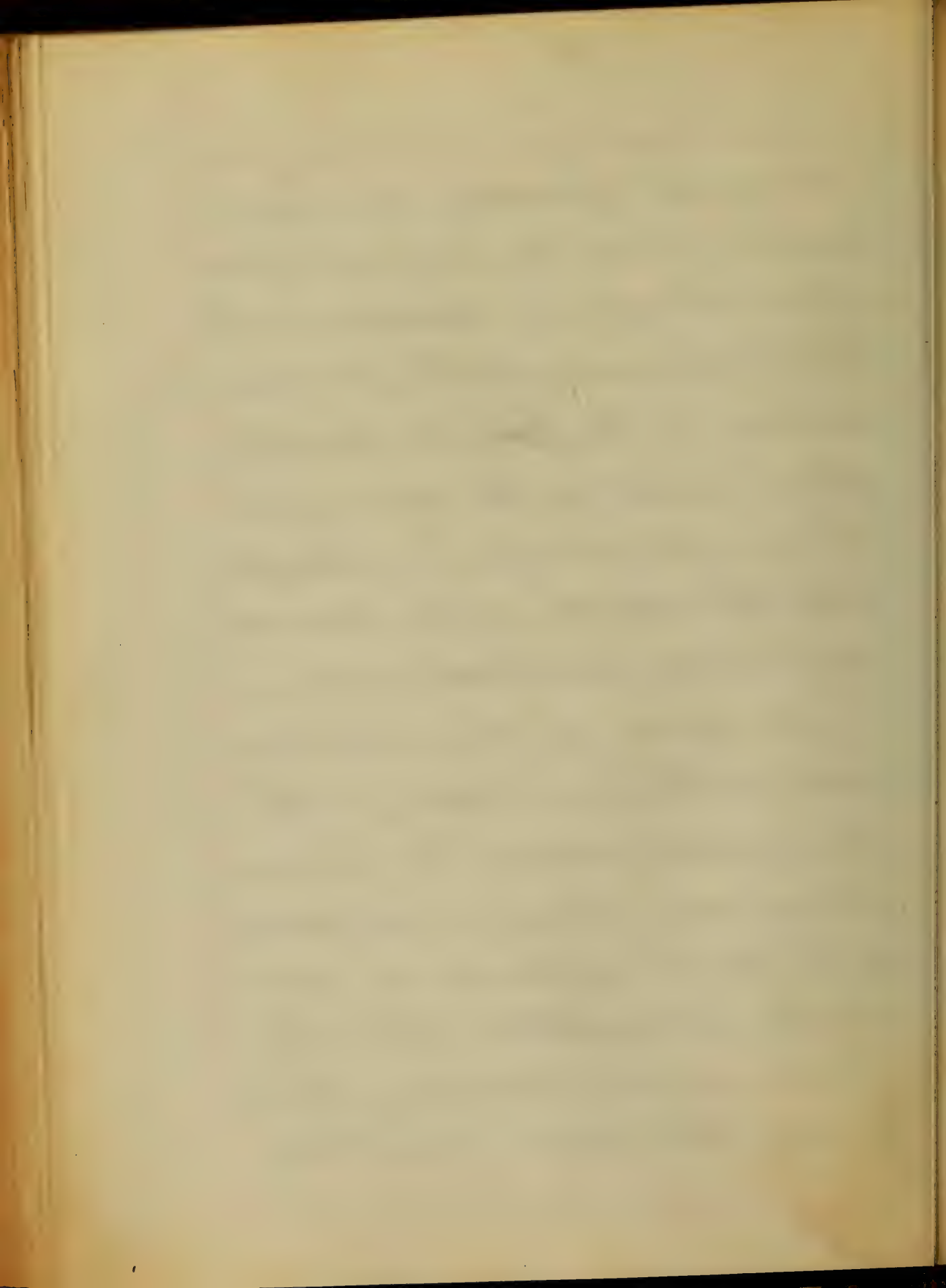


ment. The disease seems to be very mild between the ages of six and twentyone. "Of forty cases observed by Dr. Gerhard and M. Rutz in the Childrens Hospital in Paris, occurring in children from six year old to the age of puberty, only one terminated fatally." It is much more dangerous when the whole of one lung is affected; in double pneumonia the danger is always greatly increased. In delicate persons, and those above fifty, the disease is much more fatal. The fatality



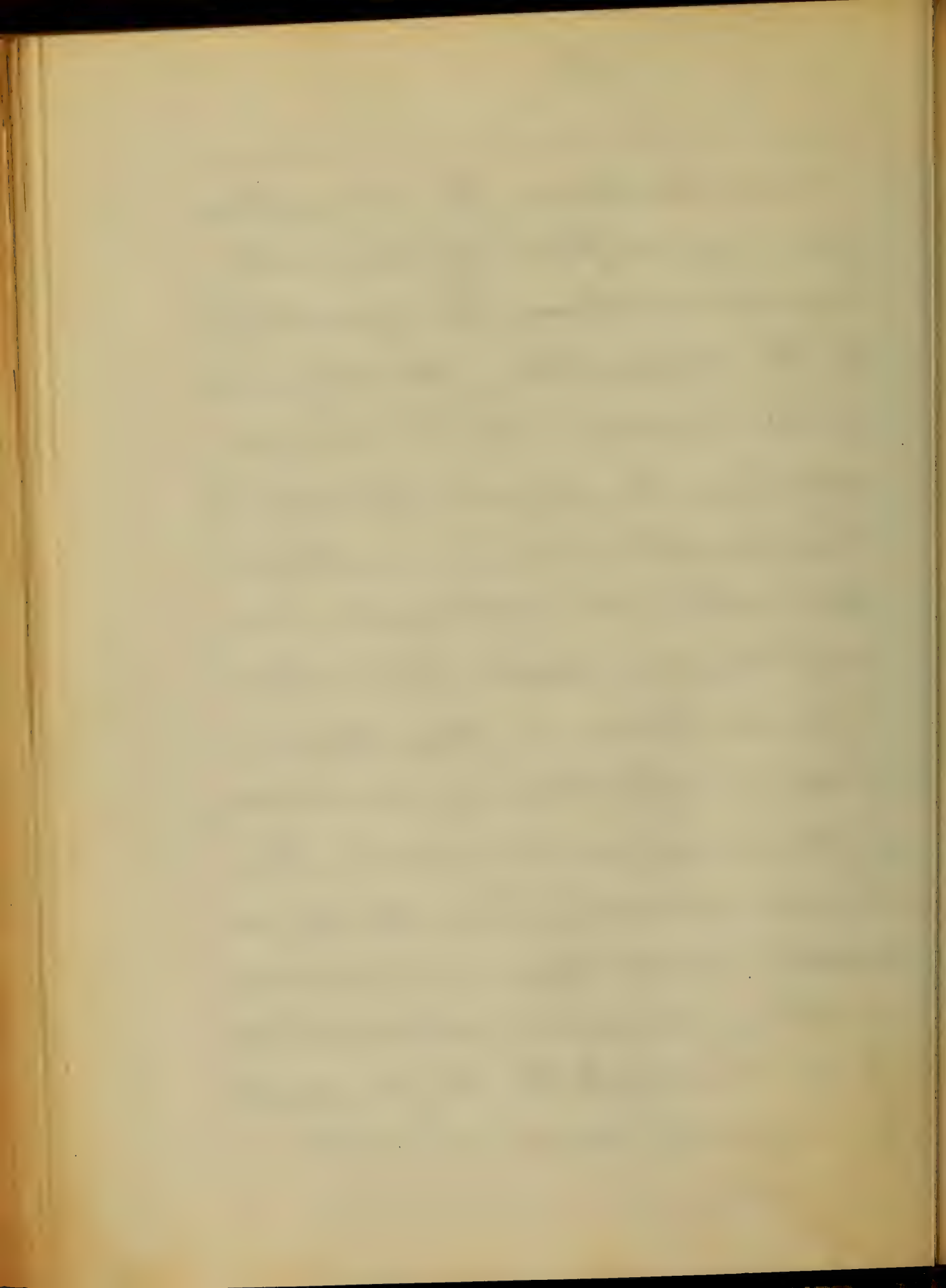
is much greater in hospital than in private practice; chiefly on account of the previously shattered condition of the patient's constitution and of the advanced stage at which it is brought into the wards, after previous neglect or bad treatment.

In persons of strong and vigorous constitutions, bleeding is the most potent remedy. The bleeding is not only called for, on account of its direct influence in relieving the inflammation, but with a view also, of lessening the labor of the lungs, and thus

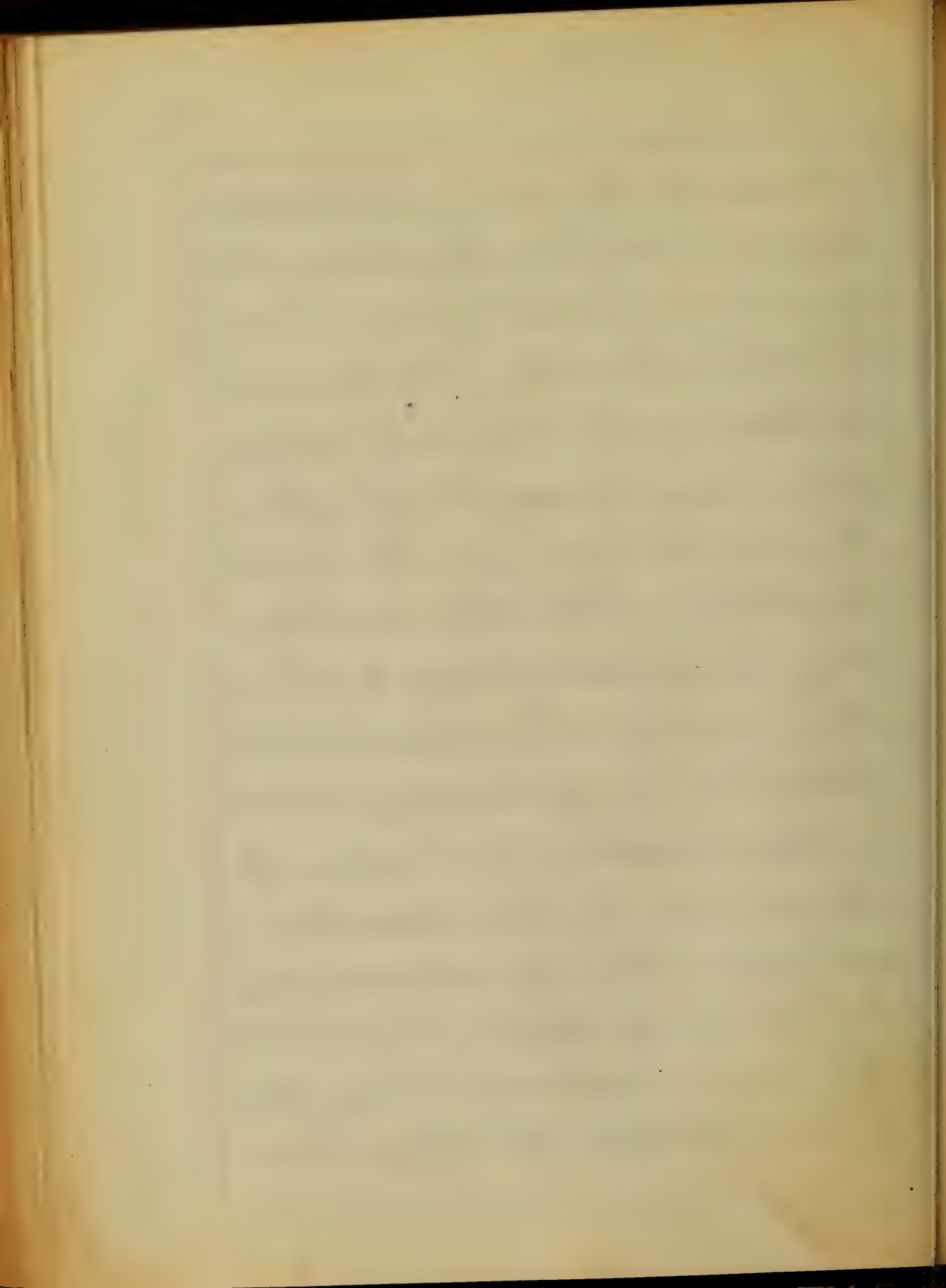


procuring rest for the affected organs. As all the blood must necessarily pass through the lungs after reaching the heart, before it can again be distributed, and as a considerable portion of the lungs when affected by pneumonia, can perform their office but imperfectly, a greater burden necessarily falls upon the unaffected portion, and thus, not only the sound portion of the lung is overtaxed by being compelled to perform the duty of the whole lung, but the number of respirations must be increased,

in proportion. We relieve the lung of a part of this duty, by diminishing the quantity of the circulating fluid, by means of the lancet. After the venesection, the bowels should be evacuated by an active cathartic, but afterwards it is sufficient to keep them open once or twice a day, which may be effected by small doses of Castor oil or Magnesia. The bowels having been fully evacuated, small doses of Tartarized Antimony should be administered: from the twelfth to a quarter of a grain, every one or two

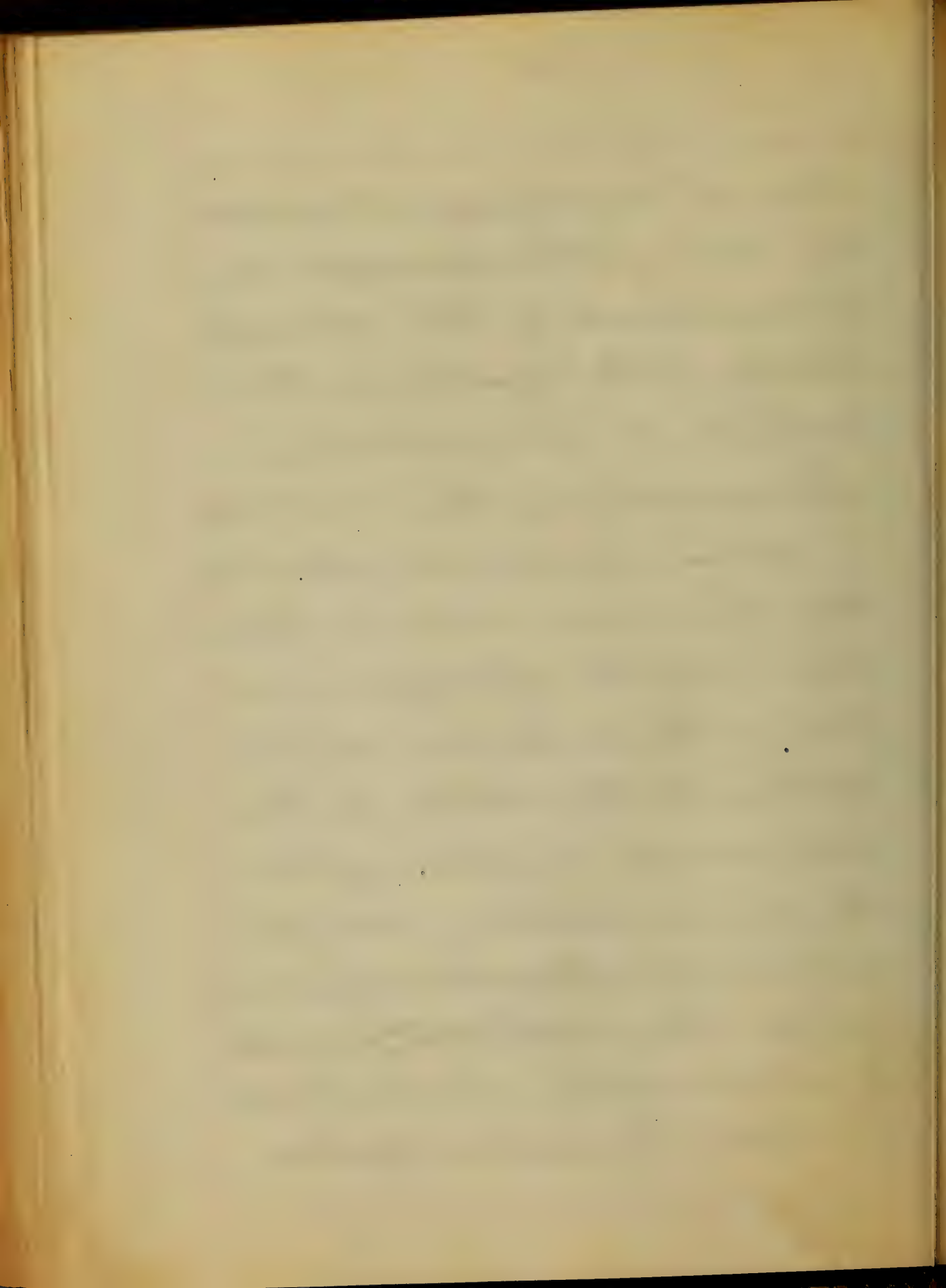


hours. If the skin is hot and dry, the neutral mixture should be administered, if well borne by the stomach. In cases attended with vomiting, the effervescent draught should be substituted for the tartar emetic. After two or three days of such treatment, when the force of the circulation has been sufficiently subdued, a combination of a grain of opium, one of ipecacuanha and two or three of calomel, may be given at night in pill form, the above treatment being continued through the day. Some-



times it is necessary to increase the dose of the anodyne in consequence of the insusceptibility of the system of the patient to its influence.

The advantages of this combination of opium, ipecac, and calomel are that it procures rest for the patient, obviates the injurious effects of the cough and directs action to the skin. If the pain remains unabated after the general bleeding, and especially if the physical signs indicate the unchecked progress of inflammation, blood should be taken by cups or leeches

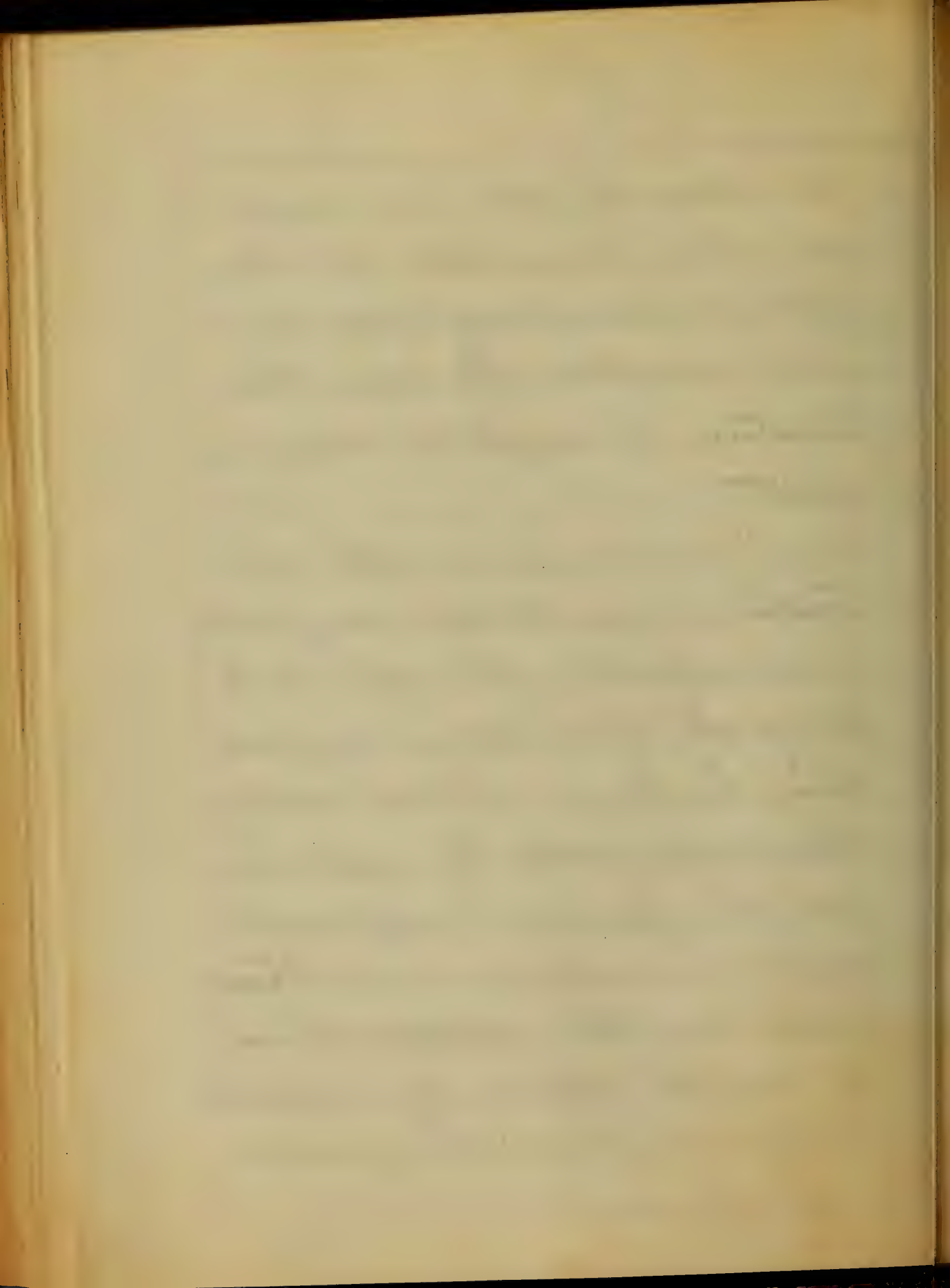


from the chest to an extent corresponding to the strength of the patient. Large emollient cataplasms are also sometimes useful, but require to be used with great caution, lest they render the patient liable to cold by improper exposure of the wet surface.

In the declining stage of the disease, expectorant medicines are very often necessary; the syrups of Squill and Seneka should be combined with a little tartar emetic and one of the salts of Morphine, and given in such doses as

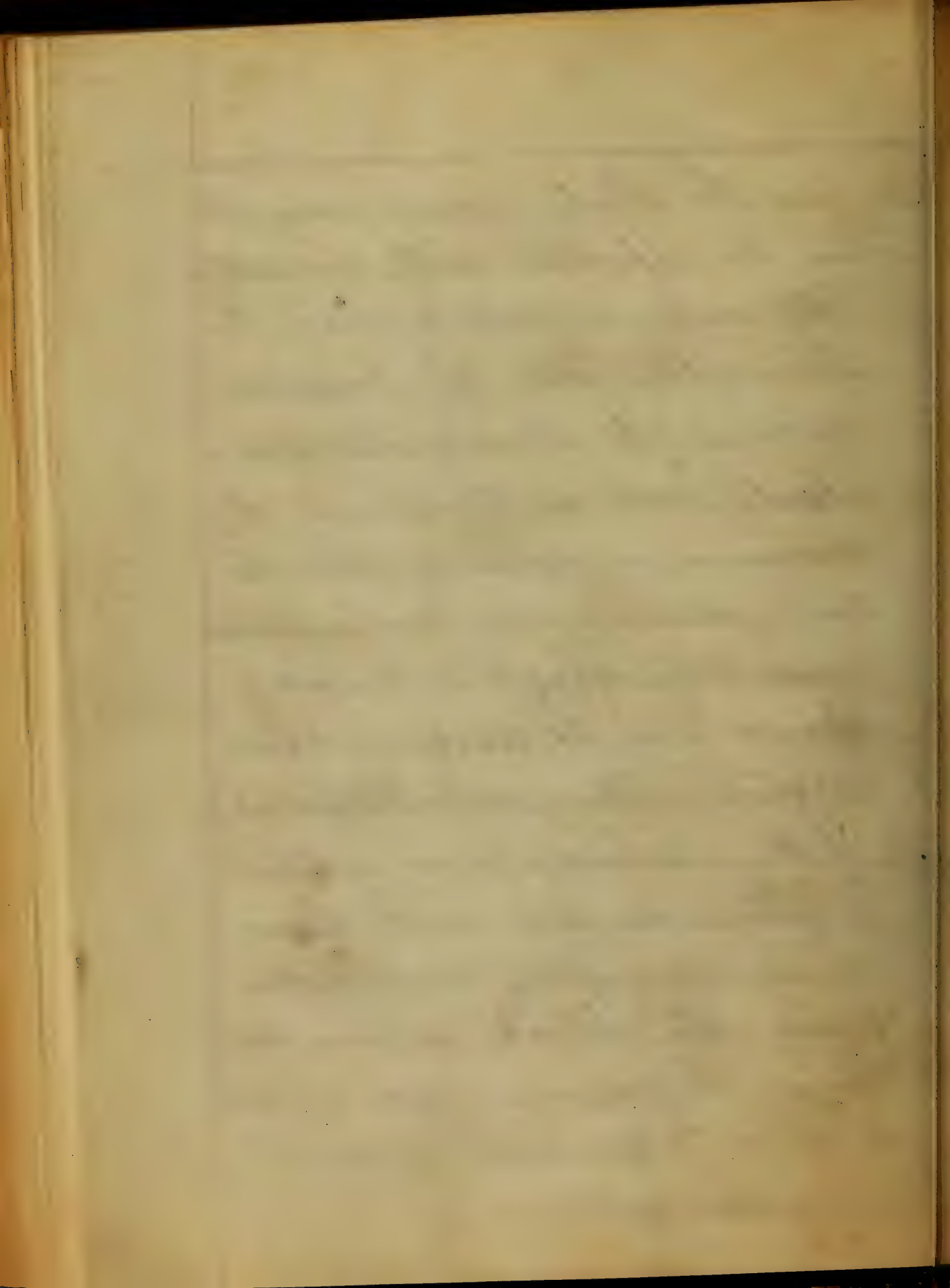
The stomach will bear without being nauseated. If the pulse remains very frequent as is sometimes the case, the tincture of digitalis may be added.

In connection with this treatment, a blister may with great advantage be applied to the chest. It should as a general thing be large, at least, not less than six inches by eight. Before this period its application would be improper, as, without unseating the inflammation, it might injuriously increase the fever. Should the fever be



ger, the blister may very often be repeated with advantage.

If in the advanced stage the strength fails, it becomes necessary to administer stimulants such as Carbonate of ammonia, in doses of three to ten grains every two or three hours, Milk-Whey and brandy should also be used in connection with a nutritious diet. If there is hectic fever Sulphate of quinia should be used. Gangrenous symptoms should be combated with chloride of lime and opium, the mineral acids, especially the nitro-muriatic.



AN
Inaugural Dissertation

ON
Rheumatism

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

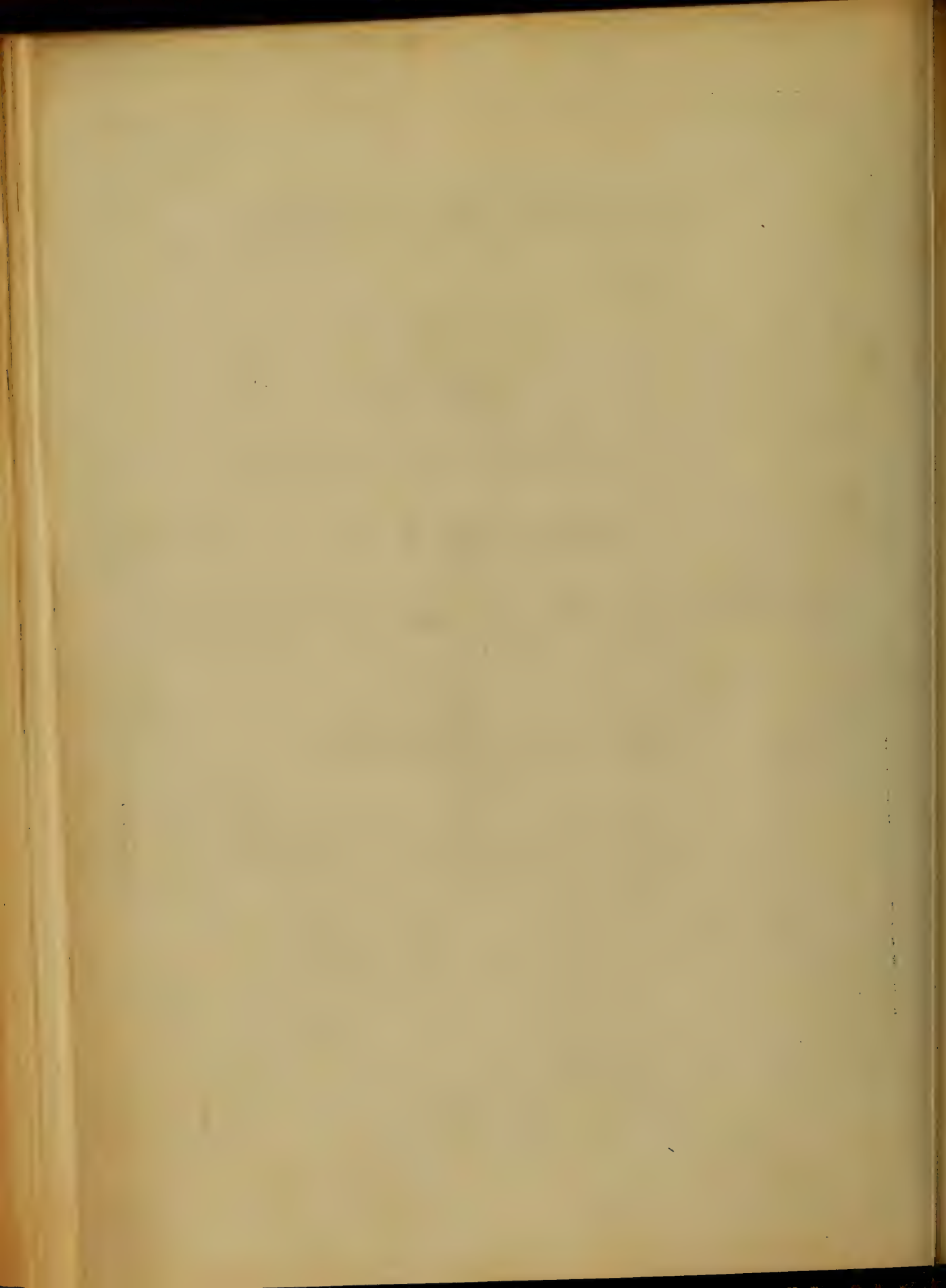
George B. Crawford

of

Baltimore County Maryland

Session of

1867

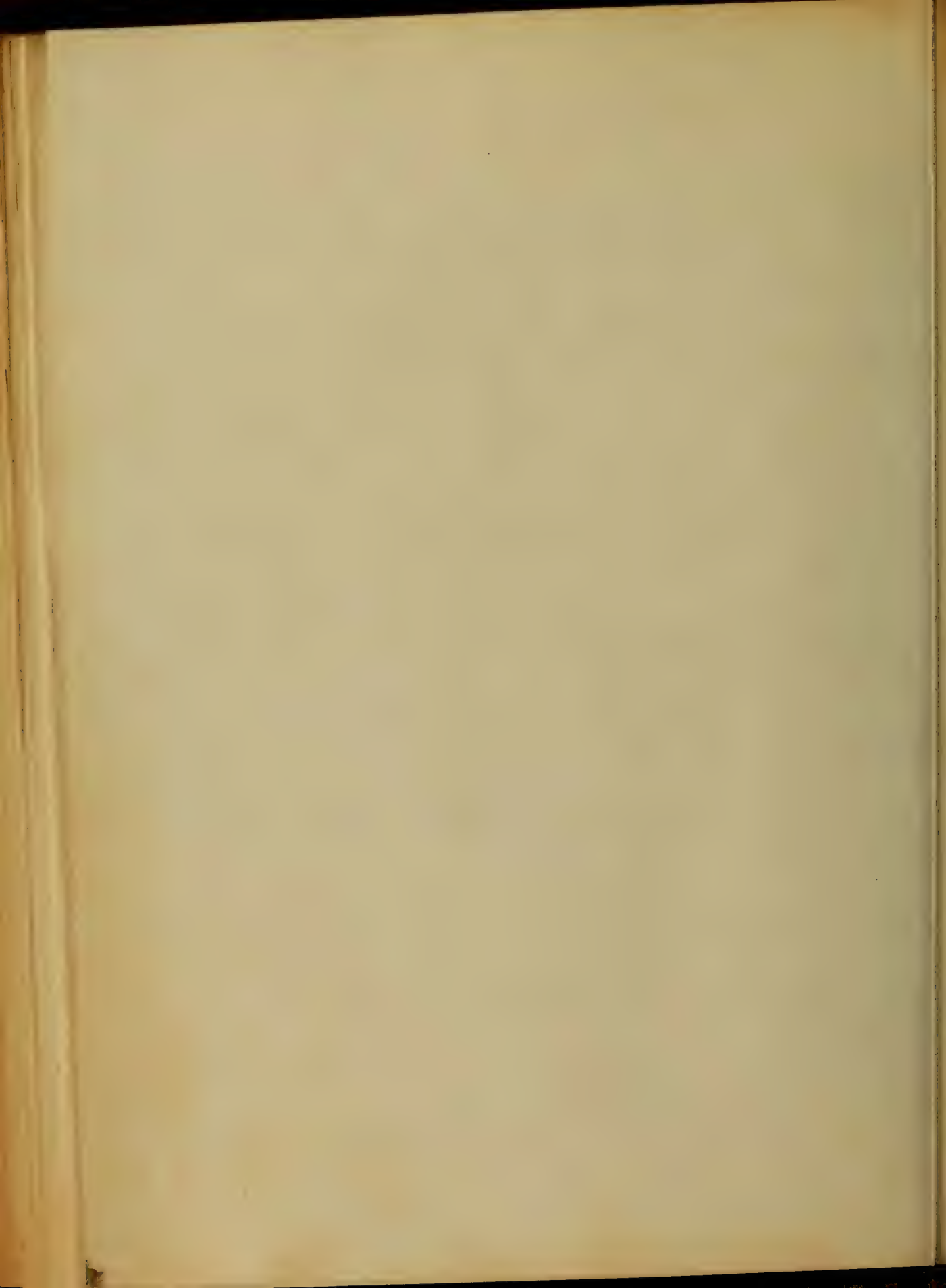


Rheumatism

Rheumatism, from Rheuma, a flow, is a constitutional affection, a kind of a drifting phlegmasia to, which, all parts of the system are liable, attended with a peculiar irritation or inflammation.

This disease presents a strong individuality in whatever part it may exist. It is different from other varieties of inflammation shown by its drifting, character, and even absence of suppuration. This peculiar inflammation first received the name of Rheumatism in Ballonius Treatise, published in Paris, 1622.

Rheumatism is supposed, or considered by some authors to have a tendency, only to certain tissues, as the fibrous, muscular, and serous, but I believe, judging from its



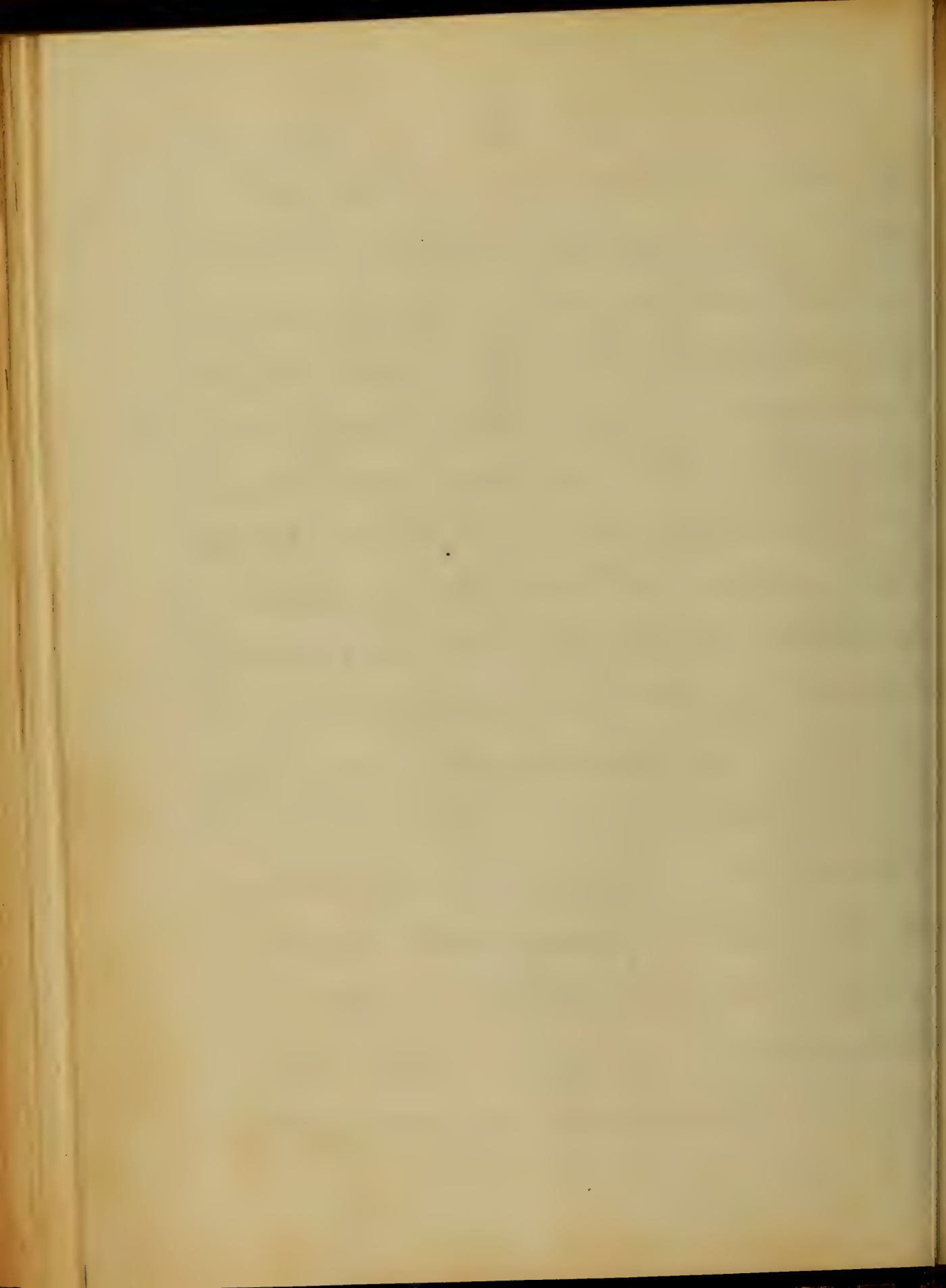
peculiar, character, and general description
given by such authors, as Wood, Armstrong,
and others, that, any ^{part} of the body may be
affected, and it is divided by the writers into four
varieties, Acute, Subacute, Chronic and nervous.

Acute Rheumatism, is a violent local inflammation
attended with considerable constitutional distur-
bance, and usually attacks the large joints.

The Subacute, has an inflammation less violent than
the acute, with little or no constitutional disturbance,
and occurs mostly in the muscles and may, also
attack the joints.

The Chronic form is characterized by long duration, and
the lowest grade of inflammatory action, and is most
apt to fix upon the joints, and synovial membranes.

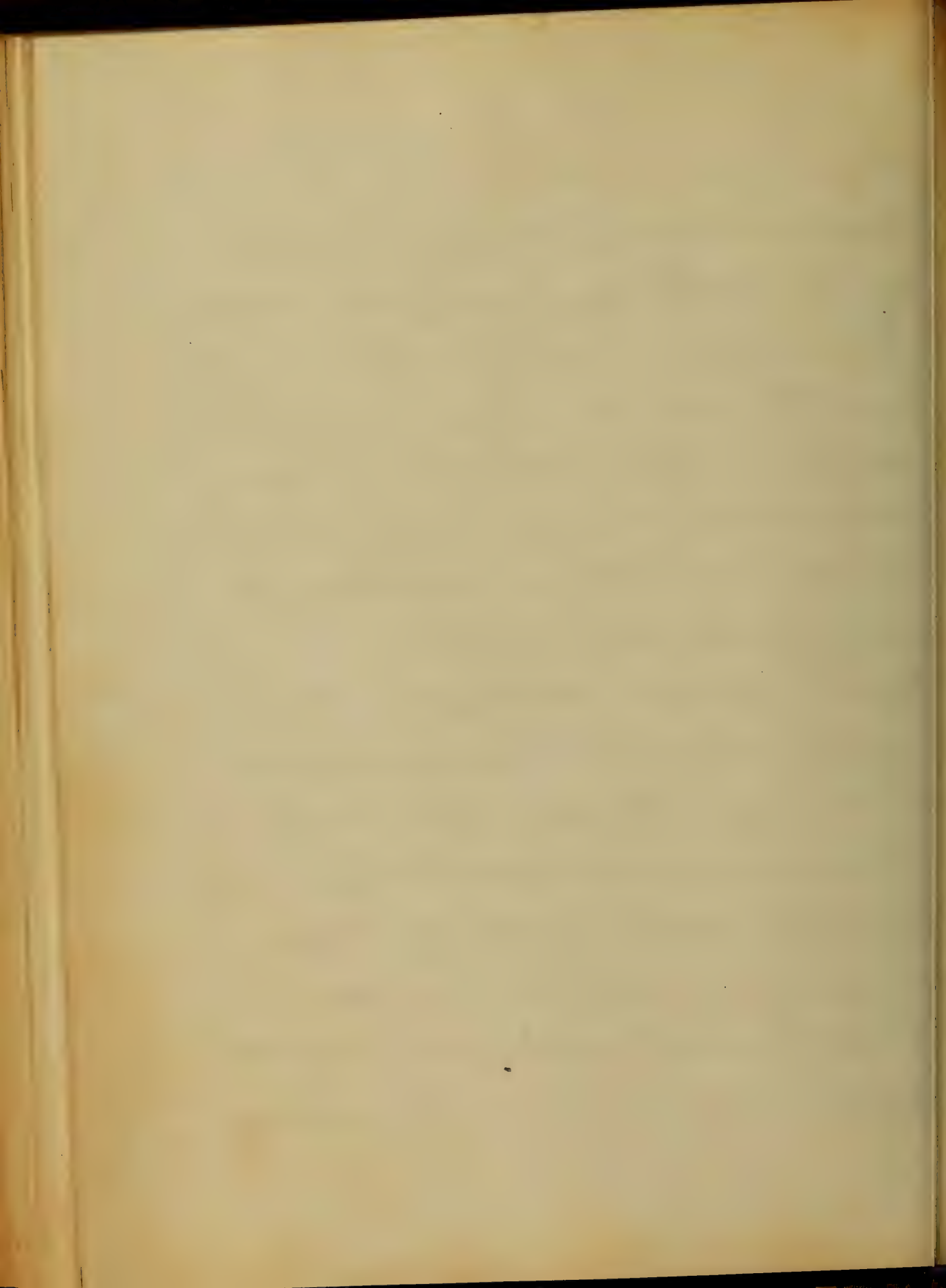
The Nervous variety consists in an irritation directed
essentially to the nervous tissue in which inflammation



and fever, are entirely absent.

Symptoms of the Acute form, Acute Rheumatism
may come on without any previous febrile symptoms
but fever I believe, generally and almost invariably
attends this form of inflammation and being present
during the whole period, and remaining severe
most of the time. It is said sometimes to precede
the inflammation but this not often happens, the
primary symptoms, are generally local.

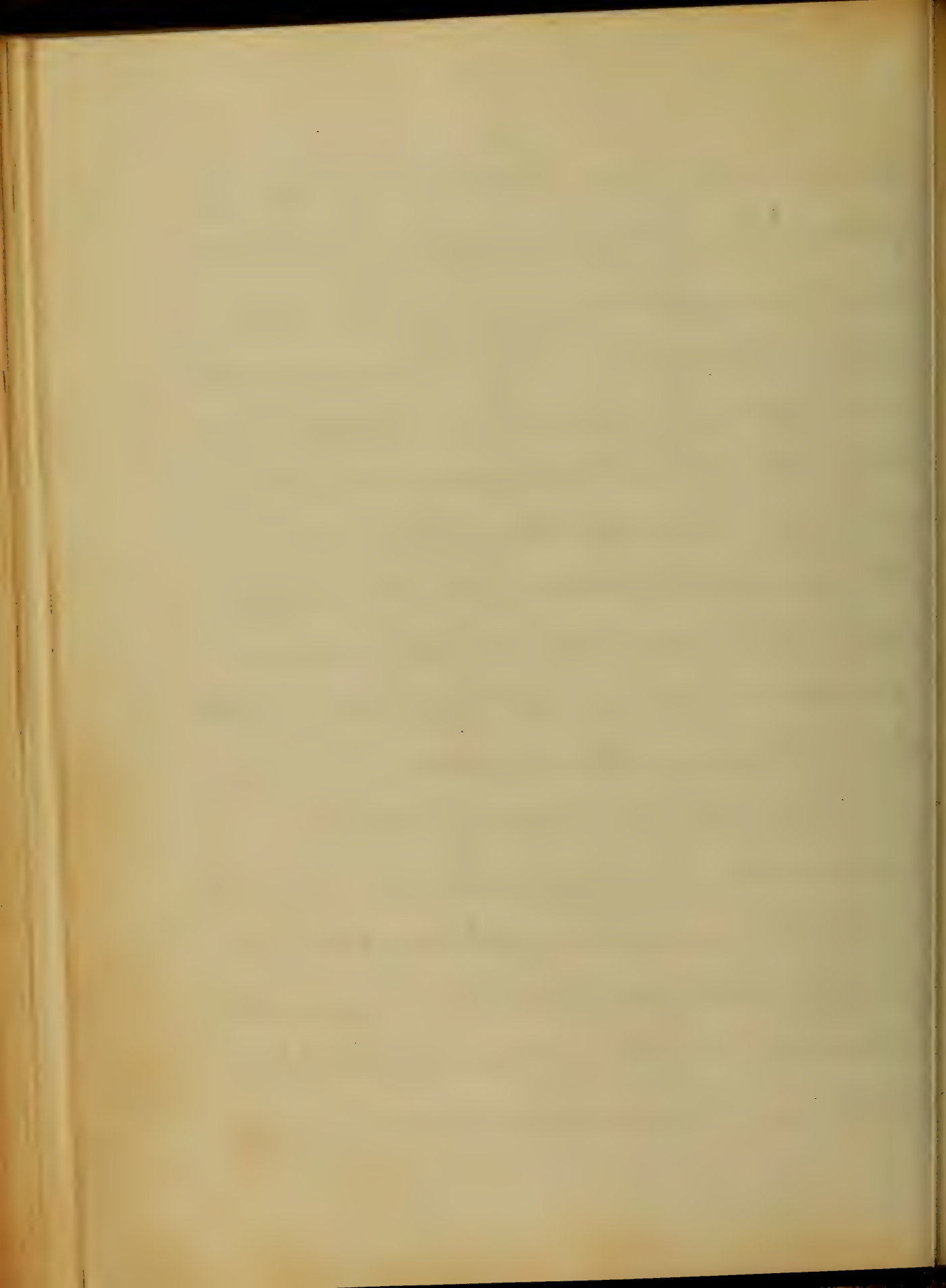
The febrile symptoms that generally precede the acute
disease, are languor, chilliness succeeded by heat,
thirst, anxiety, restlessness and full quick pulse,
seldom exceeding 110. in minute. The tongue usually
coated white, occasionally red or dry. Seldom
nausea or vomiting, the skin though warm is less
heated than in other fevers, and is covered with
a profuse, perspiration, of a peculiar, sour, pungent



sickening smell. Notwithstanding this excess of, hyper-
pæria. The skin feels extremely hot, and the
pulse is, in no way, influenced by it, nor has
it, any effect, in relieving the, inflammation or, pain,
Being, an essential symptom, of the, affection, there-
fore it affords no relief. The bowels, are, generally,
constive, and the secretions, are little diminished,
with the exception of the urine, which is scanty,
high colored, and, depositing a brick-dust colored,
sediment of Uric acid. Both the, pain, and, febrile
symptoms become, more severe towards the evening,
and abate, considerably in the morning. These
exacerbations are, accompanied with an increase
of pain, - consequently they, are, worse at night but
relax somewhat, with the fever in the morning,
The fever rarely lasts over two or three weeks but
the, pain and, swelling may last, a much longer



period. The disease may run its course and very often does so without penetrating any of the great cavities, or may fix its seat upon some internal organ by a translocation of the inflammatory action as the heart, lungs, diaphragm, liver, Stomach, bowels, uterus. When the heart is attacked we may have Endocarditis or Pericarditis, there is acute pain over that organ, with palpitation, difficult breathing, partial fainting, great anxiety, pale, distressed countenance and delirium. When the brain is attacked there is acute pain in the head, intolerance of light, a wild, and anxious expression of the face, heaviness and sometimes delirium. It is said however that delirium may be one of the most prominent symptoms without reason to believe any cerebral inflammation has taken place, when the disease fastens upon the stomach there is pain in its region



with nausea and vomiting &c., and when these internal organs are attacked the disease is liable to terminate fatally, unless prompt and efficient treatment is adopted, Pericarditis like Endocarditis may come on without being denoted by pain or any symptom sensible to the patient, the regions of the heart should therefore be frequently sensitized by the stethoscope and proper measures be adopted as soon as there is the first indication of murmurs. Endocarditis and Pericarditis may be looked upon, as an extension and not as a transfer of the disease as the affections of the joints, does not diminish it.

When the disease is about to give way, the decline is indicated by disappearance of the pain, inflammatory action ceases, or if they occur, exhibit a much milder character. The excessive sensibility to impression from without are almost entirely lost, and the febrile symptoms are.



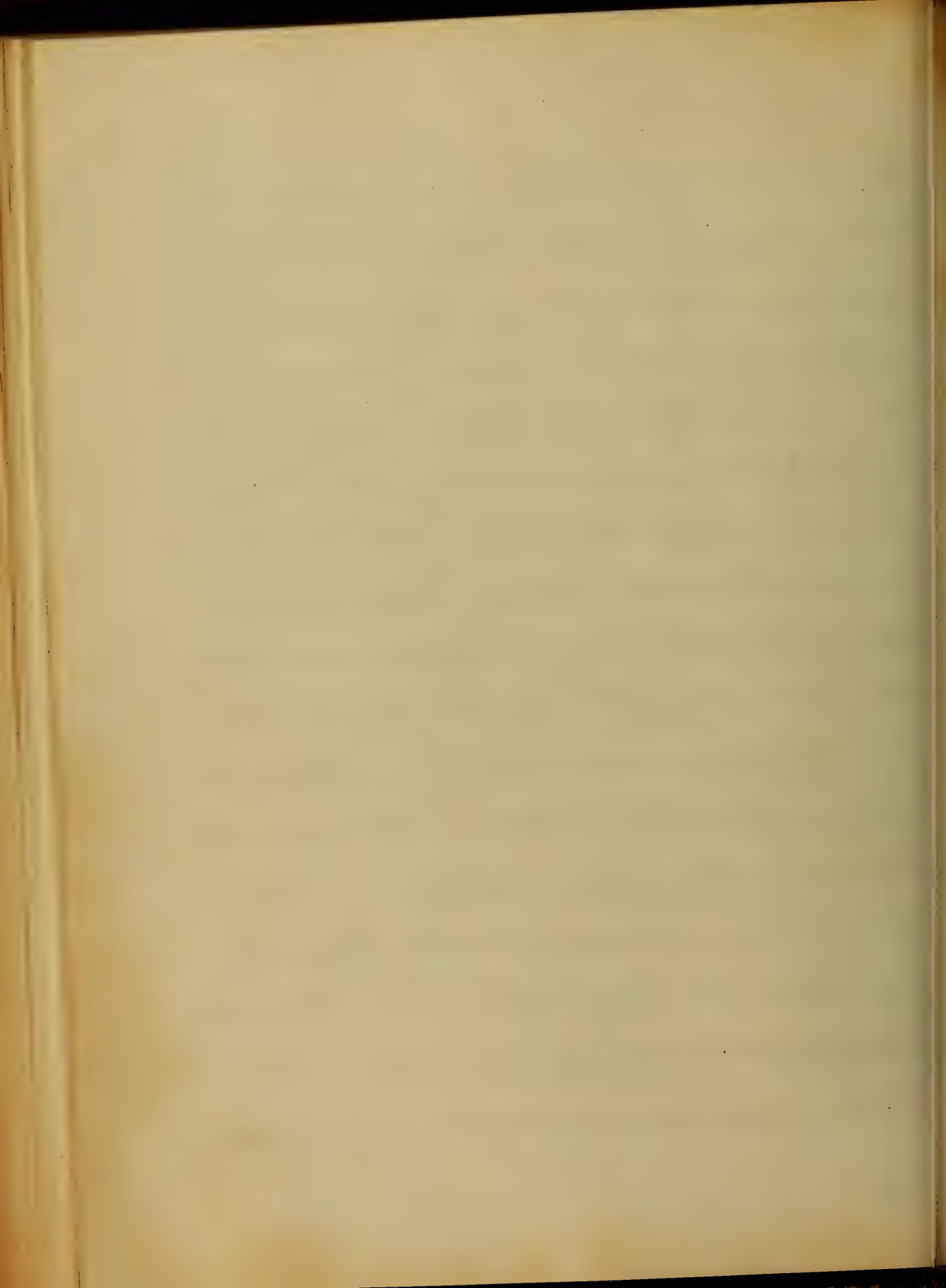
Moderated or wholly, disappears, some swelling and
soreness are apt to remain, for considerable time, after
the disease has passed, and weakness and stiffness of
the joints and muscles are frequently left, after
convalescence and recovery. Sometimes there is more or
less local disease left after the fever has gone and the
acute degenerates into the Chronic form.

Local Symptoms, Excruciating pain may be felt in different
parts of the body at the first appearance or after febrile
action takes place. The pain shifting from ^{one} joint to
another, with great rapidity, attacking in its progress
neighboring parts, Sometimes, distant parts, in succe-
ssion, disappearing in one seat after rising upon
another. Sometimes the complaint begins with a feeling
of soreness, stiffness is felt in the muscles with a
sense of soreness, which is more or less followed by
Excruciating pain in one or several parts of the body.



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particularly in the joints of the toes, ankles, knees,
wrists, elbows, and shoulders, the pains shift, about
from one joint to another, and accompanied
with Swelling of the parts, redness and heat
is confined to the touch, this tenderness is frequently
so great that the patient cannot even bear to have
a person to walk across the floor of the chamber.
Sometimes the attack is confined to one joint or
limb, but more frequently it attacks several limbs
and different parts of the body, the pain and swelling
of one part may continue or gradually subside, as
the disease appears at another, in other instances, the
first symptom is acute and violent pain, heat
and swelling soon come on, and when the pain has
been sharp and lancinating, it is very commonly moderated
after leeching, extreme soreness however remains
and the slightest movement of the part occasions suffering



On the joints. The disease may be confined to the ligaments
or may affect, also the synovial membranes, in the former
case swelling is firm and elastic, in the latter soft and
fluctuating, in consequence of the effusion of synovial
secretion taken place in the synovial membranes and
the cellular tissue, continuous with them. The pain is
somewhat moderated by the effusion except where there
is great distention. The fluid effused is generally
absorbed, after, coalescence takes place and
recovery complete and the joints retain their natural
form and motion. But when the fluid is not absorbed
the ligaments continue in a thickened state and the
motion of the joints are decidedly injured. The swelling
is greater in such joints as the ankle, knee, elbow
than those that are more protected by muscles as the
hip, shoulder, the suffering is very great, the pain
being described as tearing, rending, sawing, which



are scarcely ever entirely absent, and are at times
almost excruciating

Subacute Rheumatism

This is a modified form of the acute variety, so
limited in extent and duration with so little constitu-
tional disturbance that it cannot be ranked with
the acute, while its long duration excludes it from the
chronic forms, differing in intensity.

Duration and course.— This variety of Rheumatism
is peculiarly liable to remission, & may last for weeks
or months, but the acute the inflammation is so severe
as to give a strong direction of the disease, & it usually
tends to its own cure. In the chronic the disease appears
often to be a more local and has no disposition to change.
In the subacute, the constitutional tendency to Rheumatic
diseases is so strong while local affection is so feeble
that it readily yields to causes which cause the



irritation another direction. The variety is intermediate
between the high inflammatory and the pure nervous
form. It is a form of subacute rheumatism is common
and depends upon the same kind of irritation
in two or three days and sometimes runs on for
three weeks or months. It is or may be
inflamed but in the majority of cases the disease
is confined to one joint at a time. If however there
was an extension of the disease to several of the
articulations simultaneously would give rise
to decided fever and thus constitute acute
rheumatism. The local symptoms are not however
materially different from those described under
the preceding variety. The pain however is usually
less severe amounting often only to slight itching
or soreness. There is also less redness and heat and the
swelling is less tense and elastic. There is sometimes



increase secretion of the synovial fluid, and that
of the bursae, and fluctuation, may be noticed
in the vicinity of the joints, especially the knee. It is
also true to the muscular form as in the articular.

This disease may extend to several muscles or be limited
to one! It very frequently however extends to several
muscles of the same part, performing the same office.
In some instances there is at first, a feeling of
soreness which gradually increases until it amounts
to a dull aching pain which becomes acute when the
muscle contracts, and then again there is a severe, sharp,
lancinating pain which seizes the muscle when suddenly
called into action. The pain is sometimes excruciating so
as to render the patient unable to repeat the motions.
Any of the external muscles may be affected, and the
disease takes its name according to its seat. As the
neck, under the name of Wry-neck or Torticollis.



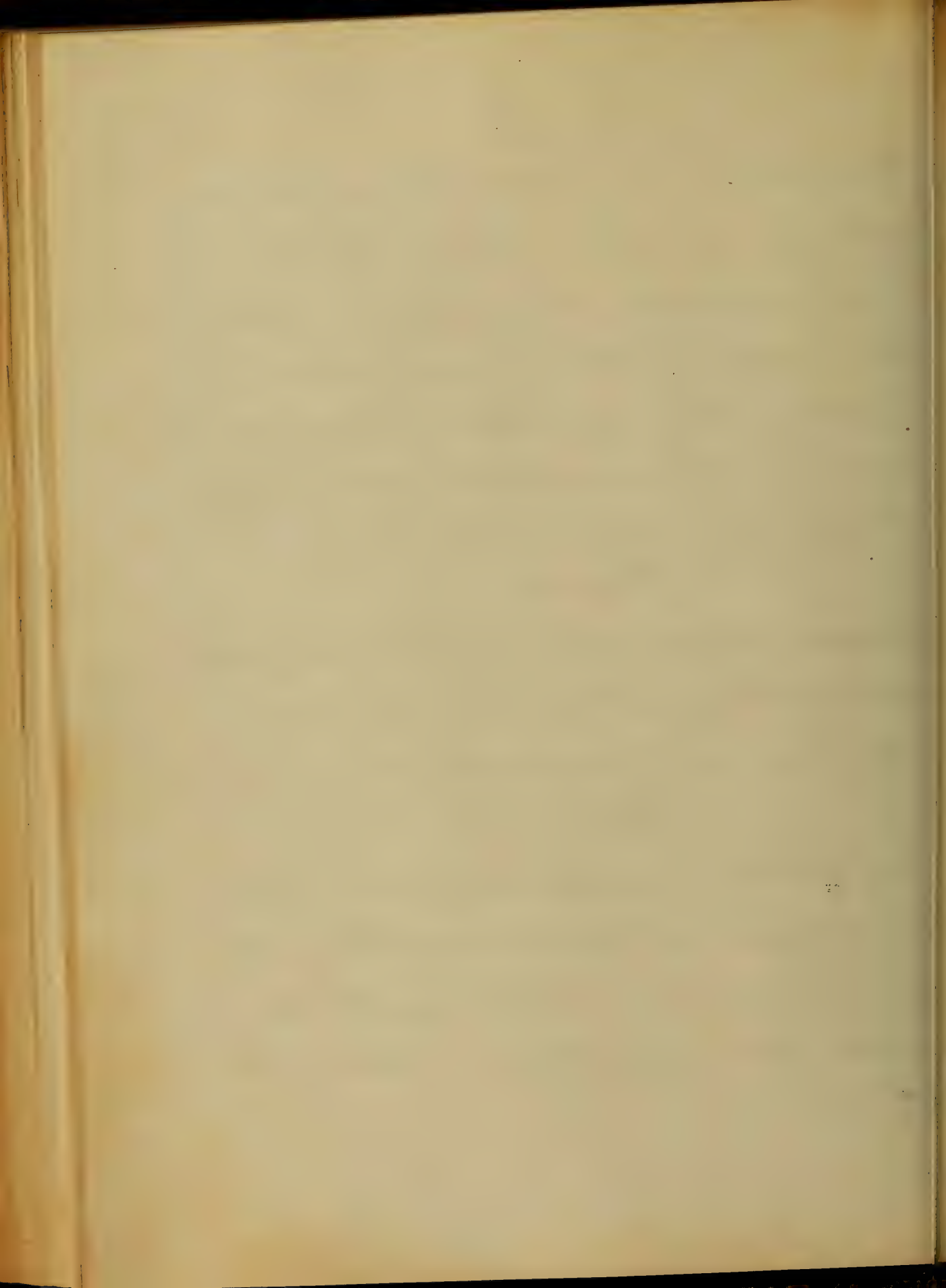
Phurodynia to it of the chest. It occurs in this occu-
pied muscles situated in the small of the back,
sometimes extending up to the neck. A common course
is around towards the abdomen. A scatica which the
is involved which is seated sometimes in the muscles,
sometimes in the ligaments of the spine, and reason is
believe in the neurolemnia of the sciatic nerve.

Diagnosis

Suddenness of the attack. The severity of the local symptoms
compared to the general. The sharpness of the pain. The
rather absence of any tendency to suppuration.

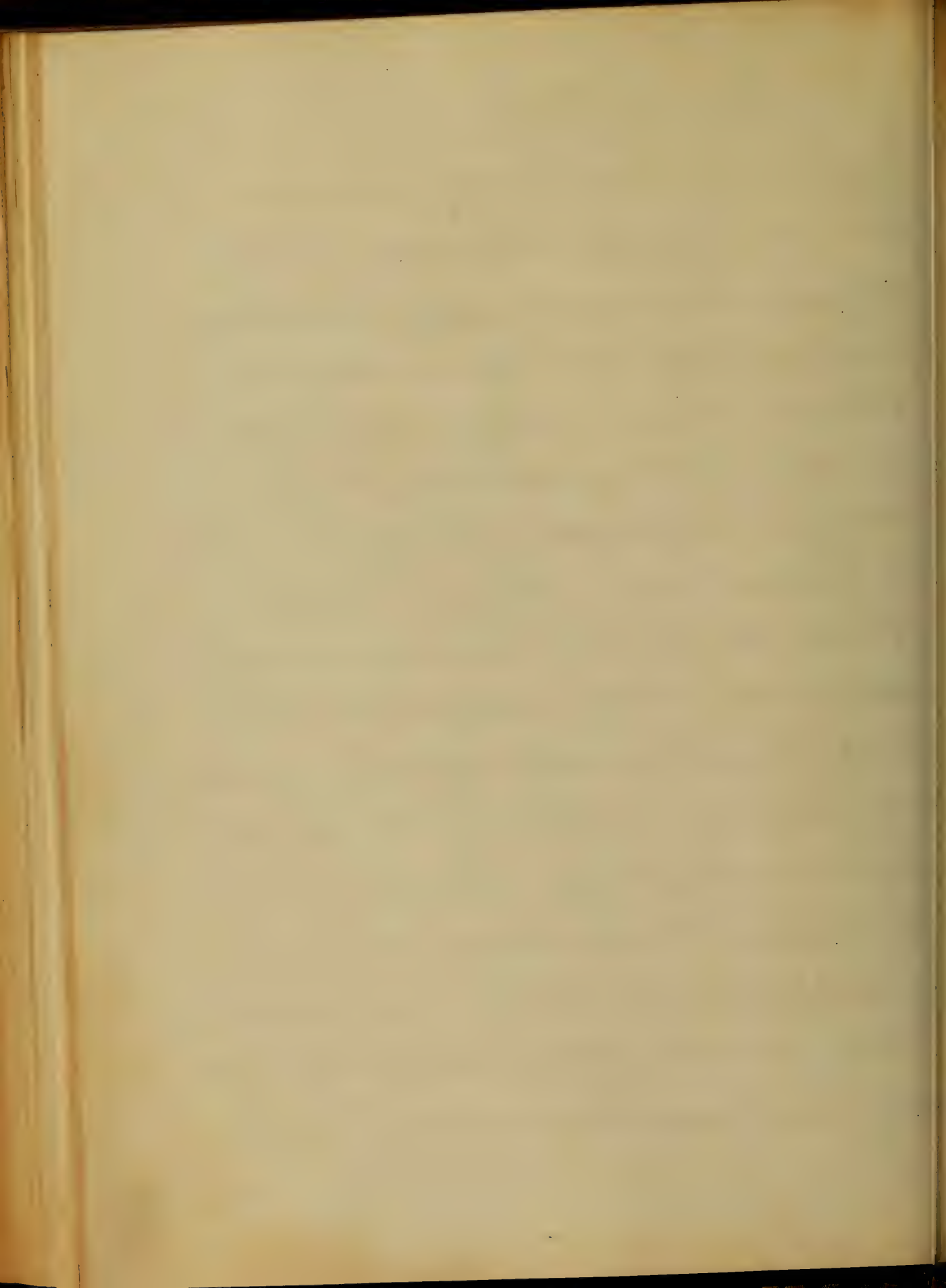
Prognosis

Rarely otherwise than favorable, unless when it seizes upon
some vital organ - as the brain, heart, stomach. The greatest
danger is probably upon the sudden seizure of the muscular
structure of the heart, arresting the movements of the
heart.



Chronic Form

This form of Rheumatism usually appears as a sequel to the acute or sub-acute attacks and also may appear as an original affection without any previous acute attack. It bears some resemblance to the acute form. The principal difference between the two forms of the affection lies in the less activity of the attacks and inflammatory fever and the indefinite duration of the symptoms of the Chronic form. It is sometimes limited to a single part sometimes extends to several and may be fixed or moveable, generally however it is more apt to be fixed firmly in its original seat than either of the other varieties. The effects when the joints are very near the same as in the acute variety. Ligaments become thickened, the form of joints becomes changed and their motion injured. When the muscles are affected they often generally waste away. Tendons and become shortened.



Gonorrhoeic Form

and, when examined after death, they have been found to contain a yellow translucent granular secretion, in the cellular tissue, connecting their fibres. The pains are usually confined to the large joints. Most frequently the hips, loins, knees, and shoulders. Though every joint is liable to be affected, the pain may be confined to one particular part, or may shift from one joint to another with a slight degree of inflammation. The pain is generally worse at night, and worse in moist than in dry weather. Some persons are hardly ever free from pain, while others suffer only on the appearance of cold or damp weather, or from improper exposure. The joints are usually swollen, but not to that extent as in the true gonorrhoea, and the skin is not affected with the redness of the inflammatory variety, but is pale-cold and stiff, and cannot be easily be made to sweat. When the patient



Chronic Form

remains, at rest for a short time he will, experience
pain, and stiffness in the affected part on attempting
to move it. But on exercising until the body becomes
warmed, both, pain and stiffness, disappears. The pulse
is generally quiet, and tense - more particularly towards
night. The appetite is more or less imperfect. Urine variable
amount, irregular, with a tendency to coldness of hands
and feet, and numbness of the limbs, and not infrequ-
ently, a partial insensibility. When chronic rheumatism
is permitted to progress without attending a permanent
cure. It causes, organic, disease of tendons, perman-
ent stiffness of the joints, with a wasting and hardening
of the muscular structure, about the parts with con-
siderable deformity. There is, generally, a complete
absence of fever, in this form of rheumatism. Much
disorganization of the tissue has taken place. In obstinate
and very old, cases there is often stiffness or immobility



Chronic Form

of the joints arising from contraction or thickening of the ligaments. It is a very tedious and obstinate disease to cure, on account of the inattention bestowed upon it during the absence of actual suffering. But when early and properly attended to it is as readily cured as most maladies.

Nervous Rheumatism

This form of Rheumatism evincing itself by pain or other disordered sensation, and by irregularities of the motive power. It may affect any portion of the body or organs. The disorders of sensation and function falling under this head, are peculiarly similar to nervous Gout, and for to say whether it is nervous Gout or nervous Rheumatism is to notice which of these symptoms it is, apt to be associated with. The rheumatic irritation may assume the form



Nervous Rheumatism

of neuralgic pain in any part of the body.

Vertigo, Dizziness. Head ache, & irritus aurium, prevented vision &c, when it affects the brain. When affect the respiratory apparatus. hurried or irregular breathing and even violent dyspnoea. Palpitation, & oppression and great precordial distress when the heart is affected.

Disruptive vomiting, nausea or vomiting, & spasm &c when the stomach is affected. Colicky pain when the bowels are affected.

Cause—The exciting causes of this variety of rheumatism, are the same as of the other. A predominance of the nervous temperament. Sedentary habits. Whatever tends to depress the powers of the system at large may be considered, as favouring the production of nervous rheumatism.

Treatment of Nervous Rheumatism

The practitioner must be guided in his treatment

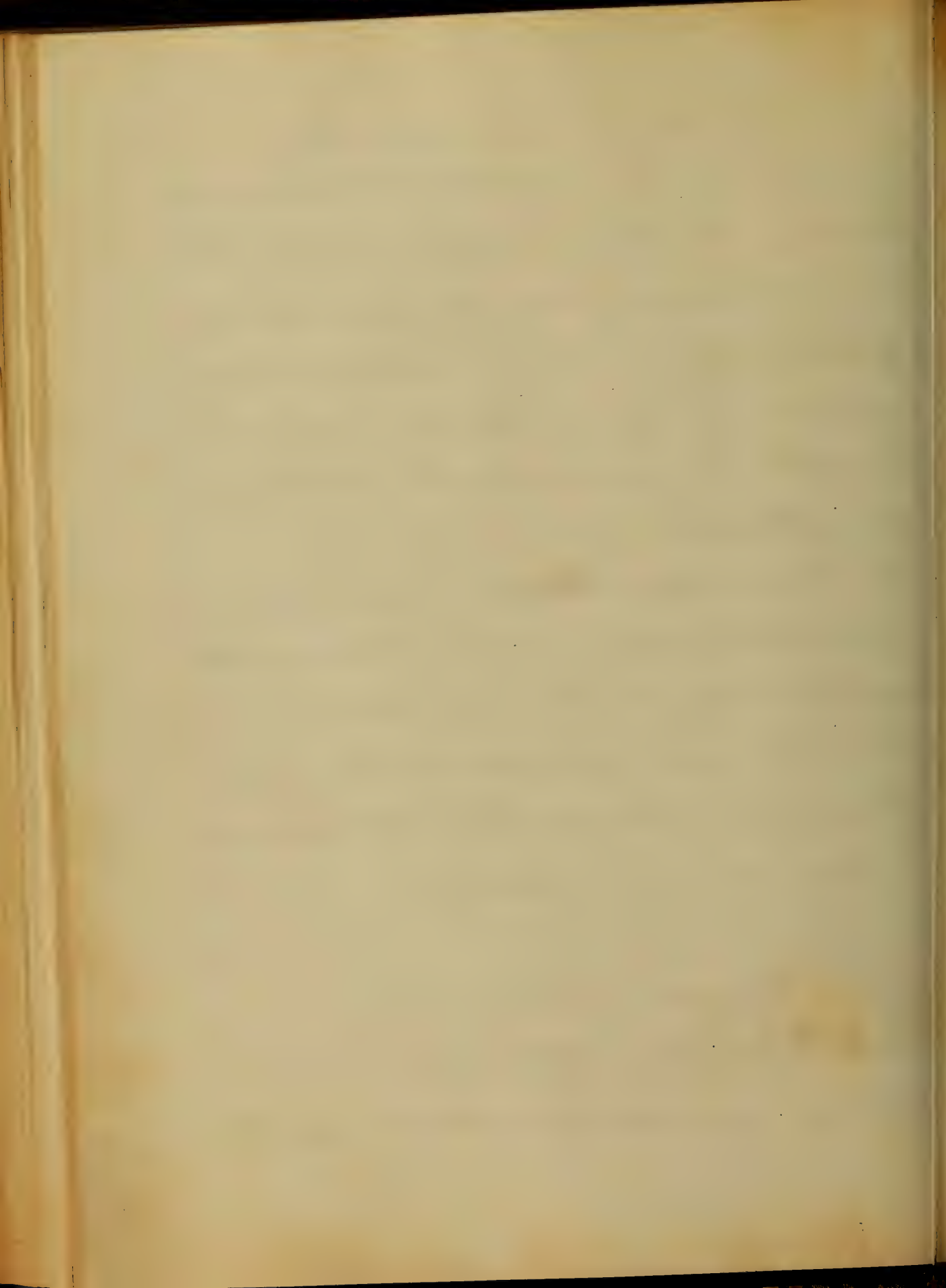
Treatment of the Nervous Form.

by the symptoms, arising and make his applications, accordingly.
 According to Woods Practice, one universal rule in these cases is, whenever the faintest disposition is shown by nature to give an external direction to the disease, a judicious use of alterative medicines, such as Colchicum, Guaiacum, Scoville, Veratrum, Arnicum and Sulph. Iodide.

Anemic condition of the system. Preparation of simple bitters nutritious diet. When the disease takes on the intermitting character. Sulphate of Quinine should be used freely, and in the neuralgic forms, it often becomes absolutely necessary to have recourse to anodynes.

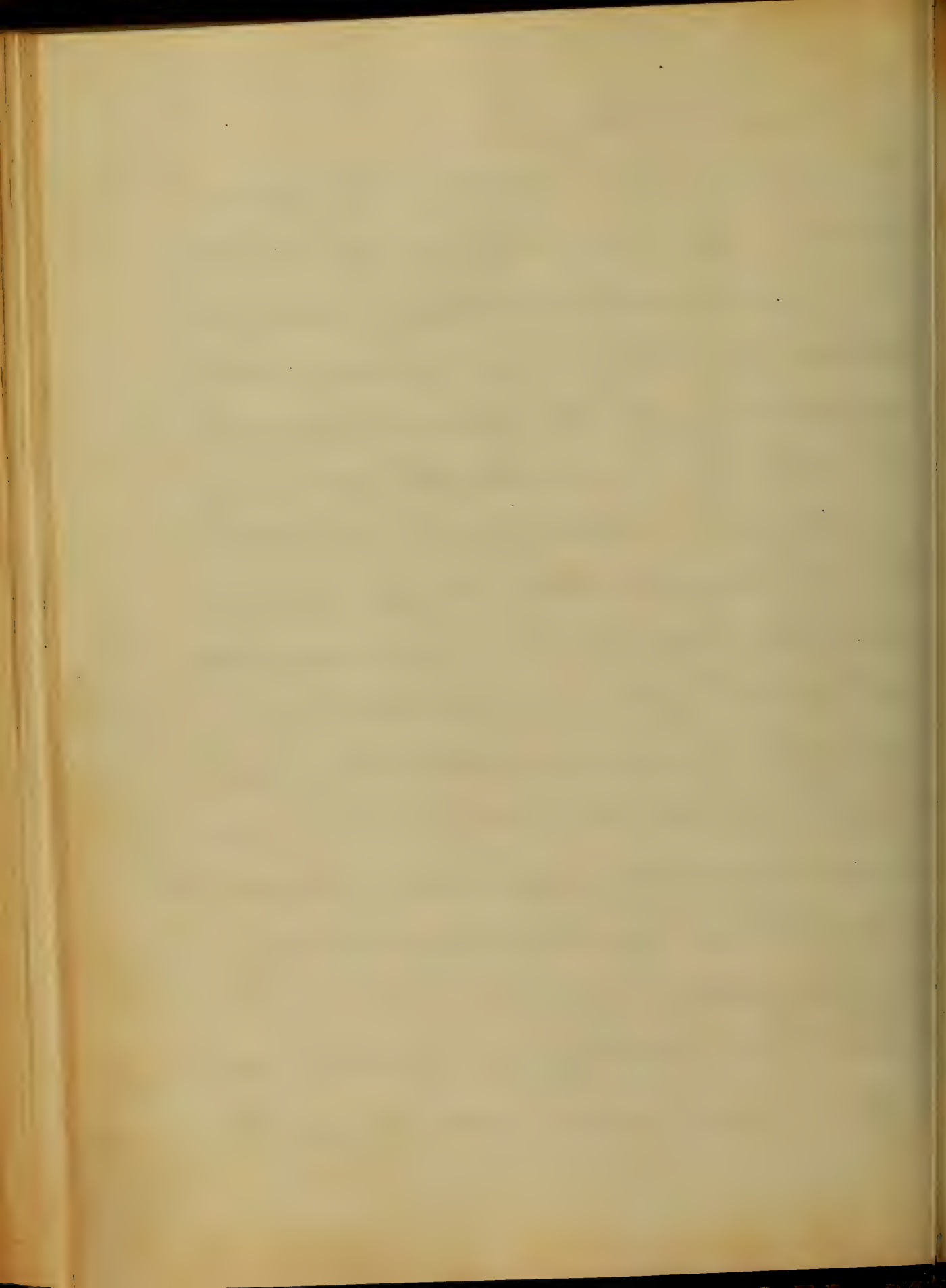
Causes of Rheumatism

Acute Rheumatism, is generally said to be produced by an exposure to cold or damp. It is



Causes of Rheumatism

true these may be the only known exciting causes.
 But these exposures are frequently made to the
 full extent without a subsequent attack of the
 disease. And the disease may occur without
 any exposure of this kind whatever. As Prof Wood says
 there must be a peculiar state of the system, pre-dis-
 posing to this form of disease - a rheumatic diathesis.
 What this rheumatic diathesis consists has not been
 discovered. It may depend upon an excess of Lactic
 acid, upon the approach of damp weather the
 unhealthy muscles expand and by pressing upon
 their accompanied nerves, produce more or less pain
 and as soon as clear and pleasant weather approaches
 the muscles become reduced to their original size.
 The pressure upon the nerves is removed and the
 patient is free from pain and comparatively well.
 The pain is generally temporary as the disease itself



But is only a symptom of the disease. The period of life at which the disease is most prevalent is between fifteen and thirty five or forty years of age. The most powerful predisposing cause of the disease is a previous attack of it. And a predisposition to the disease is often inherited.

Diagnosis

It presents many resemblances to Gout which is the only disease it is liable to be confounded with. And may be readily distinguished by the following points. Rheumatism affects chiefly the young and middle ages, and the poor. The Gout the elderly and the wealthy. Rheumatism affects the large joints. Gout prefers the smaller, as the feet, hands. Gout is attended with more obvious disorder of the digestive organs. The pain is of a more burning character and the swelling greater and more widely diffused.



4)
Prognosis - Very seldom fatal in adults. Children under fourteen years of age extremely dangerous in consequence of its tendency to give rise to a condition of the heart. An uncomplicated case it may almost always be conducted to a favorable issue.

Treatment

Acute Rheumatism. The principal object to be kept in view, in the treatment of this form, is first to limit the dissemination of the disease. Second to moderate inflammation when it occurs. Third to preserve sleep. To answer the first indication, when the pulse is full tense, and inflammation severe, bleeding should be employed, with as freedom, proportional to the vigor of the patient and resistance of the pulse. But should be employed with great caution in consequence of making the heart the centre of inflammation which calls



the disease from its external local seat, and fix
itself upon this vital organ, which may result
fatally. Bleeding is well born, but cannot cure
even the disease; I should never bleed for the pain
alone. The pulse and obvious amount of local
disease, as manifested by heat, swelling, inflammation
and redness are much surer guides than the degree
of pain. Active purging is always proper. Purgation
should always be active but not drastic. The bowels
should be kept steadily open, with some of the Saline
Cathartics, as Senna with Sulphate Magnesia, Sulphate
Magnesia with wine of Cholechina. Jalap. Pilulars
Potassae. Or Turkey or composition of the Linnæus. Calomel
alone, or in combination with some of the vegetable cathar-
tics, is proper and suitable to begin with. The purgation
should be repeated every other day. But in the first
or second, occasion it will be sufficient to employ only

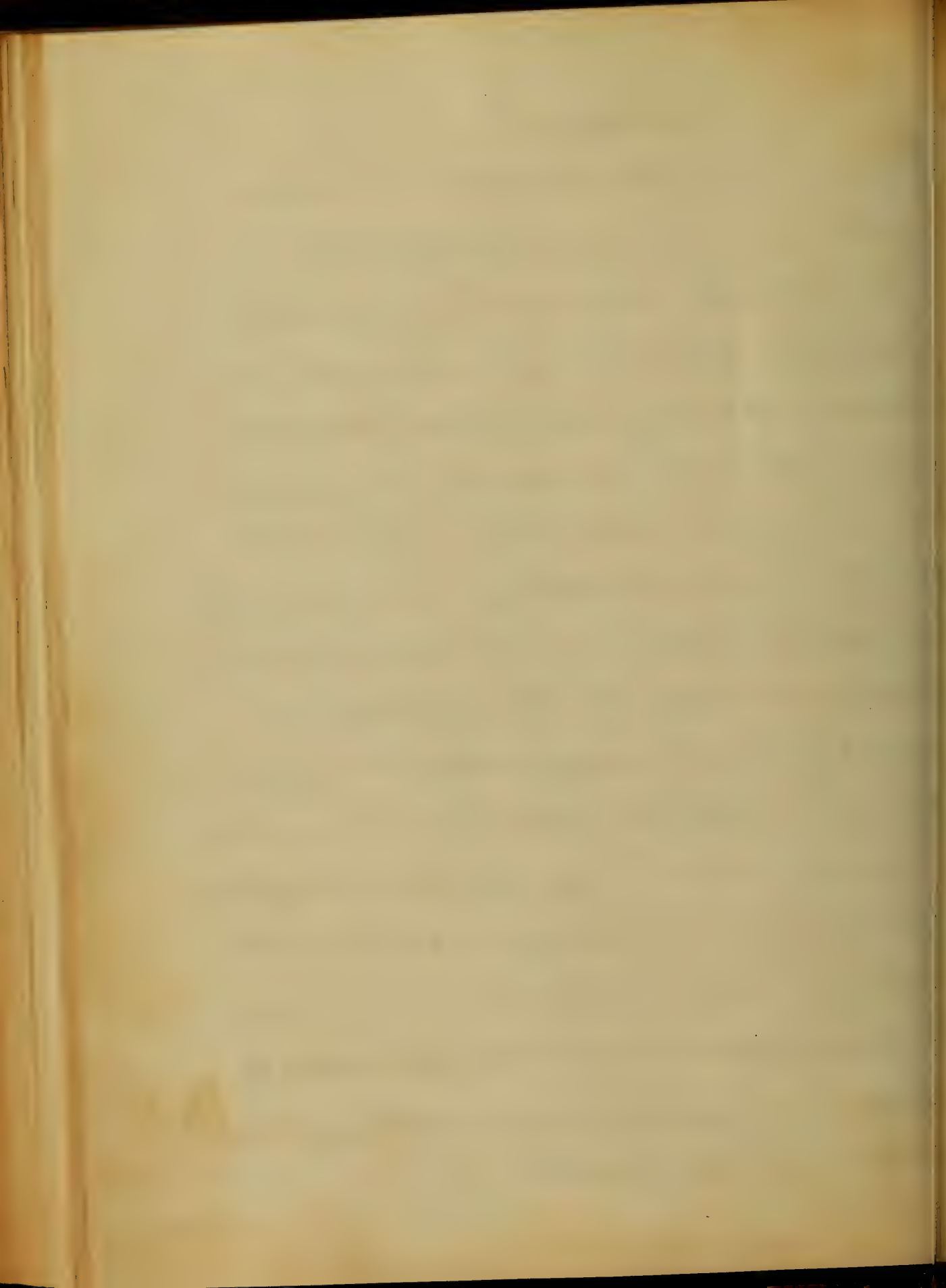


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sulphate Magnesia. Should the bowels become irritated
the purgation should be suspended. Trifluoracetate,
Diaphoretic are indicated. Dover's Powder in full
dose, at bed time. Gustas Emetic, with Nitre forms an
excellent combination, as for instance. Take Gustas Emetic
12 grains, Nitre five grains. mix given dissolved in water
every two, three or four hours. If this offends the stomach
Citrate of Potassa, in the form of the neutral mixture or
effervescent draught may be used. If stomach is
acid. Alkalis may be used, but if alkali. the acids
may be used. Lemon juice, sugar & ginger & peppermint.
The object of the diaphoresis is not merely to induce
perspiration, but to sustain a moderate sedative
impression over upon the circulation. Opium & Opii
should be given at bed time to relieve pain and procure
sleep. If the disease does not yield to this treatment
by the second week, resort to Potass. acet. & Opii and Anti-
mony as alteratives and may be suspended as soon as



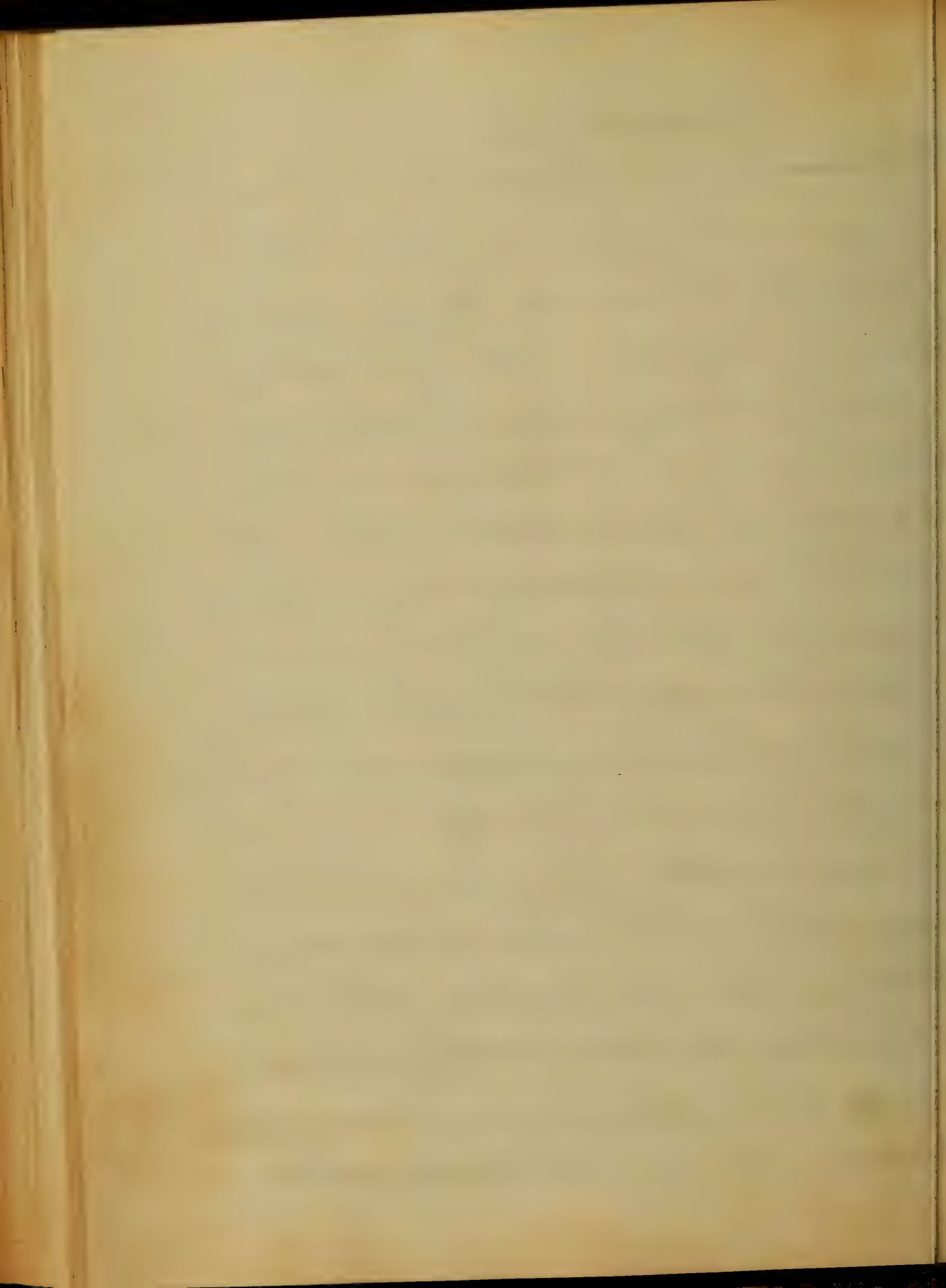
Treatment

^{gums} becomes tender, copious salivation not desirable.
If the disease is, in any way disposed to move
about. Colchicum and nuxvomica will be found of great
advantage. If, an adynamic condition of the system
comes on, which is indicated by, perspiration, during
sleep. Sulphate of Quinine is an admirable remedy given
in doses of about one to two grains every hour. More
than this is seldom required, large doses, are dangerous
as causing a tendency towards the heart. I would then
be, danger, from affection of the heart, prompt and
energetic treatment is strongly called for. Bleeding
general & local. Blisters, the mercurial course should
be commenced at once, leeches and leeches should be applied
between the shoulders. Blister 8 by 10 - applied over the
region of the heart. If the brain is involved the
is the same. Efforts should be made also in cases of
retrocession to invite the disease back to its original seat.
A hot pediluvium is very good.



Treatment

Local Treatment. In acute rheumatism local treatment
 is regarded and used with great success.
 upon the whole the less is done in this way, is better
 in consequence of increasing the risk of relapsing
 it from the joints to some internal organ. It may be
 best in to cover up the parts with scented cotton flannel,
 if pain very severe, a milk hot, poultice, or a mild anodyne
 liniment may be applied. Should the spinal column
 be found tender with rheumatism in lower extremities
 cups should be applied to the tender spot. When the
 complaint has given away, the fever subsided, and
 if the parts remain red, hot and painful, an anodyne
 and rubefacient lotion may be found useful. Such
 as Compound Liniment &c. But still more advantage, is
 when the disease seems to be peculiarly adhesive to one
 part or a few parts and, according to ^{some} Charris I would
 blister the parts, and if any stiffness or swelling which
 may remain may be overcome by the following application



Treatment

Dissolve Muriate of Ammonia two drams in one fluid ounce
of water "distilled" add tinct. Stern (etc) one ounce. the
parts may be bathed with this several times a day.

The Compound plaster of Belladonna is very good

Diet - Hygiene &c

During the acute state the patient should be kept quiet
and recumbent position. the apartment in which he resides
should be maintained at a moderate & uniform temperature.

Diet should be very light - no Barley water Rouse water.

When the pain and inflammation of the bowels have subsided
the diet should be more restrictions. All fats - acids and
every thing will cause acidity of the stomach or flatulences
and all Stimulents especially Liqueurs of all kinds should
positively be avoided. The surface of the body may be rubbed
once or twice a day with a coarse towel with sufficient
friction so as to cause an agreeable glow of heat. Moderate
exercise both within doors and out in the open air being
extremely careful not to fatigue himself and



. Diet & Hygiene &c

to, avoid all exposure which may excite a new attack.

The patient should wear flannel or, cotton, and avoid
linen next to the surface of the body.

Gentlemen

In submitting the foregoing pages to your
penetrating and scrutinizing minds, would not ^{be} doing justice to
my own feeling, without, reticulating the light reflected
from your respective, Chairs in the unexplored roads of Med-
ical Science in, giving to a true and safe slating print,
and making that, intelligible, and, clear, which was enveloped
in, obscurity and mystery. So far I, cannot reveal, anything new
to the progressive science, but only unfold to you, again
that which was unaverted to me.

A very Respectfully

Yours
Geo. P. Crawford.



1867

An Essay
on
Pneumonia

Respectfully Submitted

To the Honorable

The Regents, Proost and

Faculty of the

University of Maryland

By
Gustavus, A. Wagner.

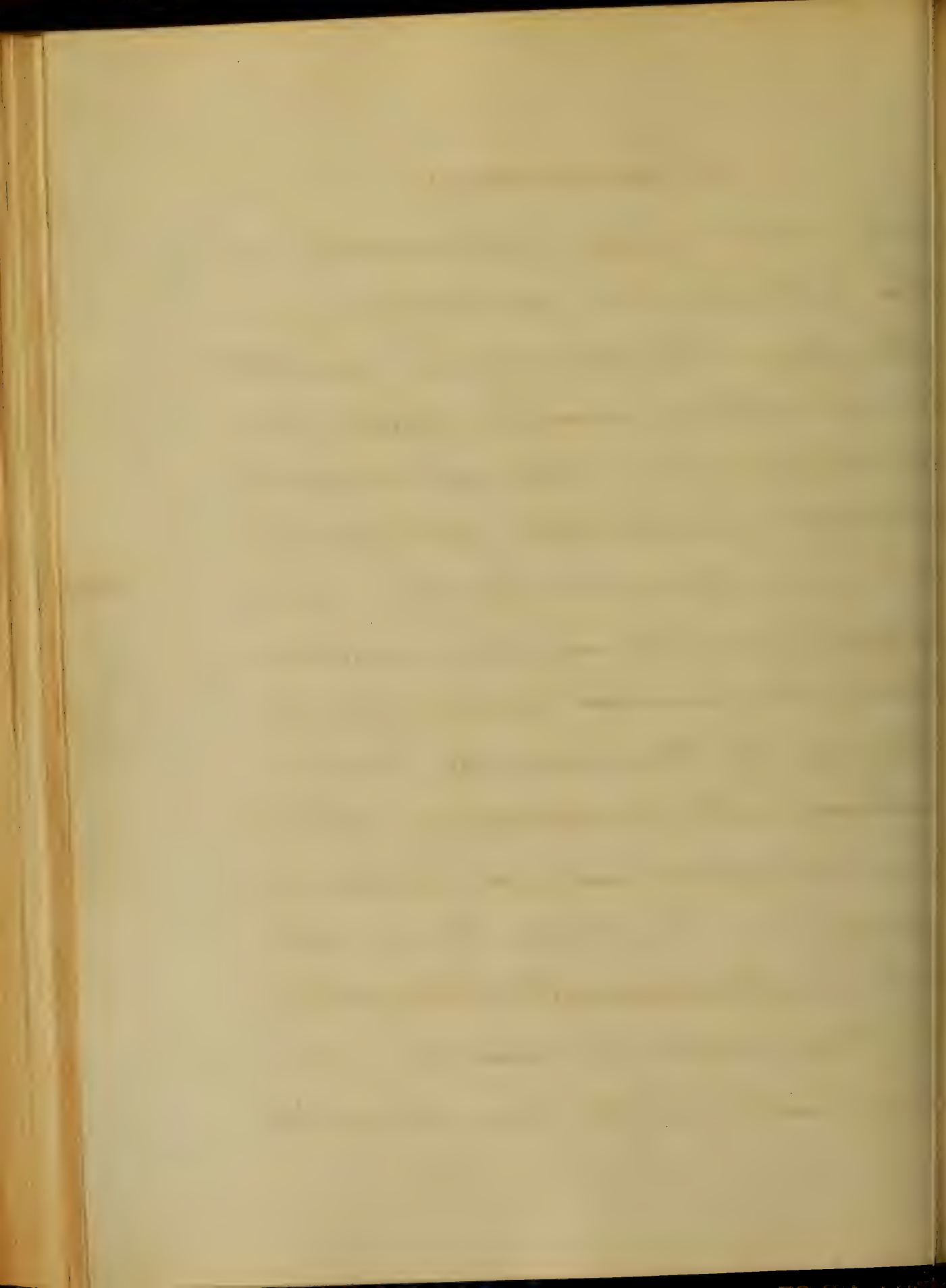
Baltimore.

Maryland



Pneumonia

The word means inflammation of the substance or parenchyma of the lungs. The parenchyma constitute the air-cells or vesicles together with the bronchioles or terminal bronchial branches. The air-cells and bronchioles are lined by a membrane, which differs from the mucous membrane lining the bronchial tubes, by its tenuity, by the absence of mucous follicles, and by a change of epithelium from the cylindrical and ciliated to the squamous or tessellated. The air-cells and bronchioles constitute the lobules, and these united by masses of areolar tissue, constitute the lobes, into which



the lungs are divided. The inflammation in pneumonia affects the membrane lining the air-cells and bronchioles.

When, pneumonia does not depend on an existing pulmonary disease, it usually affects, at least, an entire lobe; and this is called lobar pneumonia.

When, it depends on a pulmonary disease, it may be more or less limited.

When, it is limited to a portion of a lobe, it is called circumscribed pneumonia. The inflammation is found more in an acute form, than in a chronic form.

Anatomical Characters.

The first change resulting from acute inflammation of the lung is, an abnormal

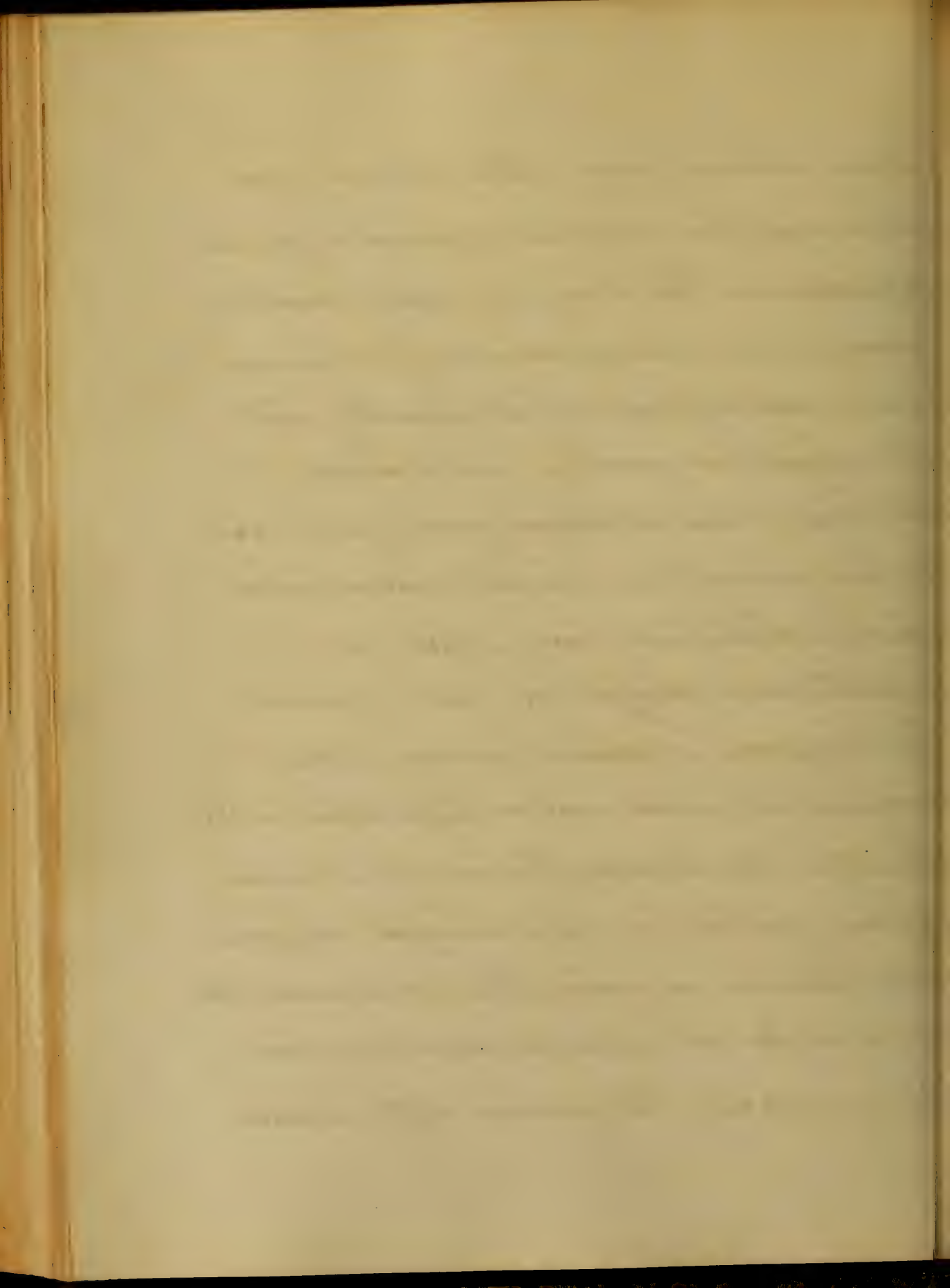
accumulation of blood, or hyperaemia,
due to active congestion or engorgement.
The inflamed portion of the lung is
heavier than in its healthy state;
on section, the cut surfaces have a
dark appearance, and blood flows
freely, accompanied by a frothy
serous liquid. In this condition the
air-cells still contain air.

Exudation soon follows. The blood
deposits a coagulating material in the
air-cells. The cells fill up and are
distended with the exuded matter.
Air is now wanting in the cells. The
lung is solidified, having the appearance
of the liver, which condition is called
hepatization. In this condition the



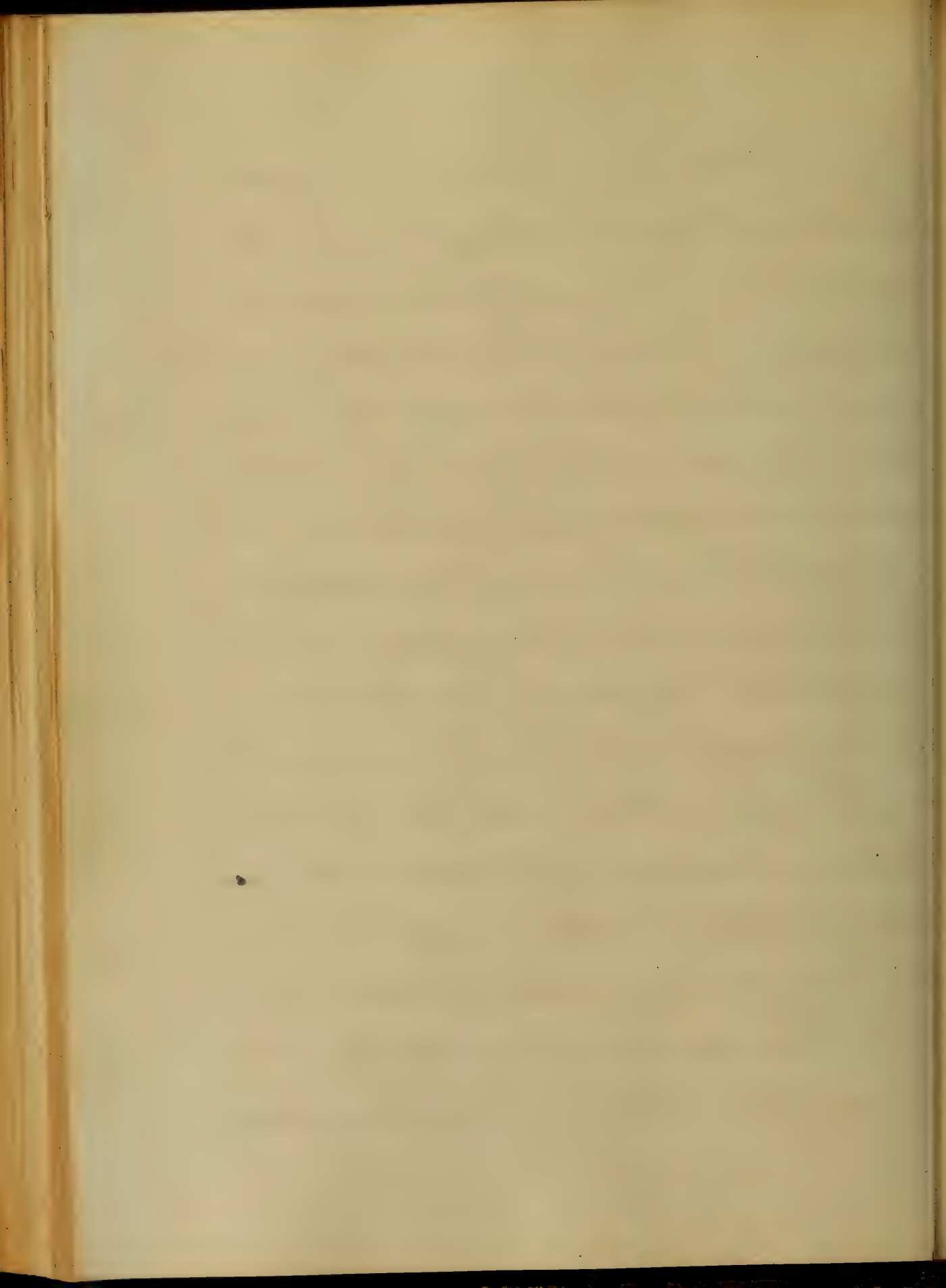
Lung contains very little blood, and when cut, the surfaces present a granular appearance. The lung is softer, breaking down under the pressure of the finger more readily than in its healthy state. Its weight is greatly increased.

A single lobe solidified gains from one to two pounds in weight, and a entire lung solidified may acquire an additional weight of four pounds. This increase in weight is due to the amount of solid matter deposited in the lung by the blood. From the want of air, portions of the solidified lung sink when thrown in water. The solidified lobe or lobes do not collapse, when the chest is opened. If the progress of the disease

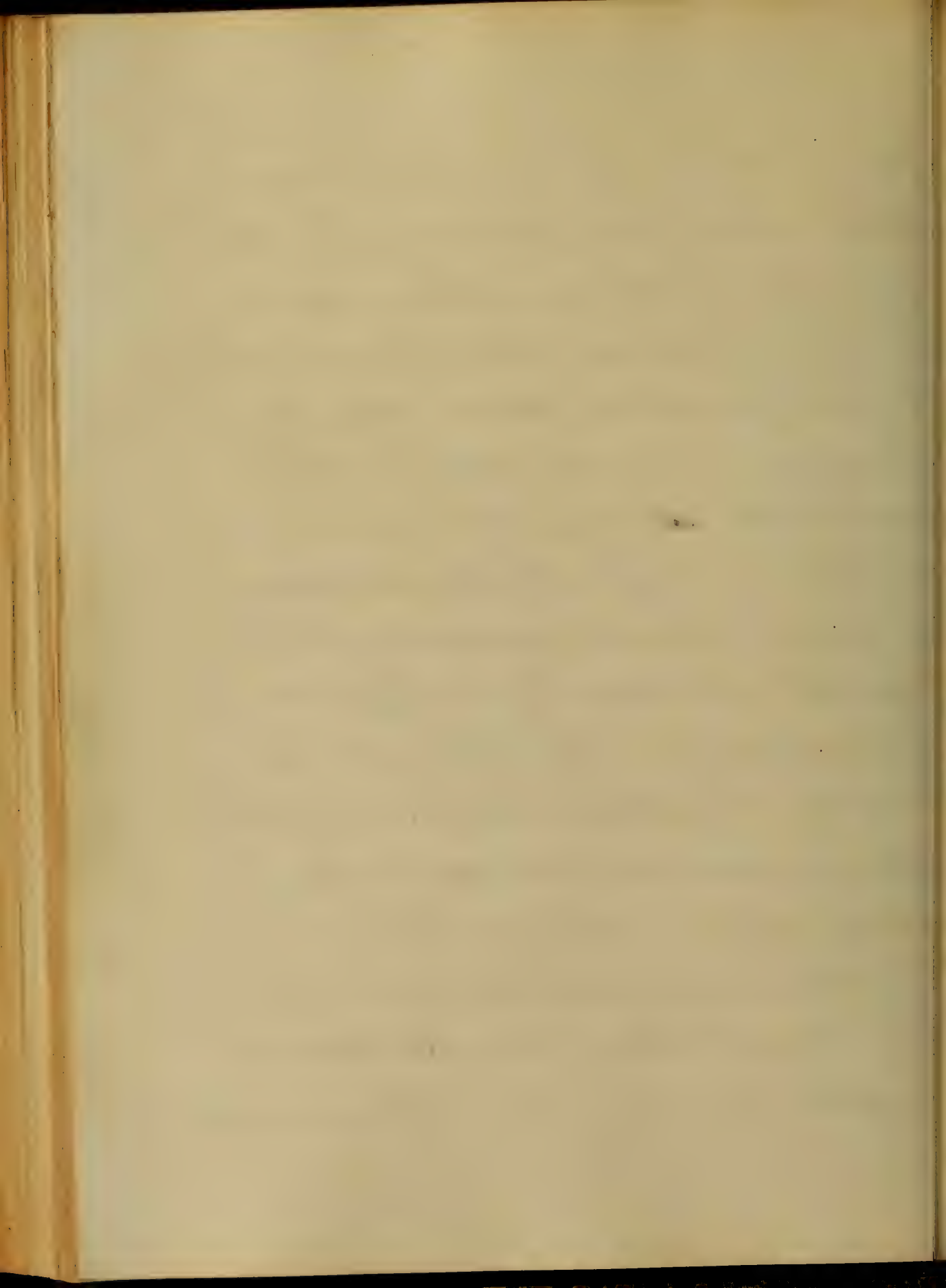


is favorable, the exudation is removed by absorption. The absorption of the exudation varies greatly in different subjects; in some it is absorbed much more rapidly, than in others. If it has been absorbed entirely, the air cells will be found to have sustained no injury. The pulse will be restored to its natural and the recovery of the heart will be found complete.

If the progress of the disease is unfavorable, suppuration sets in, and the affected lobe or lobes are infiltrated with pus. This is called purulent infiltration. The lung has a grayish appearance, and when cut pus flows freely from the surfaces. The lung is much softened,



and breaks down on slight pressure.
Sometimes the pus collects and forms
pulmonary abscesses. Gangrene of
the lung sometimes takes place, but this,
as well as abscess occurs very rarely.
Pleurisy is in most cases developed
coincidentally with pneumonia. It is
wanting in comparatively few cases
of pneumonia. It varies much in
regard to its severity in different cases.
The exudation of lymph varies also
in amount in different cases. Liquid
effusion into the pleural cavity is
rarely met with; the pleurisy is
mostly circumscript and dry.
The coexistence of pleurisy & pneumonia
is called peripneumonia and pleuropneumonia.

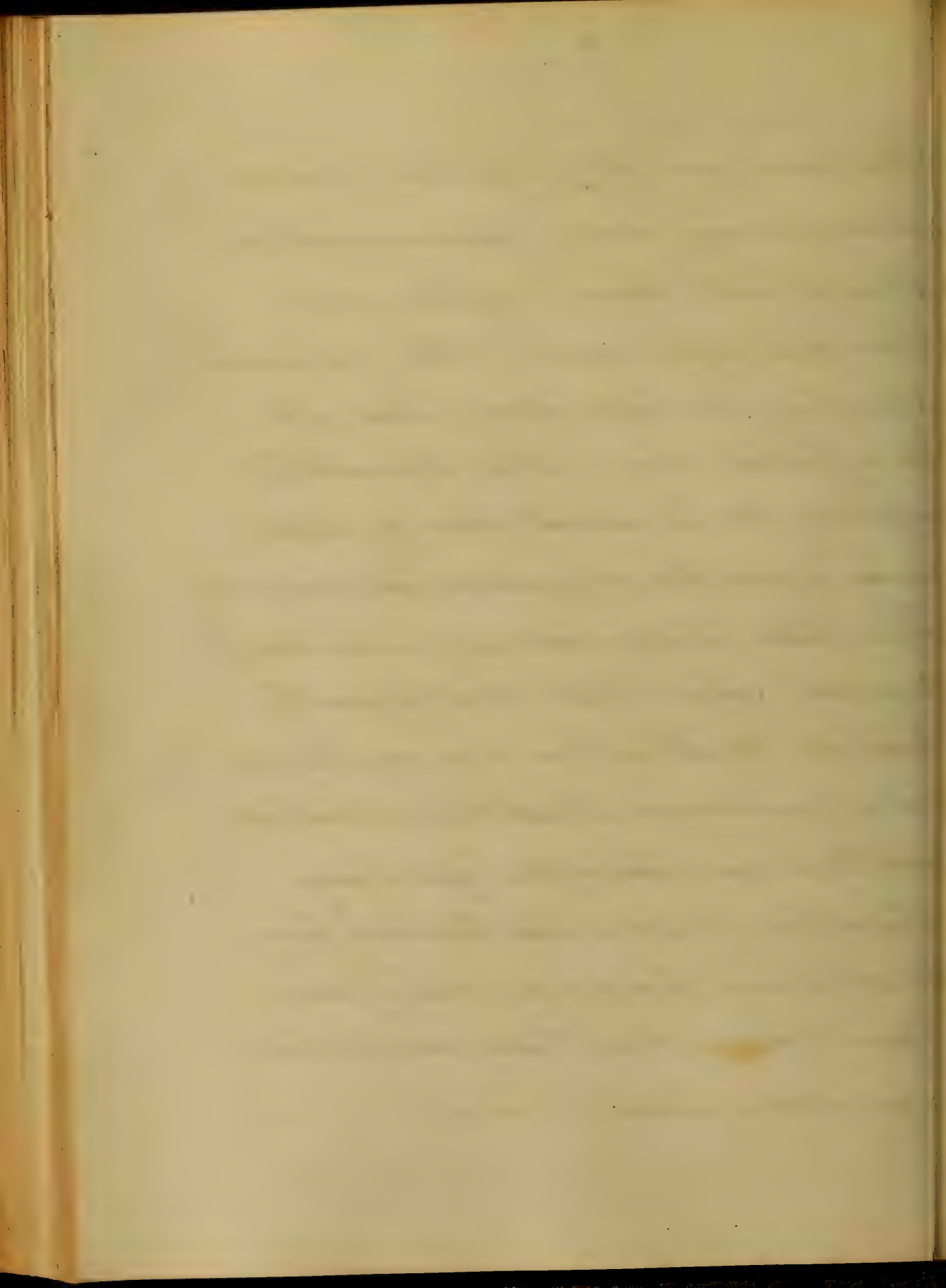


These terms are often applied to cases in which pleurisy is very prominent and attended with liquid effusion.

Bronchitis often exists with pneumonia affecting the bronchial tubes within the affected lobe or lobes. Bronchitis affecting the bronchial tubes of both lungs is sometimes present with pneumonia.

When these two diseases are combined, it does not follow that the one tends to develop the other. In a majority of cases pneumonia attacks the lower lobe, and the lower lobe of the right lung, oftener than the lower lobe of the left lung.

It sometimes attacks primarily an upper lobe, and in these cases the disease is generally more severe.



The disease rarely attacks two lobes at the same time, but it invades, sometimes a second or a third lobe. The disease does not extend from one lobe to another, but when a new lobe is affected, it is the seat of a new invasion. The lobes of one lung may be successively invaded, or a single lobe on both sides, or an entire lung being first affected, a lobe of the other lung may be attacked. In the latter two cases the pneumonia is said to be double. The inflammation extends at least over an entire lobe, in the great majority of cases. There are some exceptions to this rule. Doctor Flint says, I have known some instances in which the physical signs clearly showed the occurrence



of inflammation extending over a limited area, without any evidence of circumscribed pneumonia being a complication of any other pulmonary disease. In a lobe invaded secondarily, that is, one lobe being already affected, the inflammation is sometimes found after death to have extended over a portion only of the lobe. This fact I have repeatedly noted, but perhaps if the life of the patients had been prolonged, the whole of the lobe would have been affected. The whole of a lobe first invaded is not affected at once. The inflammation begins at a certain point, and then spreads from lobules to lobules until the whole lobe is involved. The point of departure may be at either the upper or



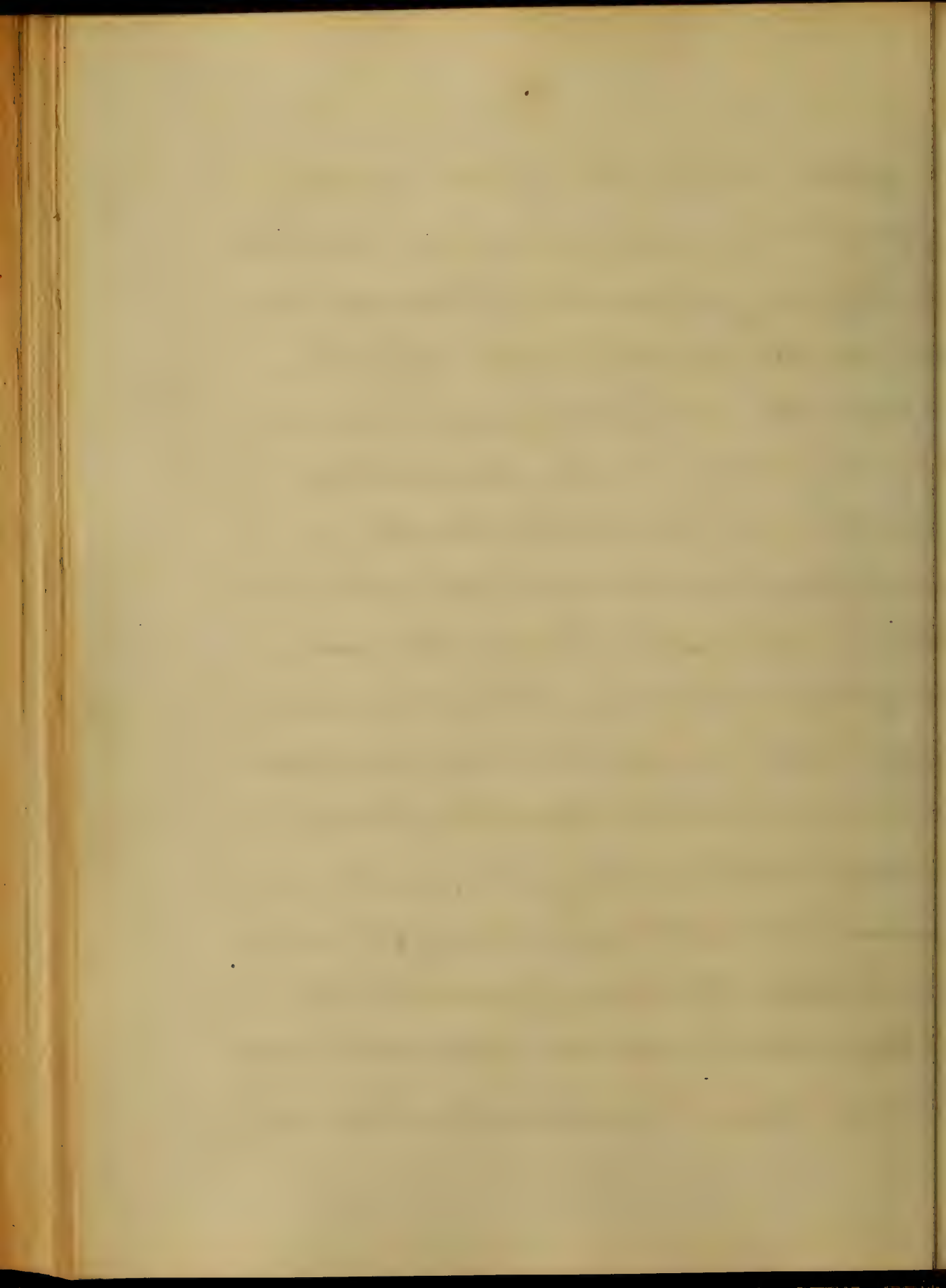
the lower extremity of the lobe, and at either the superficies or the centre of the lobe. The diffusion of the inflammation over the lobe goes on more or less rapidly. In some cases it takes but a few hours, whilst in others it takes several days. The progress of the solidification from the exudation may be determined very accurately by means of physical signs. Pneumonia very rarely ends in the first stage. Solidification almost always takes place, and when the pneumonia is not secondary to another pulmonary disease, it nearly always extends over the lobe or lobes invaded.

Clinical History.

The first stage occupies the time during which



the affected lobe is in the state of active congestion or engorgement. This is called the stage of engorgement. The second stage embraces the period, during which the affected lobe, or a greater part of it, has become solidified by the inflammatory exudation. This is called the stage of solidification or hepatization. The third stage is one, in which the affected lobe is in one of two conditions. If the disease pursue a favorable course, the third stage begins when it is evident that absorption of the exuded matter is going on, and convalescence takes place during this stage. This is called the stage of resolution. If the disease pursue an unfavorable course the third stage is one of suppuration or



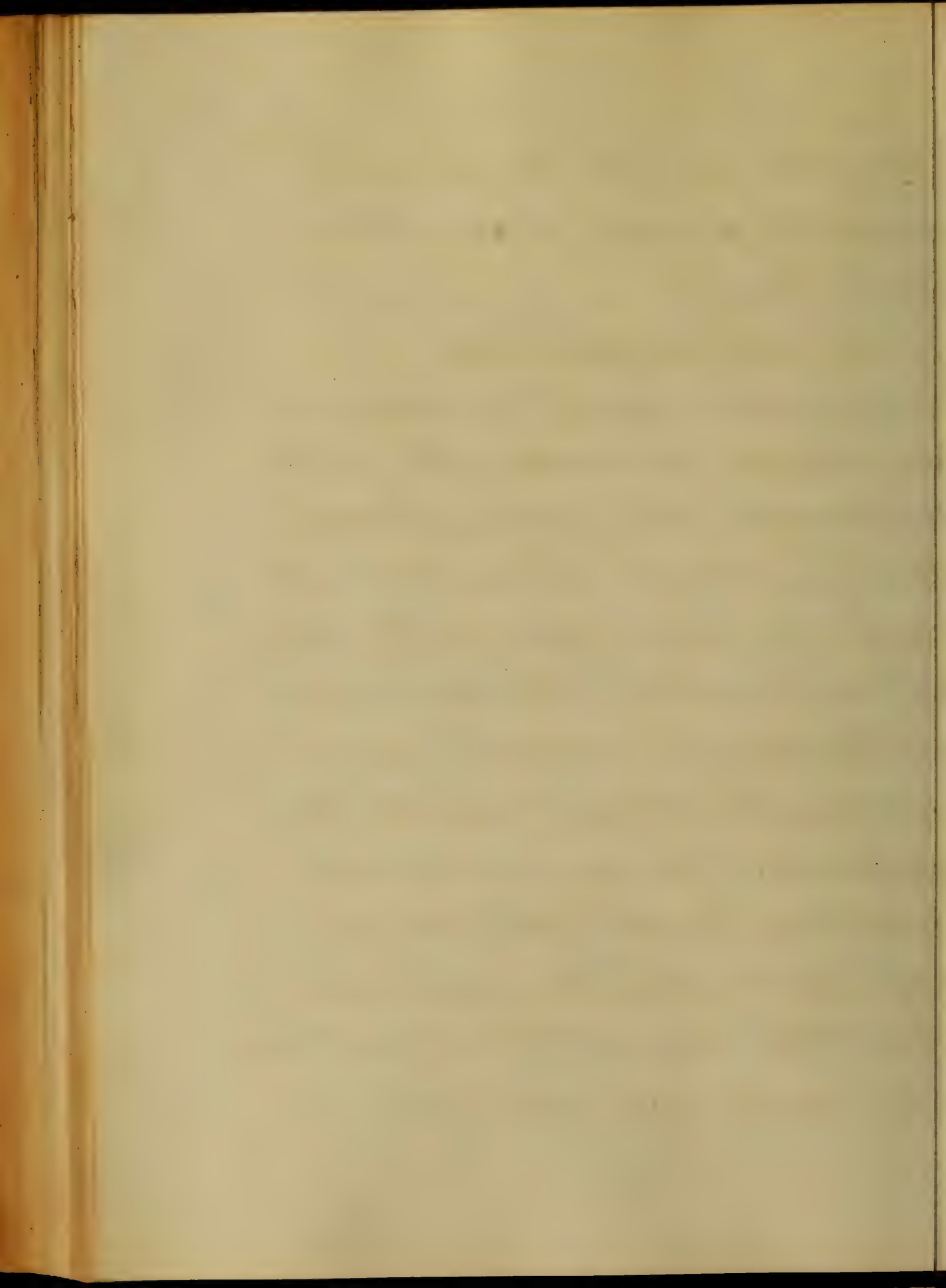
purulent infiltration. This is called the
suppurative or purulent stage. If this
stage occurs, it generally ends fatally.
The duration of each of these stages varies
in different cases. The stage of engorgement
may occupy only a few hours. The stage
of solidification generally occupies from
twenty-four to forty-eight hours. In some
cases it embraces a shorter and in others
a longer period of time. The stage of
resolution is still more variable than
the first and second stages. The solidifying
deposit is very rarely removed in less
than eight or ten days, and in some cases
three ^{or} and four weeks and sometimes a
longer time is required, before the air-cells
are restored to their normal condition.



If the disease assumes the purulent form, death generally occurs within a few days.

Symptoms.

In the great majority of cases, acute pneumonia commences with a well pronounced chill, soon followed by fever; coincident with, or soon after more or less pain is felt in the side, back or breast. In the majority of cases the disease is ushered in very suddenly with but few premonitory symptoms. If the pain is acute and lancinating it mostly depends on a complication of pleurisy. Cough is present or soon follows the invasion. It is sometimes wanting.

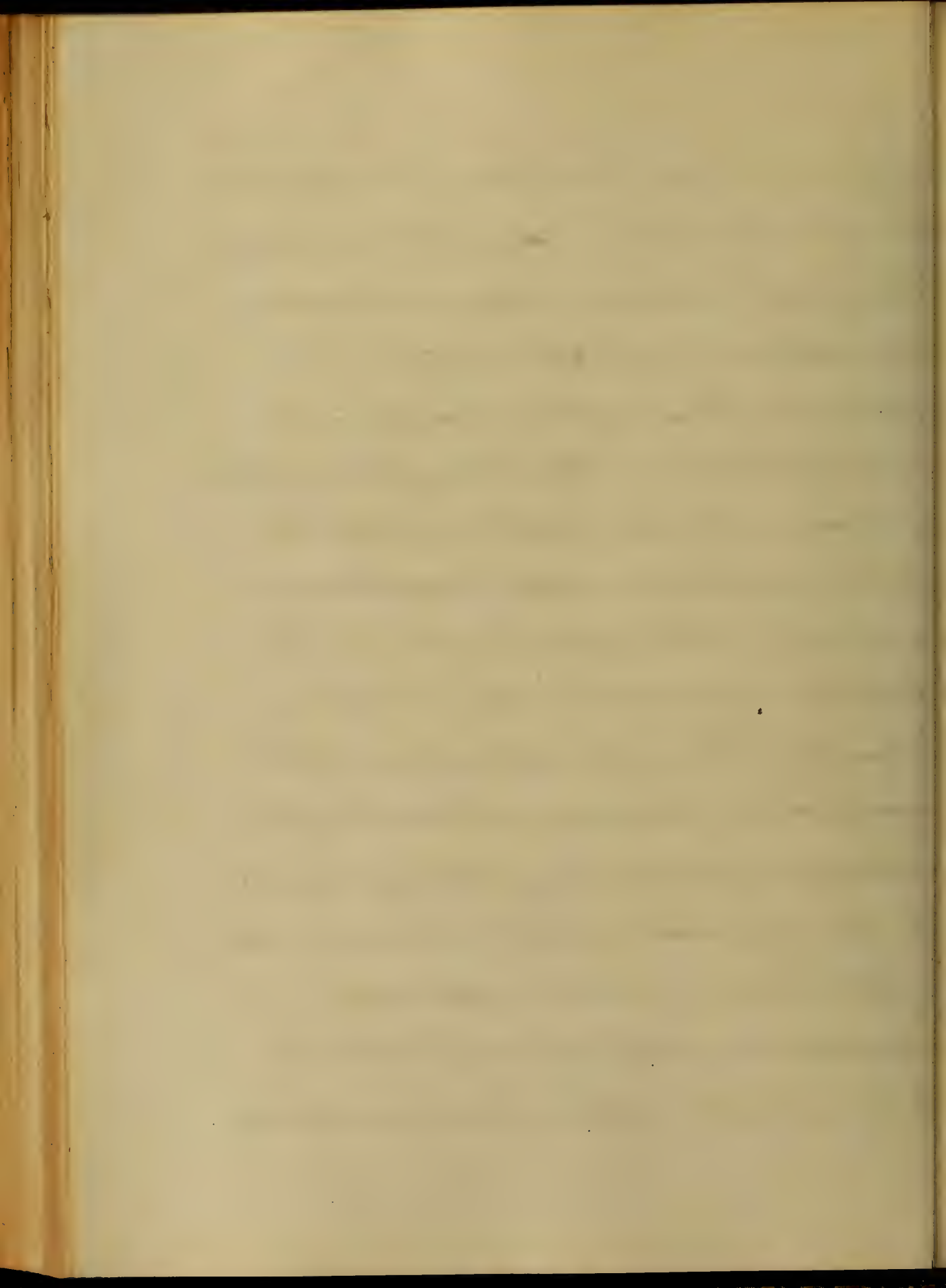


When the cough is a prominent symptom, the pain is more severe. The cough is often accompanied by expectoration. In the first stage of pneumonia the sputa is scanty, transparent and viscid; but in the second stage it is semi-transparent, adhesive, and rust coloured. The rusty appearance is due to the blood which has become mixed with the mucus in its passage from the smaller to the larger bronchial tubes. The sputa of a well marked case of pneumonia, when collected in a vessel, unite into one jelly-like and trembling mass; and adhere to the sides and bottom of the vessel with such tenacity, that it may be inverted

without they being detached. If it contains an abundance of blood, and if the blood is of a dark color it is called the prune-juice expectoration. The invasion commences with a pain in the head, side, back or breast, loss of appetite, thirst, prostration heat of skin etc. The pulse is more or less full and hard, ranging from 80 to 120 beats in a minute. The respirations are increased in frequency. This may depend on the pleuritic pain or on the interruption of the function of haematois in the part of lung affected. During the stage of hepatization, the symptoms change somewhat. The pain diminishes or ceases entirely. The cough and expectoration continue, but the



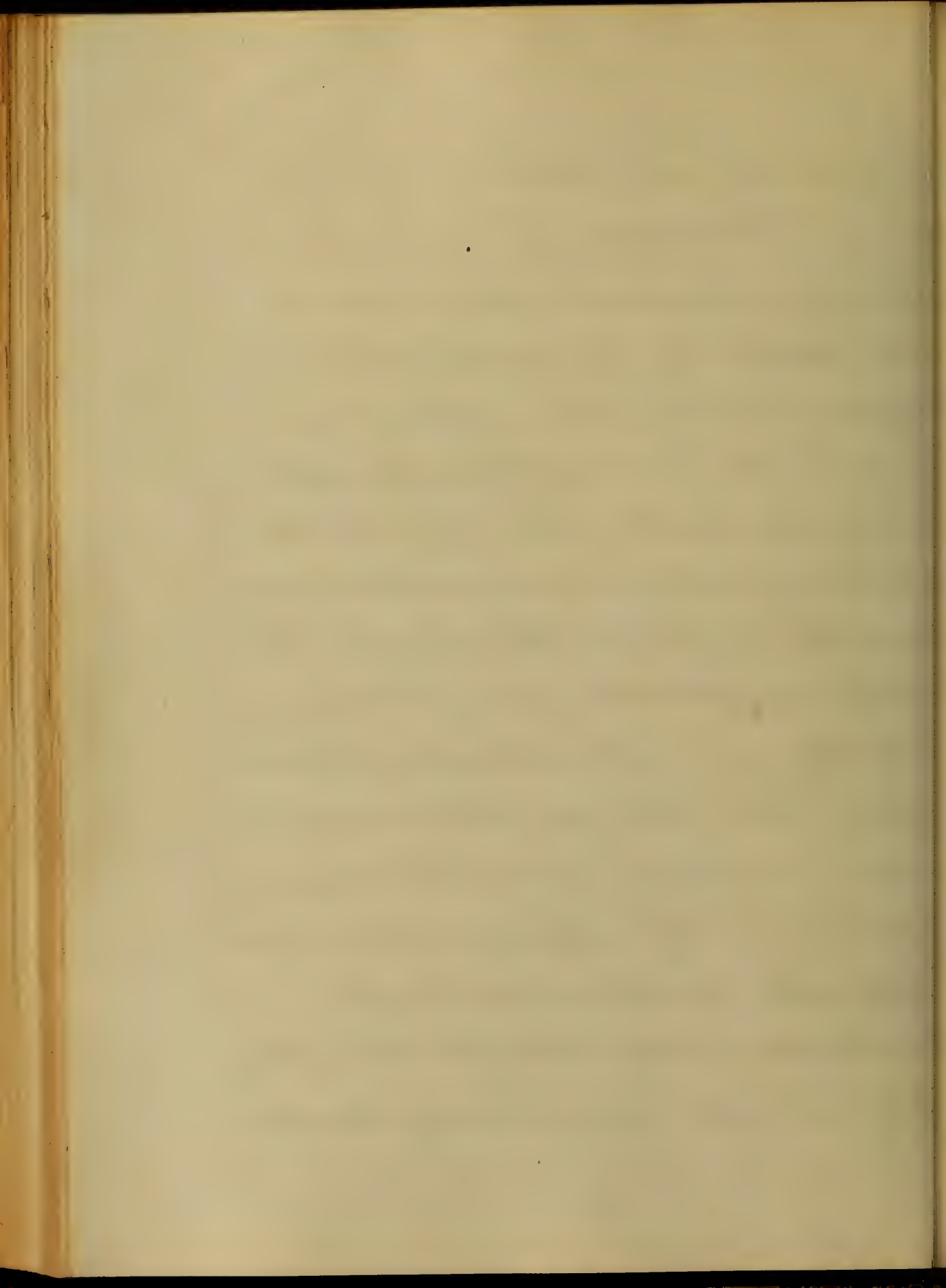
cough is not so hard and painful, and the expectoration is ~~affected~~ more easily. The sputa becomes opaque, abundant, less adhesive, and less rusty in its appearance. It is supplied chiefly by the bronchial tubes within the affected portion of lung, and is abundant in proportion as the bronchial mucous membrane is involved in the inflammation. The febrile movement is diminished in intensity. The respirations are still increased in frequency on account of the solidified part of lung taking no part in the respiration. If the disease involves another lobe the febrile movement increases, the respirations increase in frequency, the breathing becomes laborious,



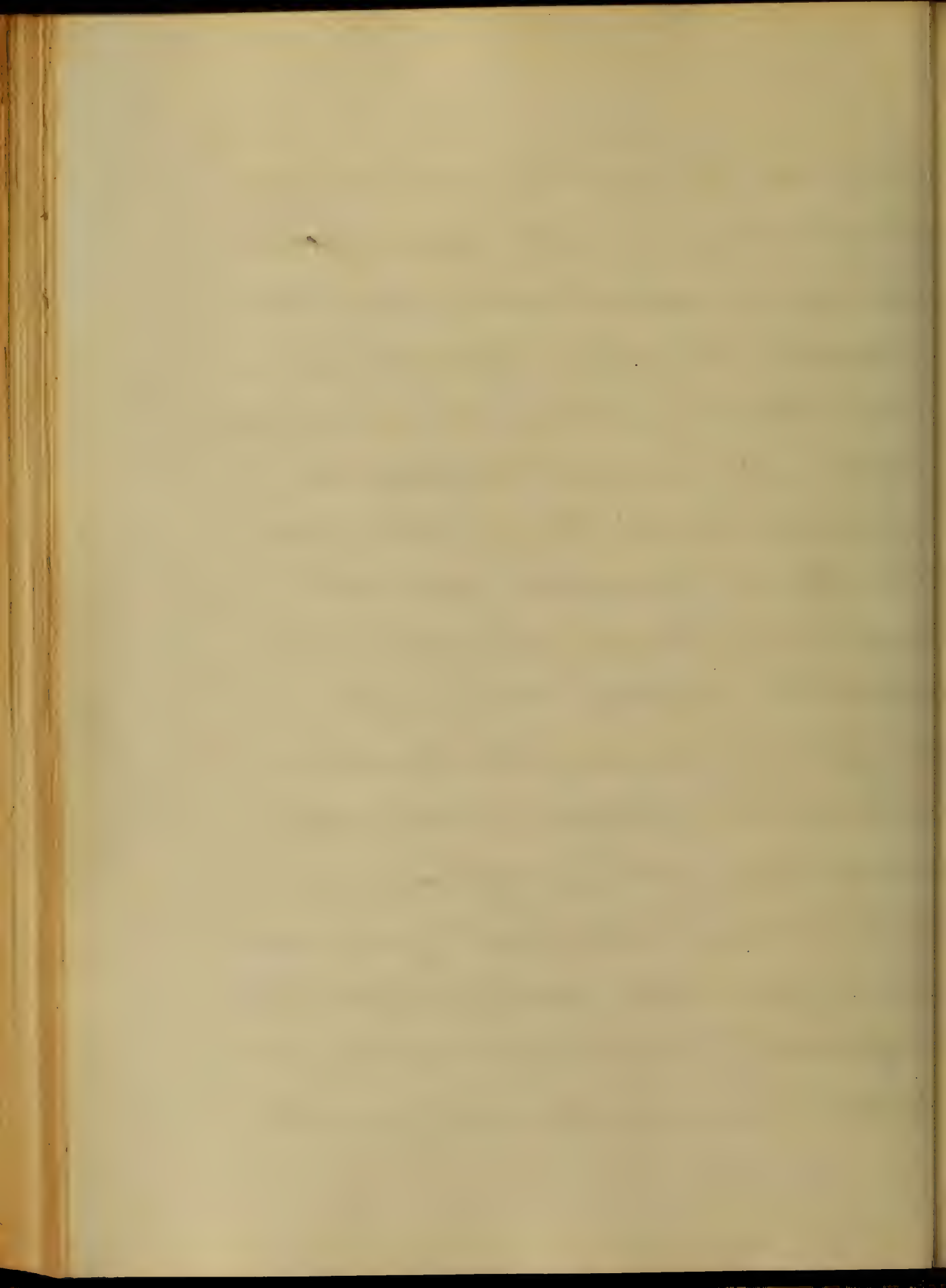
and the alae nasi dilate.

Diagnosis.

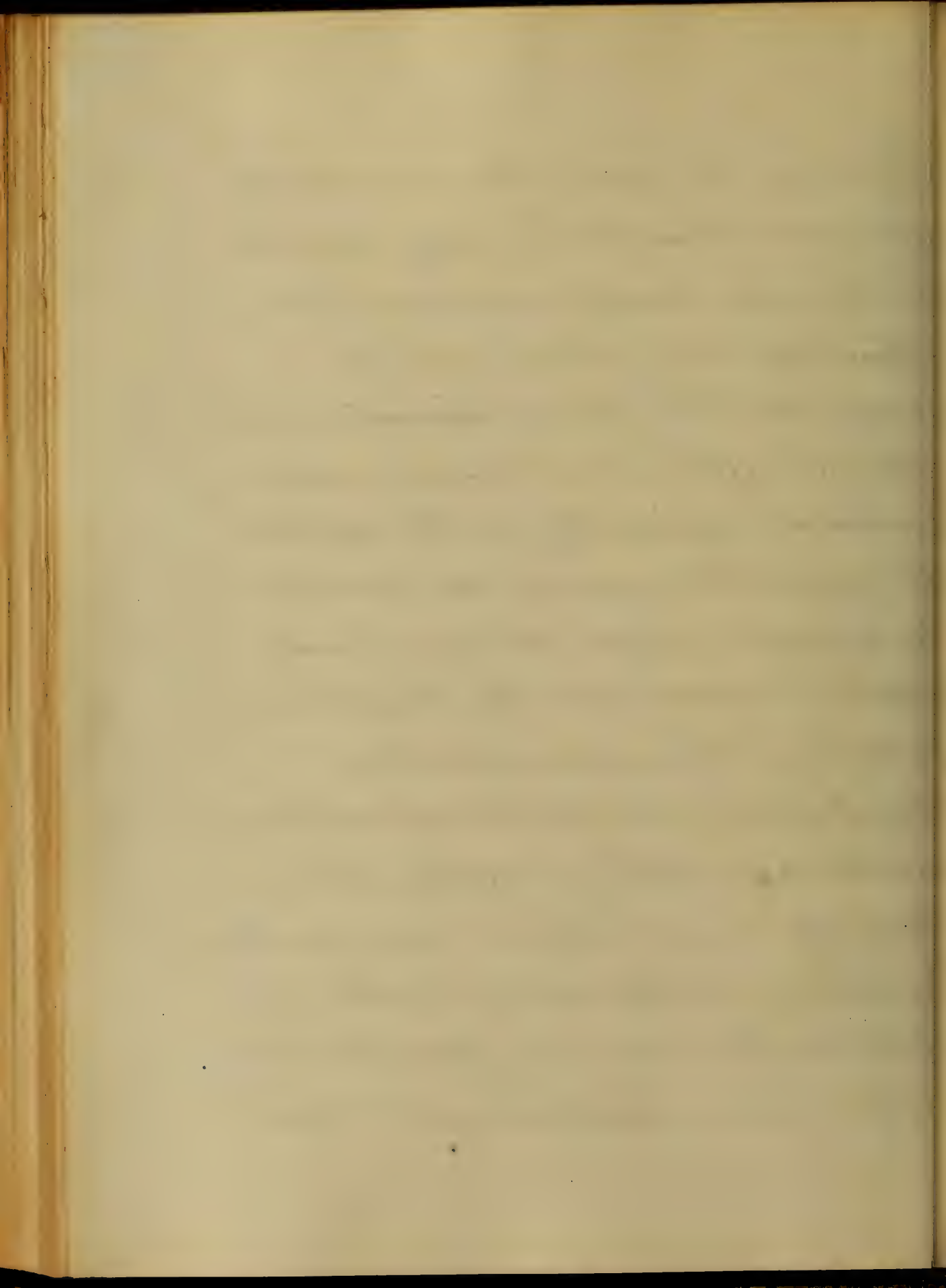
Acute pneumonia, in some cases is accompanied by symptoms, which are highly distinctive. If a patient be seized with a chill, followed by febrile movement, together with a pleuritic stich, referred to a circumscribed space near the nipple, and the characteristic rusty expectoration occur, the diagnosis is readily made without the aid of physical signs. But these symptoms are by no means constantly present. The disease is not infrequently entirely latent as regards diagnostic symptoms, and is often overlooked by those who do not employ physical exploration. Even if its existence



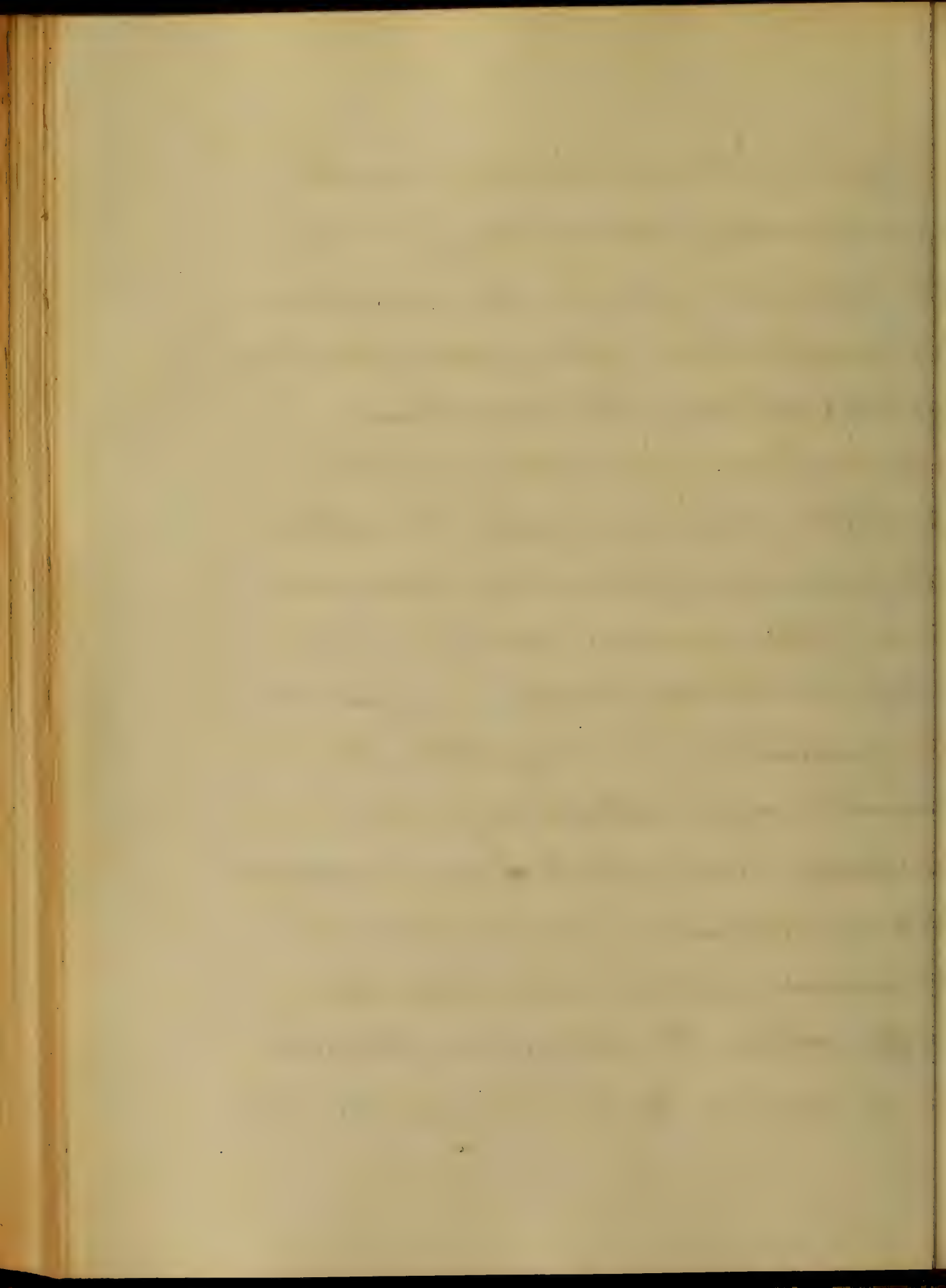
be revealed by symptoms, without signs, the situation and extent of the affection can only be ascertained by the latter means. In the first stage, the signs on which the diagnosis is to be based, are slight and moderate dullness on percussion and the crepitant rale; the latter is persistent and well marked, is almost pathognomonic. But the crepitant rale is not uniformly present. In its absence a positive diagnosis may require some delay, until a sufficient number of lobules are solidified to give rise to an appreciable modification of the respiratory murmur. In most cases if the disease be observed from the



beginning, the signs of the second stage are soon declared. In many cases the disease has already advanced to this stage when the patient is first examined. When the solidification has become sufficient in degree, and has extended sufficiently over the affected to furnish the signs of that condition, the diagnosis if have not been already made is rendered clear by the presence of the signs. Bronchial respiration, bronchophony and whispering bronchophony are the signs denoting solidification. Dullness on percussion is now marked, amounting perhaps nearly or quite to flatness. This dullness or flatness extends over a space corresponding to that



occupied by the solidified lobe. The commencement of resolution and its progress from day to day are shown by modification of the signs denoting solidification. The bronchial respiration gives place to the broncho-vesicular, and the latter progressively approaches more and more to the normal vesicular, into which it becomes finally merged, when the resolution is completed. The characters of bronchophony are gradually lost. Dullness on percussion becomes less and less marked. If the disease pass into the stage of suppuration, the dullness or flatness on percussion continues, and the moist

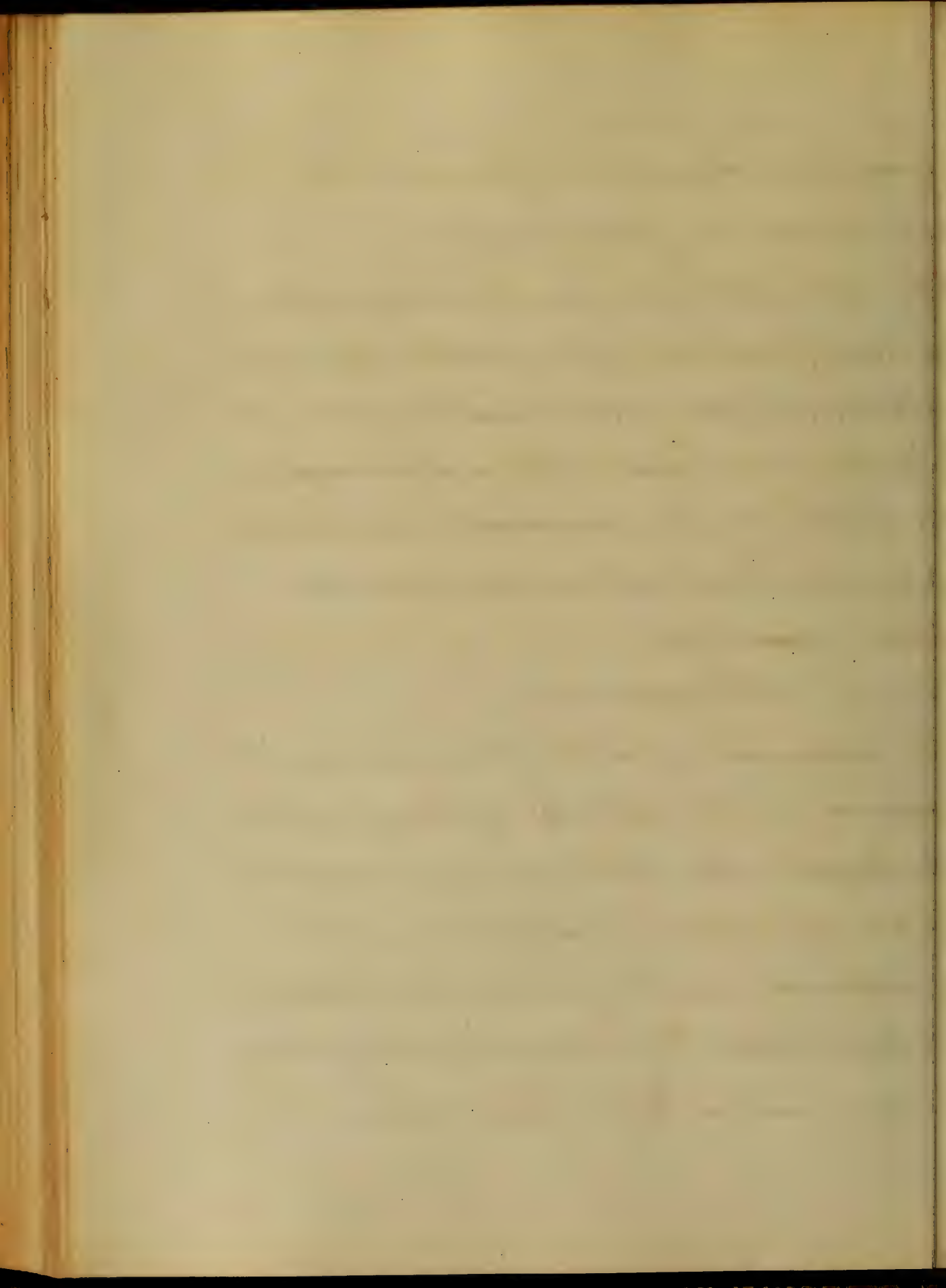


bronchial rales, due to fuss in the air-tubes are prominent.

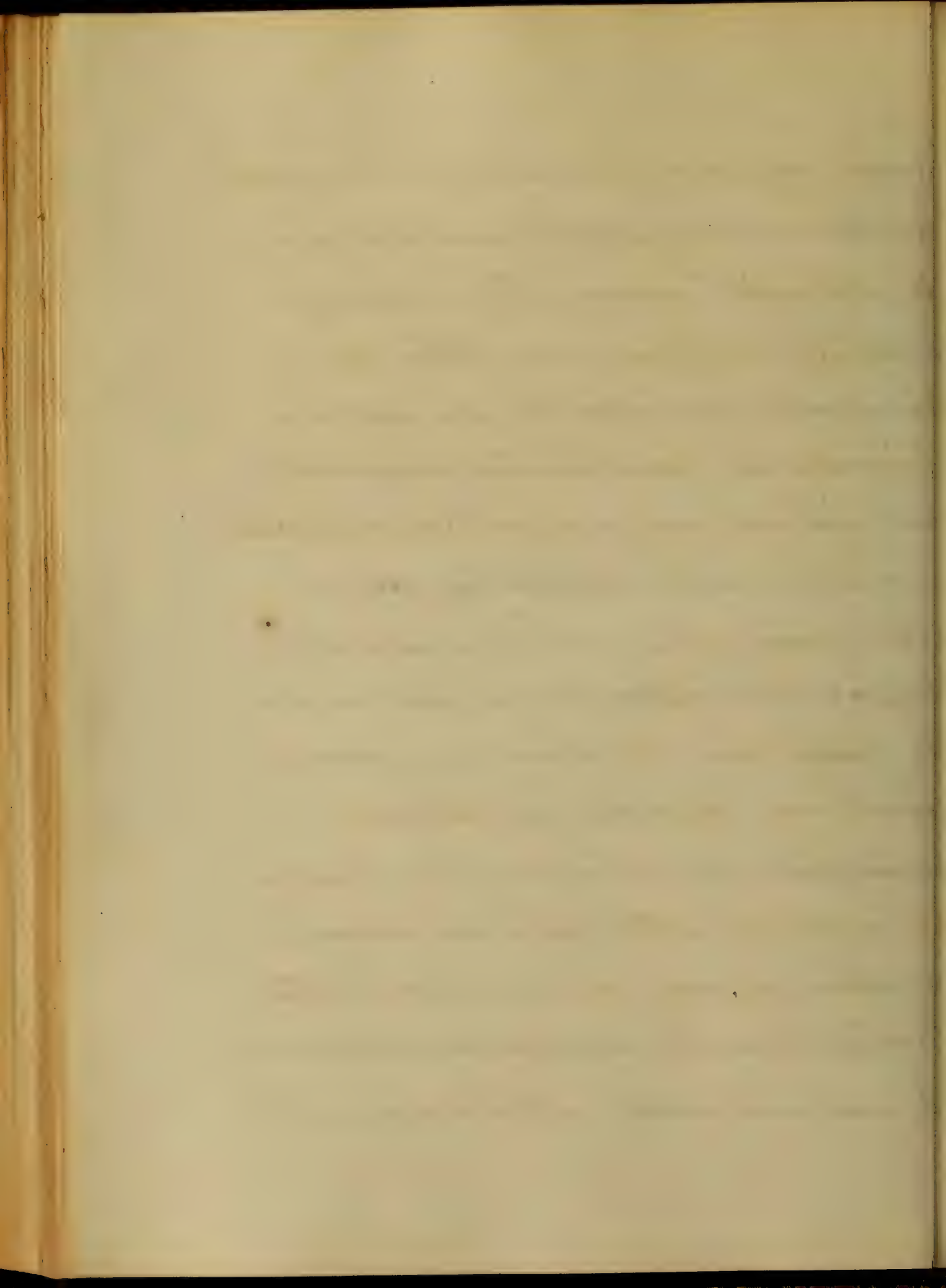
The auscultatory signs of solidification continue, but are less marked. If abscess of the lung take place and the patients life be prolonged until a discharge of the puss into the bronchial tubes occurs, cavernous respiration may become well marked.

Prognosis.

The prognosis of acute pneumonia will depend on the extent of lung involved, the disease with which it may be connected as an intercurrent affection, its complications, the previous constitution of the patient etc. Occurring as a primary disease limited to a lower lobe,



remaining uncomplicated and the person affected having a fair constitution the intrinsic tendency is to recovery. Even if more than one lobe be involved, provided the disease be primary and uncomplicated, a favorable termination may reasonably be expected in a subject not enfeebled by age or other causes. The gravity and danger then, in cases of this disease, proceed not so much from the disease as from coexisting affections and other incidental circumstances. Developed in the course of continued fever, measles, or other diseases, it may lead to fatal termination. In aged and feeble persons it may end fatally without any coexisting



disease, especially if more than a single lobe be involved. Occurring in persons affected with organic heart disease, it is likely to prove a serious affection. The complications which are most apt to render it fatal are pericarditis, intermittent fever, and delirium tremens. As regards anatomical changes pertaining to the lungs, gangrene, abscess and the suppurative stage of the disease render the prognosis extremely unfavorable. Symptoms which are unfavorable as prognostics are the following. Frequency and fullness of the pulse, great frequency and labor of respiration. Lividity of the prolabia and face, an abundant purulent or muco-purulent expectoration.



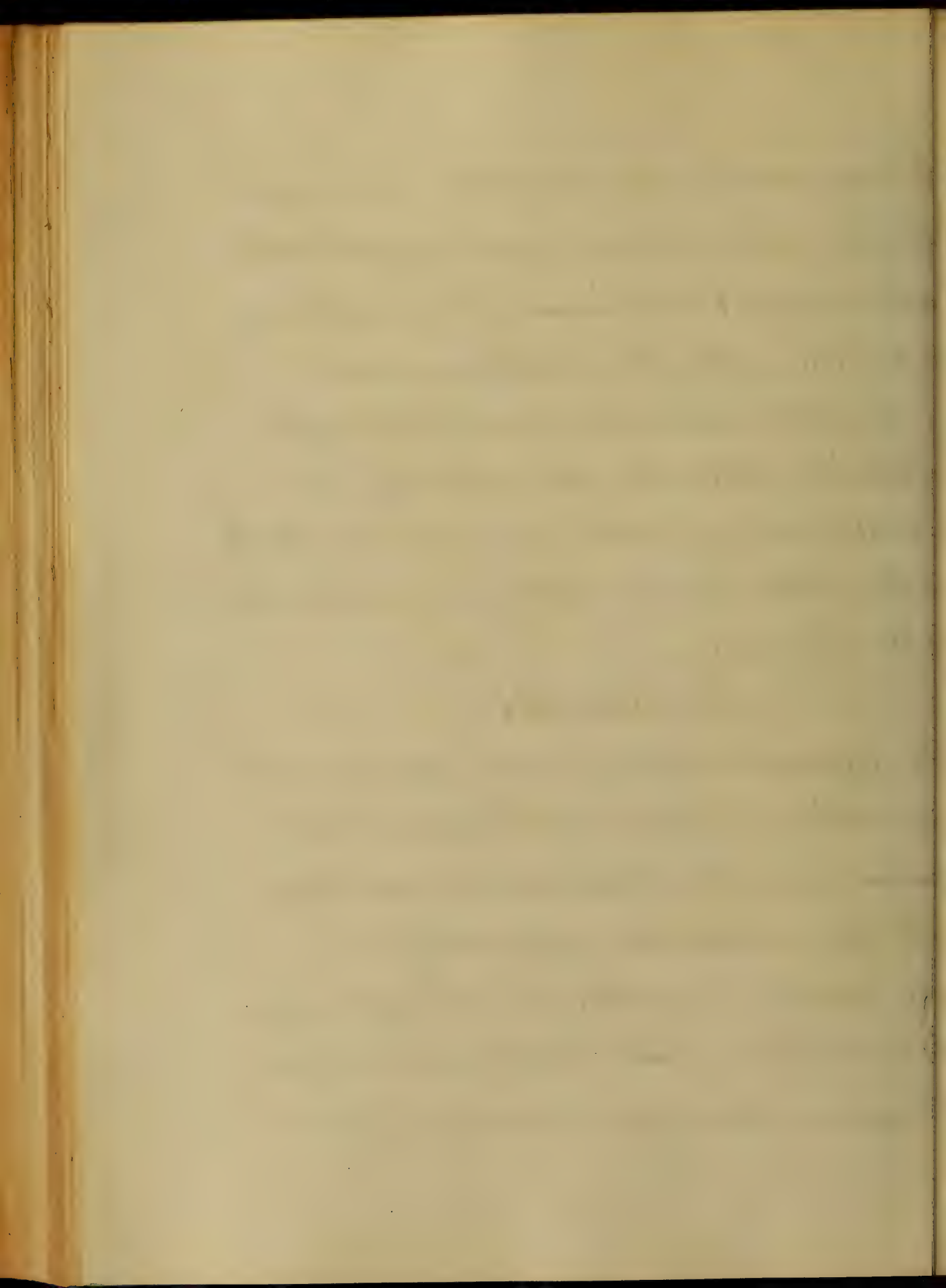
Bloody dark colored sputa commonly known as the prune-juice expectoration, active violent delirium. Low muttering delirium, with prostration and subsultus tendinum, constituting the typhoid state. In the majority of fatal cases of acute pneumonia death takes place from asthenia in combination with apnoea.

Treatment.

The different stages of acute pneumonia furnishing different therapeutical indications, the treatment of each stage is to be considered separately.

The question whether the disease may be arrested relates to the first stage.

Measures which have heretofore been

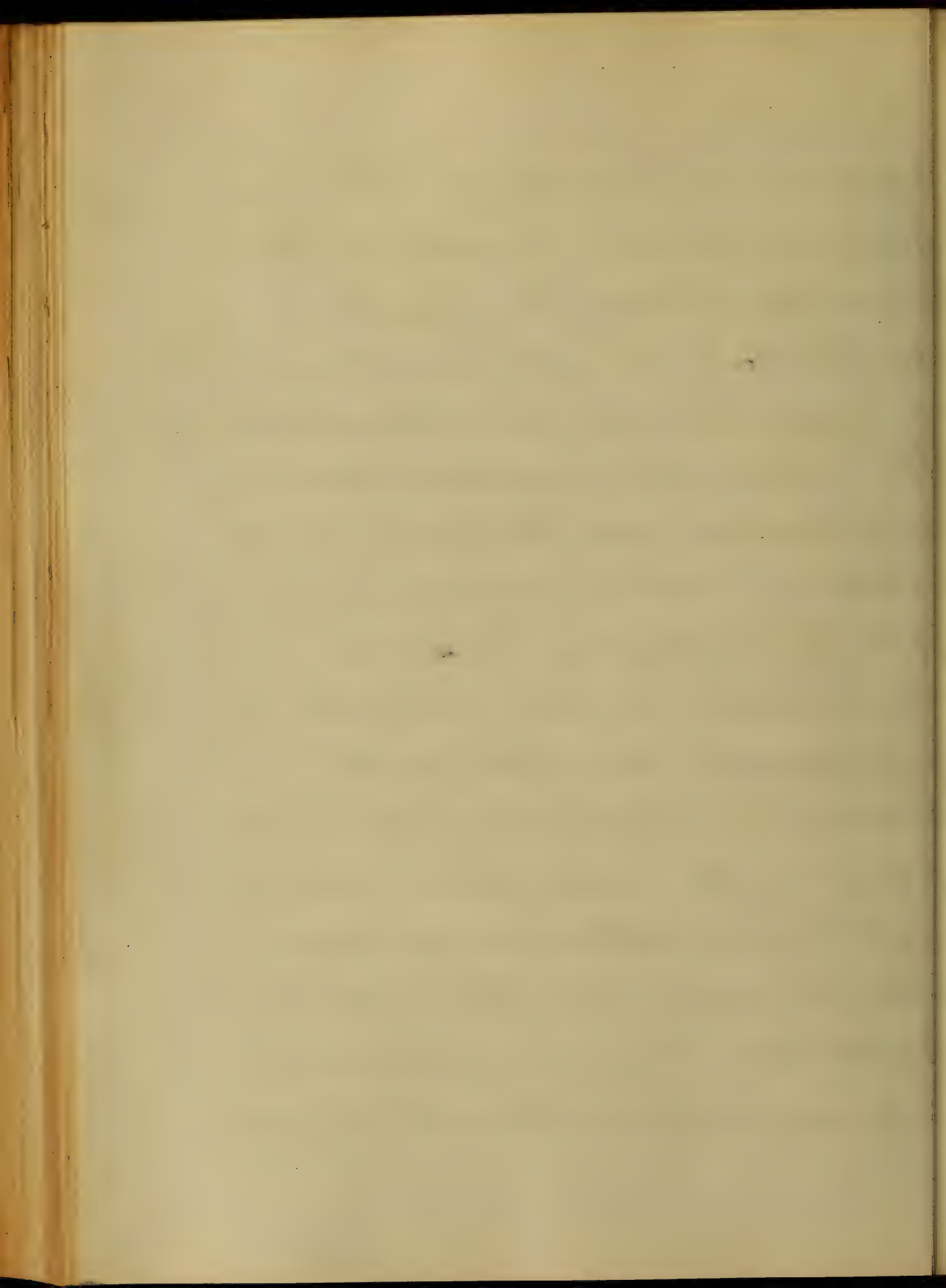


considered as abortive and which are
still perhaps so considered by some,
are blood letting, cathartics and other
remedies entering into the so-called
antiphlogistic method of Treatment.
Experience has abundantly shown
that these measures are not to be
relied upon for the arrest of this, more
than other inflammations. Even
admitting that they sometimes succeed,
the probability of success is so small
as not to warrant their employment
under circumstances, which will ^{be} likely
to render operation hurtful if they do
not prove successful. The objects of
Treatment then, in the first stage are,
to diminish the intensity of the

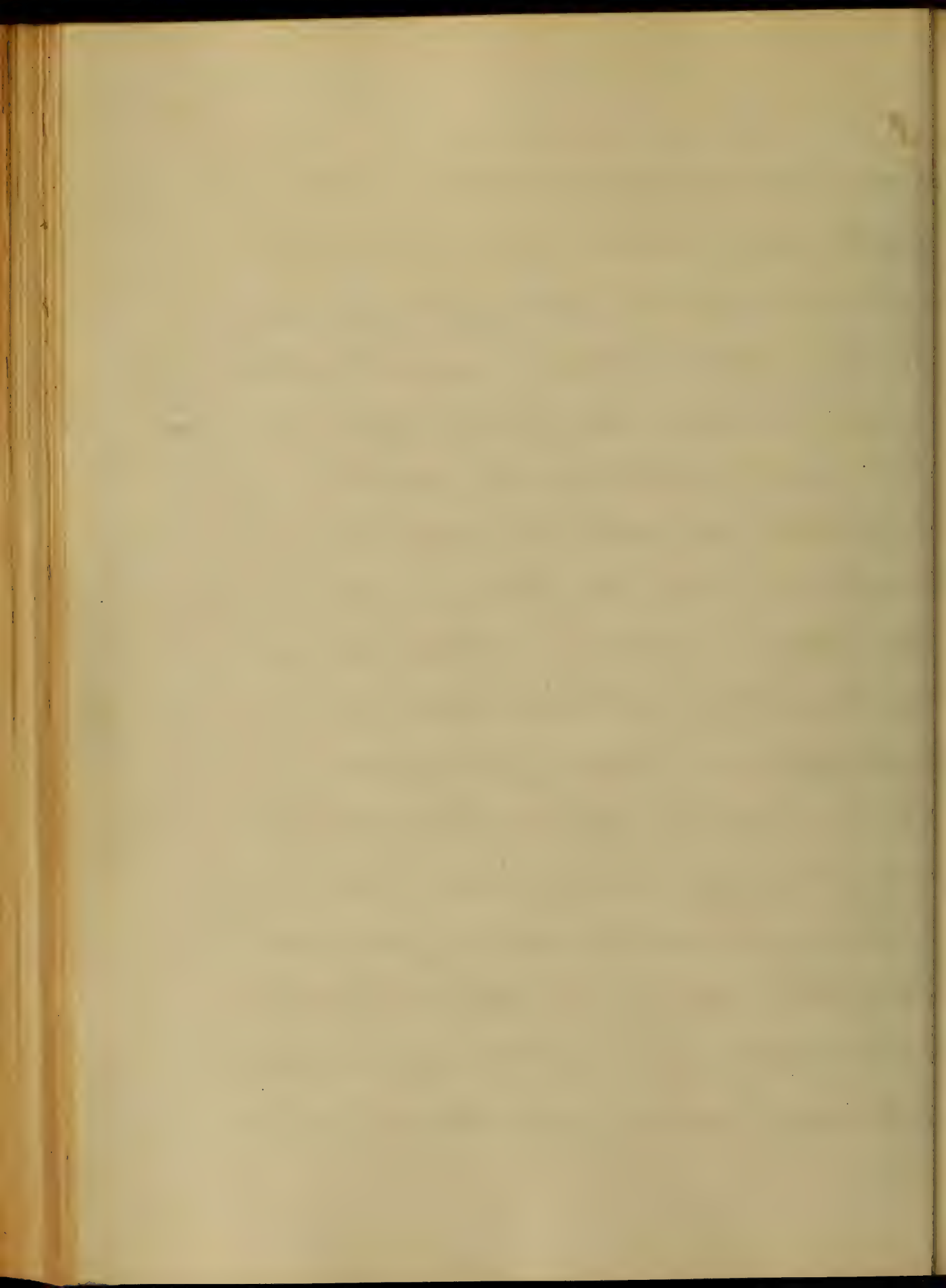


inflammation, to relieve symptoms, and place the system in a condition to tolerate the disease. As regards blood letting, its employment is to be regulated by the general considerations. It is admissible in certain cases as a palliative and perhaps to some extent a curative measure, in view of the promptness of its effects.

The circumstances which warrant its employment are; high febrile movement, the pulse denoting increased power of the heart's action, and the condition of plethora, or at least a robust constitution. It is contraindicated wherever the febrile movement is not marked, the denoting activity without

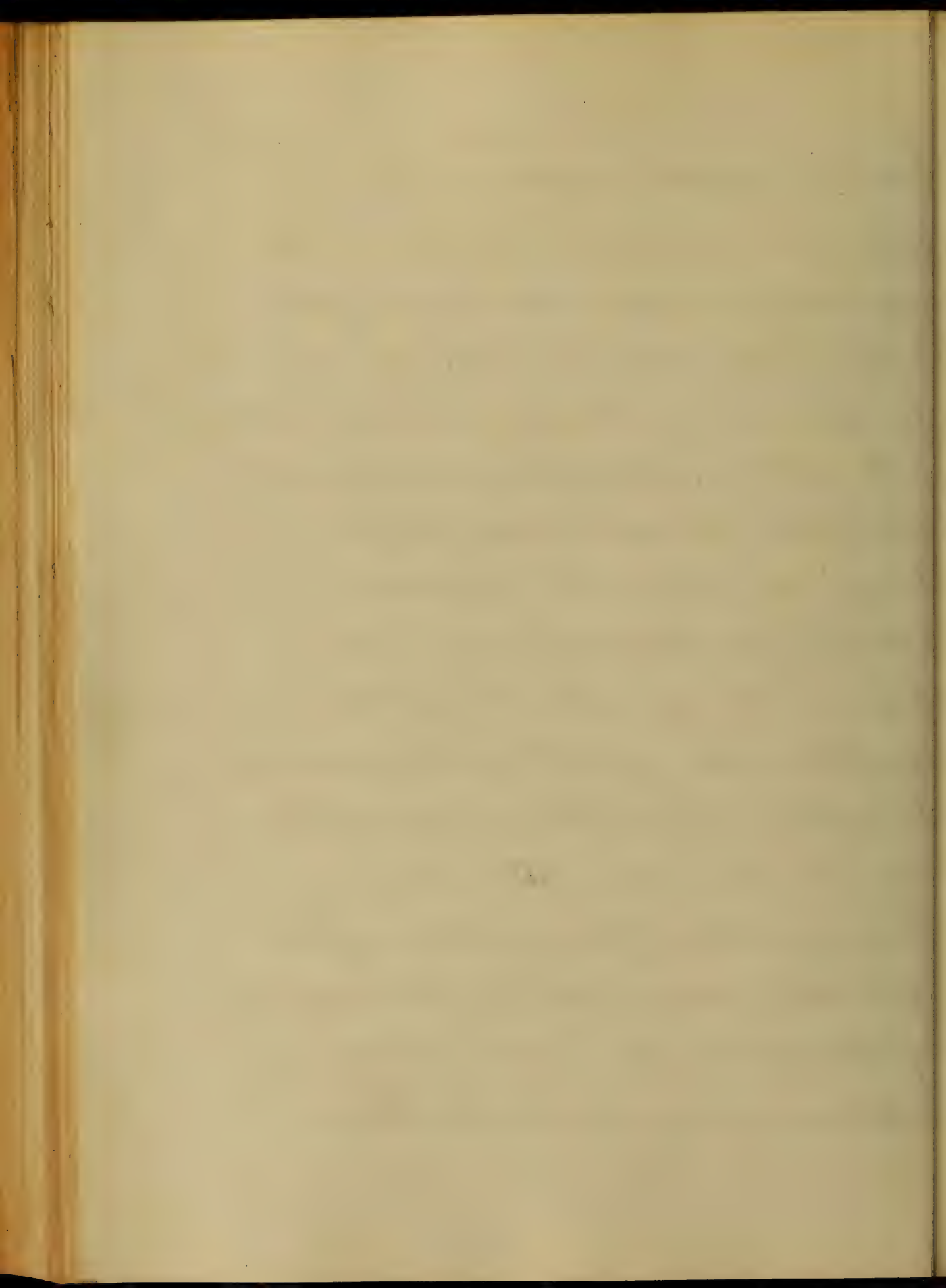


power, the patient anæmic or with a feeble constitution. In most cases in which it would be admissible, provided the same ends could be secured by other means, the latter are to be preferred. They consist of depletion by saline purgatives and sedative remedies as *veratrum viridi* etc. These remedies are not called for if the symptoms are not urgent and are contraindicated by feebleness or a tendency to depression. Opium may be given with propriety and advantage in the first stage in doses sufficient to relieve pain, and tranquilize the system. Cups, sinapisms or stimulating liniments may be employed, followed by warm fomentations, which

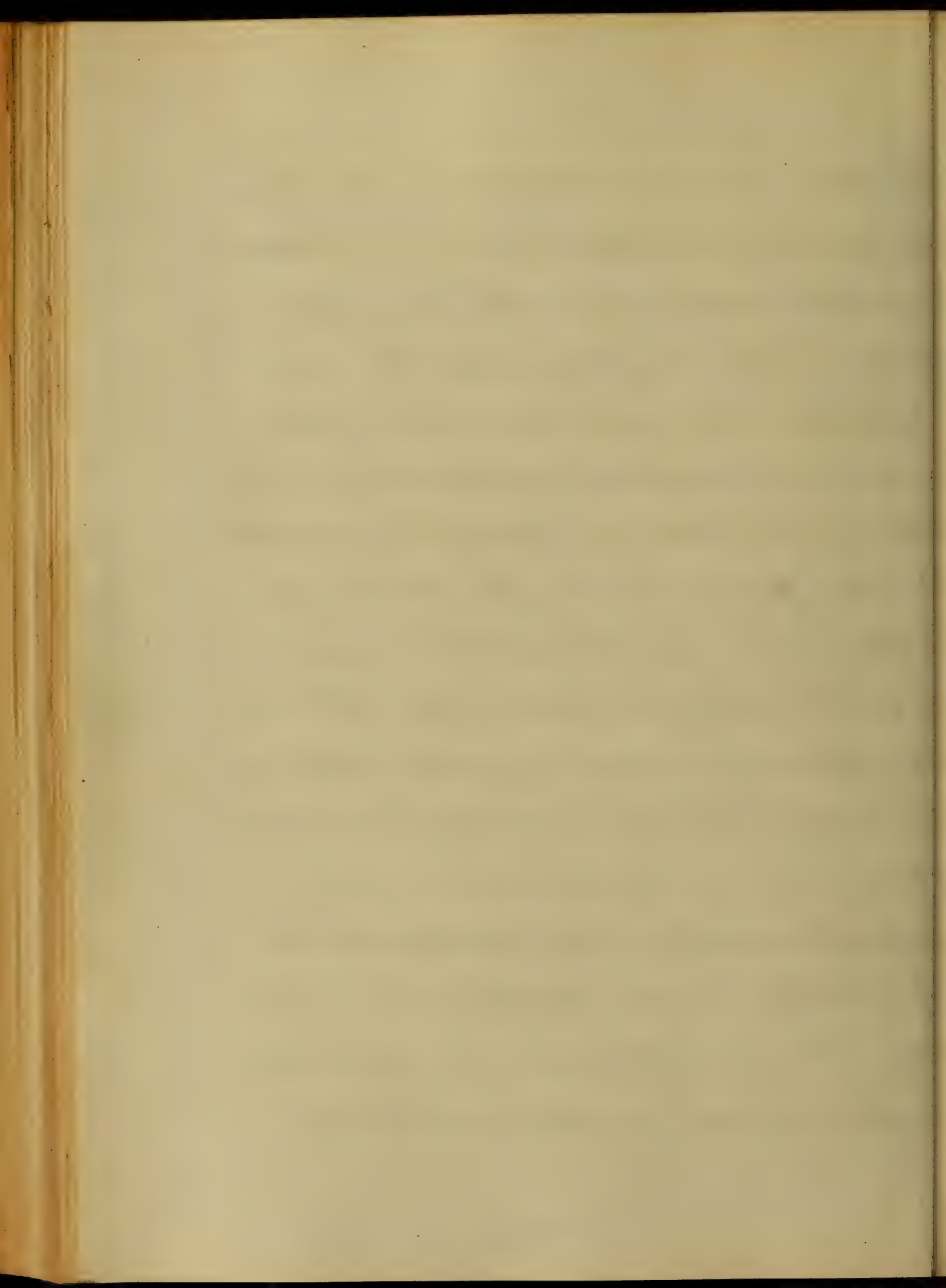


must be changed as soon as the
Temperature becomes lower. In the
majority of cases a saline purgative
followed by some form of opium,
the latter continued at intervals, together
with soothing applications to the chest,
will meet the indications pertaining
to the first stage. The treatment in the
second stage has reference to the
promotion of resolution, palliatives of
symptoms and supporting the powers of
the system. Bloodletting or purgatives
are not indicated in this stage.

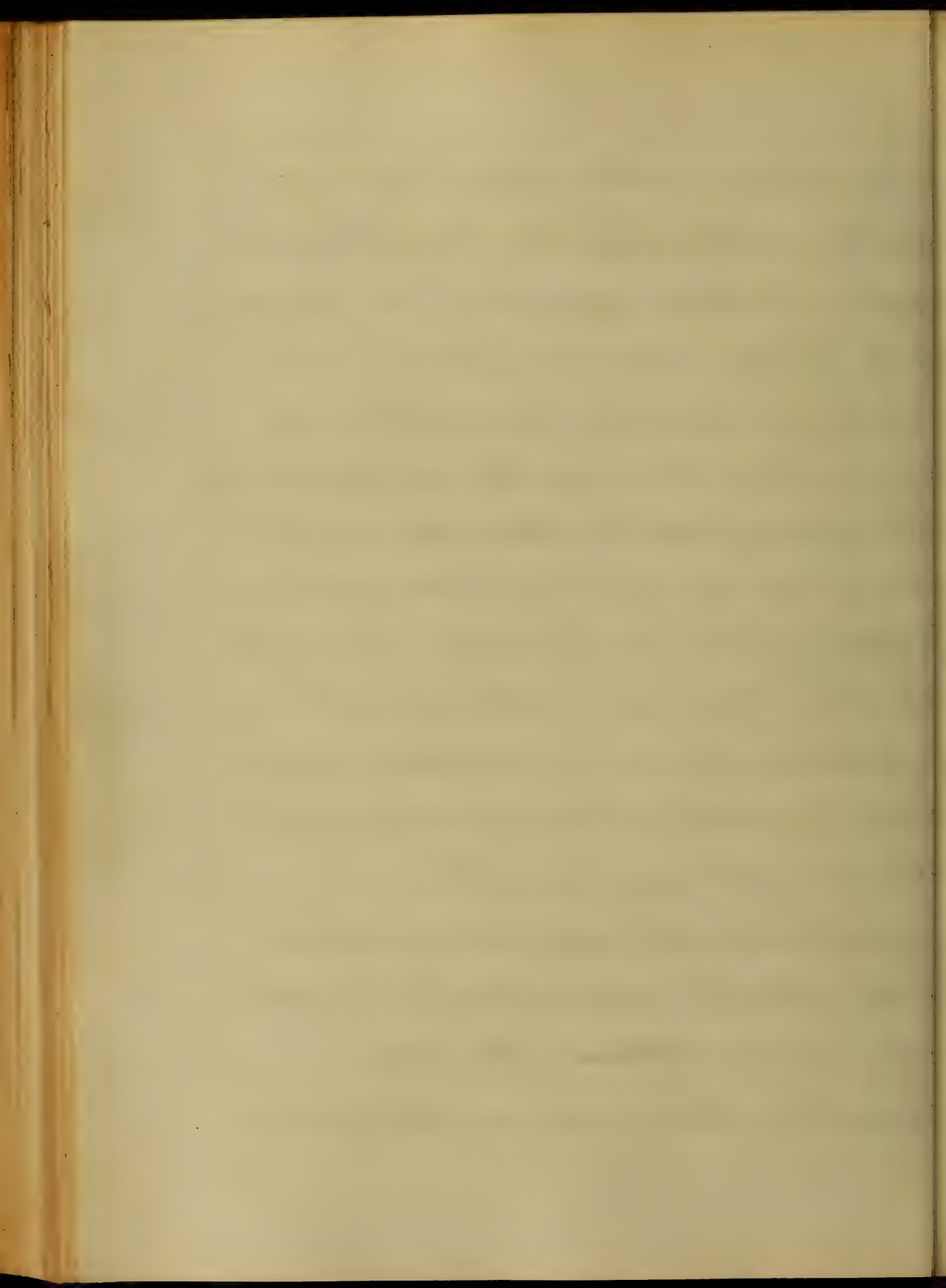
Iodine in the shape of tincture applied
externally answers well in the second stage,
repeated at intervals in order to keep up
a certain amount of counterirritation.



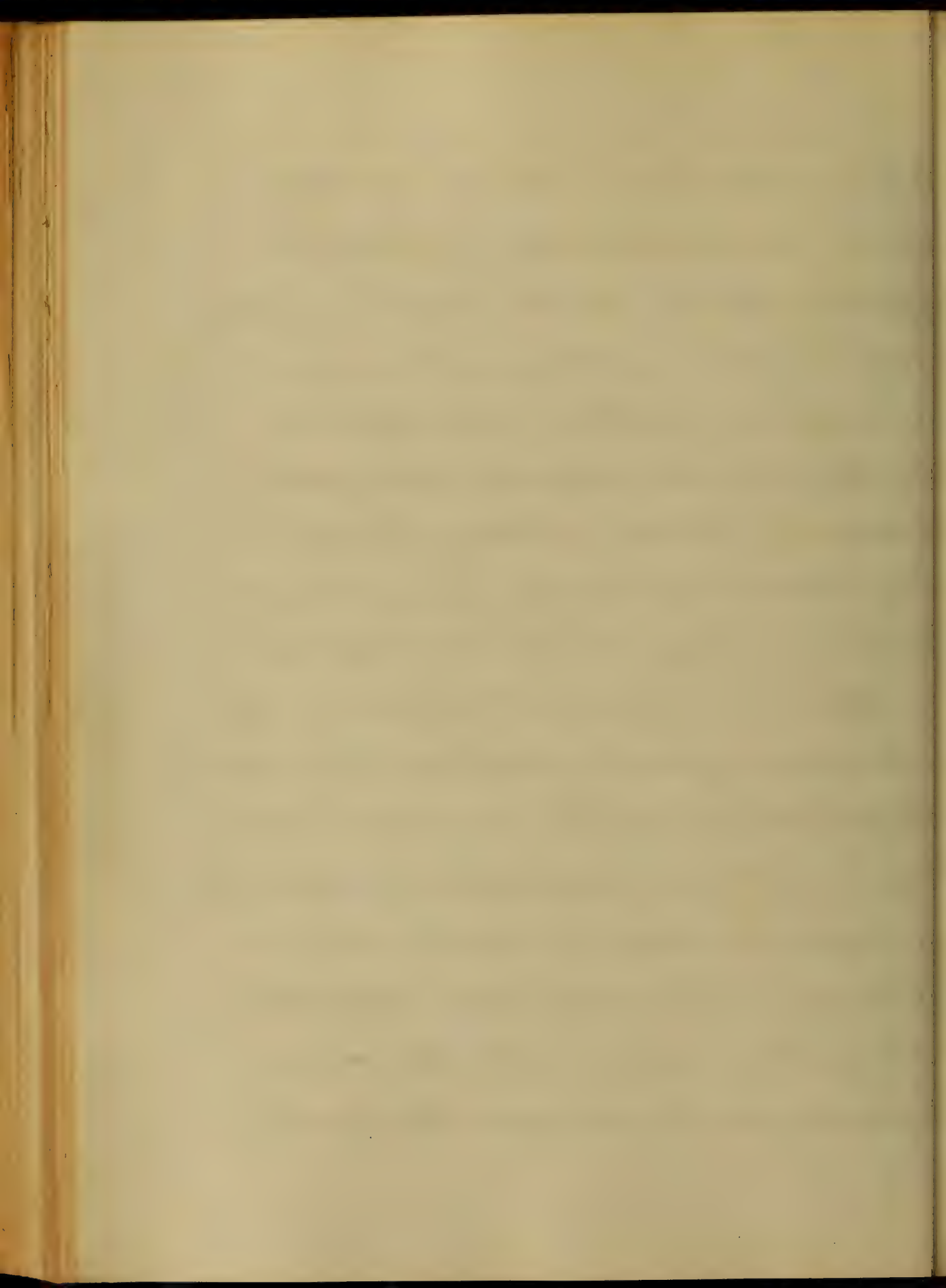
Blisters are not advisable, on account of the general disturbance which they occasion, and their interference with physical examinations of the chest. If pain exist, the best applications, are, either warm fomentations of linseed, or the application of turpentine, or what is used frequently in Hospitals, the oil of mustard which in fact answers every purpose of fomentation as it retains the moisture of the body and prevents too rapid evaporation of the perspiration. Opium is a most valuable remedy in the second as in the first stage; it is indicated not only by the continuance of pain, but by vigilance, restlessness and symptoms denoting



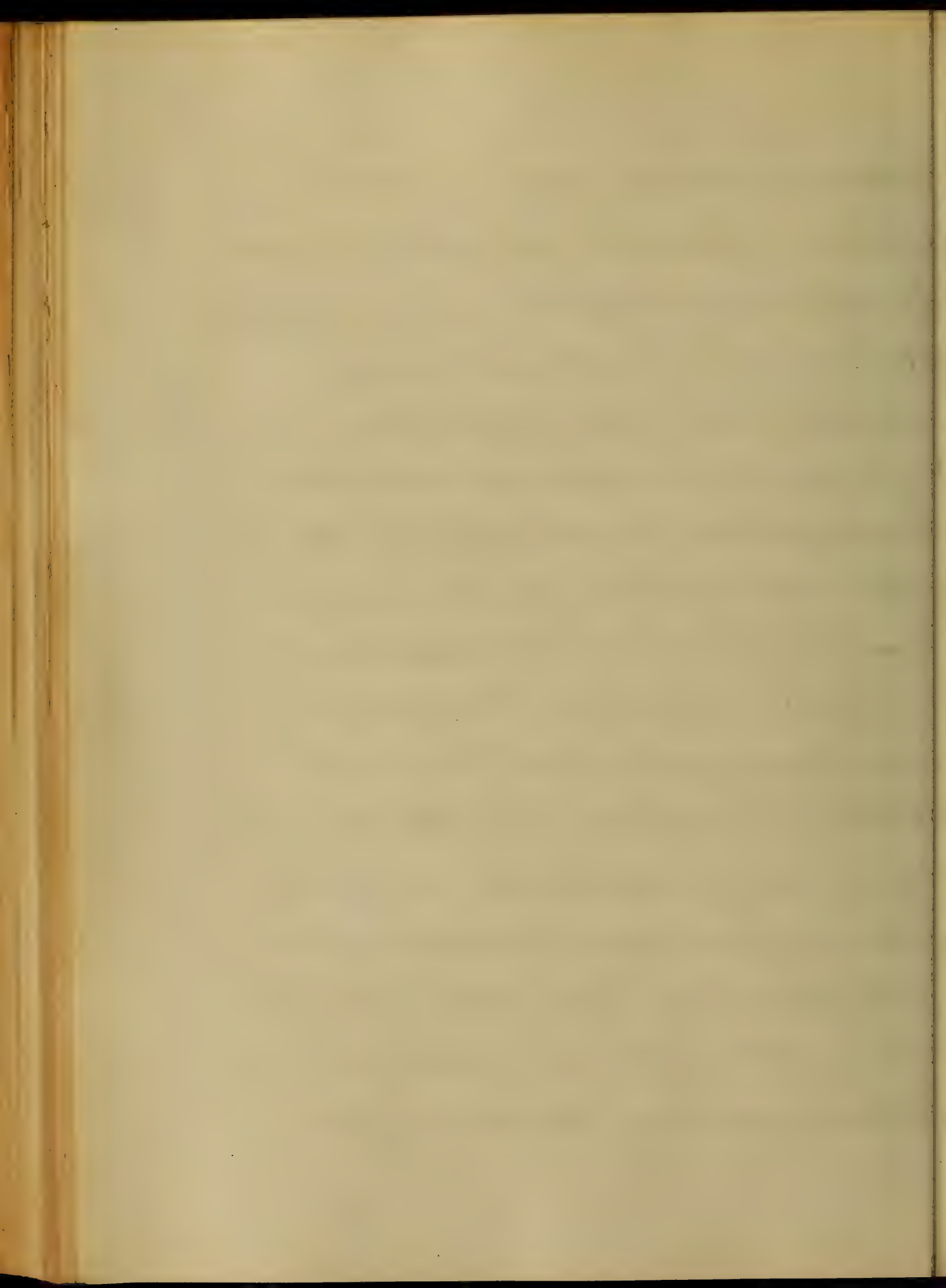
constitutional disturbance. I have seen
whilst connected with the U. S. Hospitals,
that a marked difference in the reduction
of the pulse and respirations with
refreshing sleep and a condition of
comfort to follow a full dose of opium.
This remedy has the advantage of not
doing harm if it fail to do the good we
expect from it. Remedies to promote
expectoration, as a rule, are not
indicated. The use of remedies of this
class is based on the erroneous idea
that the matter of exudation is
expectorated. Clinical observation
shows that the removal of this matter
may go on ~~without~~ with great
rapidity without any expectoration.



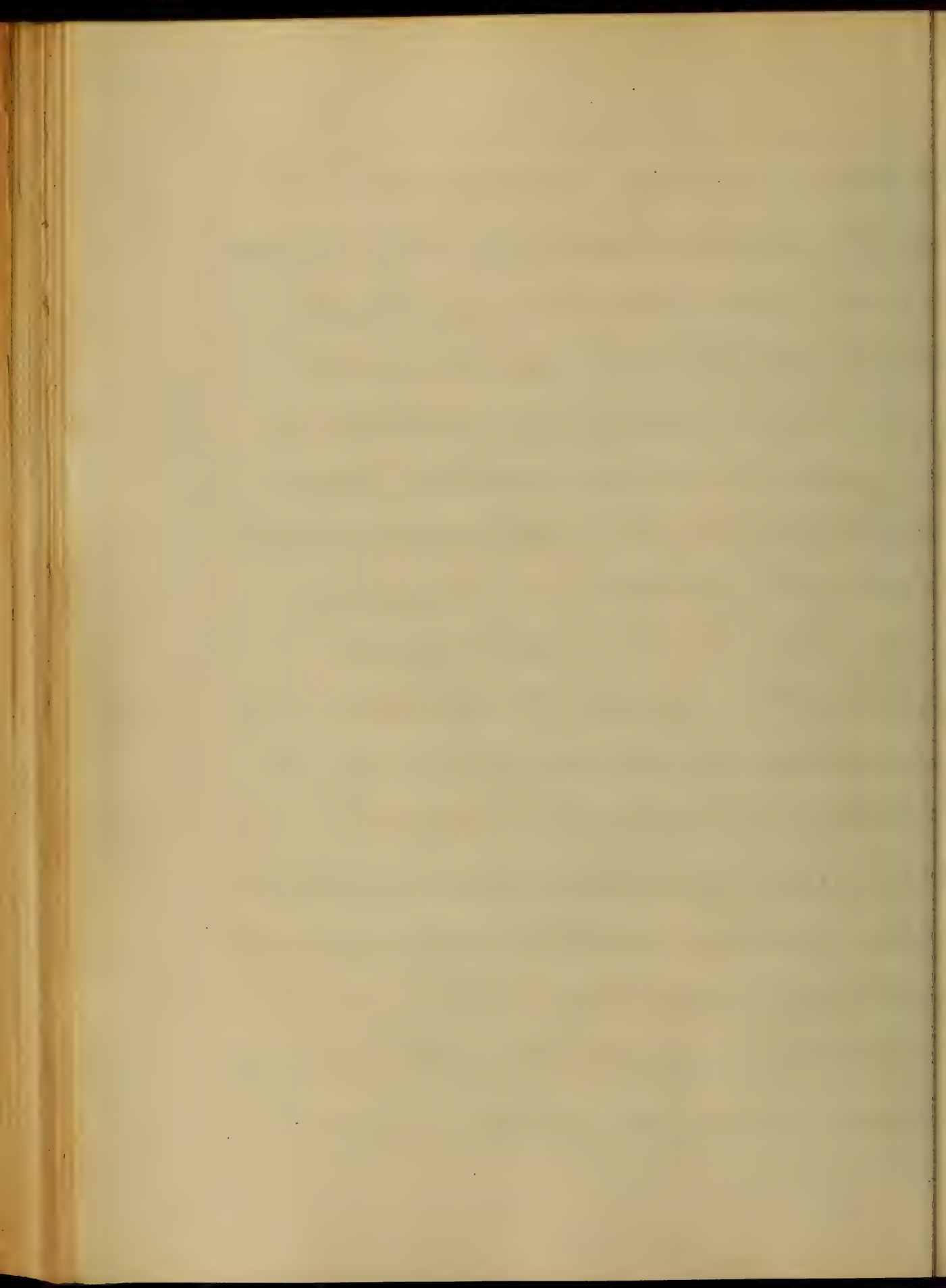
The expectoration in the second stage is due to bronchitis usually limited to the affected lobe or lobules. Sedative remedies, such as tartar emetic in small doses, and the veratrum viride are admissible in this stage, if there be considerable high febrile movement, without a tendency to asthenia. They should be cautiously given so as not to incur risk of constitutional disturbance or depression. To support the powers of life is the leading general indication in the second stage. Resolution will be sure to begin and continue if the life of the patient be sufficiently prolonged. The danger is generally not from the amount of persistence of the solidification of lung, but from failure of the vital powers before the resolution takes place. The supporting



treatment embraces tonic remedies
alcoholic stimulants and nutritious diet.
Of tonic remedies quinine is to be preferred.
Alcoholic stimulants form a very
important part of the supporting
treatment in the disease as in all other
diseases, whenever the great object is to keep the
patient alive until the disease has reached
the end of its career and advanced into
the stage of resolution. As regards the
circumstances under which the use of
alcoholic stimulants is to be commenced,
they are always indicated so soon as
evidence appears of any tendency to failure
of the powers of life. And of this the
action of the heart is the best criterion.
Febrile, great frequency, and a pulse

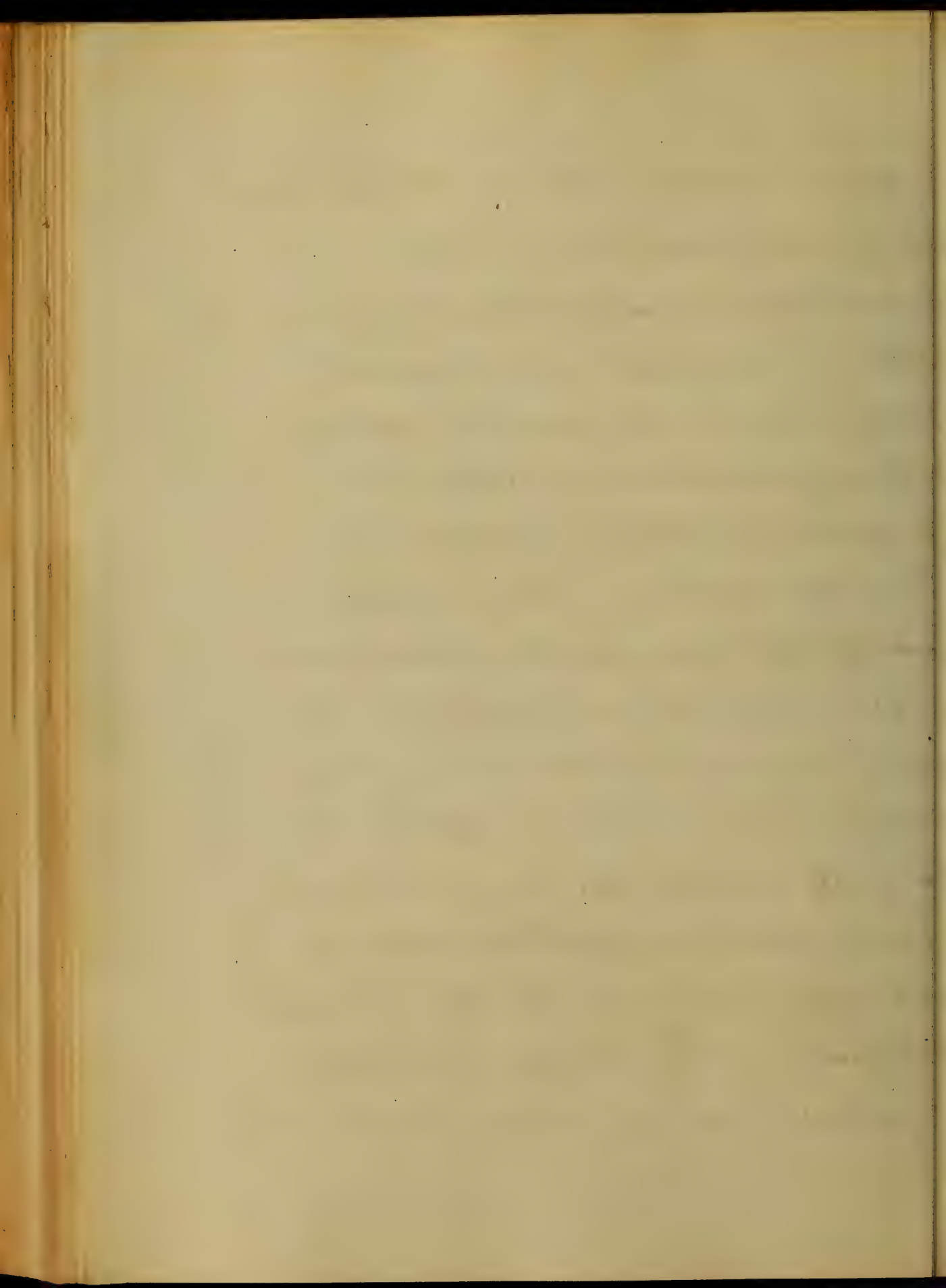


vibratory or thrilling but compressible denoting increased activity but diminished power of the ventricular contraction; these are the characters which indicate supporting measures, of which alcoholic stimulants are an essential part. Given at first in small and moderate doses and increased as occasion may require. The habits of the patients, as regards the habitual use of alcoholic drinks, are of course to be taken into account. In cases of pneumonia associated with intermittent fever quinine should be given promptly and in efficient doses. Cases of pneumonia complicated with delirium tremens call for the pretty free use

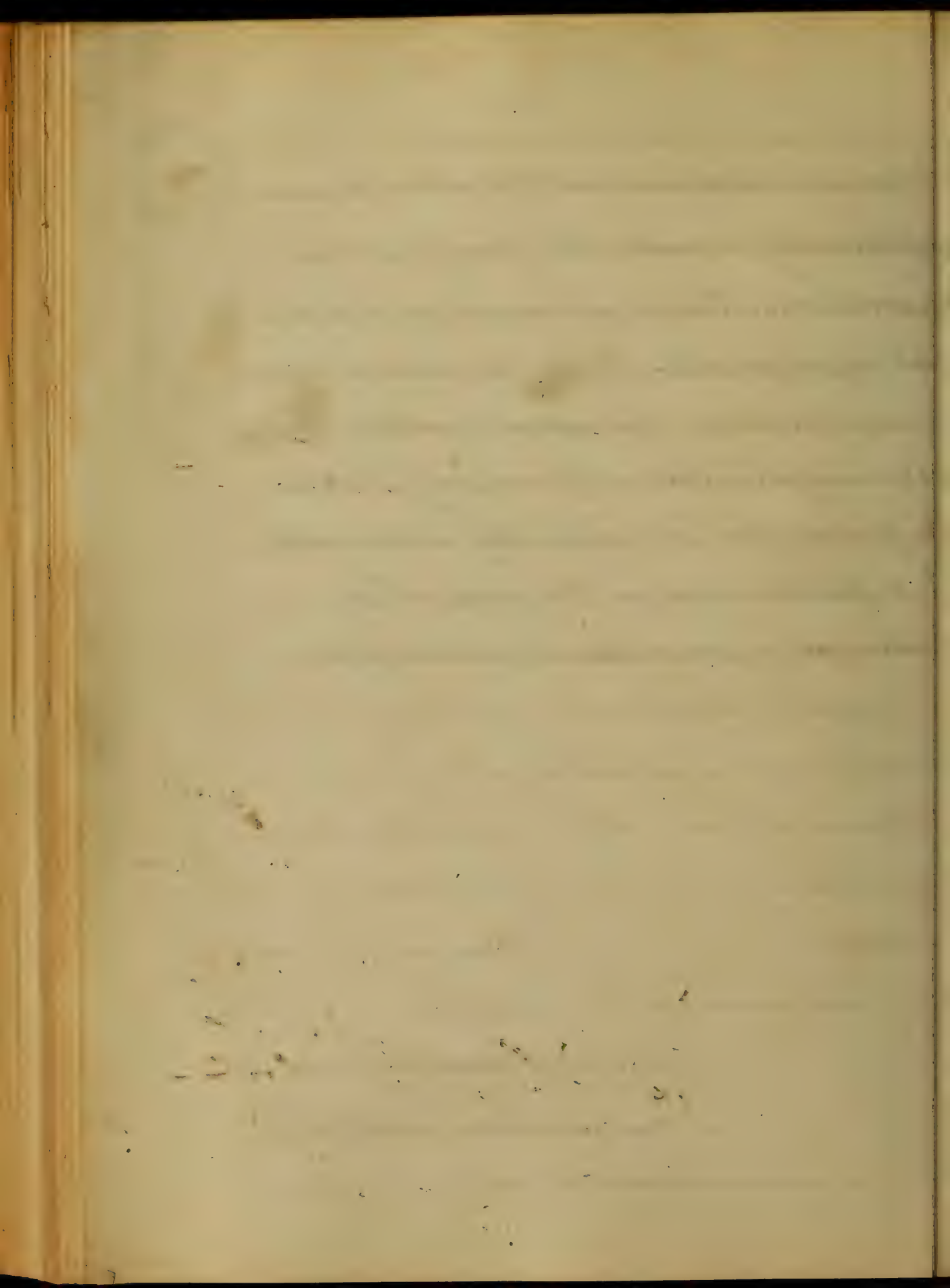


of opium together with alcoholic stimulants and a nutritious diet. When convalescence is established there is little or no danger of a renewed attack. There is therefore no need of extreme precautions in order to prevent a liability to relapse.

Experience has shown that a solid, substantial diet may be entered upon as soon as the patient is fairly on the road to recovery, and that the recovery is more rapid, than if the appetite be too much restrained. As a general rule ordinary, wholesome, digestible articles of food may be allowed, when they are desired by the patient. Permitting or encouraging the patient to sit up will be found not to

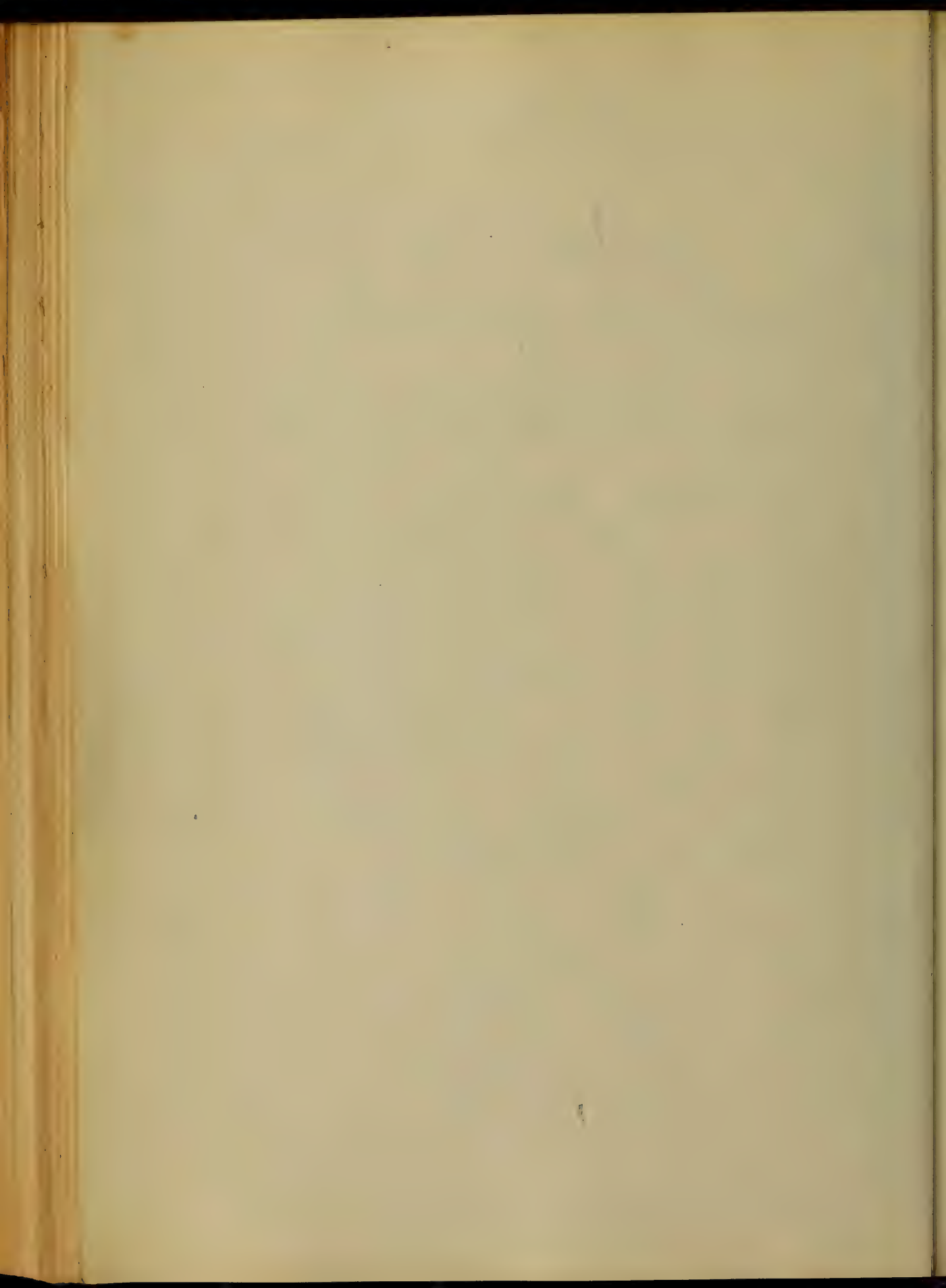


relard recovery, but on the other hand
apparently to hasten the progress of
resolution. Early going out of doors is
not objectionable. If the disease proceed
to suppuration, purulent matter being
either infiltrated or forming abscesses,
the prognosis is extremely unfavorable,
but perseverance in the supporting
treatment is sometimes successful.



1857.

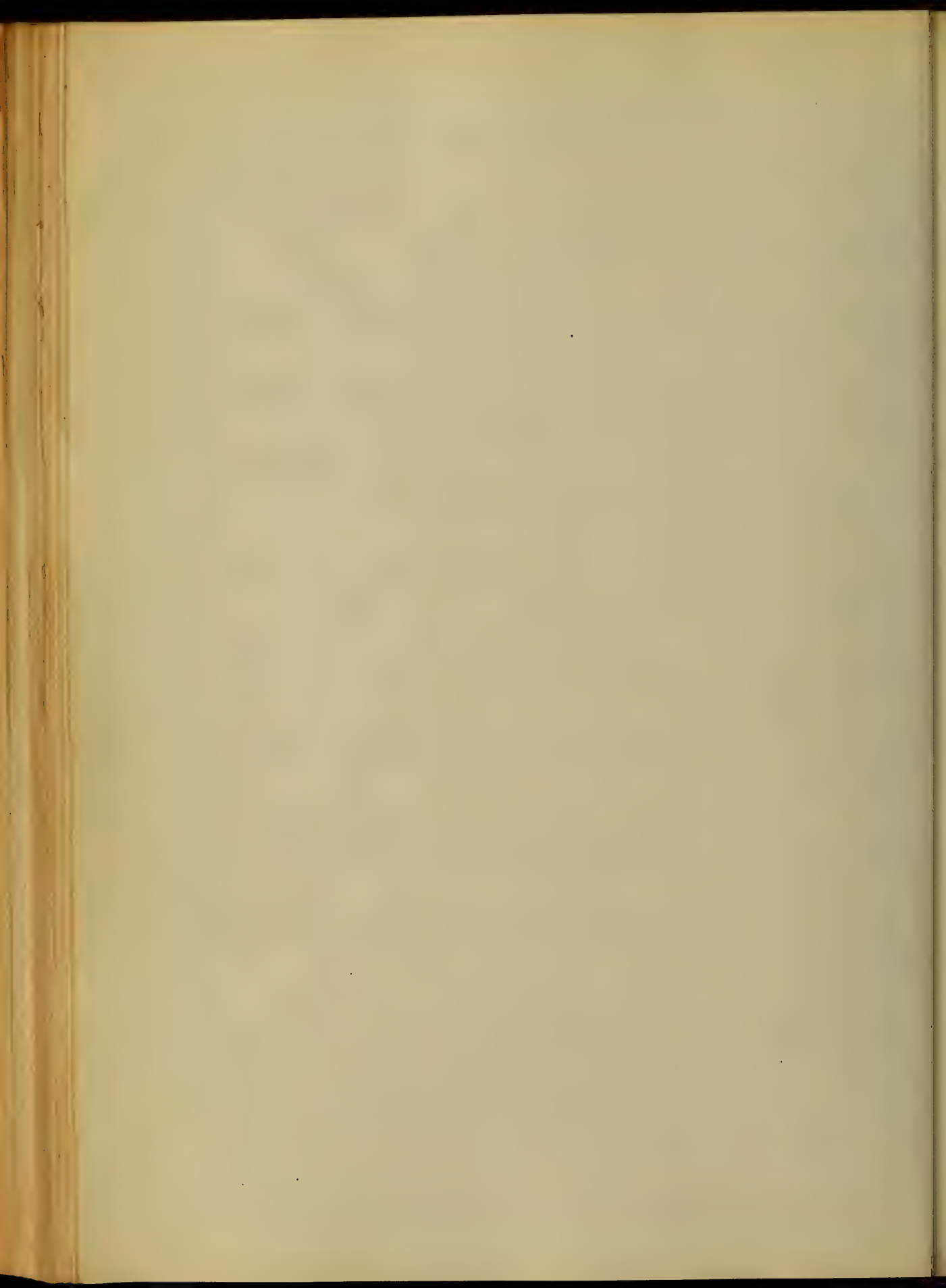
An
Inaugural Dissertation on the
Development of
Bilious Remittent Fever
Submitted to the
Examination of the
Provost, Regents and Faculty,
in Pursuance of the
Rites of the
University of Maryland
for the Degree of
Doctor of Medicine
By
Samuel S. Lawson
of
Maryland



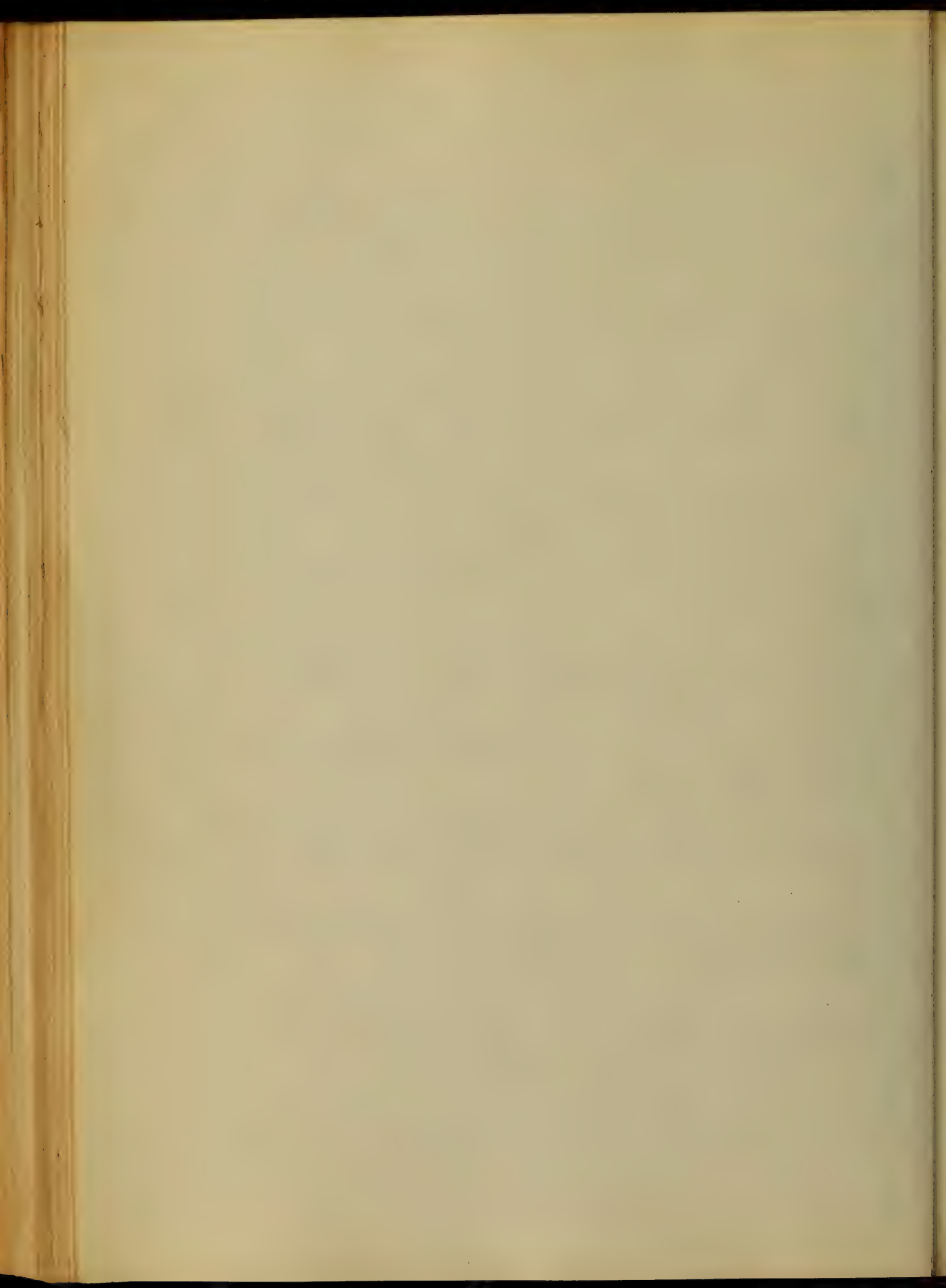
Remittent or Scurvy

These fevers are common in the United States and prevail in the latter part of summer and autumn but are other complaints known by the same common continued fever symptoms. Which are most common in cold weather they are referred to as autumnal and winter fevers, either of them may occur at any period of the year though not so frequently, exist at the same time and as they often bear no inconsiderable resemblance to each other they require no very different treatment.

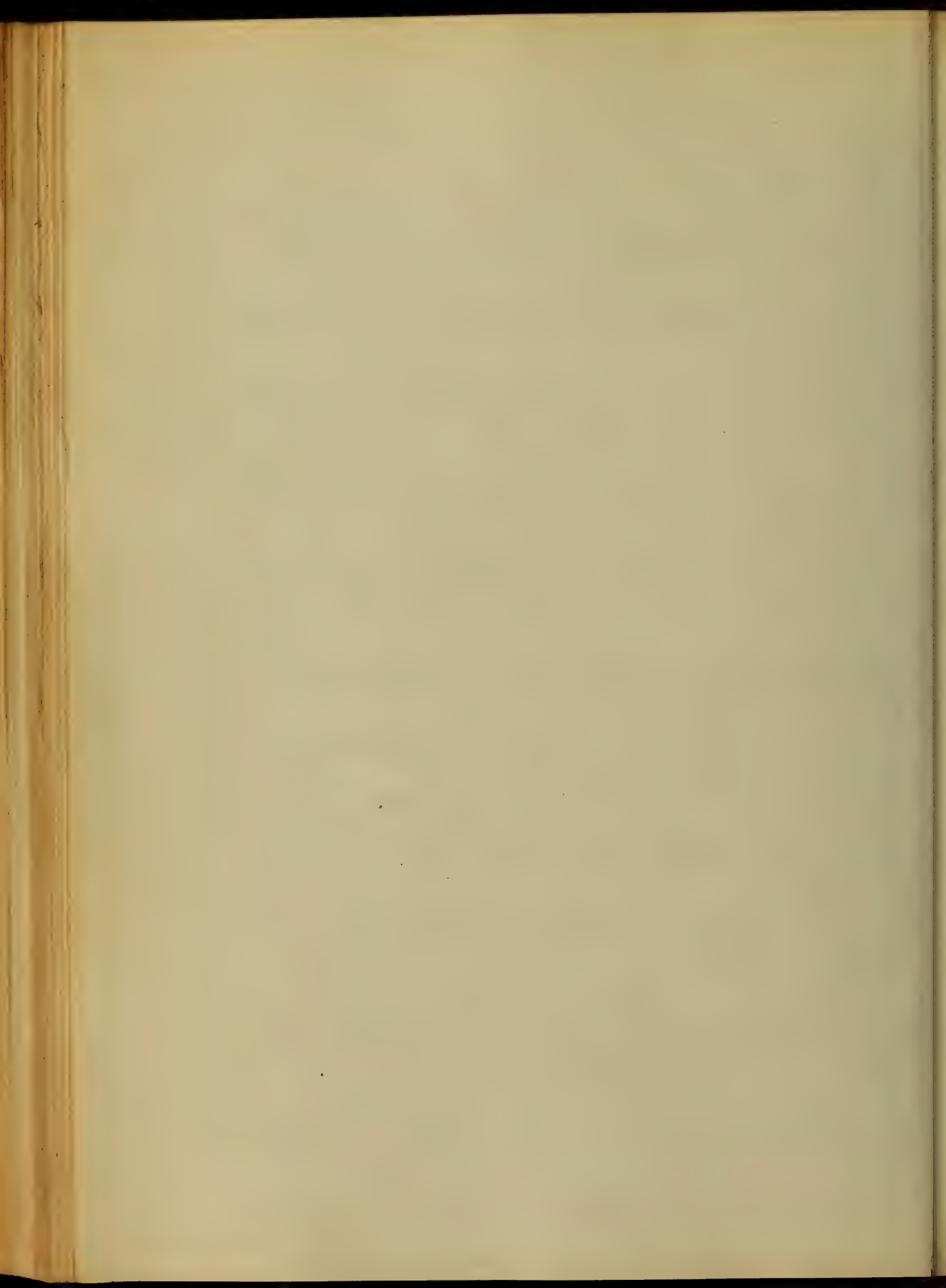
Remittent or scurvy has been seen in all parts of the United States, particularly in the Southern States and the Gulf of Mexico.



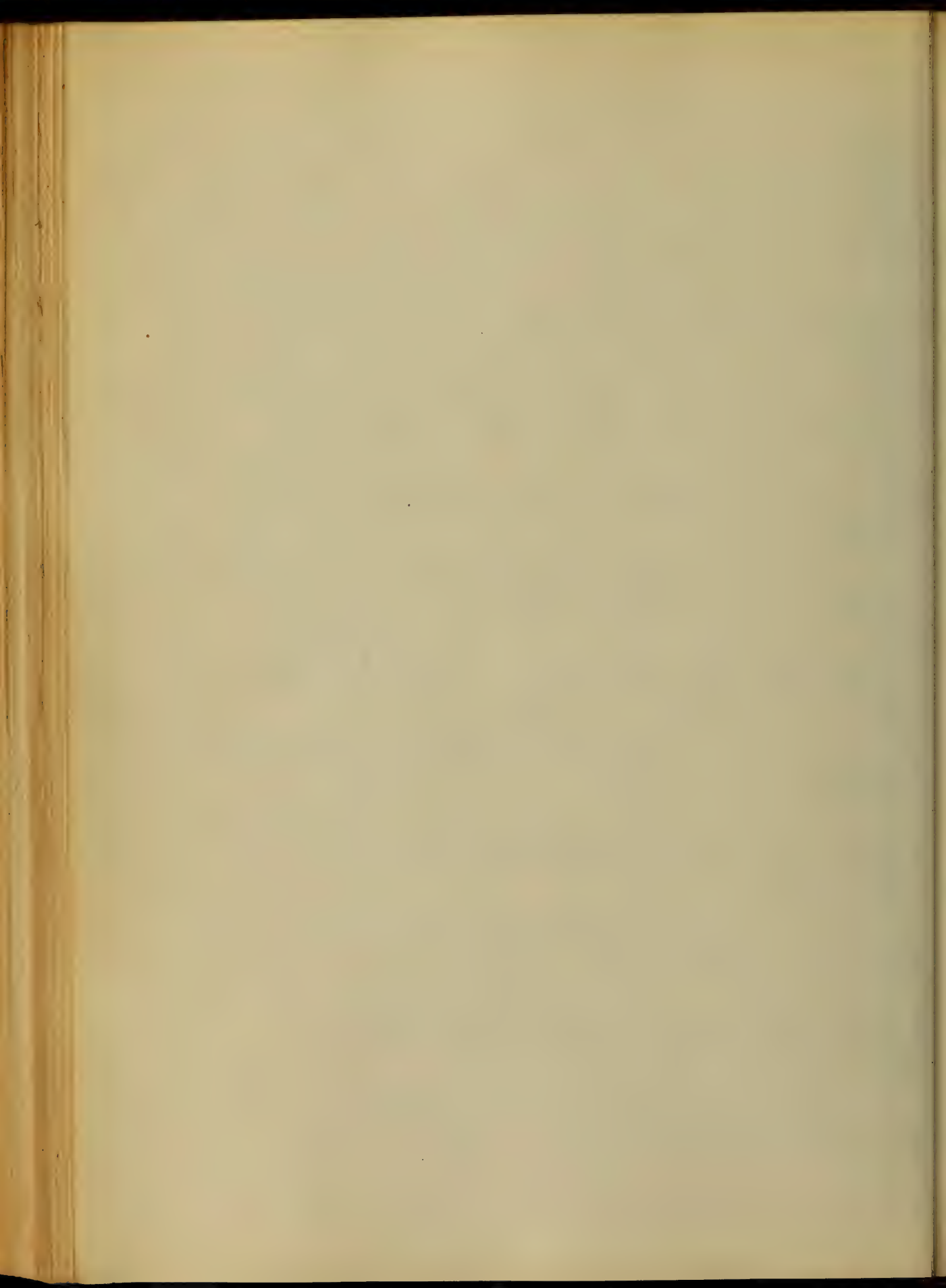
and is more frequent in the hills and
Southern sections than in the north
In some parts of New England it is
almost unknown it is rare in the
Mountainous and hilly districts of
our country except when there are
large streams or standing ponds
It is also in sandy regions covered
with pine forests, and in the
middle states The situation in
which the disease is most prevalent
is the valleys of streams the borders
of lakes or ponds, and the rich lands
of the Western States It is a much
more serious disease in the South
and South west than in the middle
or northern States of the North.



Remittent or vitious serous may occur
in all countries especially the East India
India and South America The disease
has received numerous names which are
various in location It is Remittent
fever in the former man of the
Remittent fever Some times occurs
in which it is difficult to distinguish
any decided remission I will endeavour
to enumerate some of the names which
has been given to this disease I have
never the Bengal fever Lake fever
&c. The names are named after the
places where they abound not that
it is one and the same Remittent
I have seen stated that miasmatic
remittent fever is essentially the

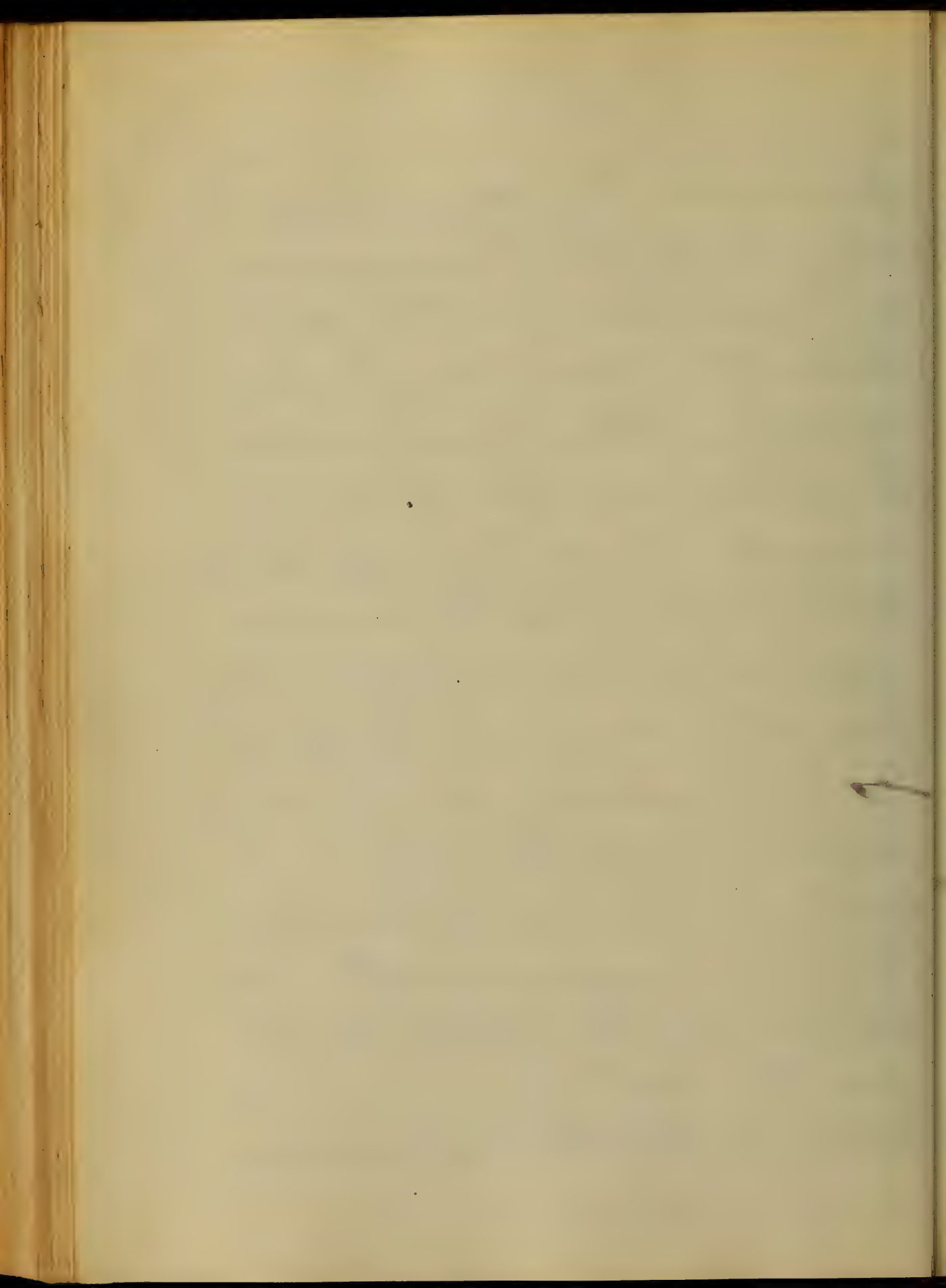


Some discuss as the intermittent. It is
sometimes approach each other & unite
in form, that it may be infectious in
some cases to doubt to which of them
it belongs in the intermittent, and
there is some degree of marked action
between the paroxysms, and in some
other very little, it is not always
possible to determine whether the
morbid action as it exists does or does
not amount to fever. If there is no
and it is intermittent if fever it is
Remittent. The paroxysms occur at
regular intervals and consist of the
Cold, hot, and Sweating stages.
In some paroxysms one or the other
of these stages may be wanting.

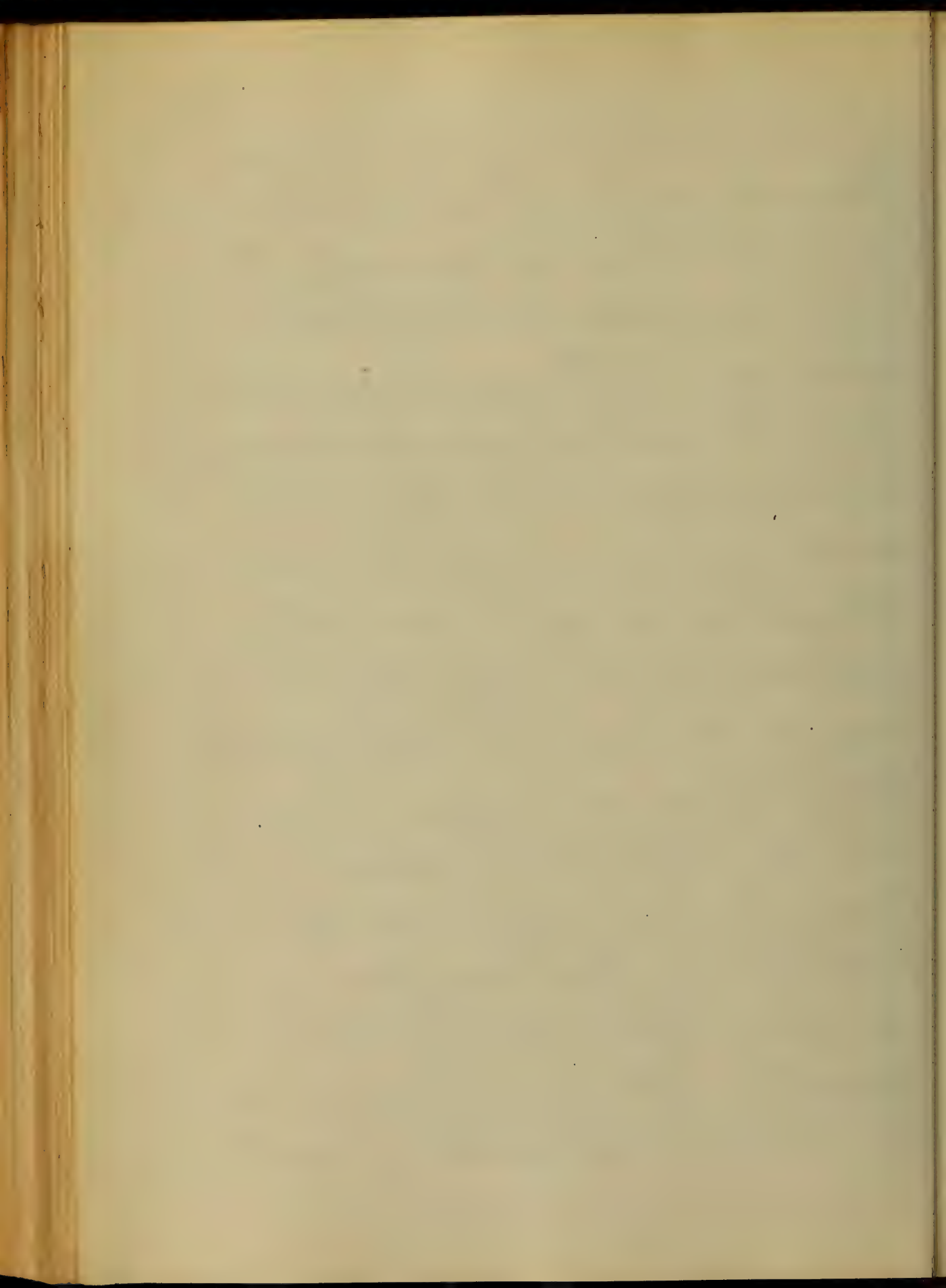


This fever sometimes rises and falls
at the same time. It may occur
at the same time. Intermittent and
intermittent fevers have the same
course. The quotidian occurs every day
the tertian every third day it is not
uncommon. The quartan is very rare,
there is double tertian. The paroxysms
may occur in the morning or evening
those of the evening are lighter
those of the morning have headache
&c. The intermittent fever may be
considered of the tertian kind.
When the fever has set in we
look for its return about the same
hours the next day.

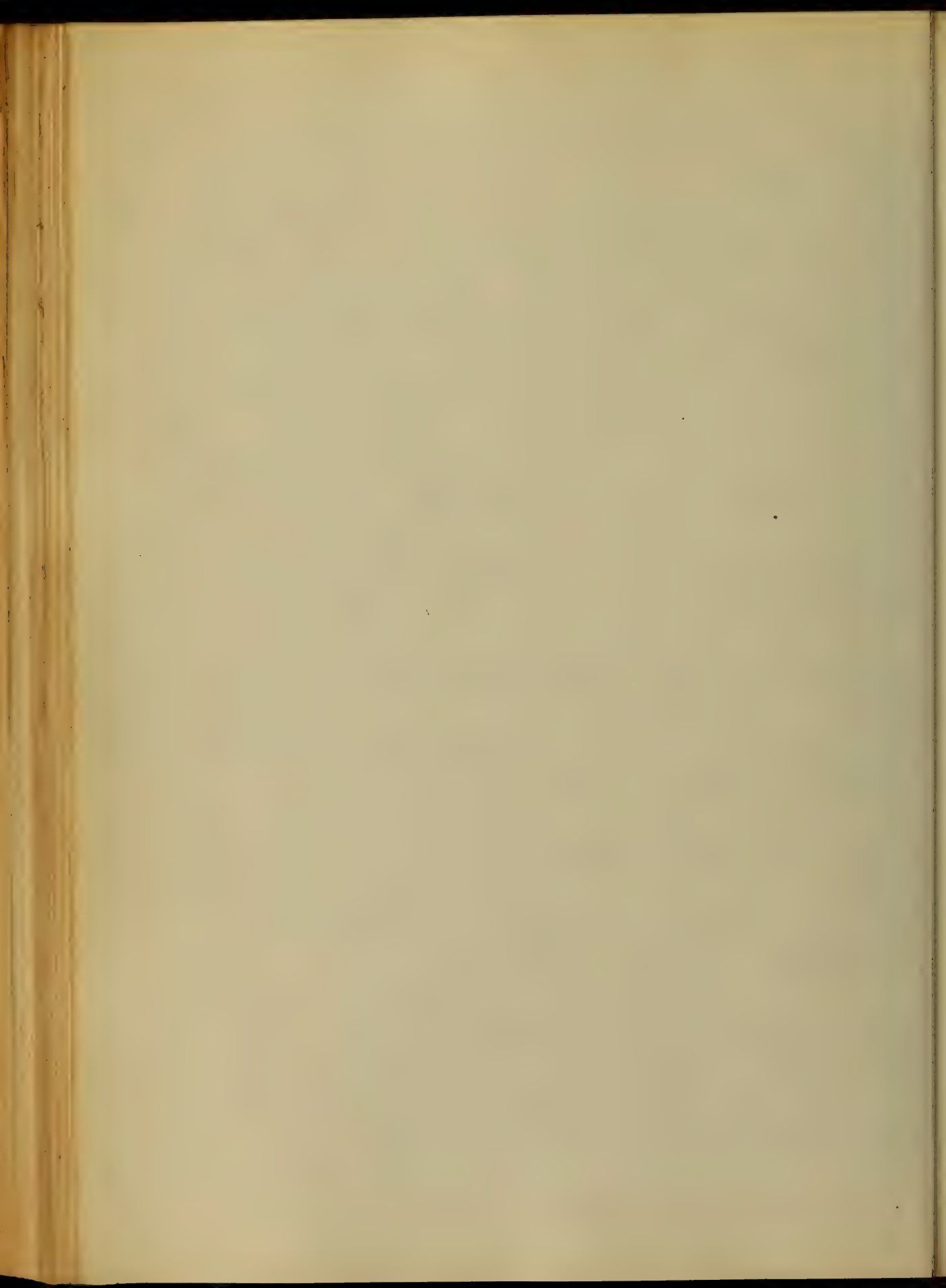
Quads. Feb. in the middle of which



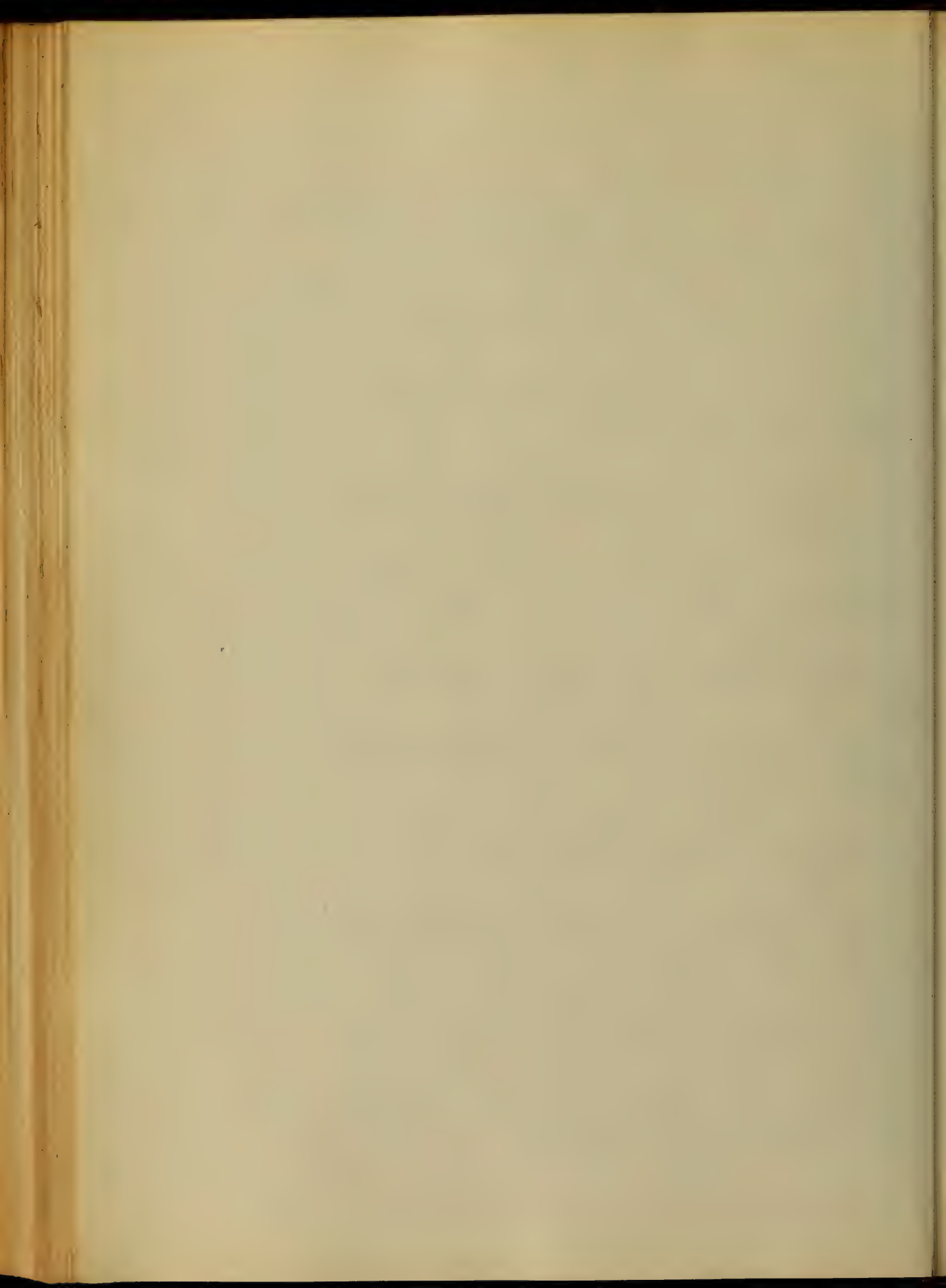
This grade may be estimated, first as
regards its violence and secondly, the
range of system which attends it as
regards violence. It may be of all grades
from the mildest form which merely
demands relief to the form which
demands prompt treatment.
The energy of system may differ
and in such a disease the blood
may be rich and the vital functions
not exhausted. It may be rich
with the vital forces exhausted. In
diseases the blood may become deficient
and take the tubercular form.
Symptoms, There are two diseases
more where the fever commences
the patient is in a sub. state



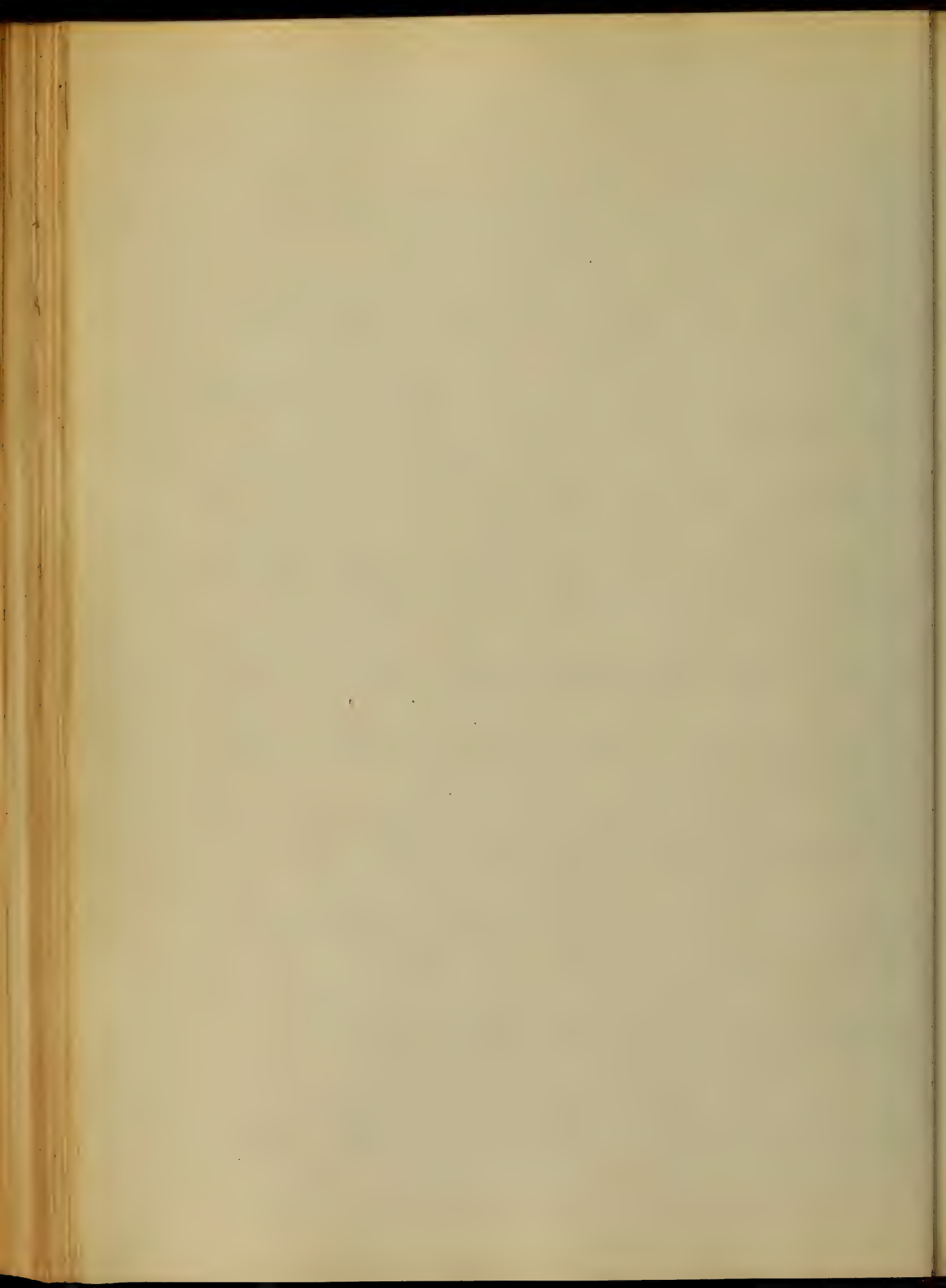
distention complains of uneasiness at
the epigastrium, deficiency of appetite,
slight pain in the head, and sores
in different parts of the body, the
tongue is slightly furred near the root
the pulse excited and the countenance
dingy or sallow, During this period
the patient is going about though
languidly, the disease usually commences
with a chill, the face is pale, the lips
purplish the pulse depressed and
irregular, there is nausea and vomiting,
thirst and pain in the loins, the
duration of the chill varies from a
few minutes to an hour or more, it
does not last as long as in intermittent
fever, the patient is liable to chills



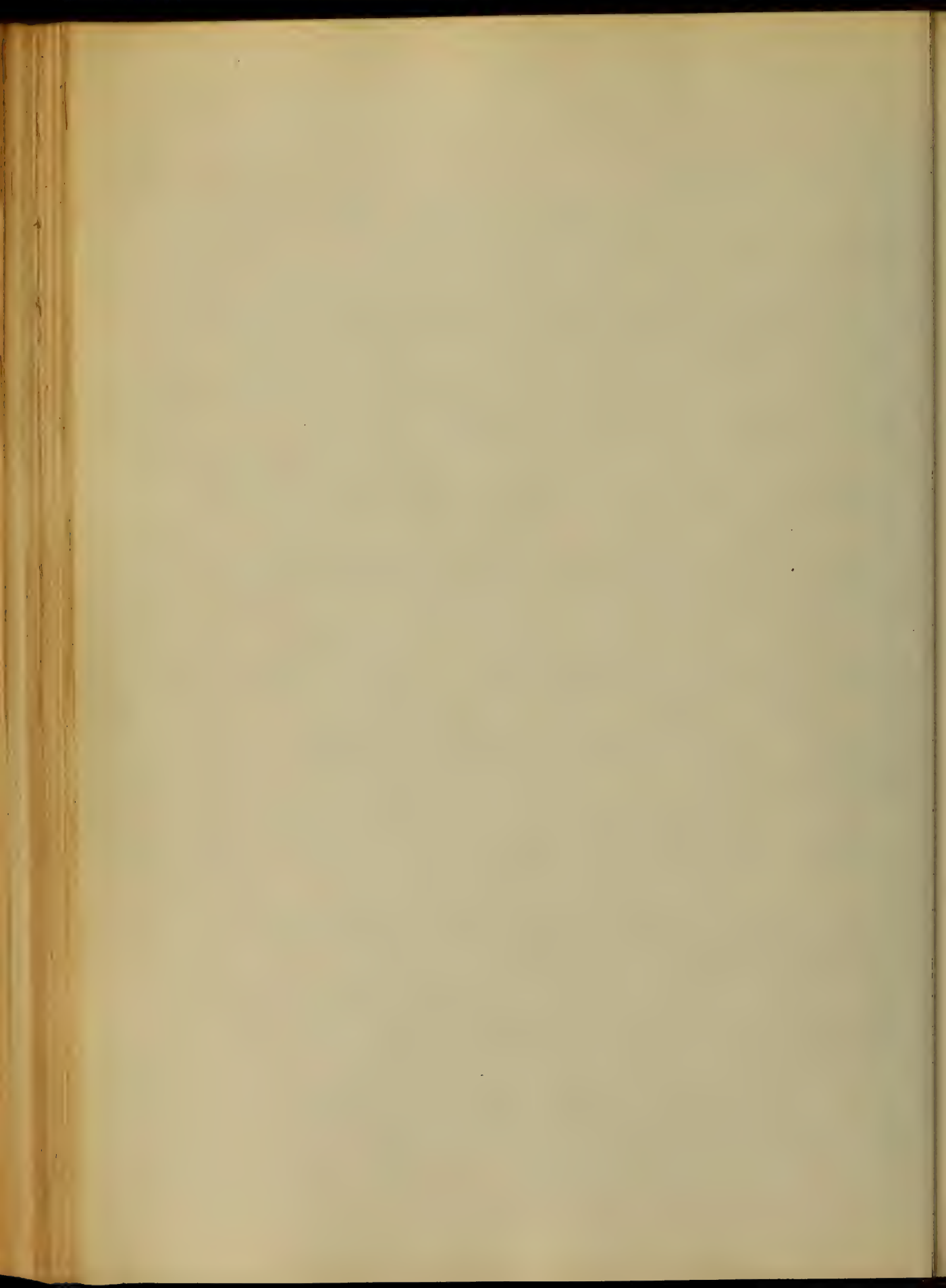
relaxation by changing his position
by placing himself in contact with
the ground, when another states that
the patient looks uncomfortable but that
his is reddened his circulation is hurried
the pulse increased, from 70 to 100 when
in the minute. The tongue is
almost always somewhat coated at this
period there is a complete loss of sleep
the face is flushed the eyes suffused
there is sometimes delirium, the patient
is restless and wakeful these symptoms
continue for a considerable time
after which they begin to relax
the patient falls asleep and when
he awakes seems to be much improved
the headache, thirst and nausea



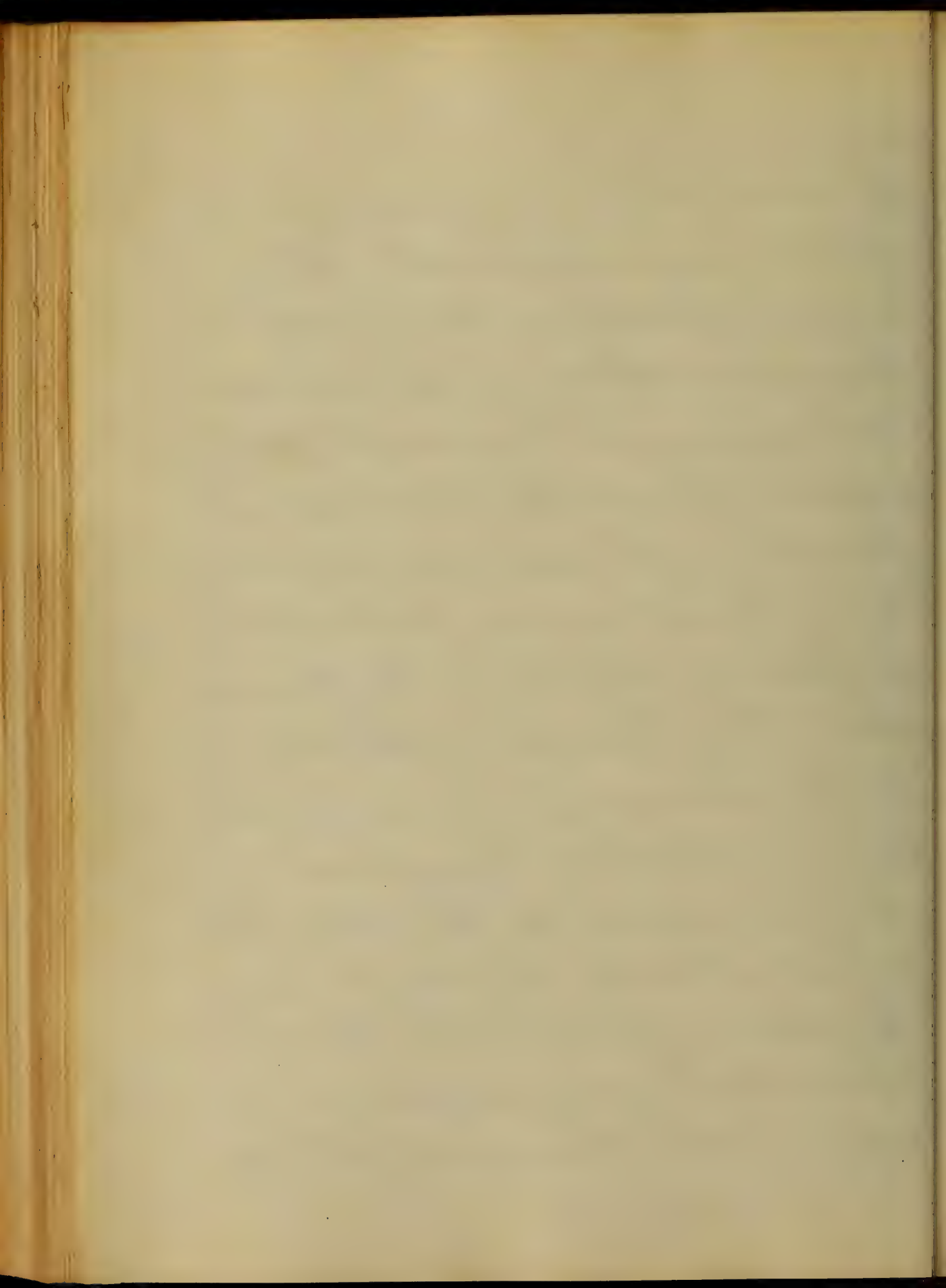
have greatly altered the usual is
natural the skin soft in moderate
cases the tongue is moist throughout
the disease but in the higher grades
it becomes dry and checked and
becomes moist in the remission
Sometimes the patient has soreness
of the back part of the tongue or
gorges which causes hawking with
discharges of a yellow mucous in the
majority of cases there is more or less
tenderness upon pressure in the
epigastrium there is a sensation
of weight felt in the region
of the stomach this tenderness
and pain of the epigastrium is
not experienced before the third



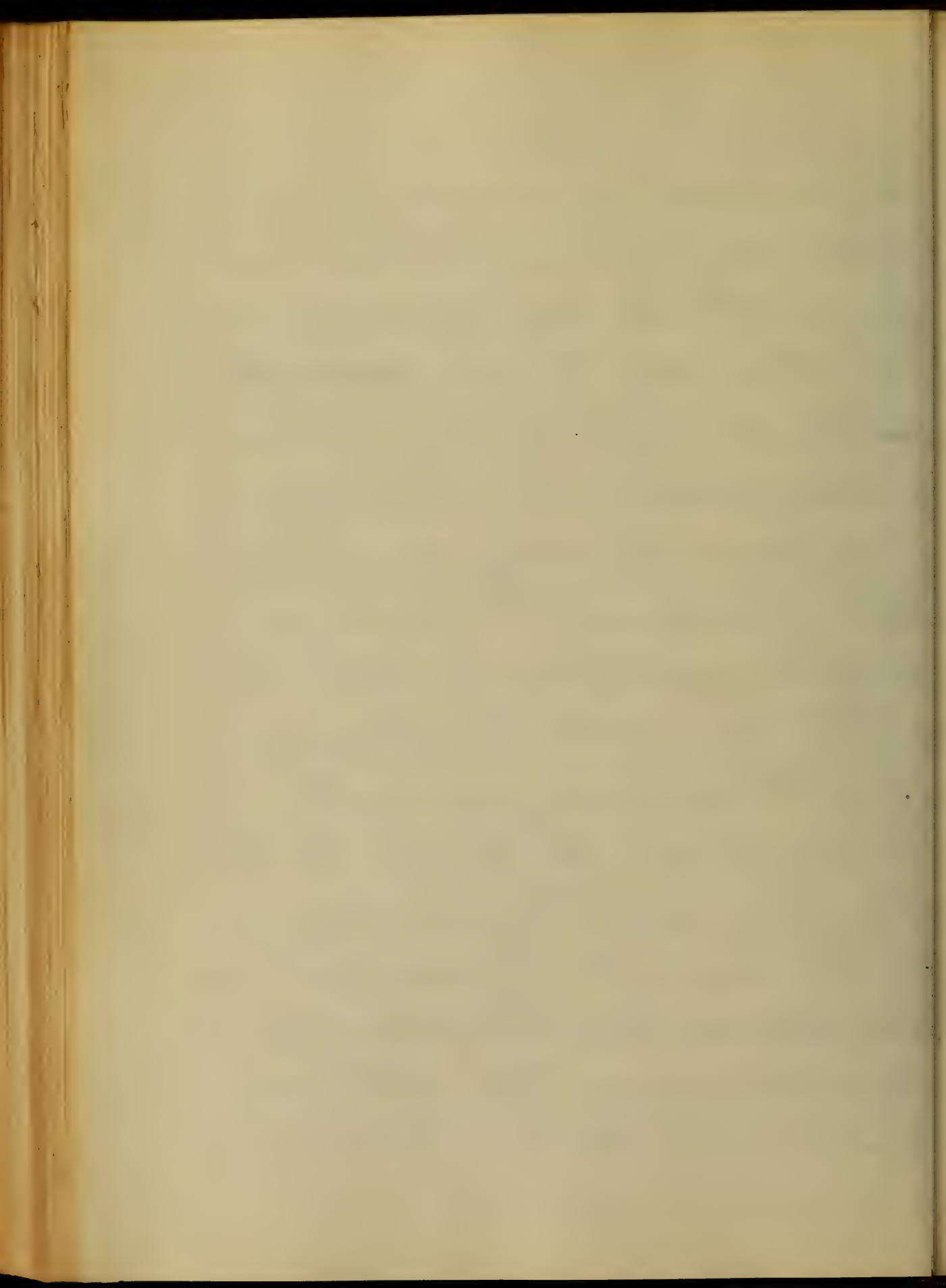
or fourth day and increases as the
disease progresses. Nausea and vomiting
are frequent attendants upon this
fever; these symptoms are most
troublesome when the disease is
highest the matter ejected is
of a yellowish, greenish, bluish
or brownish colour and a bitter
acid taste it is often difficult
for the stomach to retain
medicine or drinks. Young
mild cases run their course without
these symptoms the bowels are
constipated in the early stages
purgatives act sometimes with
great difficulty the stools
are disordered, dark colored and



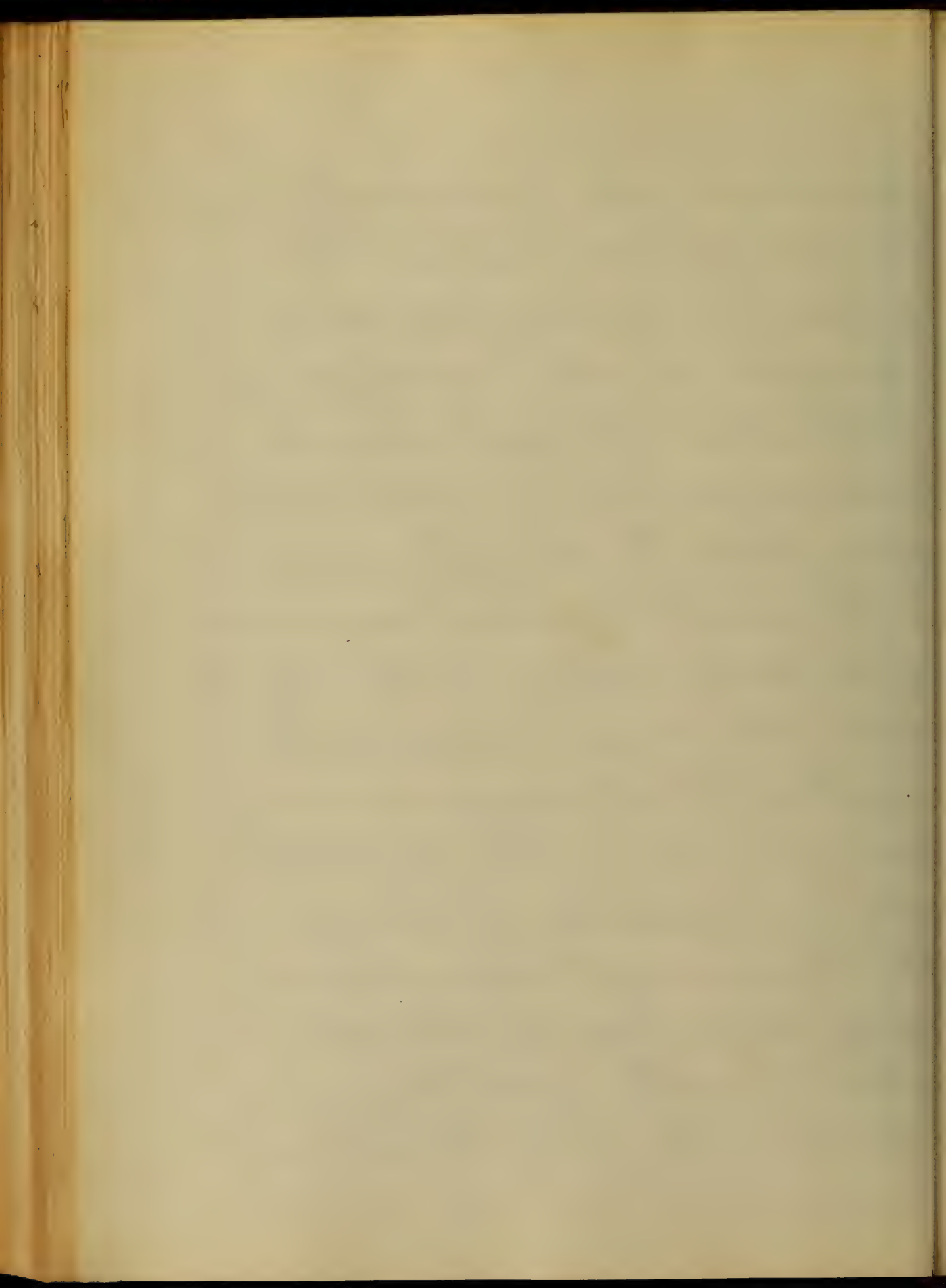
offensive with some shades of
yellow, green, or black. The
urine is scanty and of a yellowish
brown or reddish and turbid colour
colour one of the most striking
characteristics of the disease, and not
present in all cases, is a yellowish
hue of the skin and of the white
of the eyes, this makes its appearance
about the third or fifth day
of the disease, in some bad cases
it is of a dark or bronzed hue.
Such are some of the symptoms
which attend this disease, however
the disease retains a distinct
character it generally runs on
when not interrupted by some



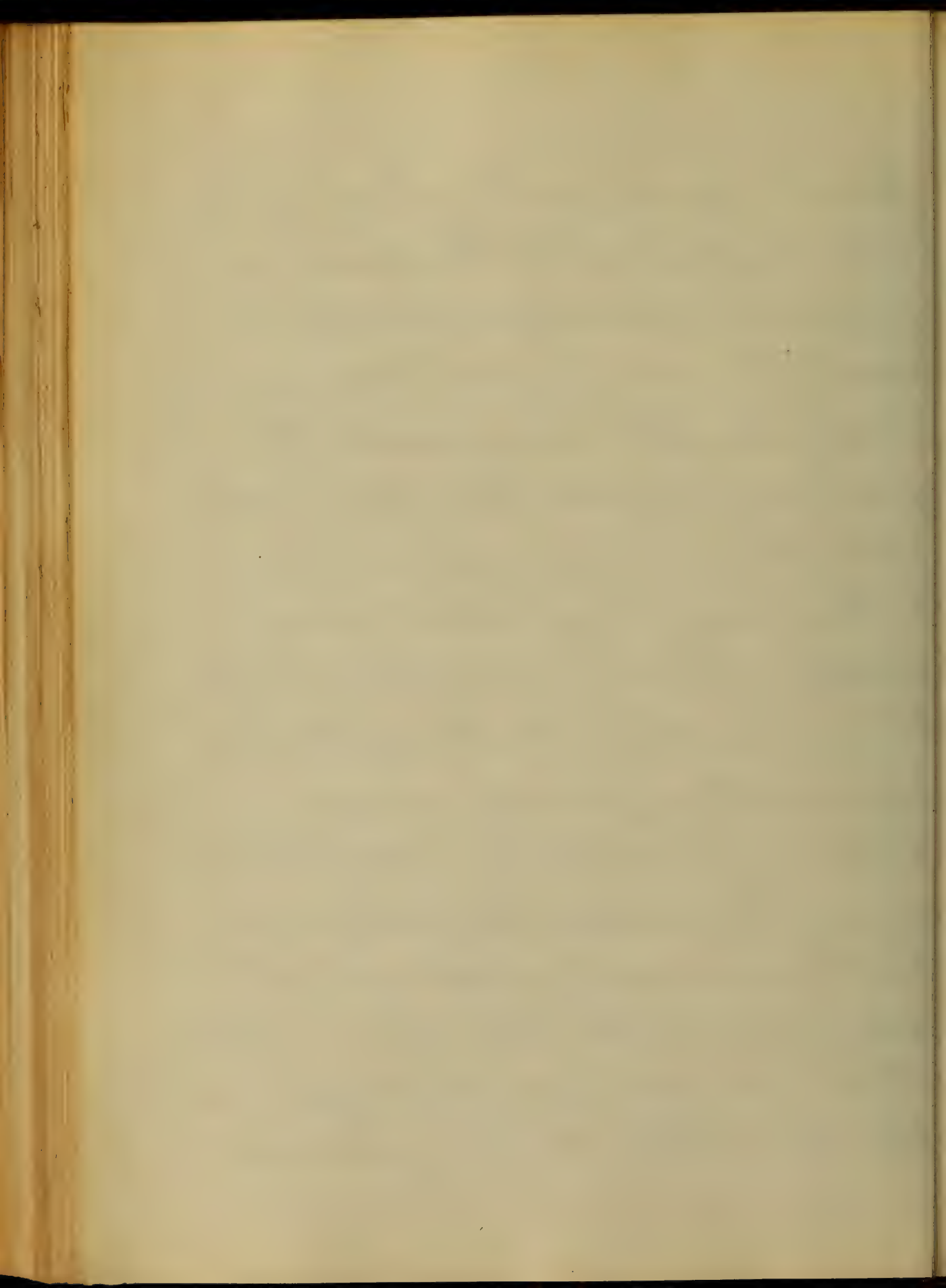
in three weeks or even more, in
severe cases it approaches the continued
fever. At the end of four or five
to fifteen days the fever begins to
decline, or ends fatally, or takes on
a new character. The first signs
of a favourable change, are a steady
pulse, moisture of the tongue and
a softer moist and cooler state
of the skin and the disease goes
off with a profuse perspiration.
This is offensive to the smell the
diarrhoea which takes the place
of the perspiration is usually viscid
and copious, tar like discharges
Sometimes occurs towards the close
of severe fevers and this is consid-



a urinate. Signs occasionally in the
in the life, occasional this
period this is also regarded as
urinate in other management cases
of the disease the pulse becomes
more frequent and smaller and
more feeble it sometimes ceases
entirely at the wrist, some hours
before death coldness in the hands
and feet gradually invades the
system the skin assumes a dusky
or purplish hue the extremities
are covered with a clammy sweat
the tongue dark brown, clammy
or dry and chapped, hicough occurs
sometimes with eructation of
dark matter from the stomach

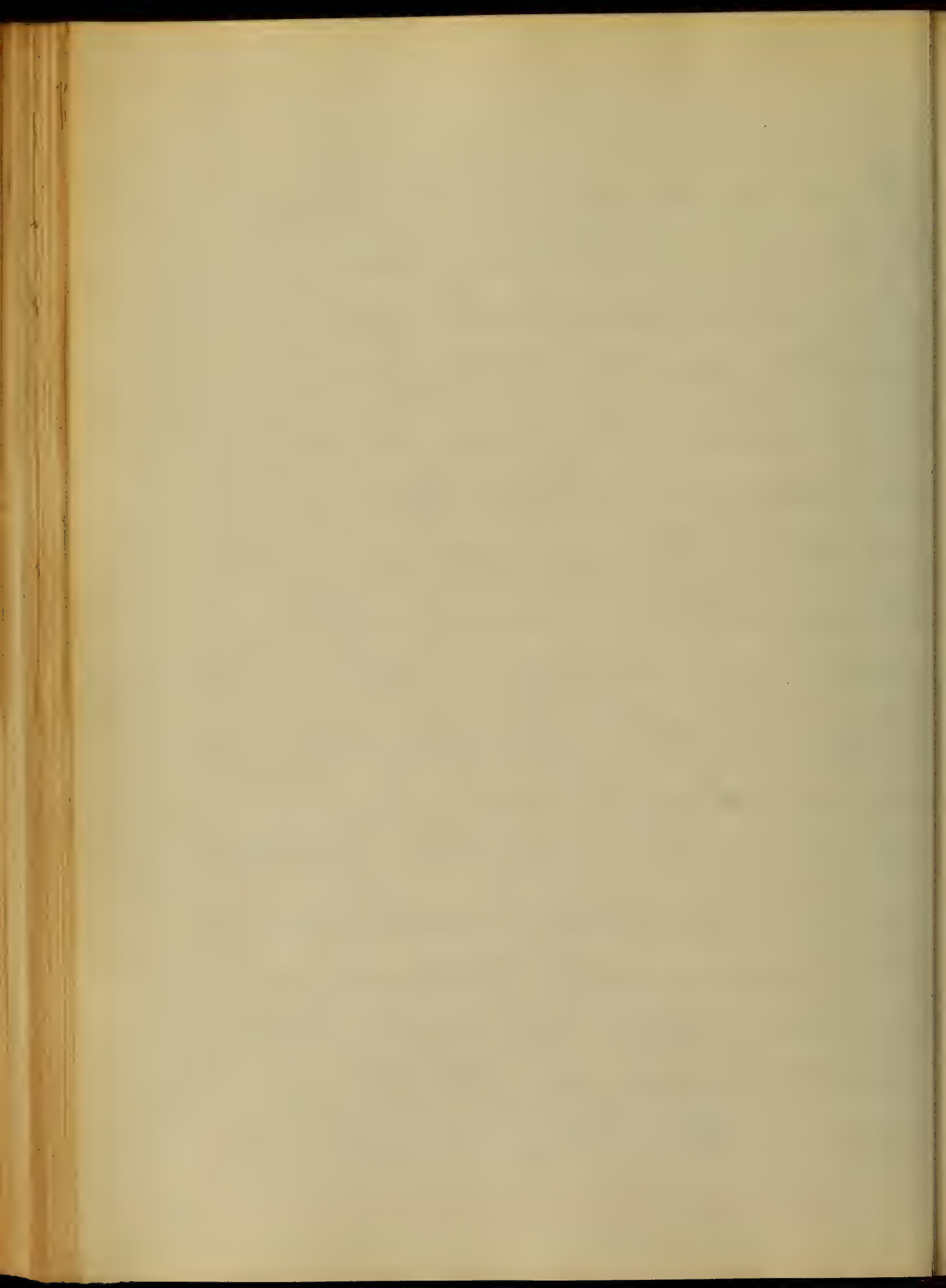


Black liquid matter, blood or
a fleshy, spongy like the mushrooms
& flesh are discharged from the
bowels the urine is dark brown and
scanty or quite suppressed, the
features are fixed, the eyes become
dull delirium stupor, or coma
takes place the patient passes
usually without consciousness into
the dying state, death under these
circumstances generally occurs
between the seventh and fourteenth
days of the disease, the pulse may
rise to 140 or more, sores will be
about the teeth tongue and lips
stupor or delirium fistling in
the bed clothes, slipping down in

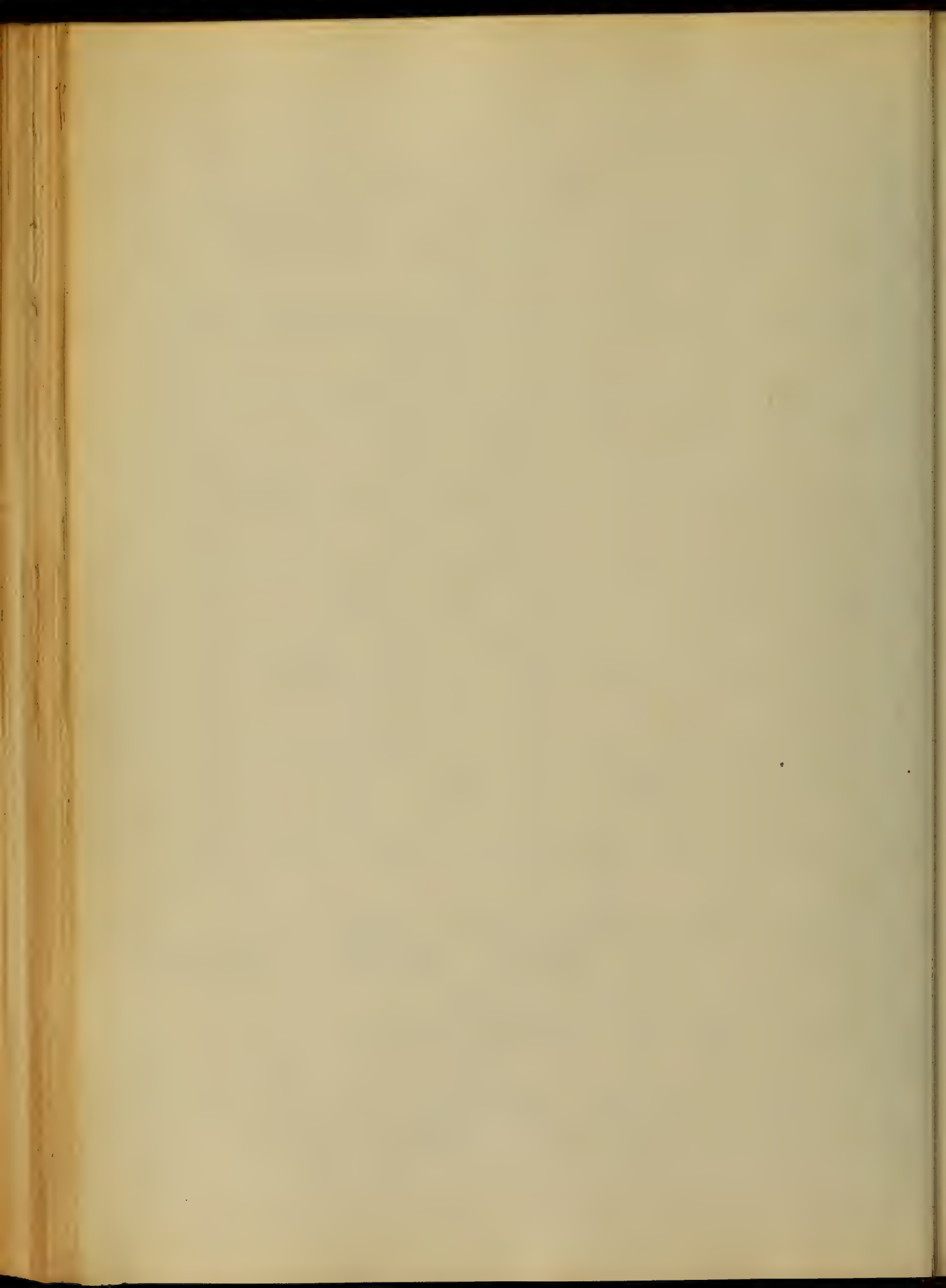


The red fever. The patient thinks himself
in a burning place sometimes rise
from his bed and sinks exhausted.
When the fever takes this form it
may run on for five or six weeks
and may end favourably.

Thortification, sometimes the
disease starts at once with
alarms, violence, after a
night while the patient may
be seized with pains in the
head, back and limbs suffering
in the epigastrium and vomiting
of viscid matter, persons exposed
to such attacks are seized with
fever, delirium, at the very
outset the stomach and liver

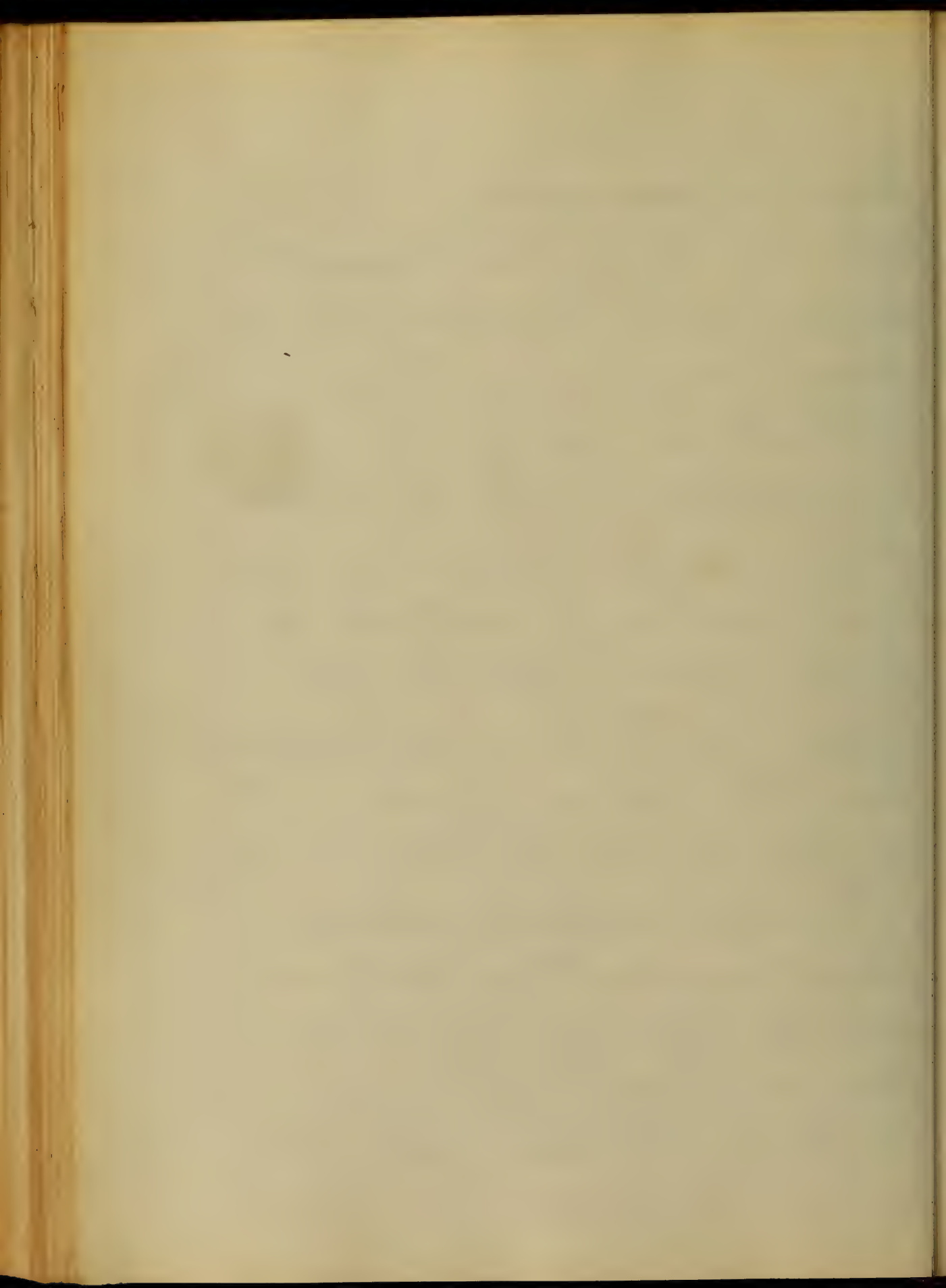


is an acute attack the stream
flows its usual course towards the
surface. In the most frequent
form a bilious excess is known in
this country by the name of
colic. In other cases it is rare that
spasmodic cases of bilious form proceed
without some sign of inflammation
burning pain in the epigastrium
Tenderness on pressure vomiting,
Inflammation of the bowels
This occurs most in advanced
Stages Dysentery in some
seasons is associated with remittent
fever there is no pain in
the right hypochondrium the
Spleen is swollen there is



Subjacent to percussion on the right
side sometimes severe. Reason the
pains are not this is owing to the
Spinal marrow hemorrhages

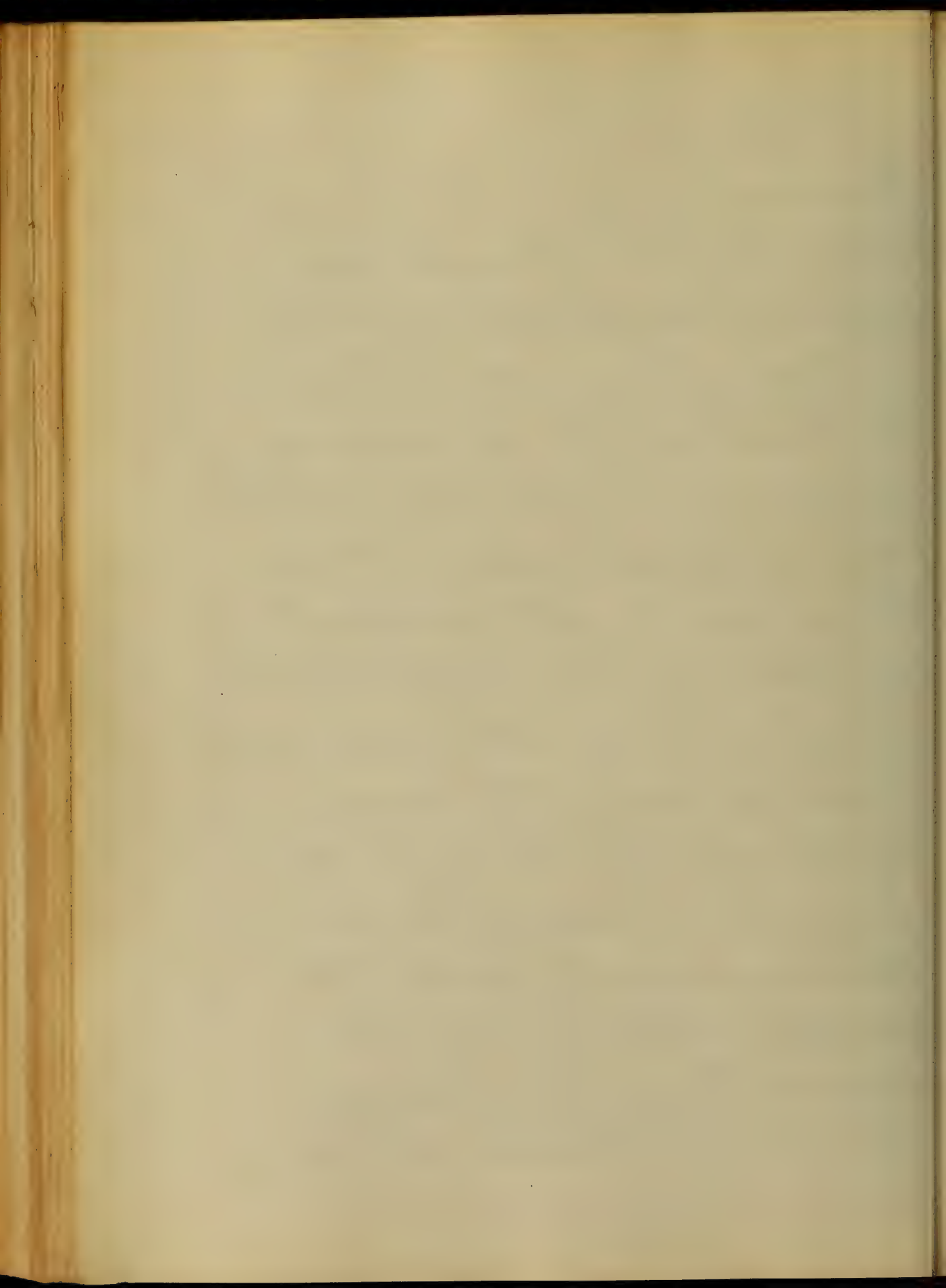
Sometimes occur
Constituent in the mild cases
is rapid and favourable but in
severe cases there is considerable injury
to the system anatomical
characters. There are various organs
presenting signs of inflammation
in this disease the mucous membrane
of the bowels is inflamed, Bruners
glands are sometimes inflamed
and the track of the bowels has
been noticed to be inflamed
it should be shown near the



commencement of the disease it
coagulates without the suggestion
more advanced stages it becomes
only a cause of bilious remittent
is the miasm which precedes
the miasm that is considered
benign to favour the disease
Cleanliness and ventilation is
of great importance in bilious
remittent fever old wood decayed
regulators and foul air are
incurious and may be the cause
of bringing on the disease
Stoves are less liable to this
disease than the walls, In crust
Africa is due to the walls
which are liable to the disease

1

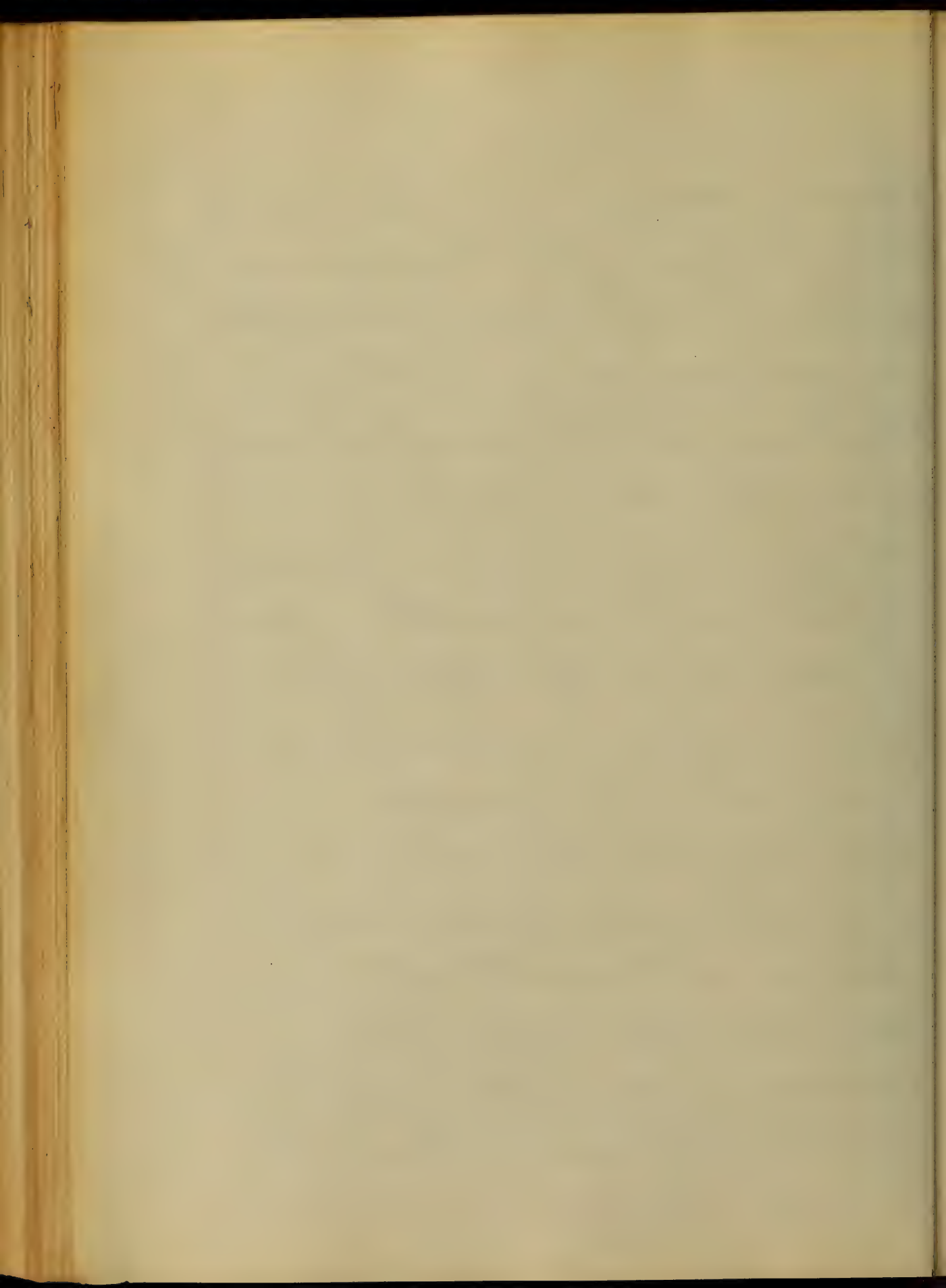
Persecution in the eyes
where this fever abounds may be
attacked in the dead or winter
season. The opinion which
viewed all the phenomena
of this fever to gastritis scarcely
requires to be combated it no
longer meets with supporters.
Another view of intermittent
fever is that of acute inflammation
of one or more of the organs
especially the stomach, liver,
or brain. Cases of the kind
do occasionally occur that
pass Intermittent sometimes
assumes the appearance of a
remittent. These are secondary



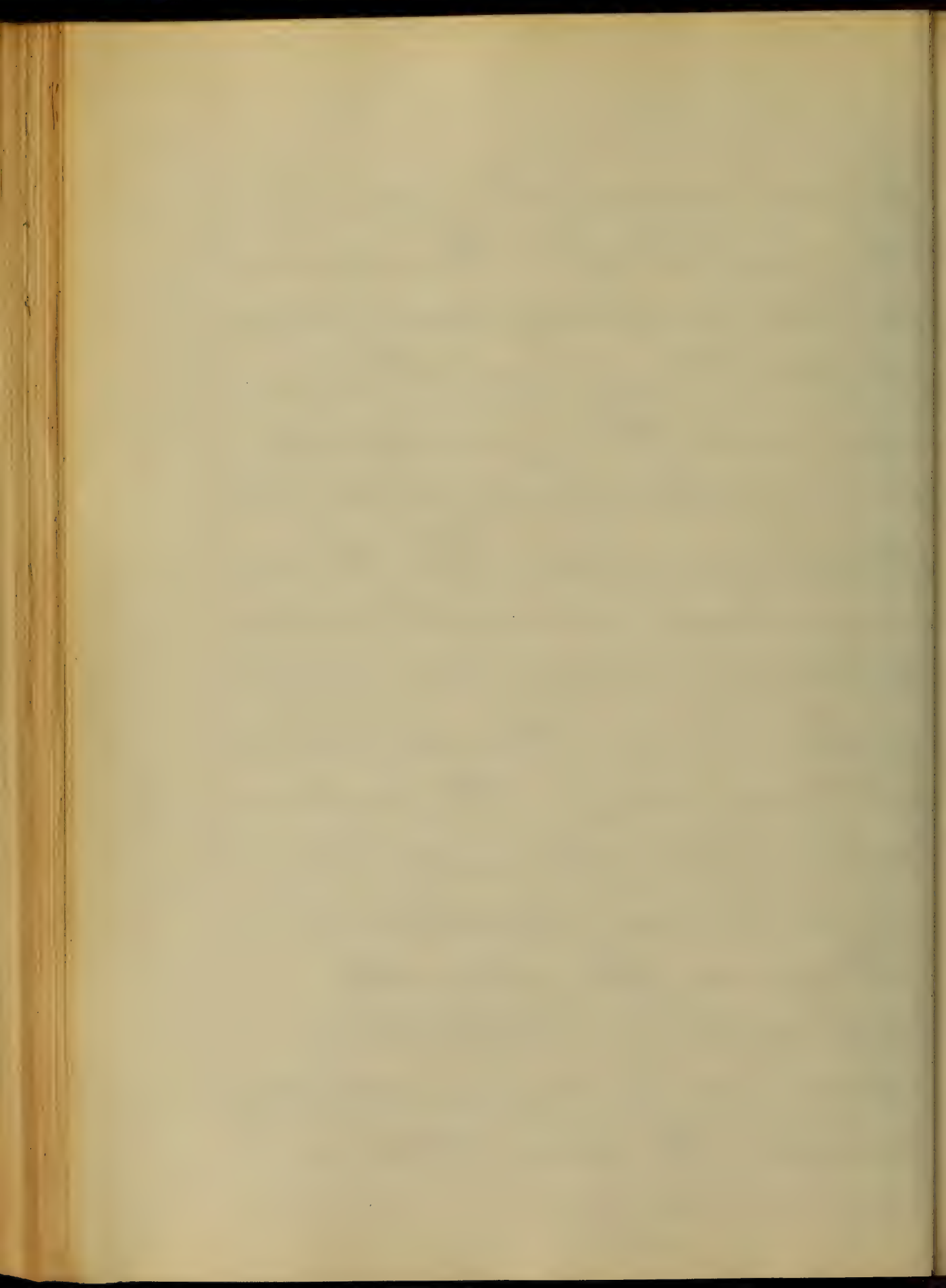
Cross making their appearance
Several days after the commencement
of the attack, these eruptions then
become more or less inflamed.

Diagnosis Little need be said
upon this subject here.

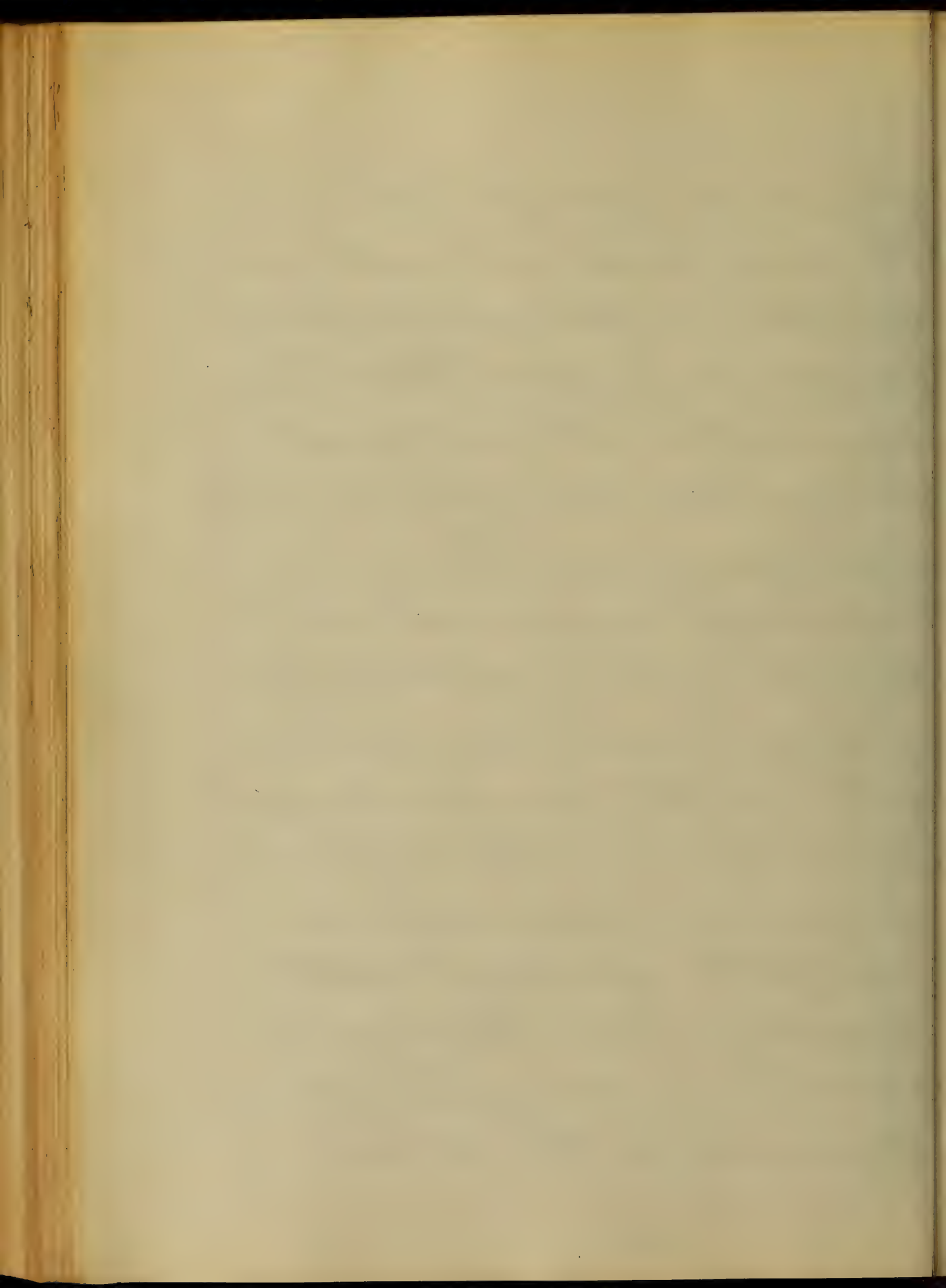
Bilious remittent fever may
be taken for remittent fever
if ever when it is the
bilious form is remittent
never lost. The regular
paroxysmal character, and
disposition to begin and to
end in intermittent fever.
Second the epigastric
uneasiness and irritability
of the stomach. Third the



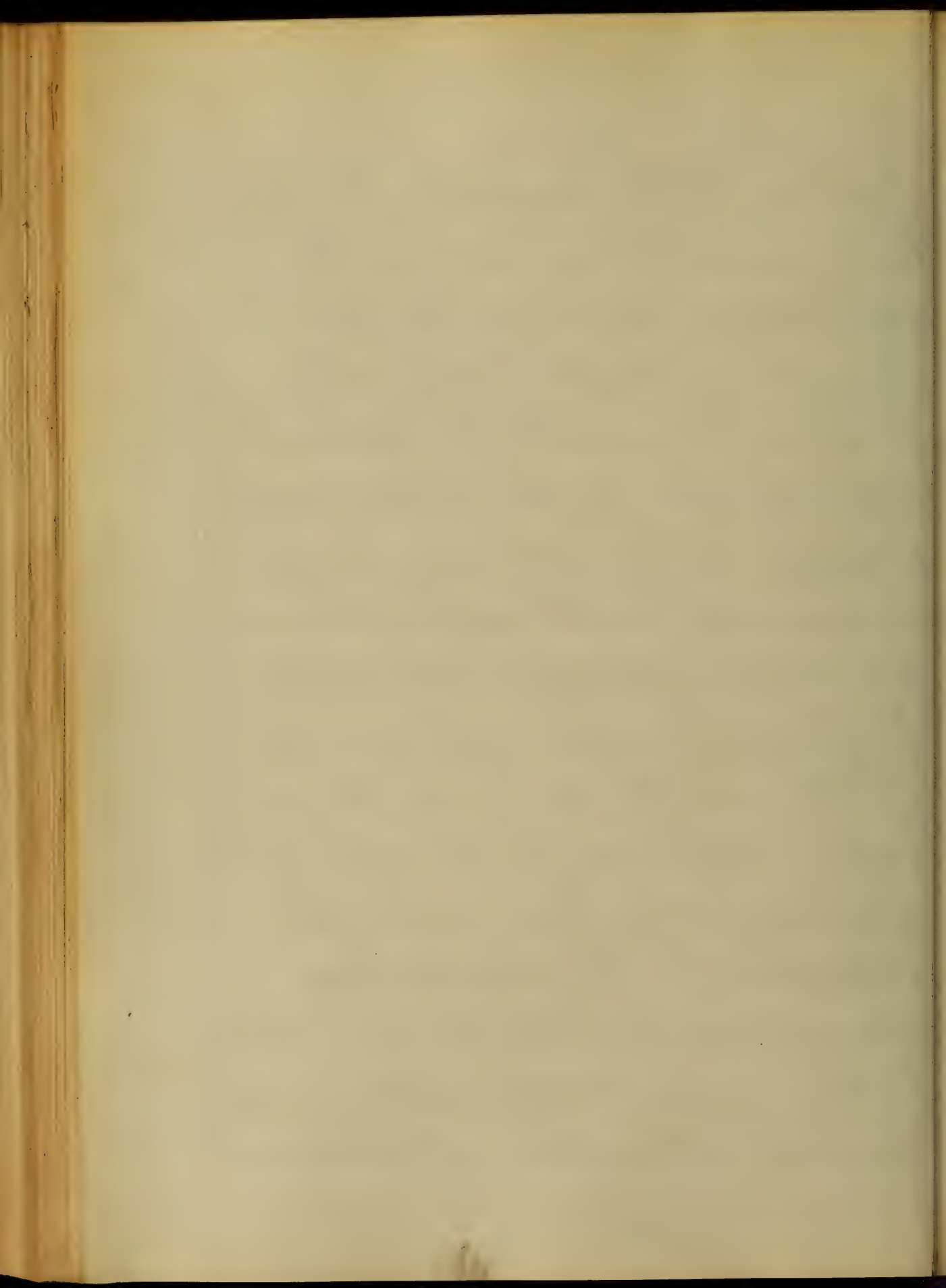
about constant pain in
the head, the excessive
bilious vomiting and purging
of bile, the yellow skin and
eyes and the jaundiced
urine, The Season of the year
the place where the disease
may have been contracted
and the exposure of the
patient and the length
of time since the exposure
when these symptoms occur
it is Bilious remittent
Prognosis, This is generally
favourable, the mild forms
always end in recovery unless badly
managed, the severest forms



It is good to prompt treatment
this disease becomes most fearful when
neglected, or mismanaged. Simple
cases are less dangerous than those
complicated with inflammation
heat of the skin, tenderness and
frequency of pulse. This is
considered unfavorable, but
does not indicate great danger.
Among the alarming and
often fatal cases we observe
pulse coldness of the skin low
delirium or coma and
evacuation of dark matter
hemorrhage from the bowels
involuntary evacuations and
suppression of the urine.

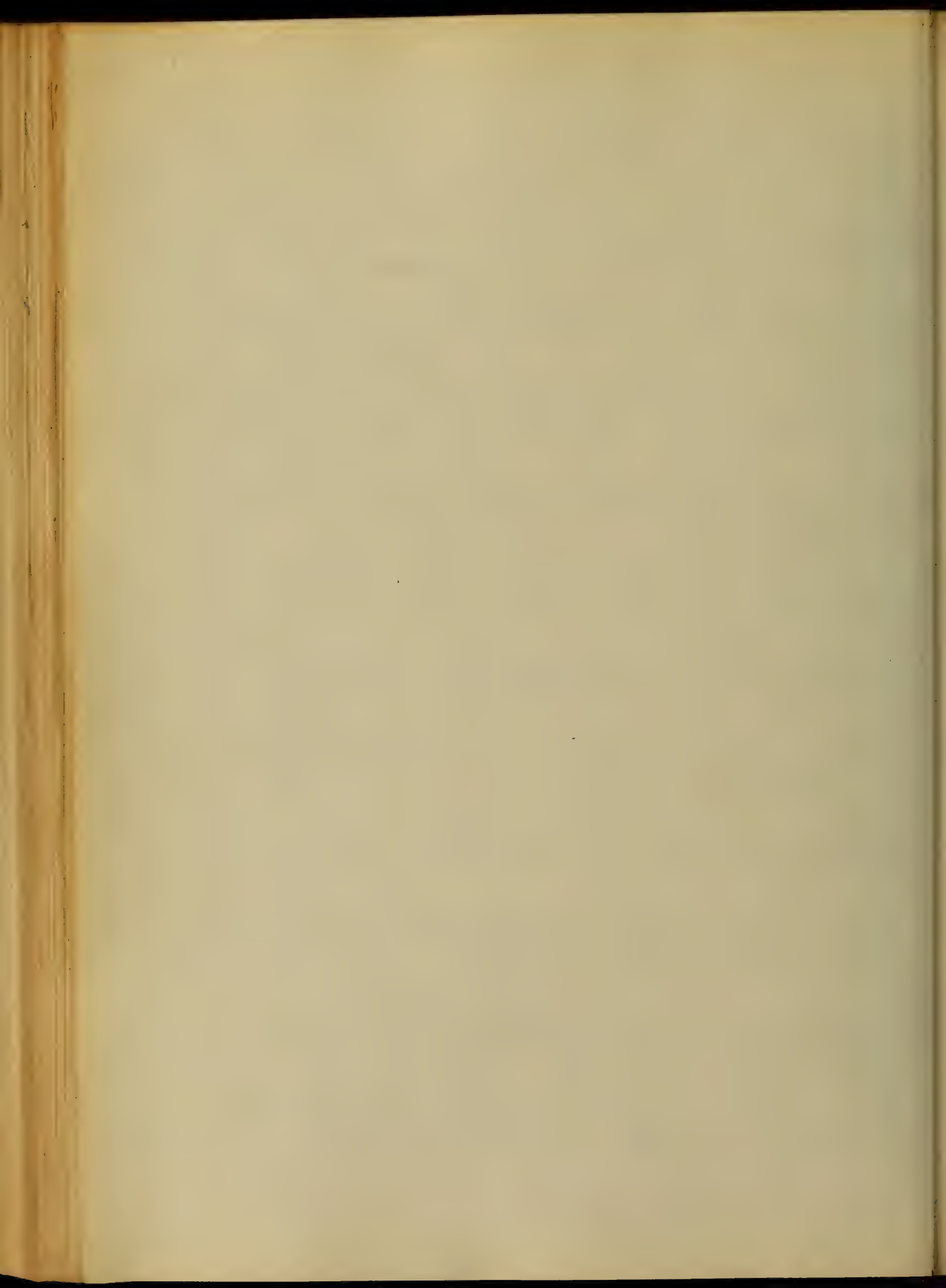


treatment it does not often happen
that we see the patient in the
early stage for it is too brief
to require much treatment
during the period the patient
should lie in bed and receive
warmth to drink may be given
Lemonade toast water, &c. &c.
Tea and acid applied externally
to the feet and extremities
if the chill is severe the hot
vapour bath may be used if the
Evacuation allentia must be
directed to the alimentary
canal an emetic may be given
if this occurs directly, a tonic sub-
sequently, Succinum or tartar emetic

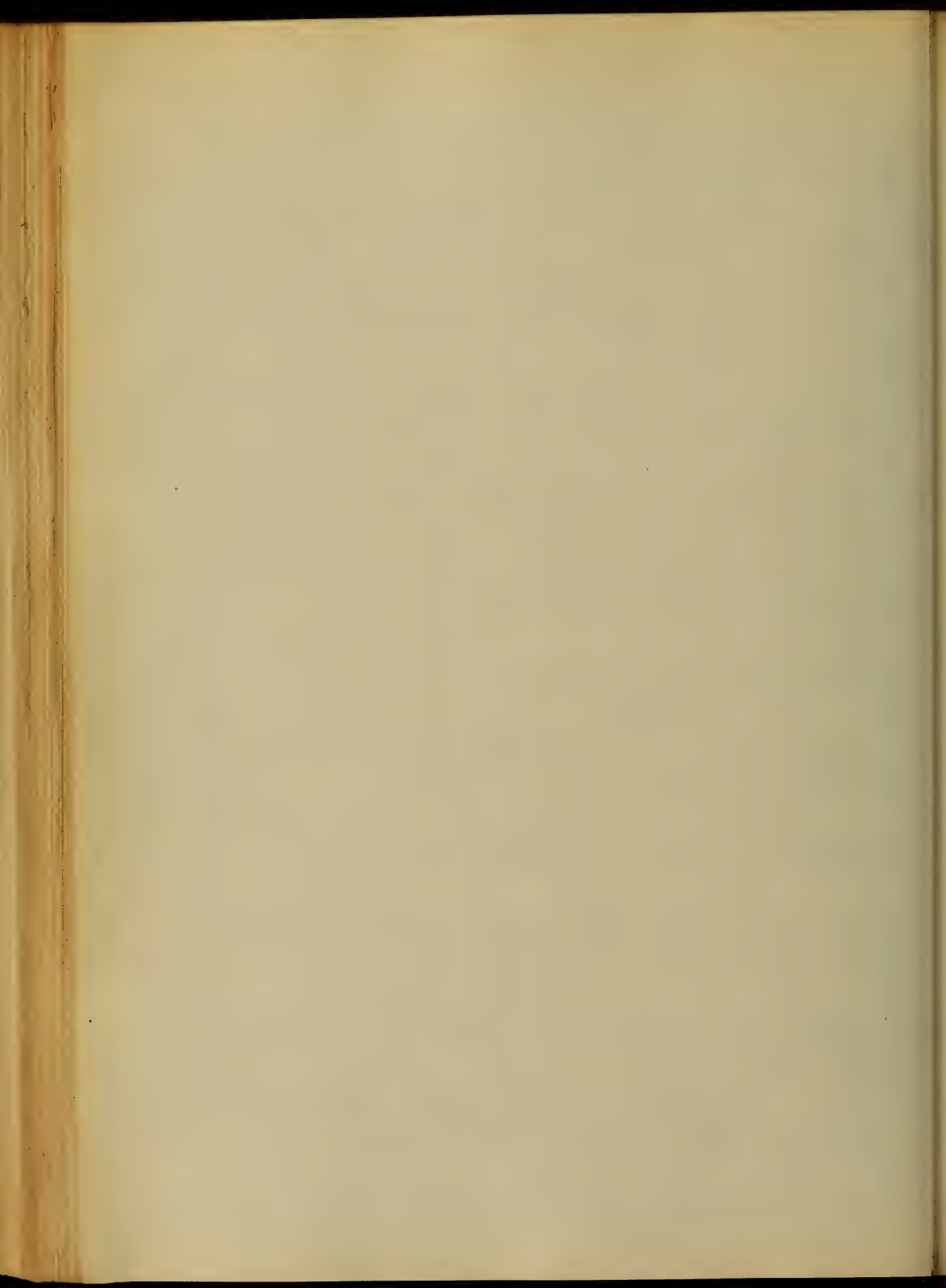


Mus. Should be allowed by warm
water or warm Chamomile tea
An active cathartic is always
needed. Calomel is the best
adapted to the case, it remains
best on the stomach and acts
on the liver and secretory

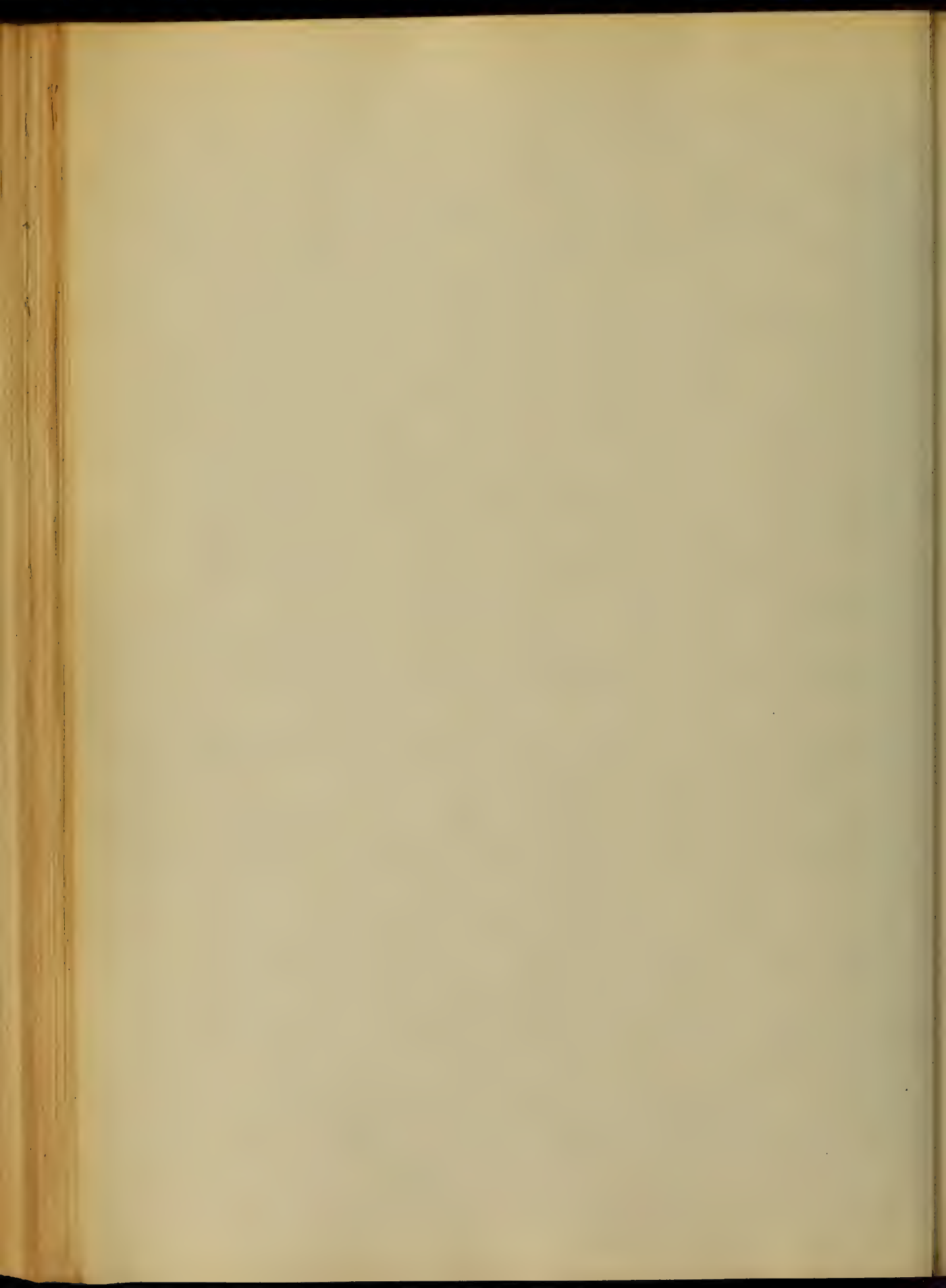
functions and has a tendency
to act on the circulatory system
see the dose is from three to
or fifteen grains and in the
course of eight or ten hours
should be followed by full re-
course of sulphate of magnesia
it may be given with chubarb
or compound extract
of colocynth eight or ten



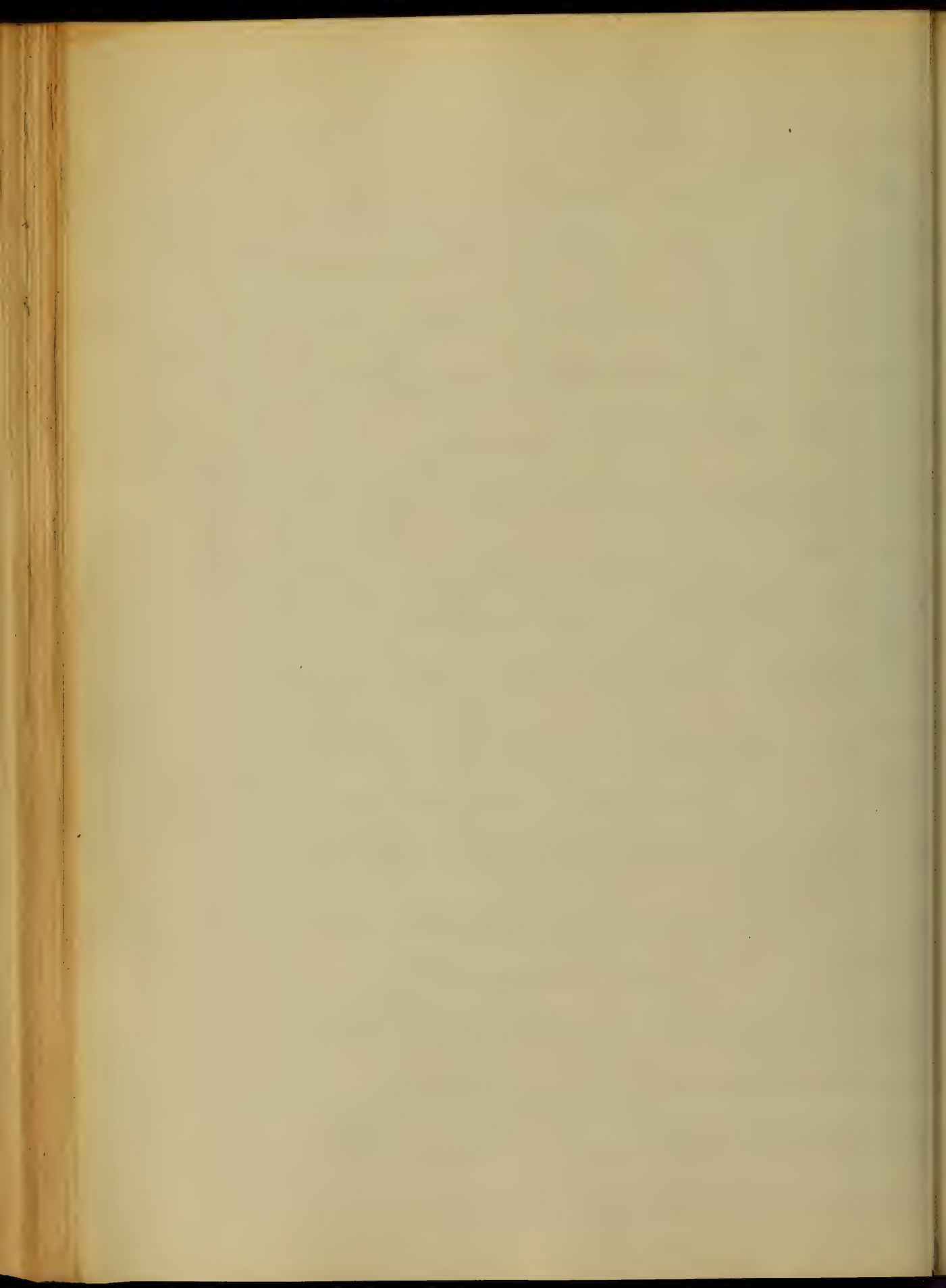
grains of each being given for
a dose, Three or four compound
cathartic pills and infusion of
Senna with opium soft manna
and fennel seeds, of which a
small wineglass full may be
given every two hours till
it operates the cathartic
Should be given as soon as
possible if the patient pleads
as cannot Tuberculous which
causes pain in the stomach
and bowels the mercurial pills
may be given in doses of five
to fifteen grains combined with
extract of jalap or rhubarb
After the bowels have been



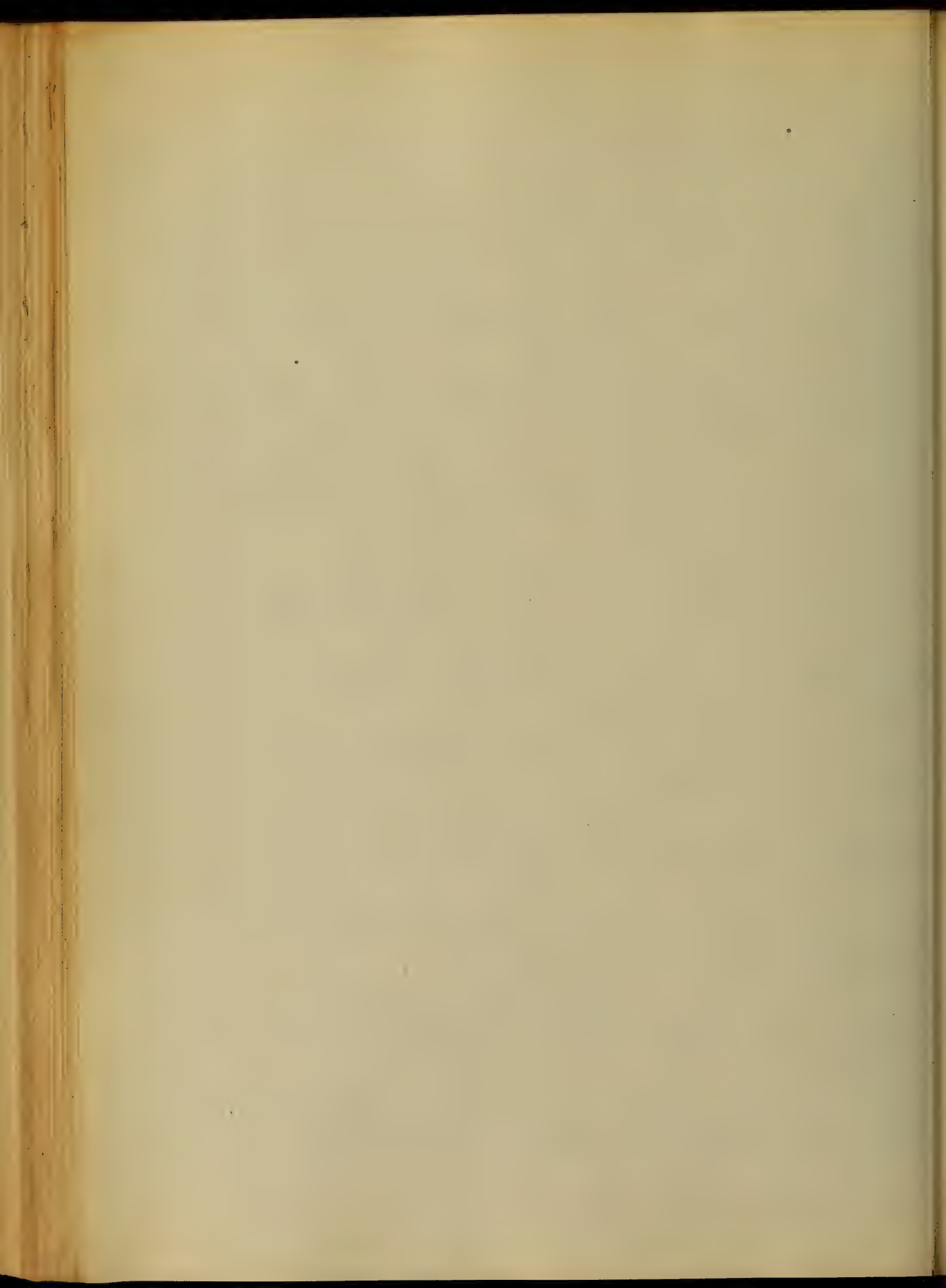
thoroughly examined it was
important to have them examined
the amount this is - has done in
medicines much are given for other
purposes. Bleeding may be of great
importance in some and in these
patients one should be practiced with
caution. Blood may be taken from
the arm in patients with full pulse
no flushed and pain in the head
especially when these symptoms
continue after a purgative, blood
may be taken to the amount of
eight to twenty ounces when the
pain does not cease, opium may
be given in one grain dose as it
relieves the pain after the



valent. The chertic should be
avoided in the treatment of
rheumatism. The diaphoretic may be
used with advantage, provided the
! The dose of grain or lactar
milk may be given even for
or more than usual. The remedy
draught is the best diaphoretic in
Rheumatism. Remittent fever it should
always be prepared with citric
acid or lemon juice and carbonate
of potassium. Should have Citrat
of Potassa for its base in advanced
stages in which rheumatism
is associated. The compound powder
of Stoevadam and other may
be given in doses of five or ten grains

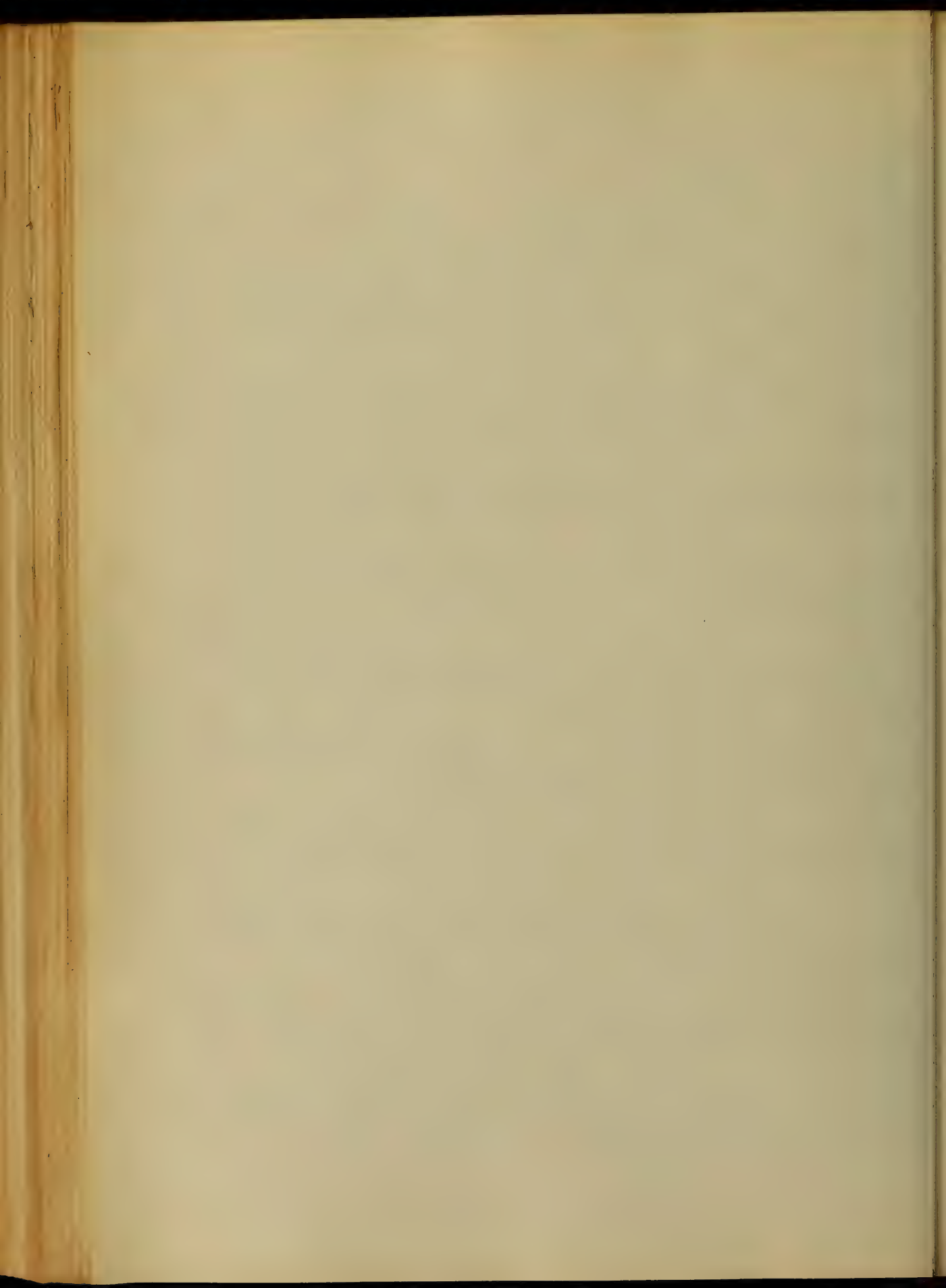


It is a well known fact that
the use of Quinine in the treatment of
malaria is not only beneficial in
acute Exacerbation in mild cases
a Remittent and other, remittent will
be required the cure may be readily
obtained by the use of Quinine
Carbonate it is necessary that it should
be given in all forms of Malaria
Remittent. The dose should be
from about 10 grains every hour
or two but a quinine is the
most important remedy in the
treatment of certain cases of
Malaria. From 10 to
Twenty grains given in six grains
doses is to be taken at times.

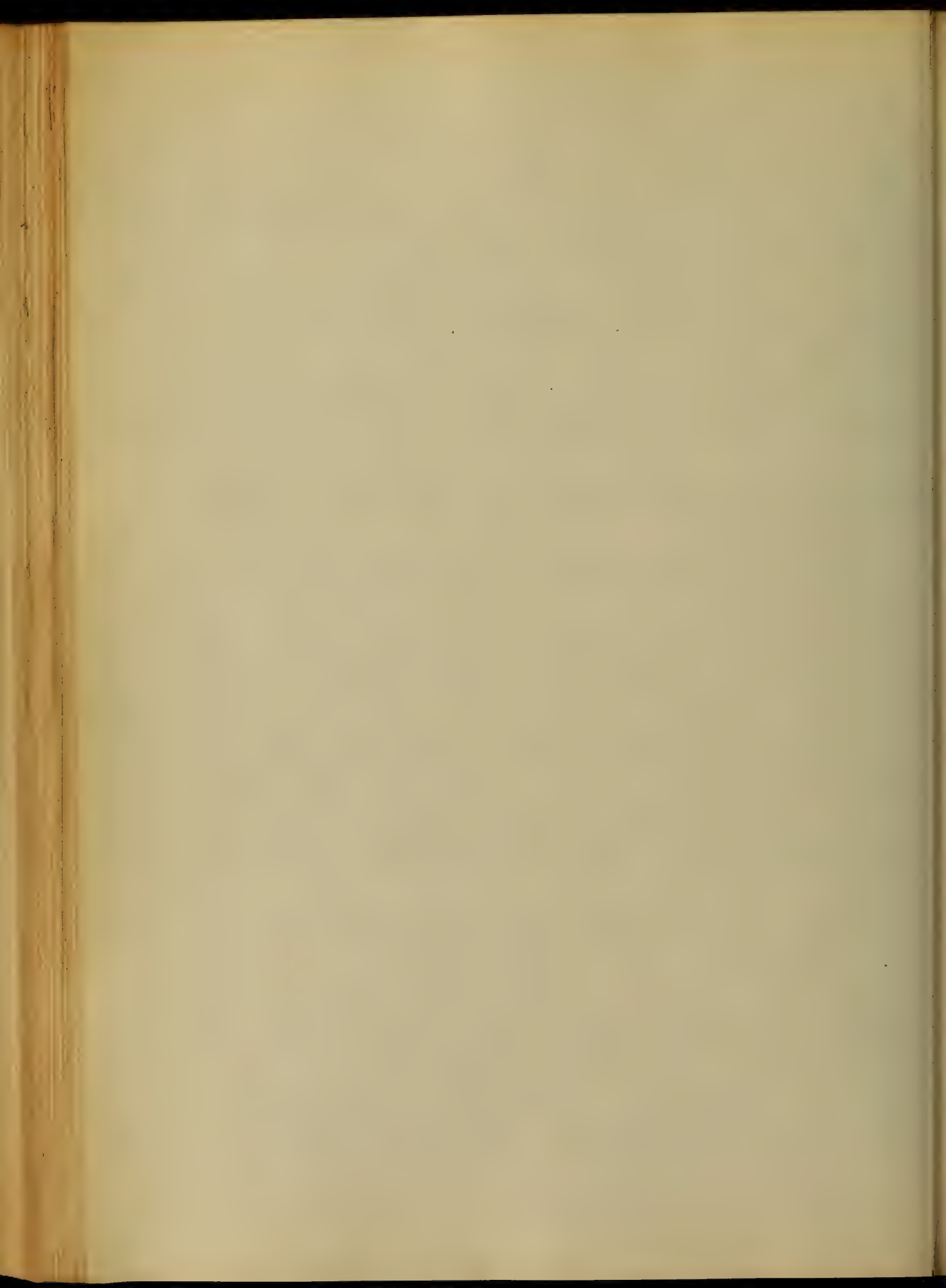


Therefore this should be continued as
long time as the disease should
continue exist at the Junction
of the sixth & seventh
ribum with the same quantity
of the quantity and the sixth
disease. Critical case. This
shows the mercury will and sublimed
Mercurius may be given together.

It is not what is very common
may be treated with Camphor
Assafetida which is used in
the most effectual remedy is must
be given. There is no diet more
suitable during the severe exacerbation
than ice cold water it should be taken
in small quantities, not more than

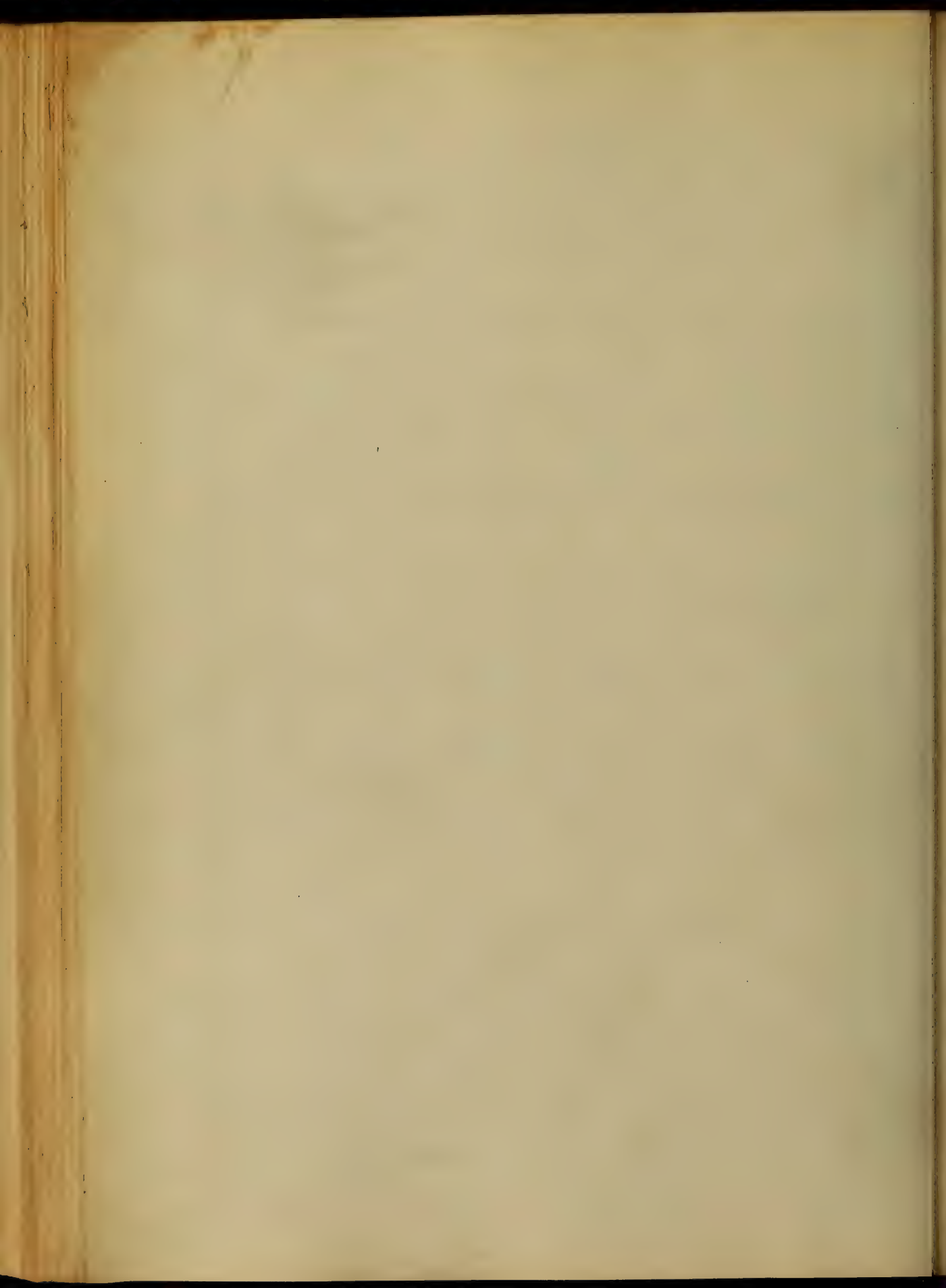


Two Spoonfuls of lime water mixed
with current juice, or very few
leaves of Basil and this is
very good. Sinks the Stomach
A gum Arabic dissolved in water
in the proportion of one ounce to the
 pint it may be taken with
Sugar, lemon juice, barley water, or
the water. If the patient may
be made take a Cube of black
with a piece of dry Basil, or the
Strength may be substituted in
gruel of oatmeal, ground rice,
or Indian meal, to which a
little milk may be added, was
served either or Stewed with
some must be taken that will



hard, under the Stomach with them to
require further Support, Animic
broths may be given, such as, beer
&c. There is a restriction of the food
which may be given, but with
care so that the Stomach be
not over loaded.

With these remarks, we extend
or commend our sincere thanks
to you, my Superior Teachers of the
well-illustrated, honest and Religious



1867 -

A Clinical Report

Submitted to the examination

of the

Board, Regents and Faculty of Physic

of the

University of Maryland

for the

Degree of Doctor of Medicine

by

Henry Darling

of
Maryland

Case No 1

W^m Waters-waiter Oct 31- Admitted April

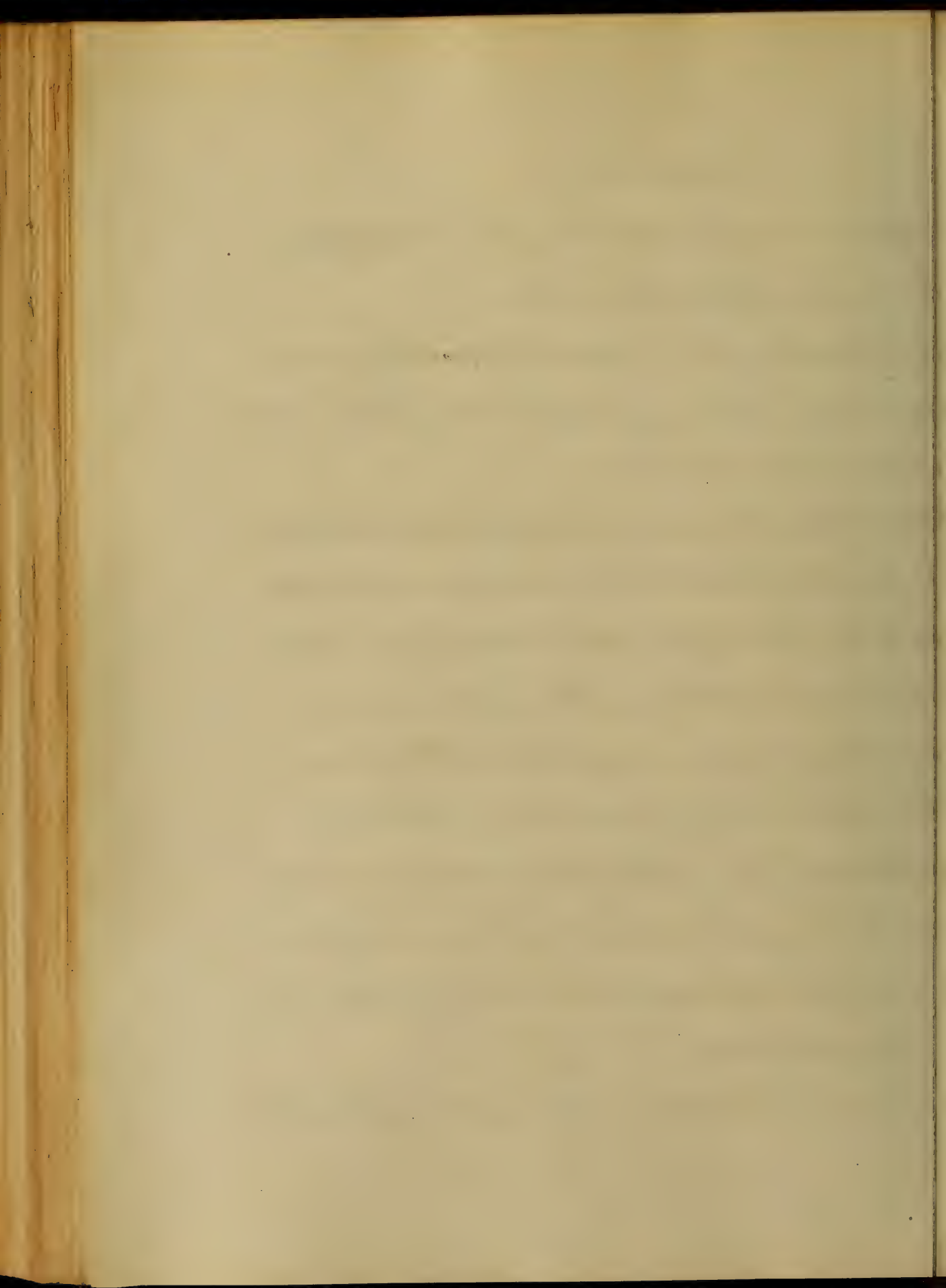
20th- has been sick three days-

His parents are both dead- his Mothers general health was always good but his father died of some chest trouble-

Patient has lived in a malarious district and has had Intermittent fever- has also had some chest trouble before- which readily yielded to treatment- otherwise his health has been good-

Sunday evening April 17th he was taken with a very severe chill which was followed by fever & copious ~~perspiration~~ perspiration
Next morning he woke up with a sharp pain in his left side which has continued up to the present time

April 21st- Patient slept well last ^{night} ~~entirely~~ ^{once}

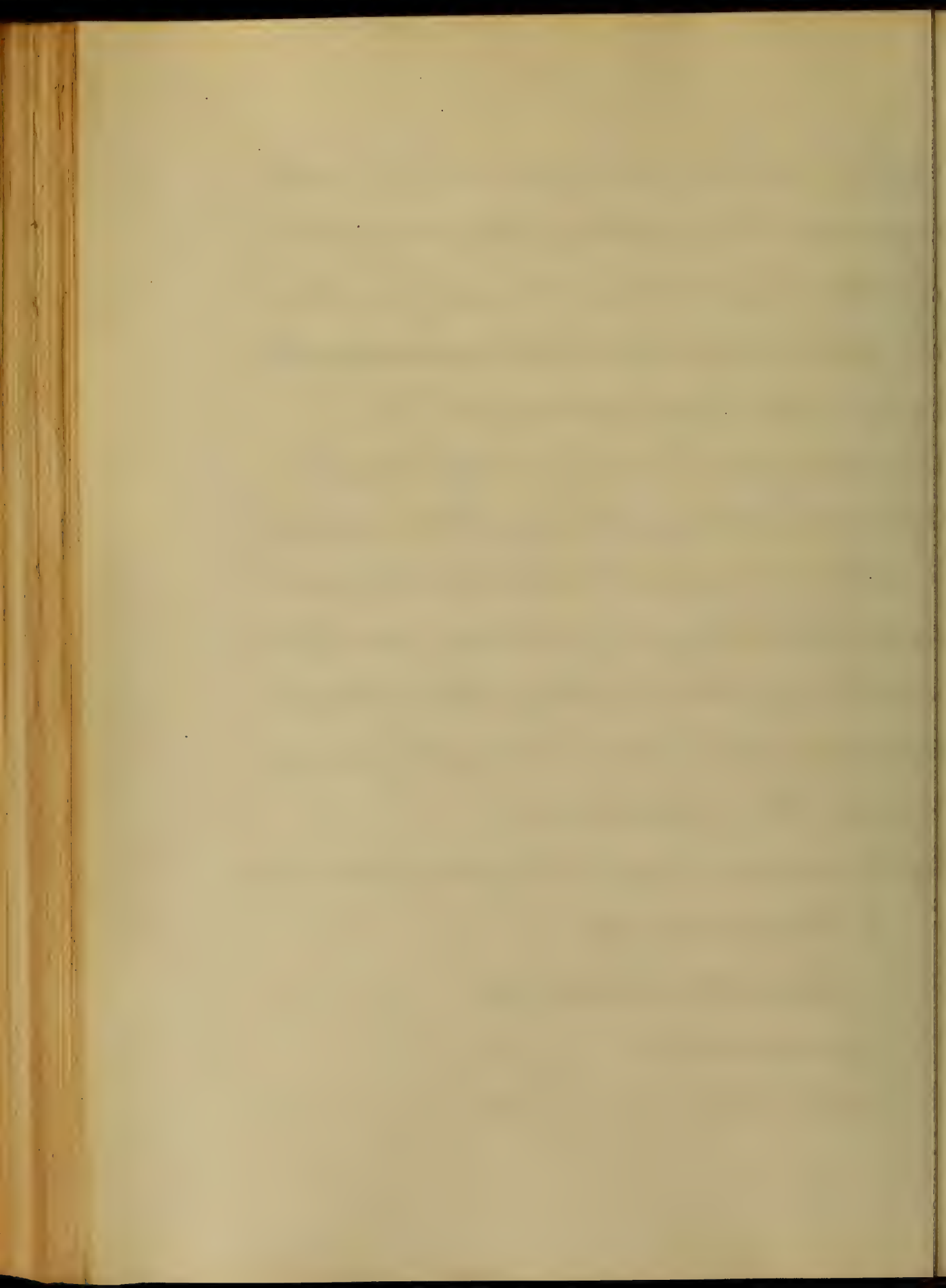


Perfectly clear - no pain anywhere except inside
Tongue moist but coated with a white fur
Appetite bad but digests what food he can
take - His expectoration is tenacious & somewhat
tinged with blood - rust colored -

Physical signs - Pulse 104 full rapid & quick
Respiration 40 hurried & labored - Percussion dull
from nipple all around to lower part of chest
auscultation - Absence of vesicular murmur in
lower part of lung - and near the middle lobe
of same lung there is a moist rubbing sound
Diagnosis - Pleuro Pneumonia

Prof Donaldson ordered the following prescription

℞ Potassa Nitras ℥i
Spiritus Etheris Nitrici ℥ij
Syrupus Scilla ℥ss
Aqua Purā ℥ij



M. S. Tablespoonful every four hours—

Evening—Patient general appearance better

Pulse 100 Respiration 32 & much easier—

April 22nd—Tongue dry and coated Pulse 100

Respiration 36—Percussion gives a dull and empty sound over the left lung posteriorly dullness not so marked anteriorly. Right lung clear—

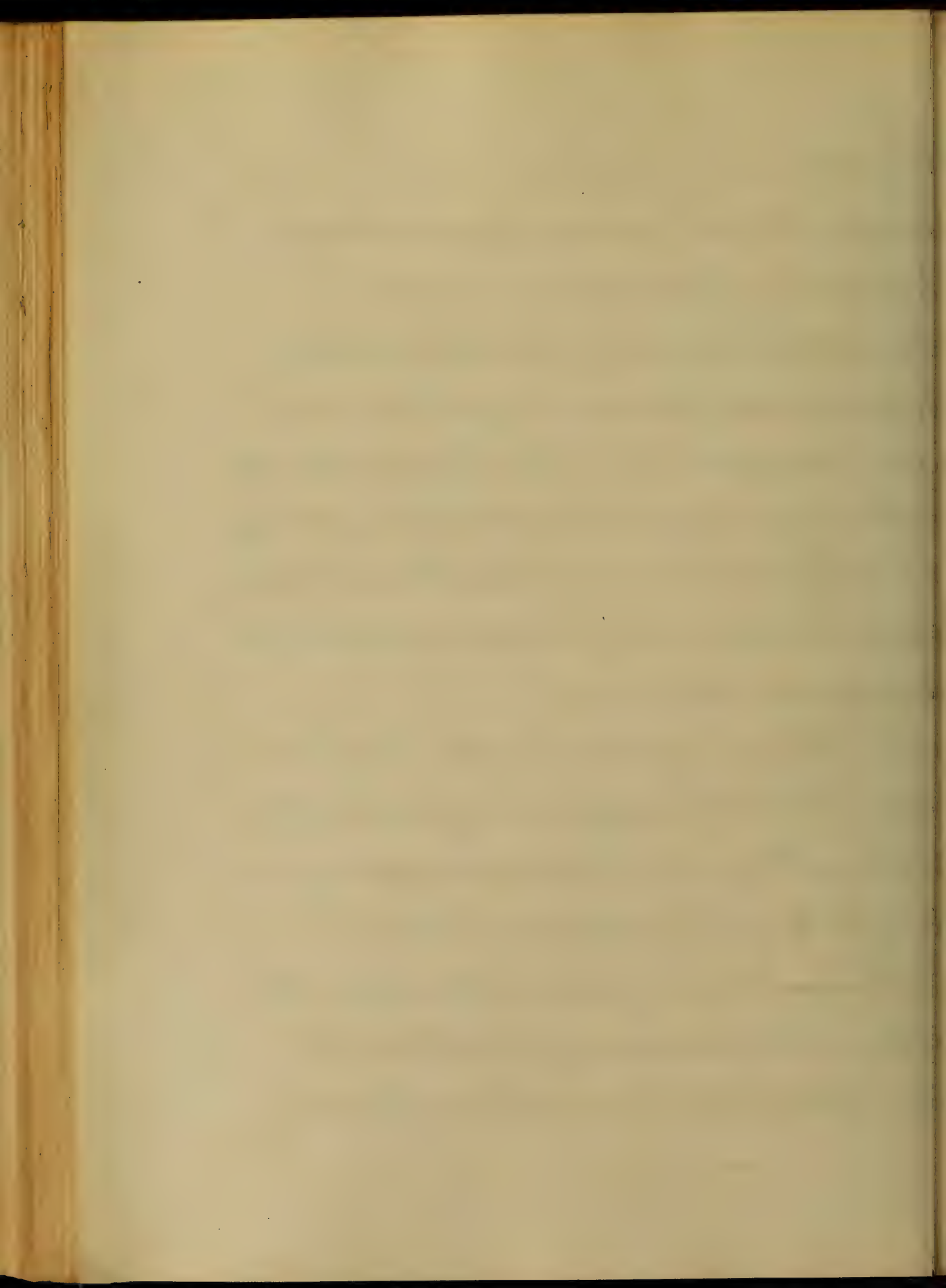
Prof Donaldson ordered a blister 3+4 inches over the lower lobe of left lung and Puls Doves 9^o X at bedtime if restless

Evening—Patient expresses himself as feeling little better but complains very much of the blister which seems to be drawing nicely—

Pulse 96—Respiration 36 & much laboured—

The thorax does not expand much but the abdominal muscles supply the difficulty

April 23rd—Patient slept well last night



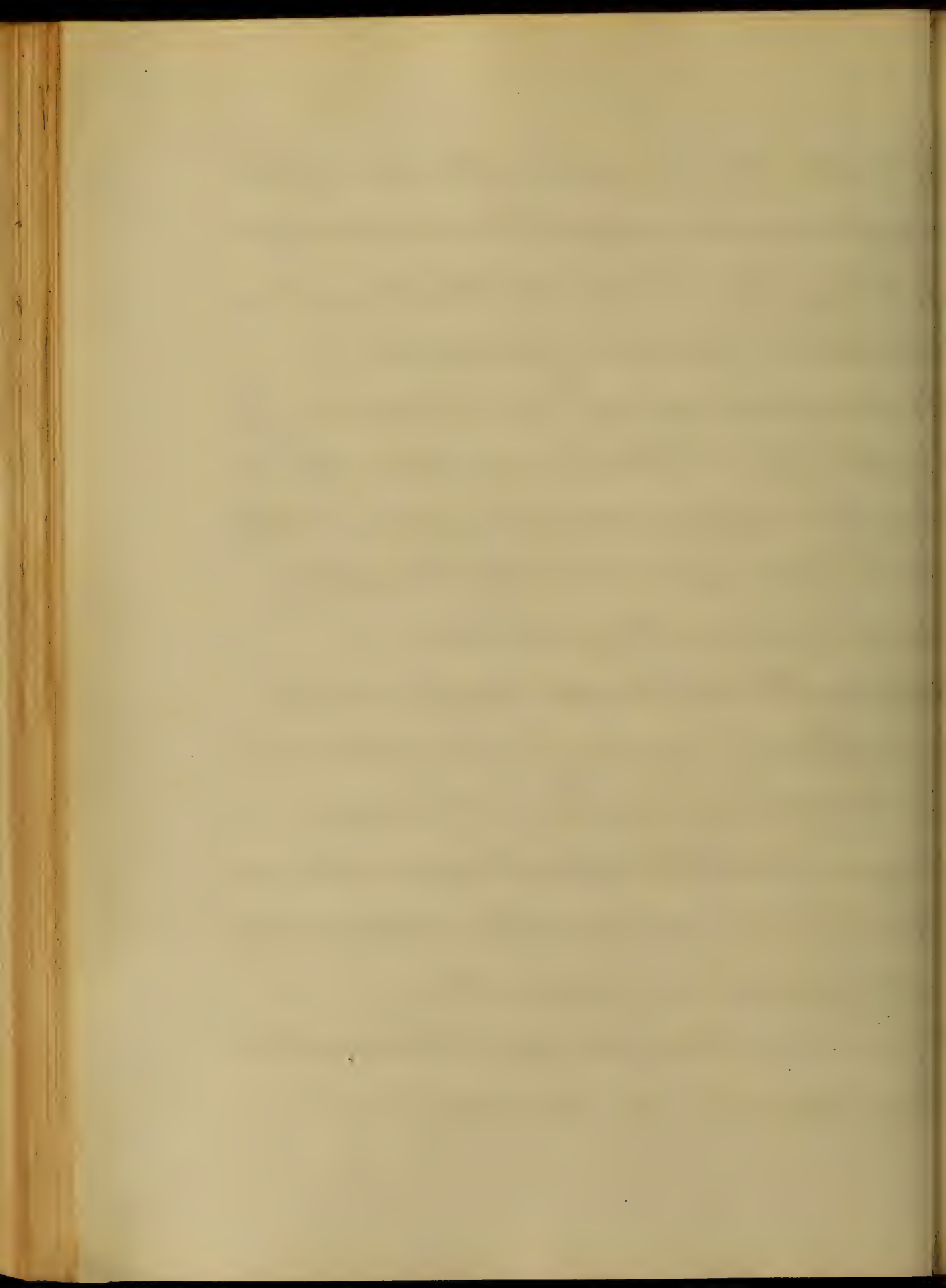
after taking the Dover's Powder. This Morning he has
no appetite & seems very weak - Pulse 110 harder & more resist-
ing than yesterday. Respiration 40 and much more
laboured. Prognosis not so favourable -

Dr. Donaldson ordered ℞ Spts Vini Gallici ℥ss
every three hours - ℞ Pulv Dover gr X - 3at Night
Stop Syrup Scilla in the prescription of twenty
first Evening - Condition not materially
changed - Pulse 102 - Respiration 36

April 24. Patient did not sleep well last
night - his cough was very troublesome but the
sputa not so high colored or tenacious.

Tongue slightly ^{purplish} in centre but red at edges -
Pulse 98 Respiration 40 - Alae Nasi contract
and expand during Respiration.

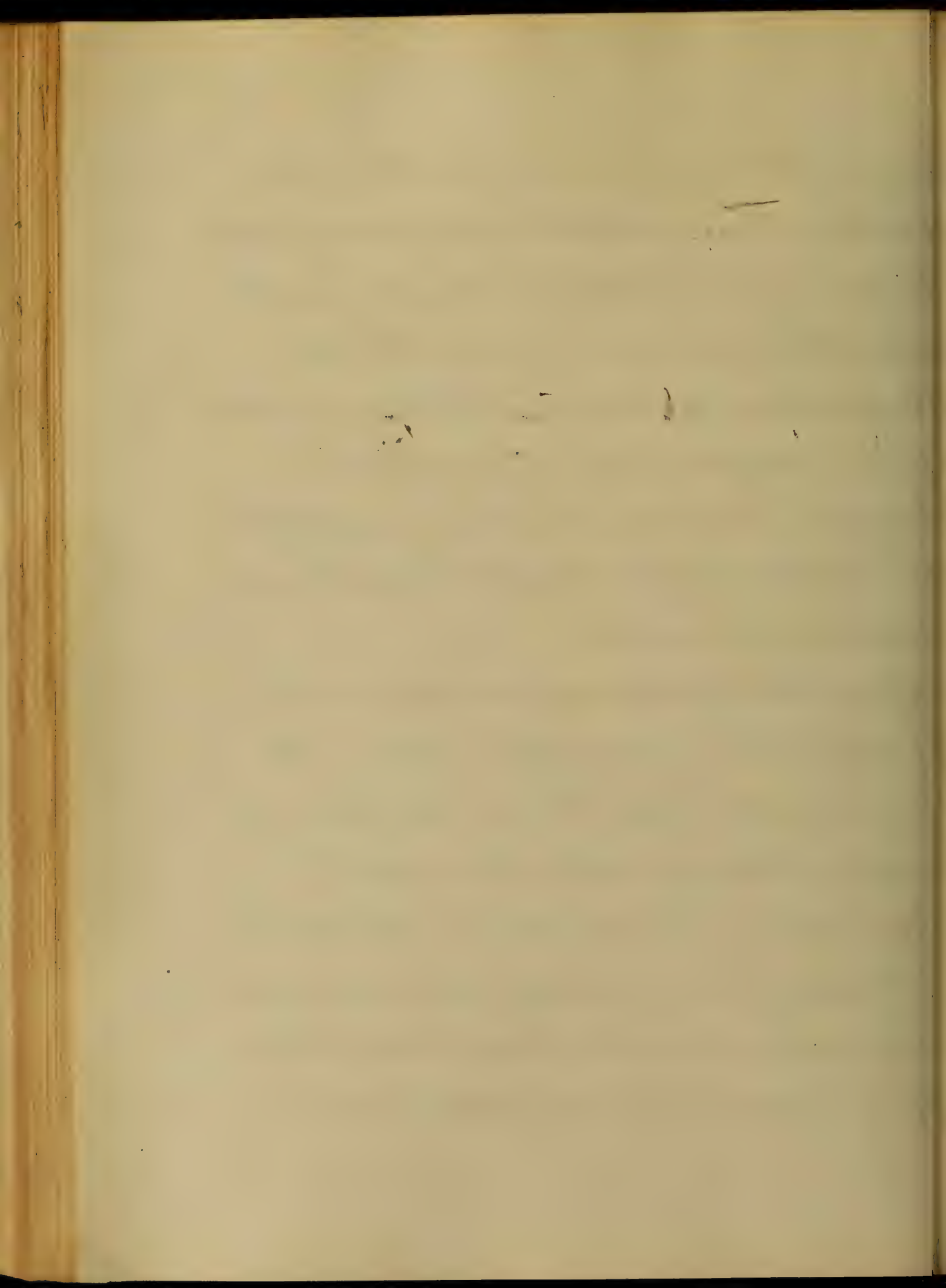
Effusion in plura less - nor is there a ventive
absence of vesicular murmur as at first



Evening Patient appears more troubled in his breathing & has a constant desire to cough which he tries to prevent - Skin is moist, in fact he seems to be perspiring freely - Pulse 102 - Respiration 48 & laboured - Position of patient is on his right side & partly on chest - Expectoration not so much in quantity nor so rust colored - in fact it is of a mucopurulent character

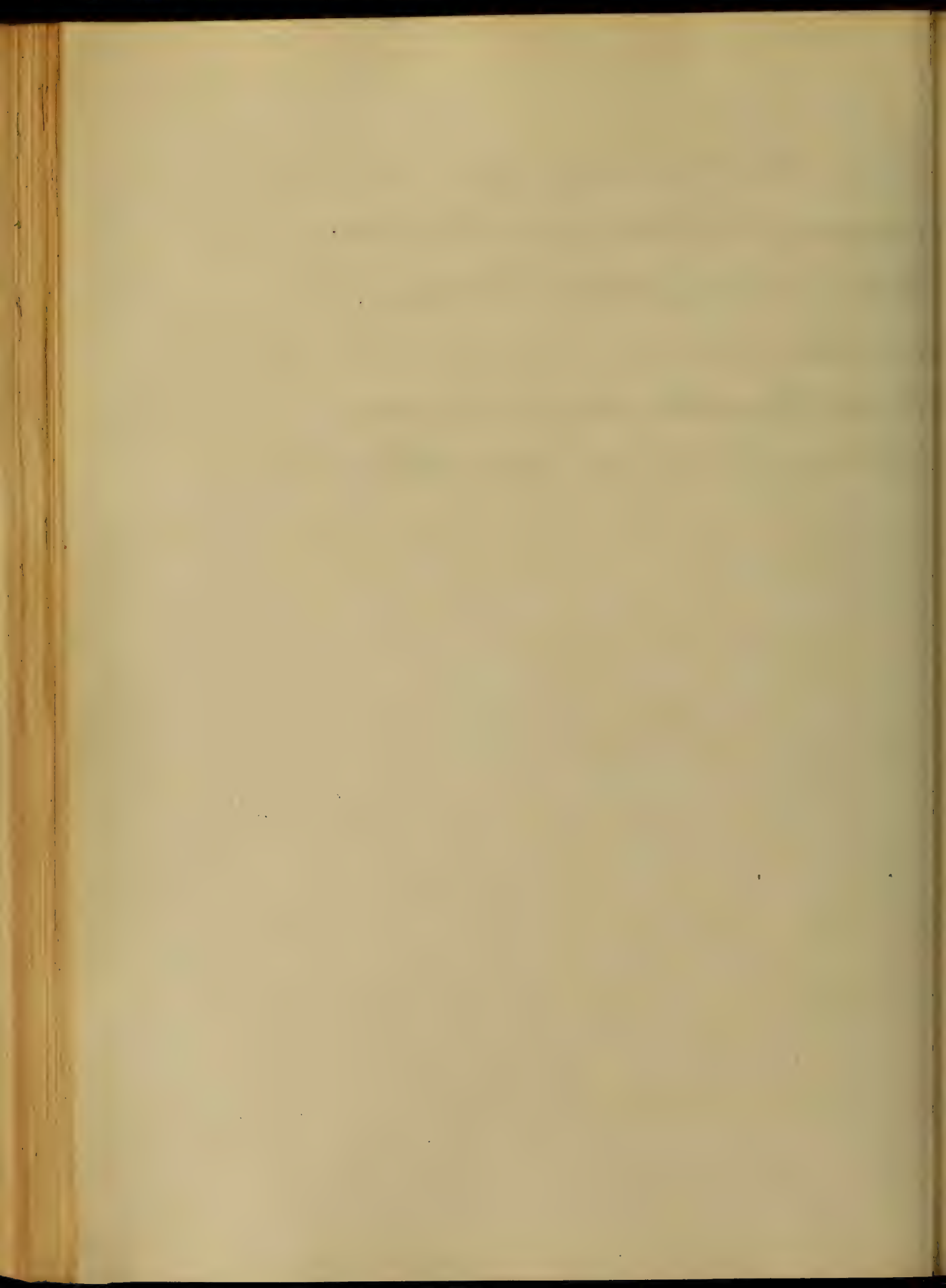
April 26th Expression of countenance better - Skin moist - Tongue slightly furred in centre - Pulse 80 soft & natural - Respiration 22 & easy - indeed patient appears better generally

April 27th By percussion we have not so much dullness or flatness as heretofore. Auscultation reveals a weak bronchial respiration a little to left of scapula - also some rude respiration in



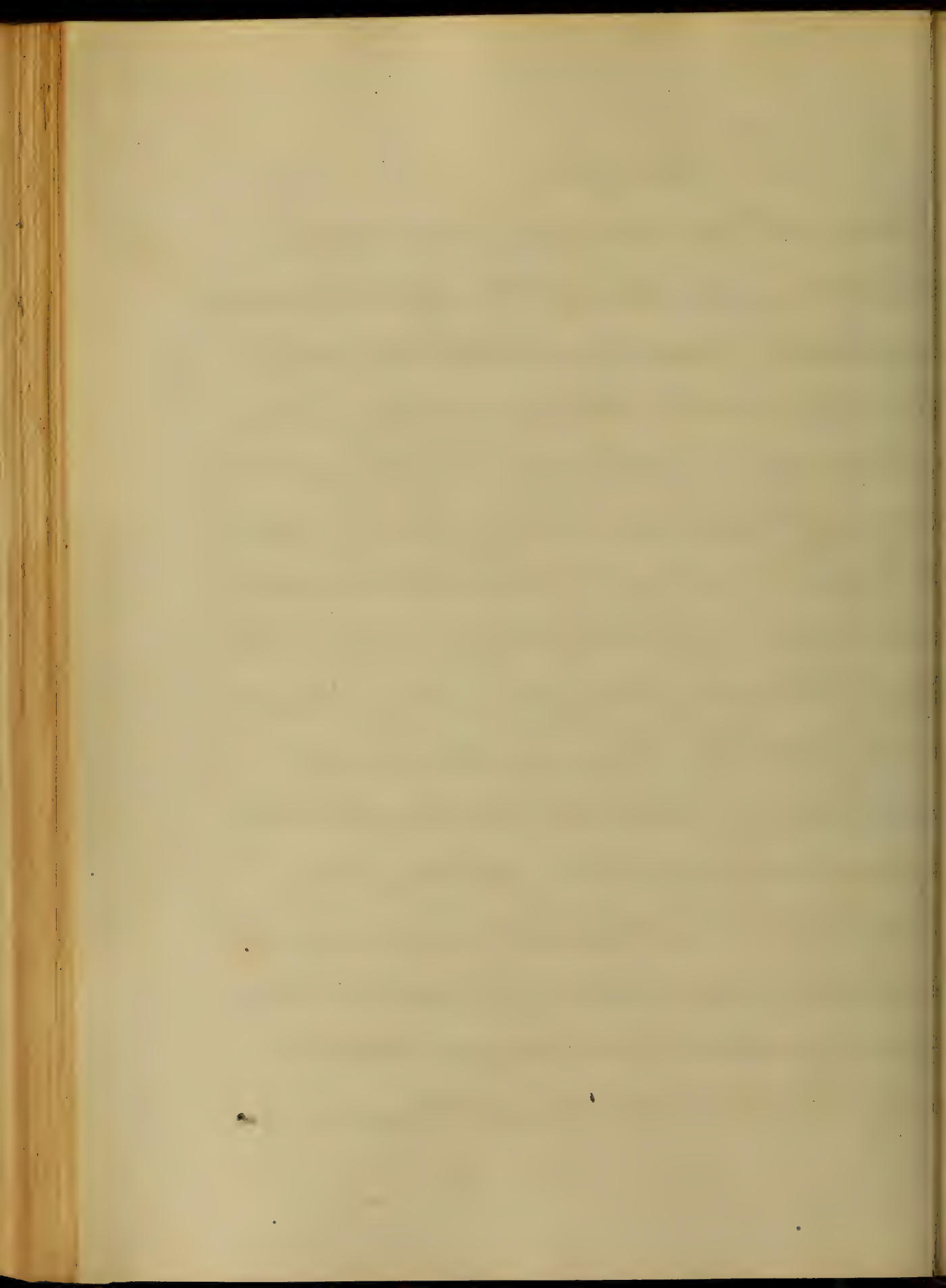
front-and at the end of inspiration we hear a
remnant of crepitant rale. Prof Chew ordered
all medicine to be stopped & to have a good
nourishing diet.

May 4th Patient has daily improved since 27th
and to day he left the house entirely well



Case No 11

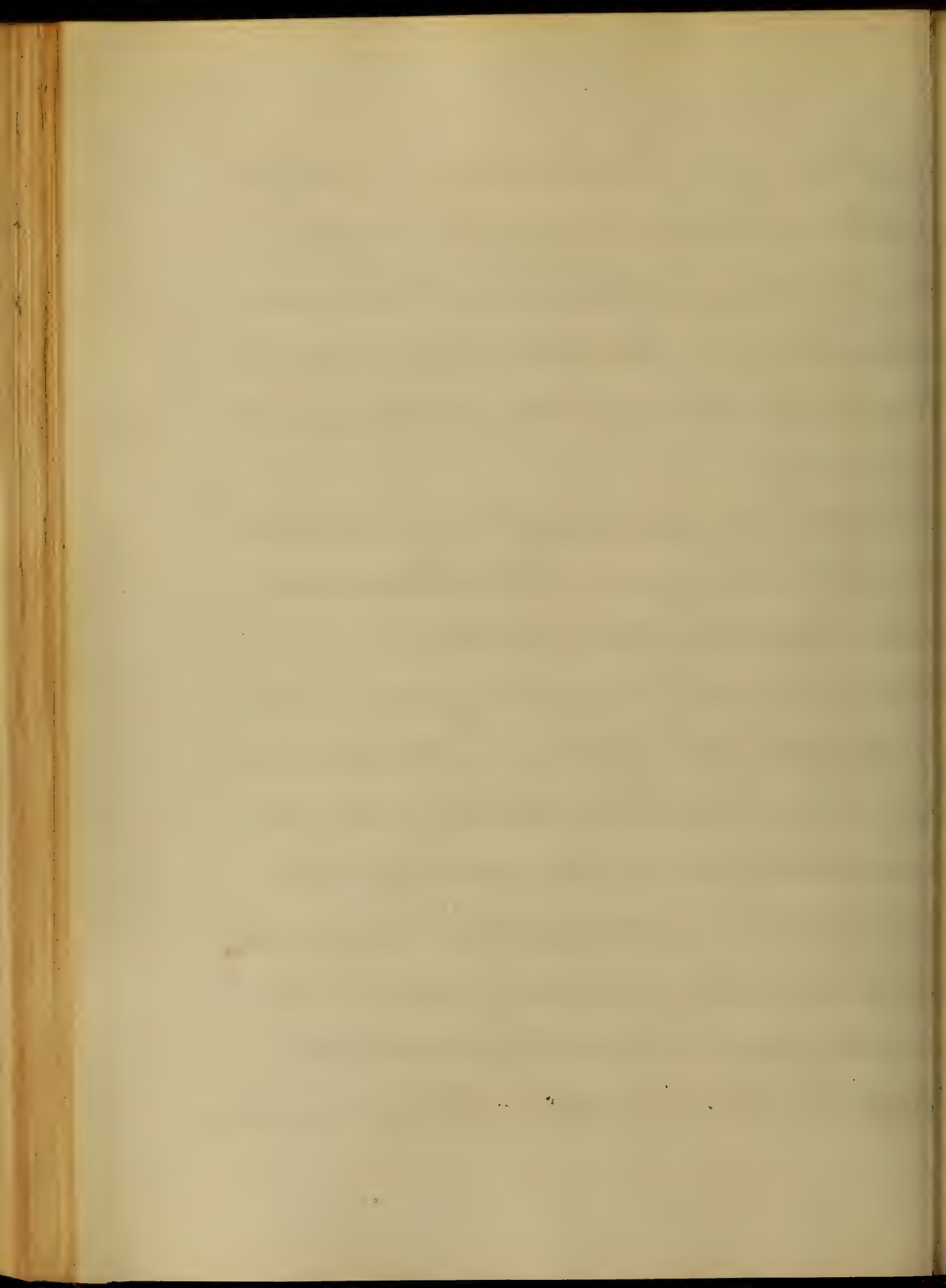
Thomas McBird - Occupation coachman
Aet 20 - was admitted into the Bult's Infirmary
Aug 26th His parents are both ^{living} and healthy peo-
ple - Patient states that he has always been
well & healthy - On Saturday last Aug 18th he
was busily occupied during the day & drove
to the country at night when he first compla-
ined of pain in the head & right side but had
no chill - he does not appear to have lost
much flesh but is somewhat anemic.
Countenance wears a natural & not distressed
appearance - c & p appetite good Tongue very
little furred - Bowels have not been moved for
several days. Urine scanty & passed with some
difficulty. - Plea hasi expands & contracts
during respiration which is not much laboured



and 36 per minute - Voice natural - Cough not frequent & moist - Expectoration thin & slightly mixed with mucus - The muscles of the chest work natural but the whole mass appears to move at the same time - Vocal vibration does not appear to be increased -

Percussion - Lower lobe of right lung dull with a sense of resistance given to the hand - Resonance diminished in middle & upper lobes -

Behind it is dull throughout great extent of lower two thirds - Left lung less resonant than normal but not dull nor does it give the same sense of resistance as in corresponding part of right lung. Auscultation - Right lung respiratory sound entirely absent in lower lobe but conducting sound of heart heard distinctly - Middle lobe fine crepitation with rude respiration



Apex nearly Normal - Behind Respiratory Murmur
absent in lower & middle lobes - None at apex

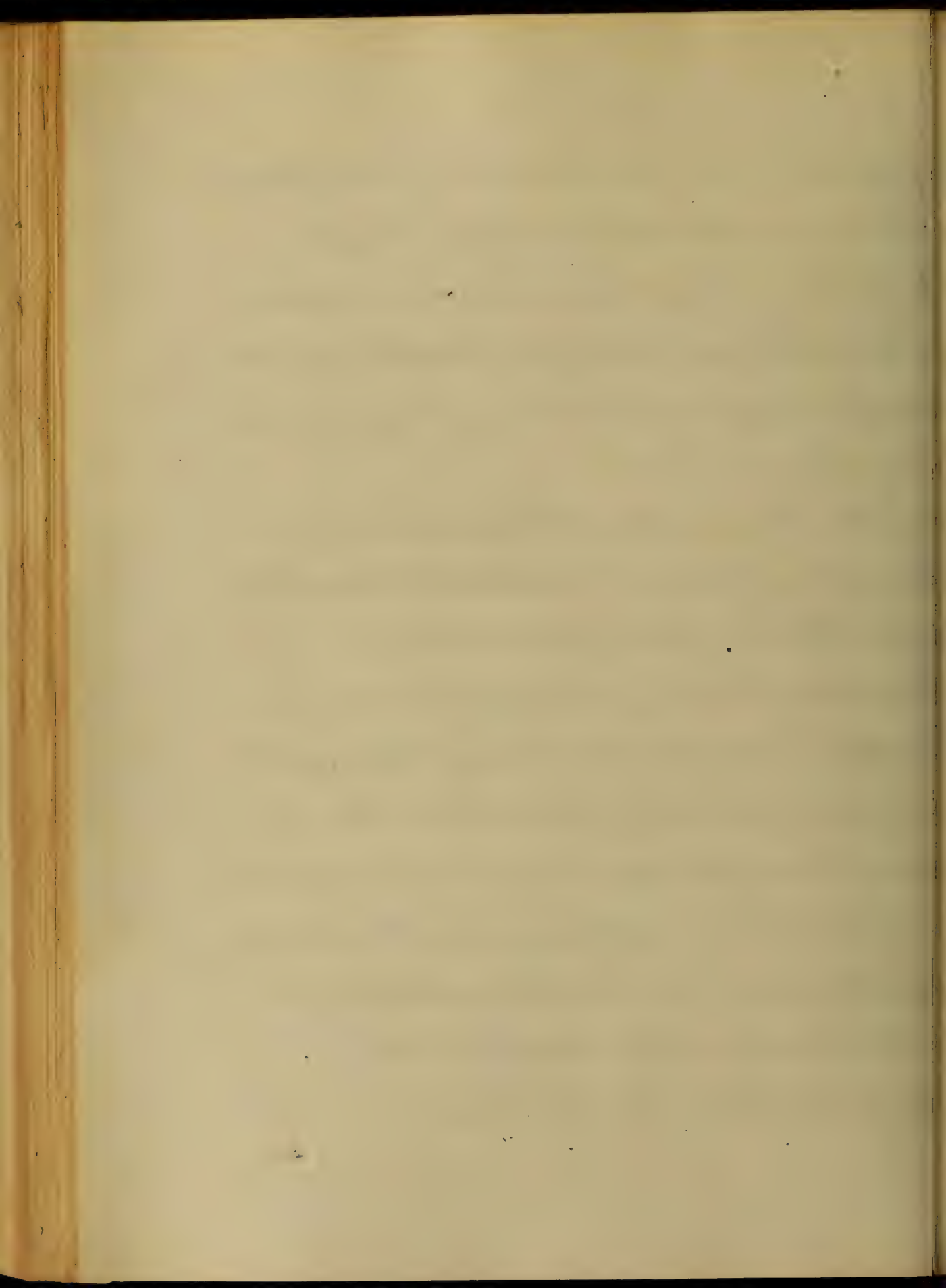
Left lung, in front we have diminished vesicu-
lar murmur at base with purile breathing in middle
and upper lobes, we also have broncophony over whole
of right lung in front.

Aug 28th: Pulse 84 and quiet - Respiration 34 -

Temperature of body in the axilla 102 - He has a slight
cough with thin mucus expectoration.

Percussion flat in whole of right side from
beneath the scapula to the base of the lung with
weak bronchial respiration behind becoming
more feeble as you come in front, there is also
a slight friction sound as you pass over the scapula
and at the end of the respiratory act high up in
front is heard a feeble crepitant rale.

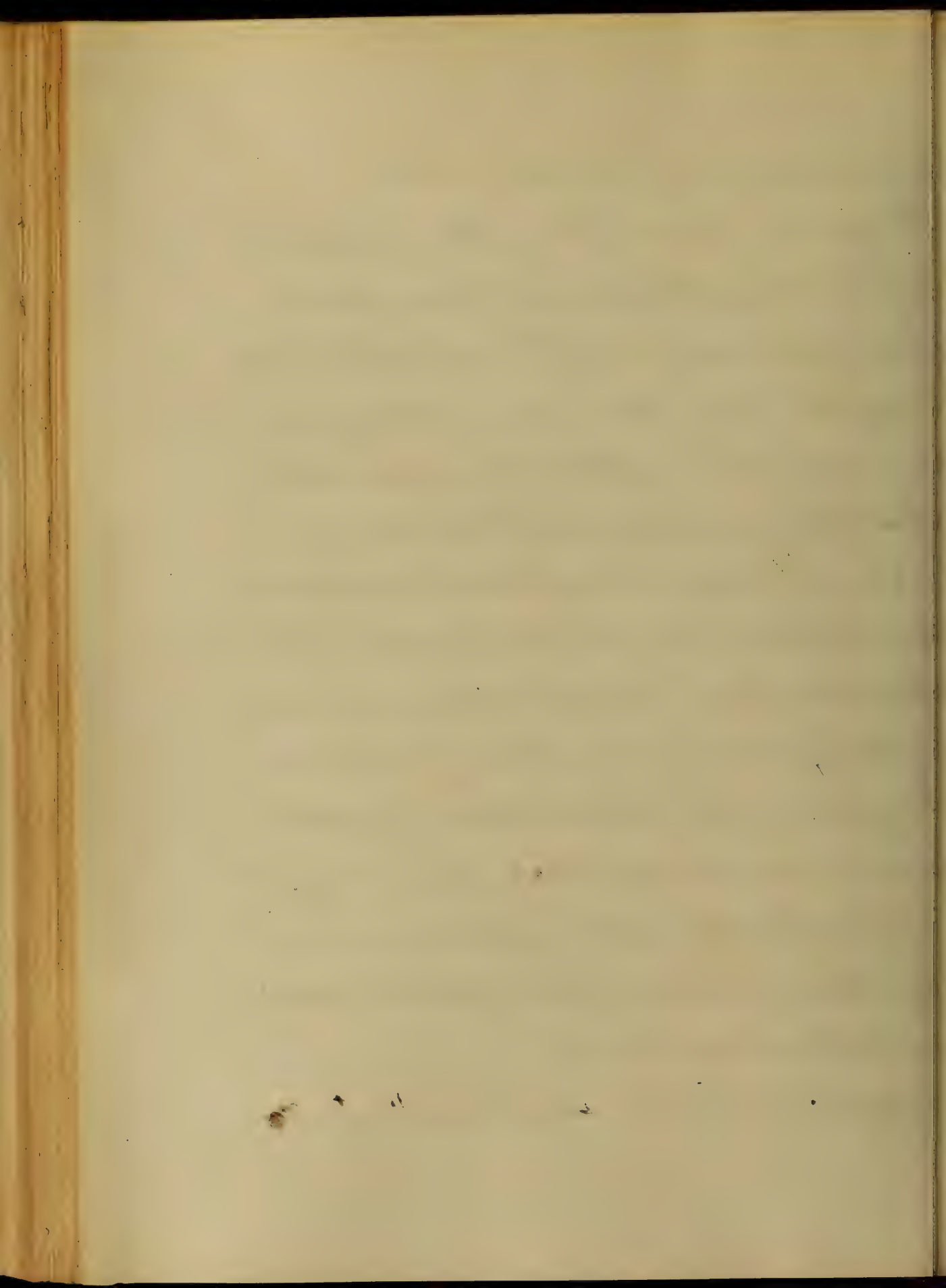
Diagnosis Pure Pneumonia



Was ordered by Prof Donaldson to take

R. Spts Vinii Gallici ℥ss every three hours with
beef tea & Milk ℥iij during the day & solid
food if he can digest it. R. An Aild Silk jacket
to cover the chest & Puls Cover go at night if
necessary - Evening - Patient expresses himself
as feeling no worse than in the morning but
complains of pain in right side and under the
scapulae did not take the Puls Cover - Pulse 96 and
rather feeble Respiration 32 not much laboured
Aug 29th. Patient slept well last night - was
sitting well up in bed this morning - Expression
of countenance natural - he is perspiring quite
freely but his temperature by the Thermometer is
102³/₅ - Pulse 98. Respiration 32 and not laboured
Same treatment continued

Aug 30th - Patient feels no worse this morning and



asked permission to sit up which was not granted
for fear of fatiguing him too much - he slept well
last night without an anodyne - Tongue moist but
thinly furrowed in centre with a white coating
Cough slight soft & moist with no pain -
Temperature of cutaneous surface $101\frac{1}{5}$ - Pulse 100
and soft - Respiration 32 - Not laboured -

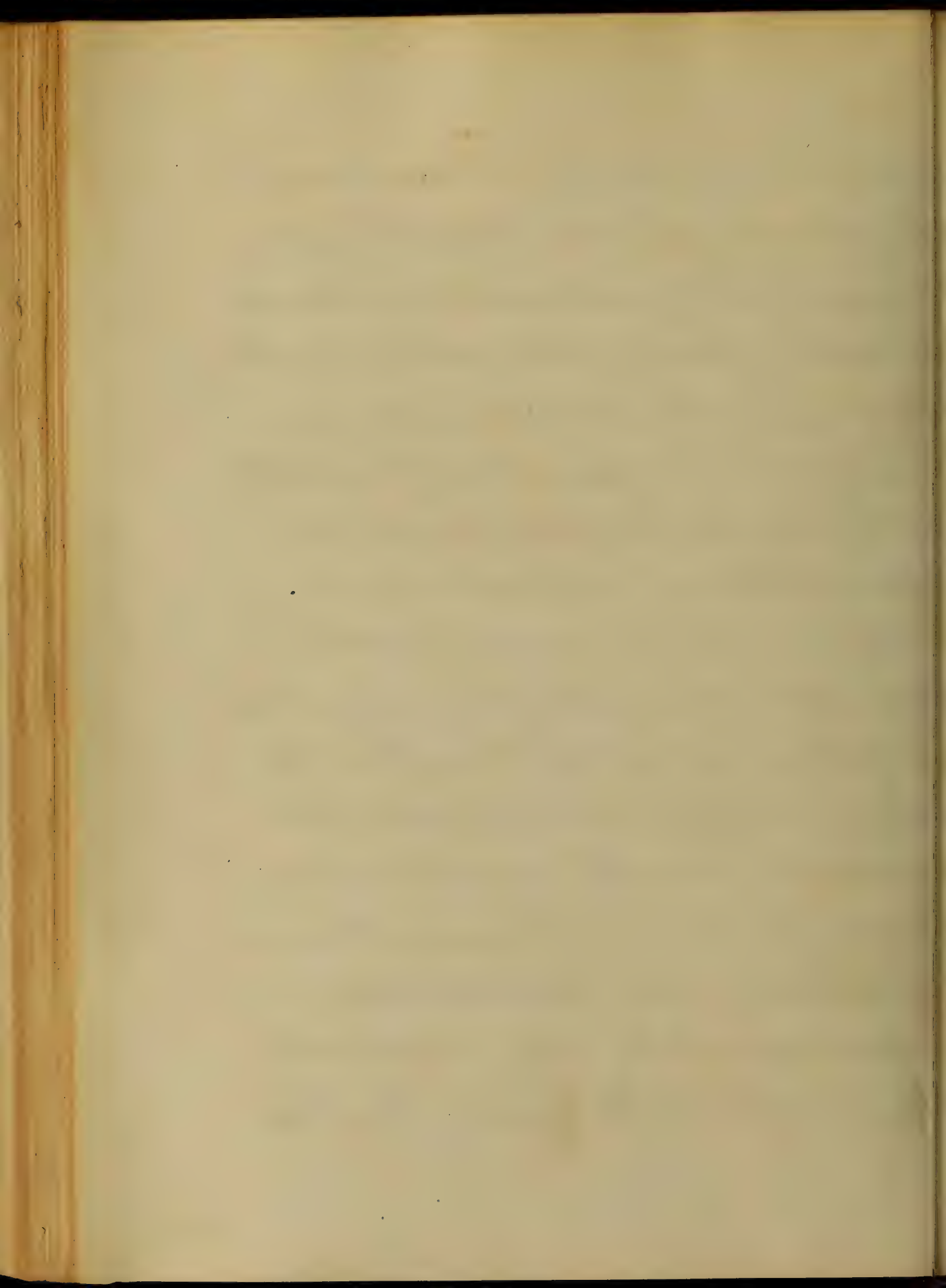
Auscultation reveals a gradually increasing
bronchial respiration in right lung together
with a ~~mixed~~ returning fine crepitant
~~mixed~~ with a subcrepitant rale

In left lung there is a little ruder respiration
He had a free passage from bowels this morn-
ing & his kidneys are acting well

Prognosis thought to be better. Same treat-
ment continued

Aug 31st - Patient feels much better to day

Slept well last night - Countenance wears a
natural & calm expression - Appetite good
Tongue slightly furred & moist - Bowels moved
this morning - Kidneys acting well has passed
40 oz of urine in the last 14 hours, the specific
gravity of which is 1014, and heavily loaded with
the chlorides - Pulse 82 and its character much
improved - Respiration 32 and easy -
Temperature of cutaneous surface 100 $\frac{2}{5}$ -
Auscultation reveals that there is much more
air permeating the right lung than there
was yesterday, the bronchial respiration
is much clearer in the upper lobes, with a
returning fine crepitant mixed with a sub
crepitant rale in the middle & lower lobes
Prognosis undoubtedly better - Was ordered to
take the Spts Vini Gallici \frac{zjss} every four hours.



insted of every three hours - To continue the
beef tea & Milk with some solid food during
the day -

Sept 7th - Patient did not sleep well last
night he says from the extreme heat - his coun-
tenance is bright & he looks well this morning
Pulse 76 soft & natural - Respiration 30 & not
much laboured. Skin soft & moist - Thermometrical
temperature $99\frac{3}{5}$ - His bowels were moved last
night Kidneys acting well, has passed 38 oz of
urine in the last 14 hours - Specific Gravity 1014 with
an excess of the Chloride of Sodium -
Percussion not so dull as yesterday
Bronchial respiration feeble except in axilla
with a broncho Vesicular respiration where
there was yesterday a few crepitant & subcrepita-
nt rale - Prognosis rapidly improving -

Ordered to stop the Alcohol & give the following
tonic mixture before each meal-

℞ Linct Cinchona Comp ℥ii

Acid Muriatic dil ℥i

M. S. ℥i before each meal in water-

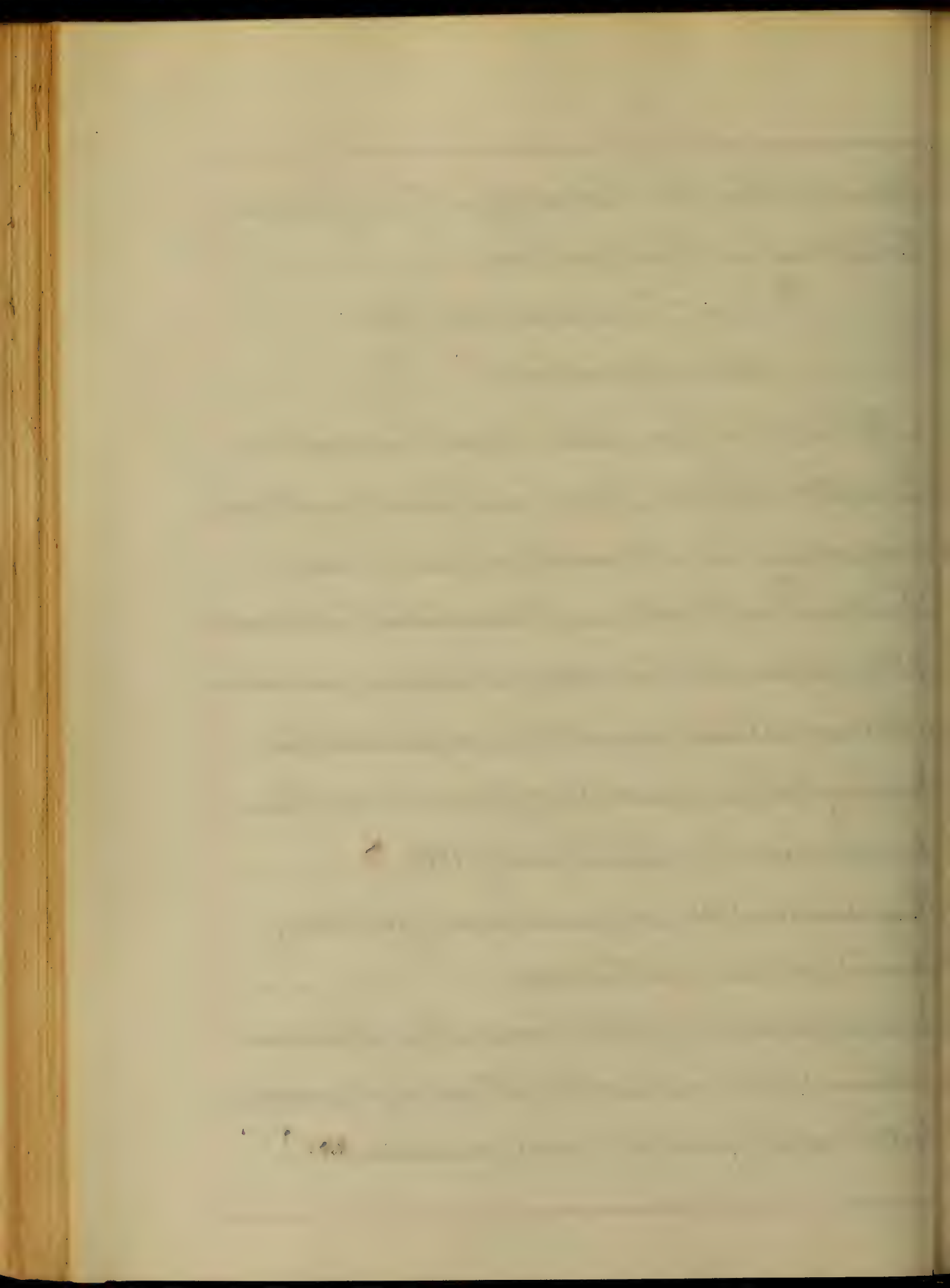
Sept 2nd Patient slept well last night and
is improving. Pulse 80 and of natural force-

Respiration 24 and easy. Theometrical temperature
99 $\frac{1}{2}$ - Auscultation and percussion gives a clear

and more natural sound. - Bowels moved this
morning. he has passed 48 oz of urine in the
last 24 hours. Specific Gravity 1014.

Prognosis decidedly improved since yesterday
Same treatment continued

Evening patient left the house this afternoon
contrary to the wishes of the attending physician
but he was beyond all doubt convalescent



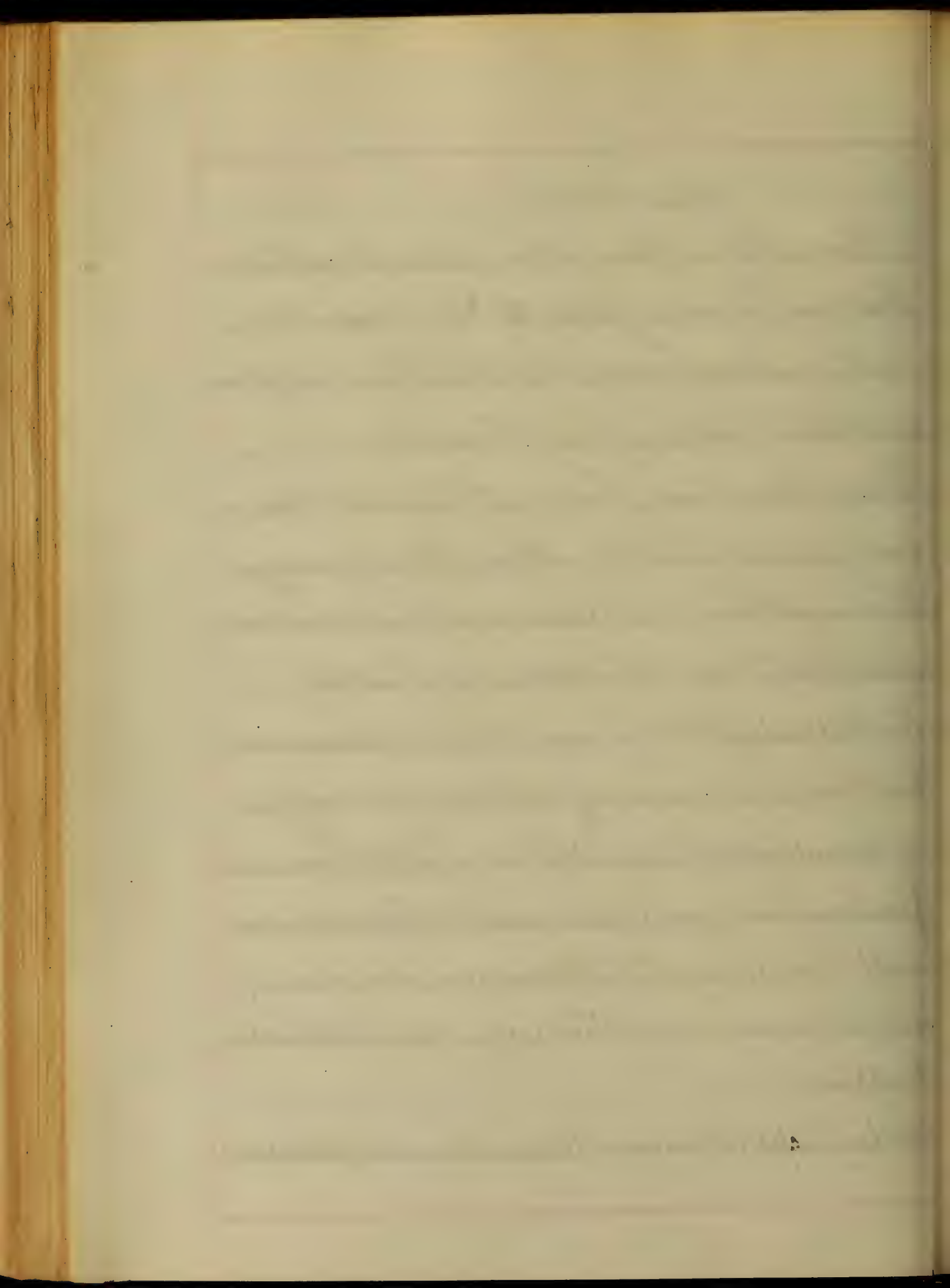
Case No 111

Thomas Payer Occupation Sailor-Admitted in
Baltimore Infirmary-Sept 7th- His parents are
both dead and he states that neither his father
nor Mother had any chest trouble-

Patient has always been a temperate man
and generally healthy- About three years ago
he was sick, but don't know what his disease was-
since that time he has been very healthy

On Wednesday ^{5th} he went to his bed as usual
but passed an uncomfortable night and got
up Thursday morning with pain in his head and
limbs which continued until his admission
with loss of appetite & nausea every evening
with an emesis once or twice of a greenish looking
matter.

Today Sept 7th his countenance has a depressed and



anxious expression Has no appetite Tongue slightly
furred & dry - Pulse 140 & feeble Respiration laboured
and 40 per minute - By percussion we have dull
ness over the lower lobes of both lungs & resonant
throughout. Auscultation reveals a fine crepitant
at the base of both lungs, but more marked in
the right lung

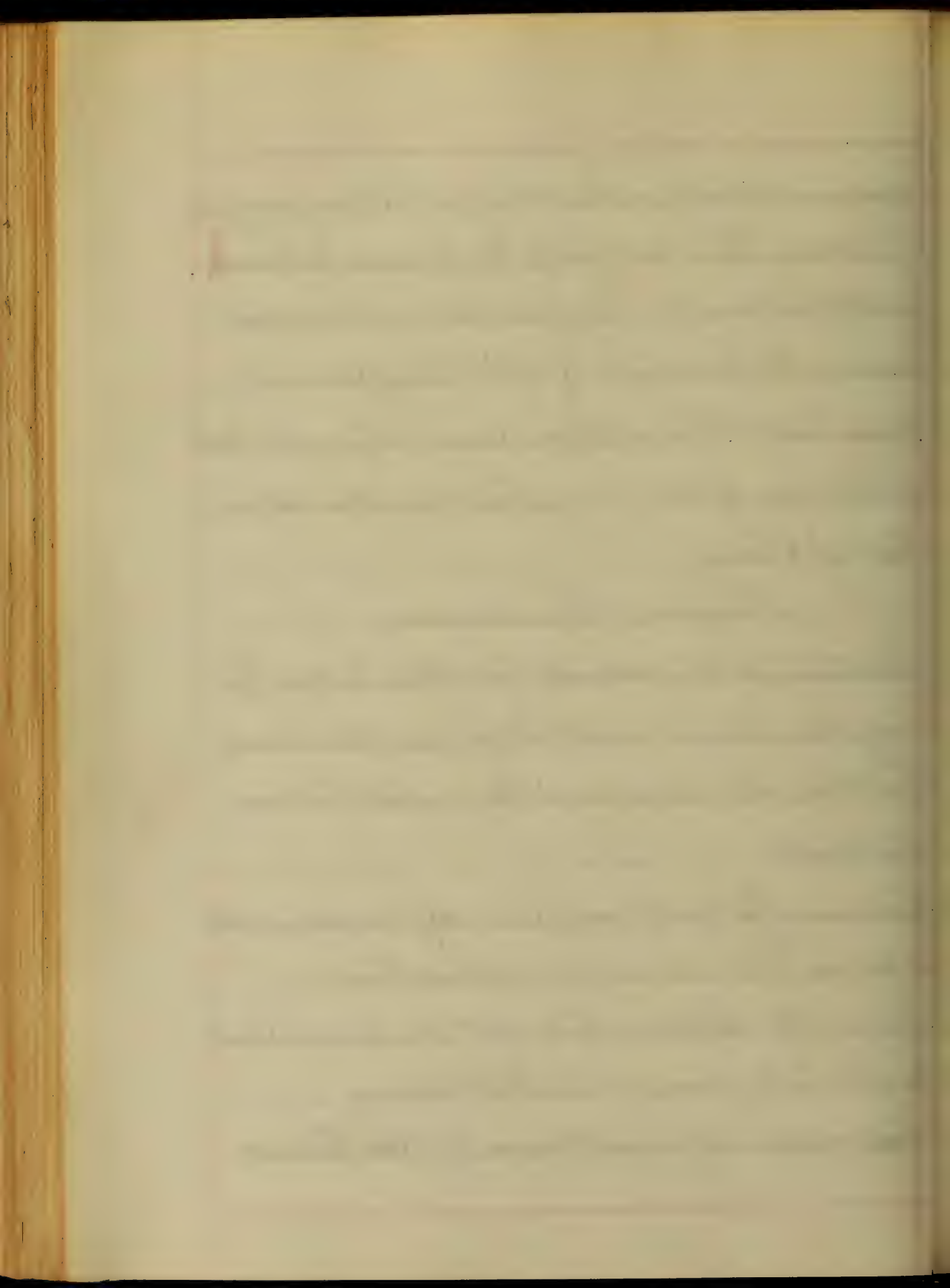
Diagnosis Pneumoniae

Treatment - Was ordered Spts Vini Gallici ℥ss
ery. three hours with beef tea & milk ad
libitum, also an oiled silk jacket to cover
the chest.

Evening - Patient complains of insomnia and
is ordered [℥] Pulv Dover gr x at bed time -

Sept 8th - Patient did not sleep well last
night but seems better this morning

Expression of countenance better - Pulse 100

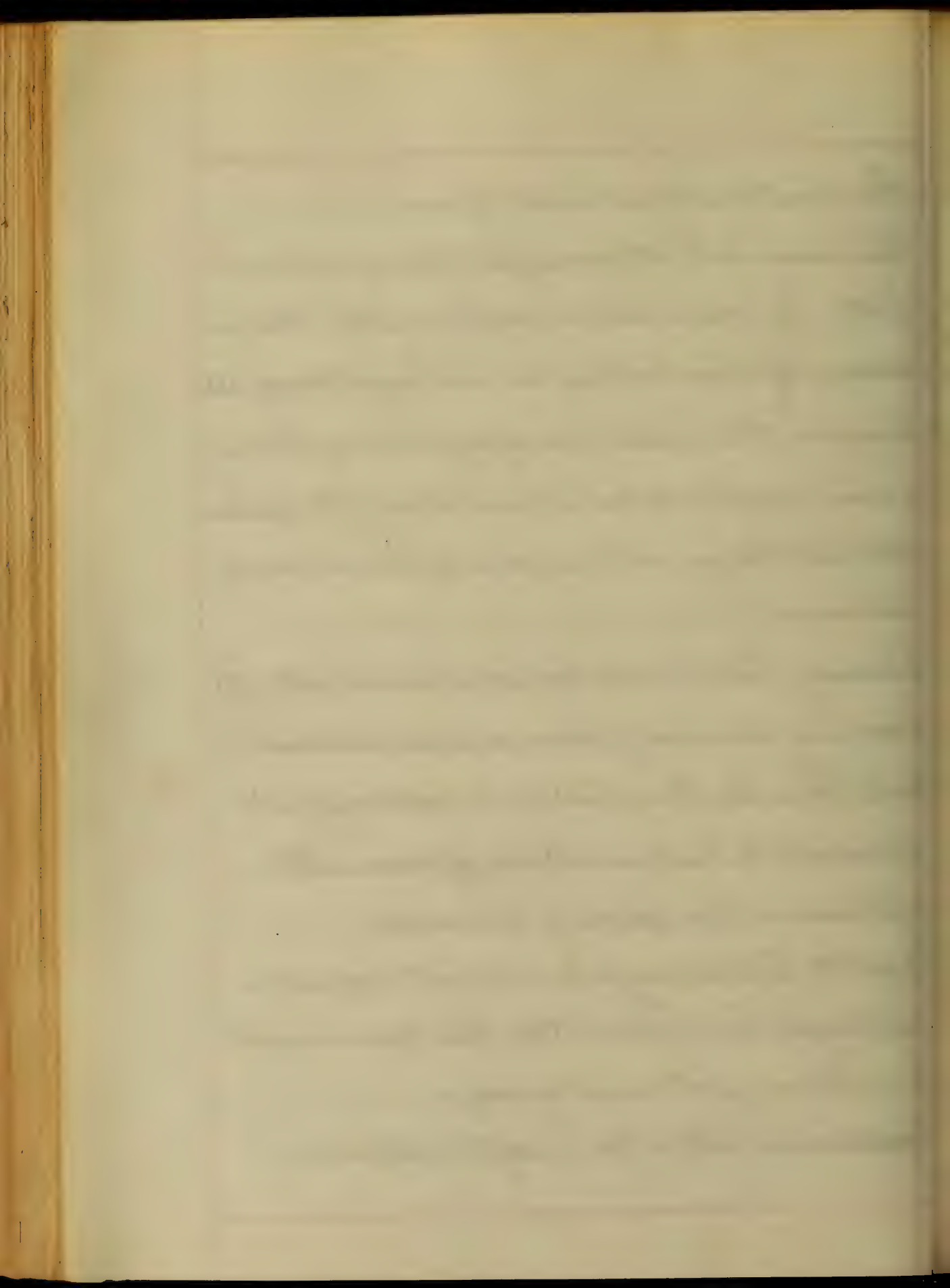


Respiration 31 per Minute & easier -
Percussion dull at base of both lungs but not
flat - By auscultation we find that there is
absence of vesicular murmur in lower lobes of both
lungs - in the middle lobe of right lung there is
a moist crepitant rale - Urine scanty the Spec Grav
1020 with ~~the~~ an entire absence of the chloride of
Sodium -

Evening - Patient does not seem so well as in the
morning - His countenance wears a distressed
look - Pulse 110 - Respiration 40 and very much
laboured - He had an attack of Measles this
afternoon - Skin hot & dry - No cough.

Sept 11th - Patient says he did not sleep well
last night but feels better this morning and
he is more quiet in every way -

Expression better - Skin soft & natural.



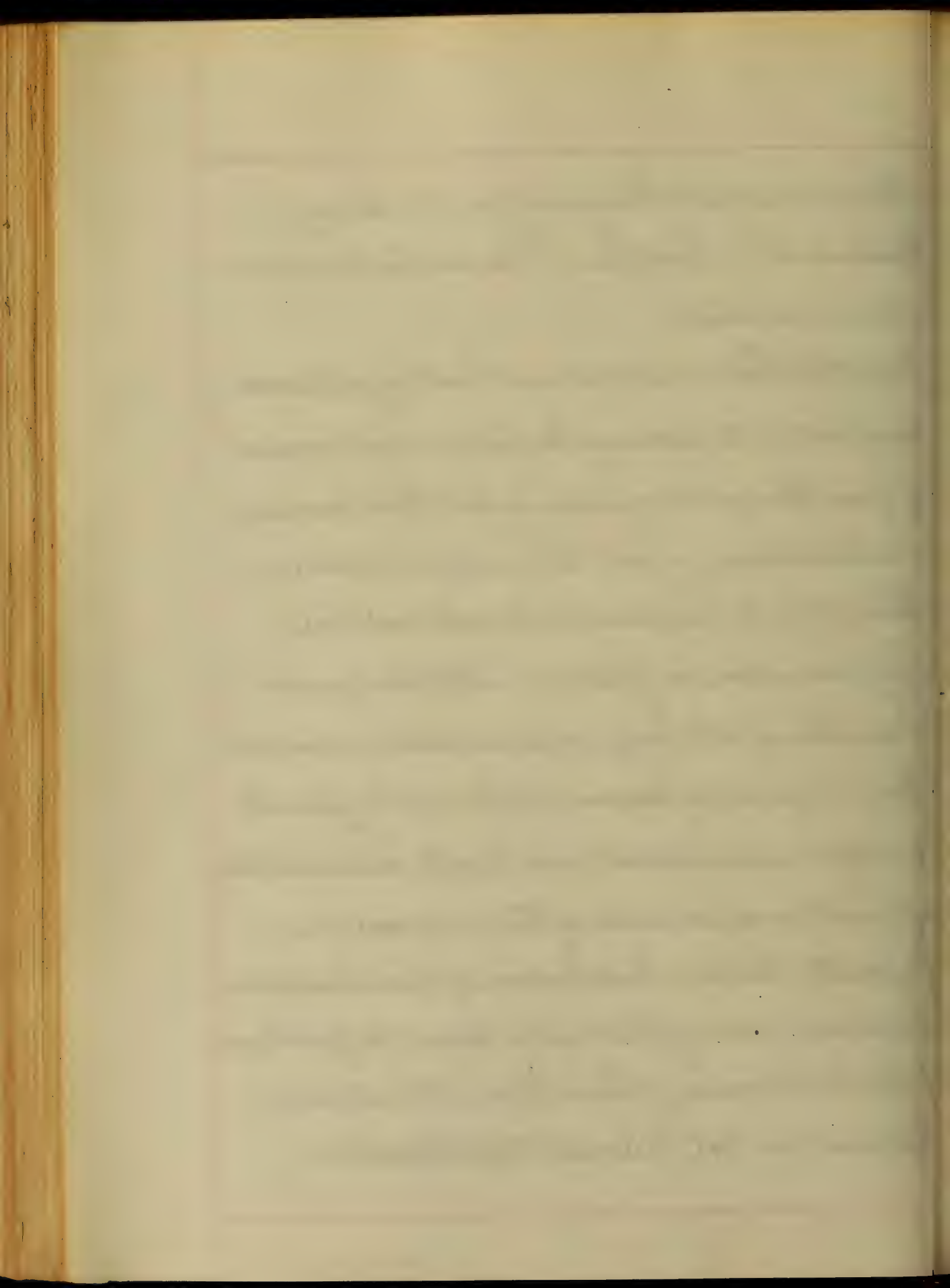
Pulse 88 and full - Respiration 28 and easy
Was ordered by Prof Chew \mathcal{R} Quinia Sulph \mathcal{g} \mathcal{v} ter
die in solution

Sept 12th. Patient slept well last night & seems
much better this morning - He had a slight increase
of fever this yesterday evening but this morning
his countenance is good. Skin soft & natural

Pulse 80 & full - Respiration 20 and natural -

By percussion we find very little dullness in
lower lobes of both lungs & auscultation reveals a
fair respiratory murmur at base of lungs with
a slight subcrepitant rale heard in lower lobe
of right lung in some of the inspirations -

Sept 13th - Patient had no rise of fever last evening
slept well during the night & says he feels much
better this morning - Pulse 75, full & natural
Respiration not laboured & 20 per minute -



Skin soft & natural -

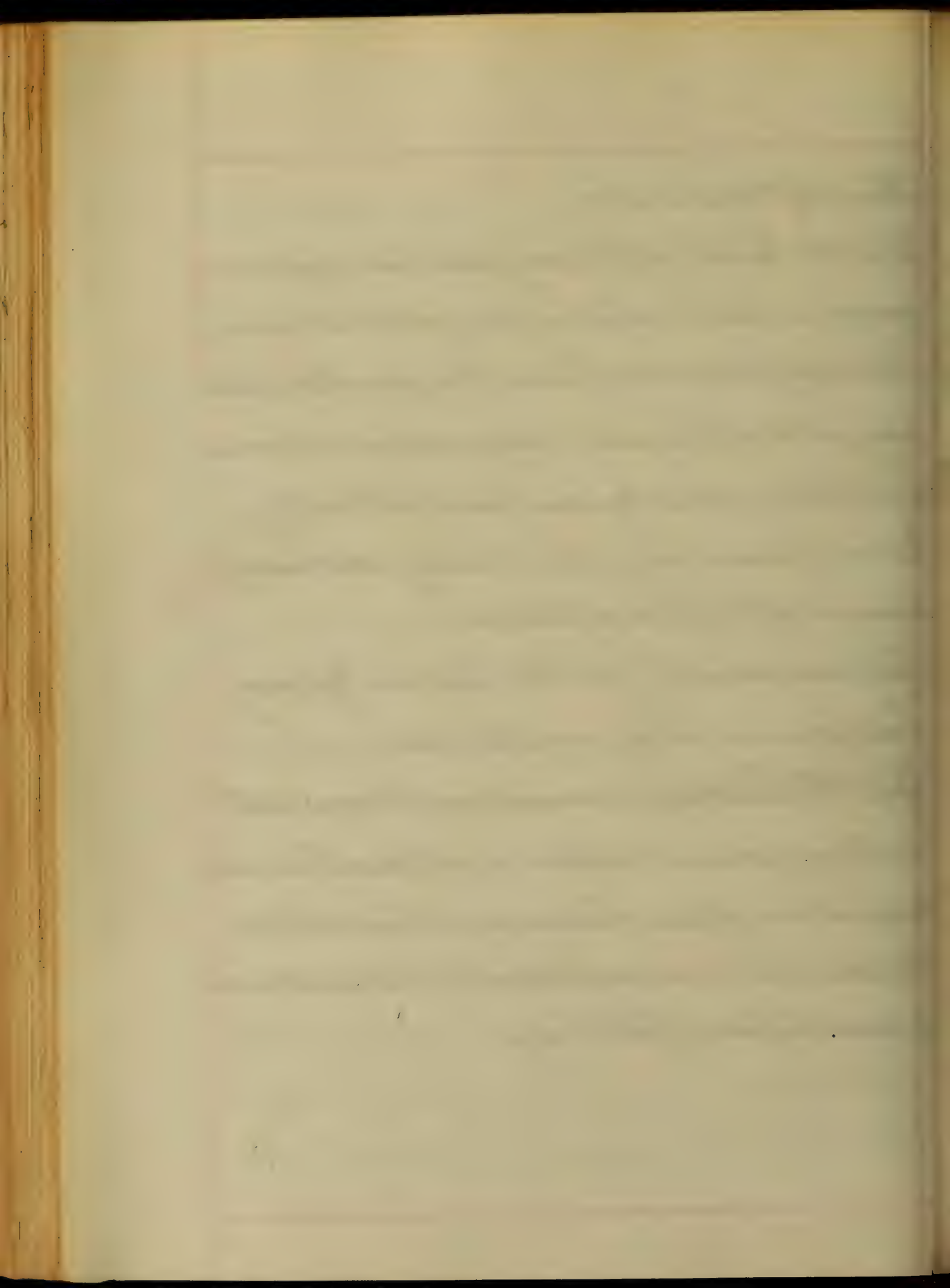
Sept 14th - Patient slept very well last night and expresses himself as feeling very well this morning

Skin soft & natural - Pulse 68 & regular - Resp 16 and easy - Appetite good - Lung resonant on percussion & the vesicular murmur heard distinctly -

Urine passed freely Spct Gravity 1020 Normal amount of the Chloride of Sodium

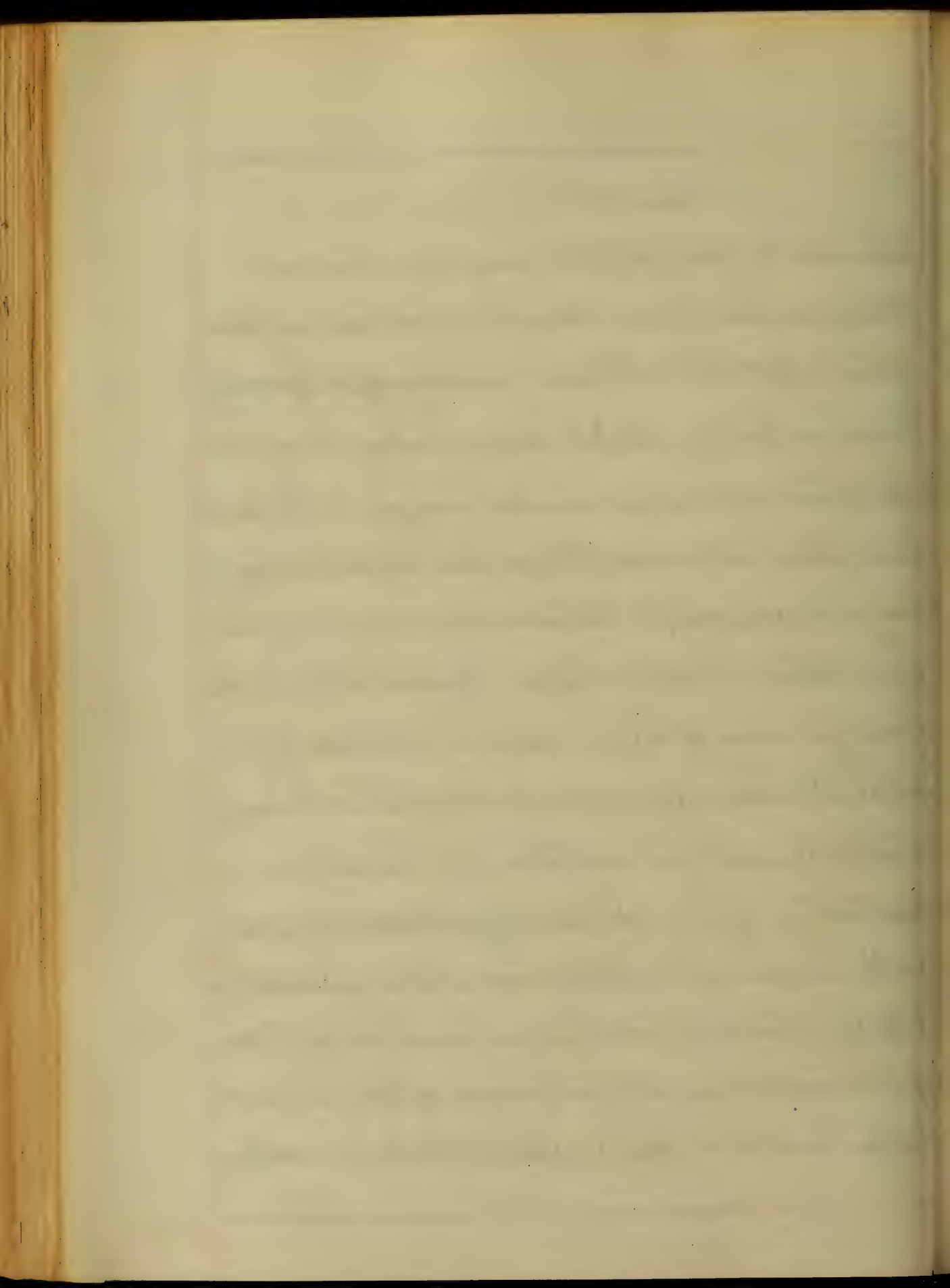
Prof Chem ordered \mathcal{R} Spts Vini Gallici \mathcal{Z} ss every four hours instead of every three hours

Sept 16th Patient pronounced convalescent and to all appearance he ~~has~~ is a well man - Pulse and Respiration natural - Percussion shows a little dullness - but on auscultation the Vesicular Murmur is heard distinctly ⁱⁿ both lungs



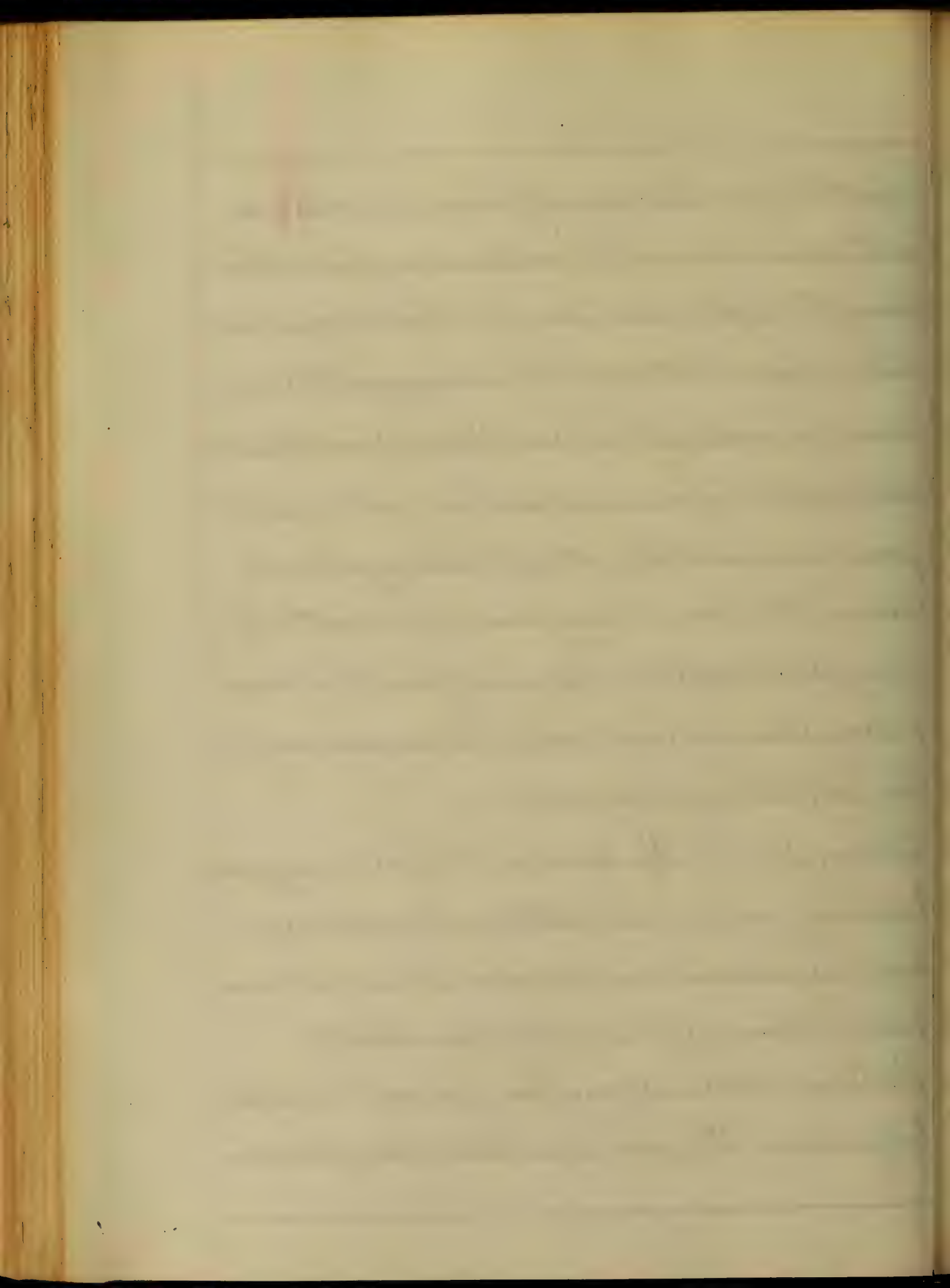
Case No IV

Martha Walford - Oct 11 Occupation Servant
Residence Baltimore - Admitted in University Hos-
pital Sept. 14th - Patient is a negro girl formerly
lived in Caroline Co. Md Seven weeks ago moved to
Baltimore where she has been living up to the present
time - Her mother don't recollect of her having
any sickness except Pertussis which was five years
ago - About six weeks ago she contracted Scarla-
tina from one of the children in the family for
which she was working, she also assisted in nursing
the child until she was taken sick herself -
Was treated by Prof. Johnson for Scarlatina and
in third week of her illness was able to get out of
bed & go about the rooms, but on fourth or fifth day
of her convalescence she complained of violent pain
in her head & there was also observed to be some swelling



about the face two days afterwards she was seized with convulsions which continued every hour or two during the night & next day. On third day again at better under treatment. Five days ago, that is some five weeks after first attack of Scarlatina she had a return of convulsions which continued to grow worse, and the patient making so much noise in the house being afraid of the most trifling things such as flies imagining them to be snakes or some other hideous monsters she was removed to this Hospital for treatment.

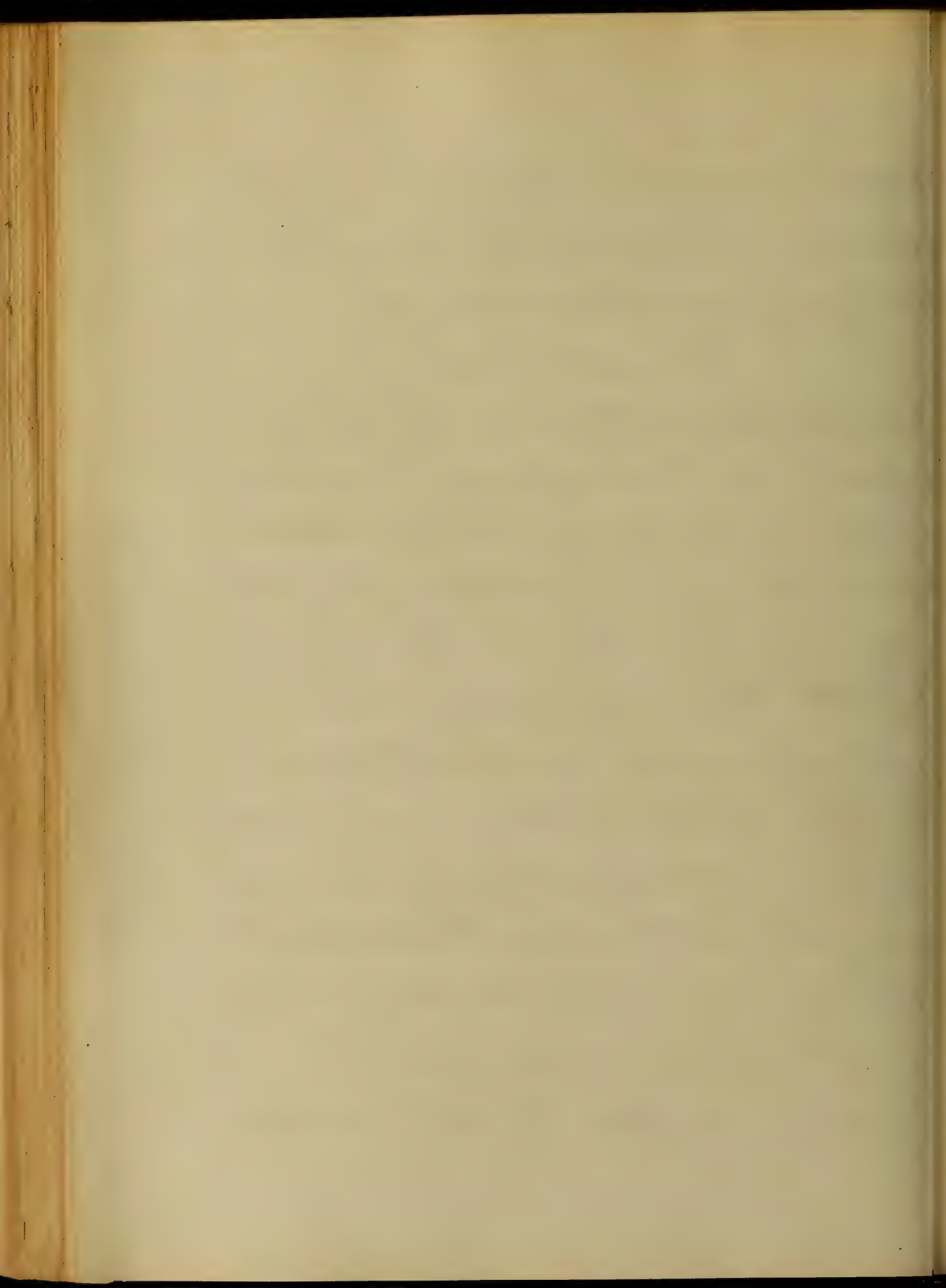
To day Sept 7th She presents the following symptoms. Lays on her back with mouth wide open and has a convulsive maniacal stare with convulsive twitching of the eyes & pupils dilated. She takes no notice of anything nor will she respond to questions. Physical signs - Pulse 66 & very tremulous



Respiration 16 very much laboured - Lung moist
with a white fur - Skin hot & dry - Urine almost
totally suppressed - Bowels constipated

Diagnosis: Uremia

Prof Donaldson in the absence of Prof Chew
ordered \mathcal{R} Elixerium g $\frac{ss$ every four hours
until it acted freely on her bowels - (11:20-3
cups over the region of each Kidney - And to have
a hot air bath twice daily - Diet to be liquid
Sept 20th - Patient appears about the same as
yesterday as regards her general appearance
Her lips are parched & dry - Tongue is still fur~~red~~
but more moist than yesterday, nor is her skin
as dry - Pulse 80 & tremulous - Respiration 20
and laboured - The patient had two evacuations
during the night and also a copious diaphoresis
after the hot air bath - The Elixerium ordered



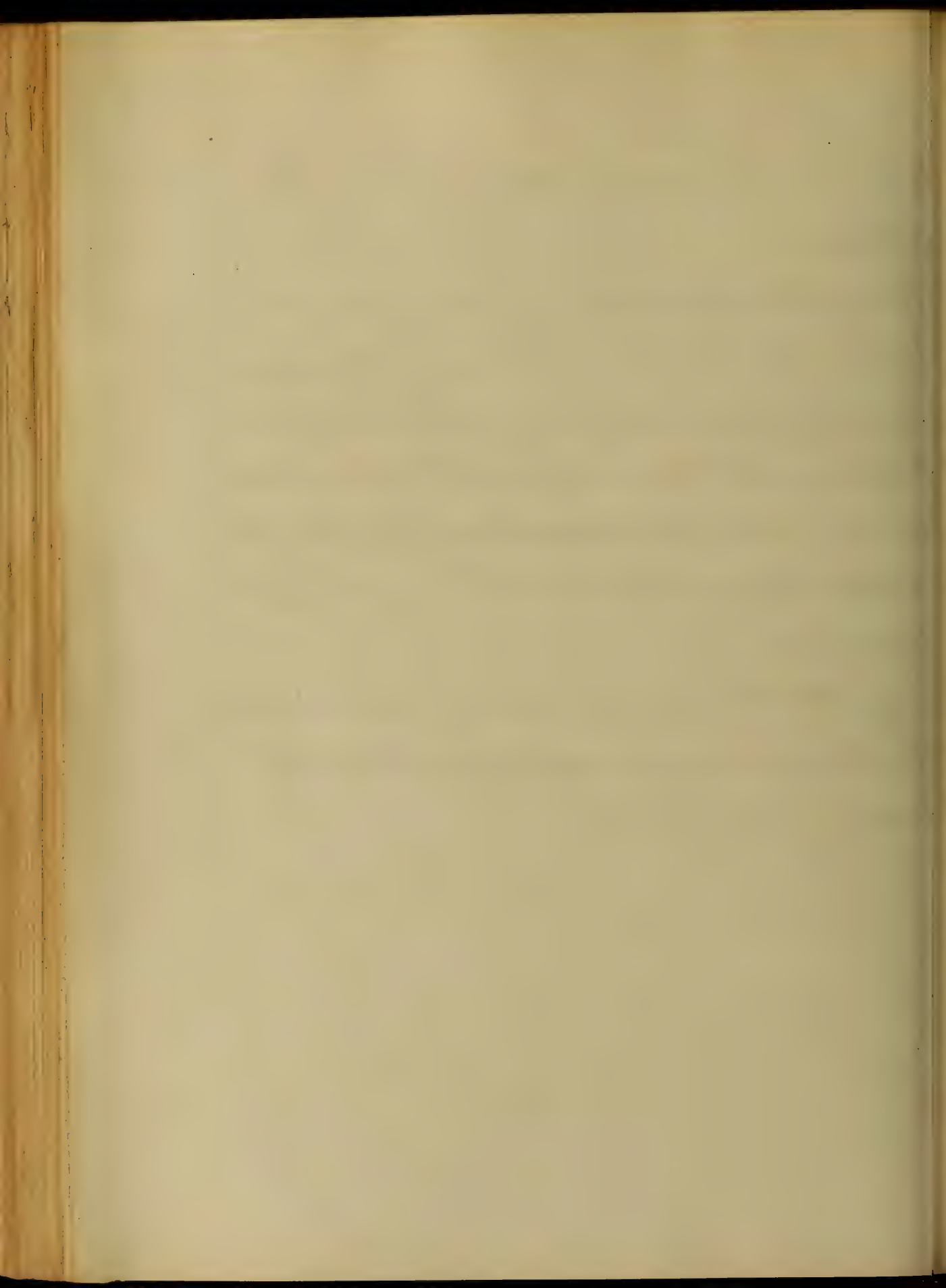
to be stopped & to take a drink flavoured tea

ad libitum

Sept 5th - Patient is a great deal better today
her general appearance calm & easy - Tongue moist
and nearly clean Skin moist & quite natural
Pulse regular & 78 per minute - Respiration 18
and easy - Has had no convulsions since the 9th

All treatment stopped with the exception of the
flavoured tea

Sept 12th Patient has gradually improved since
the 5th and was pronounced by Prof Chew this
morning as being well



Case No V

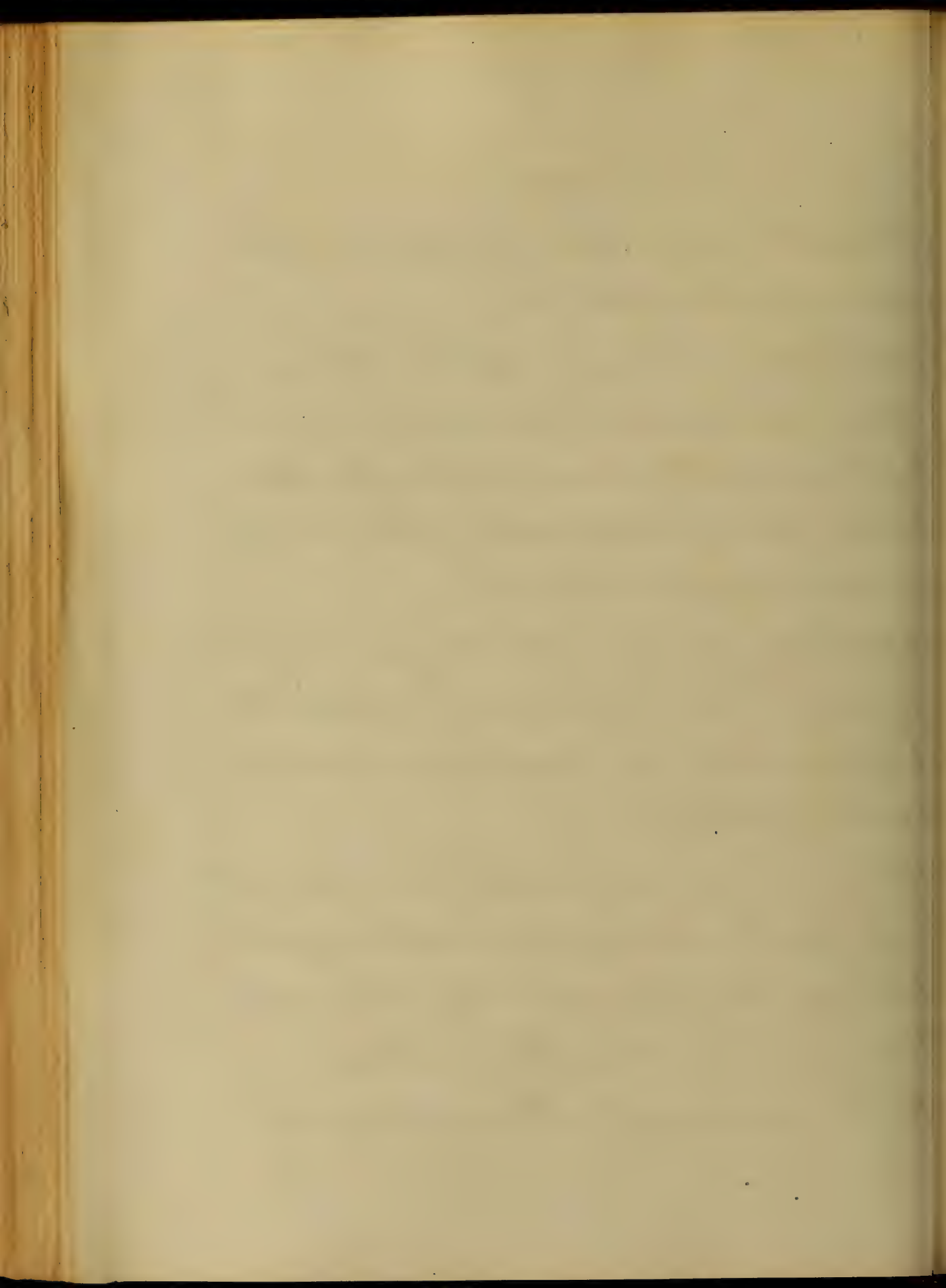
Robert Cloney - Aet 35 Occupation tailor
Admitted Aug 28th /61

About two years ago he had an attack of
Gonorrhoea which was followed in about 12
Months with a stricture of Urethra - for which
he had been under treatment up to the time of
his admission into this Hospital

About two years ago patient says he suffered
from an occasional pain in the region of the
Kidneys which he thought was caused from
constant sitting

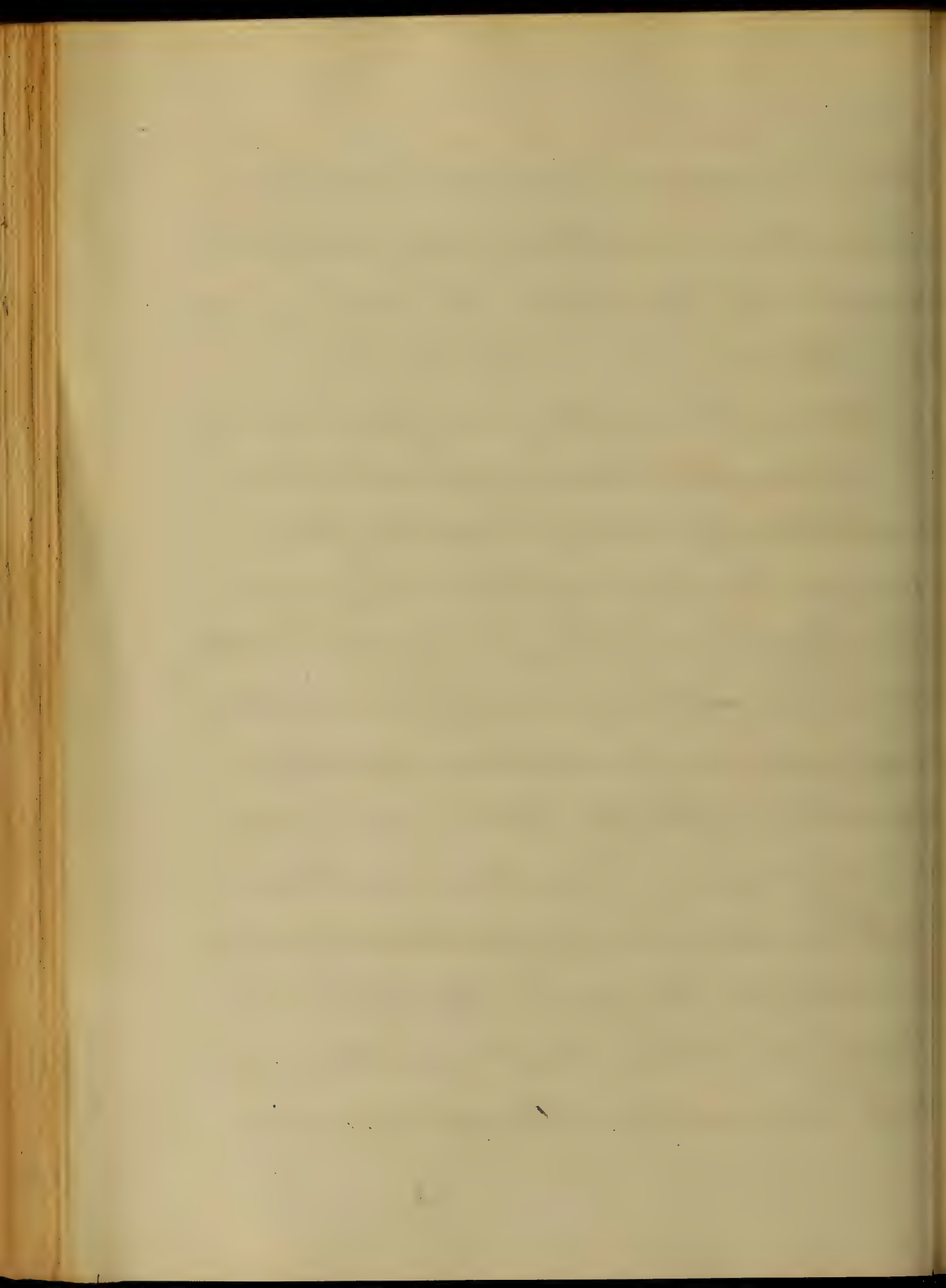
While in the house he had been under treat-
ment for the stricture which was being gradually
dilated with the conical bougies - he was also
taking an infusion of Præparata Brava -

On the Morning of the third of September



Dr. Butler passed a steel sound No 8 into the bladder
and detected a small stone which he proposed to
remove on the fifth of Sept by the lateral operation
for Lithotomy

Sept 5th. After all things were prepared and
chloroform administered a grooved staff No 8
was introduced into the bladder & the patient
secured in the usual position the staff was then
held firmly under the pubes by Dr. Allen Smith
The usual ~~external~~ oblique incision was then
made extending from about an inch & a half
above the anus & a little to the left of the raphe
to a line midway between the ischium & anus
the tissues were then carefully divided deeply behind
the bulb into the groove in the staff - turning
the knife backwards he then divided the prostate
to the proper extent - Little or no urine escaped



the bladder being somewhat contracted

The forefinger of the left hand was then introduced along the staff through the opening intentionally made small into the bladder where it touched the calculus - the staff was then withdrawn & the forceps introduced & a small mulberry calculus was grasped & extracted without any difficulty - He then passed a large steel sound through the wound into the bladder but could find no more stones

The hemorrhage was menous & moderate so that the tube was introduced & the patient untied & put to bed without delay

Sept 6th - Patient feels very comfortable this morning except a slight scalding at the neck of the bladder - His skin feels quite natural - Tongue but slightly furred & moist

Pulse 92 and soft - Urine passed through tube
Sept 7th - Patient passed a good night & has a cheer-
ful & contented expression of countenance

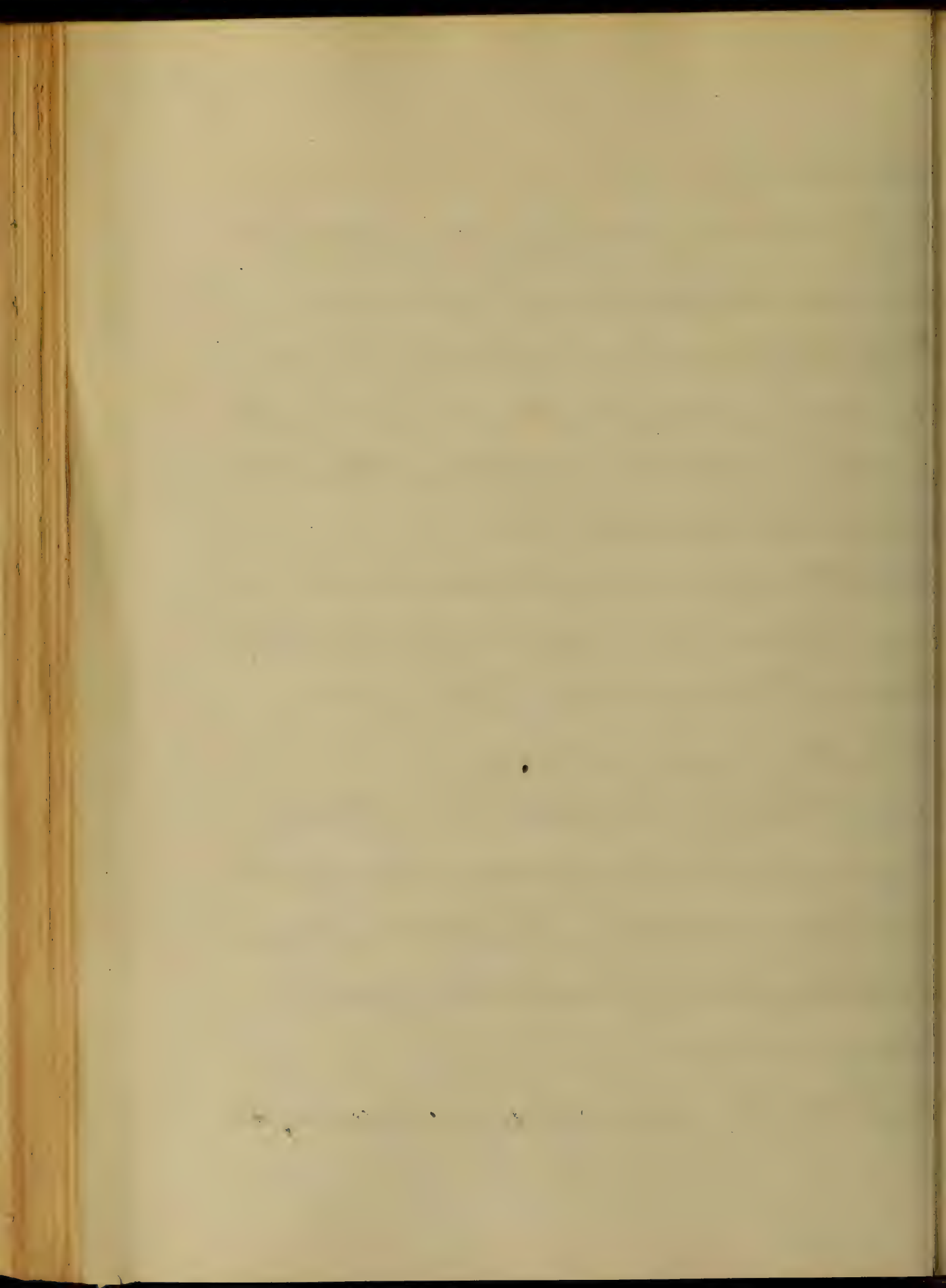
Pulse 92 - Skin cool & moist - has no pain except
the smarting caused by the flow of urine thro-
ugh the wound & that is subsiding - Bowel not
moved since the operation -

Sept 8th - He feels some fullness about the abd-
omen supposed to be caused from constipation
Ordered ℞ Oleum Ricini ℥ss at once

Pulse the same as yesterday

Sept 9th - Patient feels better - Pulse 84 Natural
Tongue clean - He has had two or three operations
since taking the ℞il - The tube was removed
this morning but he continues to pass urine
through wound -

Sept 12 - He complains of fullness in the

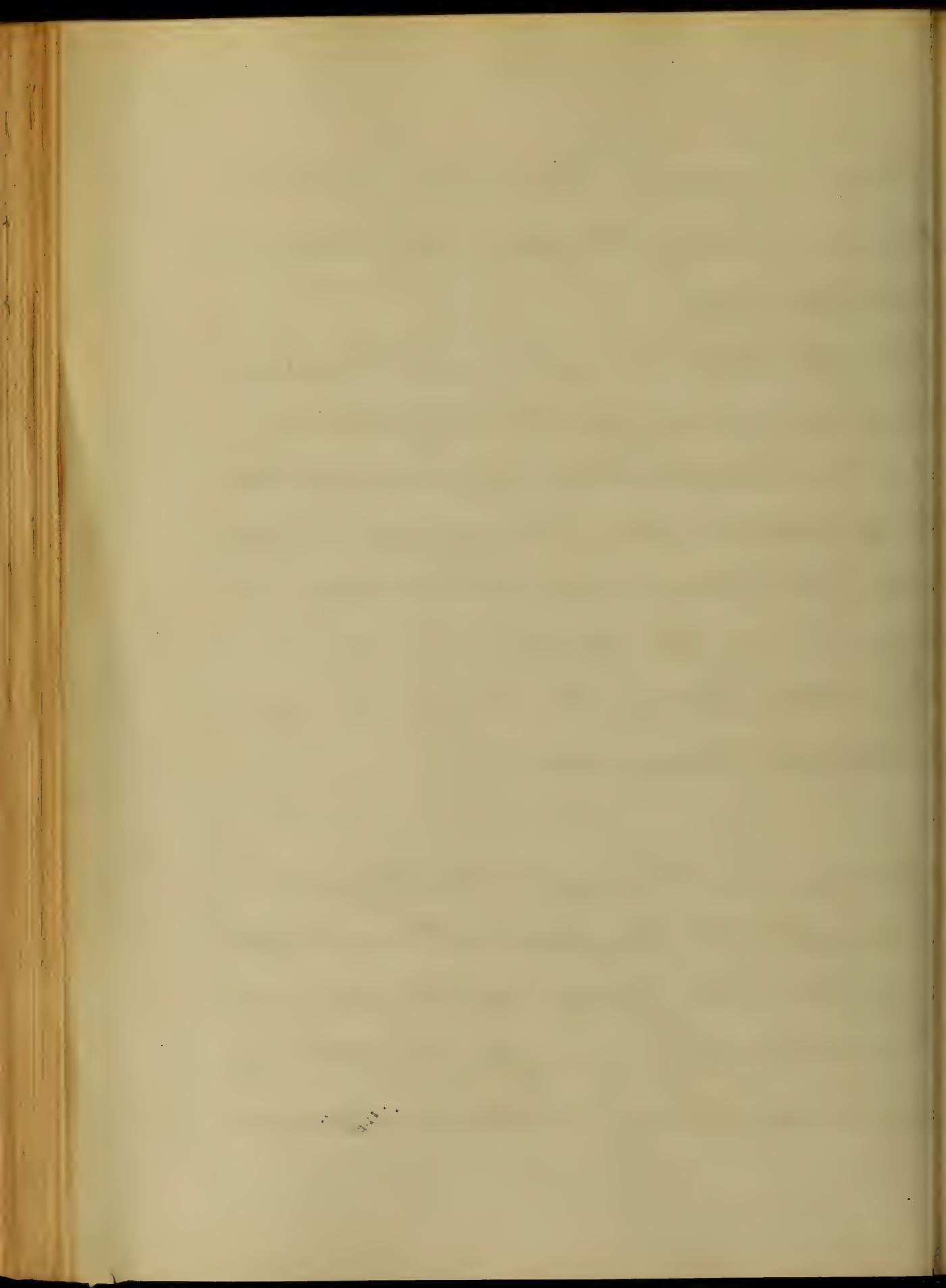


abdomen & was ordered ℞ Oleum Ricini ℥i at once.
His urine is flowing through its natural passage
the Urethra to day

Sept 15th - Patient is walking about his room
this morning, it being the tenth day after the
operation - Urine has been passing per Urethra since
the twelfth but he complains of some incontinence
which I think due to sympathetic irritation from
the wound to the bladder

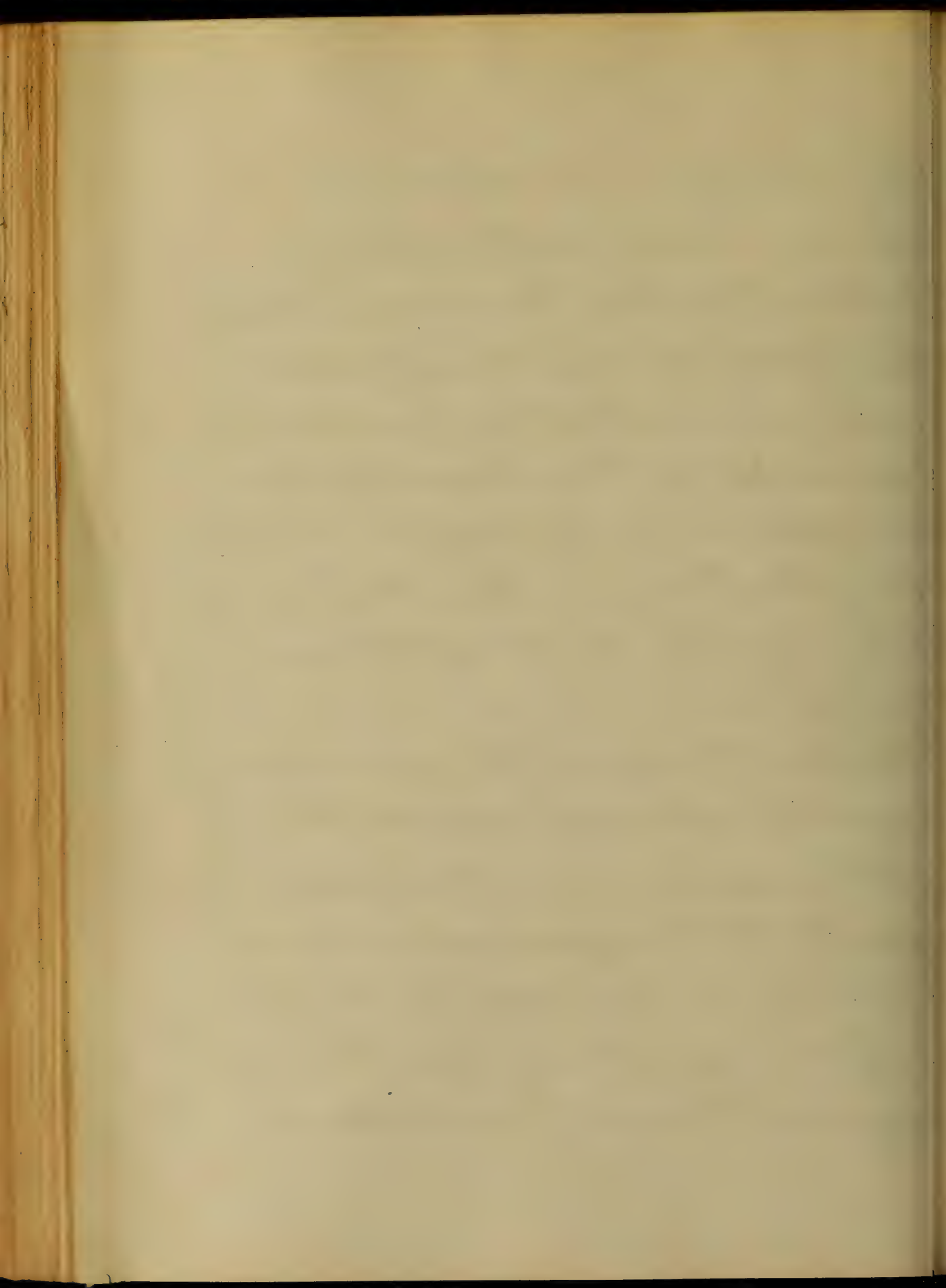
Sept 22nd Patient left the house to day a
well & healthy looking man.

And now Gentlemen of the Faculty of the
University of Maryland as I have finished
my reports I must needs stop for doing so
I will take this opportunity of thanking
you one & all for the Kindness, Courtesy and



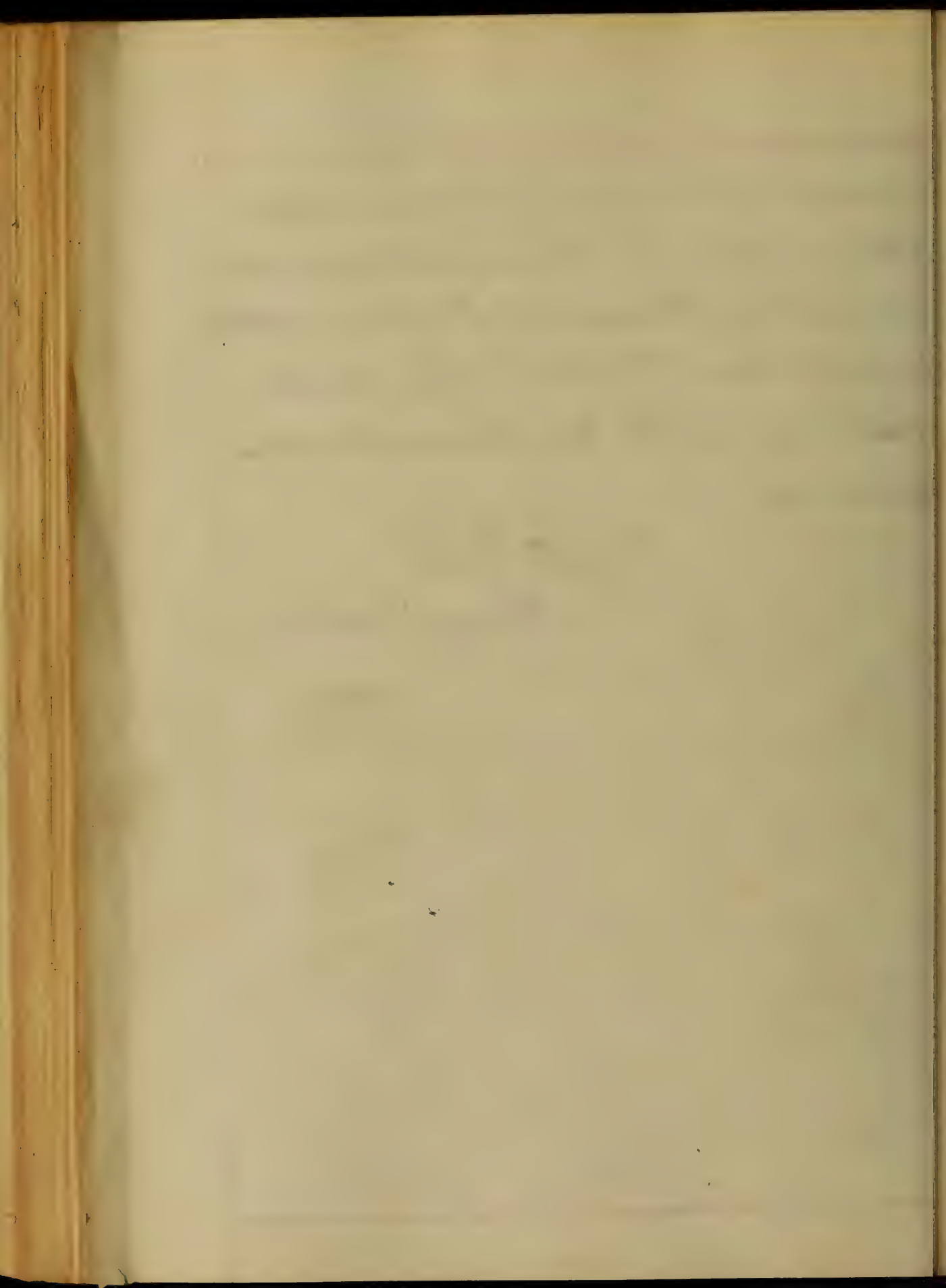
And attention you have shown me since I
have been a student at this College -
Gentlemen, I feel that I have reason to thank
you and I do thank you sincerely, but I
cannot do so without regret or concern for
I am aware that I have heard my last
lecture not only of this course but the last
of any that I may ever have the pleasure
of hearing within the walls of the University
of Maryland.

The rules & precepts that you have so
earnestly endeavored to teach me, I hope
with your consent soon to be called
upon to test by my own ~~experience~~ experience when
I shall have to adopt or reject them accord-
ingly - but be that as it may I shall all
ways cherish them as the true doctrines



viewed in the present light of our rapidly
advancing science - As year after year rolls
around new theories will be advanced which
we will have to test by practical
~~use~~ experience the true basis of Rational
Medicine

Respect Yours
Henry Darling,



AN
Inaugural Dissertation

ON

Typhoid Fever
Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

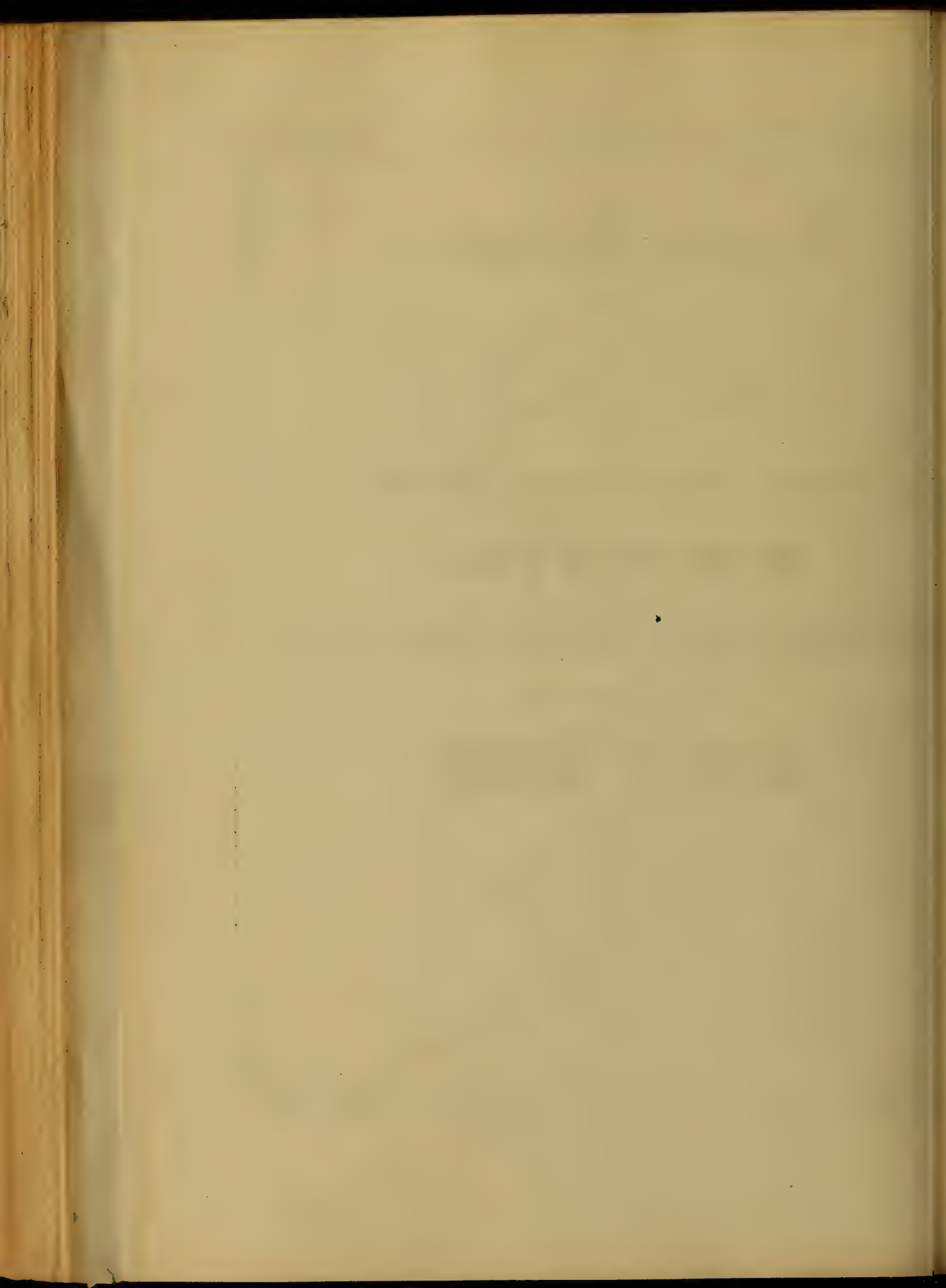
By

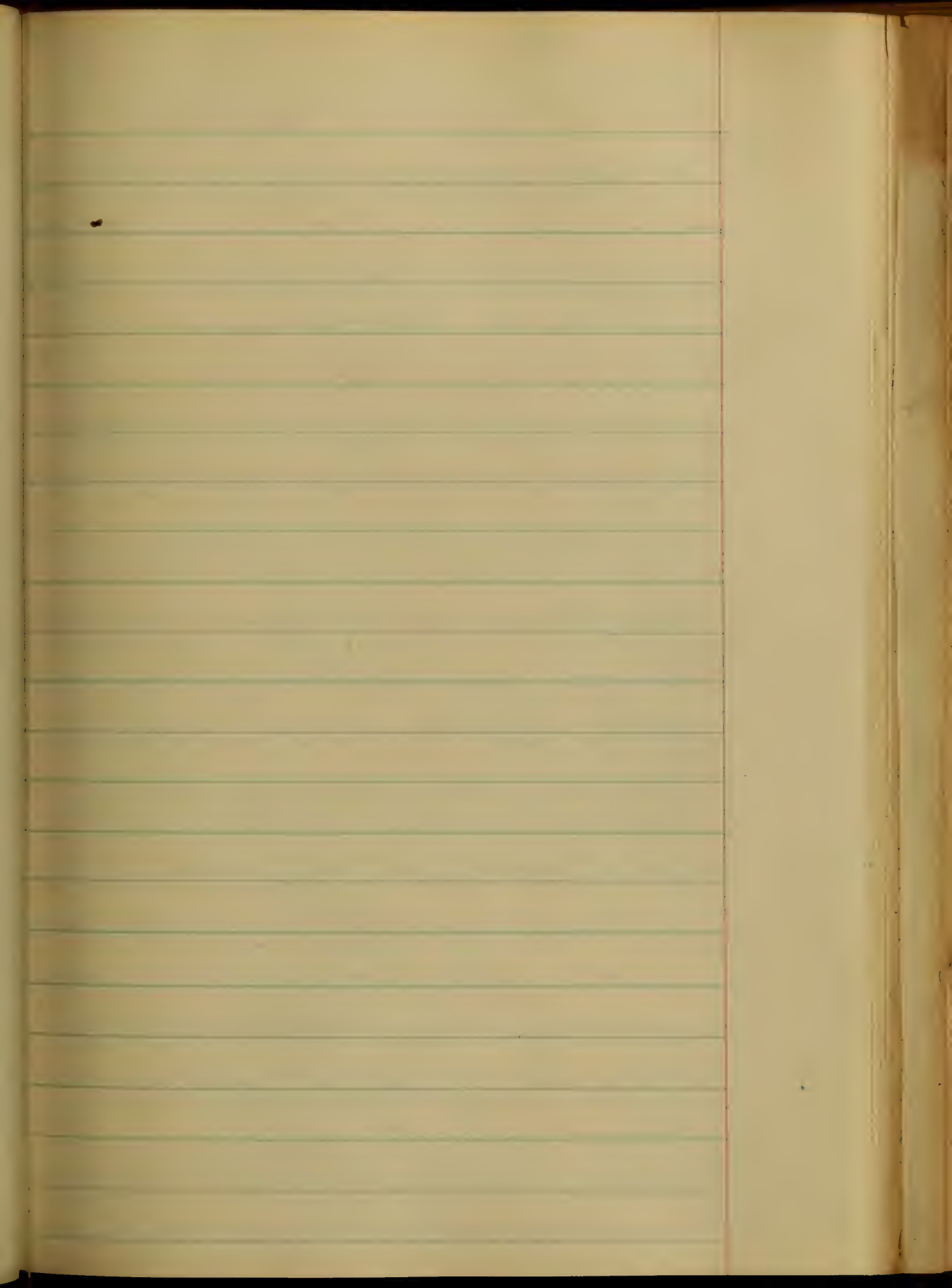
Hugh R Green
of

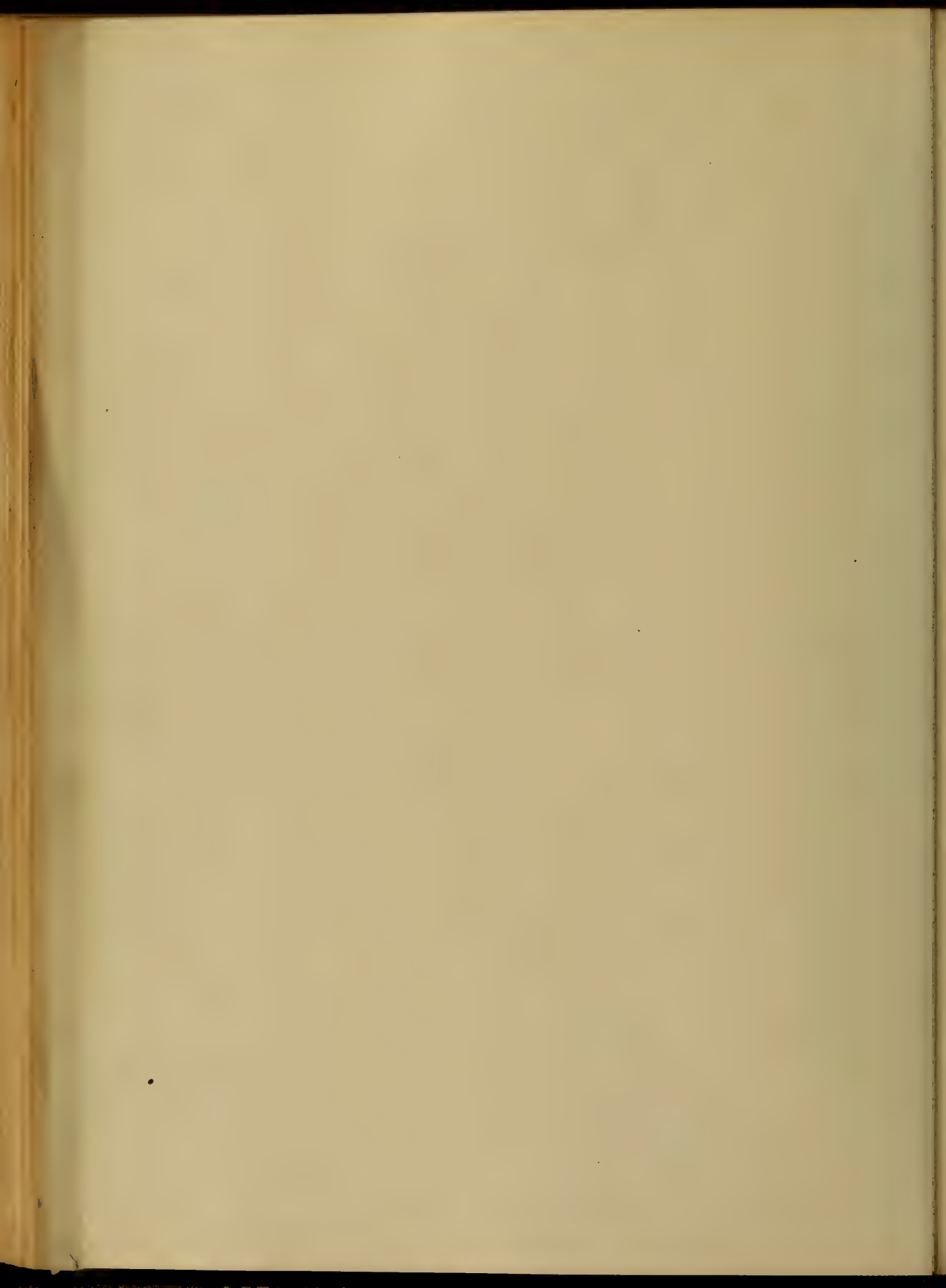
Virginia

Session of

1866-67



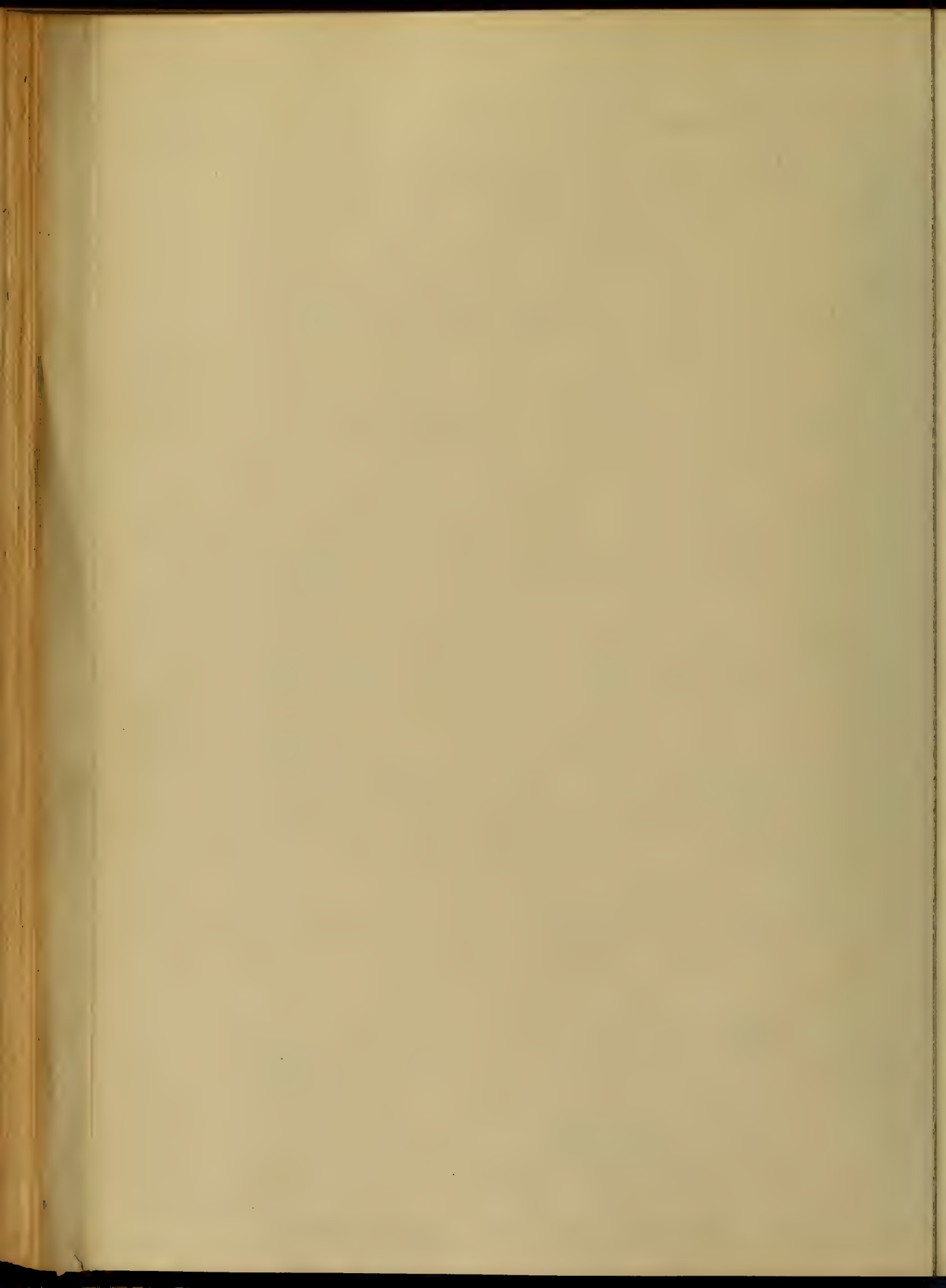




Typhoid Fever.

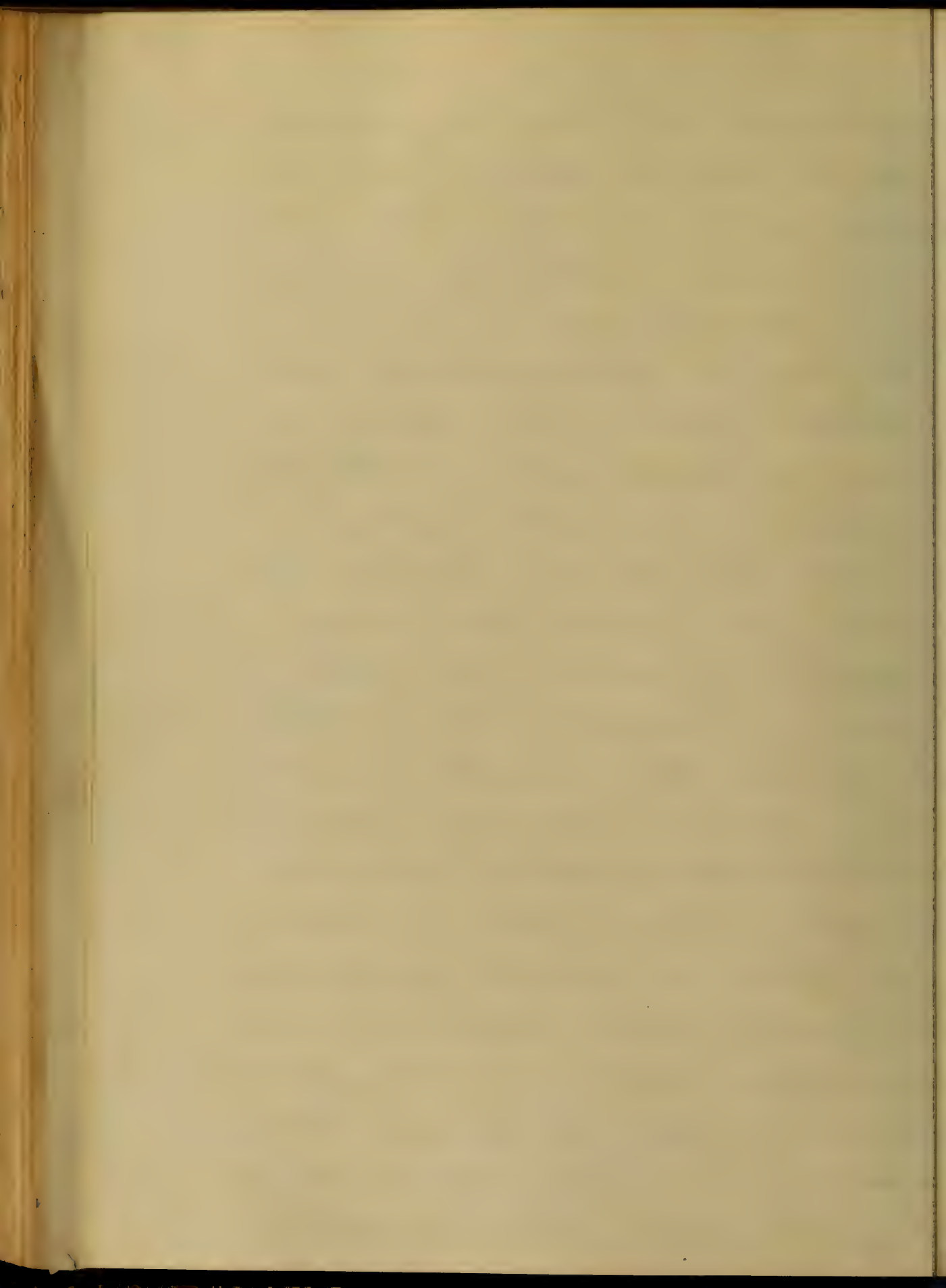
It cannot be supposed that a student with only the limited knowledge he may have gained from the few cases which may have fallen under his notice in the clinical wards of a hospital while attending lectures can advance anything new concerning a disease the prevalence of which have given rise to so much discussion among many of the most learned of our profession. I do not therefore propose to touch upon any of these mooted points, but simply to advance those ideas which after reading ^{carefully} different authors upon this subject seem to me most plausible.

The nomenclature of this disease has been a subject of much dispute, and many different names have been proposed by different

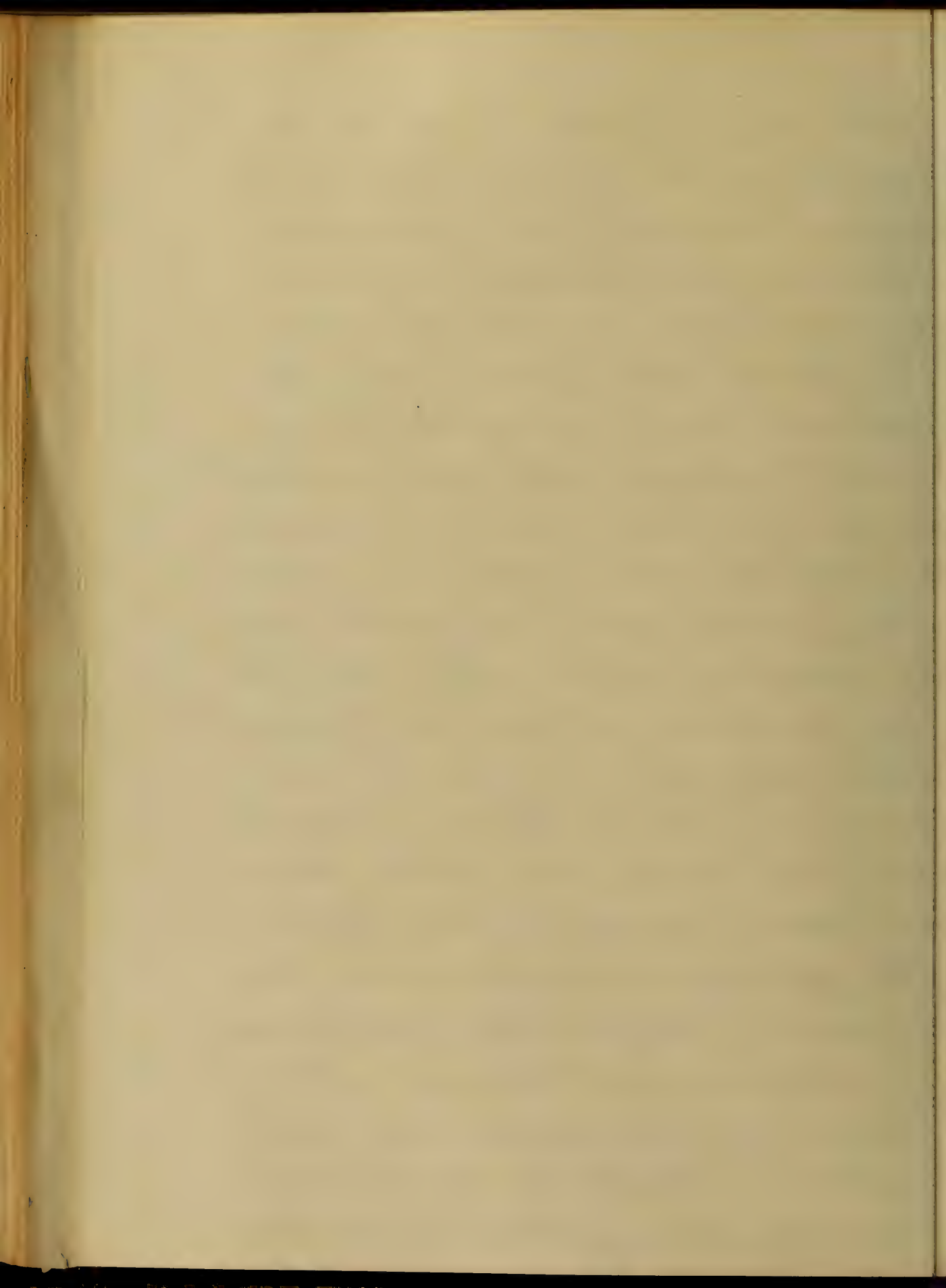


individuals, all of which are alike
open to some defect. I will there-
fore adopt the one by which it is
most commonly known in this coun-
try, Typhoid Fever.

Anatomical Characters.—The char-
acteristic lesions of this disease are
found in the Peyerian, Solitary and
Mesenteric glands, more particularly
in the two former. Early in the
disease the Peyerian and Solitary
glands become enlarged from a
deposit of morbid material (known
as Lymph Material) into their sacks,
which causes them to project into the
intestinal canal several times above
the surrounding mucous membrane
whose glands are hard to the touch and
the vessels around their bases con-
siderably injected. According to
Hunt this phenomenon is first
noticed as early as the second day of the disease.
The glands having attained their

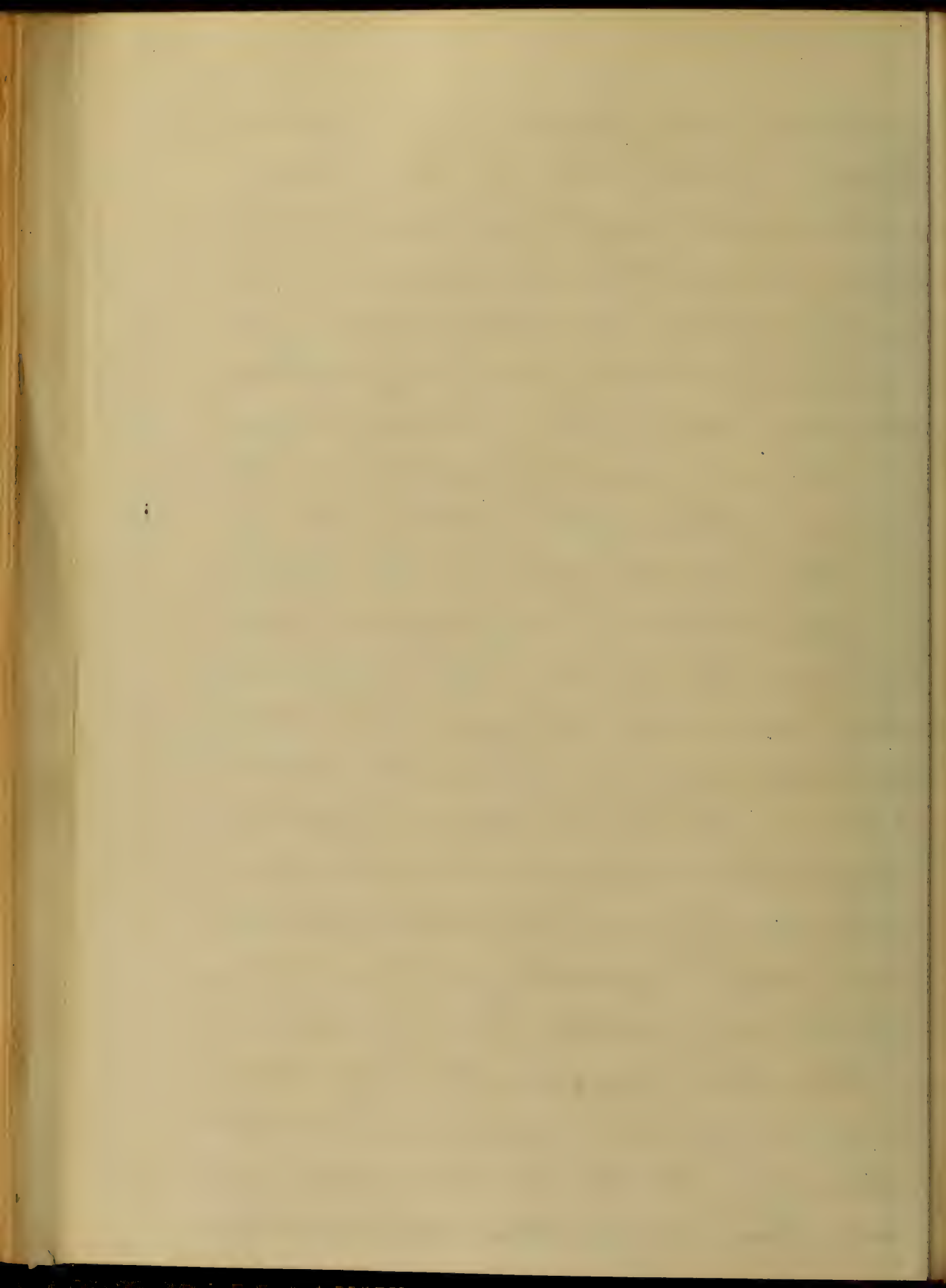


full size. They soften and the con-
 gestion subsides. Elimination of the
 morbid material now commences
 This may be effected in several
 different ways. In the first place
 the gland will become soft, the
 sack will burst and allow the con-
 tents to escape into the intestinal
 canal. The vesicle then collapses and
 cicatrization takes place. In the second
 place elimination may take place
 by sloughing which may extend to
 the muscular or even the peritone-
 al ^{coat} or perforation may be the result
 giving rise to peritonitis. Ulceration
 may take place and like slough-
 ing may produce perforation
 The perforation caused by sloughing
 is much larger than that caused
 by ulceration. Ulceration which
 usually commences about the
 eighth or tenth day is character-
 ized by an aggragation of the

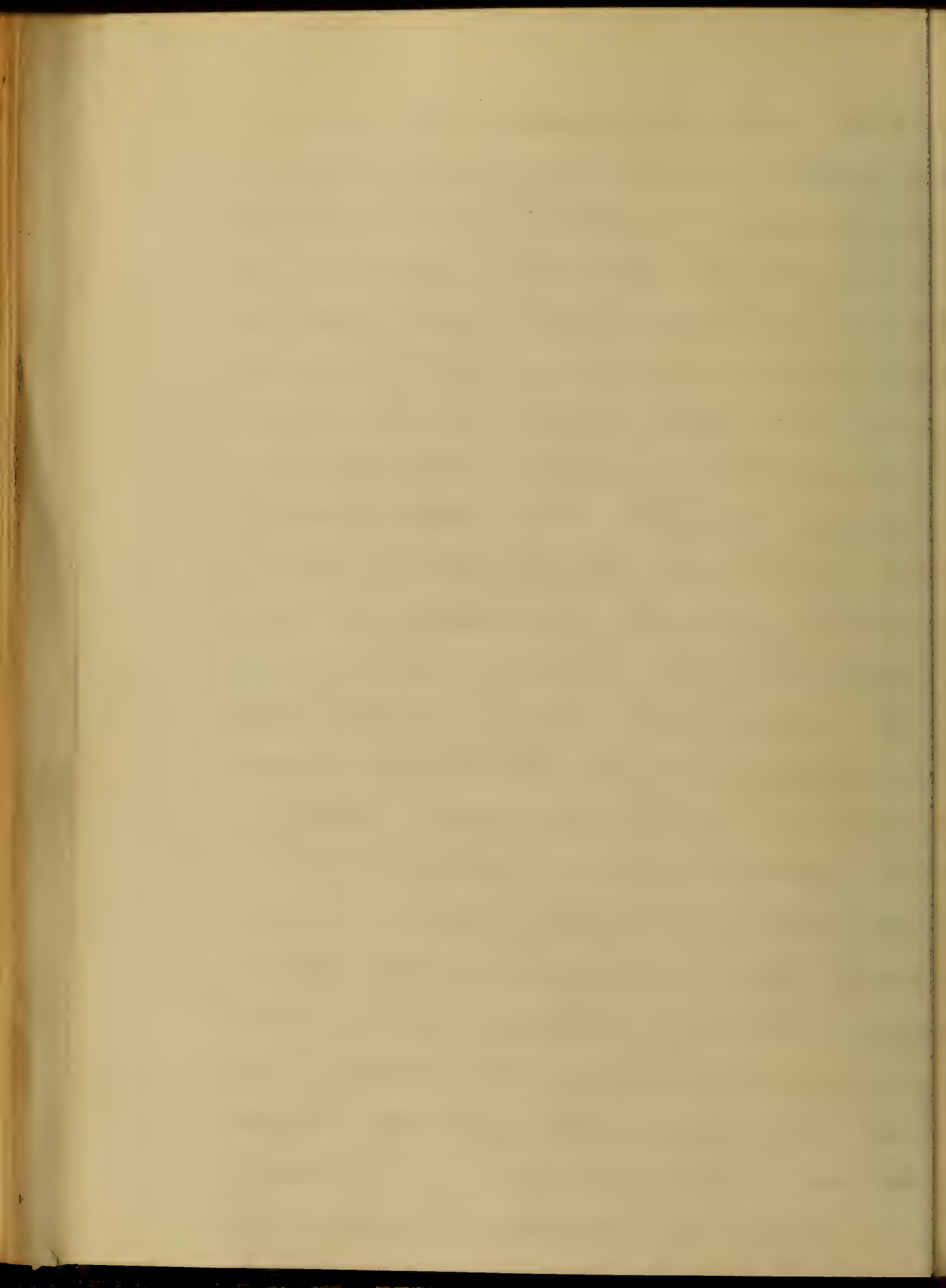


4

original symptoms of the disease. Febrile symptoms are increased and abdominal symptoms become more distinctly marked. The elimination of the morbid material follows in the order of its deposits commencing in those glands nearest the Coecum and gradually extending to those above. The following are the characteristics of the ulcers of Typhoid Fever. (1) They are situated in the lower part of the ileum and are larger and more numerous near the ileo caecal valve. (2) Their form is either elliptical, circular or irregular, accordingly as they correspond to an entire patch of Peyer's glands, a solitary gland or a portion of a Peyerian patch. (3) They do not form an entire circle around the intestine as do tuberculous ulcers but their long diameters correspond



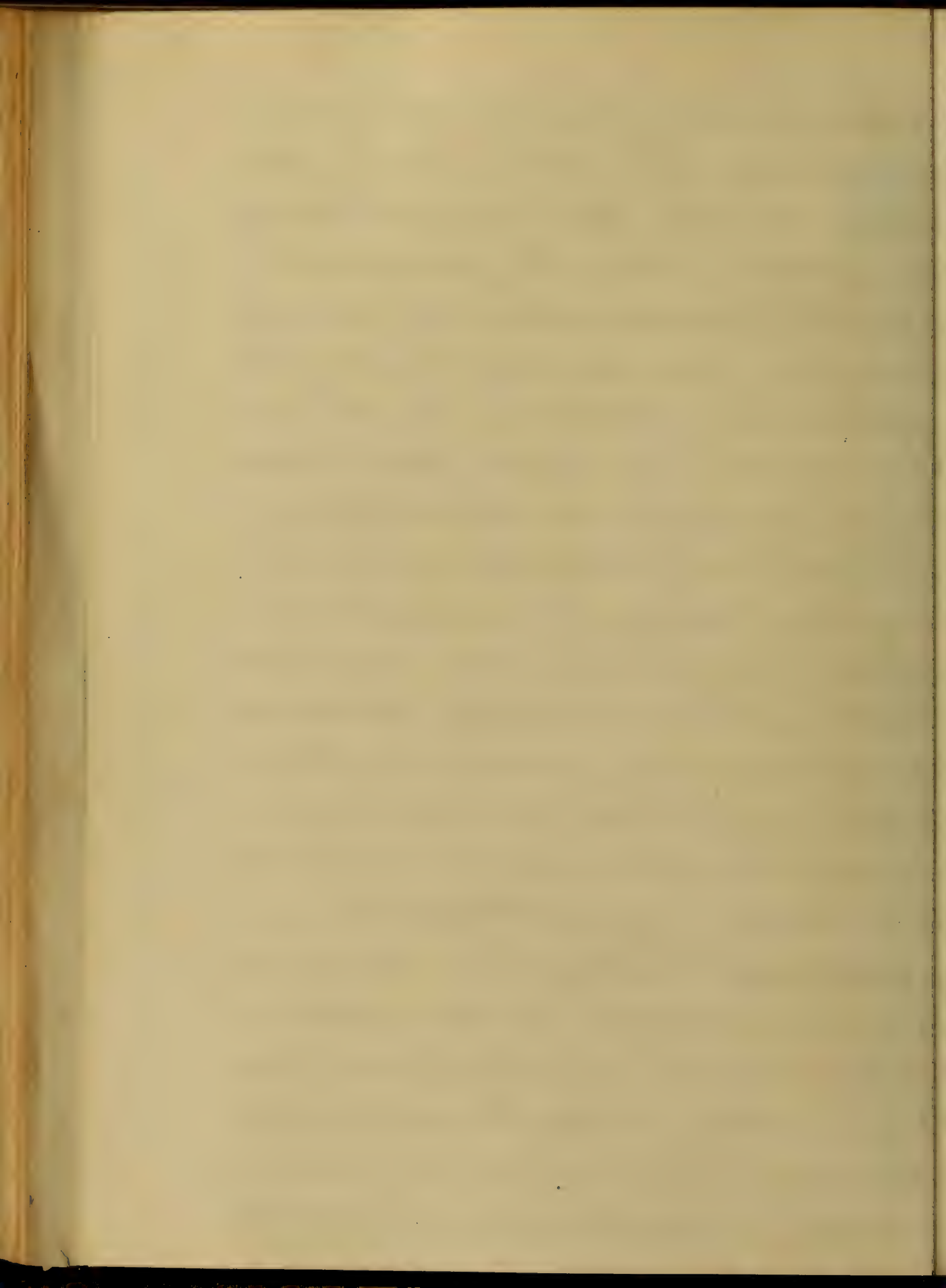
with the long diameter of the intestine. (4) The elliptical ulcers are always opposite the attachment of the mesentery. (5) Their edges are surrounded by a fold of mucous membrane and are not indurated as is the case with tuberculous ulcers. Cicatrization usually commences towards the latter part of the third week. It takes place by the growth of a delicate membrane in the base of the ulcer to which the edges of the mucous membrane becomes adherent and the ulcer gradually heals. The cicatrices never constrict the diameter of the gut. Simultaneous with these changes in the Peyerian and Solitary glands, there is series of morbid phenomena taking place in the mesenteric glands. They also become enlarged from a deposit of the morbid material, which may



6

either be absorbed or removed by sloughing. The slough being discharged into the abdominal cavity giving rise to peritonitis. In this disease there is usually more or less enlargement of the spleen. The blood found in the heart after death is of darker color, contains fewer red corpuscles, and less fibrine than normal blood, and it does not coagulate readily. If much fibrine exists it is due to some local inflammation. There are other lesions which are occasionally found in this disease after death, but as they are by no means invariable I need not dwell upon them here.

Clinical History. This disease is generally preceded by symptoms of indisposition ranging from three to ten days. This is called the forming stage and it is often a matter of difficulty to ascertain

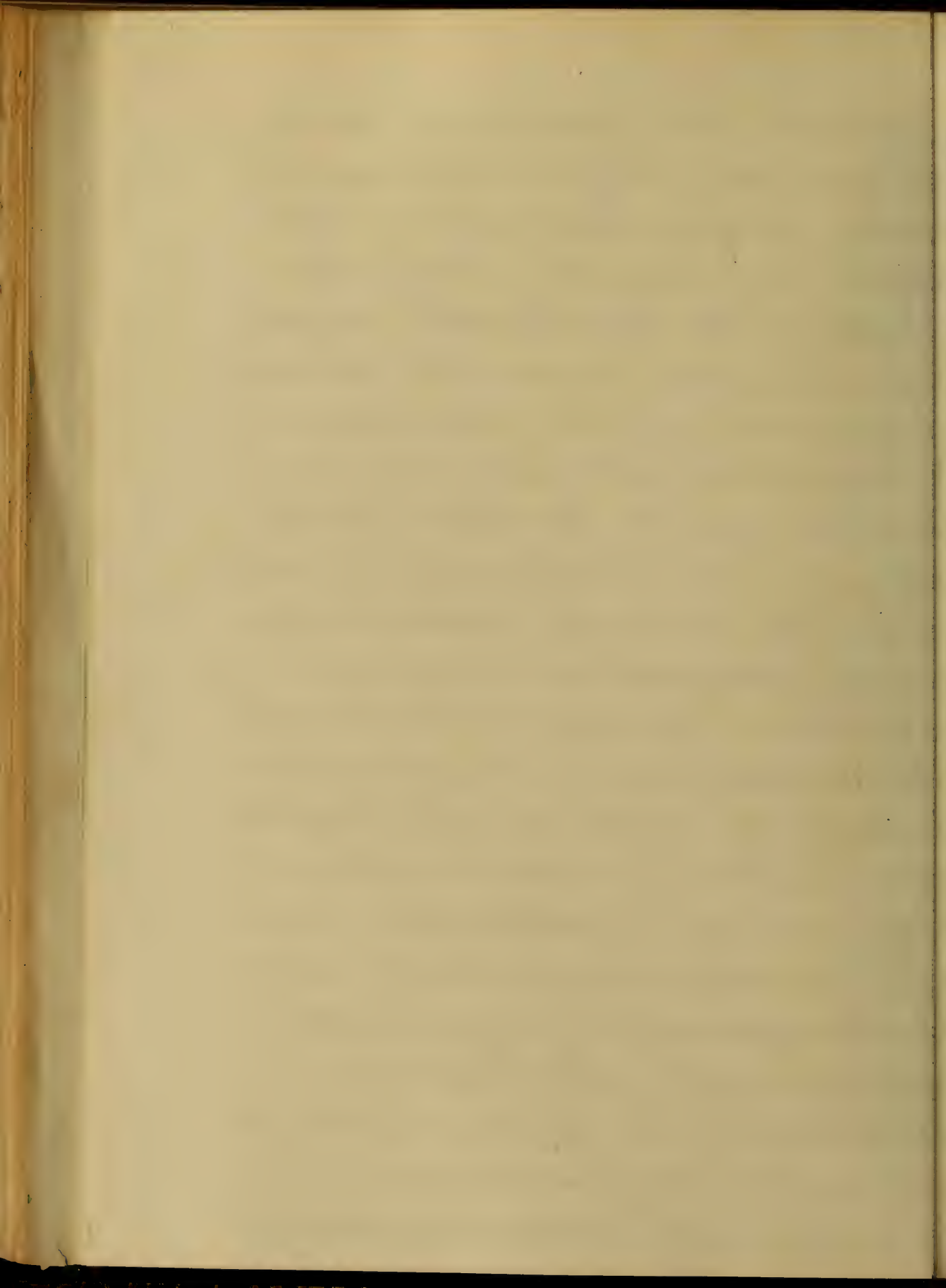


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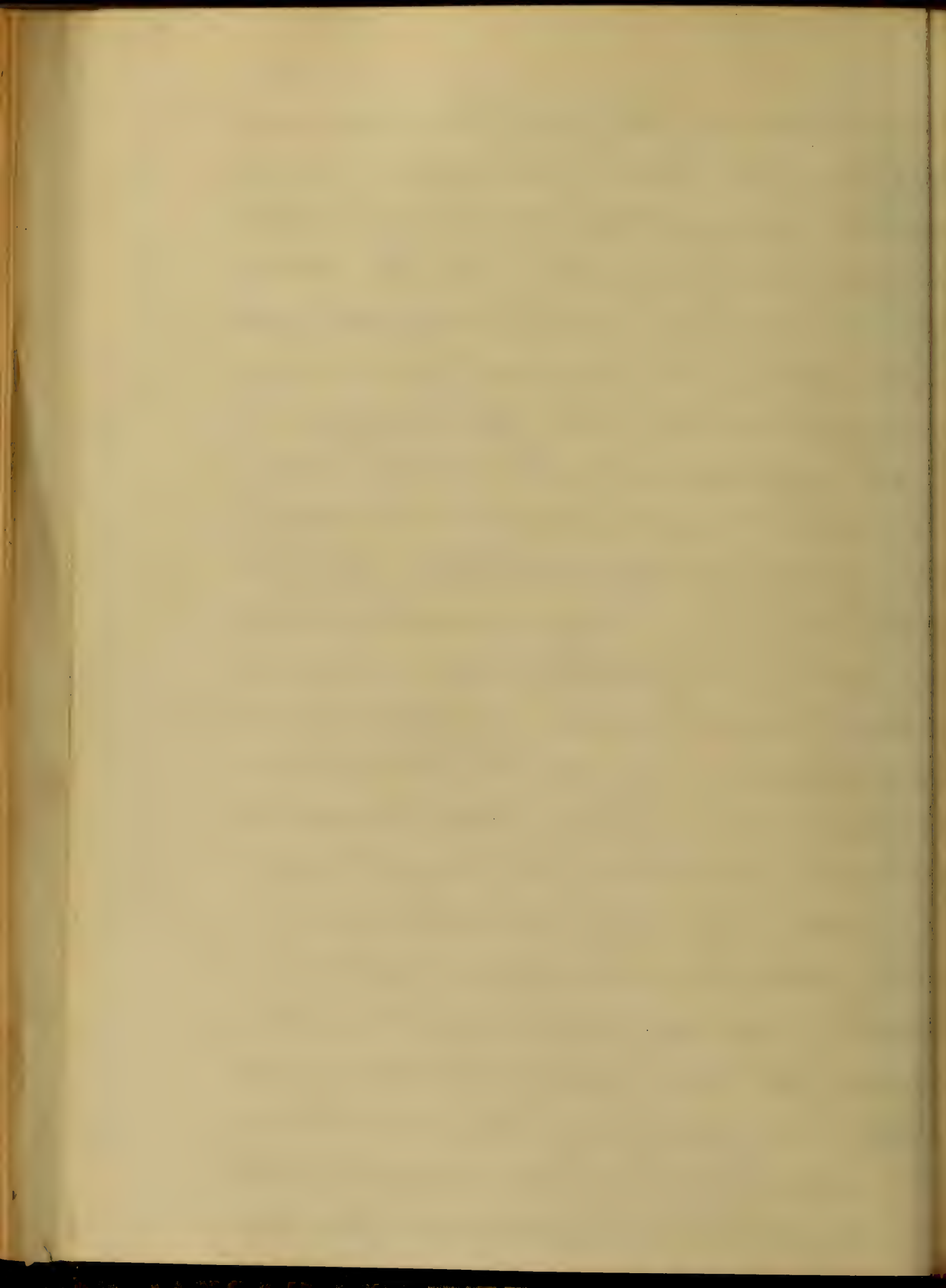
precisely the period at which the formative stage ends and the disease proper commences. Flint adopts the period at which the patient takes bed as the commencement of the disease. The disease is generally preceded by a sense of chilliness which is more or less distinctly marked. Cephalalgia in which the pain is referred to the forehead, Prostration, frequently nausea and vomiting, Lassitude, Epistaxis and Diarrhoea.

The two latter may be considered as strongly diagnostic. The face is more or less flushed in the early stages and as it advances the countenance assumes a dull and listless expression proportionate to the severity of the disease.

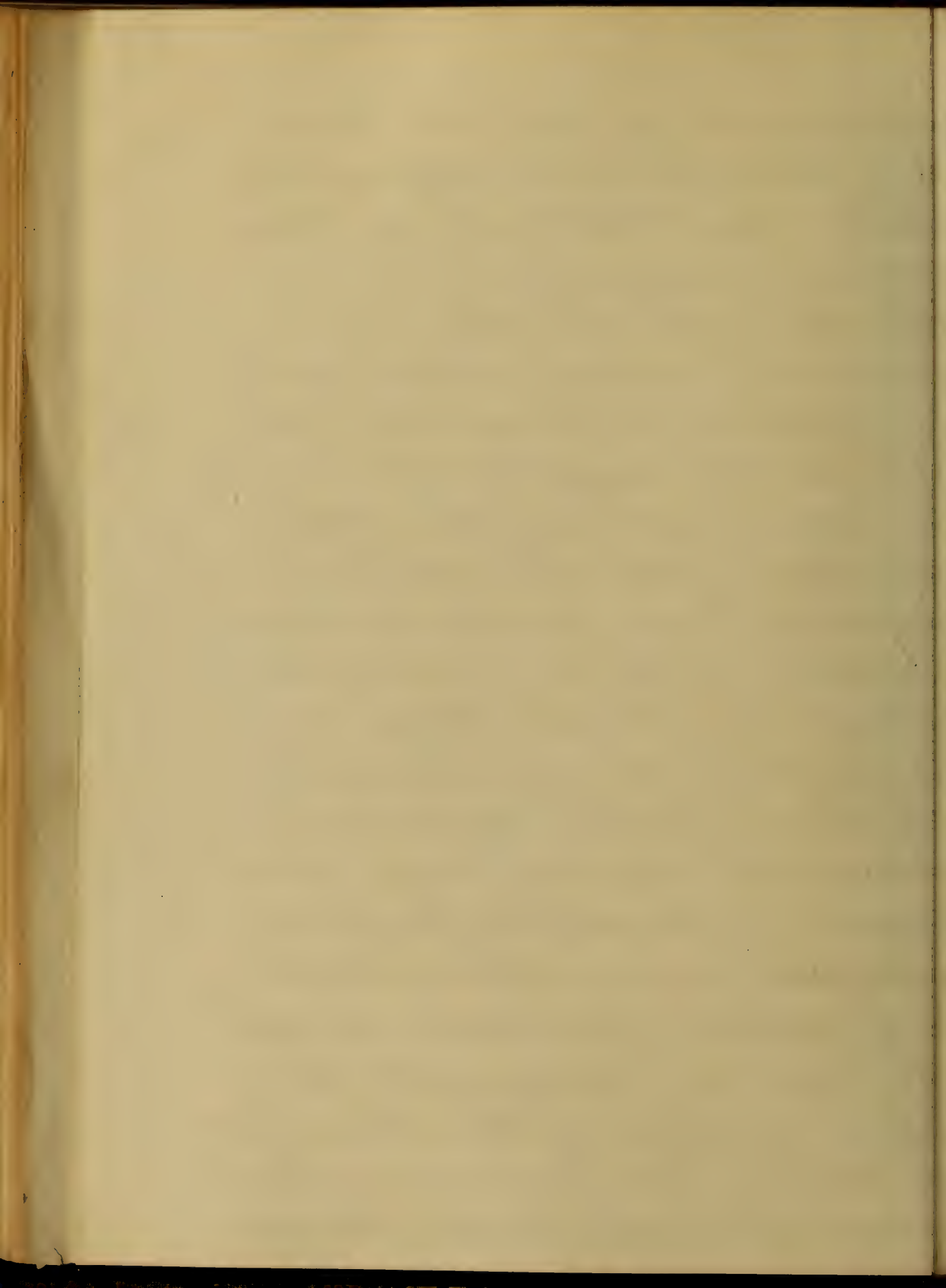
Although the patient complains for a considerable amount of pain in the commencement of



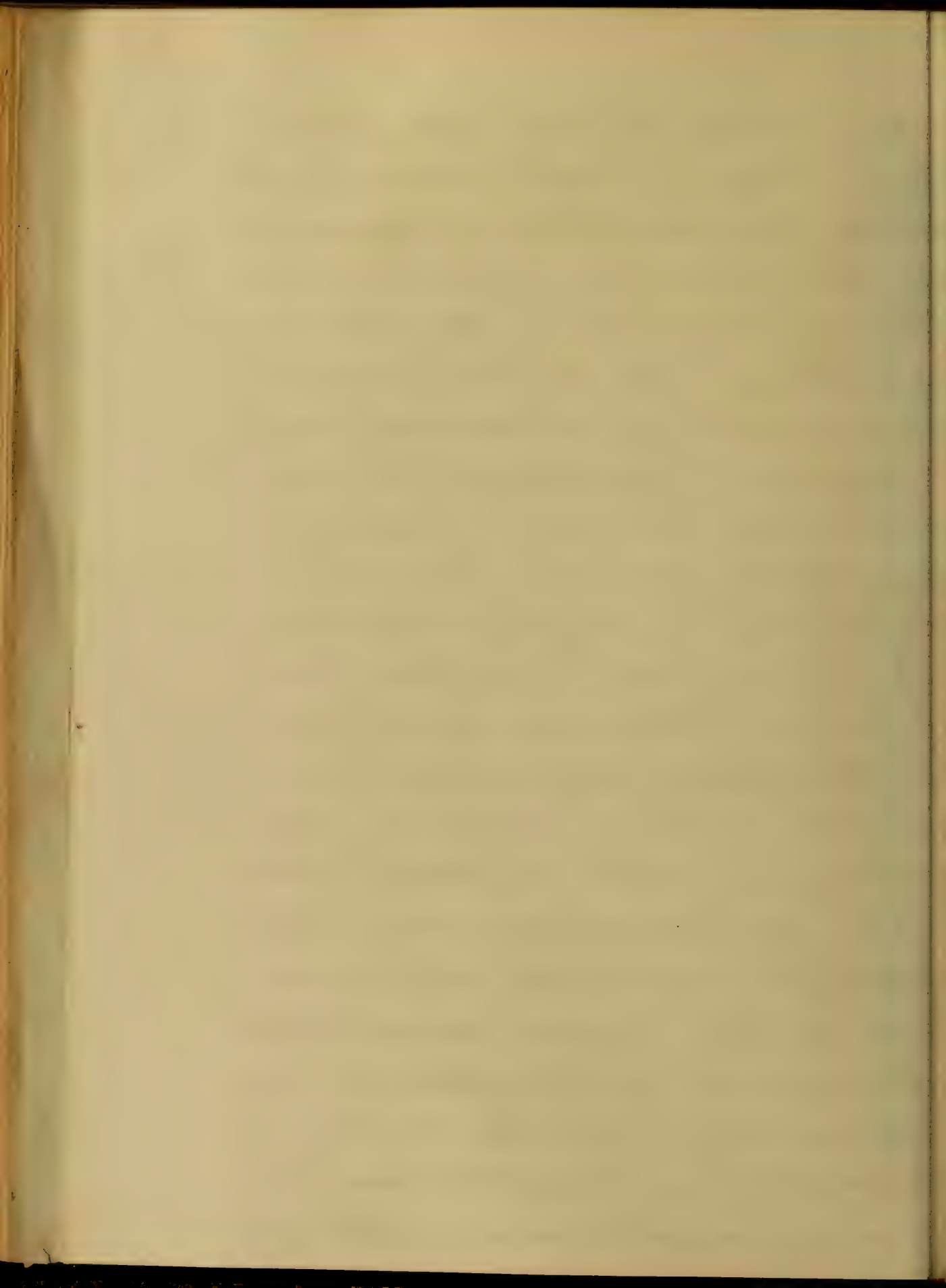
The disease yet in the advanced stages it is not usually a prominent symptom if it exists at all. This is probably due to the exhausted condition of the nervous system. Delirium is present in a majority of cases. The precise period of its appearance varies. It may be slight or it may be a very conspicuous symptom. In some cases it is of a very mild, ^{and passive} character and the patient can be very easily controlled by persuasive measures. In others it is very active the patient often requiring forcible restraint to keep him in bed. In the advanced stages ^{sometimes} the patient becomes listless and almost insensible. He seems to be unconscious of all that is going on around him. He rarely asks for food or drink and frequently passes the urine



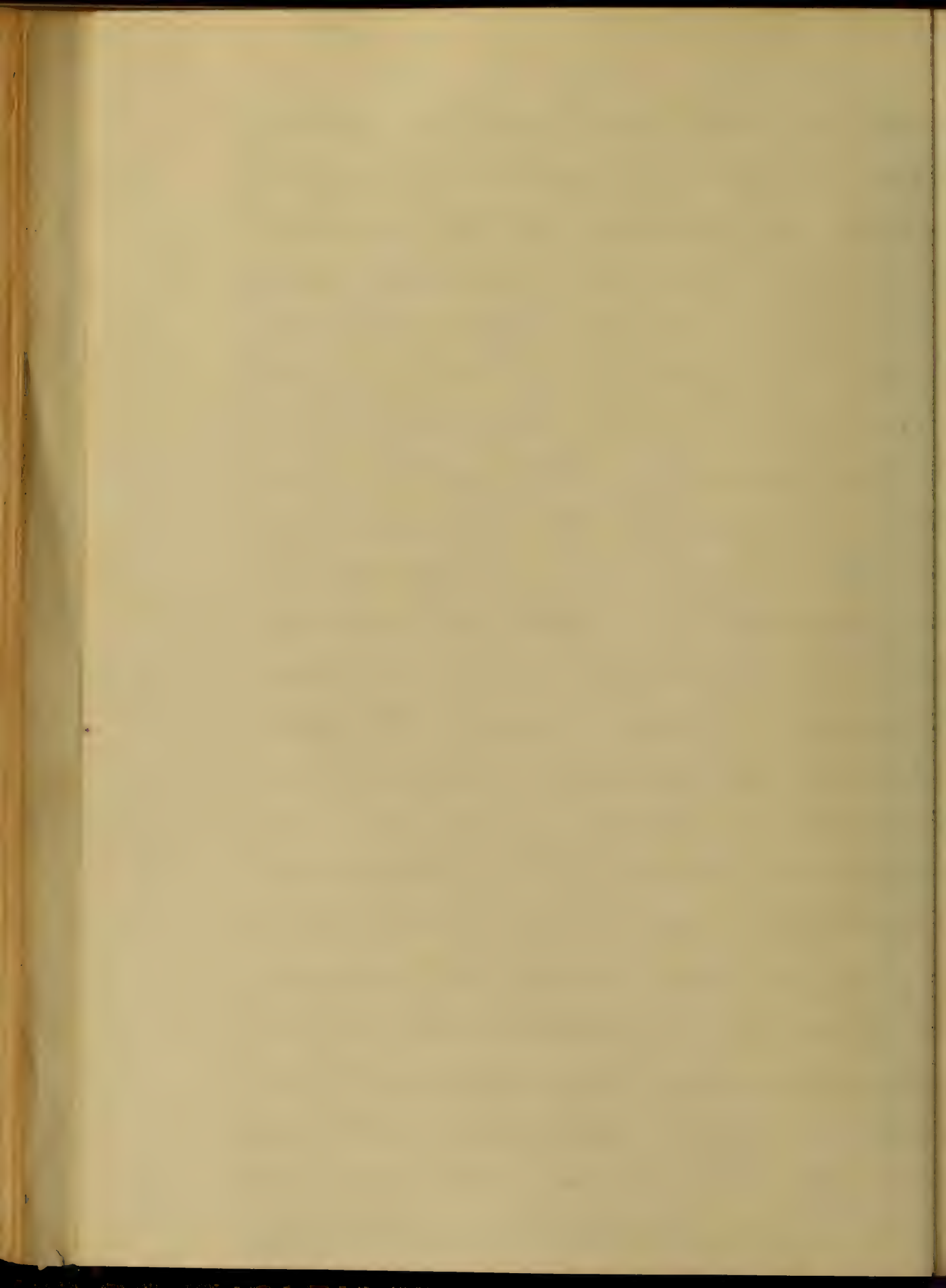
and fever in bed. Wakefulness is a prominent symptom in some cases. Picking at the bed-clothes or invisible objects in the air, and twitching of the muscles, usually denotes gravity of the disease. Anorexia is present in the majority of cases yet in some instances the appetite continues good throughout the disease. Urine perception becomes blunted there is generally much thirst. The tongue though sometimes only furrowed is generally thickly coated. Haemorrhage from the gums is an occasional symptom. Inflammation of one or both of the parotid glands is a rare symptom yet it may take place at any stage of the disease or during convalescence. Diarrhoea exists in a large major-



etc. of cases. Yet in some instances we meet with constipation which by some practitioners is regarded as a very favorable sign. Haemorrhage from the bowels sometimes occurs, but is not to be regarded as necessarily ^a fatal symptom. Tympanitis or meteorism, tenderness & pain on pressure and gurgling are important symptoms and are highly diagnostic of this form of fever. Perforation giving rise to Peritonitis may occur late in the disease or during convalescence and in some cases after apparent recovery. It is likely to occur in mild as well as in severe cases. So that the severity of the fever is not always proportionate to the amount of intestinal lesion. The sudden appearance of Perito-

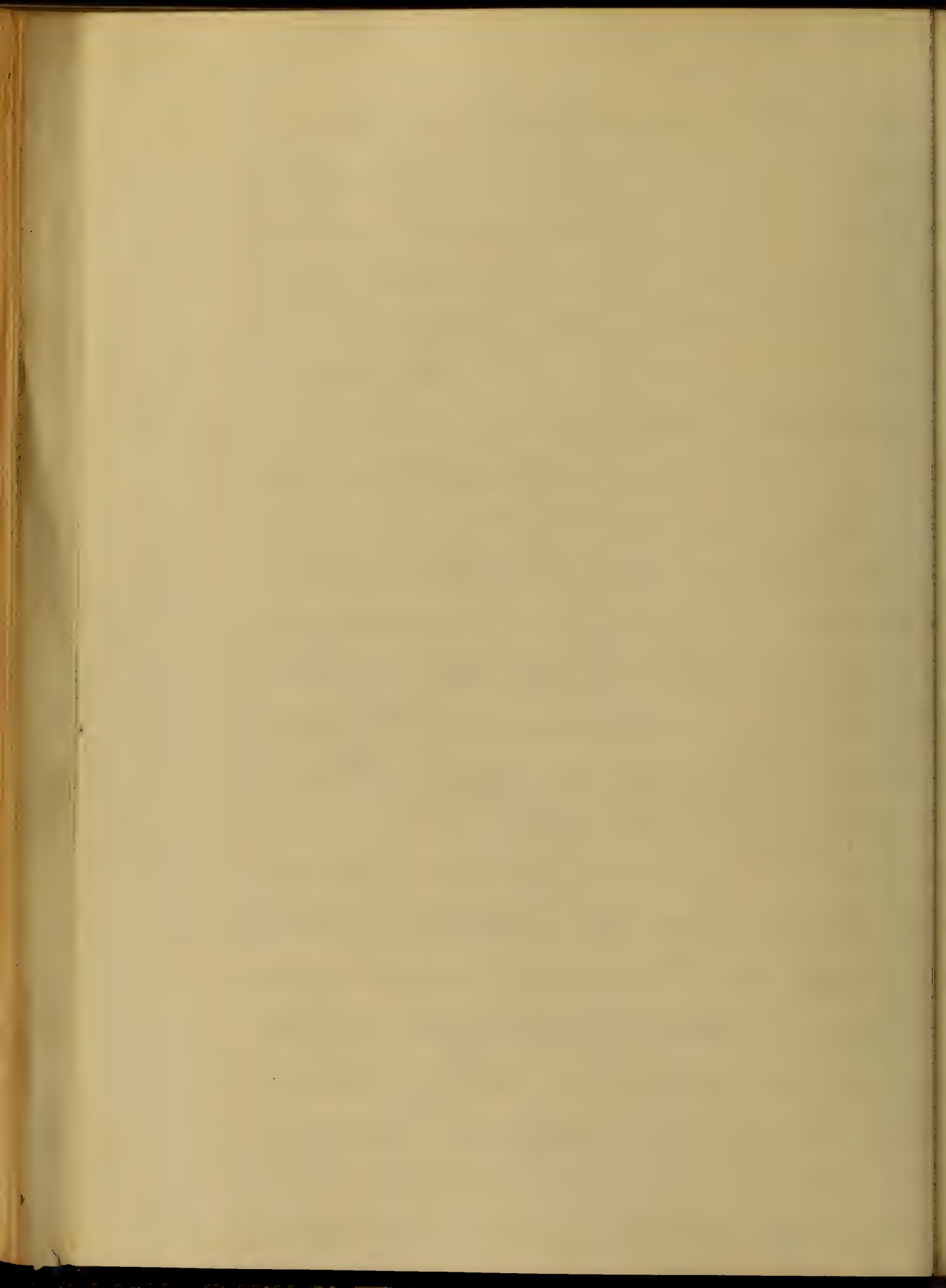


nitis in the latter stages of the dis-
 ease or during convalescence de-
 notes perforation of the intestine
 or sloughing of a mesenteric gland.
 One of the most important diag-
 nostic symptoms is the appear-
 ance of a rose colored eruption
 which usually takes place from
 the seventh to the fourteenth day.
 In the majority of cases it is
 more distinct upon the abdomen
 but in some instances it extends
 around on the back. The eruption
 consists of minute isolated pap-
 ules which vary in number in
 different cases. They disappear
 upon pressure but resume their
 original color when the pressure
 is removed. We sometimes meet with
 perspiration which is more or less
 general, in the progress of this dis-
 ease, and ^{which} usually makes its appear-
 ance at night, but as a rule we

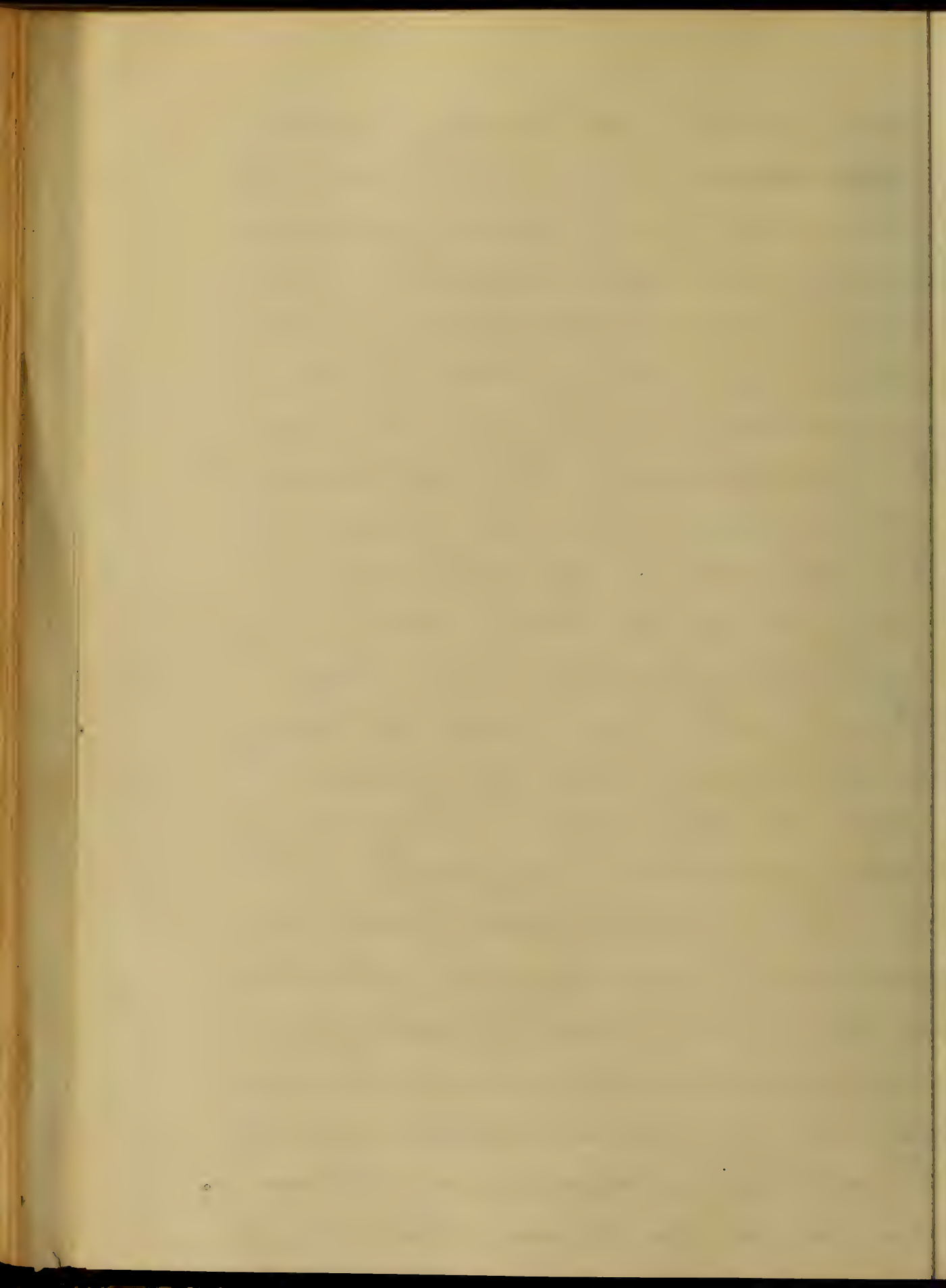


find the skin hot and dry
 The urine is scanty and the
 color of increased specific
 gravity, owing to increase of or-
 ganic matters, especially urea
 and uric acid. The temperature
 is much raised above the nor-
 mal standard, sometimes run-
 ing as high as 105° or 106° or even
 higher. According to Lehmann it
 reaches its maximum height
 about the third or fourth day, and
 the evening temperature is generally
 two or three degrees higher than the
 morning temperature.

Causes. Typhoid fever is not con-
 fined to any particular locali-
 ty but is endemic in every im-
 polished part of the globe. Yet
 in those countries where malarial
 and fevers are common it prevails
 to a more limited extent. It is
 more common in young persons

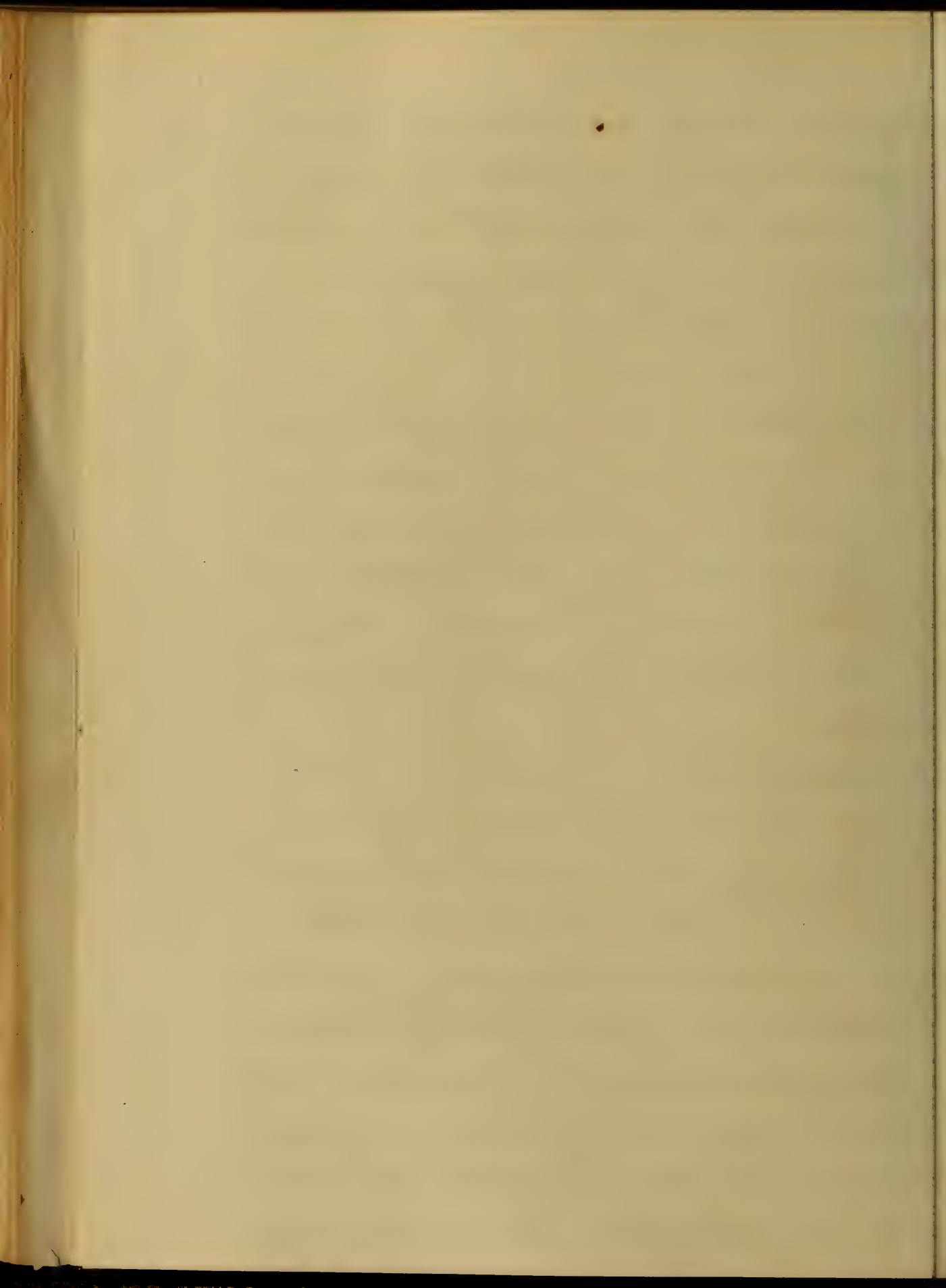


being associated with the state
 of advanced life. This has been
 accounted for by some upon the
 ground that the vesicular and
 Solitary glands disappear in ad-
 vanced life being rarely found
 in persons over fifty years of age.
 It is acknowledged by all authors
 to be more or less contagious, but
 that it occurs spontaneously in
 many instances there seems to be
 no little doubt. Most would
 I think both agree that it may
 occur spontaneously or that it
 may be brought on by the
 decomposition of animal ^{for vegetable} substan-
 ces or from such other causes as
 render the air impure. As to
 on the other hand it is
 propagated only by contagion, and
 that the contagious matter resides in
 the intestinal discharges. He even
 goes so far as to say that by the

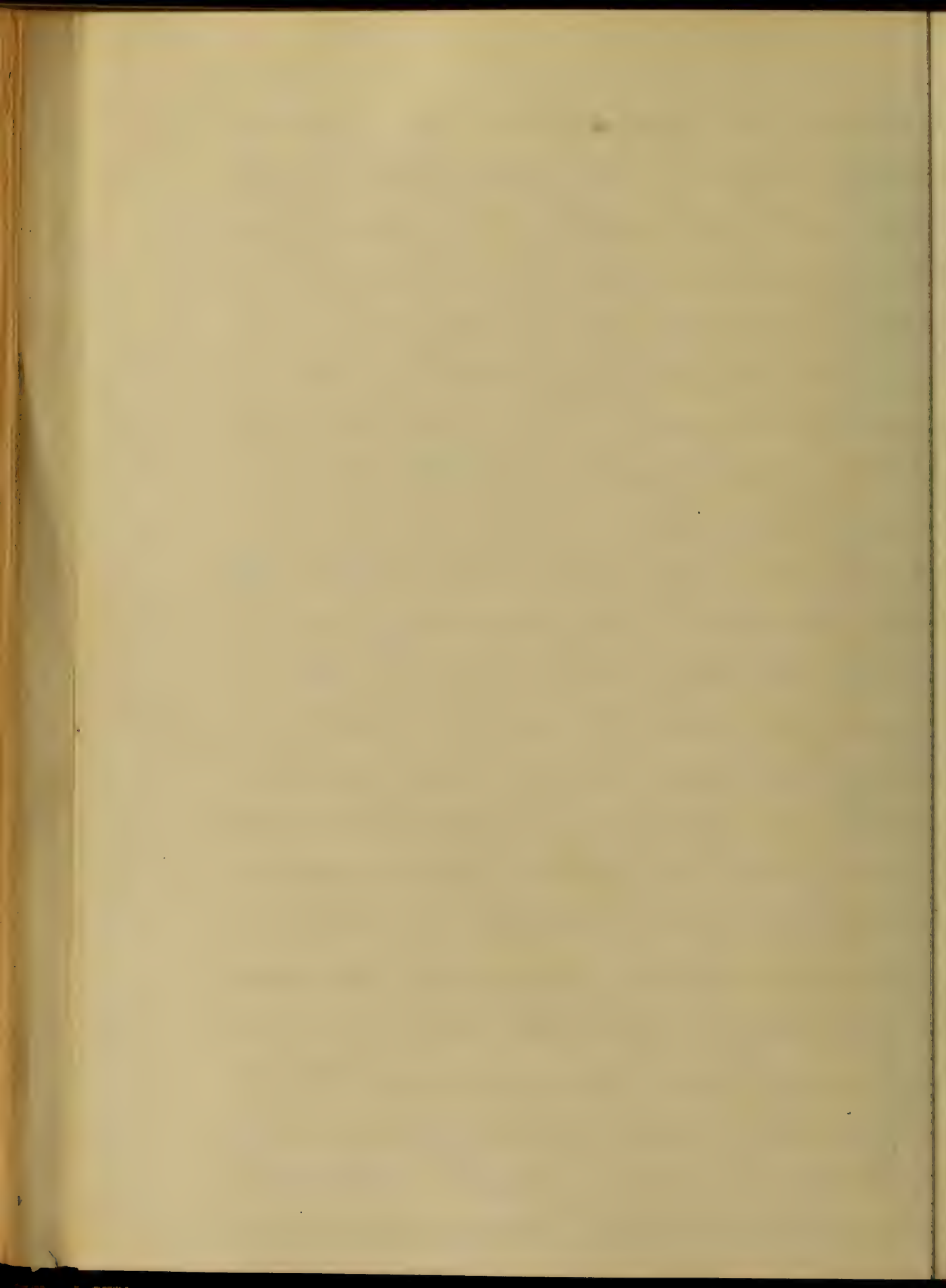


proper use of disinfectants, (if
he recommends the Chlorine Lime)
"It is not too much to expect that
this fever might perhaps soon
become extinct" This is a conclu-
sion which I do not feel warranted
in adopting. Judging from those
cases which have fallen under my
observation, I should conclude, with
Dr Wood, that if the disease is ^{ever}
contagious at all, it must be ^{only} con-
tagious, and under peculiar circum-
stances.

Diagnosis, The diagnosis is often
difficult in the early stages of
the disease. The most characteris-
tic ^{symptoms} are, the usually slow
and insidious mode of attack,
the dull and listless expression
of countenance. The presence of the
characteristic abdominal symp-
toms which are, tympanites, ten-
derness on pressure and gurgling.

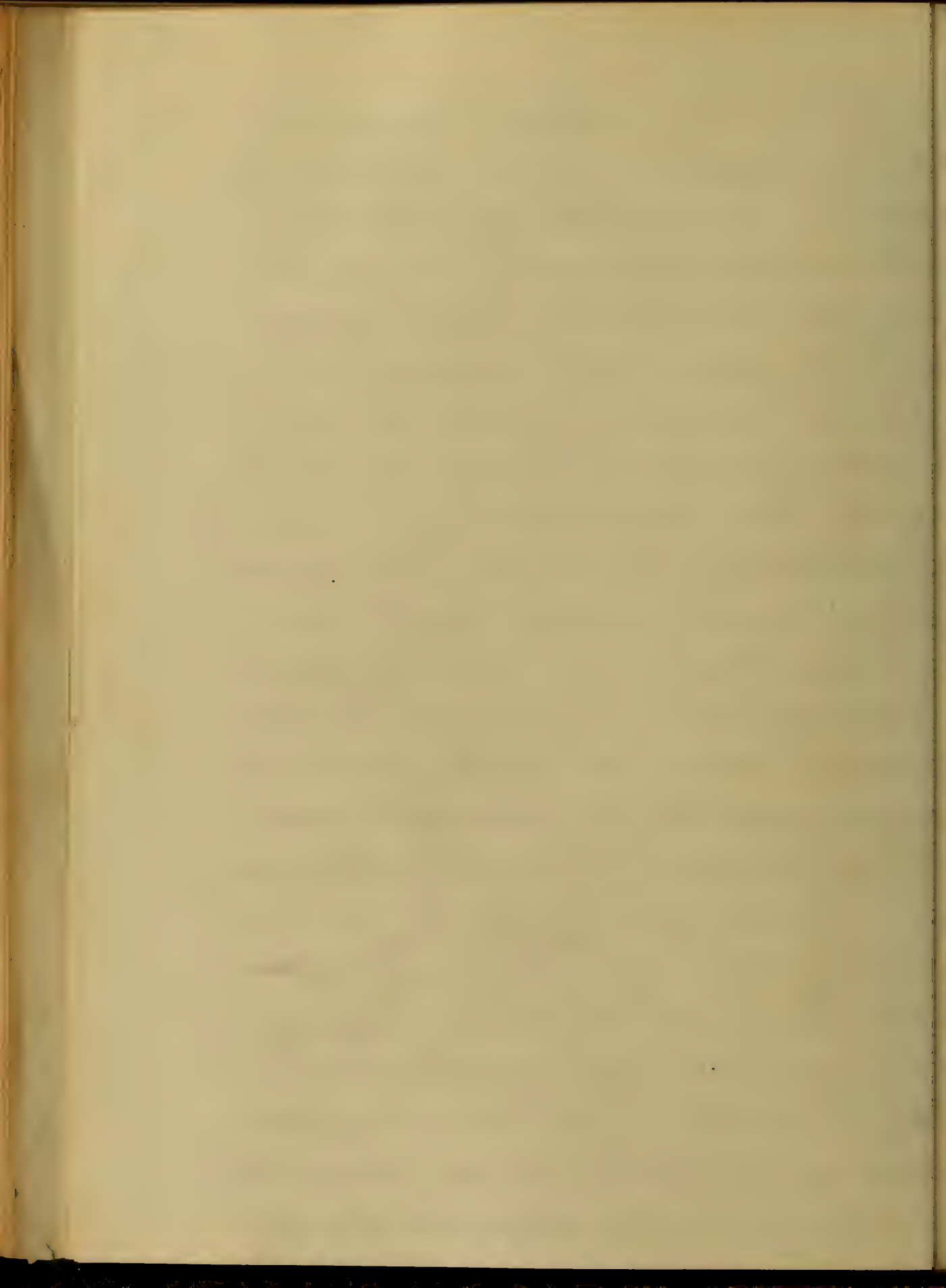


known to epistaxis and hiccups,
 diminution of the secretions, and
 after the seventh or ninth day
 the appearance of the peculiar
 rose colored spots, dryness of
 the tongue, and finally stupor
 and delirium. The extent and
 of the fever together with the sea-
 son of the year and age of the
 patient, may also be taken into
 consideration in forming a diag-
 nosis in this disease. It being
 more prevalent in the fall of
 the year and being rarely met
 with in persons of advanced life
 enlargement of the spleen either
 sensible to the touch or detected
 by auscultation may aid in form-
 ing a diagnosis. The viruses with
 which typhoid fever is most likely
 to be compared are, typhus and
 billious or putrid fevers, Miasmatic,
 bronchitis, acute tuberculous and

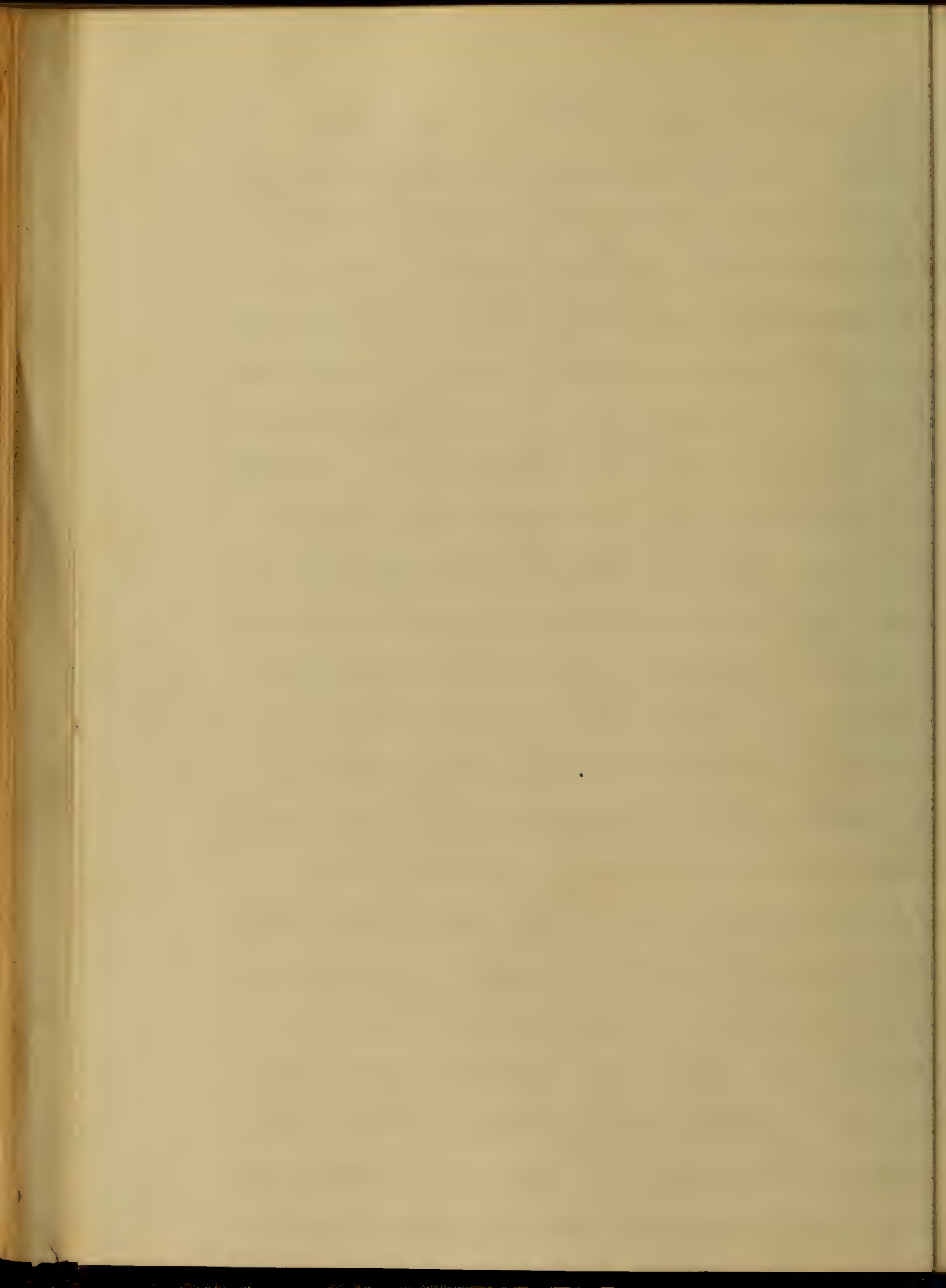


enteritis, from these it may be distinguished by the presence of more or less of the symptoms above described, all of which however are not invariably present in every case but generally a sufficient number of them may be recognized to serve as a guide as to the diagnosis.

Prognosis. This disease though it may accompany with more or less danger is not very fatal, occurring in young and healthy persons where the vital powers are unimpaired by previous disease. The prognosis is generally favorable. As it has been stated that the severity of the symptoms ^{does not always} bears a direct relation to the amount of virus so the severity of the symptoms ^{does not always} bears a ^{direct} relation to the amount of drug and while there is no correlation so low as to be considered direct

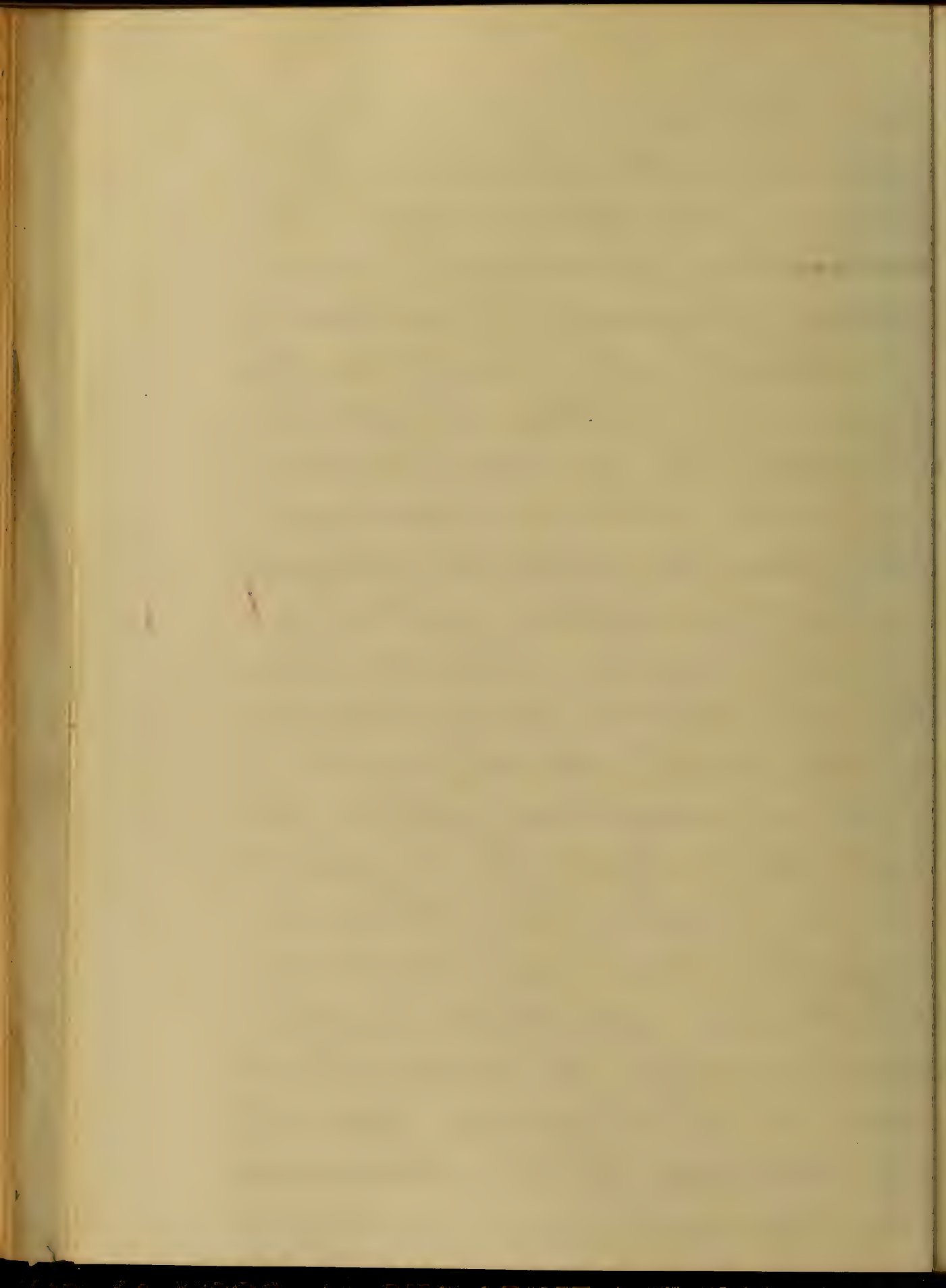


likely fatal, yet there is no case so
 mild as to be considered perfectly
 free from danger. Perforation of
 the intestine may take place in
 the mildest as well as in the most
 violent cases, which in a vast ma-
 jority of cases is accompanied with
 a fatal result. Delirium making
 its appearance early in the disease
 Stupor probably the result of ex-
 cess of urea and uric acid in the
 blood, thickening of the muscles,
 picking at the bed clothes, in-
 constant evacuations, and extreme
 febrility and frequency of the
 pulse, amounting sometimes to
 130; may be regarded as among
 the most unfavorable symptoms
 yet it does not follow that every
 patient having these symptoms
 must necessarily die. Indeed there
 is no condition so low from which we
 may not entertain some hope that the patient



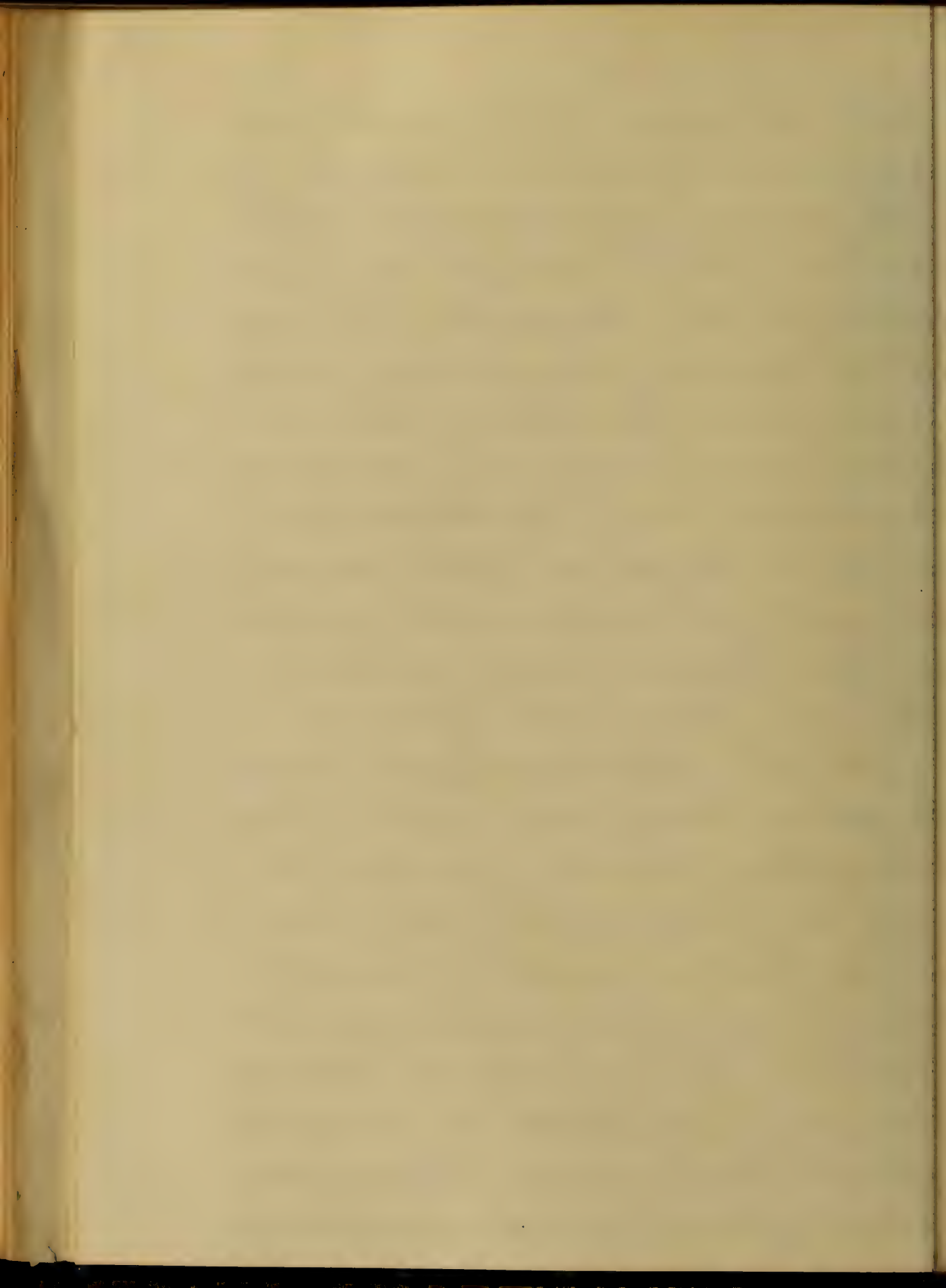
will never,

Treatment: On the treatment of Typhoid fever, Thomson, says "it is particularly necessary to beware of doing too much - of interfering too actively with Nature". Our object should be to sustain the power of life until the poisonous influence of the fever shall have expended itself, and to treat the symptoms and complications as they present themselves. Chambers thinks that the disease may sometimes be cut short by an emetic if it be administered within the first four days. This is probably due to the fact, that the poison may have been introduced into the stomach and by the early administration of an emetic we cause it to be ejected before it has had time to be absorbed into the system.



Cold affusions, to the surface of the body are highly recommended for the purpose of reducing the temperature. I have found the wet sheet highly beneficial, but owing to the inconveniences which may arise from this mode of treatment Sponging the body with tepid water acidulated with distilled vinegar is to be preferred. After sponging it will often be found to add much to the comfort of the patient to anoint the body with olive oil.

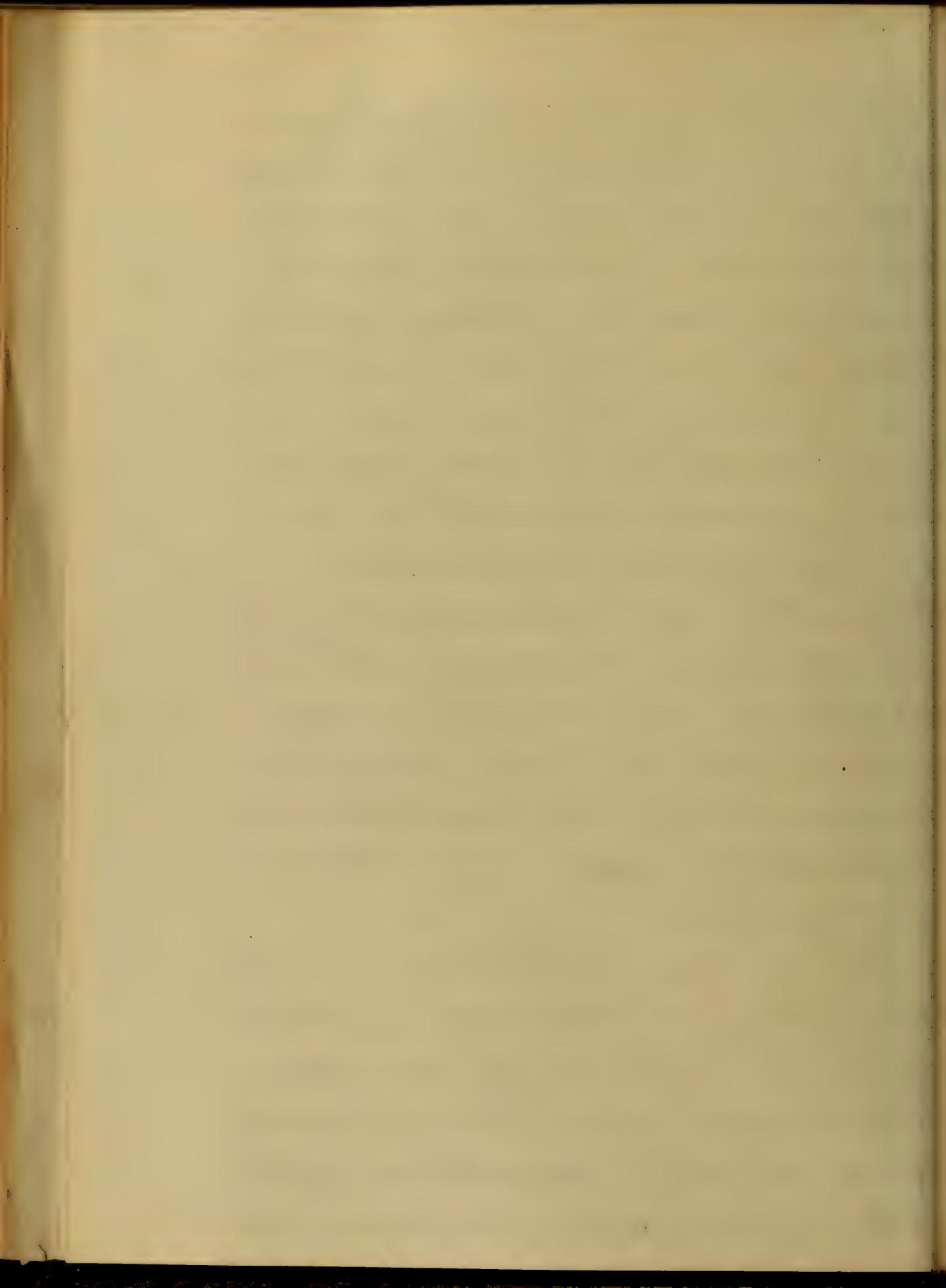
In this disease there is a rapid breaking down and waste of tissue the patient should therefore be well supplied with good nutritious food, in order to supply the heavy demands made upon the system. This should be supplied frequently, and in small quantities, and in liquid form. Solid food is inadmissible as



and the feeble digestive power
 of the stomach. Milk is per-
 mitted the usual diet for typhoid pa-
 tients owing to its highly nutritious
 qualities and to its easy digesti-
 bility. The oil globules of milk be-
 lieve to be dissolved in the stomach and then
 exist in a state of such extreme
 minute emulsions that they are
 at once readily assimilated.

When there is excessive acidity of
 the stomach accompanied with
 diarrhoea, the addition of lime
 water may be highly beneficial.
 Animal broths are sometimes pre-
 ferred, when used they should be
 well salted.

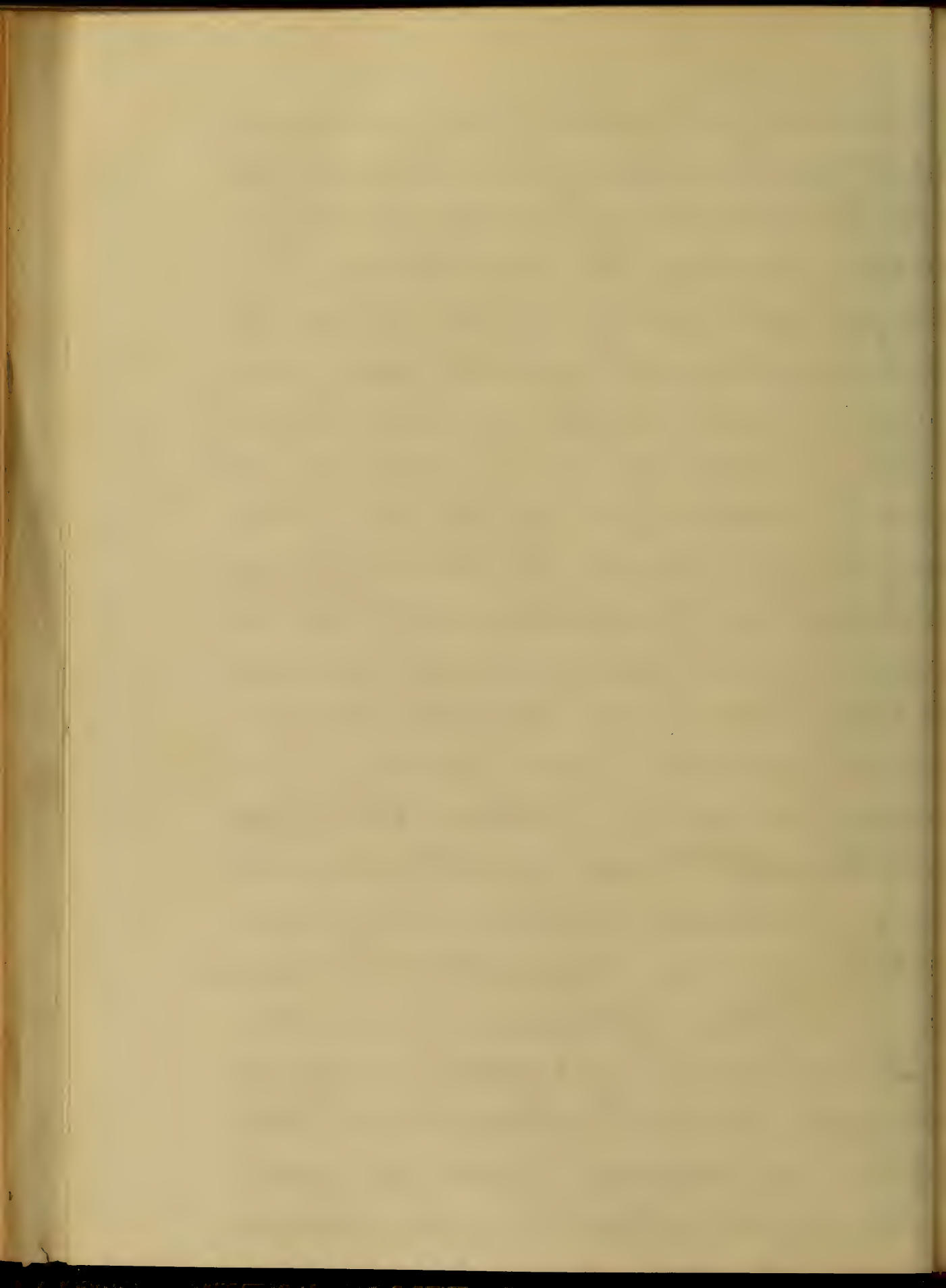
It is now generally conceded
 that there is excessive alkaline-
 ty of the blood in typhoid fever.
 Ammoniac which always exists
 as a normal constituent of the
 blood, and to the presence of which



(according to some of the latest phre-
 siologists) it owes its fluidity, is
 found much more abundant in
 this disease. To counteract this
 'super-alkalinity' of the blood, the
 mineral acids are the most use-
 ful agents. One of these acids
 may be diluted and given in do-
 ses of twenty or thirty minims
 every two hours. Chambers prefers
 the dilute Hydrochloric, while Felt
 prefers the 'aromatic Sulphuric acid'

In the use of alcohol we are
 to be guided by the state of the
 nervous system. Where there is pro-
 stration, ~~deterioration~~ ^{prostration} of a low milder
 ing character, and a tremulous
 state of the muscles it is required

When pneumonia makes
 its appearance cupping may be
 employed with advantage. When
 there is much tenderness over
 the right iliac ^{region} a few leeches

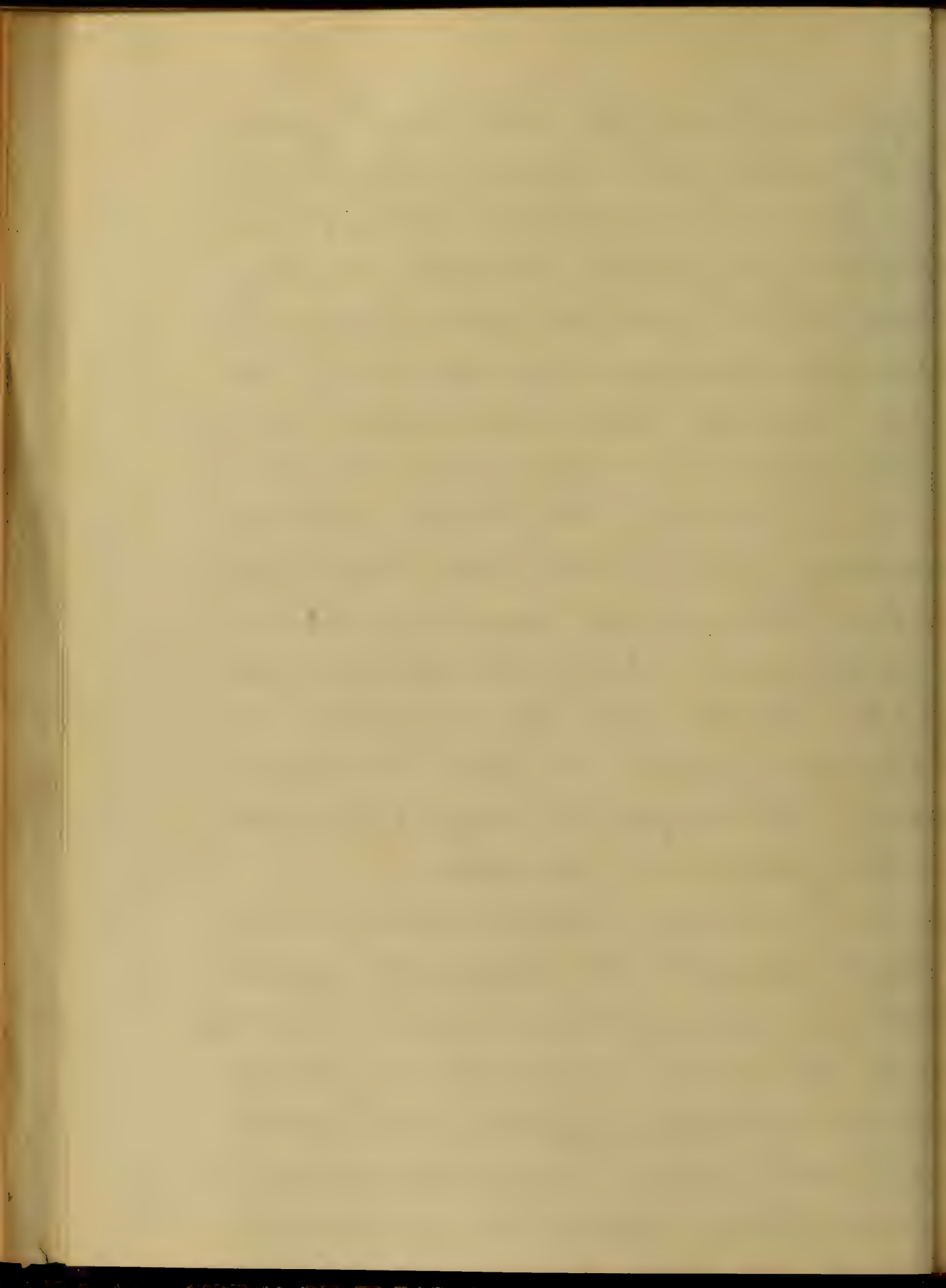


applied over the seat of the pain will often afford much relief.

Excessive diarrhoea is best controlled by opium to which we may sometimes add an astringent. In cases of hæmorrhage from the bowels opium combined with acetate of lead is a valuable agent.

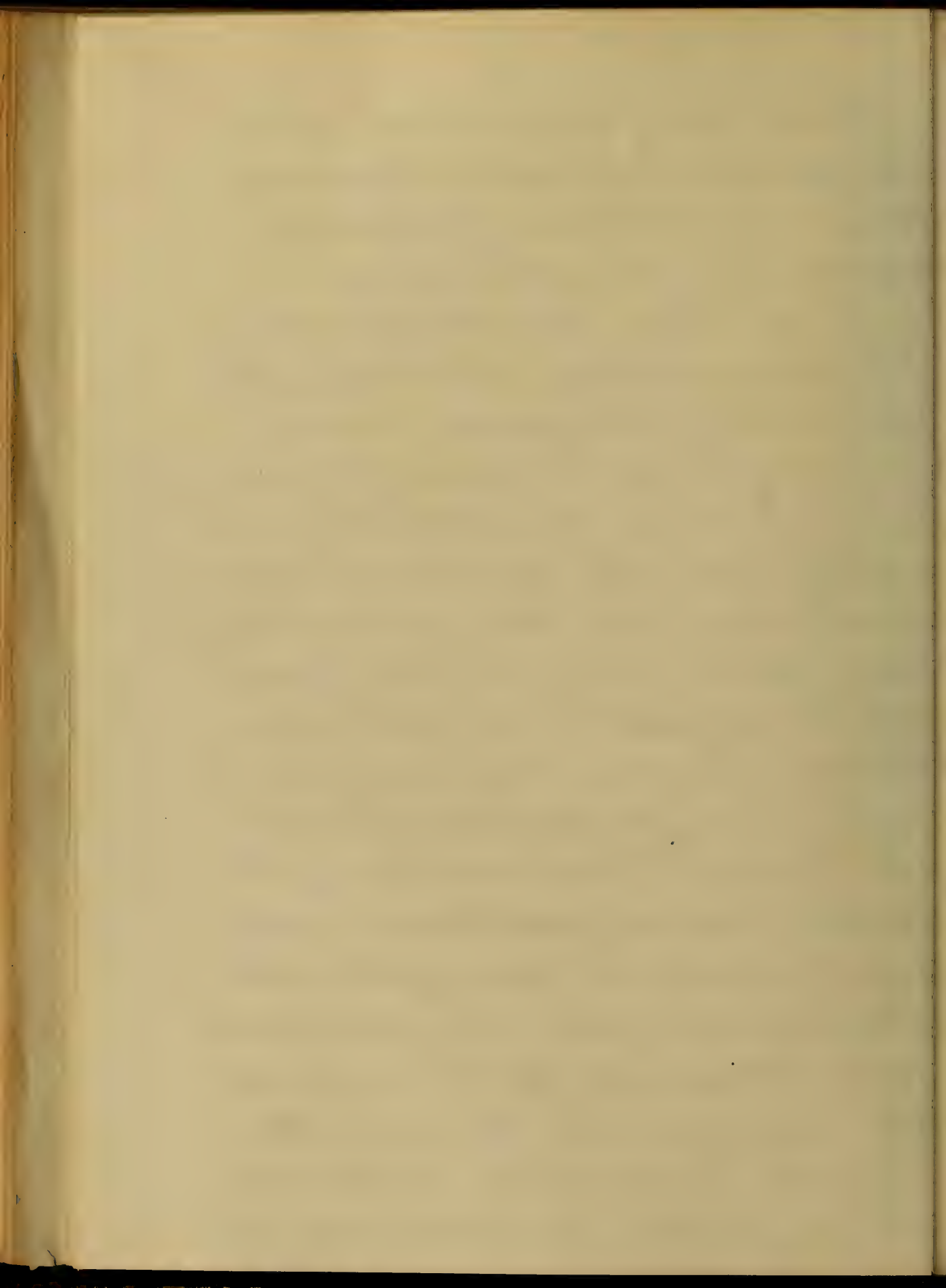
Turpentine is highly recommended by Dr Wood in those cases where the tongue instead of commencing to clean at the tip, peels with its fur in large flakes, commencing near its base and extending forward leaving a smooth and polished surface.

During convalescence, the diet should be carefully regulated, the patient here as well as throughout the entire course of the disease should be well supplied with pure air, and violent muscular exertion of any kind should be avoided.



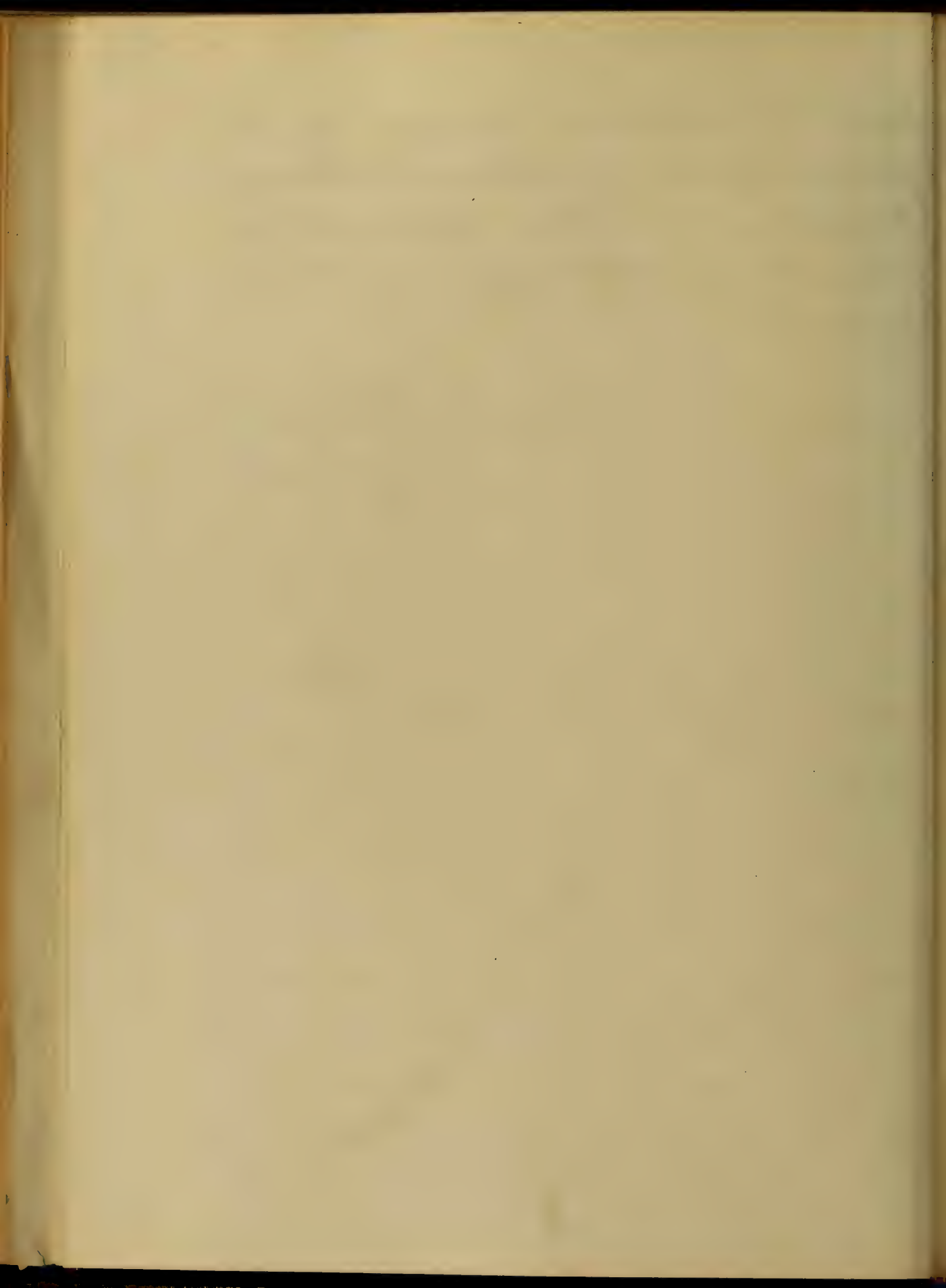
There are few cases in which the patient sufficiently recovers to resume his ordinary vocation under three or four months.

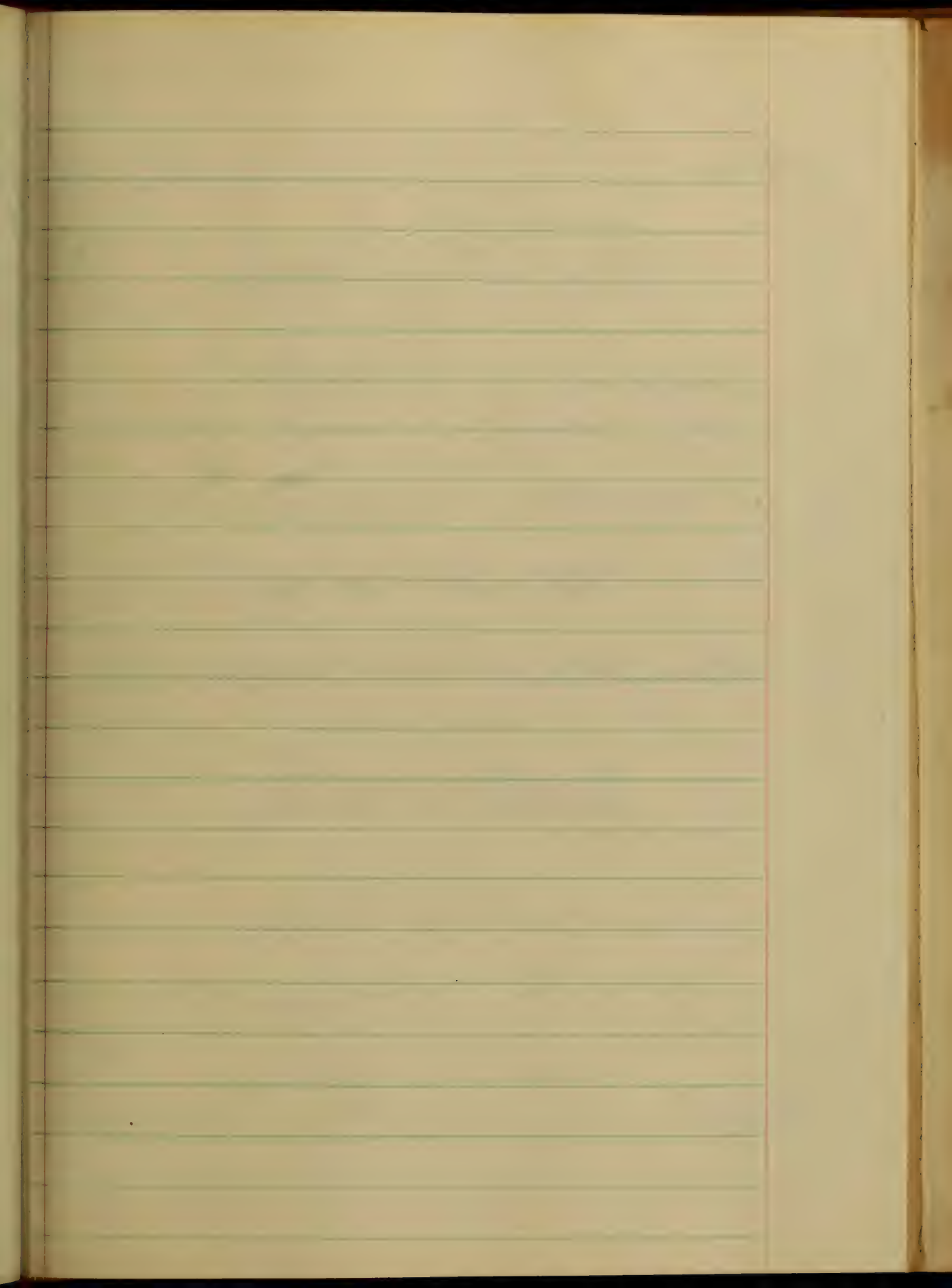
I have here briefly described the anatomical, characters, clinical history, diagnosis, causes, prognosis and treatment of Typhoid Fever. I have not entered so elaborately into this subject as I might have done had time allowed, but have dwelt only on those points which seemed to me most important. I therefore beg leave to submit this imperfect Thesis to the lenient consideration of the distinguished gentlemen into whose hands it may fall, with the request that they will make due allowances for its errors and its imperfections, knowing as they do how utterly impossible it is for the inexperienced Stu-

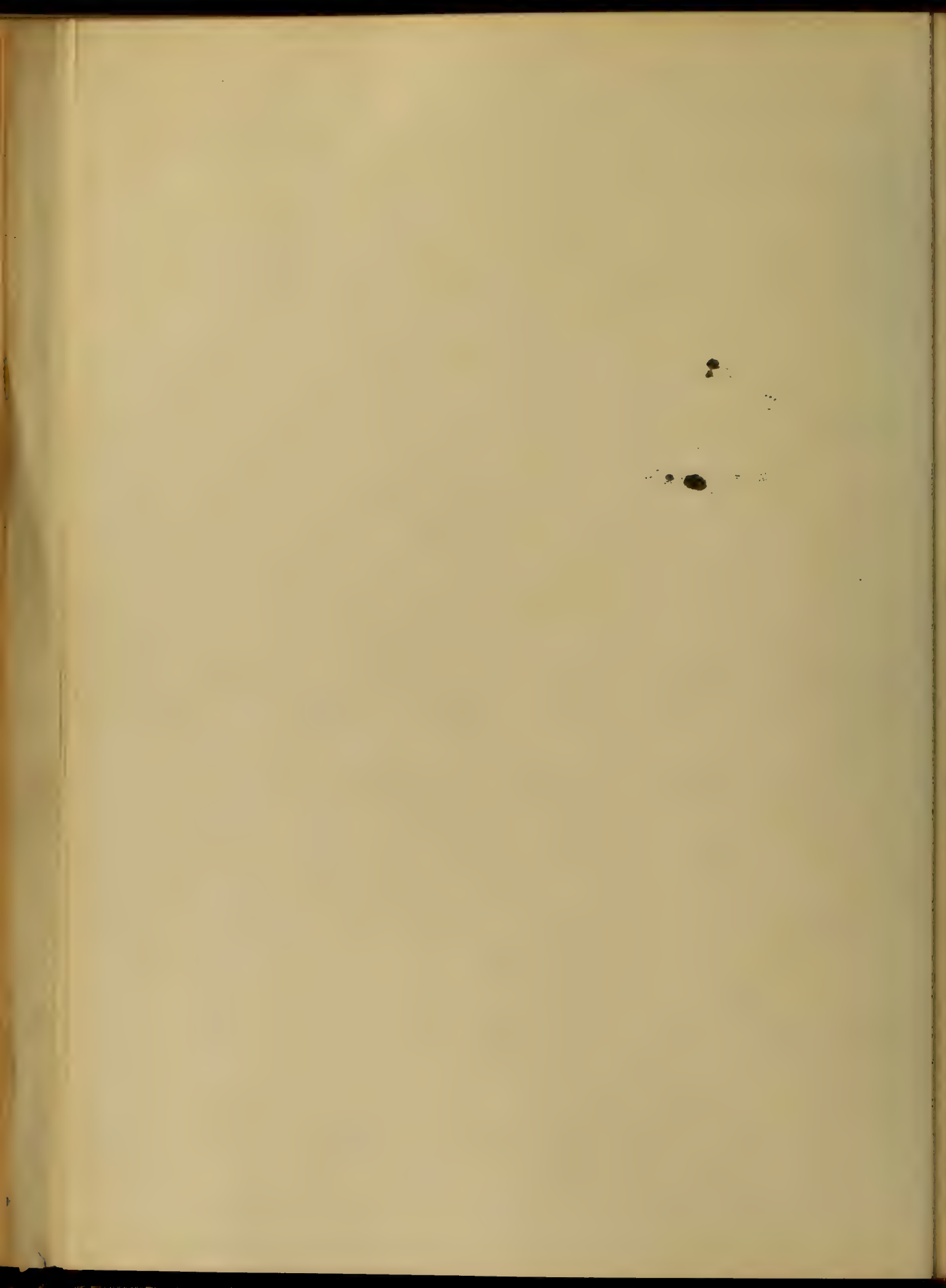


dent to describe accurately those
phenomena of disease, a thorough
knowledge of which can only be
gained by experience at the bed-
side,

Lough R. Green
Virginia.







AN
Inaugural Dissertation

ON
Asiatic Cholera

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

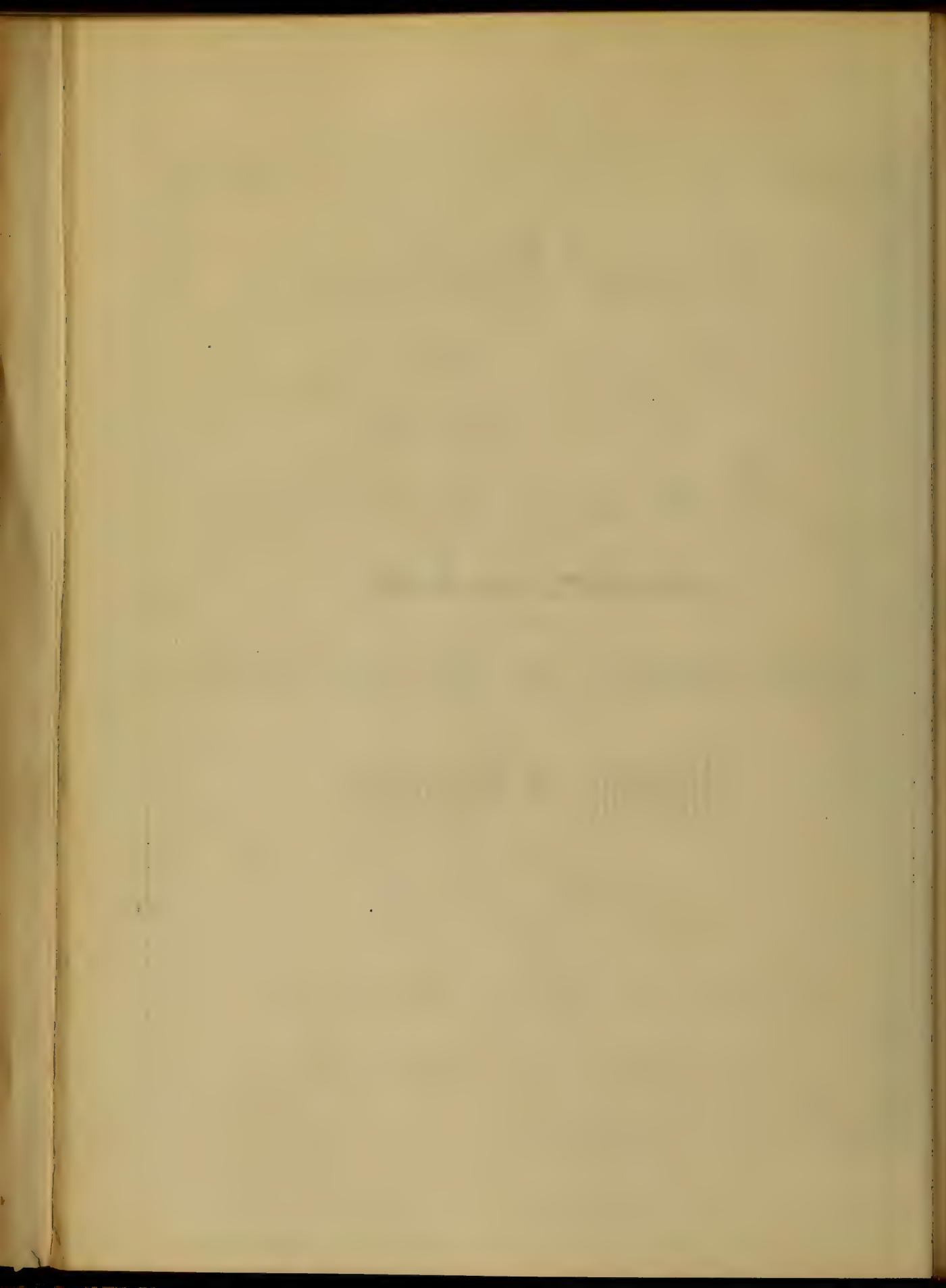
By

Allen Fowler.

of

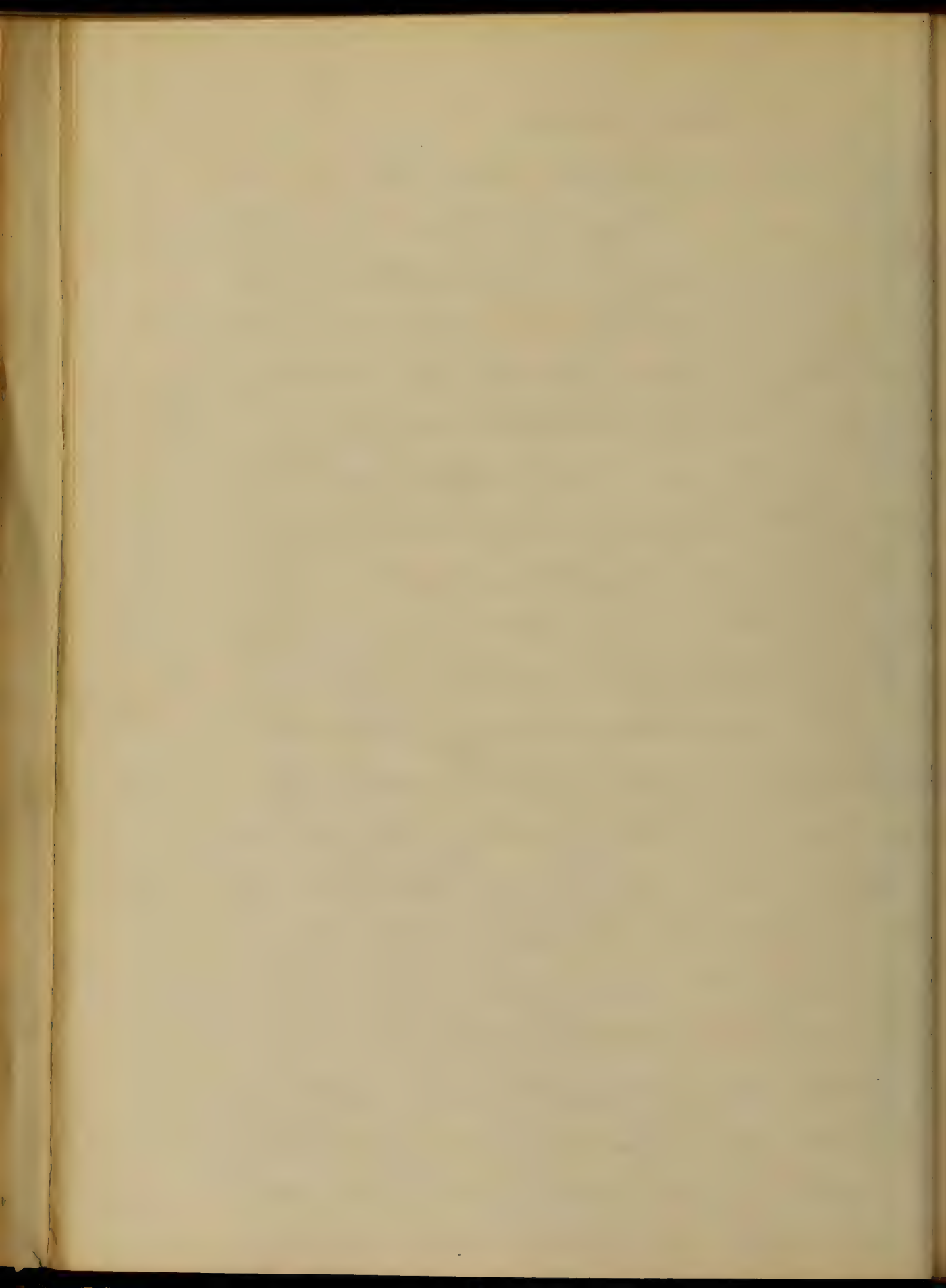
Monroe Co. West Va.

Session of Fifty ninth - 1866-1867



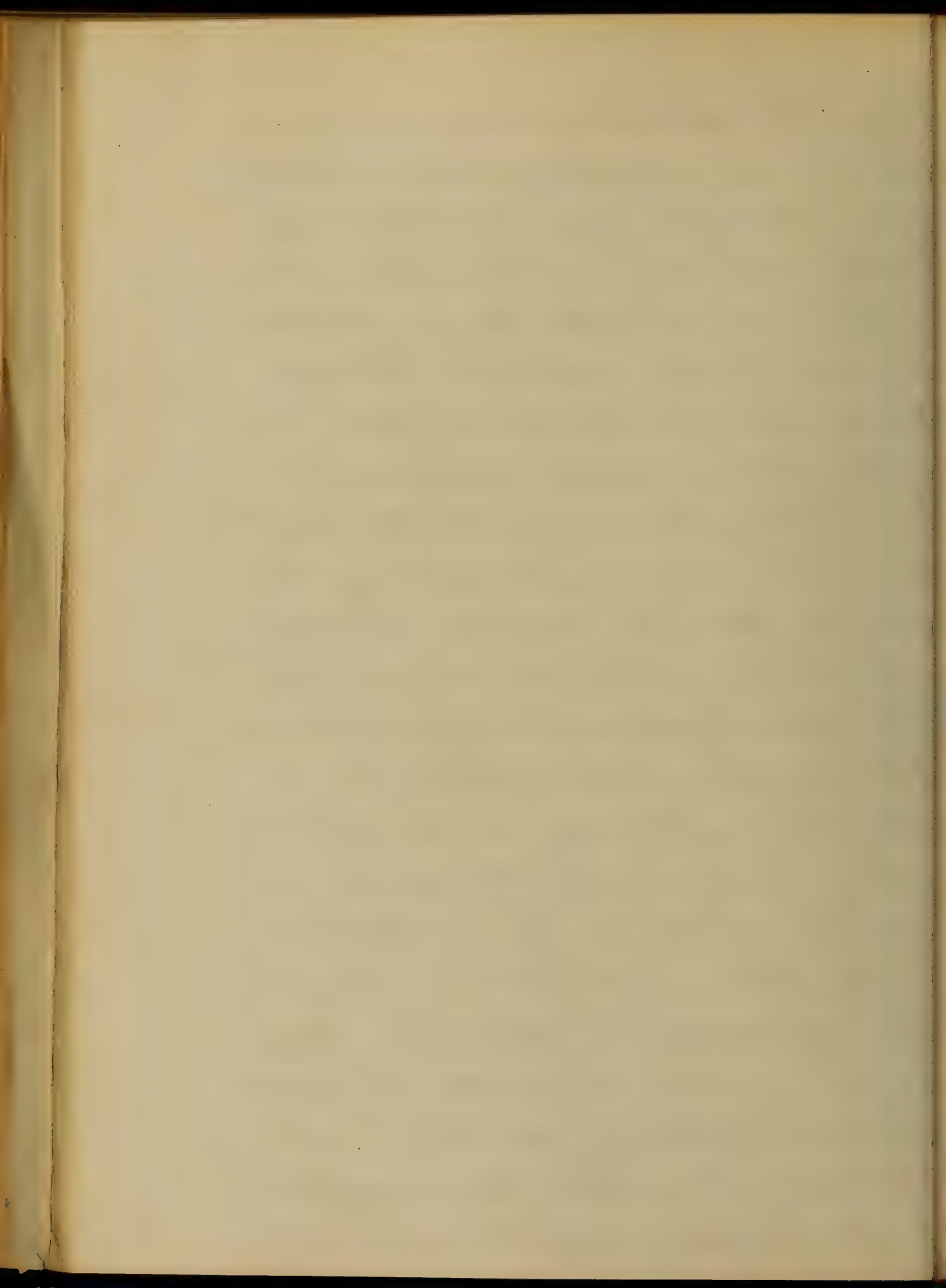
1
"Asiatic Cholera"

Though the great curtain has just fallen by which another year is consigned to the catalogue of the past, yet, it is not thus to be forgotten, but will ever go down to posterity as the year in which that great king of diseases, "Cholera," held undisputed sway over not only India but more or less over the combined world. It is by rapid strides ^{region} ~~chapters~~ after ^{region} ~~chapters~~ was quickly added to his dominions until no Kingdom, no province could be considered beyond his reach. Until now every clank-gong, every language, from the learned statesman of Europe to the irredeemable Parish of India tell the same but a sad tale of his host coming - Yes already are to be found victims of this great cycle of death in every land, in every clime. How many there are that have been snatched from the arms of friends by his all powerful hand, to find resting places beneath the mighty waves, unmarked by stone and seen not by those who sweep the loss of friends, yea, of loved ones - around each spot as mother, as sister, as kind friend can ever find a verdant, that fitting emblem of memory.

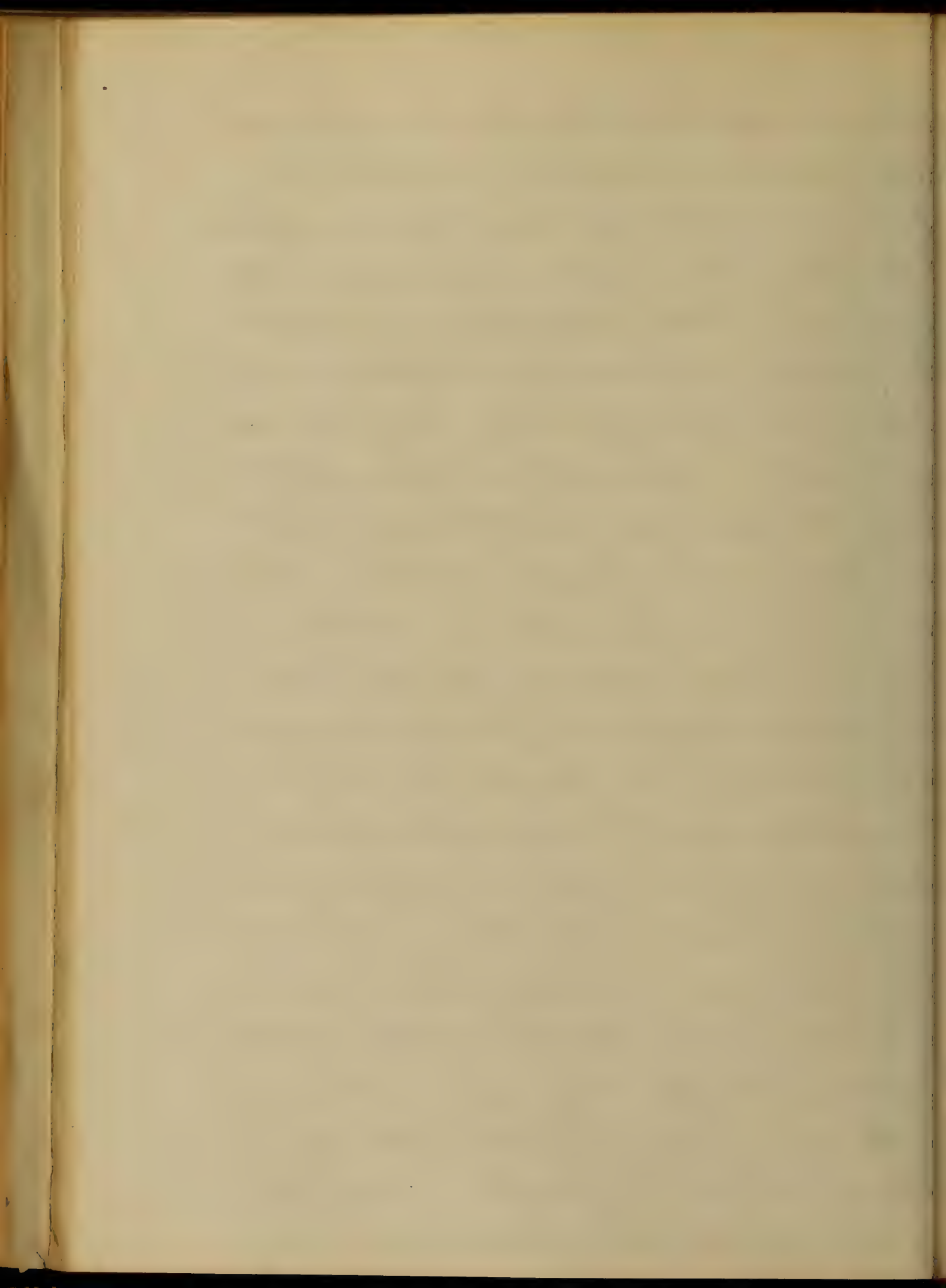


Go ask that good mother who so anxiously looked forward to the happy greeting of a son, a daughter, as day after day she from a distance beheld the Tempest tossed vessel, in which was the vessel of this; but, lo, and she greeted them not. They too had found a resting spot beneath the surging billows. We are then led to ask what is this great & mighty scourge and whence come it?

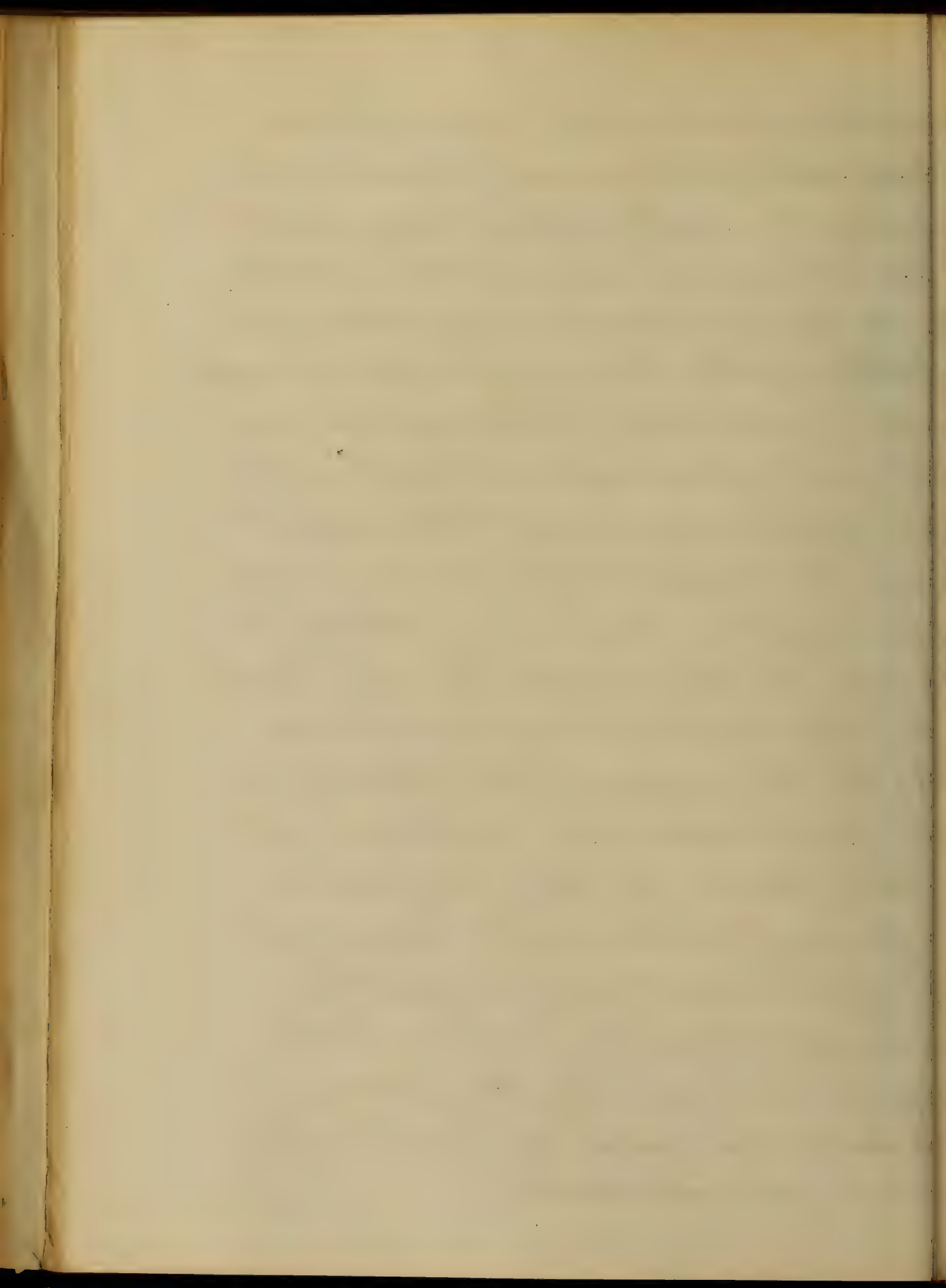
To solve this question more has perhaps been written than any other medical question of the day and yet we are still left in darkness as to its cause and prevention, notwithstanding the many and rapid strides of medicine. Then ought we not hesitate, yea, falter at such an attempt when we reflect at the mighty array of talent which has so long been engaged with this question? But yet it has only been seen from a distant point, and it is thus we see it. For true is ^{it} that the veil is still unlifted from this disease. How long we are led to ask will the splendid medical talent of this day allow this to exist? Oh! how long let us repeat before we may be able to solve this great and important question?



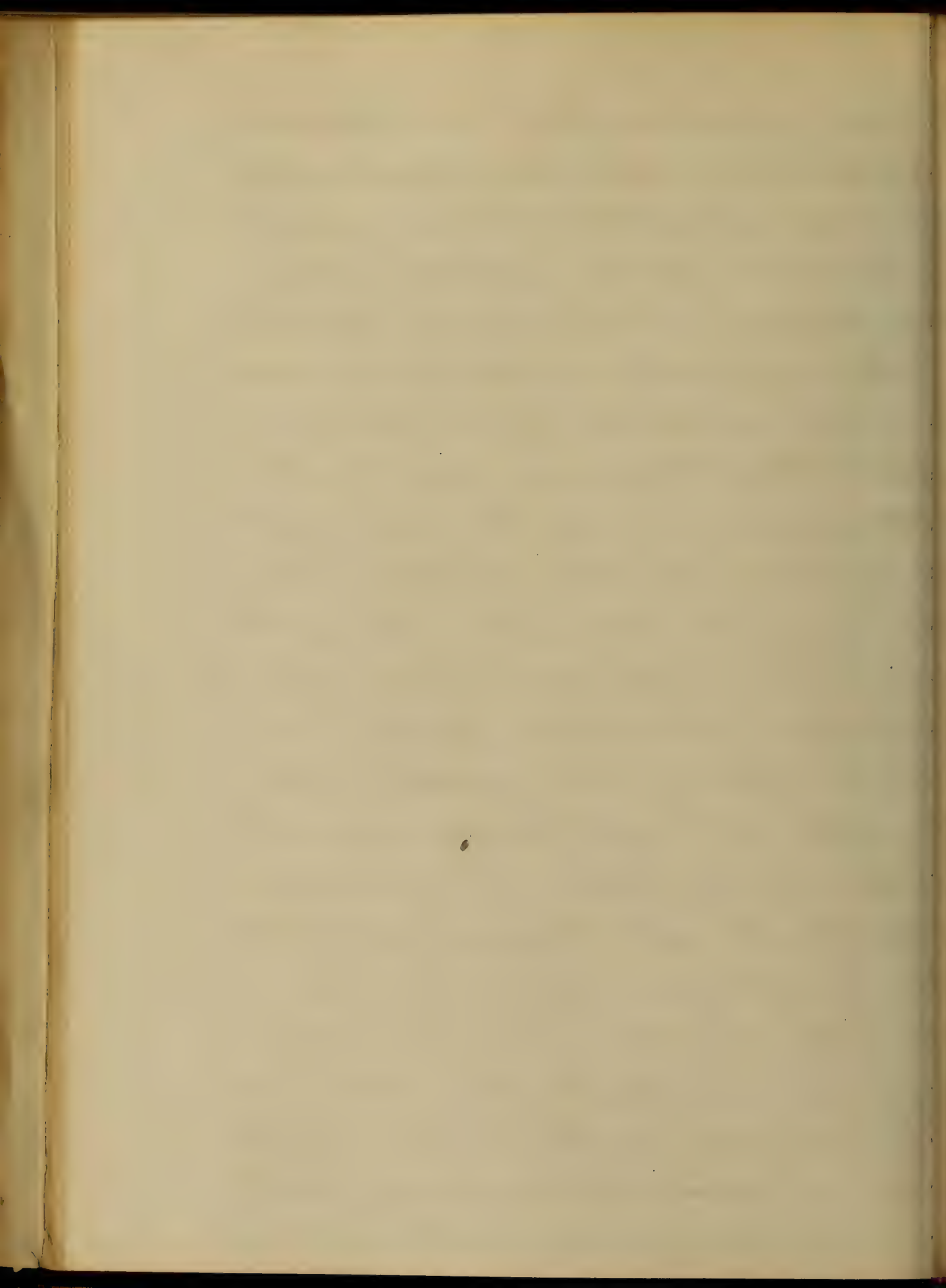
In India it seems to have had its origin and birth and
 then to exist as an endemic. Some authors trace
 its history as far back as 1769 and others even further,
 but positive evidence of its existence, prior to about
 1817 is wanting. During that year it first attracted
 the attention of Europeans as it started on its line
 of march from place to place. During the suc-
 ceeding 15 years it visited with more or less severity
 nearly the entire world. June 3rd 1832 it for the
 first time made its appearance in the U. S. on board
 the brig Carriac, which sailed from Dublin to
 Quebec and again in 1834 it reappeared. For some
 time now it is only heard of in India, and again in
 1847 it went forth from place to place "seeking whom
 it might devour", until it completely encircled the
 globe - reaching that year the U. S. again, and
 disappearing to return in '66. It may now be said to
 have withdrawn from our midst but as we much fear
 and believe not even this time for its accustomed
 interval of 16 years but again to reappear early
 in the coming spring. The Valley of the Ganges in
 India, we find to be its great strong hold - its place
 of refuge as well as place of birth. Thus it is we



find him marshaling all his energies as for some mighty combat, until conscious of power, when he descends like a mighty avolomb, traversing alike both continent and ocean, until the entire territory of the Coast acknowledges his sway. But lo, and he stops not but still onward we find his march until now as the entire globe has been succeeded and the mission of death upon which he set out has been so successfully prosecuted, that henceforth we are led to hope he will find a more congenial abode in his den - Yes he may now be truly said to be on his retrograde march. The interval between these descents seems to be about 16 to 18 years. This time being necessary for the recuperation of his forces as well as for the replenishment of his victims. Now and then during the comparative suspension of hostilities we find him as it were testing his strength and organization, by an occasional skirmish prior to taking up his regular line of march for the great campaign of death. When conscious of power his mighty arm is felt in close combat.



Formerly all cases were thought to be preceded by diarrhoea, but more recent and accurate investigations prove such not to be the case. According to a recent report of the "Society of Medicine" of Paris, only about 50 percent of all patients treated had preliminary diarrhoea. Doubtless it does exist in a larger number than by this report we are led to think though in many cases it is of so little importance as to escape the knowledge of the patient. Certain it is that in the larger number of cases more or less diarrhoea does exist, and that this disturbance of the bowels is frequently painless, generally of a serous character, and that it may last two or three days before succeeded by grosser symptoms. Quite frequently the disease appears to be ushered in by symptoms of such a serious character as to render the diagnosis quite evident from the outset. In many such cases there was no apparent diarrhoea and yet it had been going on internally, until the bowels were evacuated from their distension. The discharges at first faint and generally painless and in every respect similar to those of diarrhoea constitute what is now

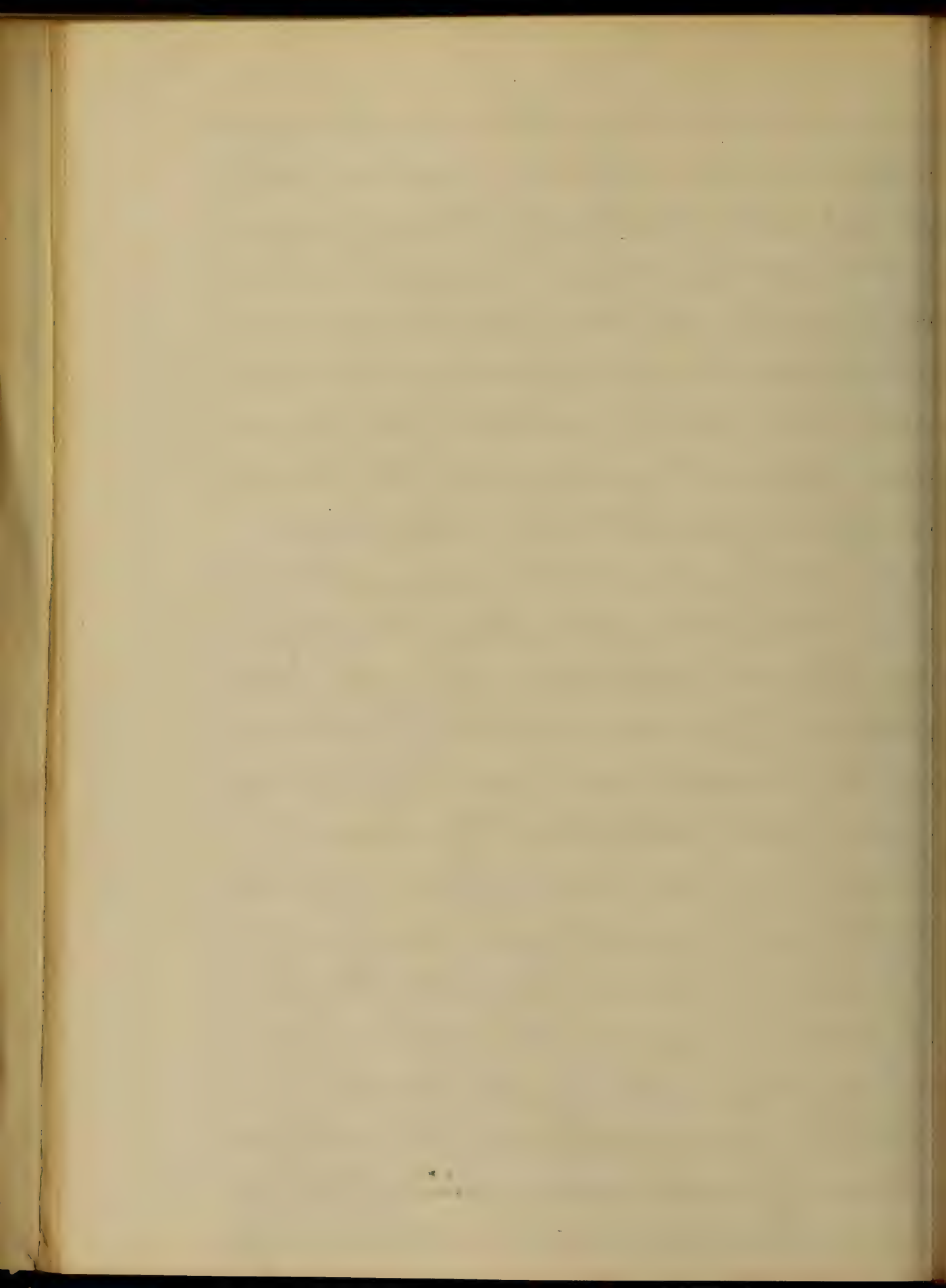


known as "the first stage". Sometimes in this stage there is more or less pain, though this is rare, and when it exists, entirely disappears as the disease progresses, and the discharges change, which in most ^{instances} is quite rapid. The transudations into the alimentary canal now increase rapidly, and the dejections become more numerous and copious. Though facultative at first they soon become erosive and very soon prevent the appearance of what is known as the "rice water discharges".

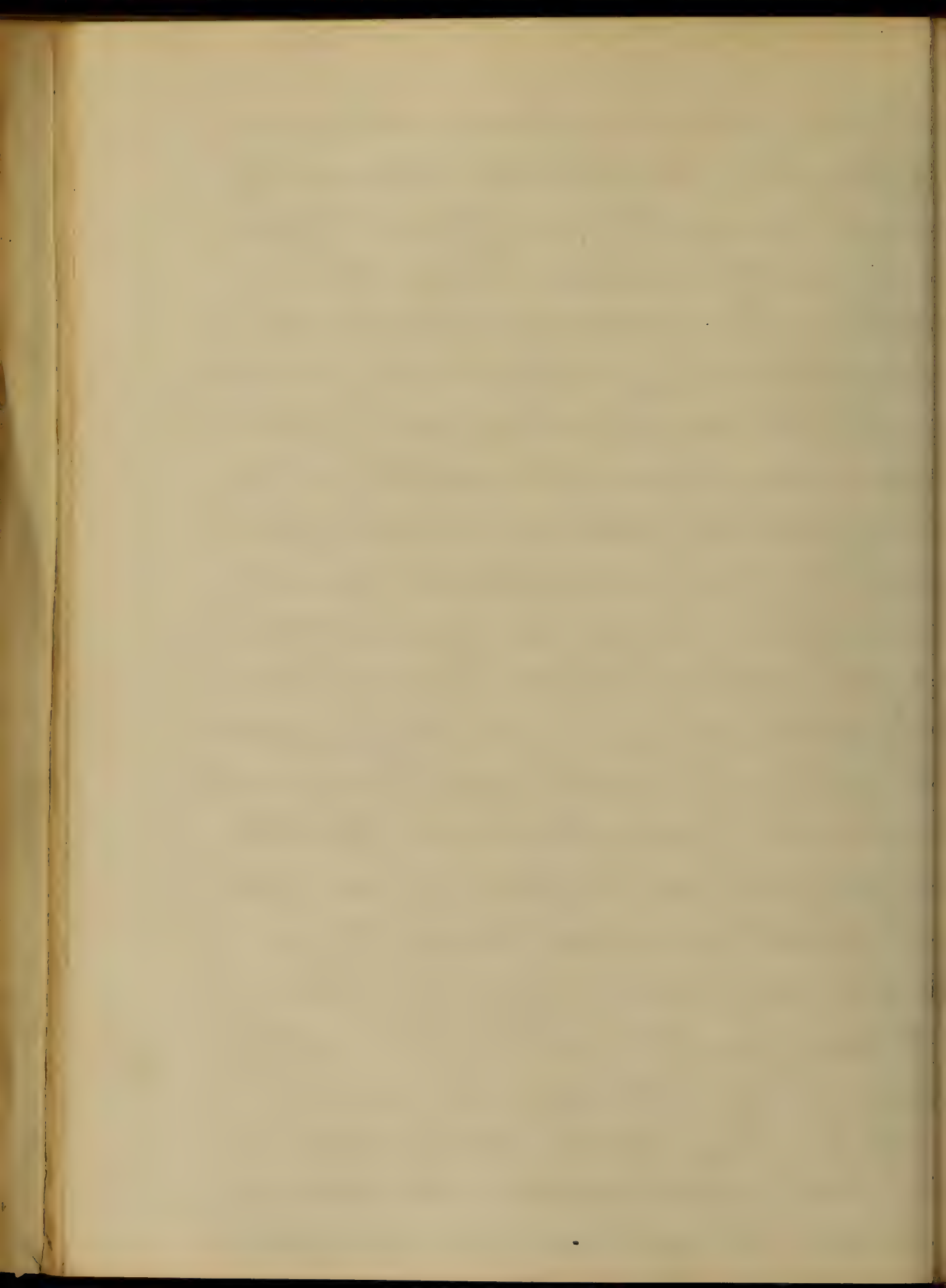
In some instances the pulse becomes very much slower prior to the attack, but in the great majority of cases the great pathognomonic sign is the diarrhoea, followed by "rice water discharges". The appearance of the vomitions varies somewhat but are very generally quite distinctive of the disease.

The first stage varies in length from one or two hours to that many days, and more - more frequently being of short duration. Sooner or later this stage passes into one of greater form, known usually as second stage, unless very promptly relieved.

This stage is generally introduced with vomiting unattended by much nausea. At first (1st) the contents of the stomach are ejected and at diminished

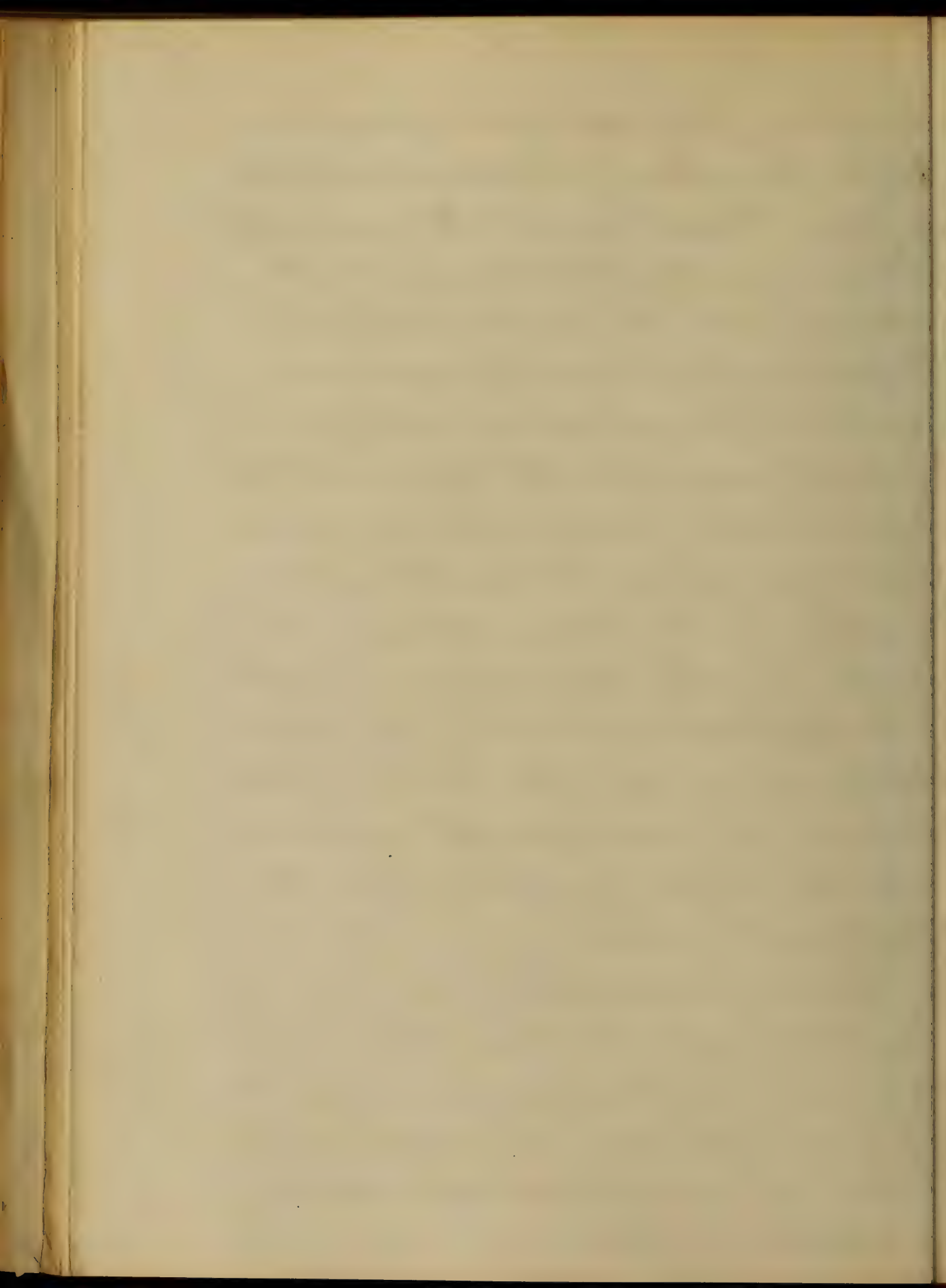


intervals, a serous fluid similar to that discharged
 by the rectum. Unless the patient experiences relief
 early in this stage, the powers of life will be found
 to fail rapidly, countenance ¹ anxious, the skin
² becoming clammy cold and bedewed in perspiration,
 pulse weak and frequent, thirst intense, cold tongue
 and breath, cramps of abdomen and the extremities,
 eyes sunken, blueness of face and lips and frozen
 nails, goose skin appearance, and in fine general
 death like look, indescribable but once seen is
 never forgotten. This stage generally of short duration
 is followed by what is called third, cold or algid
 stage. In this the secretory organs become suspended,
 the vomiting and evolutions ^{or} cease, the urine much
 diminished, if not suspended, and the patient
 though perfectly cold, complains of a sense of heat.
 The chilled skin above partially, the pulse is
 extinct and the heart is scarcely to be heard.
 If recovery from this stage takes ^{place} which is exceedingly
 unlikely, there is then a stage known as reaction
 and fever; tongue furred; sometimes delirium owing
 to urea, carbonic acid and other poisonous
 matters in the system which bring on a low typhoid state

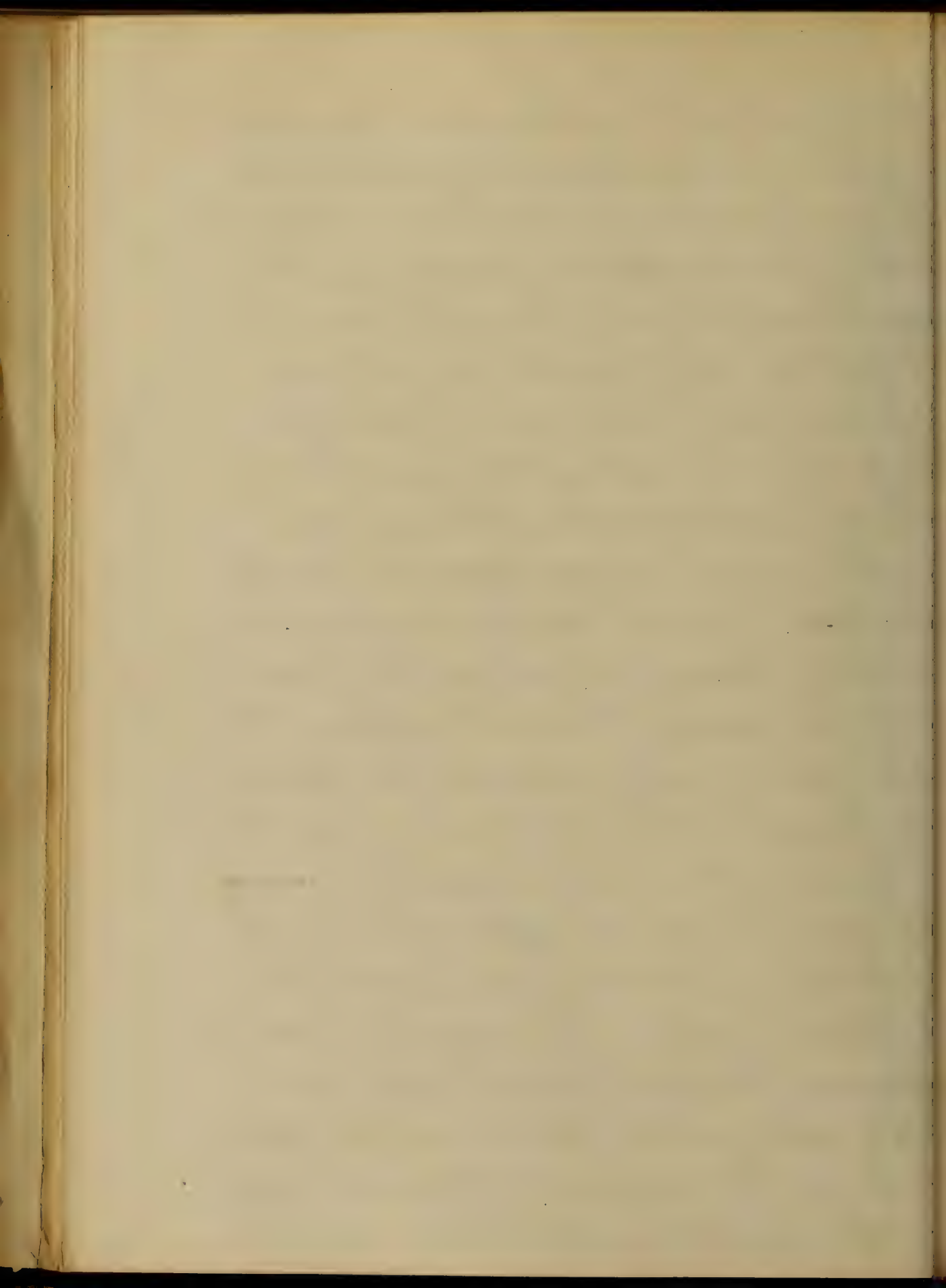


The suffering during all this time, is much less than the gross nature of the disease would lead us to think. The pain being due to the cramps, chiefly, which is now generally admitted, is caused by the withdrawal of the watery portion of the blood. The discharges after the second stage comes on, and known as the "rice water discharges," are thought to be composed of serum mixed with mucus, in which ^{are} epithelial scales from the lining of the mucous membrane, "resembling rice water in which rice float and flosses of card in wooly". It contains no bile and is devoid of odor. The quantity expelled varying from half pint to chamber pot full at each discharge. The patient usually experiences relief rather than pain, after the convulsions which sometimes cease after several have occurred, and again they may flow without the knowledge of the patient.

It is here we most naturally expect to be subjected with regard to this disease, but in no instance do we find morbid lesions commensurate with the gravity of the disease. No uniformity of structural change, or if any in any instance could they be attributed to "Cholera".

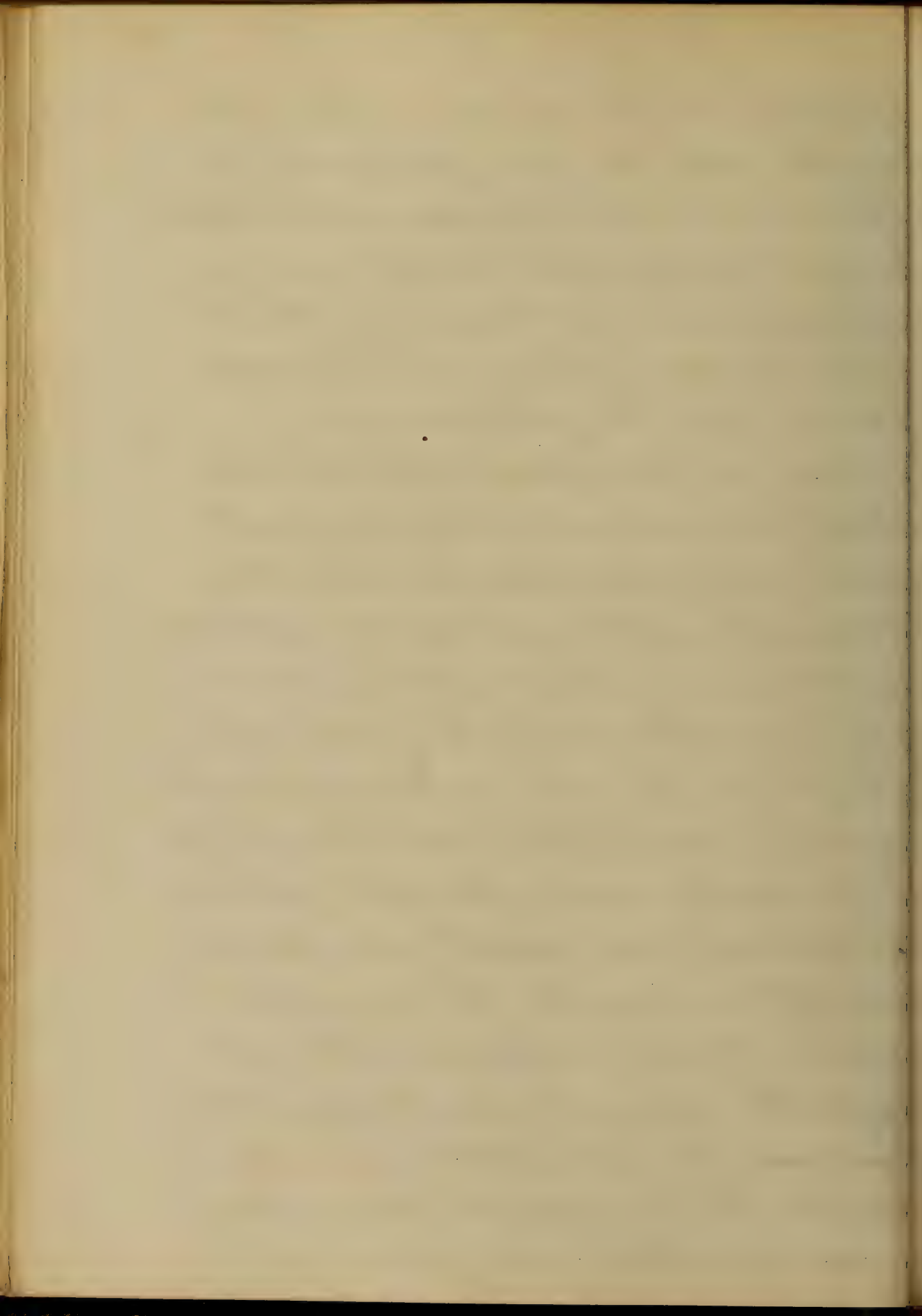


All the great central organs are found more or less congested, but in no case with true inflammation. The mucous membrane of the stomach and lower portion of the oesophagus, is generally more or less congested and ecchymosis occasionally observed. The intestine slightly tumid or congested and contain a portion of the "rice water evacuations" nearly the entire surface of the mucous coat is studded with epithelial scales. Liver and Kidney sometimes congested and gall bladder extended with bile, though, sometimes with fluid resembling mucus. The urinary bladder empty and contracted. Tenuity of the right side of the heart and plethora of the veins - smaller quantity of blood in the pulmonary structure and proportional decrease in weight of the Lungs. The blood much diminished in quantity fluidity, is generally thick, blood, fluid and portion of it semi-coagulated, being dark and tan like in appearance. Analysis shows deficiency of albumen, fibrin and the constituents of the serum but not of coloring matter. In some cases after death twistings of the muscles are to be seen and occasionally even a cramping of the limbs.



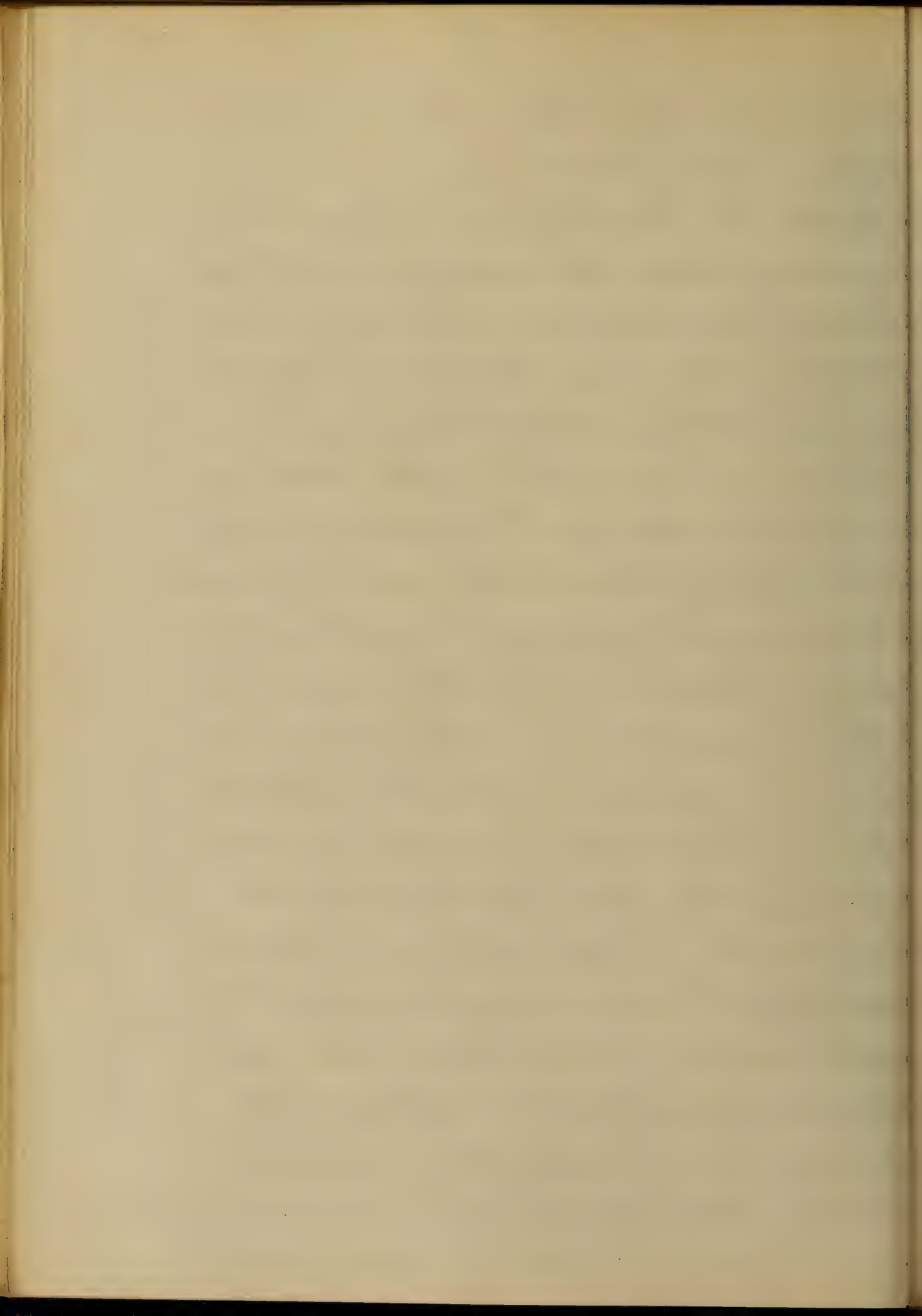
The temperature sometimes rises much higher a short time after death than during life - reaching as high as $104^{\circ} F$. at times. Then upon what pathological principle can we account for death since no anatomical lesions are to be found by which to explain it.² Only by referring it to the powerful depression upon the great nerve centres.

The brain and spinal column both retain their integrity during life and therefore they must be excluded. One of the notable peculiarities being the preservation of the mental faculties undisturbed and the same may be said of the spinal column - sensation & voluntary motion being unperverted until the 2nd stage when cramps only manifested an impairment of vitality. Indeed the contractions of the voluntary muscles after death goes to prove the existence of some sensibility even after organic life is extinguished. Then we conclude it is due to the poison of "Cholera" on the great sympathetic system of nerves, paralyzing the heart and the most important organs of secretion, the Liver and the Kidneys - disorganizing the intestinal secretory apparatus and

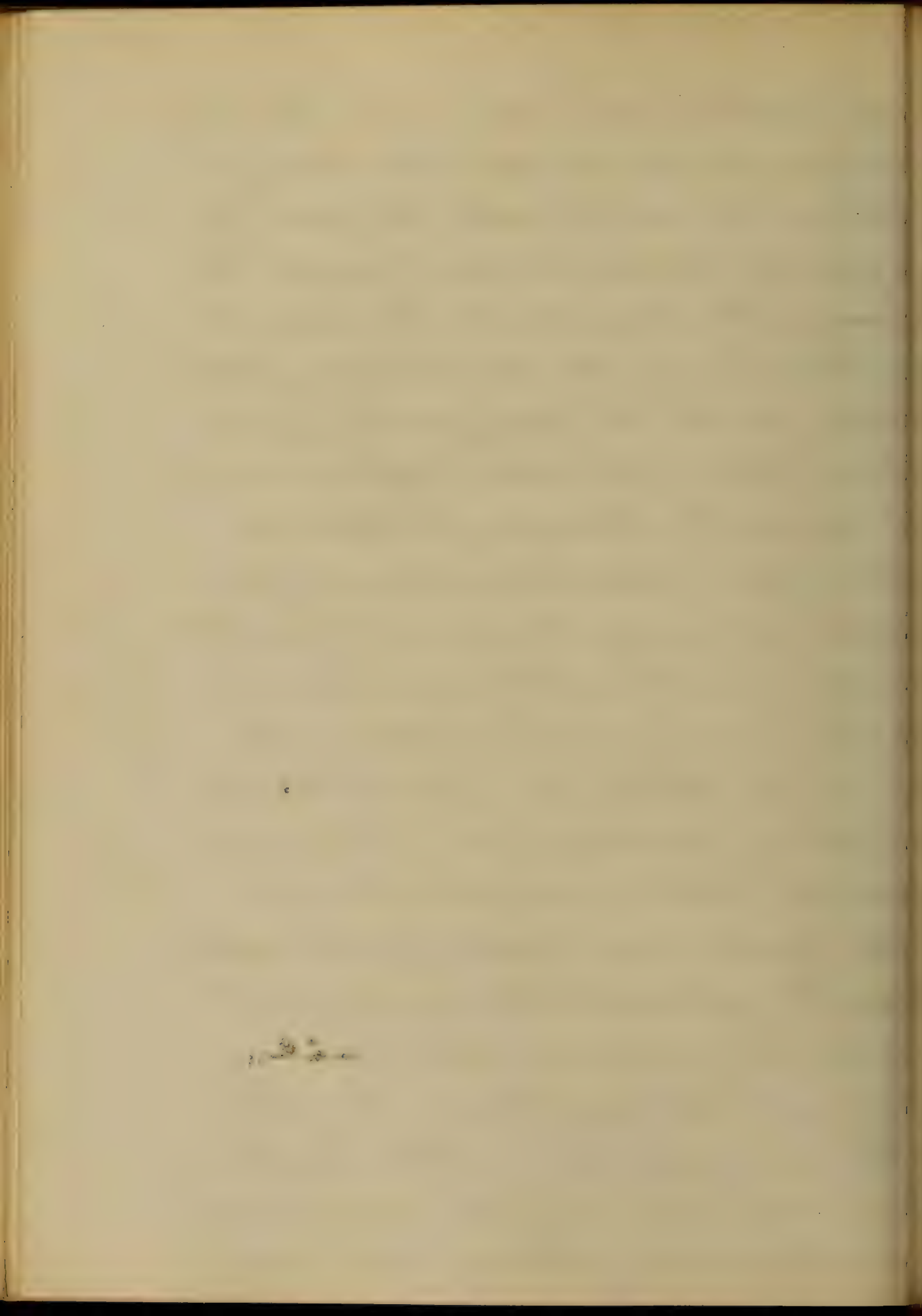


disintegrates the blood whereby the serous portion escapes from the system.

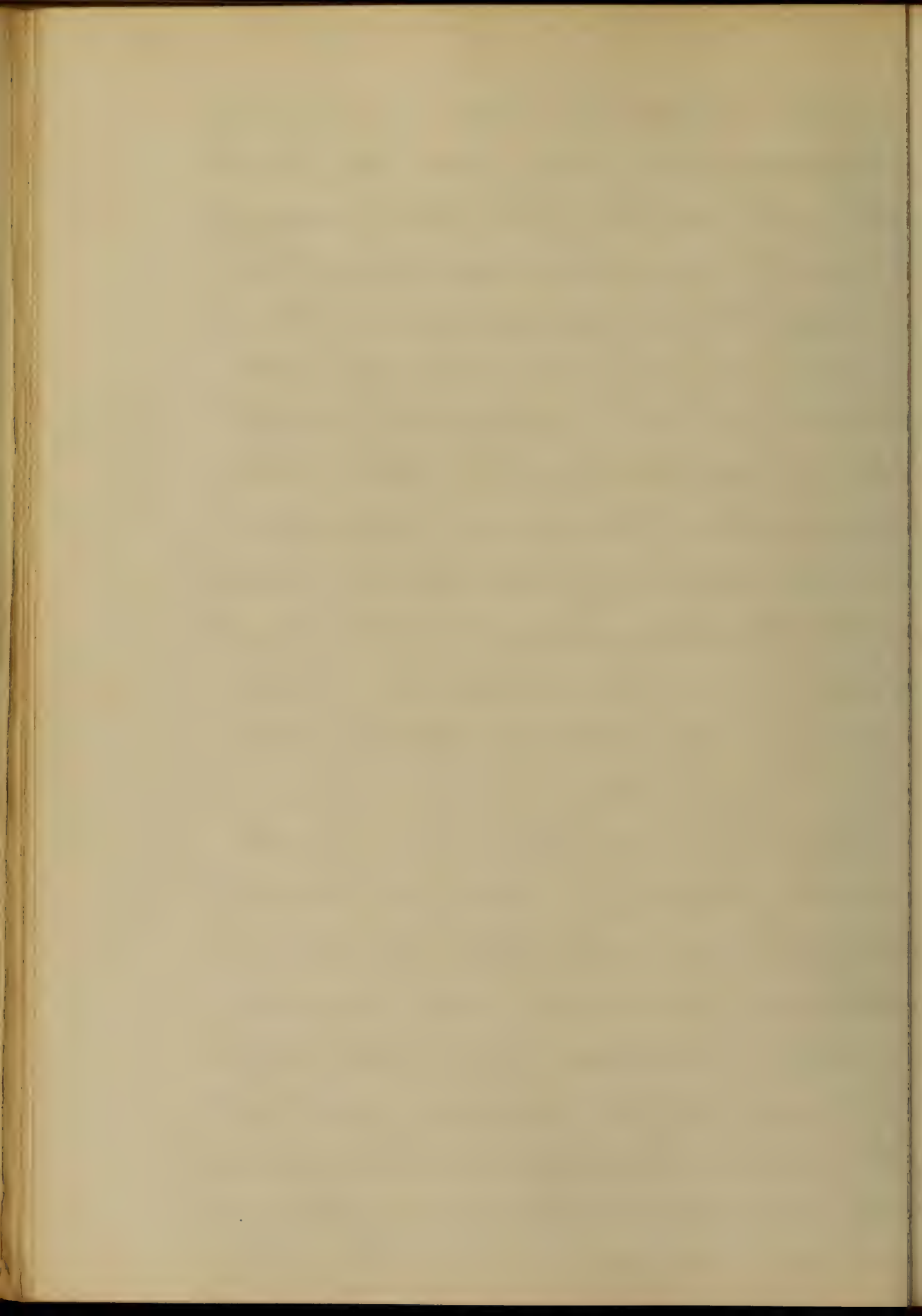
"- Within the last thirty years the opinion of the medical profession has undergone a perfect revolution as to the contagiousness or non contagiousness of "Cholera". Then it was almost universally considered non-contagious and now but few are found to entertain such views. That "Asiatic Cholera" requires a special cause for its development but few now deny and that man is the agent through which it is communicated ^{up} from point to point with a rapidity in proportion to the activity and rapidity of his own movements is an incontrovertible fact. There are those who contend that local atmospheric influence, progressive atmospheric or terrestrial emanations can alone produce the disease but how these advocates of the non-contagiousness of this disease account for its appearance only as transported by man we cannot see. For we have no evidence that "Cholera" can propagate itself at a distance by the atmosphere alone, regardless of its condition and in no instance has an epidemic of this disease extended ^{up} from one locality to another in a shorter period than



was required for men to carry it. On the contrary
 we know it never was seen in this country or
 rather on this continent until the arrival of
 a vessel at Quebec which first transported the
 disease - that it first reached the Eastern shore
 of this state Aug. 1832 upon the landing of Capt.
 Dodson, who died the following morning of that
 disease - that it first made its appearance among
 the Indians after the burial of a "Cholera" corpse -
 that in fine "Cholera follows the cover of it,
 as does wheat or any other grain and like wheat
 or other grain it must be carried from shore
 to shore, and being carried must even when
 landed and distributed, find a field prepared for
 it otherwise it will not grow". Though comm-
 unicable "Cholera" is much less so than such
 other zymotic diseases as small-pox and scarlati-
 na - It is quite evident that many things in this
 as other contagious diseases act as ~~preparing~~ⁱⁿ
 causes and chief among these may be mentioned
 bad water, improper food, a vitiated atmosphere,
 fresh, interperence in eating and drinking, fever
 and other depressing agents and of all food cysters



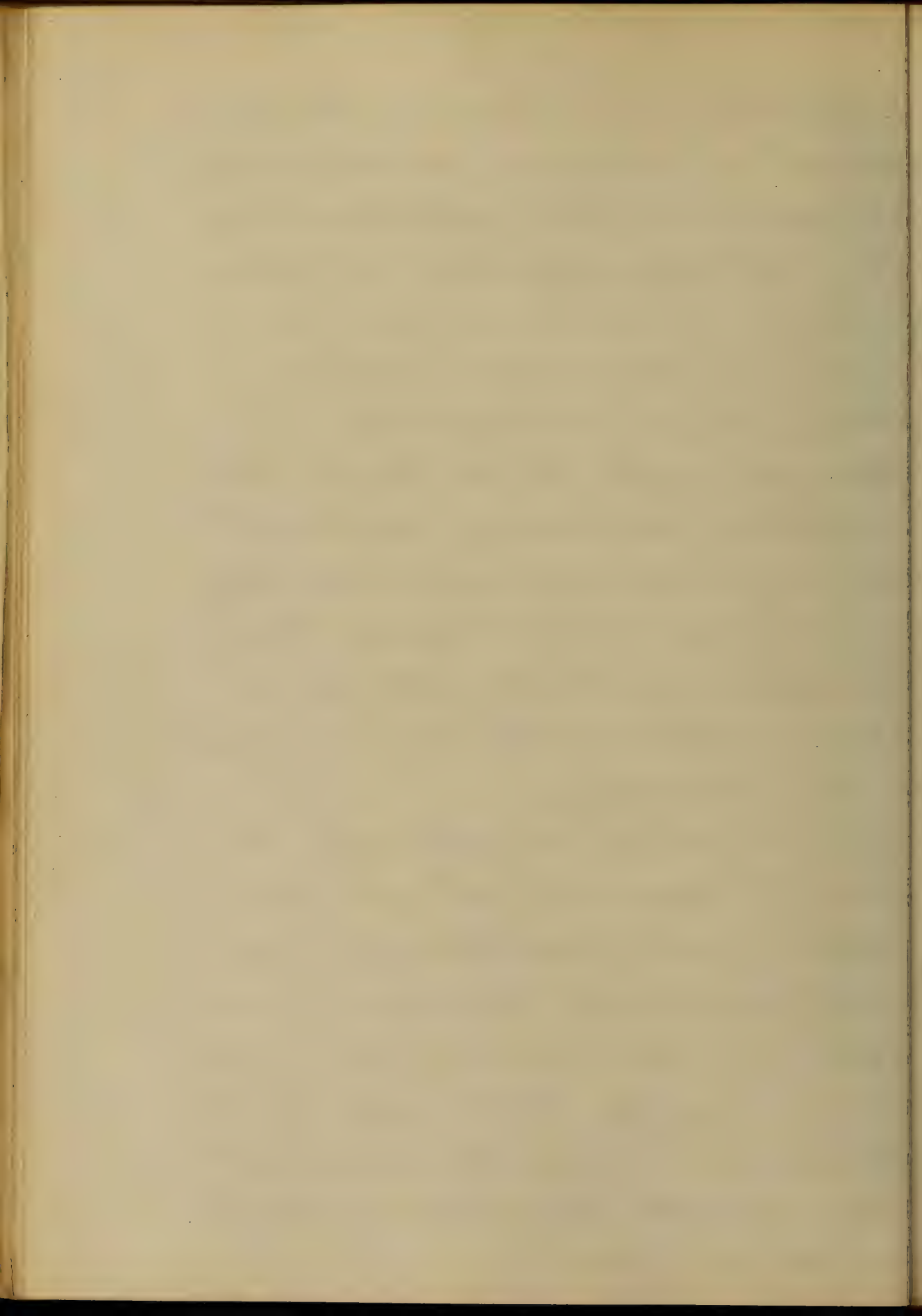
seem to have exerted the last gear a greater agency
 in the development of the disease than almost
 anything else - All shell-fish proved among the
 best exciting causes. In all such cases though,
 the system, bad water, fear &c. were only the ex-
 citing cause by which the already dormant
 Cholera poison, which was at the time in the
 system, ^{was} caused to be developed into true Cholera.
 In many instances this poison though in the body
 would more than likely never have been converted
 into the true disease in question but for the excit-
 ing cause. We are aware such things as we have termed
 exciting causes, such as bad water, bad food &c. have
 been generally considered the predisposing cause and
 such they may be very properly termed when eaten
 before the system come in contact with the Cholera
 atmosphere; so that whether they be predisposing or
 exciting causes depends upon priority. Though as we
 have said in our opinion are more properly the exc-
 iting causes - that the system first comes in contact
 with the poison and in a large number of instances the
 disease though communicable yet so slightly so as to
 require either a deranged or disordered system for its



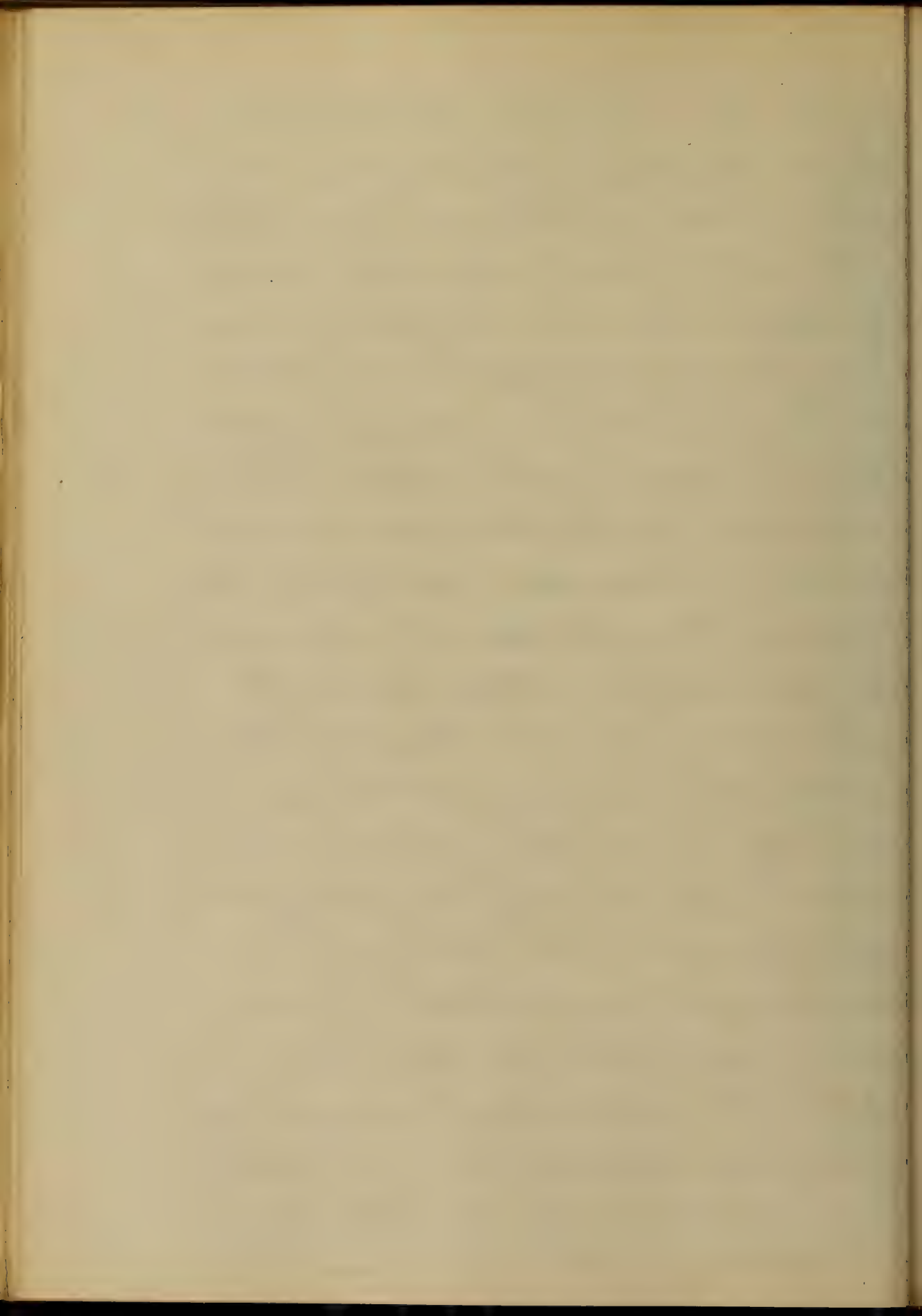
reproduction otherwise in the majority of instances it runs
matters into the disease proper. The manner in which
this is accomplished when the system has all the re-
quisites for resistance, is generally through such agents as are
now given.

is - When fully developed the diagnosis is quite easy,
especially if during the prevalence of Cholera. The
pathognomonic symptom being the "rice water discharges"
the all important point is an early recognition of the
disease and here the diagnosis must be based chiefly
upon the diarrhoea. If Cholera be prevalent, though
the vomitations are not distinctive of the disease, yet
all cases of diarrhoea should be taken as a grave symp-
tom and treated accordingly.

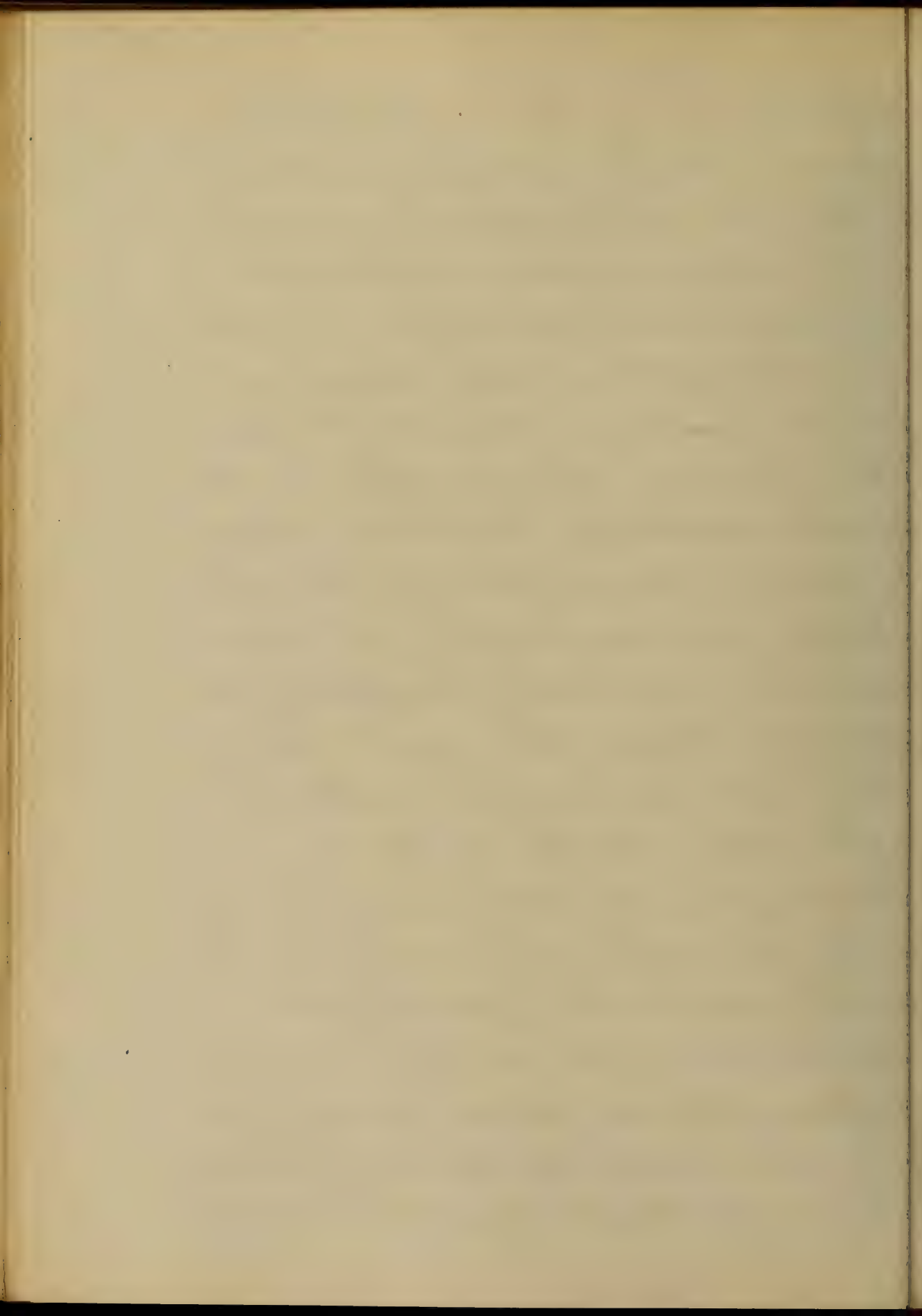
is - If the patient be seen early, that is during the
first stage the disease will be found in the majority
of instances to yield to prompt treatment. But when
the second stage is developed the prognosis is very un-
favorable - not more than 50 percent if so large a number
recovering. Recovery from the third or cold stage is only
to be regarded as an exception. The prognosis should then
be always unfavorable but much less so in the first
than either of the other stages.



Let it be understood that the activity of the
 treatment is by no means commensurate with the
 gravity of the disease - Strong reasons exist for think-
 ing the mortality to have been as great from over dosing
 as by non medication. For it may be truly said near
 the entire list of medicines has been brought to bear
 upon this disease. The first and paramount object is
 to enjoy perfect quietude both mentally and physically
 and to this end have the patient remain at once to
 bed and under an circumstances to get up until advised.
 The treatment then is applicable to the different stages,
 before collapse, during the collapsed stage and after
 reaction. During the entire disease the treatment
 must be directed to putting a stop to the liquid drain
 from the blood and chyle-bearing vessels is to encourage
 to increased power and activity the great ganglionic
 system of nerves is to both. With a view to the
 former some of the many preparations of Opium
 are found very effective. The opiate should be in
 solution that as little delay be experienced as
 possible in its action. Morphine may be applied
 chiefly to the mucous membrane of the tongue or
 by the hypodermic method. Laudanum or the

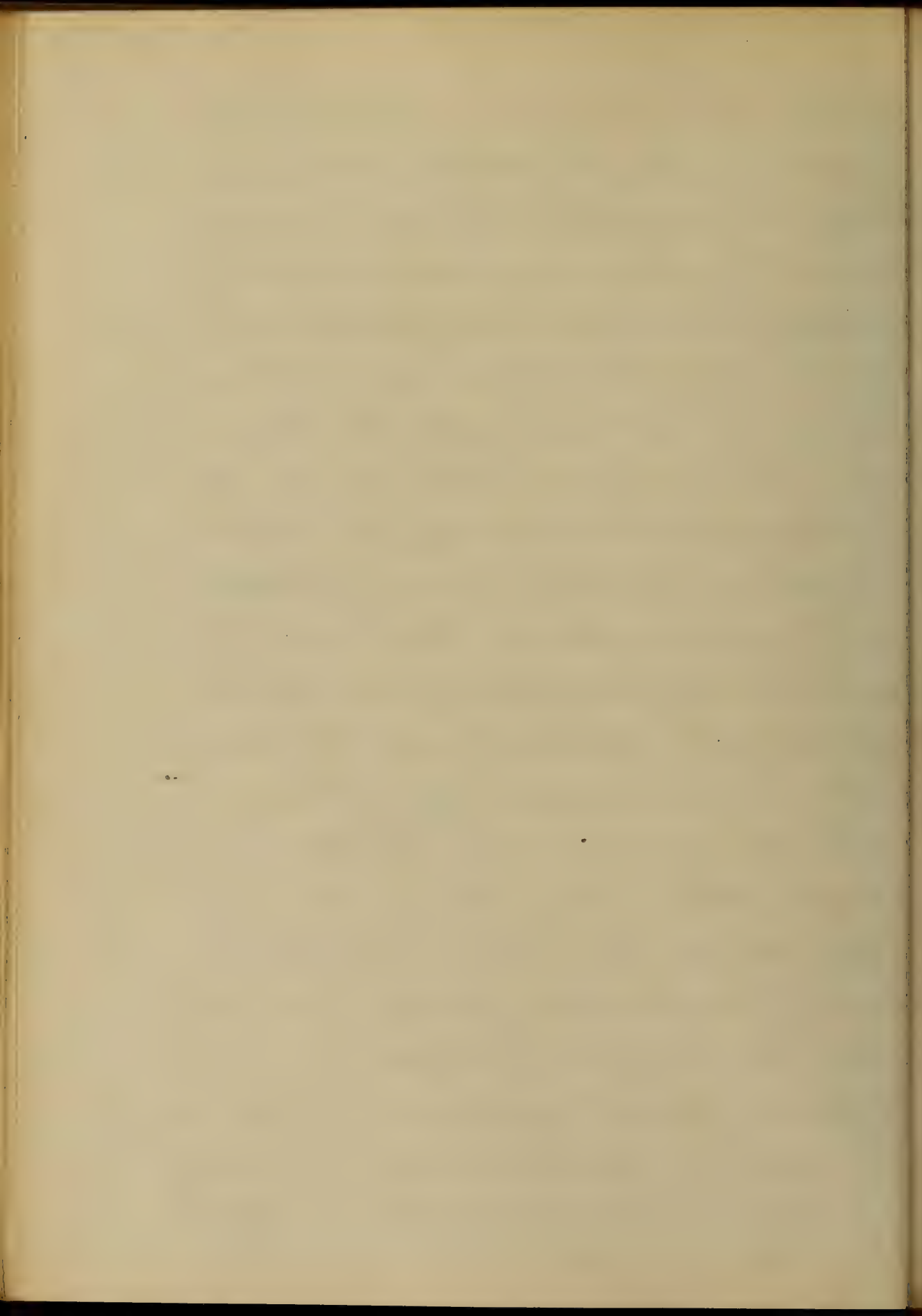


acetated tincture are very efficient preparations leading
 in the mind the paramount importance of time
 For here by the prompt arrest of the intestinal reac-
 tion the disease is cut short of a fatal career.
 In this case the opiate should be given in full doses
 and if the symptoms are urgent an emesis of
 starch and loaf sugar. Should there be a pro-
 cordial oppression a prompt emetic of mustard
 and salt or Sulphate Zinc should be given to relieve
 the stomach of the undigested food. The second
 indication, exciting increased activity of the ganglionic
 nerve centre, is more promptly and efficiently acc-
 omplished by Strychnine than any other article of
 materia medica and its importance we think has
 as yet not been appreciated. By this course of
 treatment, if seen early the disease is most frequently
 very promptly arrested in its first stage. The patient
 should be allowed water in all stages and in qu-
 antity proportional to the calls of the system and
 at intervals spirit and water and mild farinaceous
 articles of diet. Most authors permit very little water
 to be given during the first stage which we think very
 improper treatment



When the treatment fails to arrest the disease in its first stage, or when the patient is not seen until the second a more active treatment is necessary. It is here the symptoms seem to call for the most powerful treatment in the form of stimulants and anodynes. In addition to persevering in the former course of treatment we now stimulate the spinal column and all the great centres of organic life by sinapisms, wet and dry cups, brisk friction to the extremities and head by means of bottles of hot water and warm blouses placed near the body. Here it is that Strychnine is found of more utility than in the first stage. If notwithstanding all this the disease continues to grow worse and the stage of collapse ensues, it then only remains to try still other and more powerful excitants of nerve centres. Ice should be applied along the spinal column, to be followed by brisk friction with a coarse, warm dry towel or what is even more powerful the "cold drench".

Diffusible stimulants as much as the stomach will bear, should be given and concentrated nourishment such as the essence of meat, milk &c, in small quantities if borne by the stomach, to maintain the

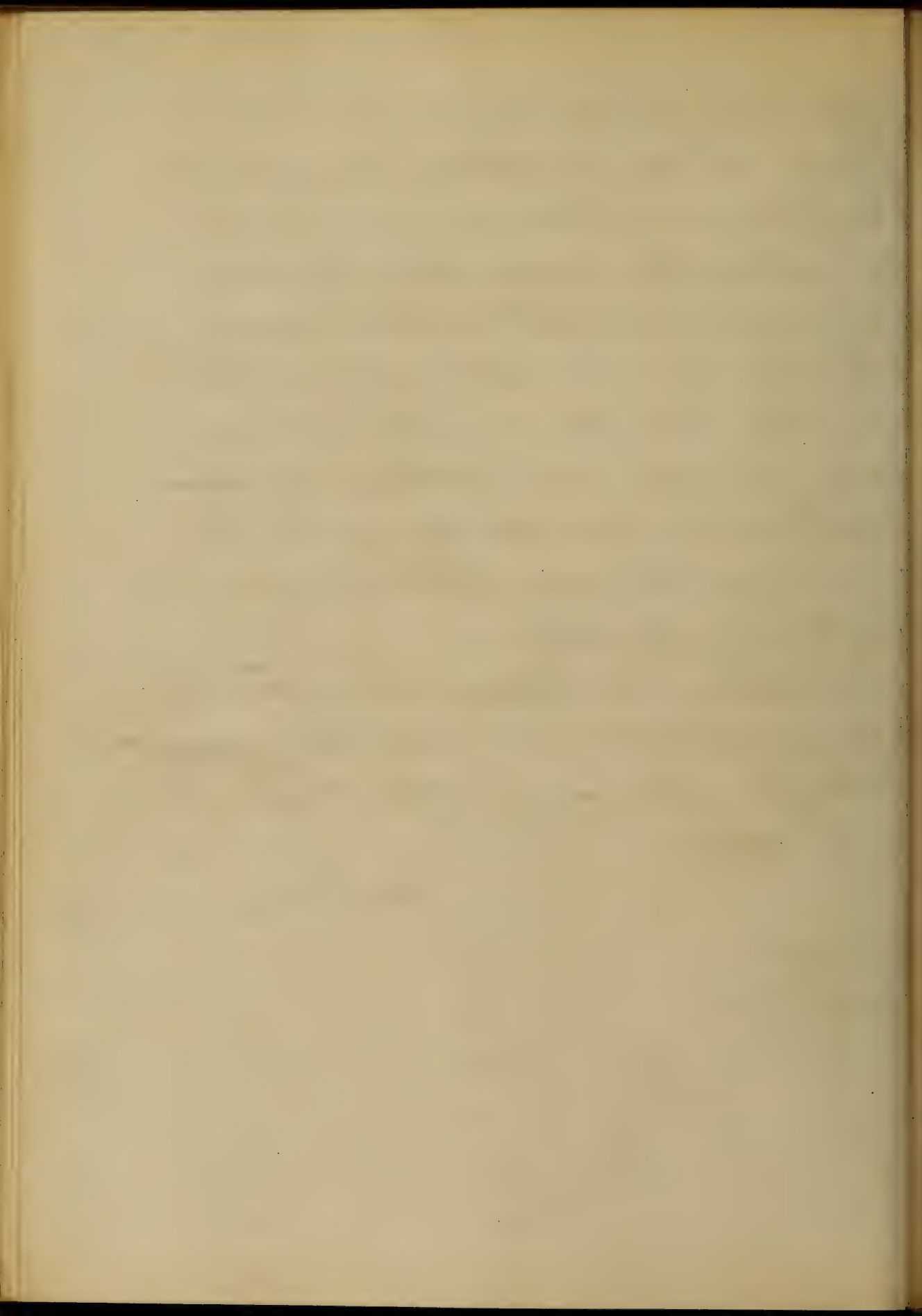


power of the system. And finally we have the resort
of injecting into the veins salt water. In several recent
trials of this mode of treatment quite recently in
Paris, after all hope of recovery from other means
had vanished, the patient was found in every
instance to revive and in several cases to enter into
convalescence; but in the course of a few hours
collapse again came on and death speedily ensued.
From ^{these} examples can we not yet expect good
to result from this mode of treatment? We are
led to reply affirmatively.

In consideration of the laborious duties of our worthy
Professor whose duty it will be to read this we
shall refrain from any remarks on the "Preventi-
on of Cholera".

Allen Fowler

Univ. of Md.
 Jan. 1st 1867

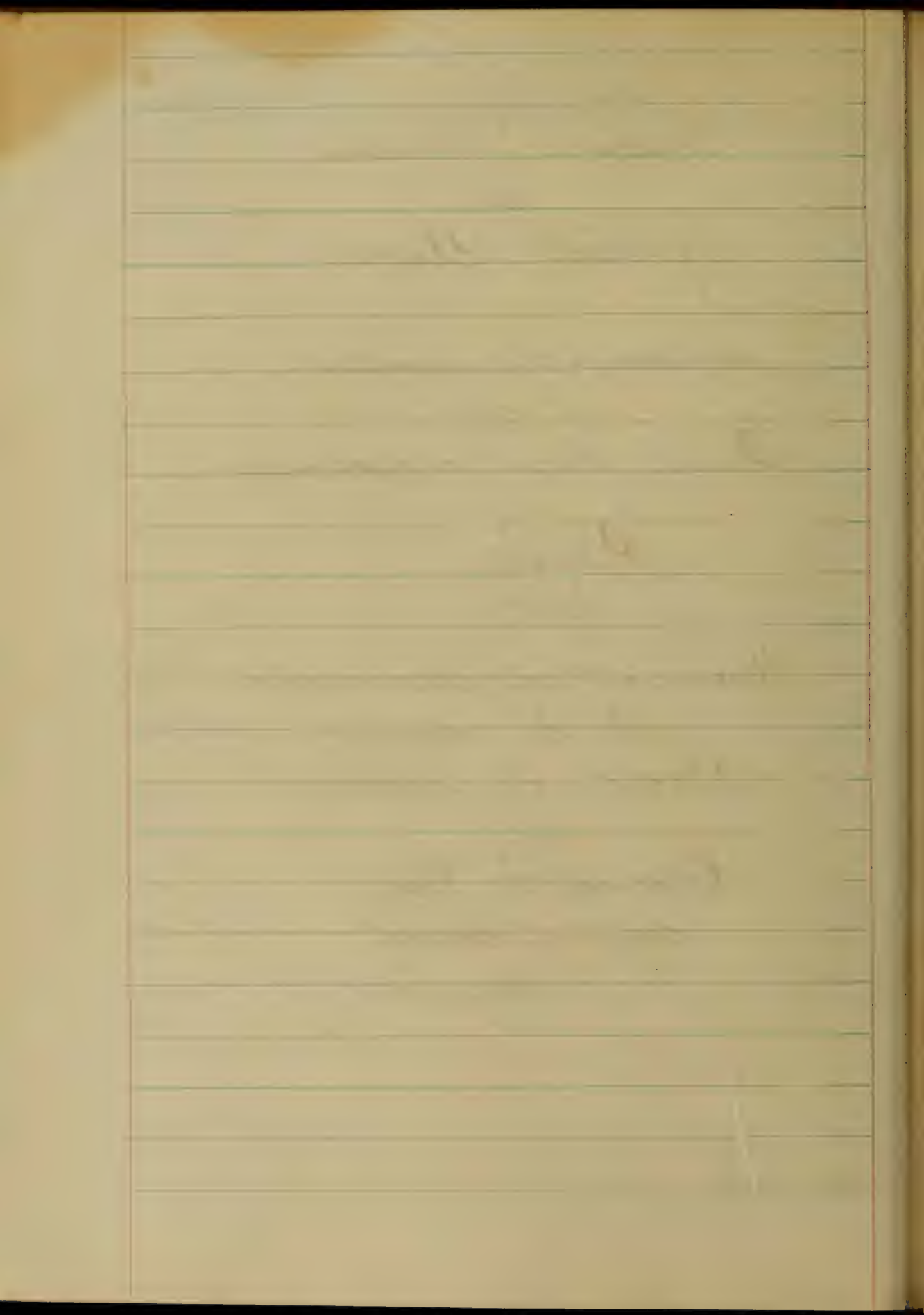


An
Inaugural Dissertation
on
Typhoid Fever.

Submitted to the examination
of the
Provost, Regents and Faculty
of
Physic.
of the

University of Maryland
for the degree of
Doctor of Medicine.

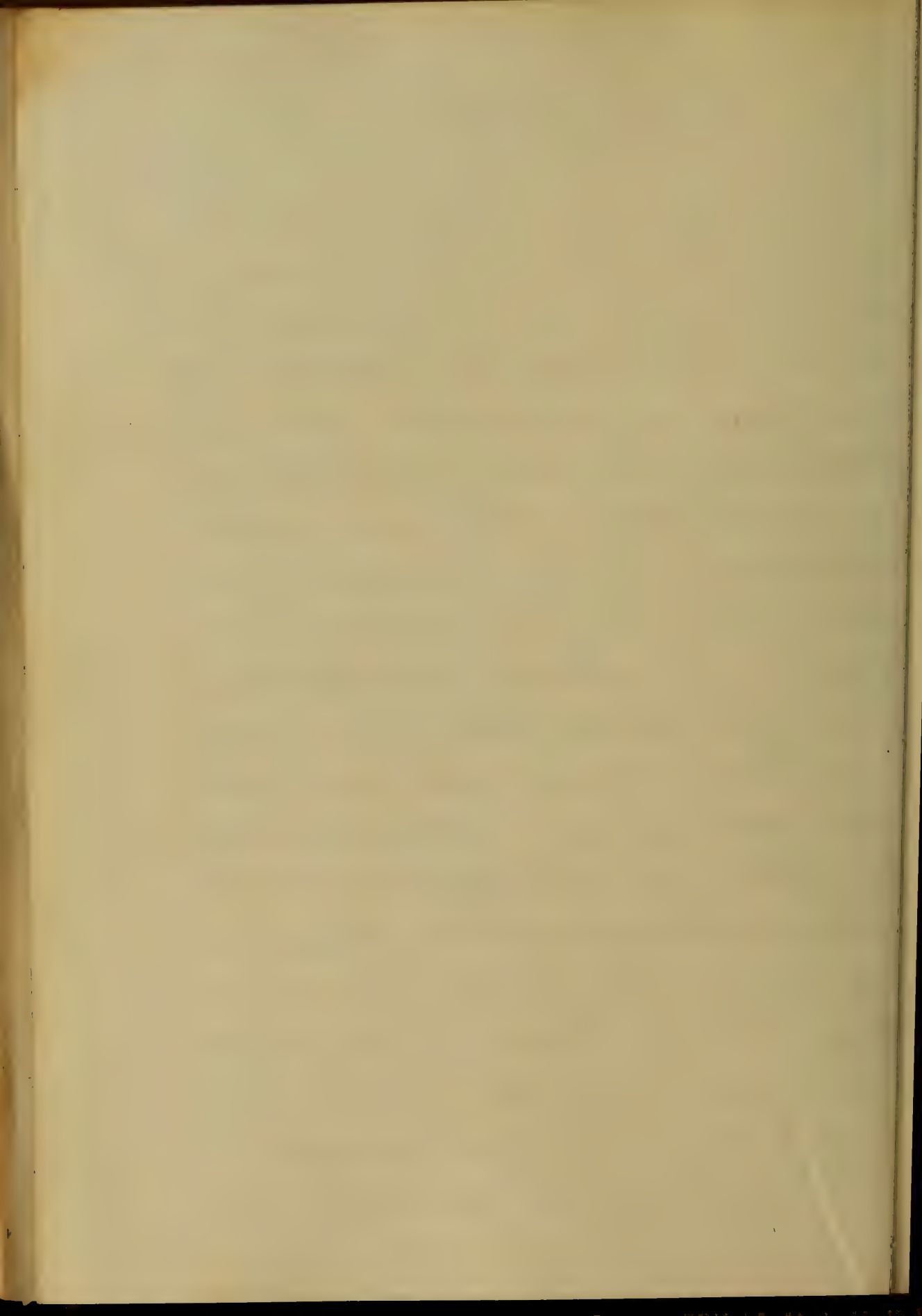
By
Daniel F. Bell
Jefferson County
Virginia

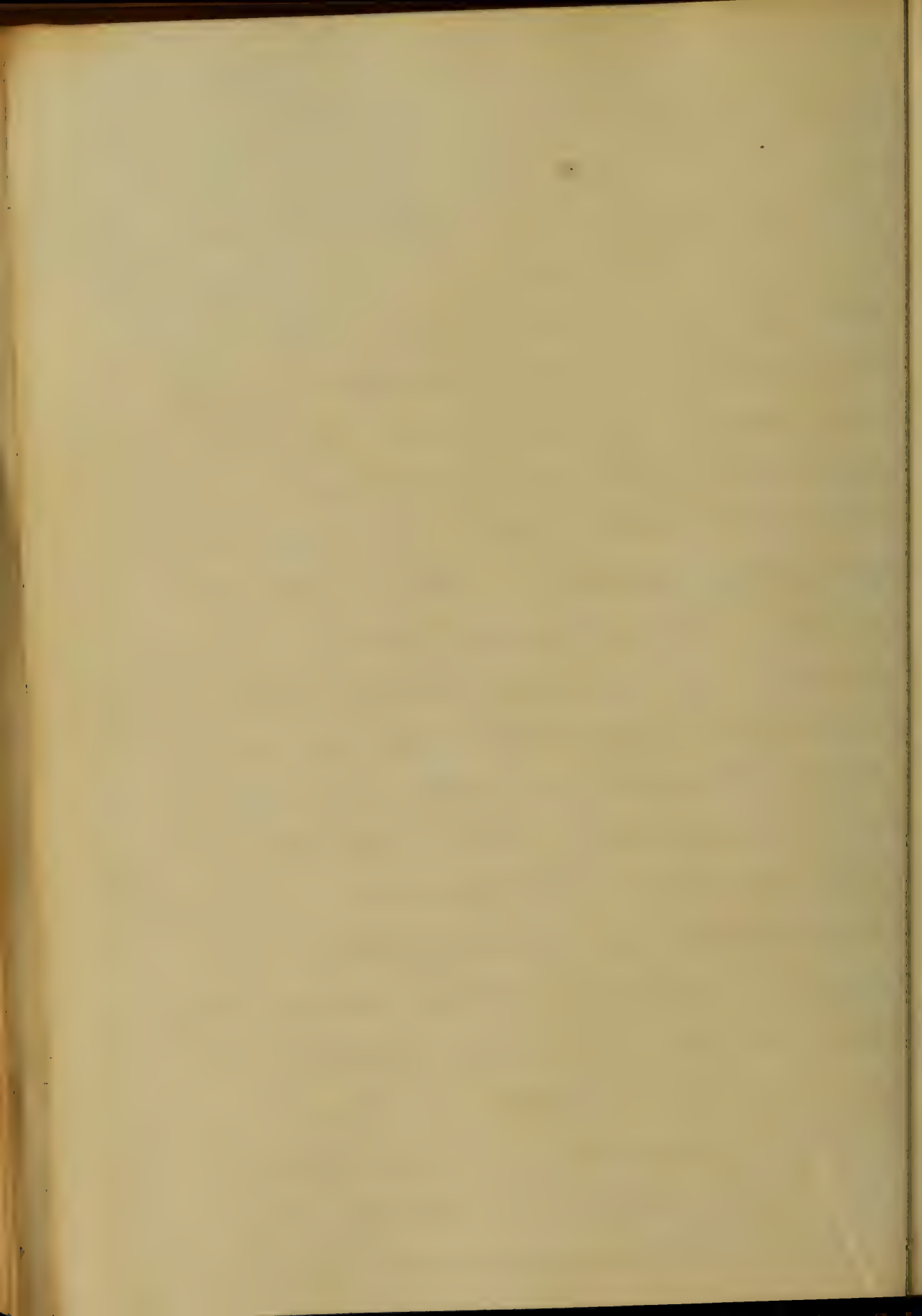


Spina

and has been known under a
different name, to
commonly continued down by others
was known as nervous fever, tubercular
abdominal tubercles and by Ant. W.
as enteric fever. The name under
it is most generally known is Typhoid
fever which was first given by
Harris. This fever is characterized
as a typhoid condition and is
a disease which is distinguished
from other diseases. It is
has become so generally adapted that a
group could only include
with it and is little
the probability is that it will
be called by this name.

The disease makes its appearance in
different modes, but generally



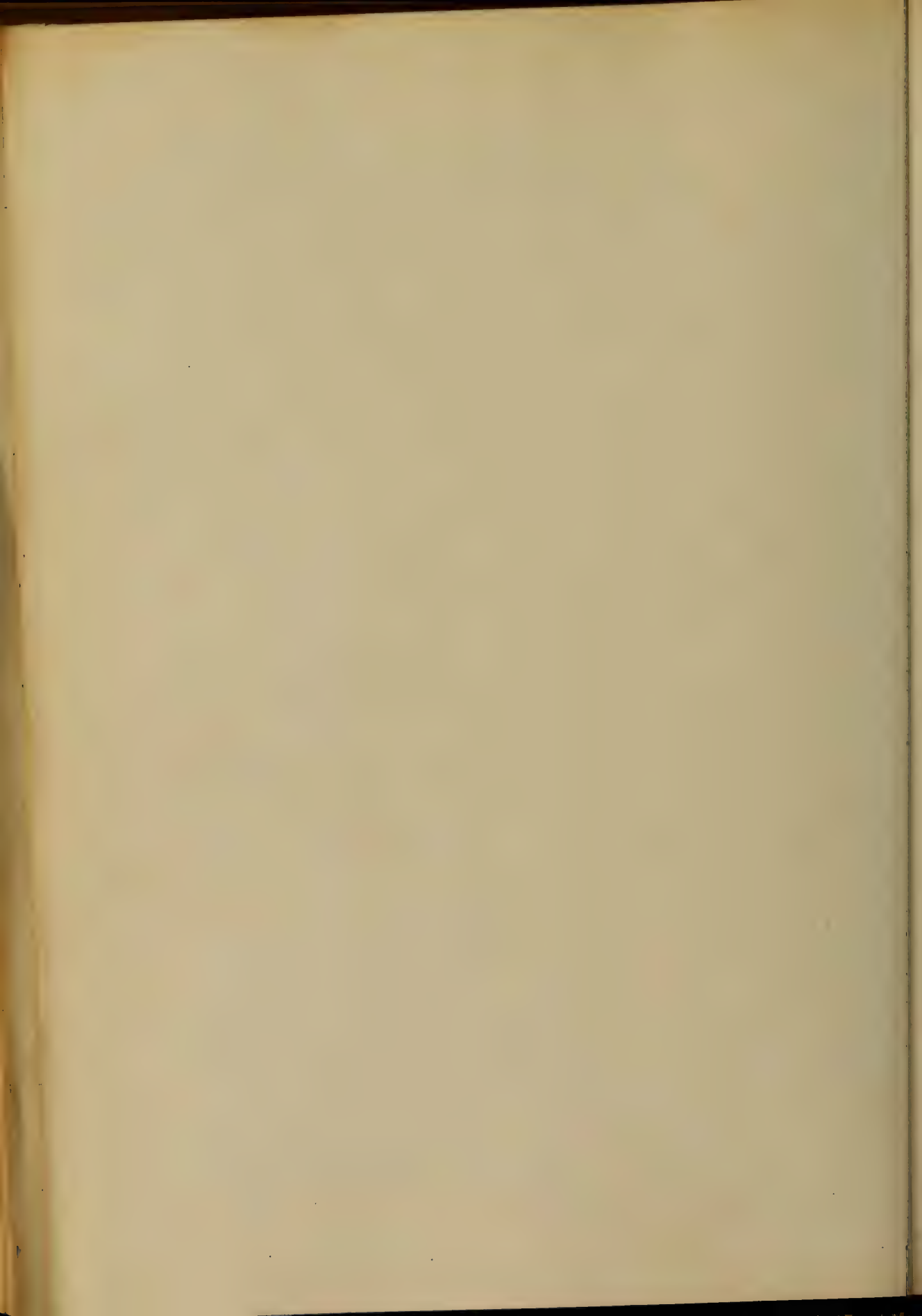


red and ...
the ordinary symptoms of ...
attendance such ...
of the skin ...

...st, flushes ...
... of appetite, with ...
... weakness of furrowed tongue

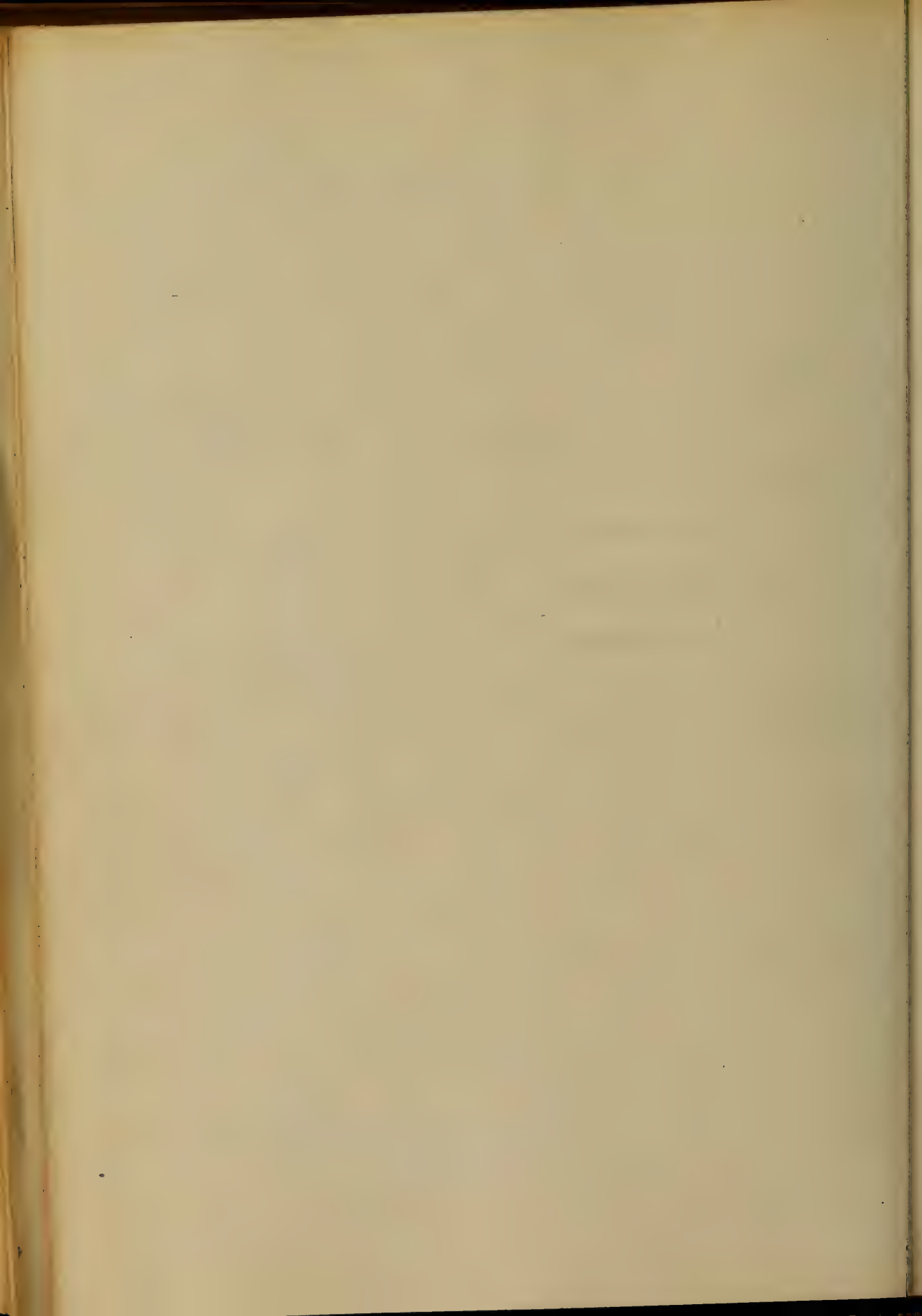
Some of these symptoms
common to fevers generally - are
this disease ...
the flush of face is of a rather
... which is not ...
in most other fevers, the ...
... ^{seen} ...
(typhus fever). There is also ...
... expression of countenance
...
...

These symptoms ...



increasing in ...
...
... more frequent ...
... skin increasing in dryness ...
... countenance becomes duller ...
... grows weaker ...
... thicker and ...
... a yellowish or brownish ...
... cases may be even ...

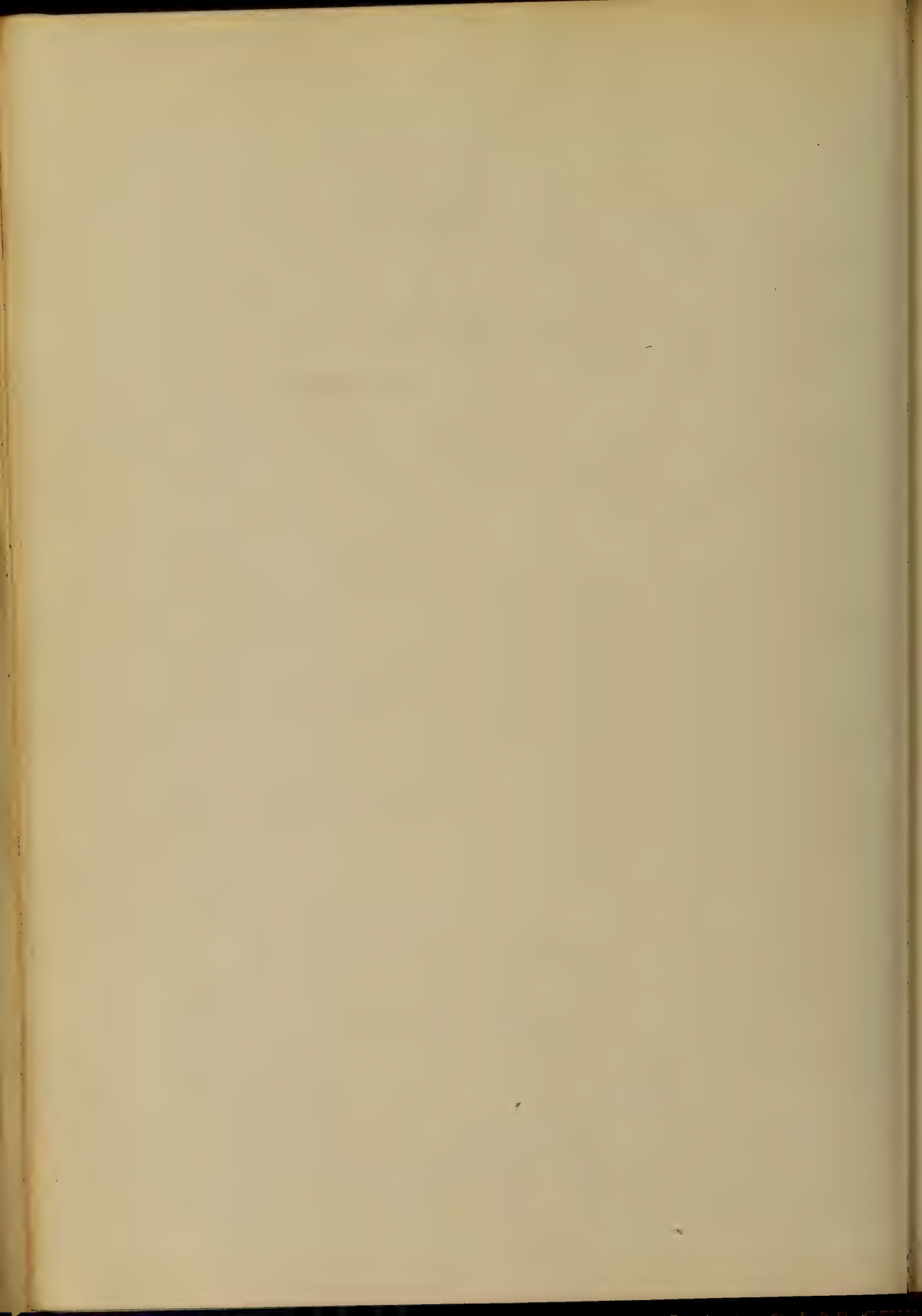
The diarrhoea if it existed ...
... this time is increased, if it ...
... appeared before it is very ...
... to makes its appearance ...
... the abdomen ...
... About the seventh or ninth ...
... the disease ... eruption ...
... skin takes place, ...
... of numerous small ... spots ...
... scattered ...
... their appearance first on the ...
... spreading ...
... these spots a

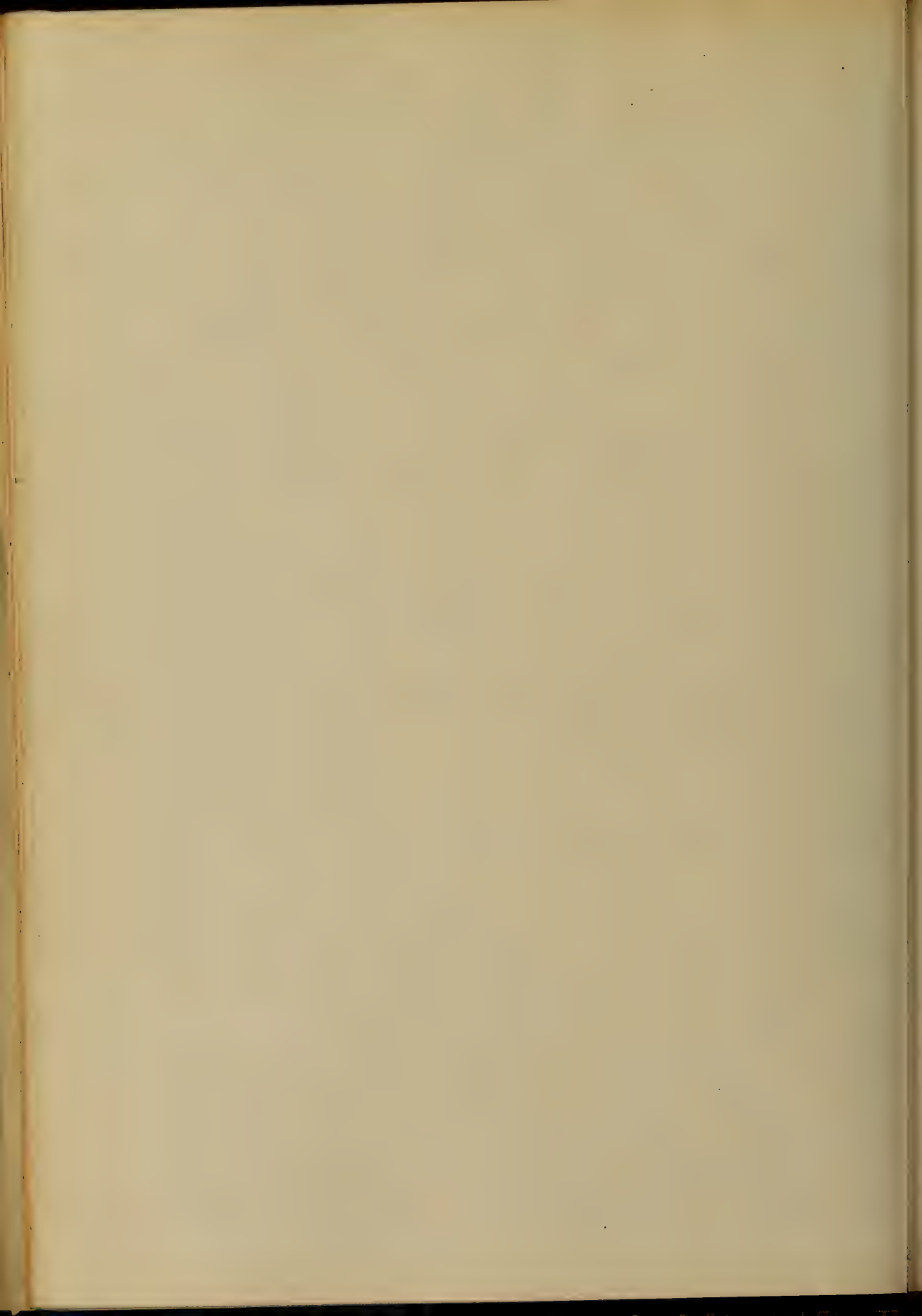


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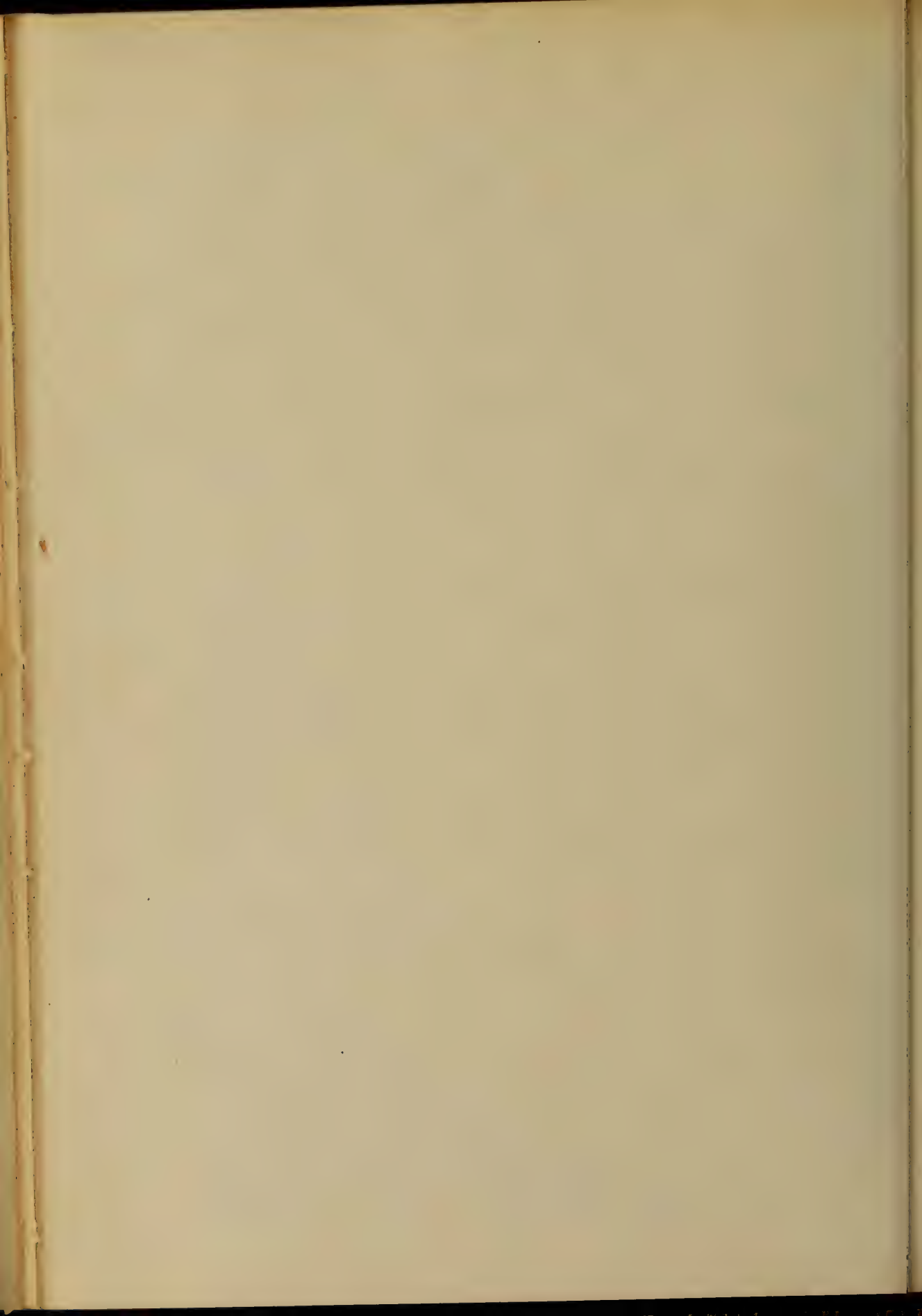
... will be found to exist more frequently if the disease of the ...

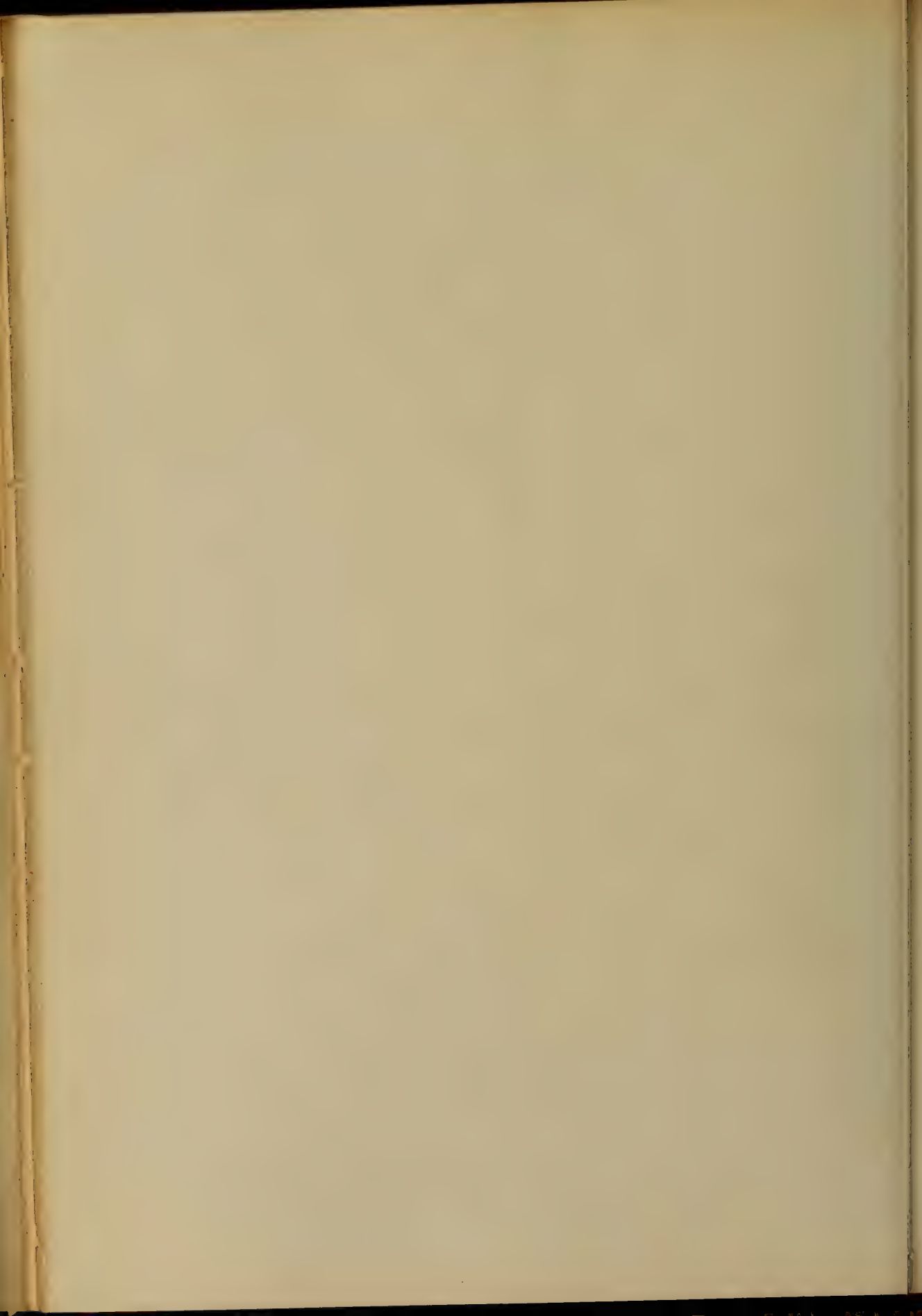
The tympanitic abdomen is a consequence attendant so much so that ... 's has very seldom seen ... without some degree of it. His opinion is that it bears some ... to the severity of the disease.

The eruption is very characteristic of this disease, it makes its appearance at different periods, from the first to the ... day, but more generally appearing about the second or third day.

It consists of small papulae or pimples of a ... a few ... slightly elevated.

His opinion is that it is ... of the ...



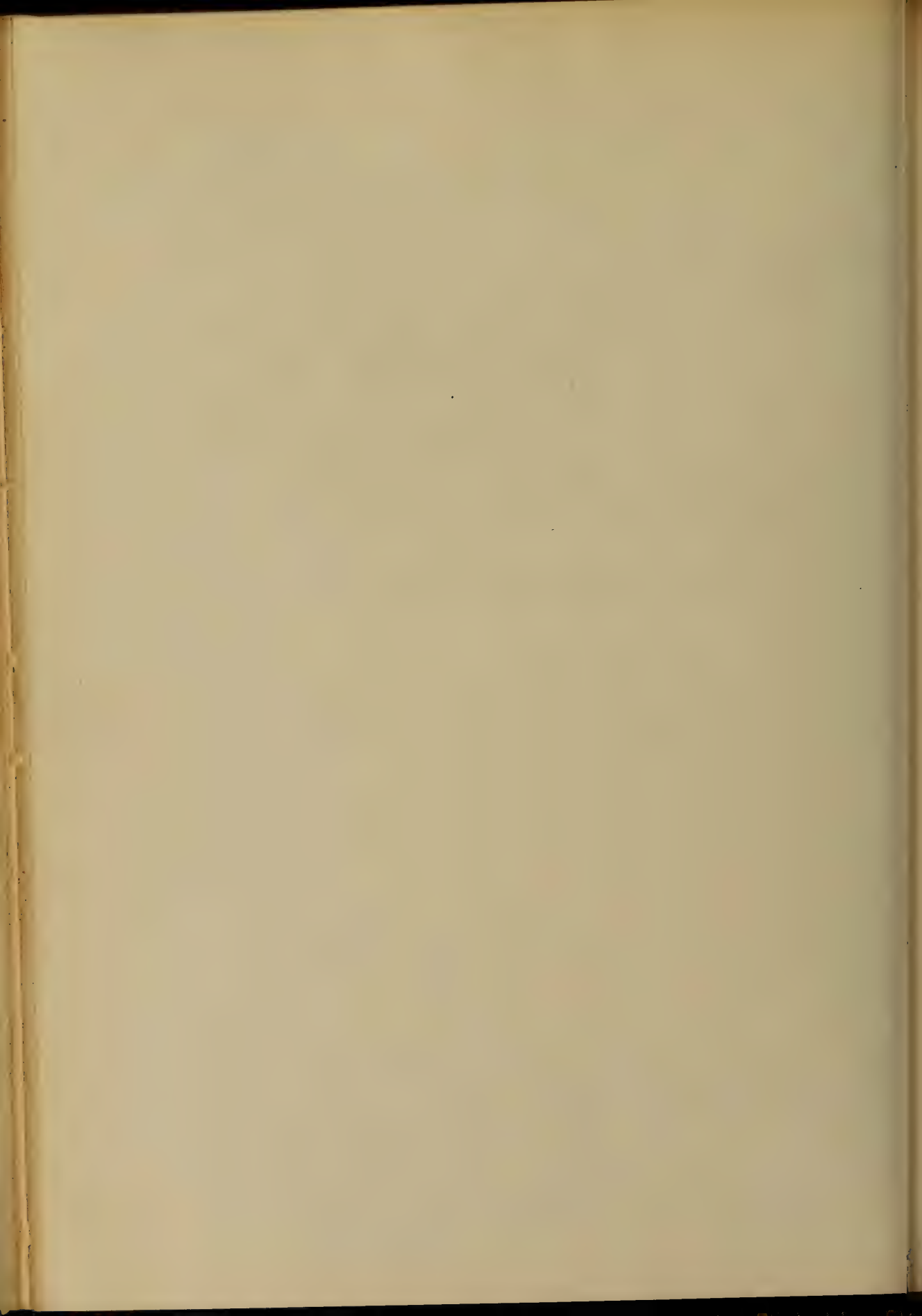


The intensity of the disease
This symptom is
a long time
a very inflammation or organic
case of the membranes of the brain;
but is the result of a peculiar state
of the blood, a certain something exist-
ing in the blood, a certain nature
rendering it unfit for its natural use
purpose.

Intending on pressure in the right
ilia. signs superficial, but sometimes on
the left and at times on both is rarely
absent entirely, and is considered by Dr
Sims as diagnostic of this disease.

Haemorrhage from the nose is frequent
in the early stages of the disease, in the
later stages of the disease haemorrhage
not infrequently takes place from the
lungs.

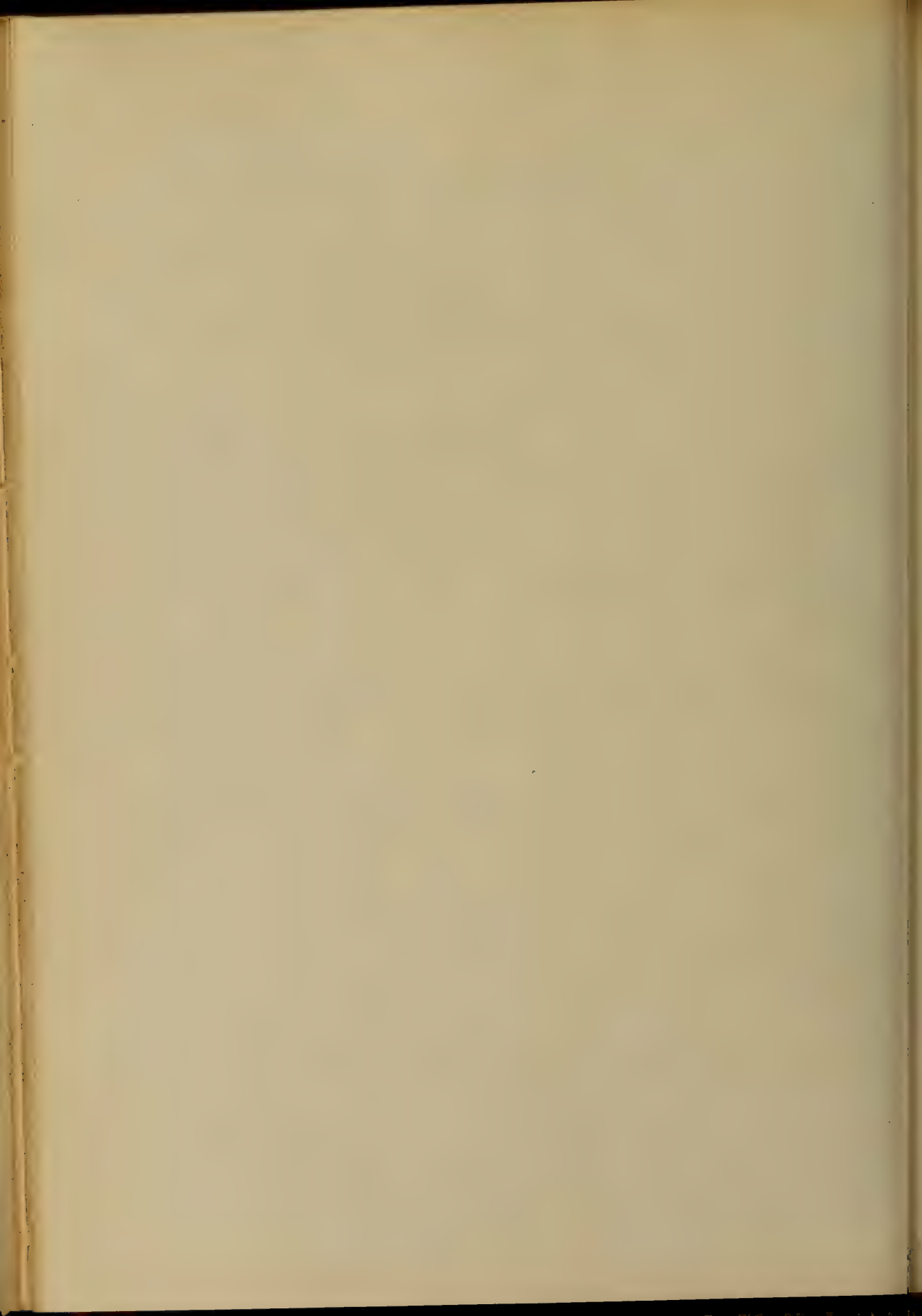
Sometimes during the second week the patient
is seized with



in the liver & spleen of the patient
This occurrence is not confined to
of the disease, but may occur at all
stages of the disease.

Quilting (Cholera) - In some cases
some organs in the body is diseased
ed, but there are some signs
is characteristic of this disease. They are
seated in the glands of the small intestine
and in the mesenteric glands. These glands
become indurated and thickened by a depos-
it of a certain matter called typhoid
typhoid material. This deposit occurs in
the lower portion of the small intestine and
mesenteric apparatus. These signs

are characteristic of this disease, as the disease
continues, ulceration finally takes place
of the intestine producing
Typhoid enteritis. The signs
of the disease are seen. The kidneys

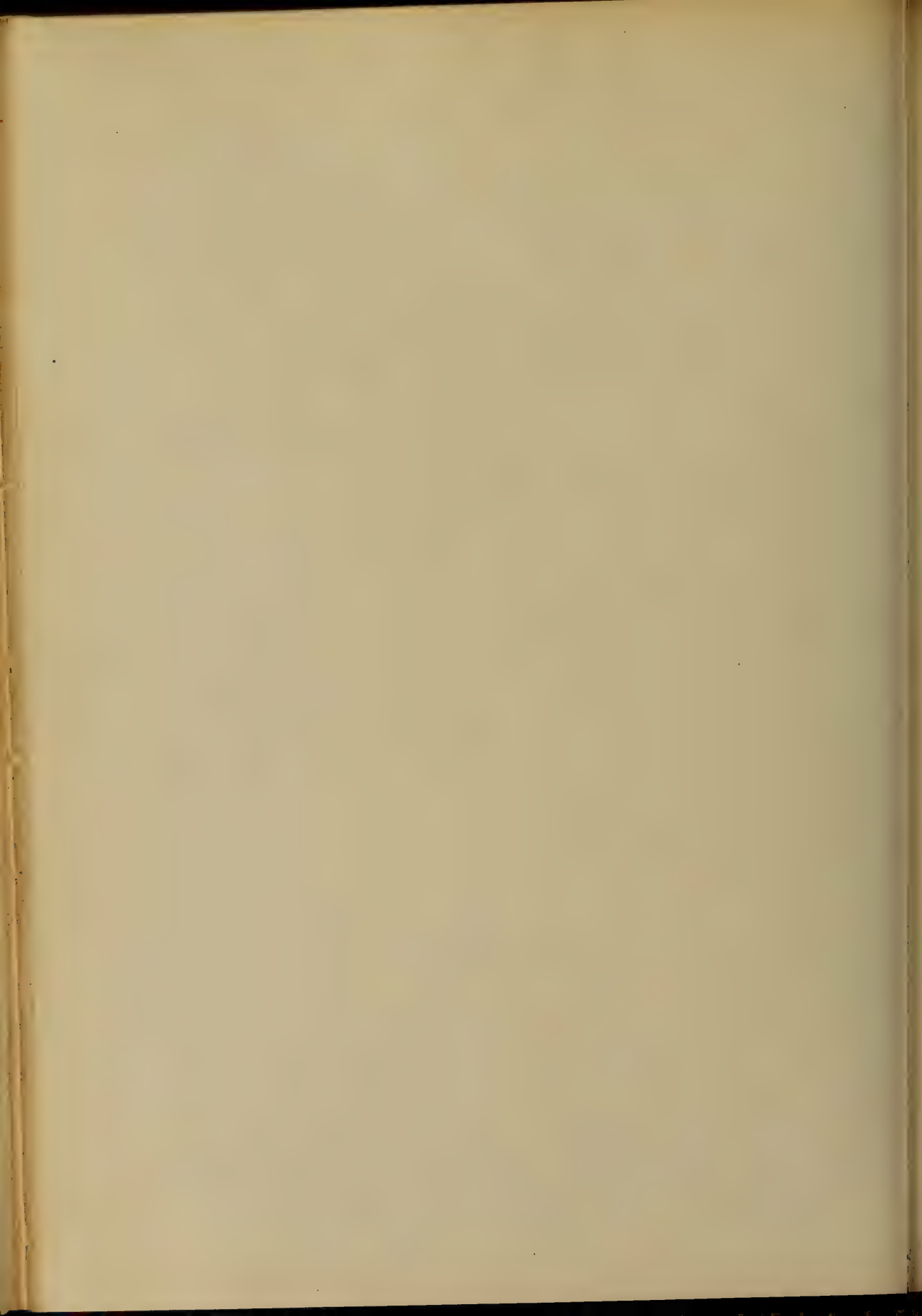


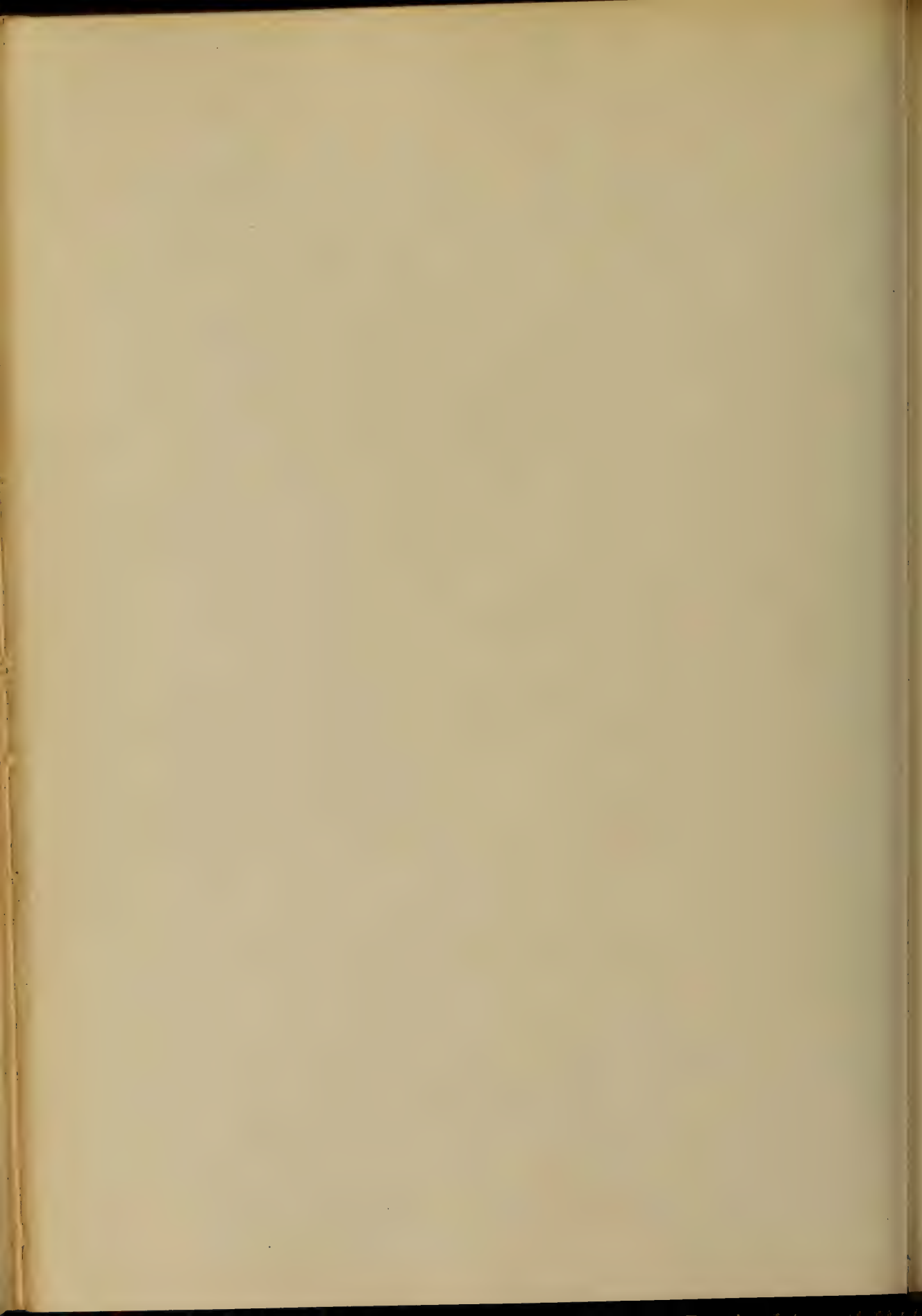
Cholera

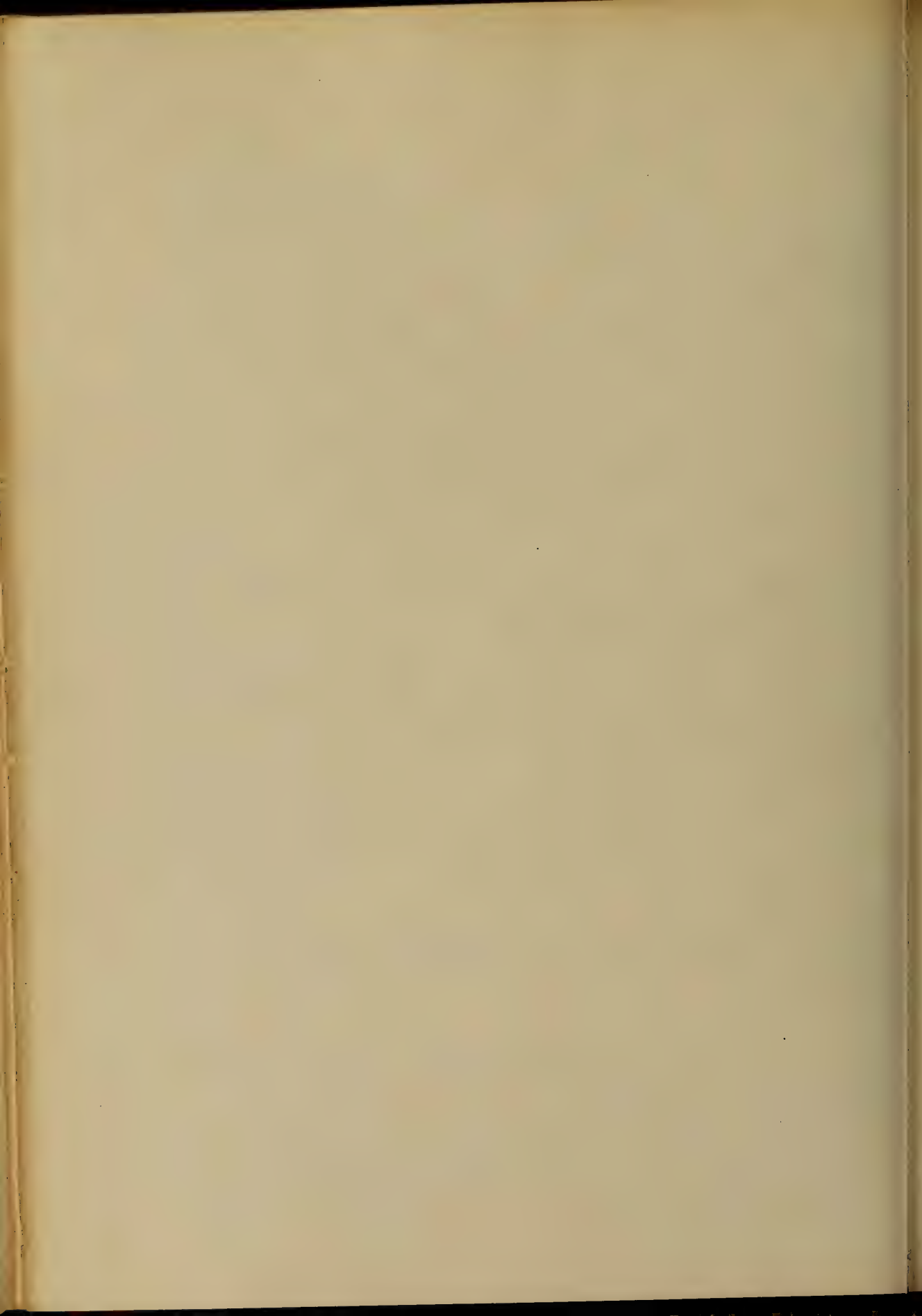
2002 Cholera is a disease which is caused by a specific poison which enters the system as a ferment and poisons the blood. It is thought to be contagious by some writers and the probability is that under certain circumstances it is so, although this is denied by some writers.

It is caused sometimes by human effluvia or excretions in a state of decomposition and it is likewise seen in thinly inhabited regions, & mountainous countries.

After a protracted course the disease being much more common in young than in those over fifty years of age, it usually attacks infants, but is seen more frequently about the age of puberty and from that time to twenty five years of age, according to what has been said to be equally liable to it up to the commencement of the autumnal season, & some writers suppose that the disease is more common in the autumnal season.







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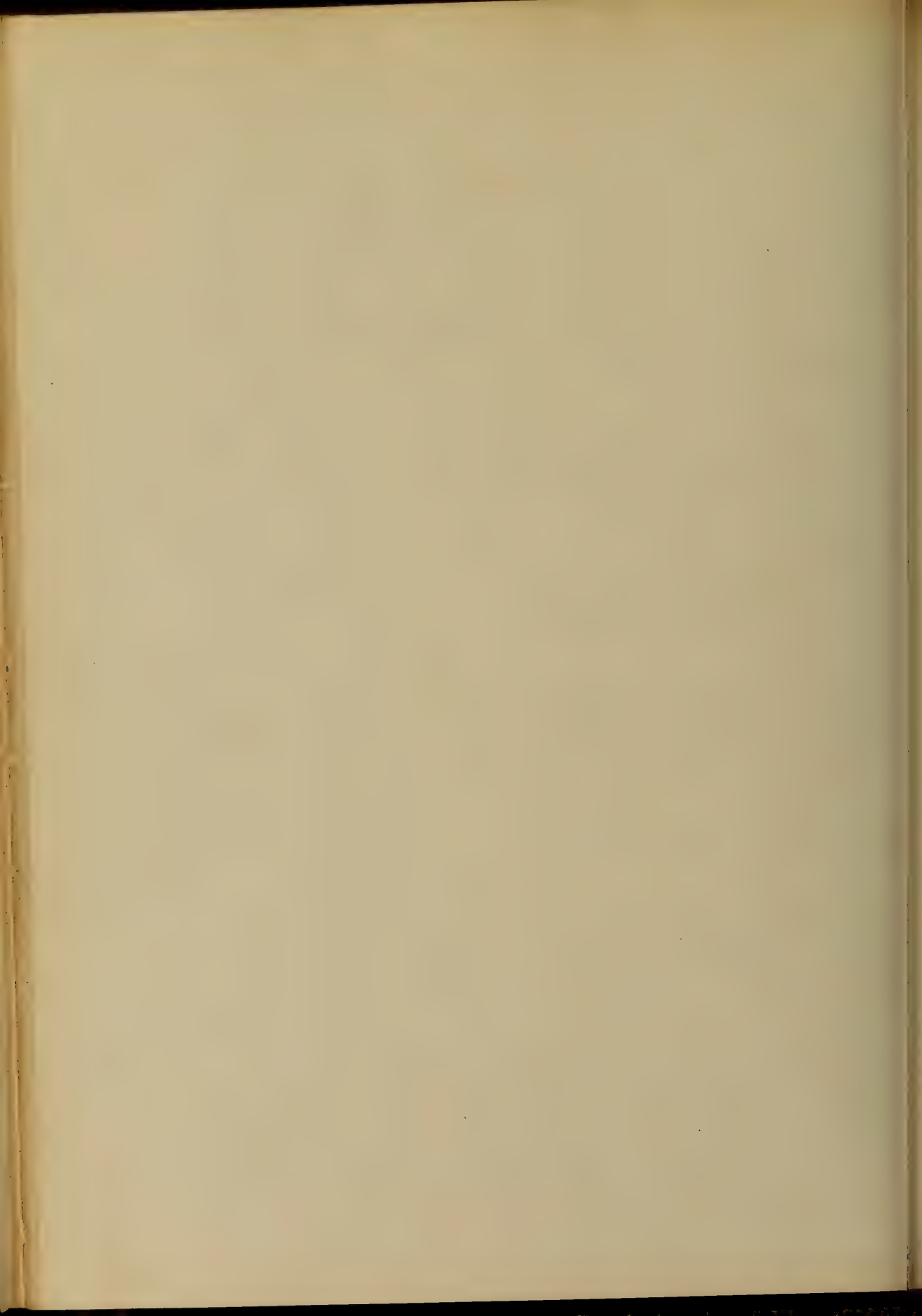
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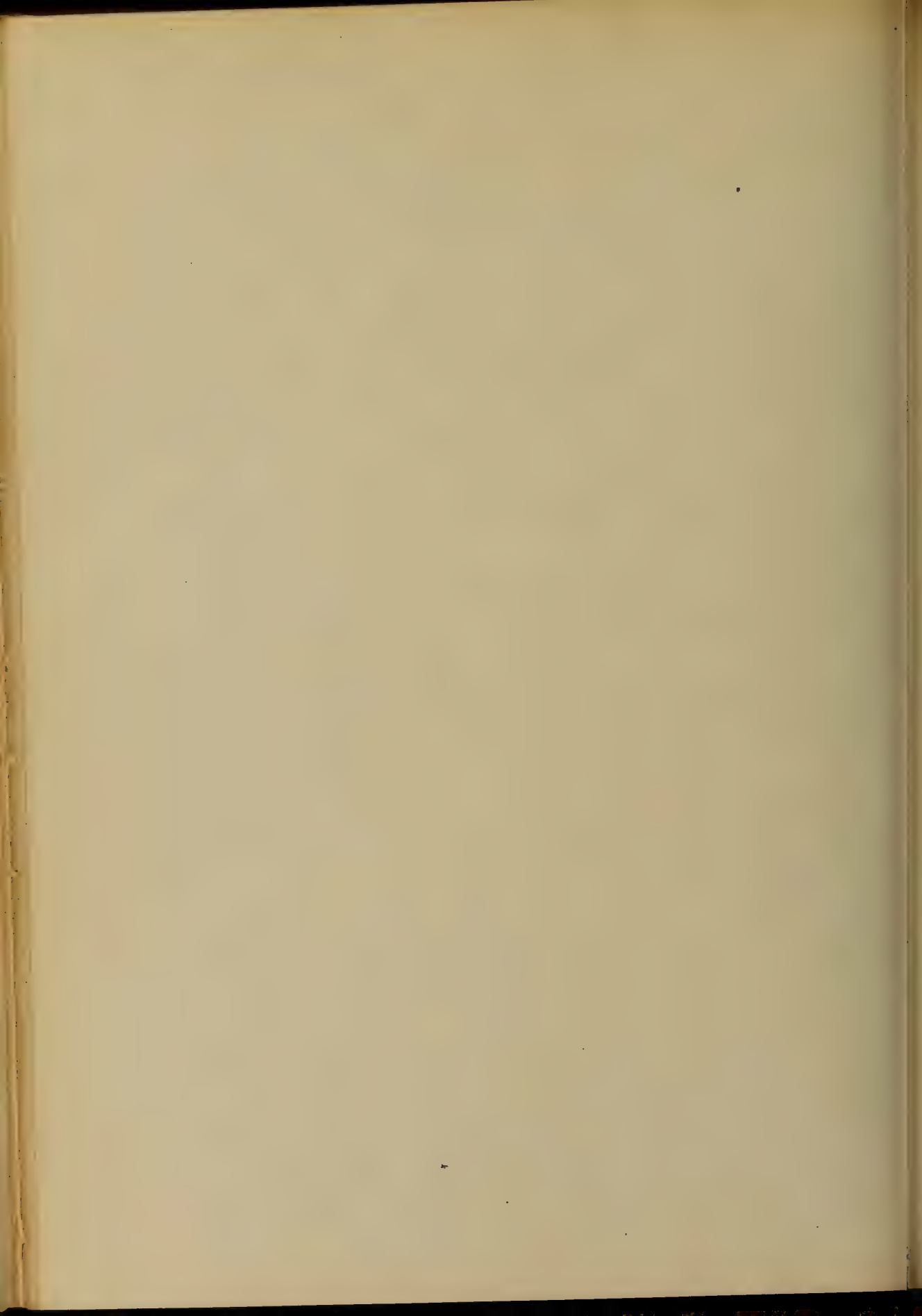
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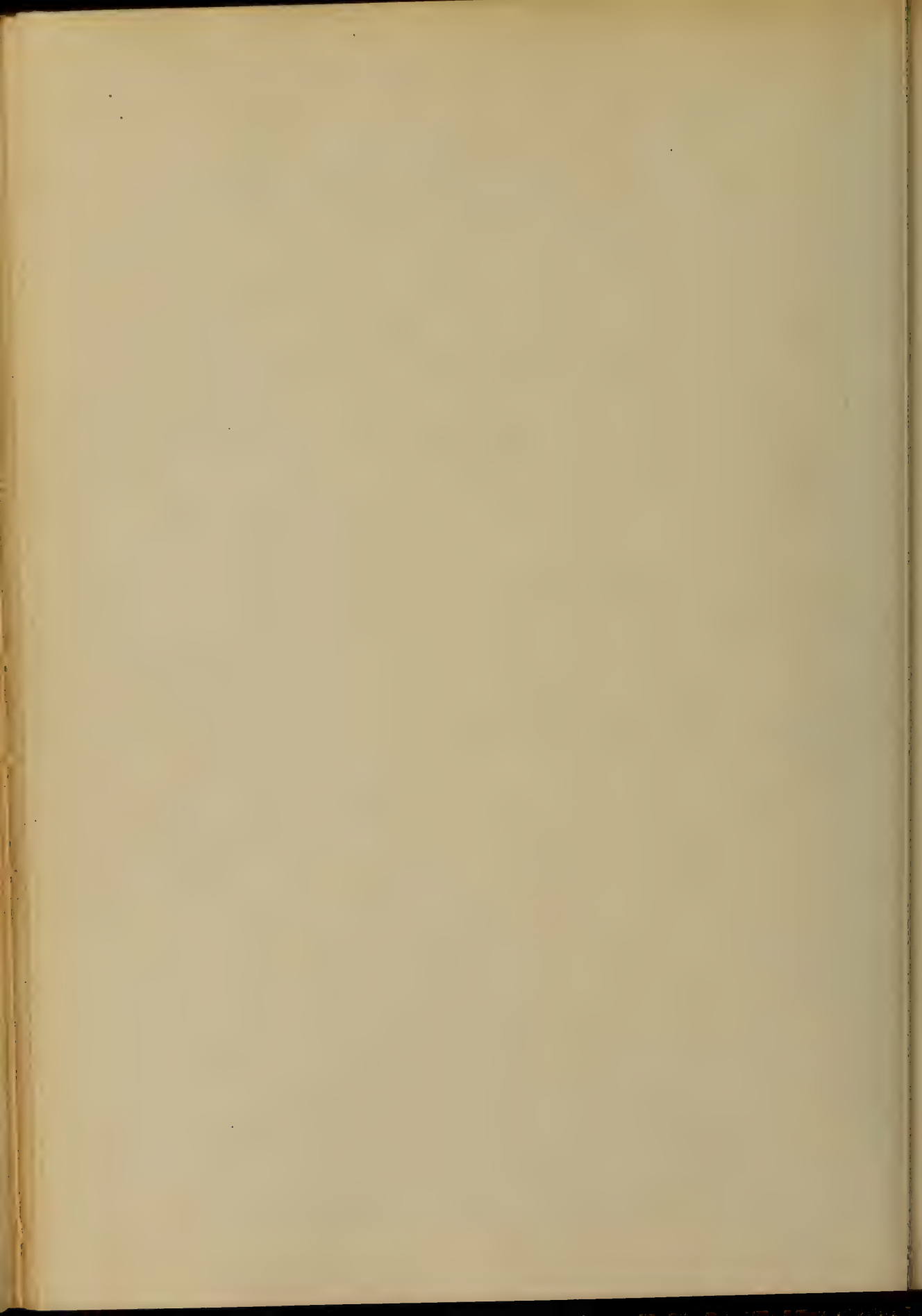
Section

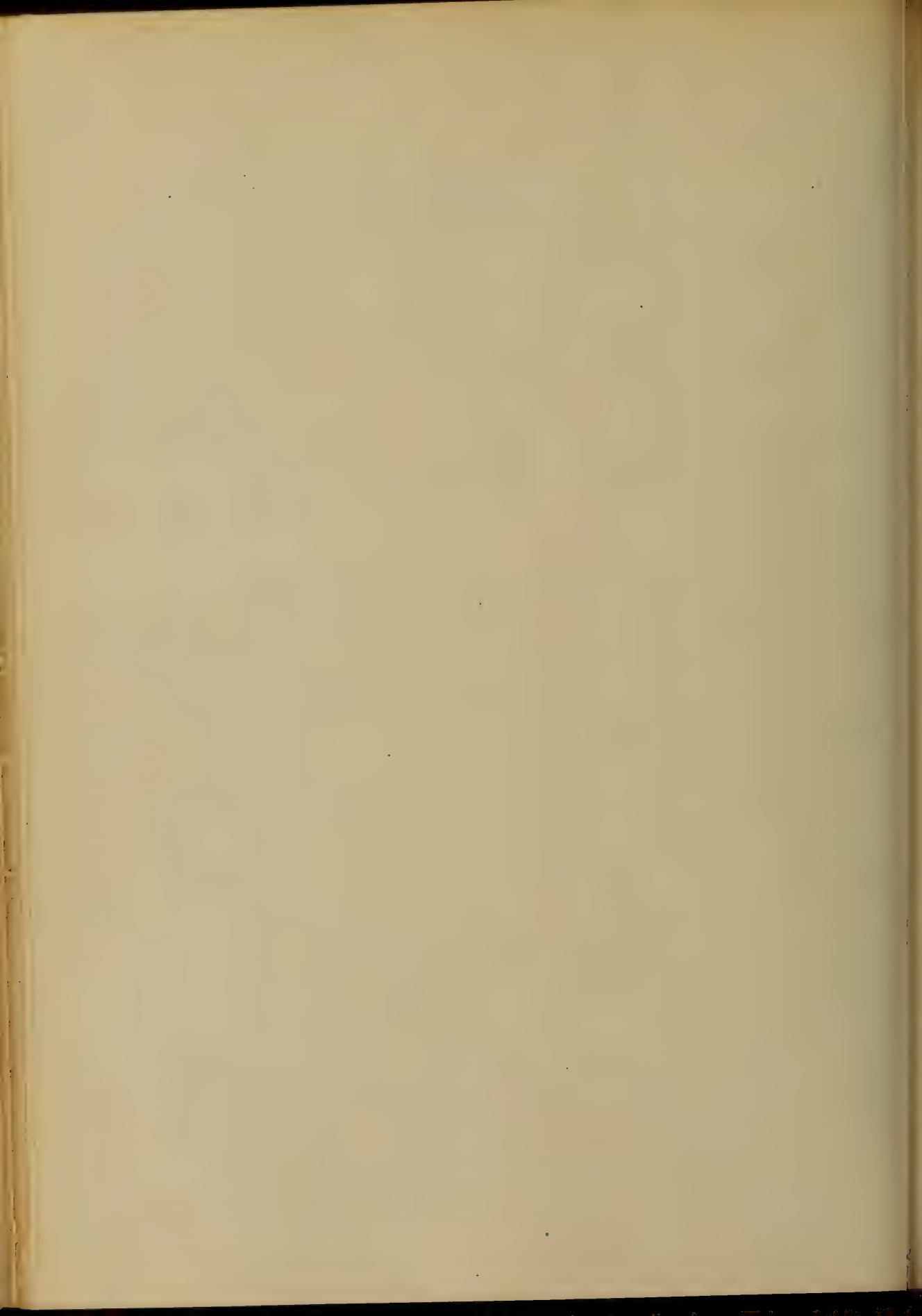
The treatment of this disease has
been different at various times and
by different writers.

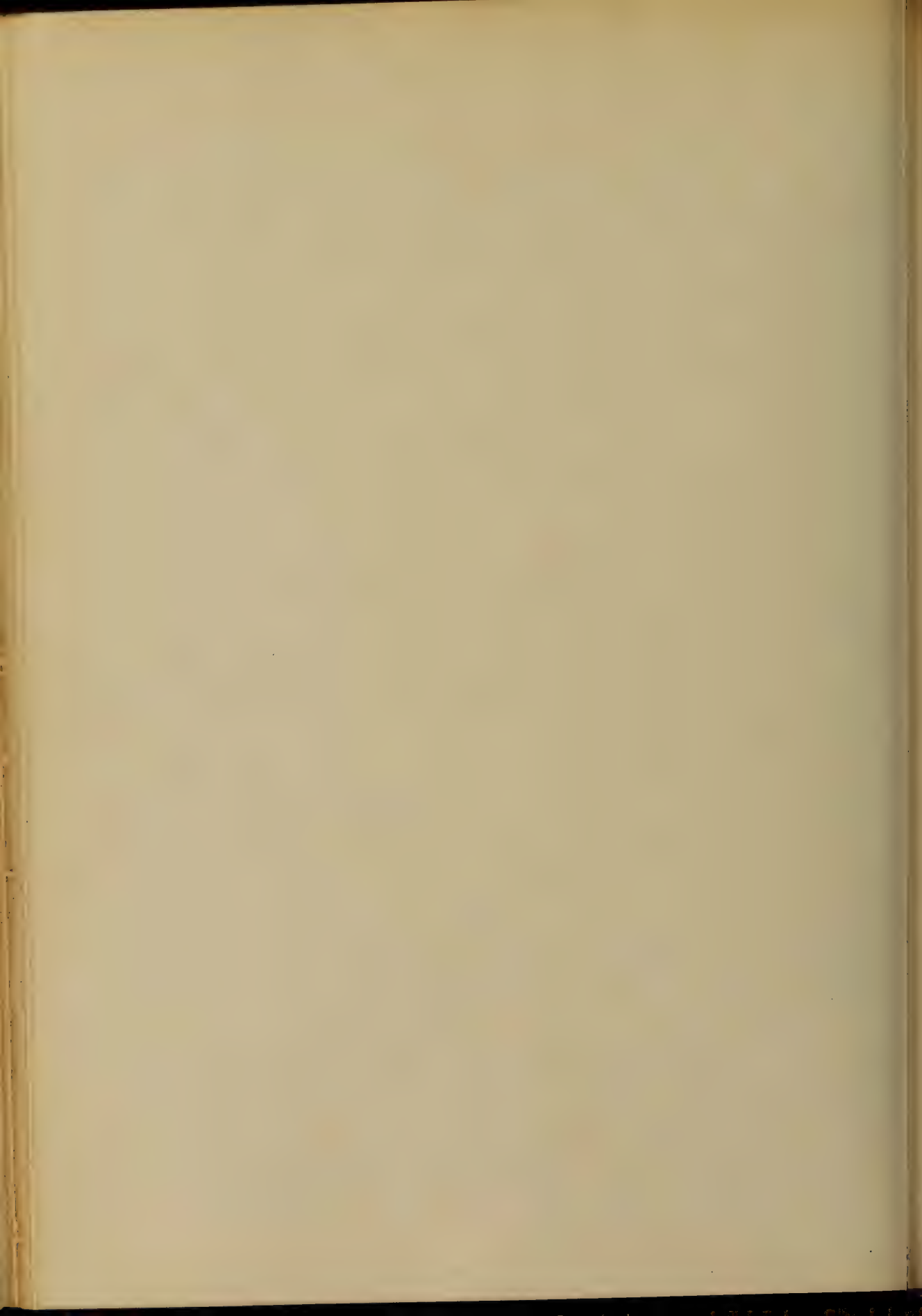
The plan now most generally adopted
in the treatment is the sublethal
treatment, the object of which is to
bring about a gradual recovery.

In the treatment of cholera
it is necessary to commence the treatment
as early as possible, & to continue it
until this disease owing to the need
of a large amount of fluid and
mineral salts the tendency to
collapse is seldom necessary, & even when
it occurs a large amount of fluid
should be given.

If the stomach be overloaded
an emetic

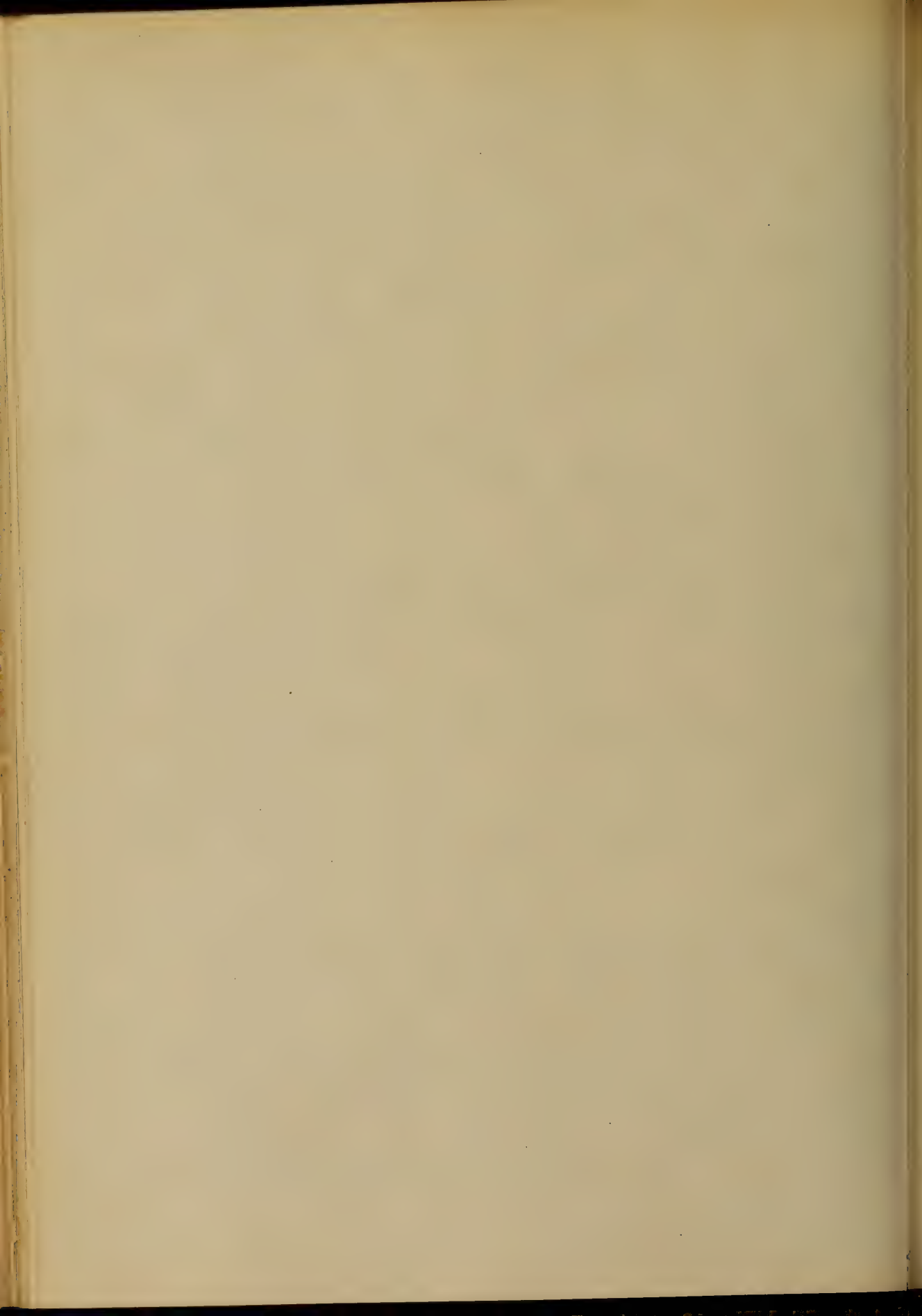






of the head, ... draw on the veins to
achieve it is ... necessary,
attention to the diet of the patient
is of great importance. The food
shall be ^{as} ~~more~~ but most nutritious &
digested articles of food, the animal
beef ...
best ...
the patient ... & milk punch
or ...

... its ...
... magnesia. Have been tried
to act with very good results,
Dr. McSherry says he has tried the
not fully enough yet. It
as a specific in this disease;
to act by stopping the fermenta-
tion ... The muriatic
acid is ...

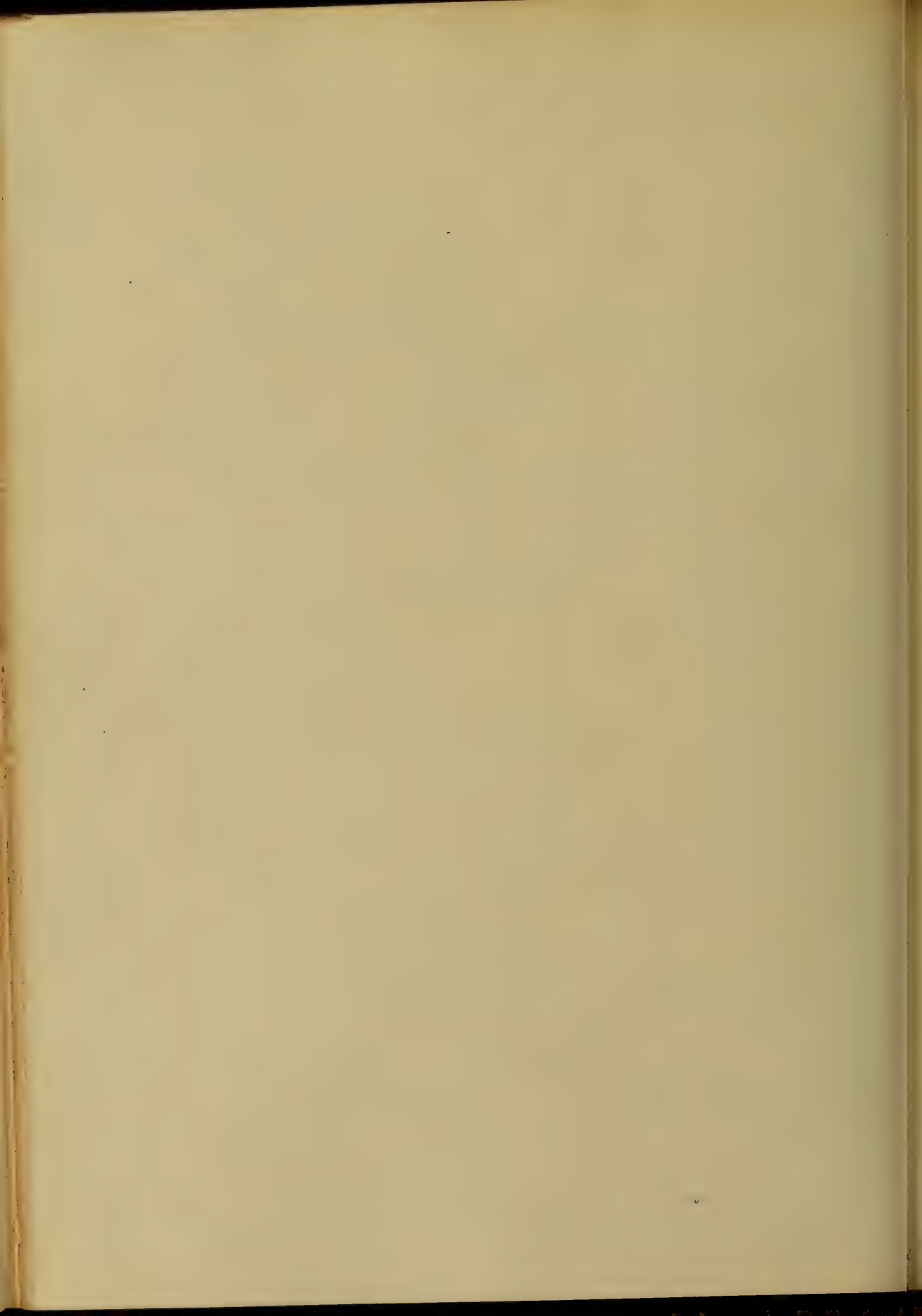


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... the river of the ...
... bed lines should ...
... as is necessary & consist ...
... condition of the ...

... the extent re-
... at ... and ...
... of the ...
... in underground and ...

... the ...
... and ...
... as a ...
... the ...
... and ...



and then the

of recognizing

the medicinal

and we cannot say

or course of treatment,

is useful in one case

or even in another

the most important indication

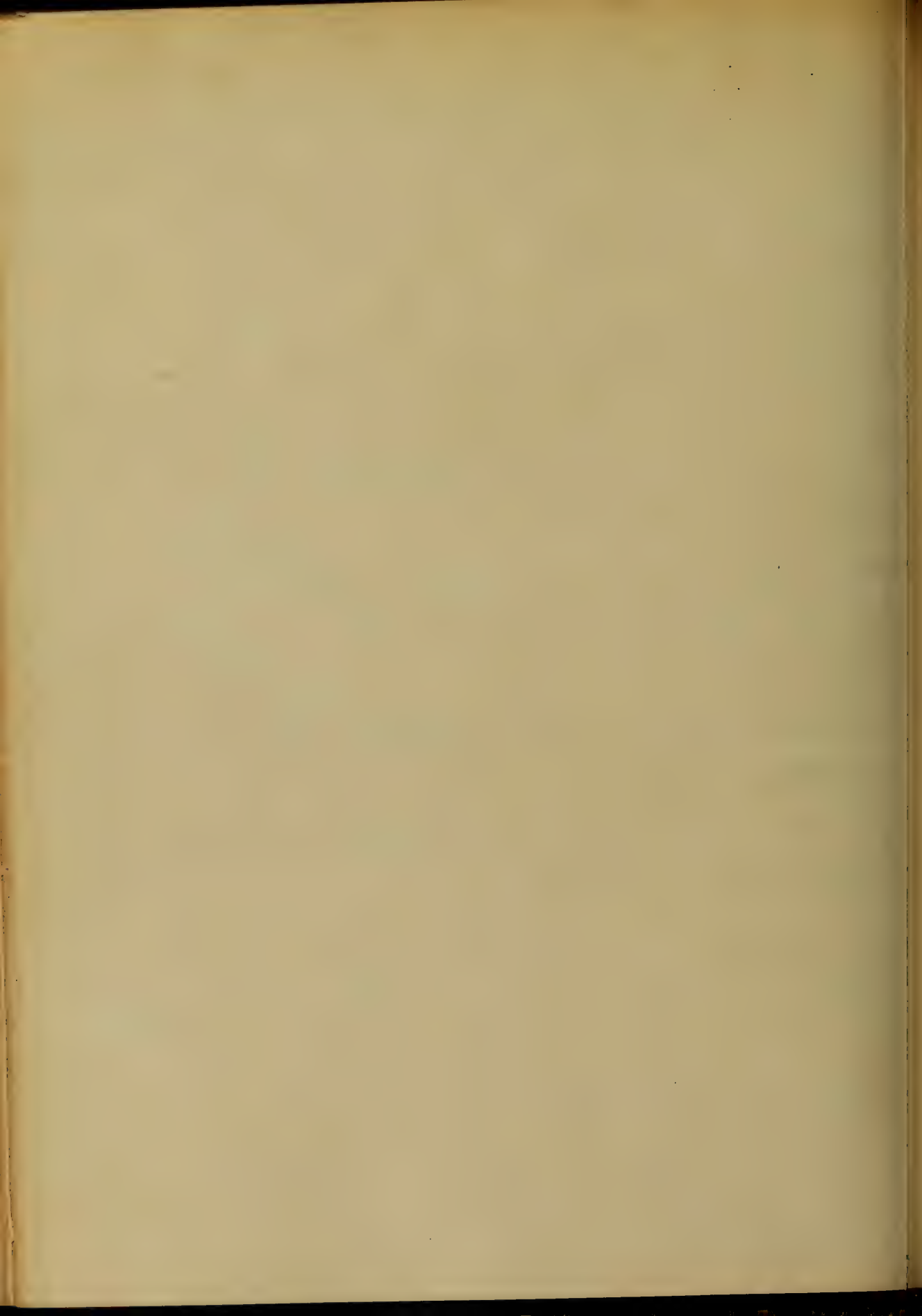
of treatment is (as has been before mentioned)

to support the strength of the patient -

and to relieve existing symptoms

and to relieve existing symptoms

at separate periods



AN
Inaugural Dissertation

ON

Septicæmia
Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

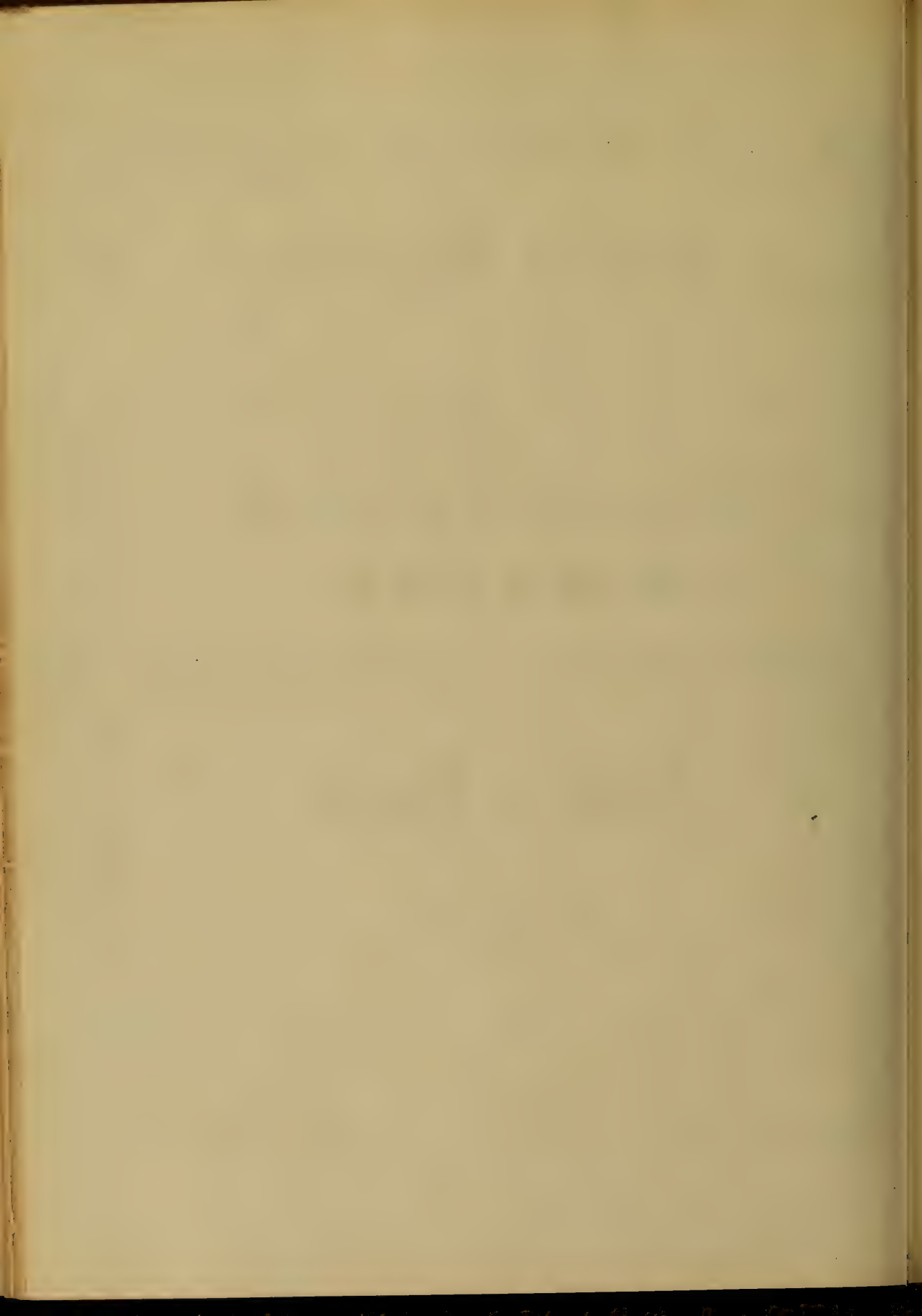
By

A. C. Wood
of

St. Mary's County, Maryland.

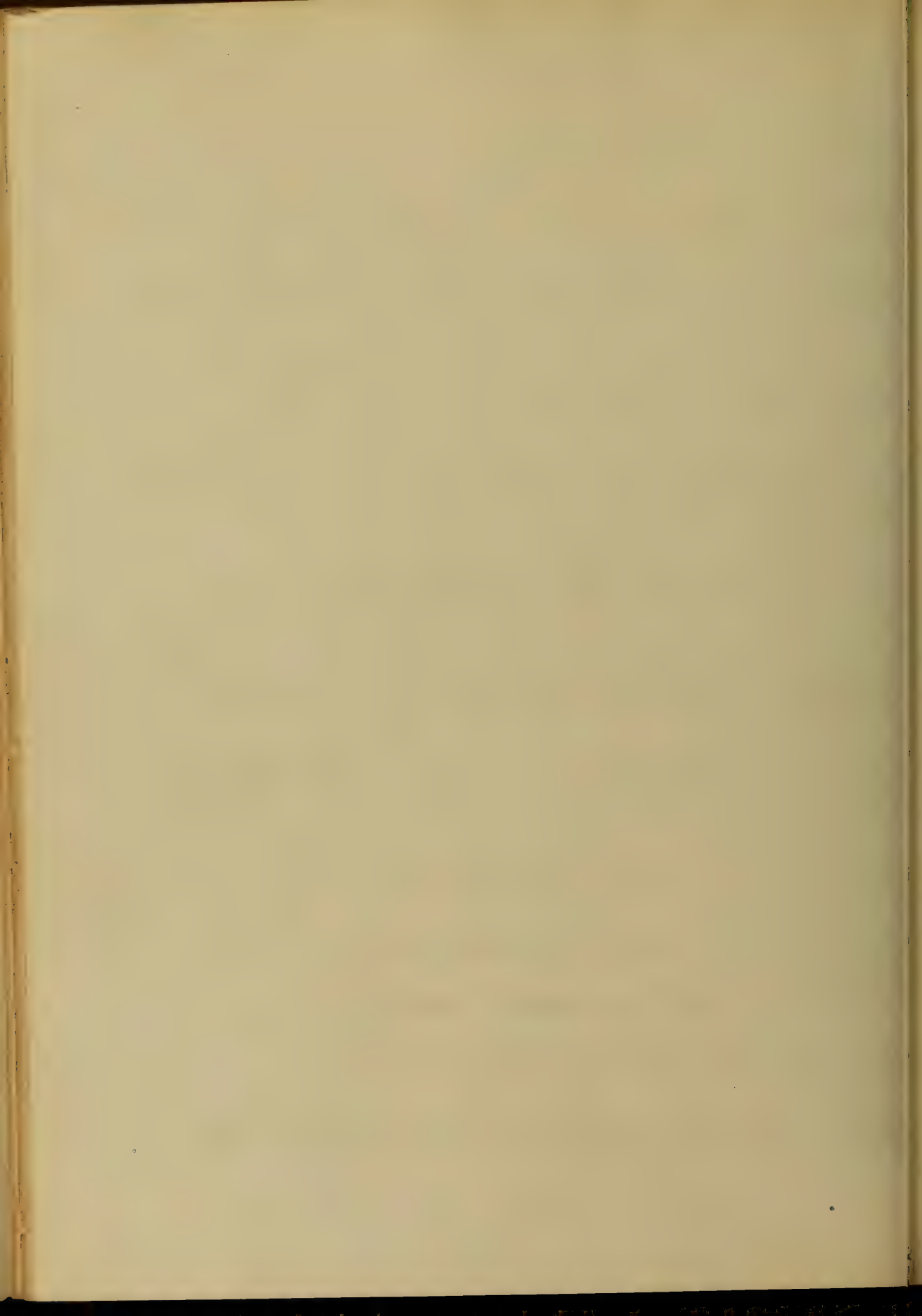
Session of

1854-5



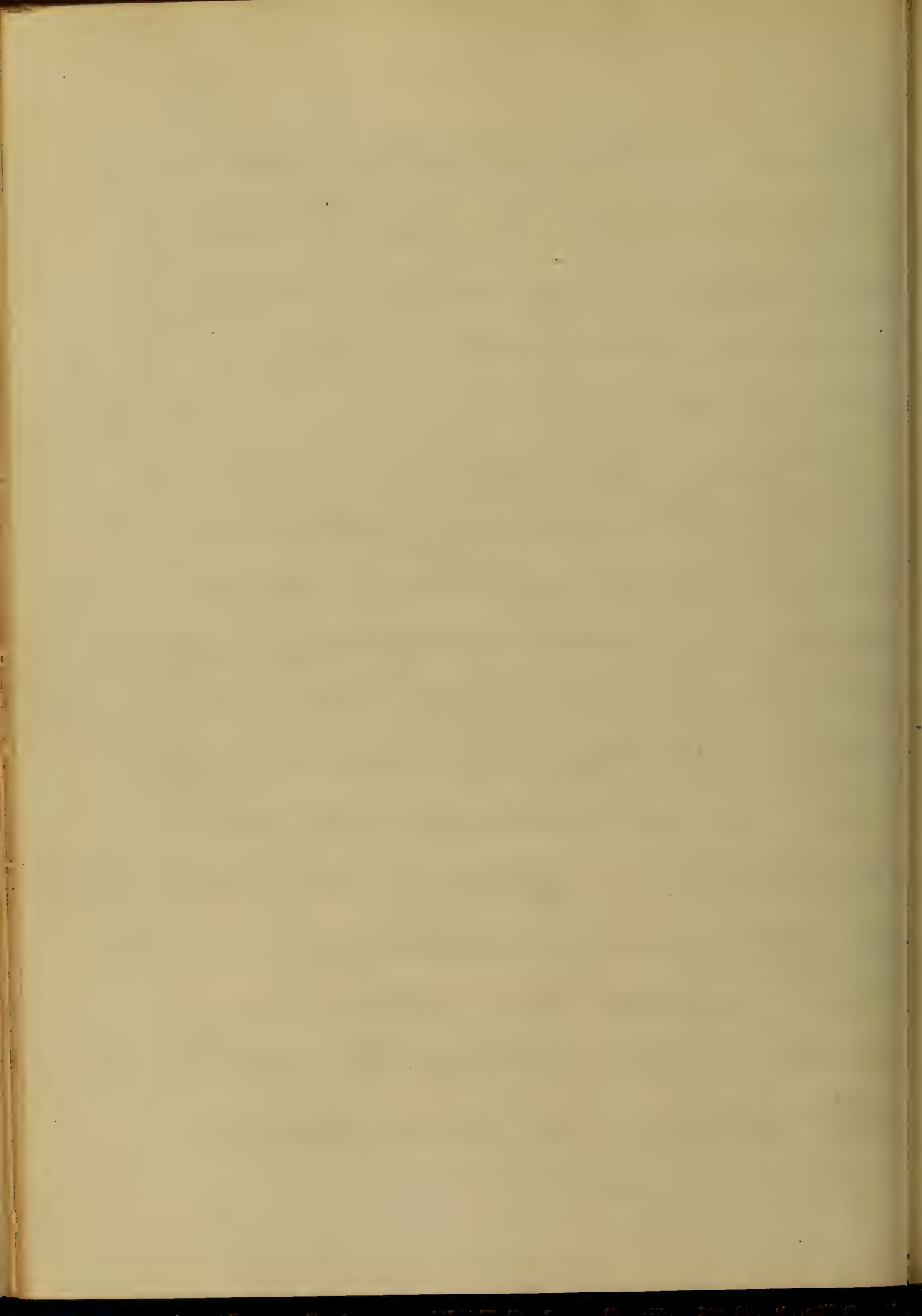
Dysentery.

This is a common inflammatory affection of the lining, or mucous membrane of the large intestine, Colon & Rectum. Characterized by griping pains in the abdomen, termed tormina, straining at stool with a small quantity of mucus more or less mingled with blood, in some cases is abundant, and which has given it the popular name of bloody flux. In some cases it is complicated with fever, and others with disease of the upper portion of the alimentary canal and it is thought that those cases which are termed Epidemic dysentery are those in which the



disease is complicated with a typhoid form of fever, or with an extensive affection of the small intestine, where there is illeitis as well as colitis

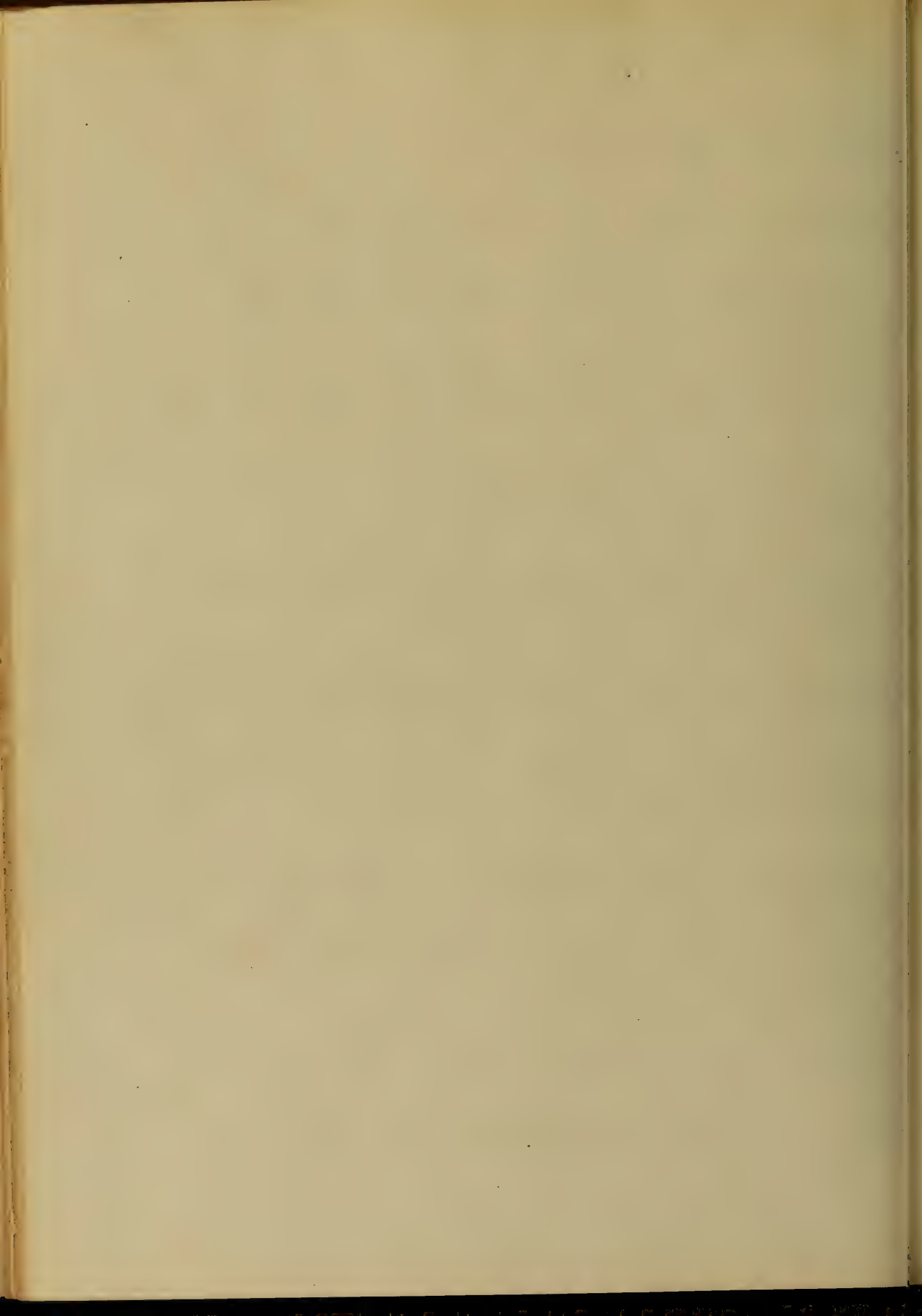
Sporadic dysentery as it occurs in practice embracing both acute and sub acute affections, and presenting symptoms which frequently of more or less gravity, compelling the patient to keep to the bed, and sometimes it is an extremely mild and almost trivial affection, but there are few diseases which offer a wider contrast than the one in question from the mildest cases of Sporadic to the gravest cases of Epidemic



developed to such an extent that the tenesmus becomes the most distressing and the most diagnostic symptom of the disease. The pains are irregular in position and accompanied with a constant desire to pass anything more than a small amount of feces, which serves to alleviate but for a moment. Sometimes the tenesmus appears as if concentrated upon the rectum, with a sensation as

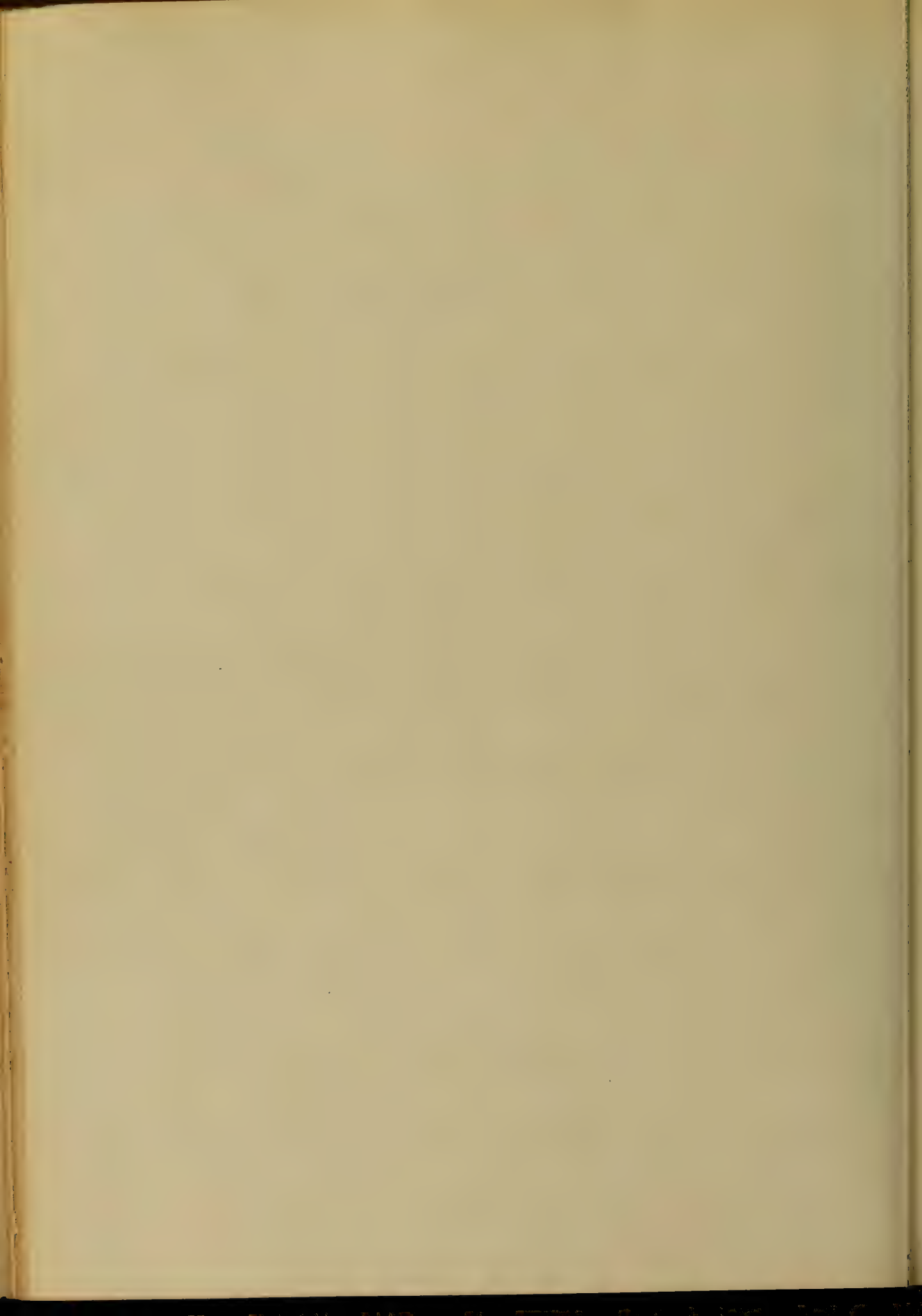


and leads to the frequent
repeated evacuations
as the soreness will allow
easily to evacuate anything
that is put into the rectum
and the stools become almost
almost incessant passages
very often thirty, sixty
or more commonly they are num-
bered ten to fourteen in twenty-four
hours of the same characteristic
distressing conditions occur
and often in the advanced
stages of the disease there is



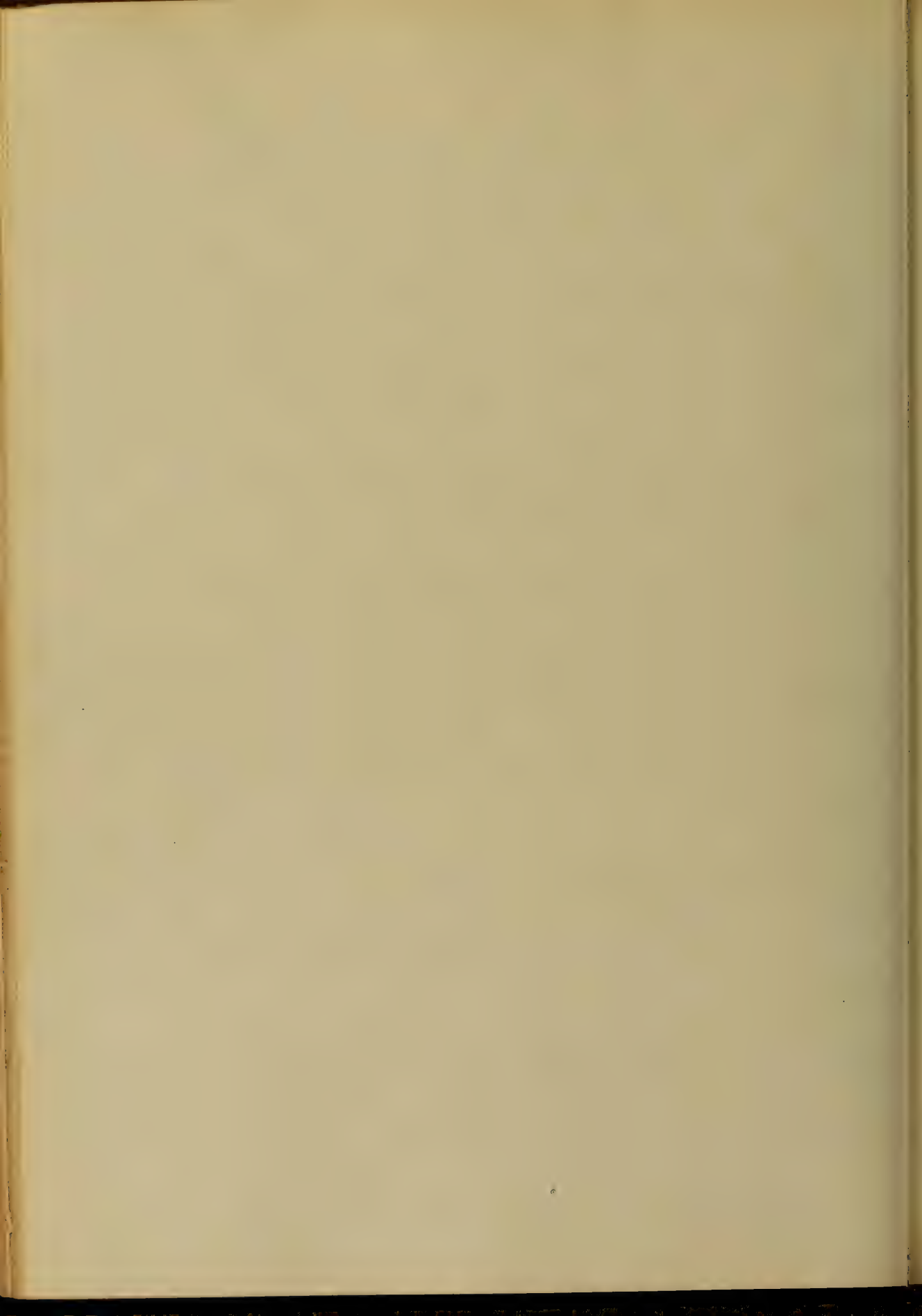
case

specialized in some instances
cases of local matter
discharge are discharged
to alleviate remarkably all
and gives great relief
during the continual irritation and
staying at work which must
lead to very unpleasant consequences
if allowed to persist. Such
discharges of the nature
of hysteria (proscidentia &c
occasionally in some cases
lead to the vital
& the nervous
system of the body.



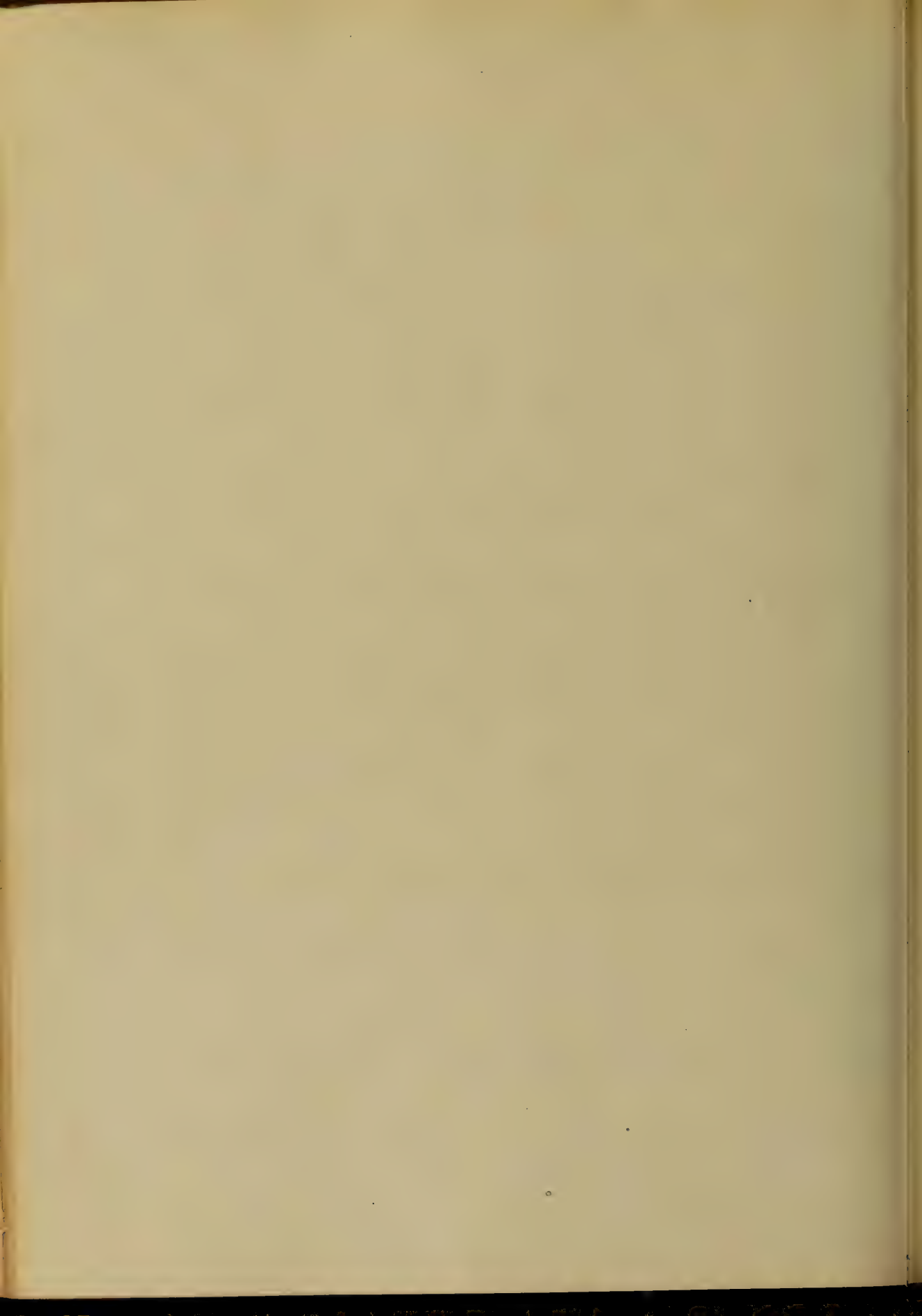
is a pale cool and
thin skin
and a purplish appearance
about the skin about the lips and under
and about the roots of the nails, and
all the symptoms are
in such cases the
is generally fatal

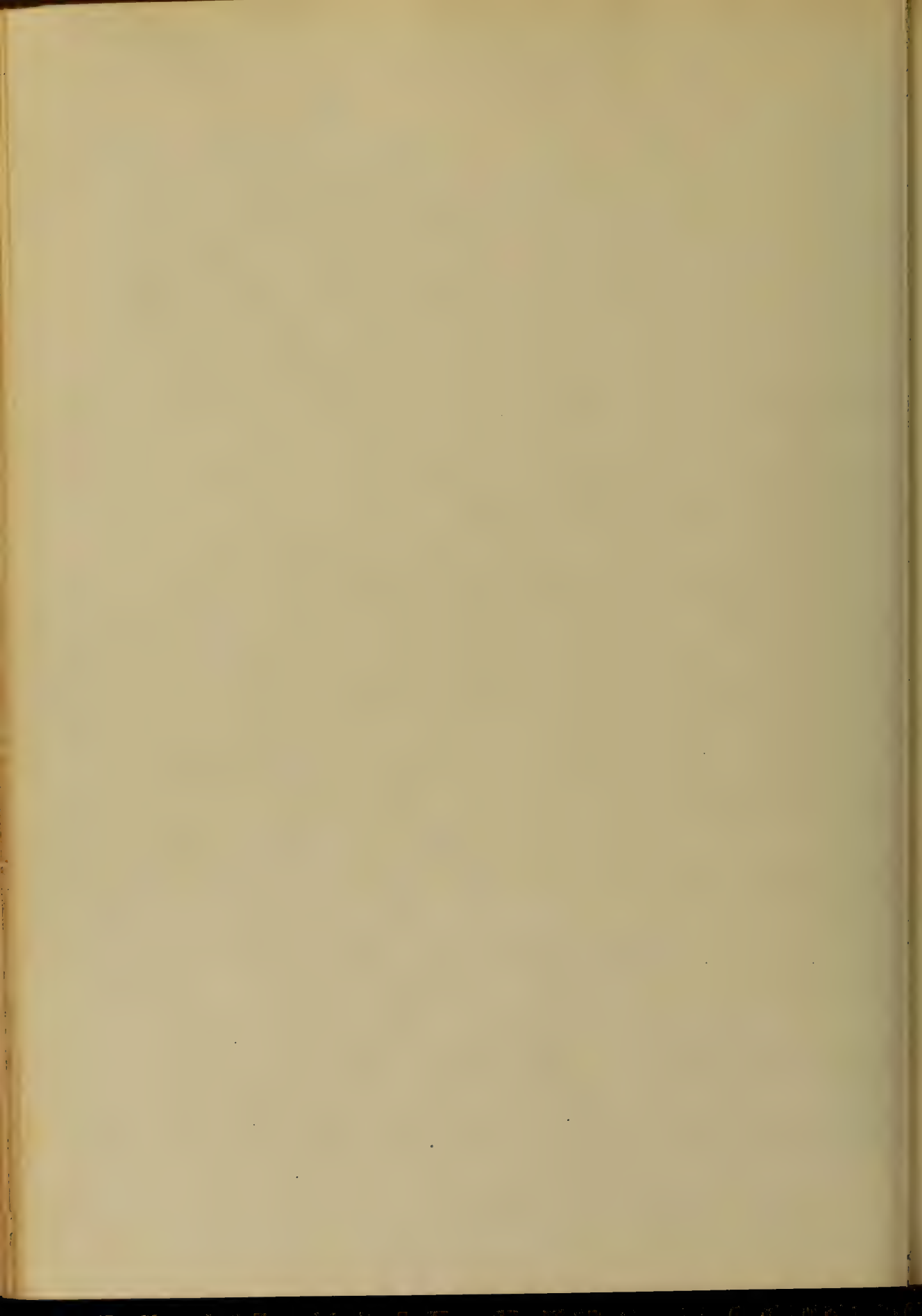
The duration of the disease
is difficult to assign it
varies in twenty-four
hours

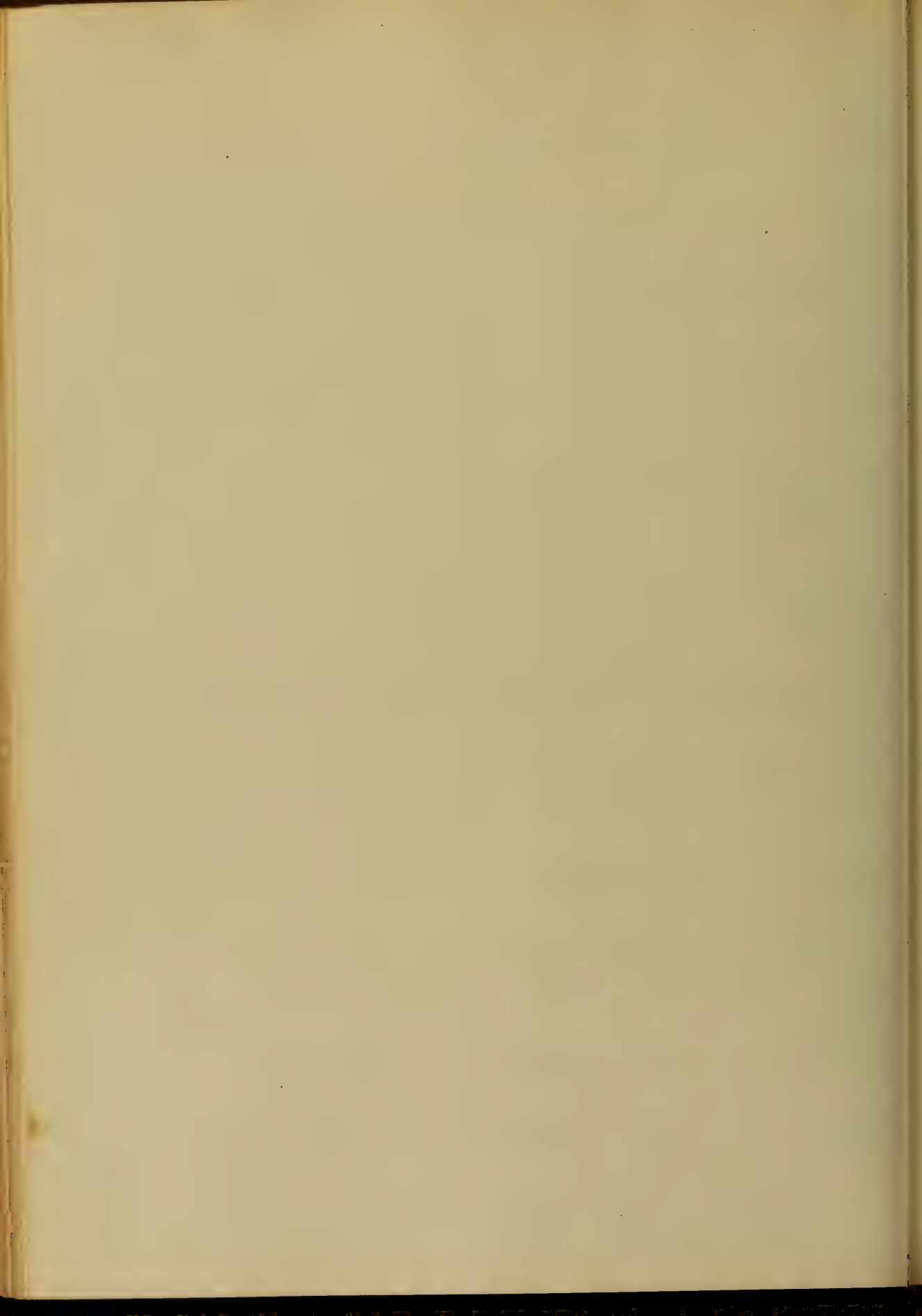


The Duration of

the disease from the date of
attack to Convalescence
usually 40 days Dysentery
frequently and in war
situations is attended with
congestion of the liver
which is one of
the most fatal complications





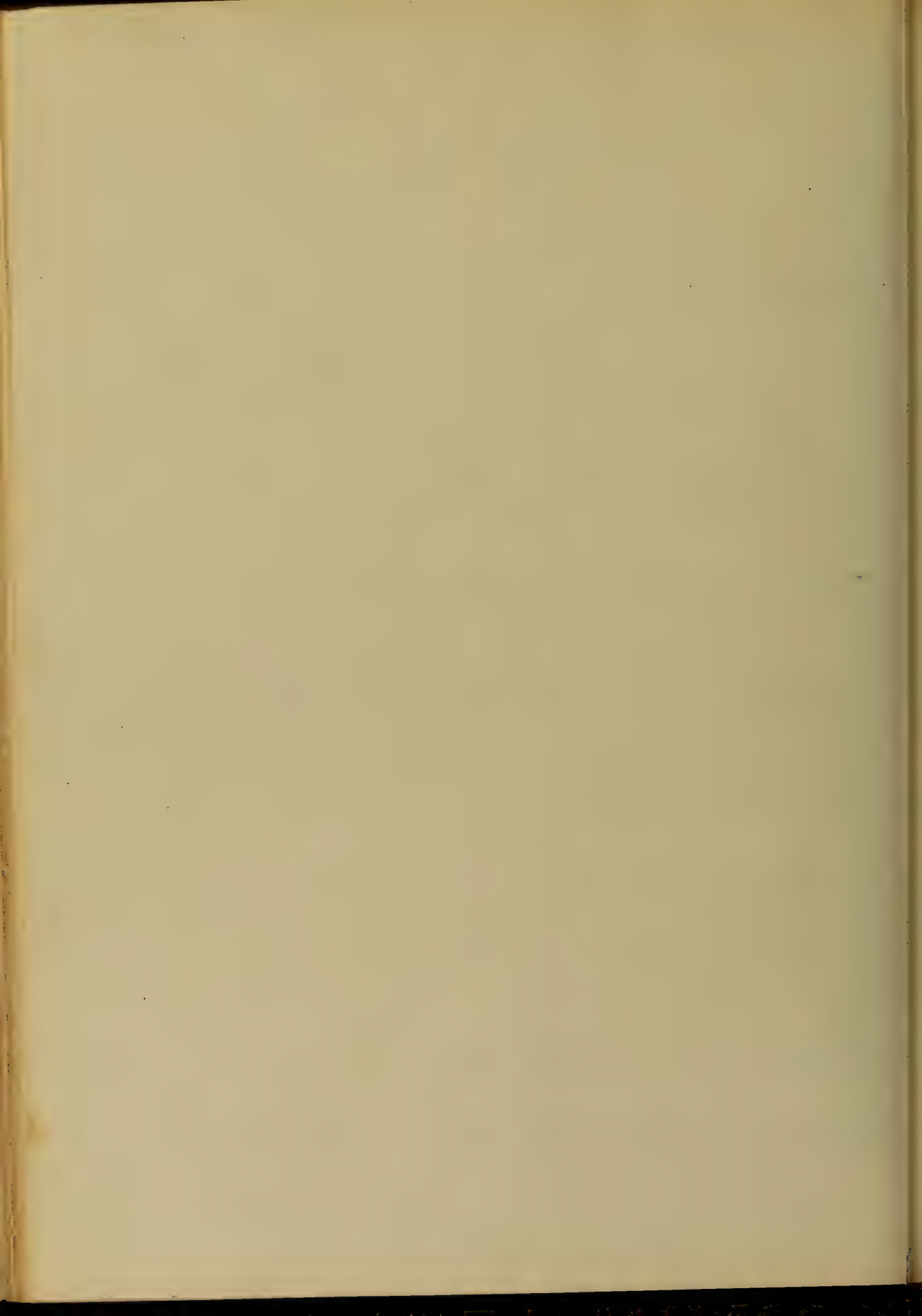


all part

~~of the~~

The Causes of Dysentery
The most common is known the Chief
Causes of Acute Dysentery are
indigestible and acid
in Indigestible and acid

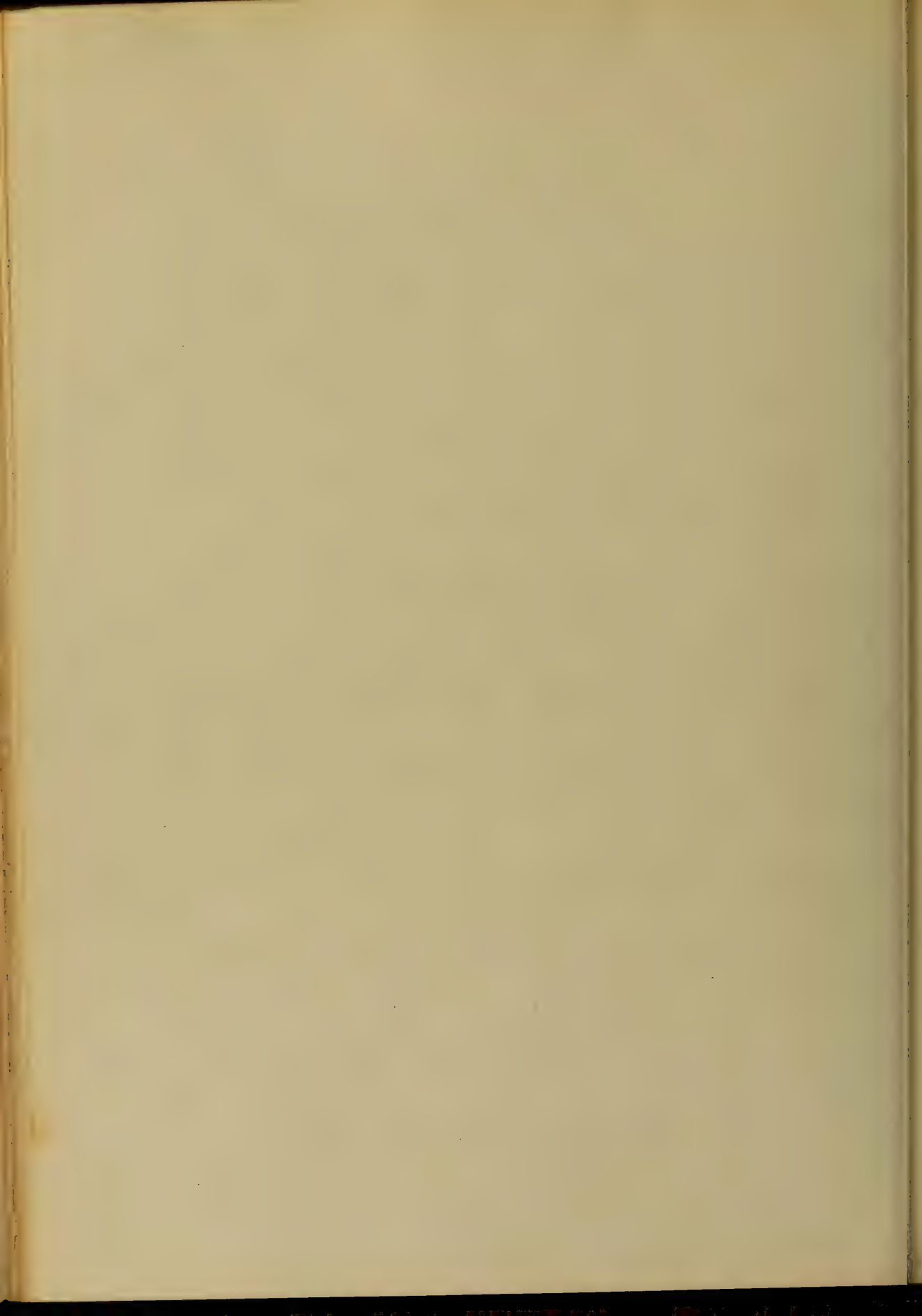
Food Effluvia in unwholesome
atmospheres, Spiritus liquor
and other things sometimes pro-
duce the disease and if not
the sole Cause of the sporadic
form will by much the
most frequent and increase the
excitability of the mucous mem-
brane of the large Canal



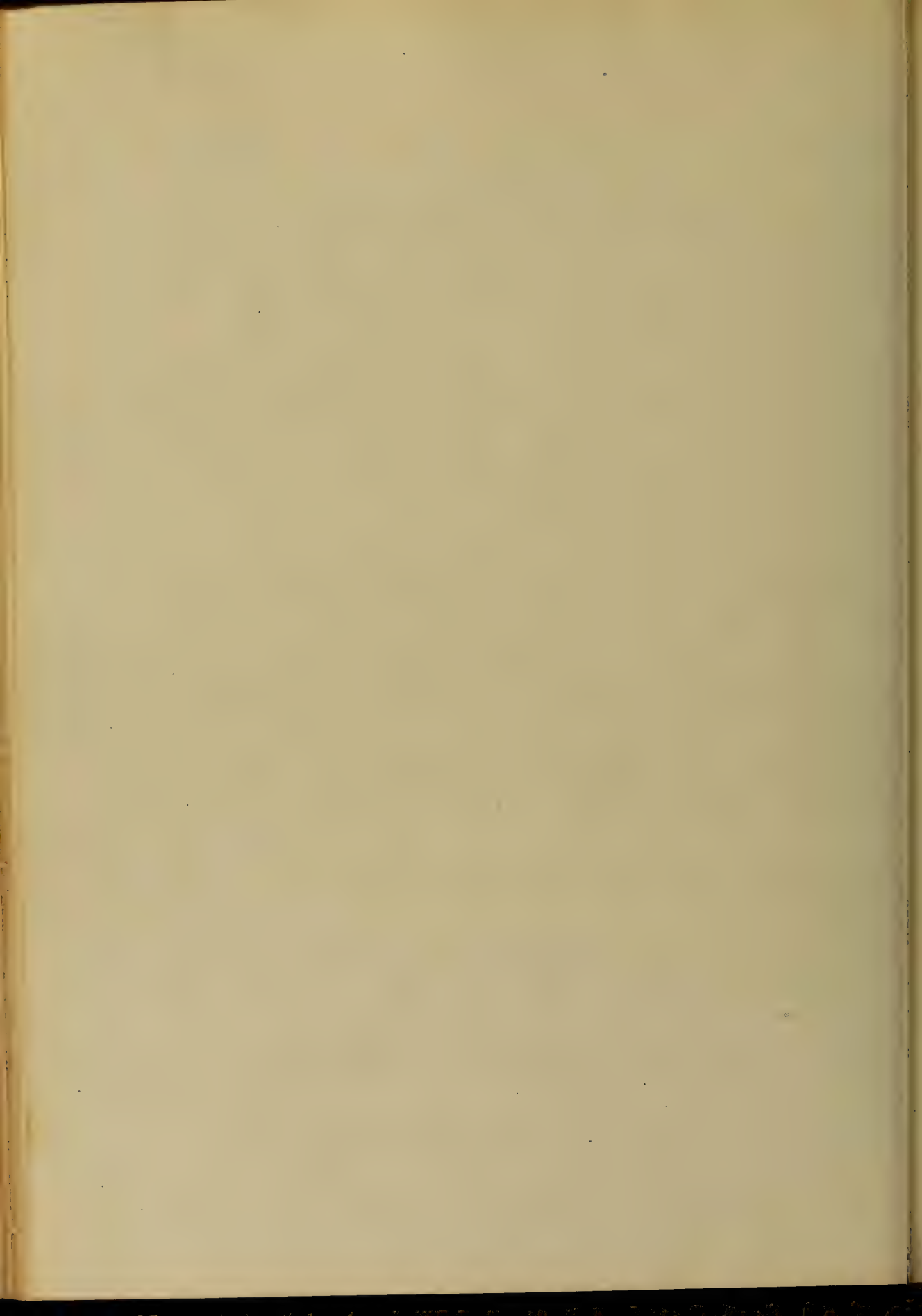
Russia

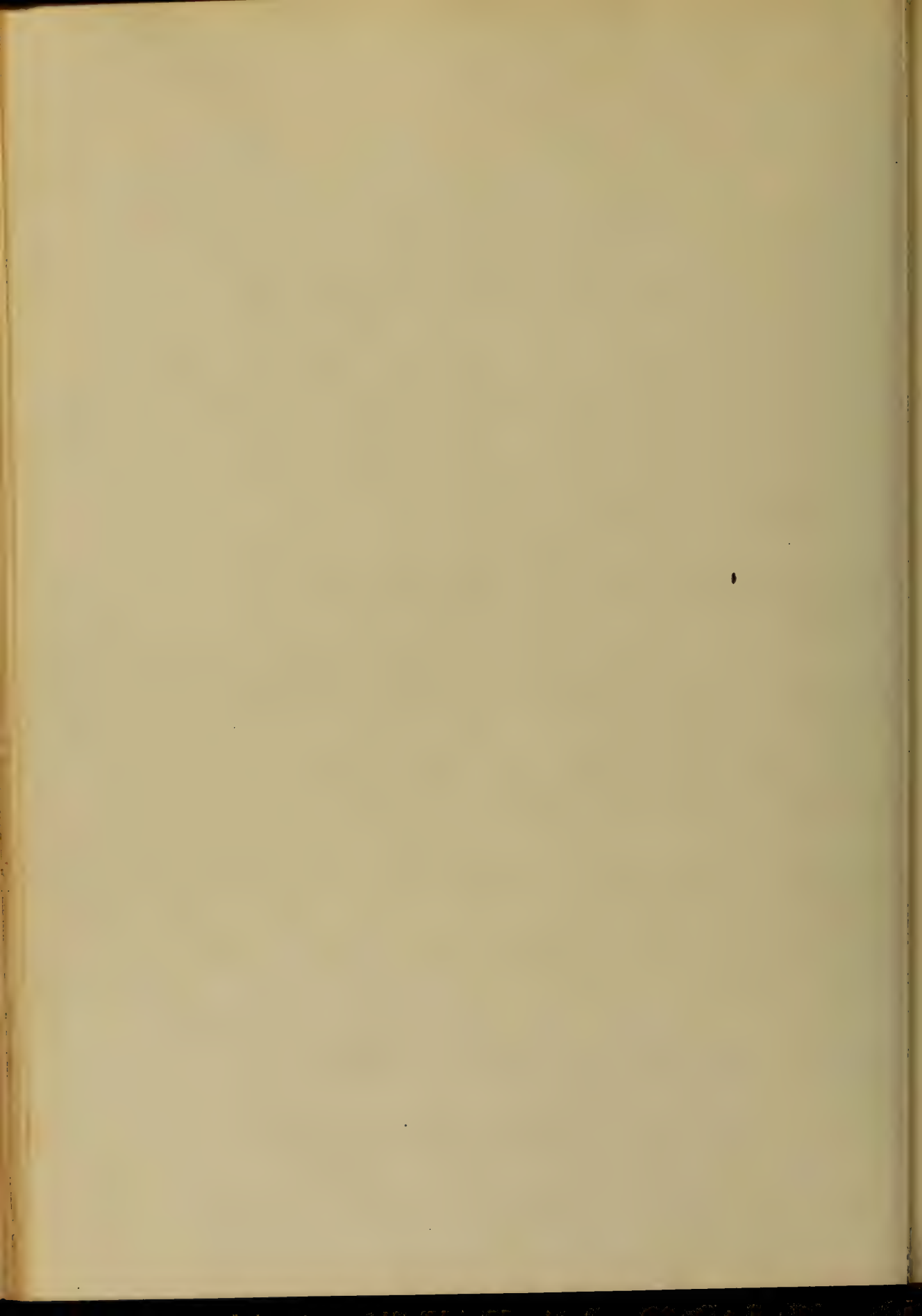
The skin of the
...
...
... the French Army,
... portion who were victims
... the night of the
... and consequently
...
... another part
... distance not thus
... escaped the disease

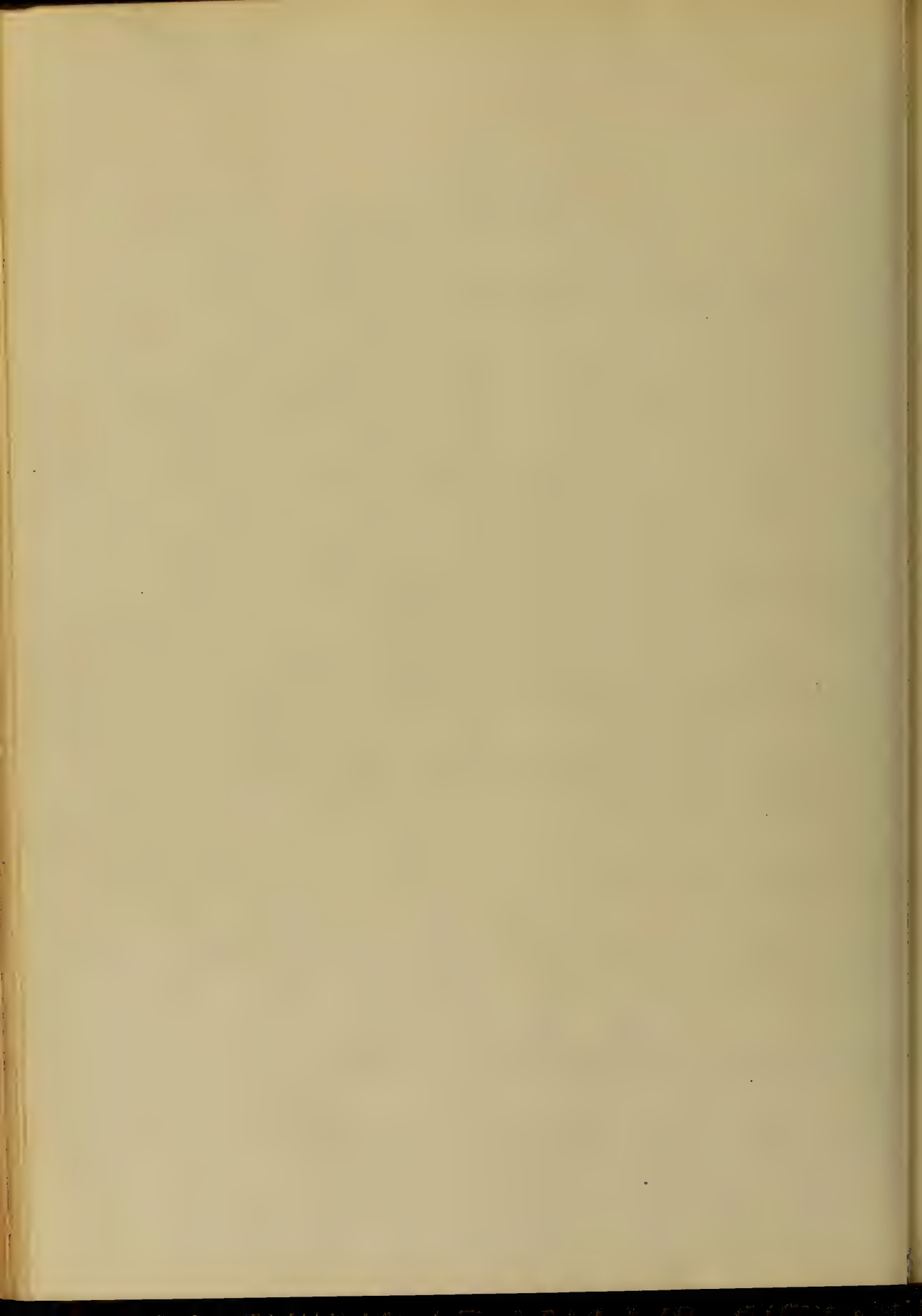
Dysentery frequently occurs
epidemicall, prevailing in
...
... of Country Miasmatic



... Cases our prognosis ...
...
to the persistence and ...
of the fever, as when it is ...
a remittent character ...
occurs in low damp ...
poorly ventilated appa ...
ment Camps. This is ...
... and in such the ...
... may be said to be ...
contagious as the disease ...
may be transmitted to ...
others who may be exposed ...
to the directly ...
... which is capable of producing ...
... of ...



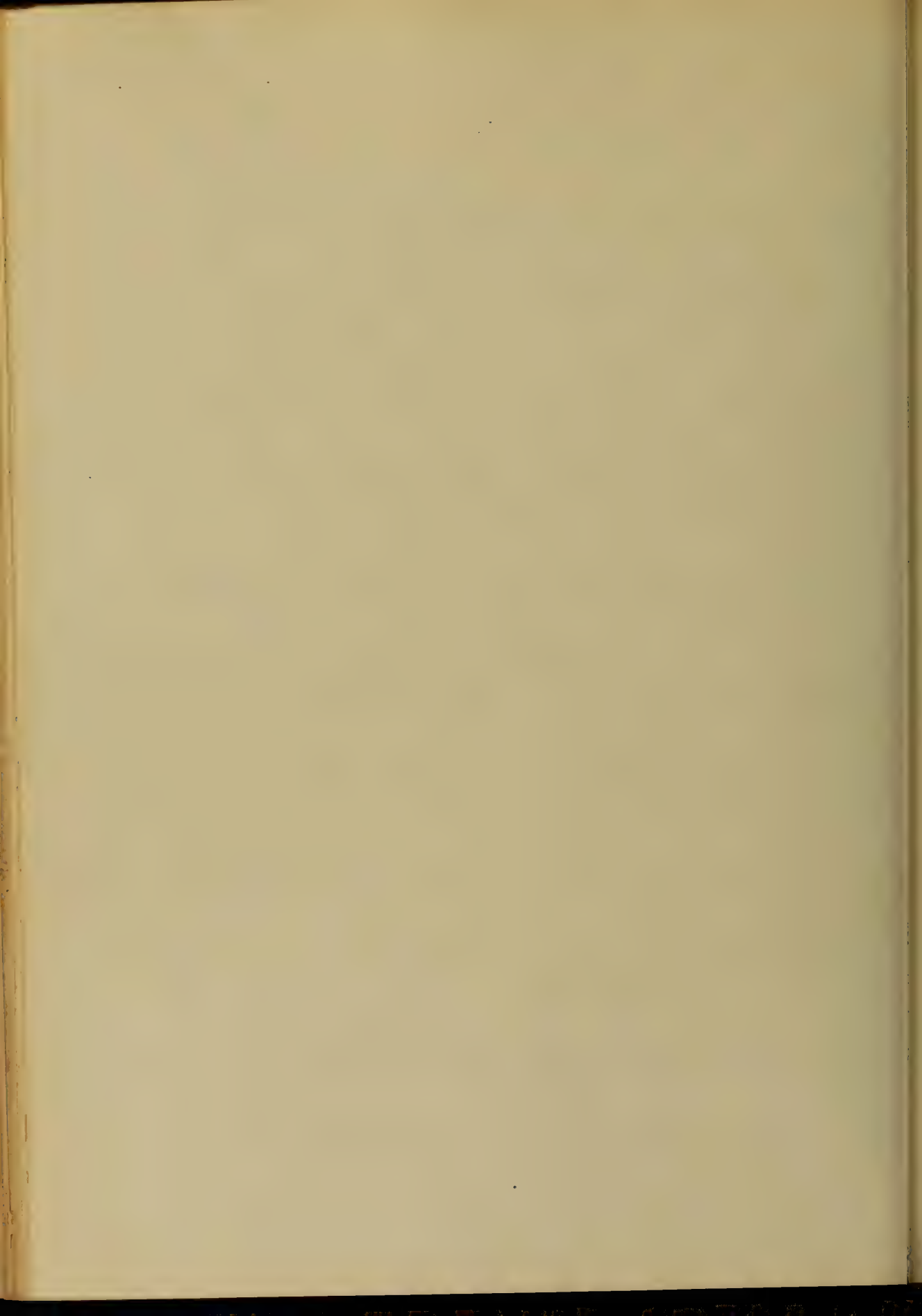


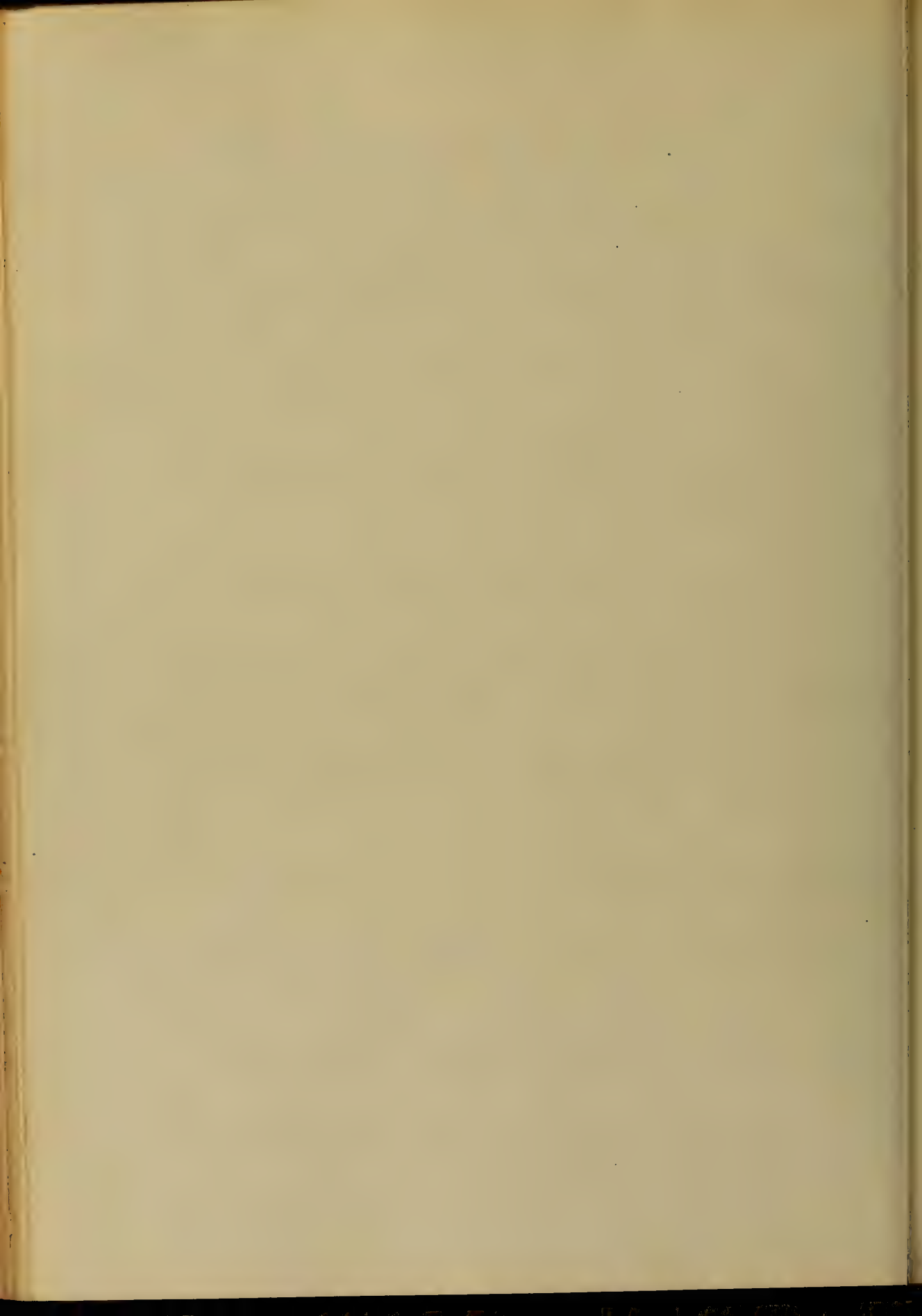


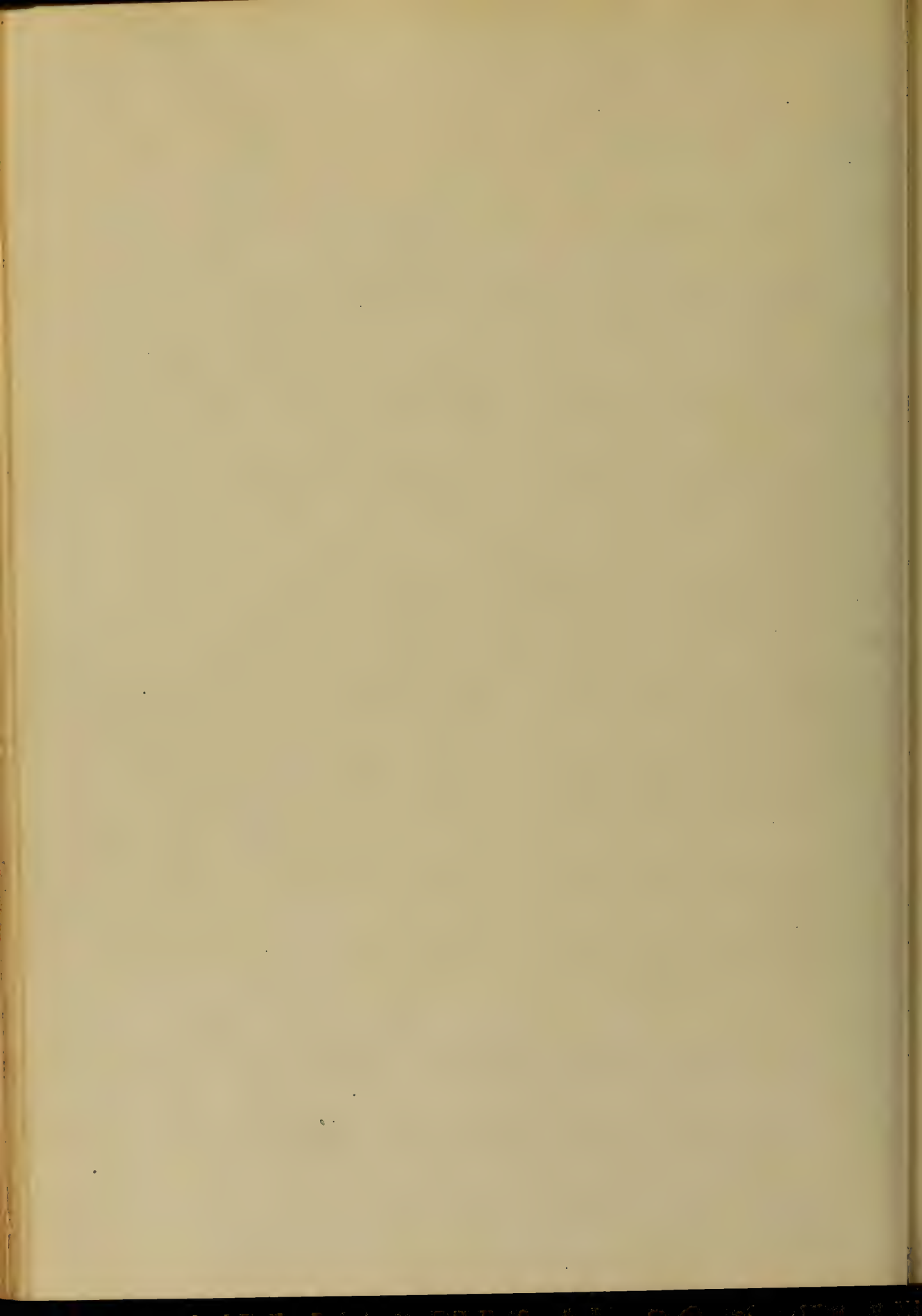
Diagnosis

1. *Suppuration*,
 in which careful diagnostic facts
 have ascertained that the preceding
 was not attended with any
 usual gastric or enteric irritation
 and when symptoms are exchanged
 in those of a dysenteric character
 it is more likely to be an extension
 of irritation of the mucous membrane
 of the stomach and small intestine
 than of malarial origin

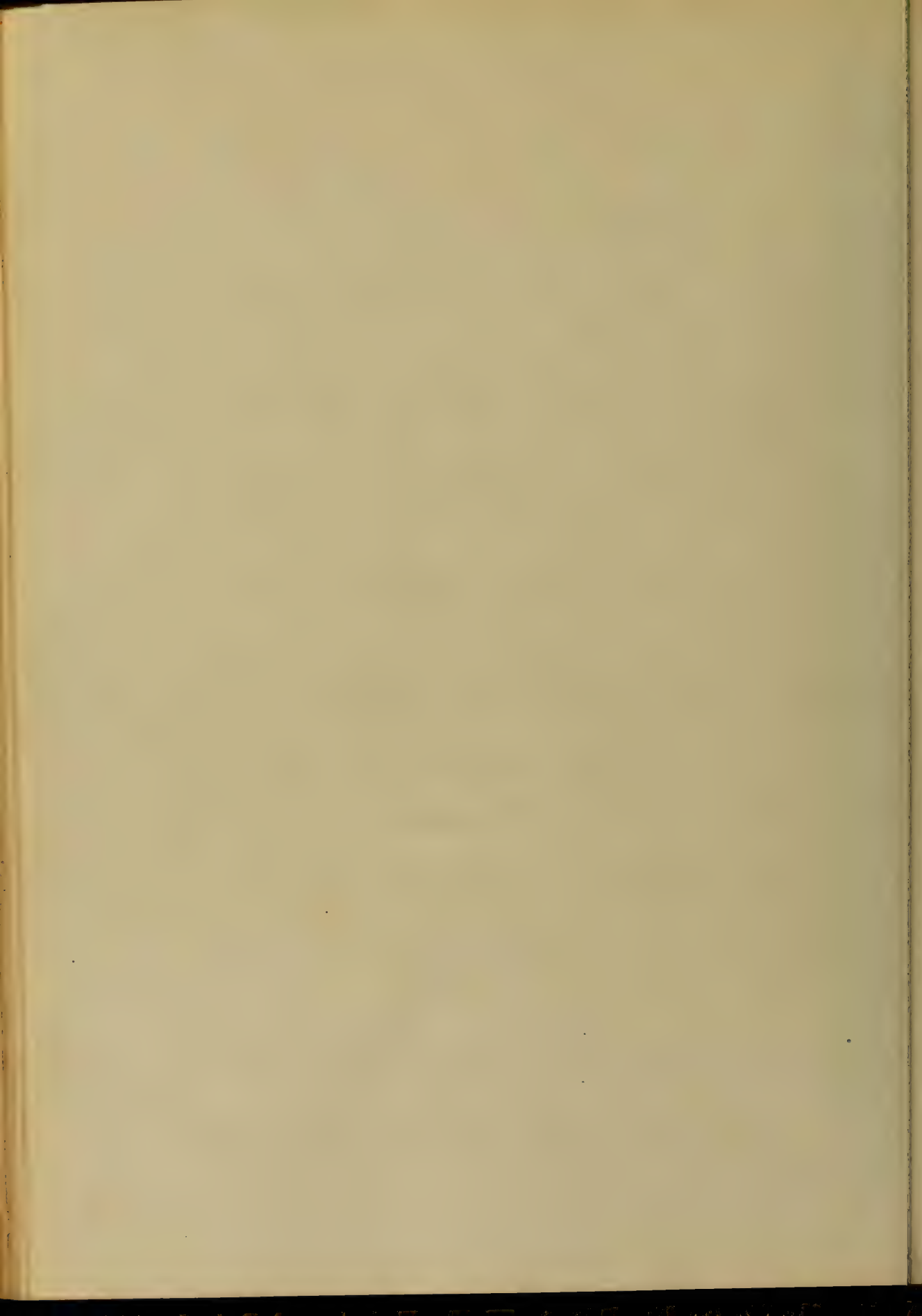
I have said difficult to assign
 must vary with the intensity of the



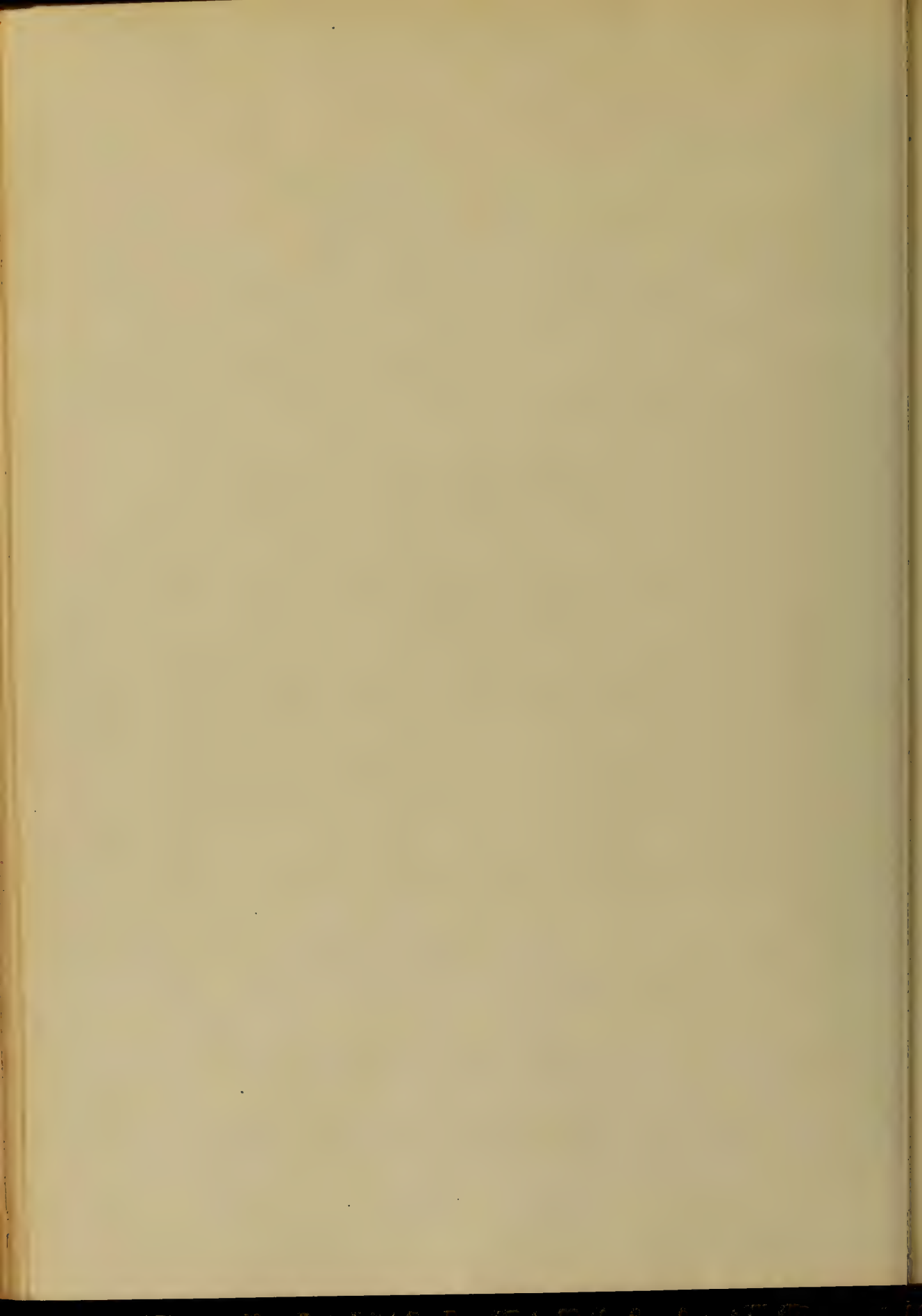


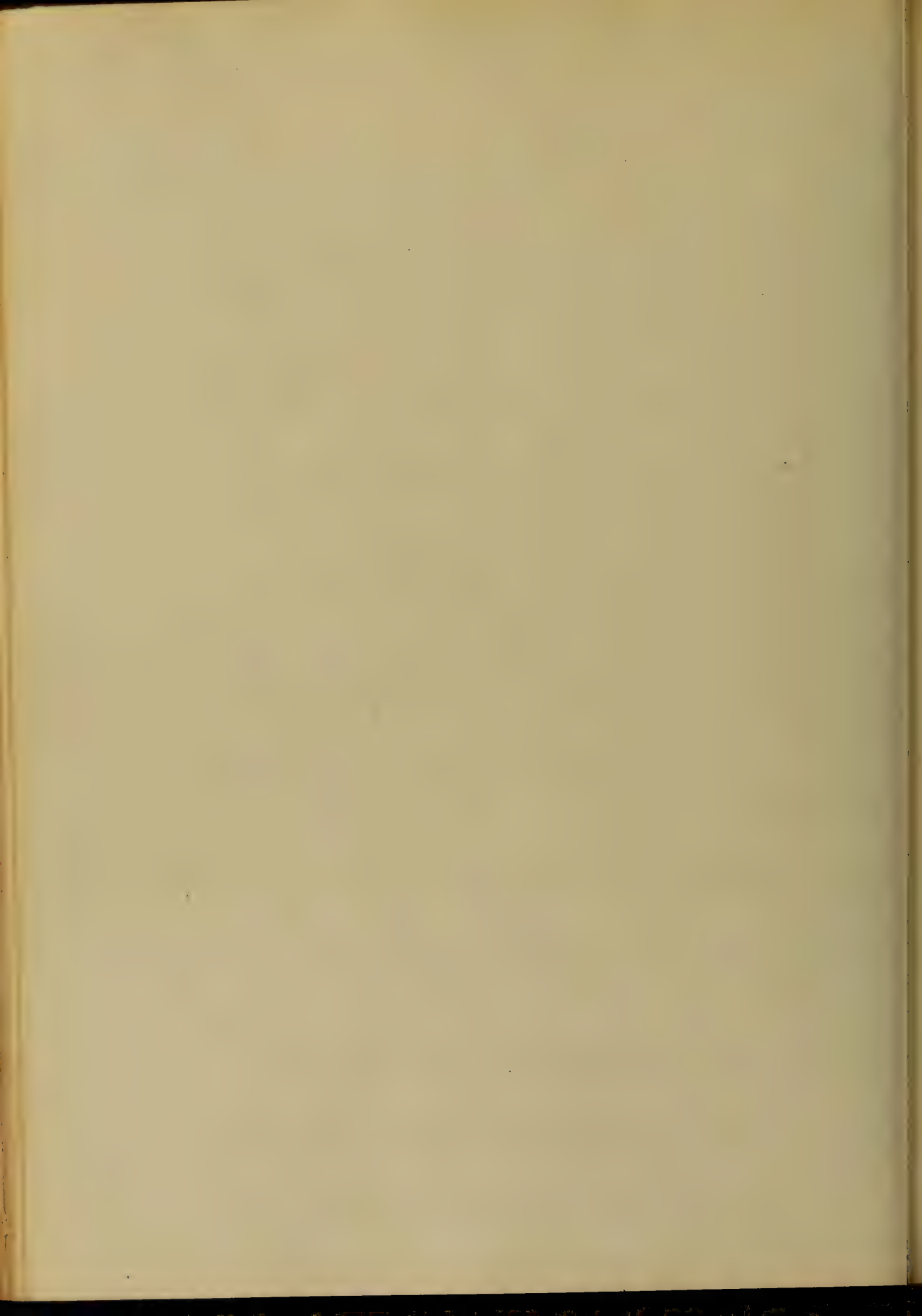


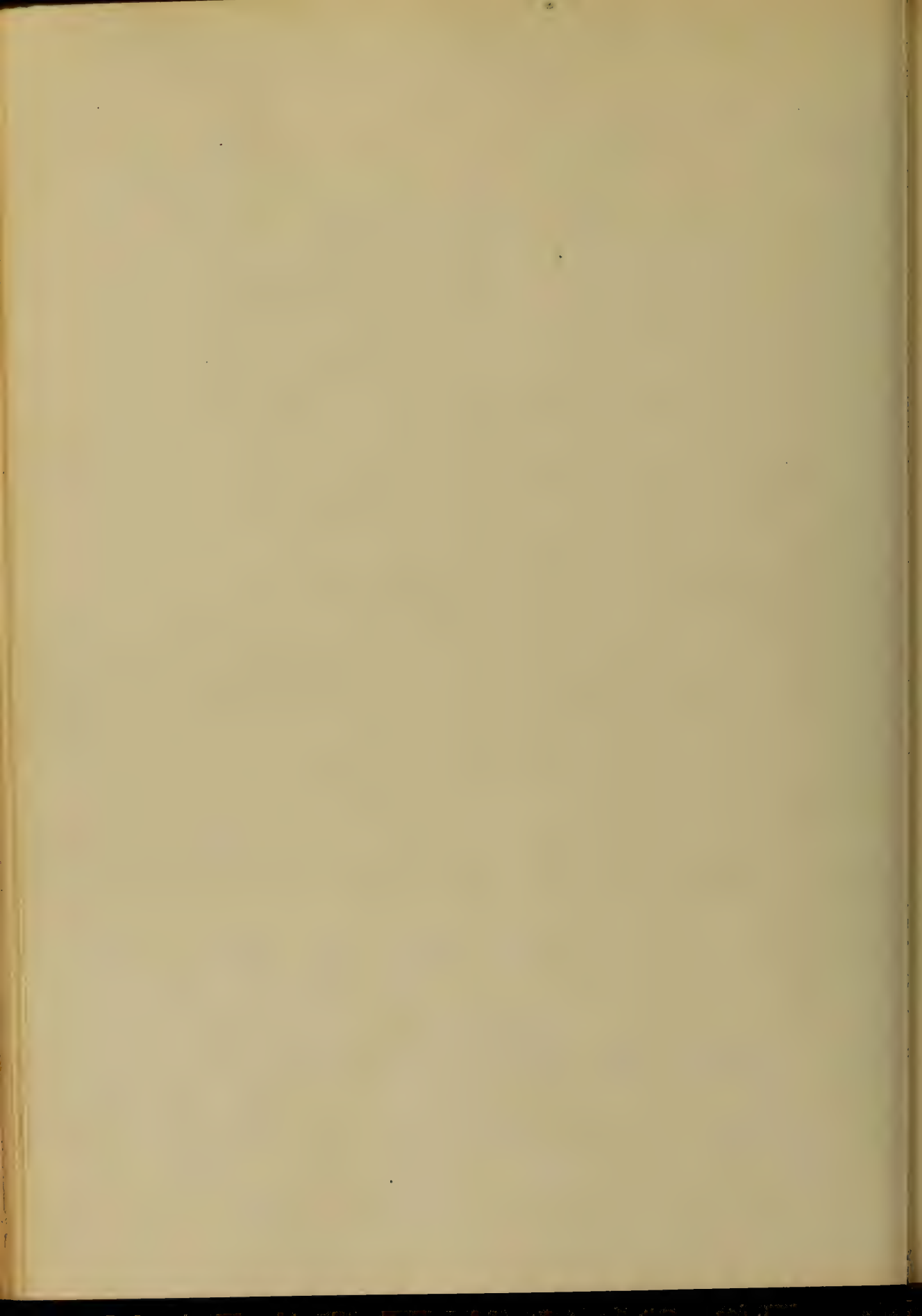
of the disease, is said to come
from the evacuations contain
ing matter which is now termed
the Chronic form and the Evac-
uations either constantly or
less frequently contain morbid
products denoting inflammation
Ulceration, such as mucous
clots of Lymph, Pus, Blood &c
In these cases the disease is
more and then, the disease is
more or less mingled with
inflammation of the
and may last for a long time
months, and if not relieved
the disease is generally a necessary
fatal



re desire to unload so early
as possible the fecal contents
of the bowels and free them
from irritating secretions and
accumulations, and thereby
the continual irritation caused
broken passages over the
irritated surface and so pro-
duce this effect - Cathartics
being among the most
of remedies but should be
used with discretion
as excessive force may be
irritating the inflamed mem-

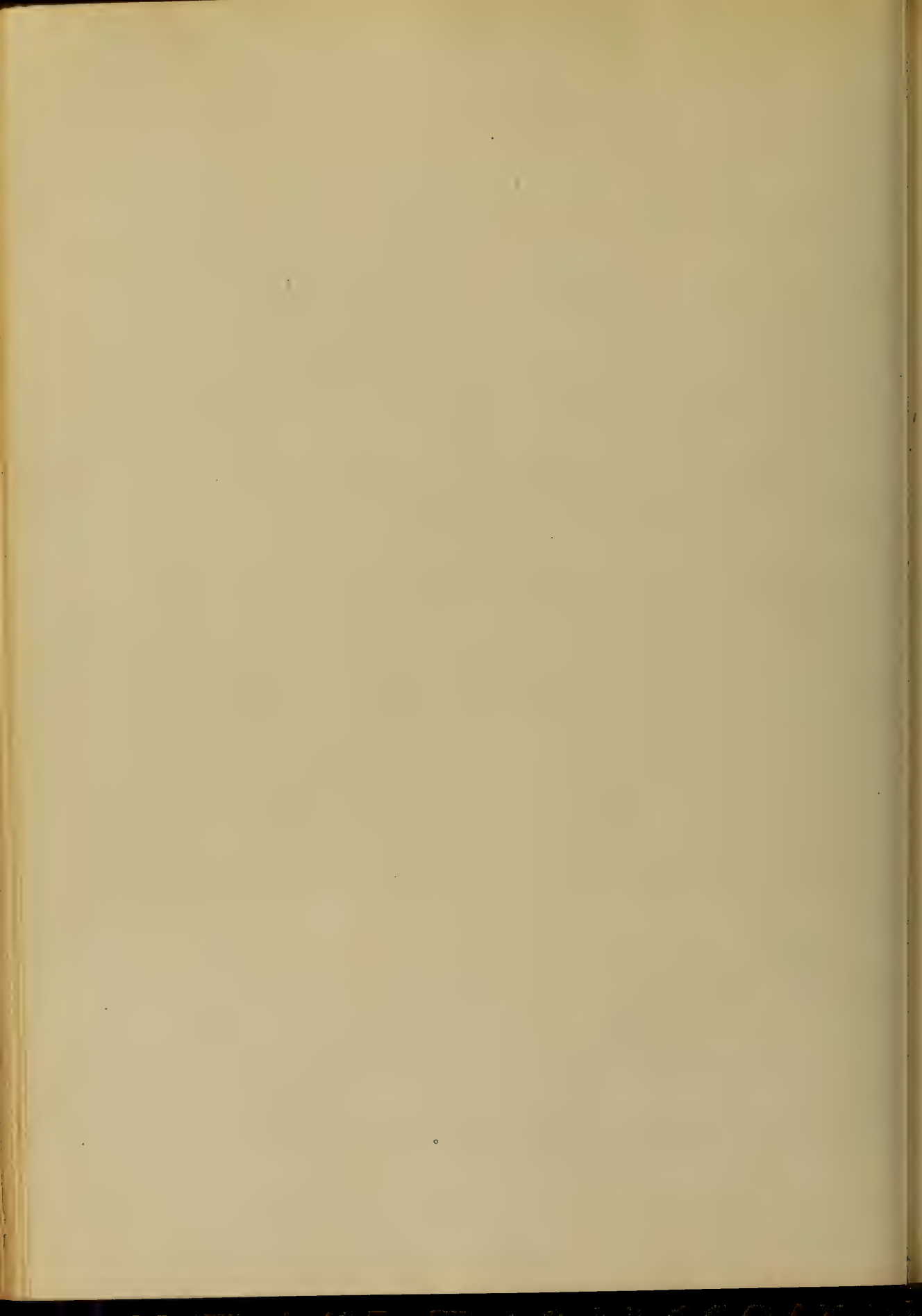






187
The ...
...
... bloody character
... when the disease is
... and assumes a bilious
... character show the bitterness of the
... and a foul tongue ...
... can be compared with
... in large doses as
... in combination with laudanum
... it is asserted if kept quiet
...
...
... effect.

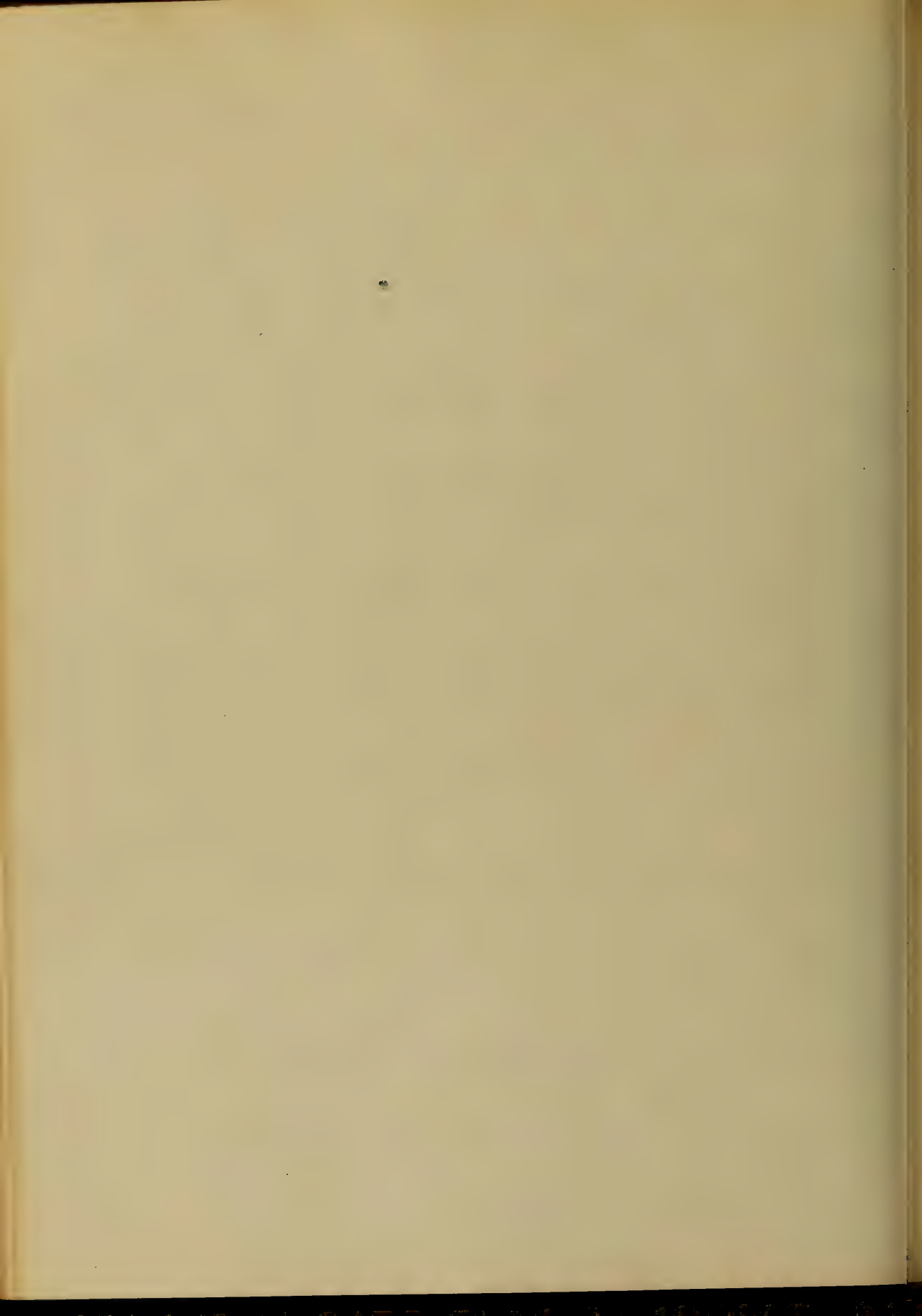
...
...
...
... the disease, Nitrate of Silver

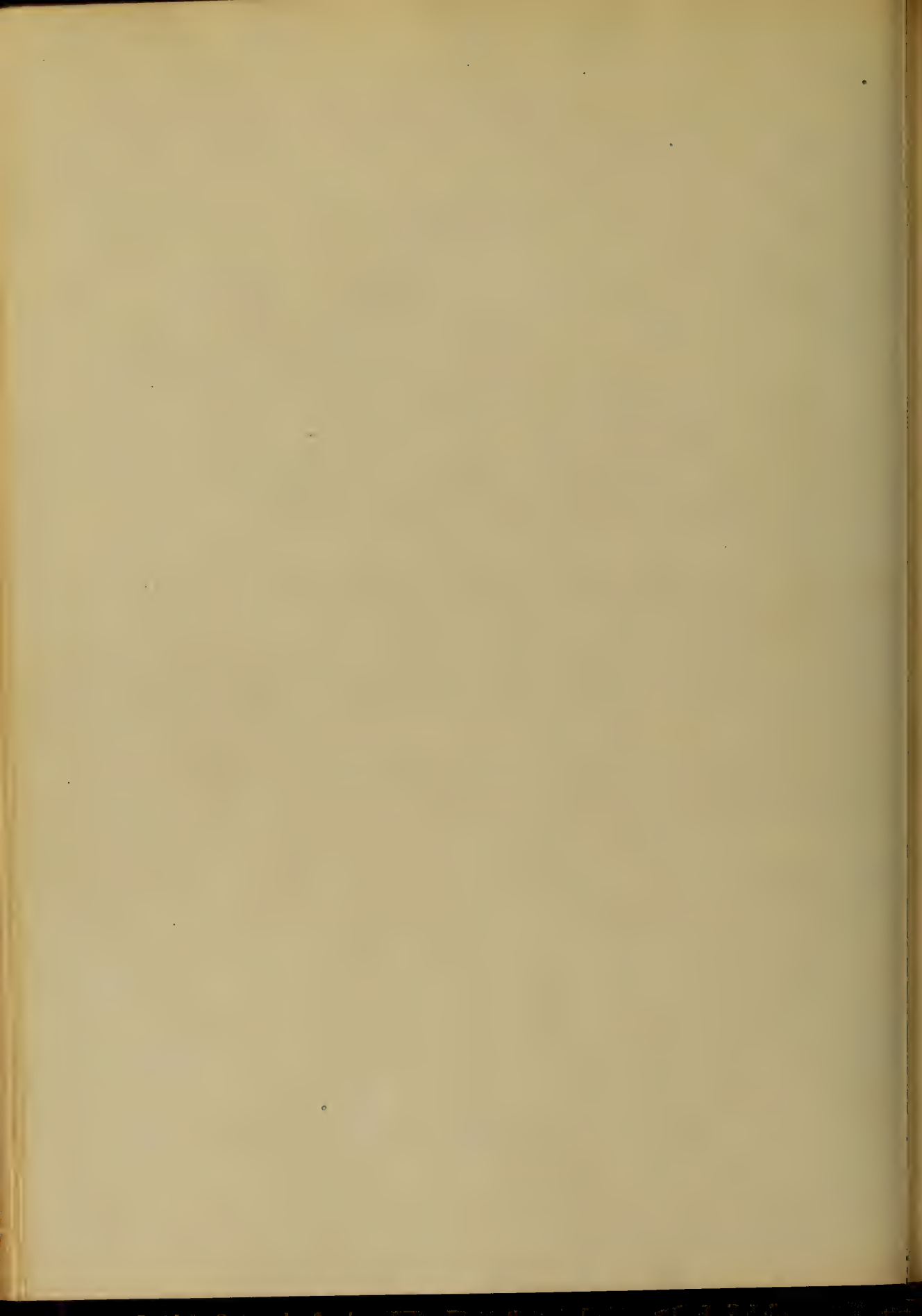


is recommended.

ages when it is
taken place in
with the patient
to the patient
amount of food during the continuance
of the disease. And for sometime after
the Convalescence the patient

should be strictly confined to
unstimulating food and very moderate
quantities as it is sometimes rightly
inferred to be the cause of tardy
recovery and frequent relapses
also as it is one of the leading points
in the treatment of the patient
early as possible empty as long





AN
Inaugural Dissertation

ON

Melancholy

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

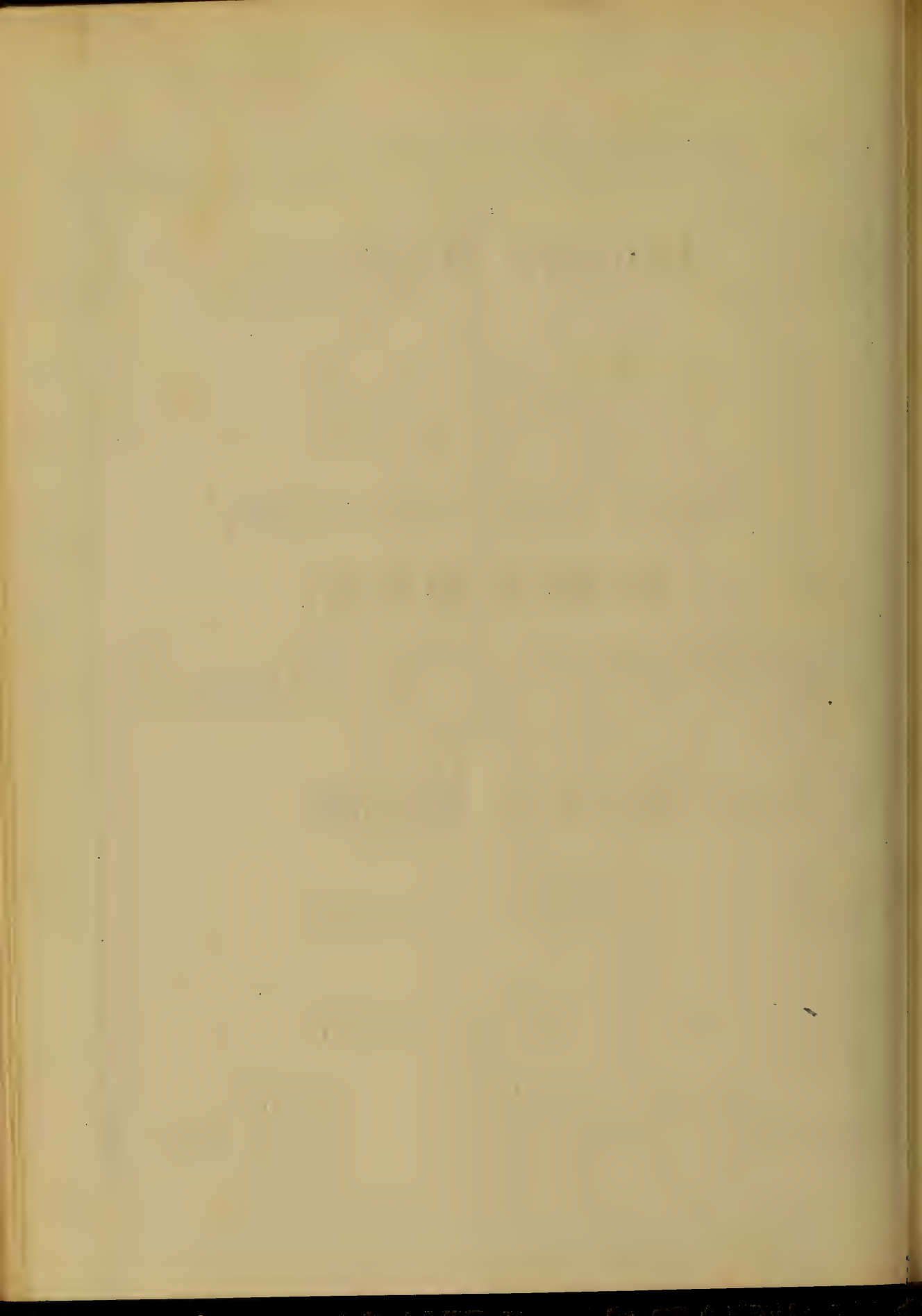
William Coult

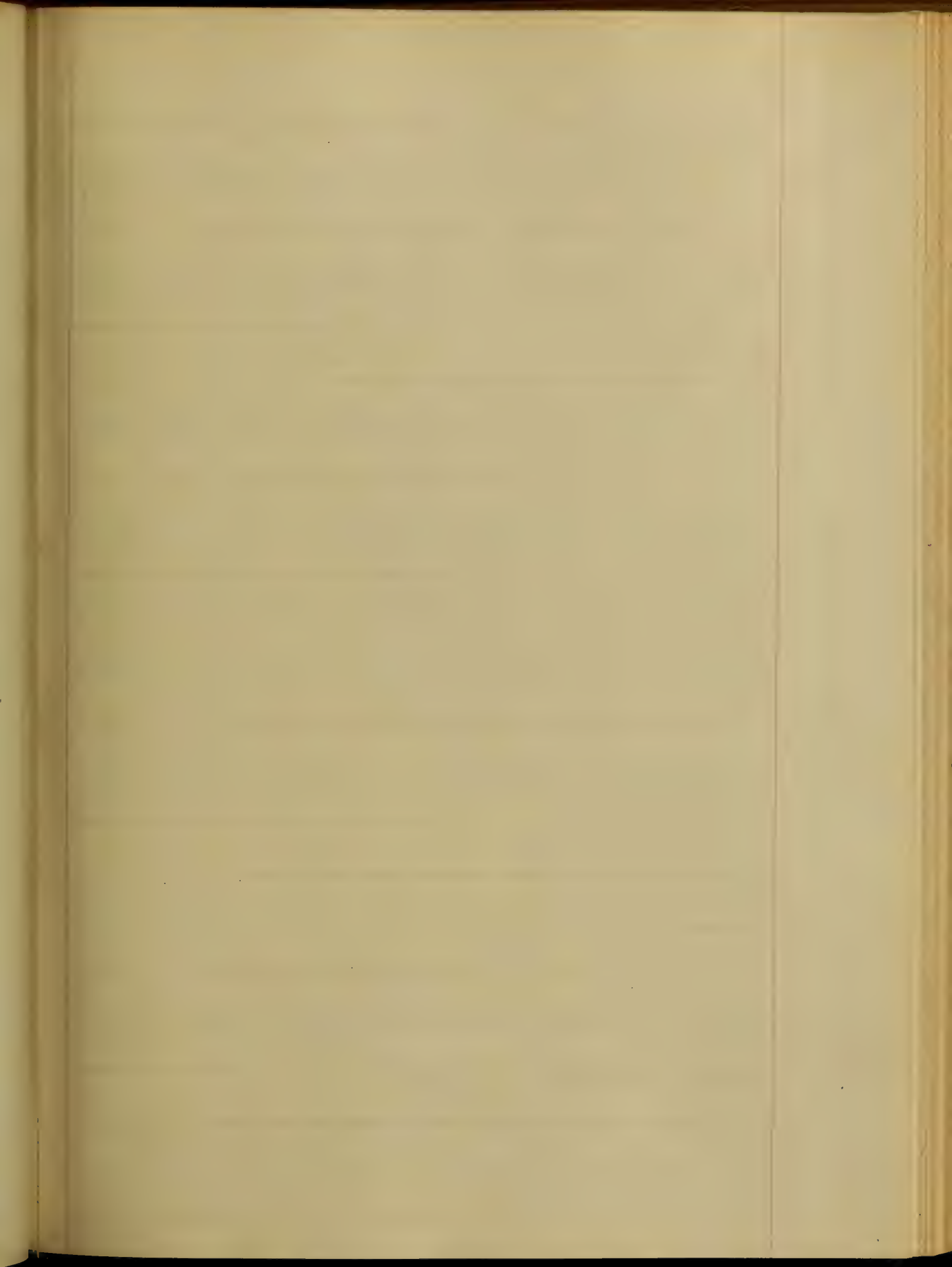
of

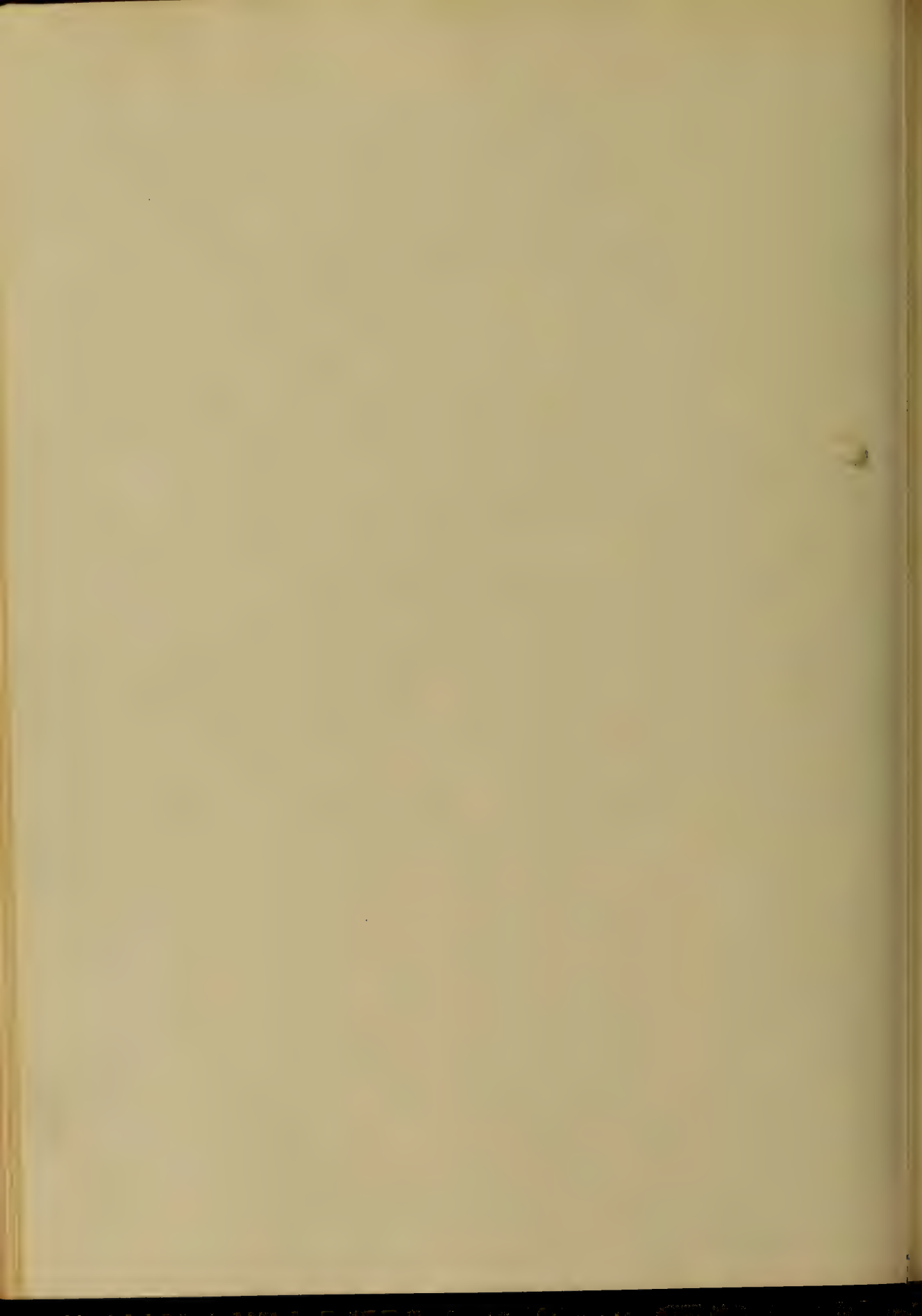
Maryland

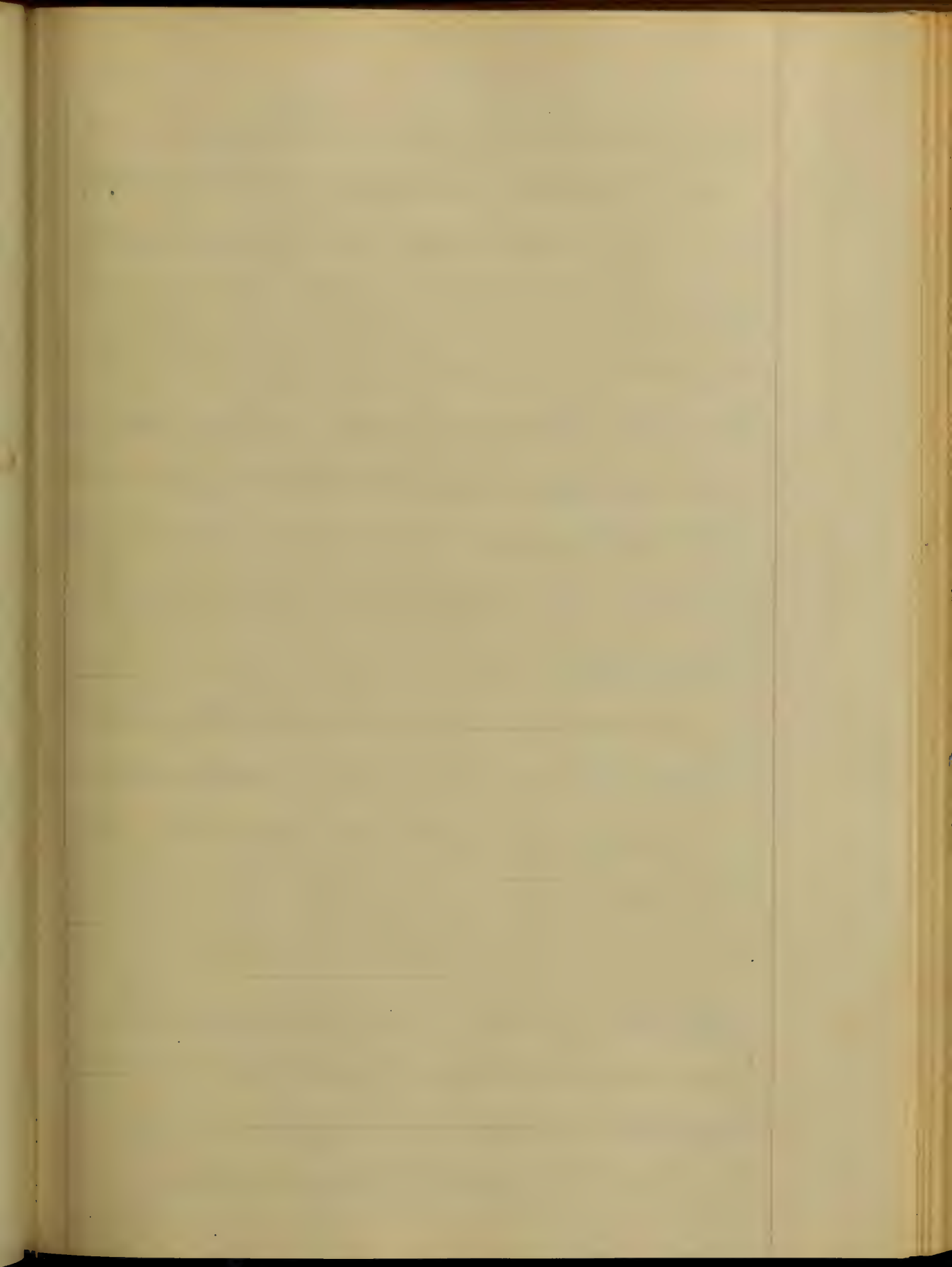
Session of

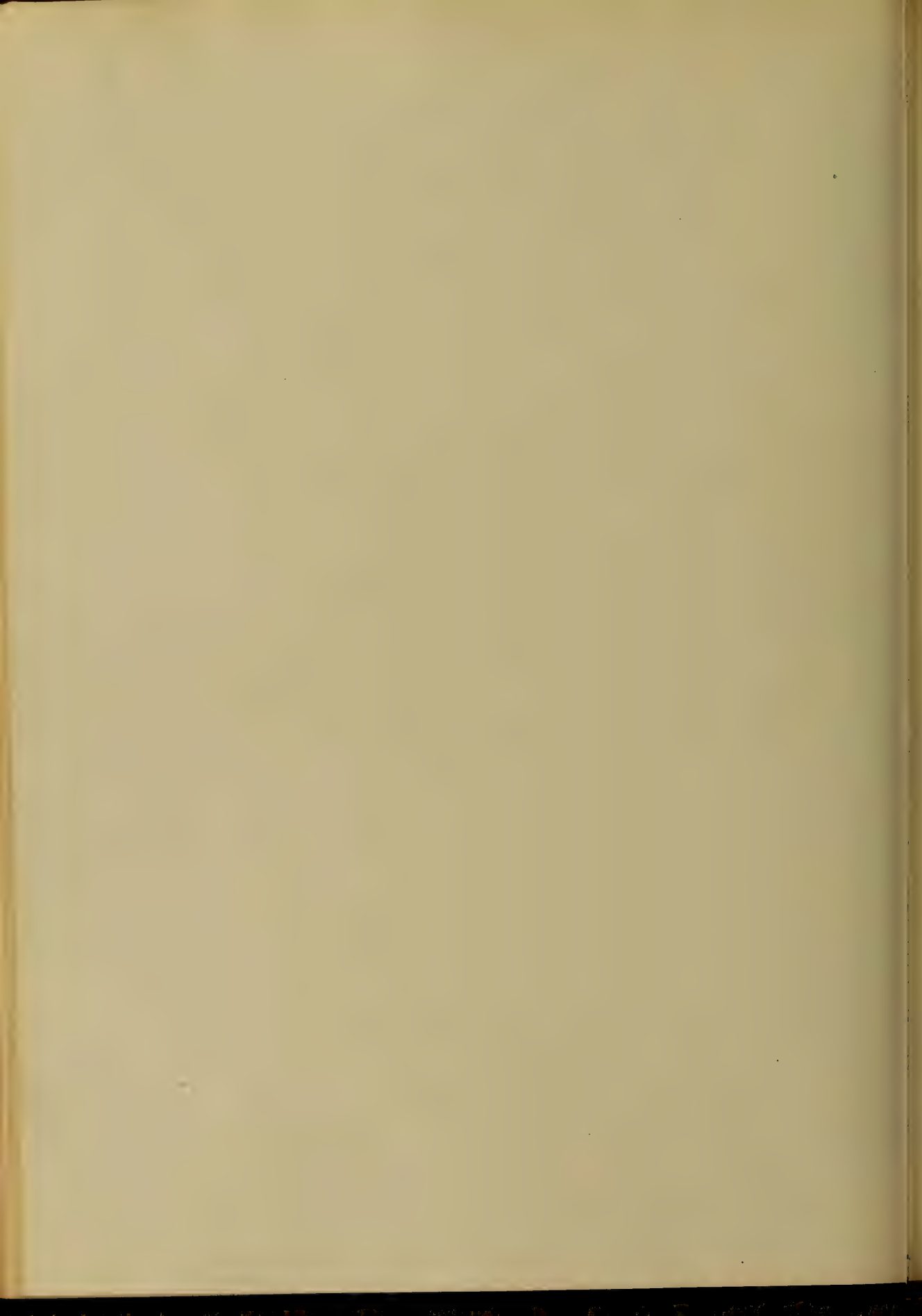
1867







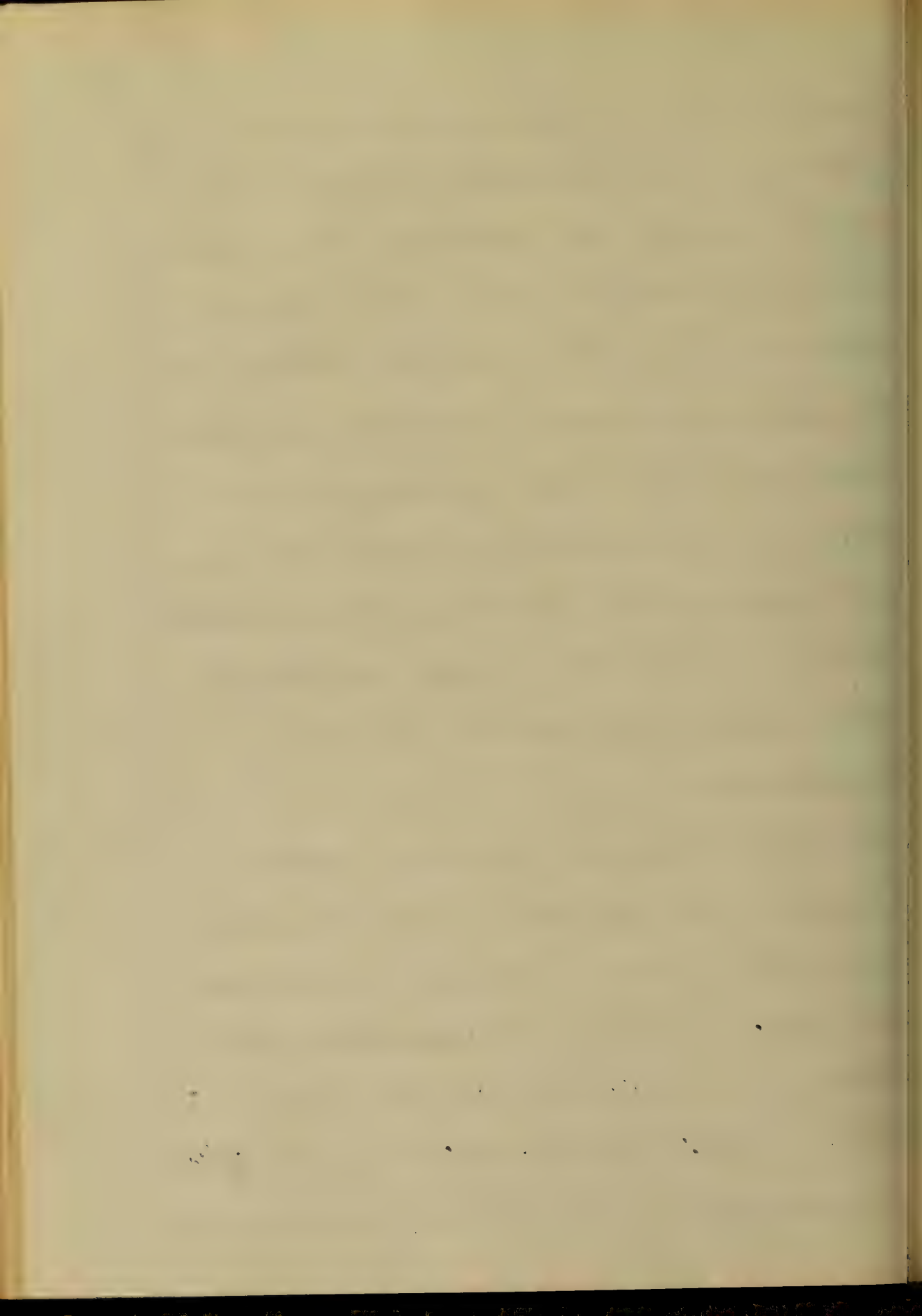




1

Among the numerous calamities by which society is afflicted, those immediately connected with the mind should have the greatest claim on the attention and sympathy of physicians. Prostrating that noble faculty by which man is so eminently characterised from all unanimated nature, the unfortunate victims of mental disease exhibit the most appalling spectacle of human wretchedness.

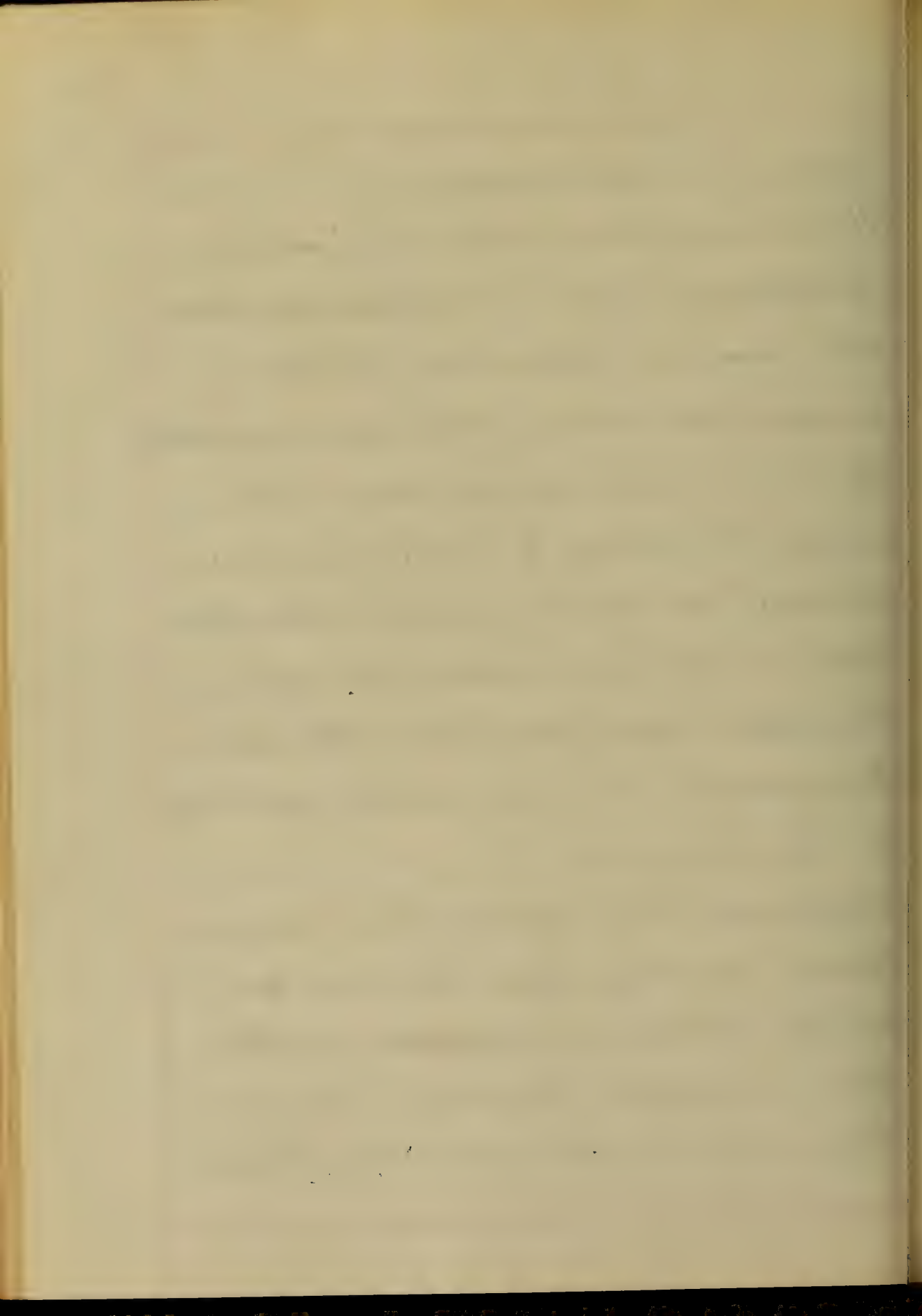
The pathology of corporeal disease (except such as are directly connected with the nervous system) has advanced so rapidly within the last century, that those of an acute character are met at their outset by the physician with zeal



resolution, and compromise.

Not so with those of the mind. Their pathology is yet infancy, and probably, ever remain entangled in an impetrable web of doubt and uncertainty. There is indeed no basis upon which the edifice of investigations can be raised. Post mortem examinations throw little or no light upon their real character; and our barometers and thermometers are here useless instruments of inquiry.

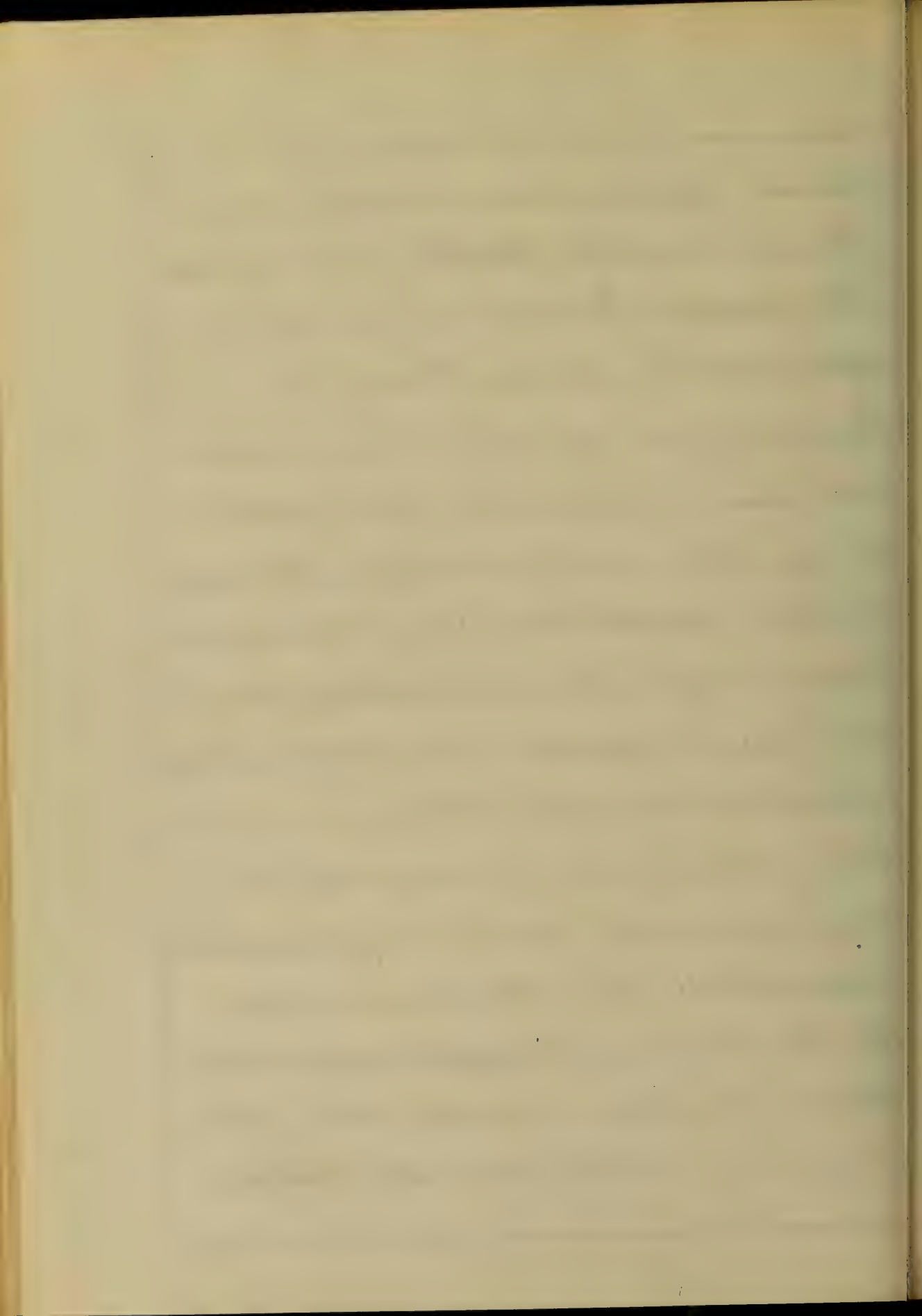
Melancholy, the subject which I have chosen, for my Thesis, has been but slightly noticed by medical writers; and whenever mentioned, its symptoms have been so blended with those of



Mania, hypochondriasis dyspepsia, and
Chronic hepatitis, that the reader finds
It impossible to draw a line of
demarcation between them,

Melancholy, in my opinion, is a disease
sui generis, independent at its outset
of any other in the Catalogue of nosology.
It differs as essentially from mania, as
typhus differs from inflammatory fever -
one being a disease of low, and the other
of high intellectual action,

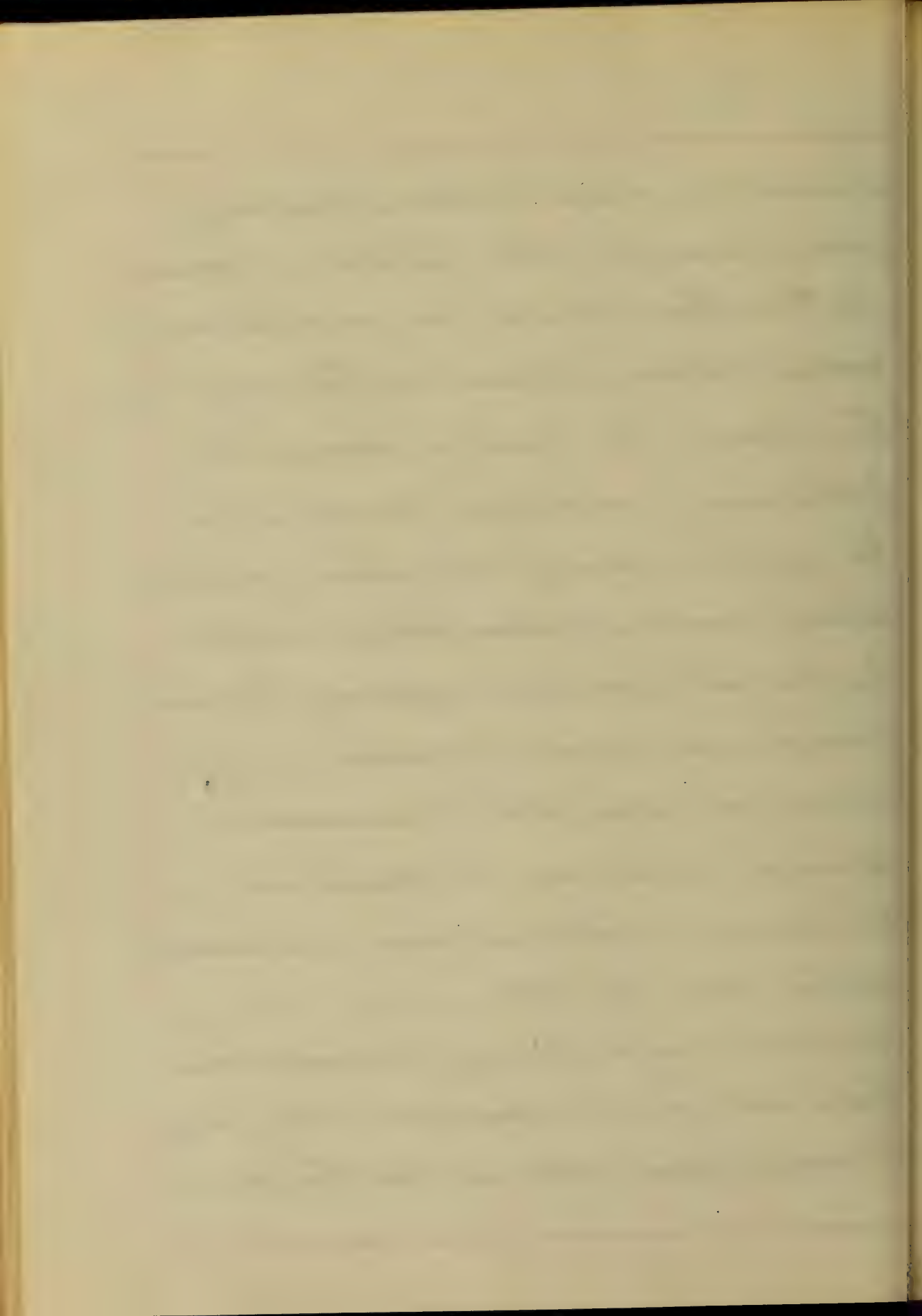
The attacks also of melancholy are
slow, gradual, and sometimes almost
imperceptible; the complexion is pale
the countenance haggard and cast
down, the pulse is weak and quick
and the whole animal system



exhibits a state of extreme imbecility and languor. The attacks of mania on the other hand, are sudden and violent, prostrating at once all the powers of the mind; the face is flushed, the countenance raised and commanding, the pulse is strong and active, and the whole animal system utters a state of prodigious exaltation, requiring the most prompt and rigorous depletion.

It is singular that these diseases should have been identified by medical writers, because the mind is the seat of both.

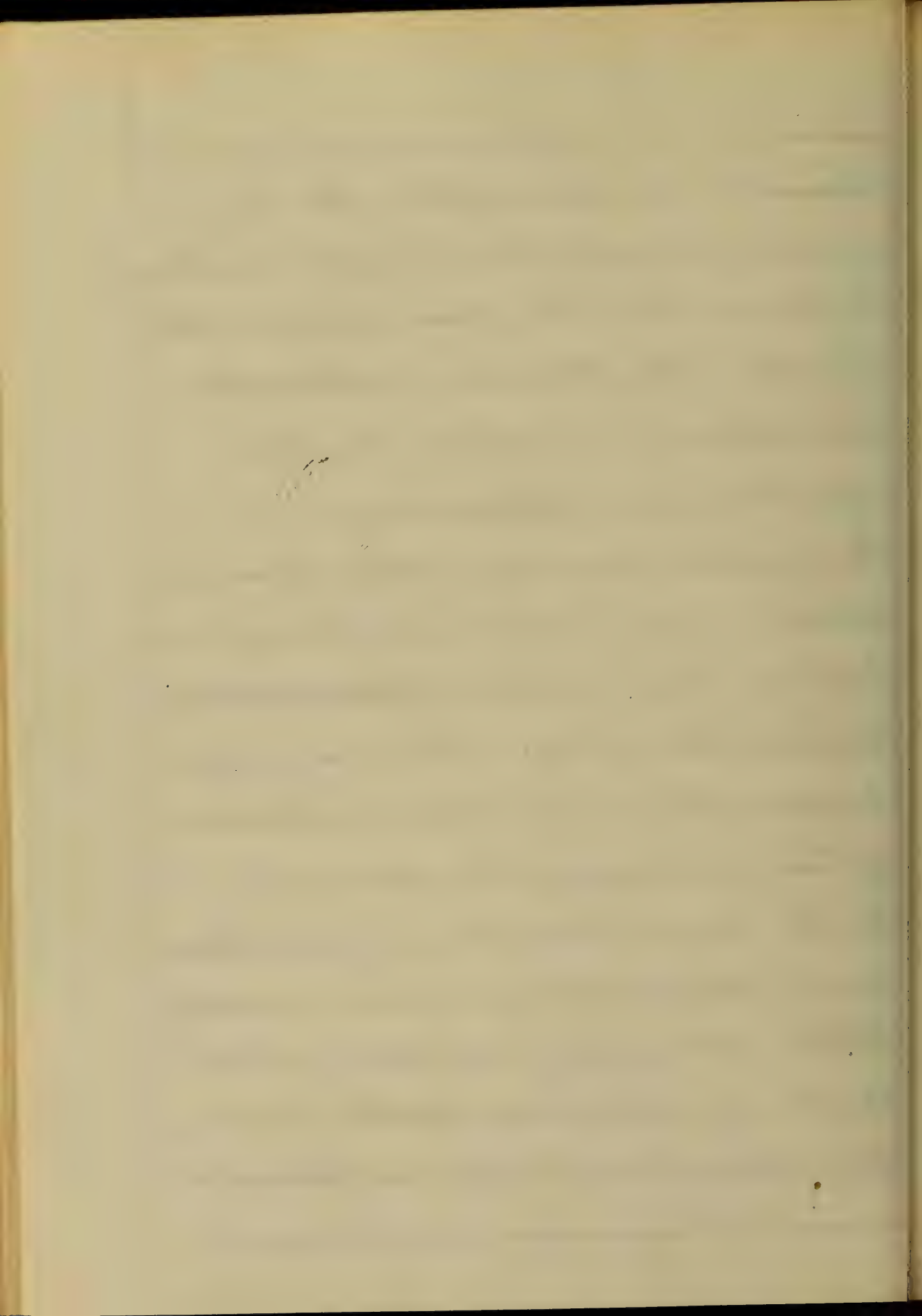
Diseases constitutionally different, have their seat in the same part of the body. It may be said, however, that they often



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terminal in each other. This is
certainly a fact, but it goes no further
to prove them the same disease than
to say that Sphacelus is inflammation,
that phthisis is Catarrh or that
hydrothorax is peripneumony.

The disease generally called hypochon-
driasis, in my opinion is nothing more
than a symptom of an advanced or
aggravated stage of the one under
consideration; the morbid influence
of the mind being communicated
to the liver producing inflammation
and scirrhosis; but more frequently
to the stomach, indicated in that
organ by impaired appetite and
digestion, acid, or oily eructations &c

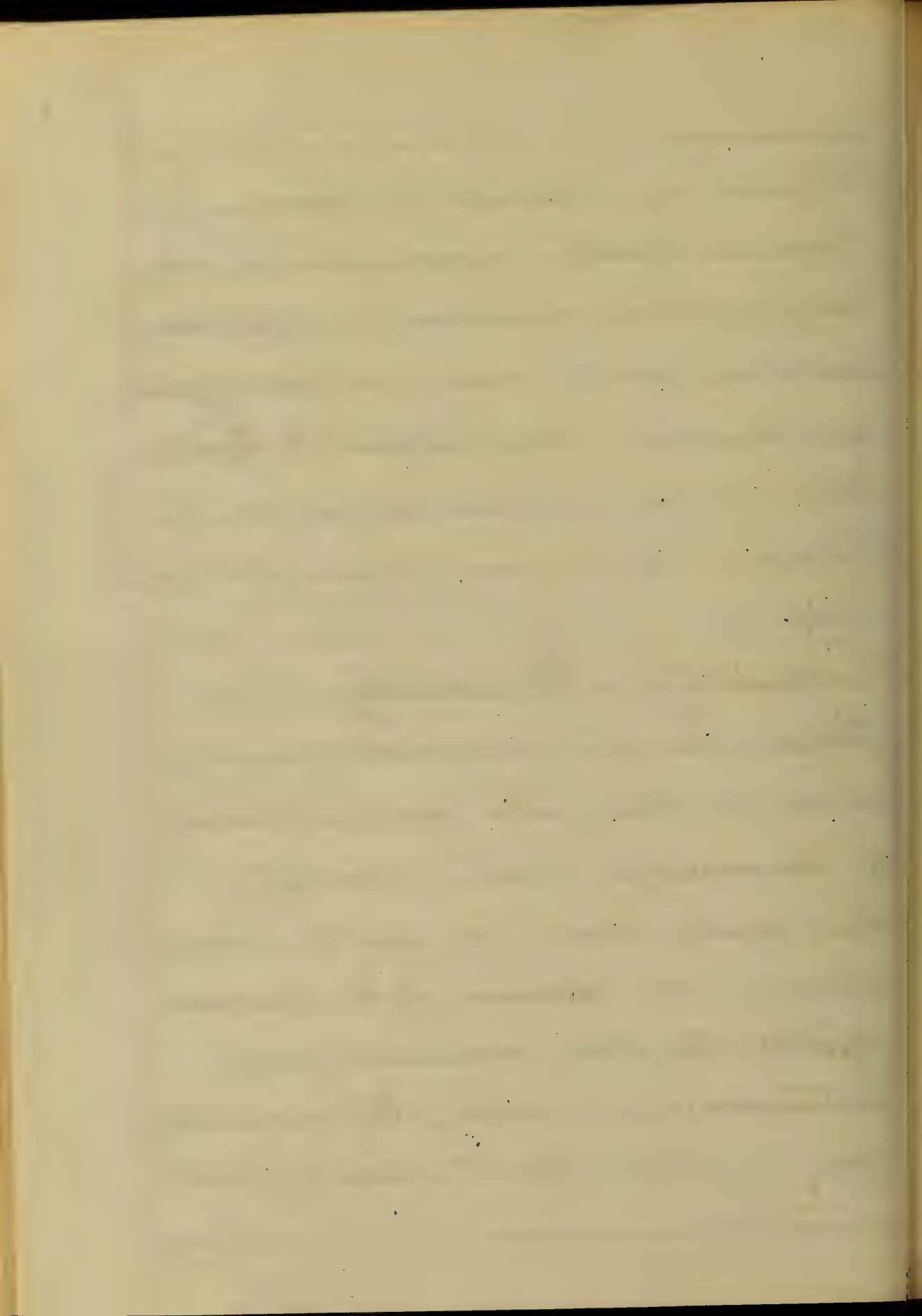


I have seen instances of Dyspepsia or Chronic hepatitis, unaccompanied with any symptom indicative of intellectual disorder; and when such a symptom is manifest I am disposed to think that it may be attributed, and can be traced, to the original disease of the mind itself.

Causes of Melancholy

These are, the proximate, remote and exciting. The proximate cause of Melancholy is mental debility.

The remote cause act upon the mind through the medium of the nervous system; the most prominent are intemperance in eating, the immediate use of ardent Spirits, Opium or tobacco.



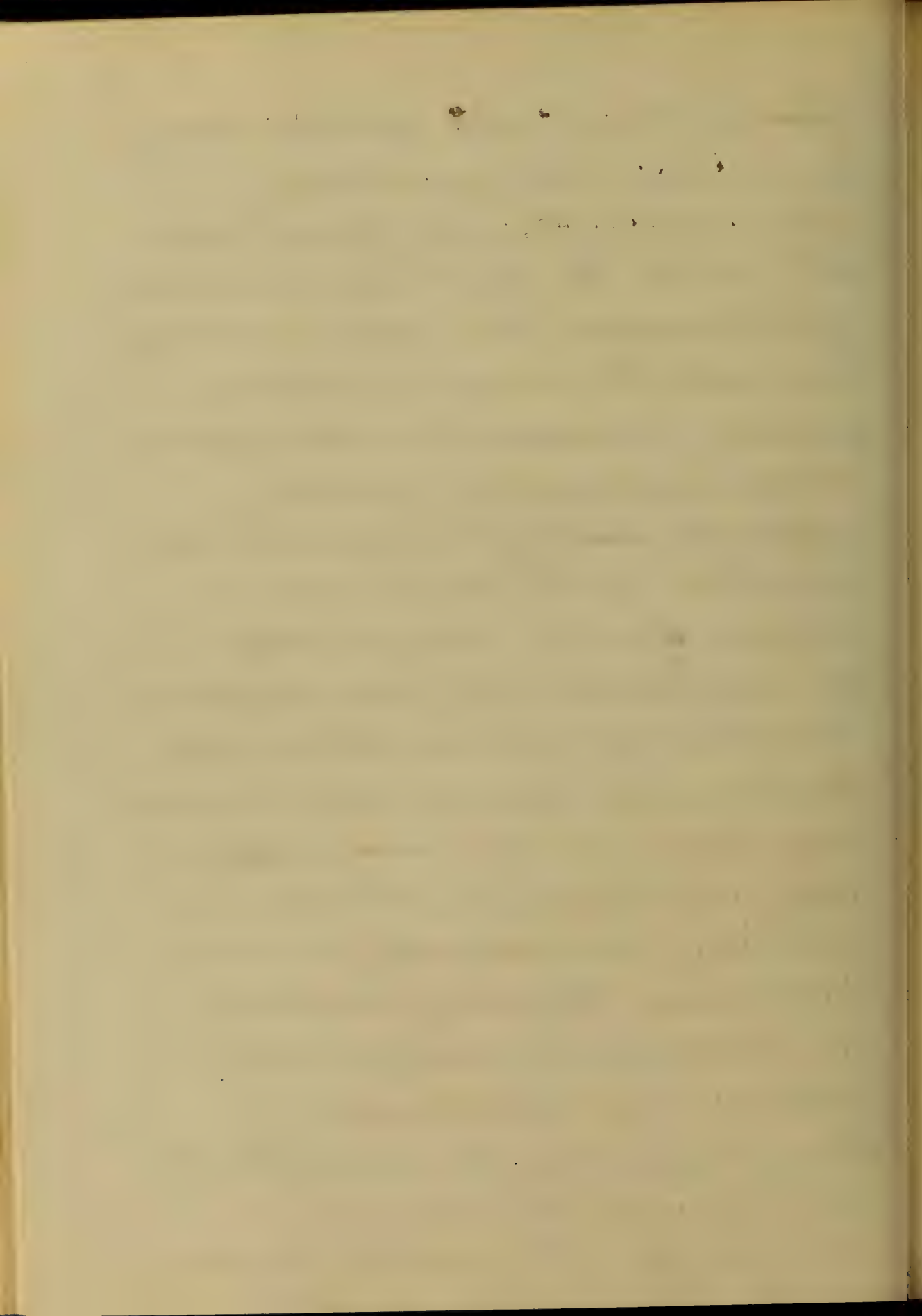
fatigue, loss of sleep, excessive worry, and above all indolence.

The exciting causes operate upon the mind through the medium of its passions. The most prominent are debt, the loss or ingratitude of friends, disappointed hope wounded pride, unanticipated misfortune unexpected prosperity, long continued exertion of the mind, and an increase of money or fame.

Of some persons are more predisposed to attacks of Melancholy than others. They are such as are of sensibility acute and tender, and of imagination lively and luxuriant; philosophers and poets being more especially its victims.

The disease certainly multiplies in proportion as society becomes intelligent and enlightened.

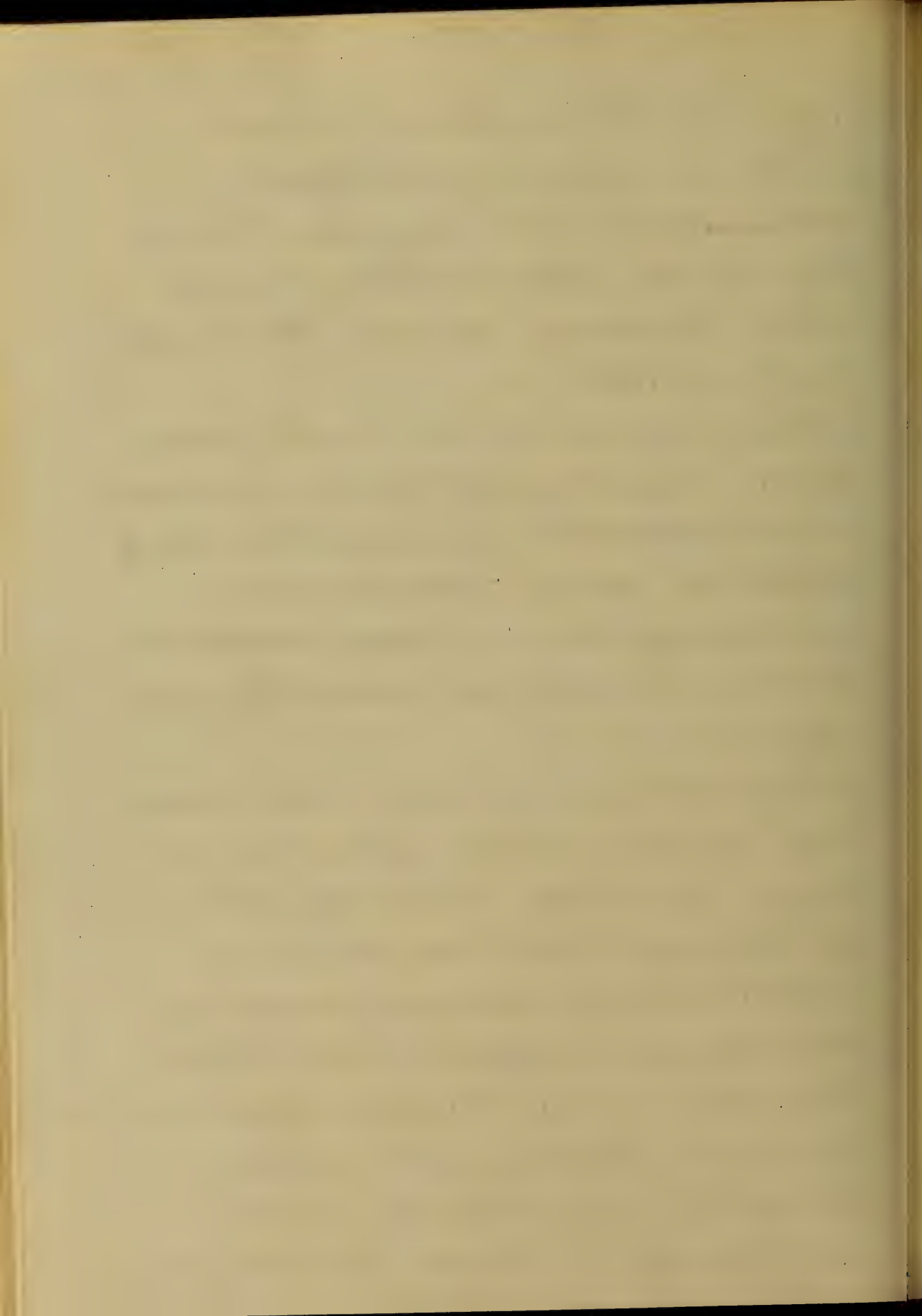
It is rarely to be seen among the laboring class, of this community; and it is a fact too important to be pass



over in silence (as Dr. Keats says)
 that in all my diligent
 observations and inquiries, I have
 not heard of a solitary case of
 this disease among the negroes
 of this State.

The Cause of their entire exemp-
 tion from a malady so prominent
 and deplorable in enlightened society
 is to my mind is obvious and
 explanatory, and is alone attributable
 to the manner in which they are
 reared.

Destitute of education, their feelings
 are almost entirely of the sensual
 kind; for large majority of them
 are strangers to both moral and
 intellectual pleasure and pain.
 Accustomed to labour from their
 childhood, it is made agreeable
 by habit. Certain of the real
 necessities of life they are never
 plagued by the desire of such, as an
 imaginary

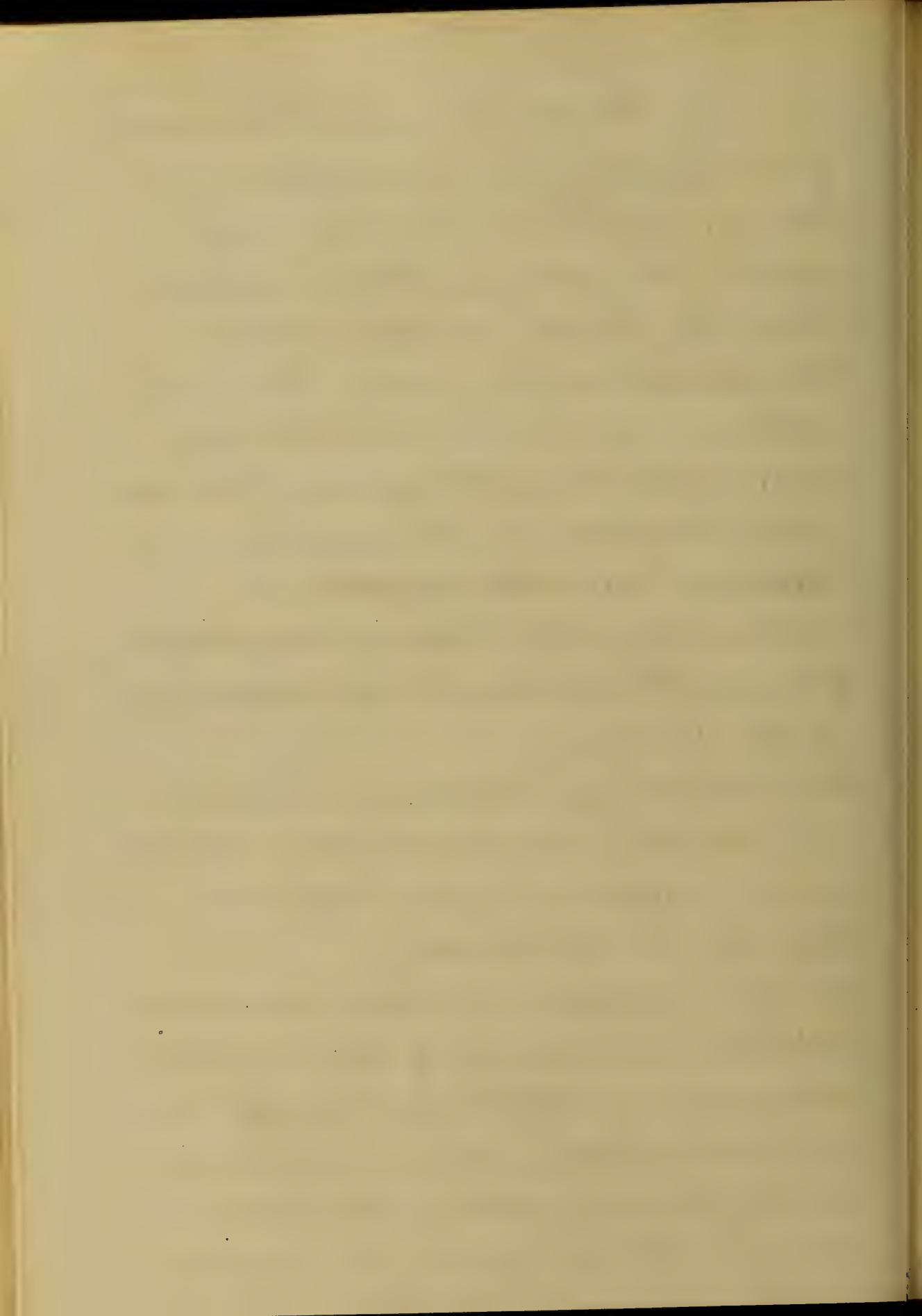


Having never enjoyed the sweets
of liberty, they found no idea of its
charms: the temple of honor and
wealth being for ever closed against
them, they have neither avarice
nor ambition: they found their own
notion of moral rectitude
and with them polygamy is no crime
and jealousy a stranger.

Women are less subject to
melancholy than men, in the proportion
of one of the former to at least six
of the latter.

This striking disparity is owing
to the habits of women being much
more regular and temperate
than those of men.

I am inclined to doubt, however,
whether women enjoy the greatest
share of intellectual serenity and
independence for hysteria a
disease arising from uterine derange-
ment entails upon the mind



Consequences as sad and deplorable
as melancholy it self.

(Symptoms of Melancholy)

These depend entirely upon the exciting
Causes, and are so numerous and
diversified, that it would almost
impossible to collect and represent them
all. The first Stage is usually marked
by great depression of the animal spirits
indicated by languor, apathy, and
extreme aversion to locomotion -
there is usually added grief, fear,
irresolution, anxiety or jealousy.

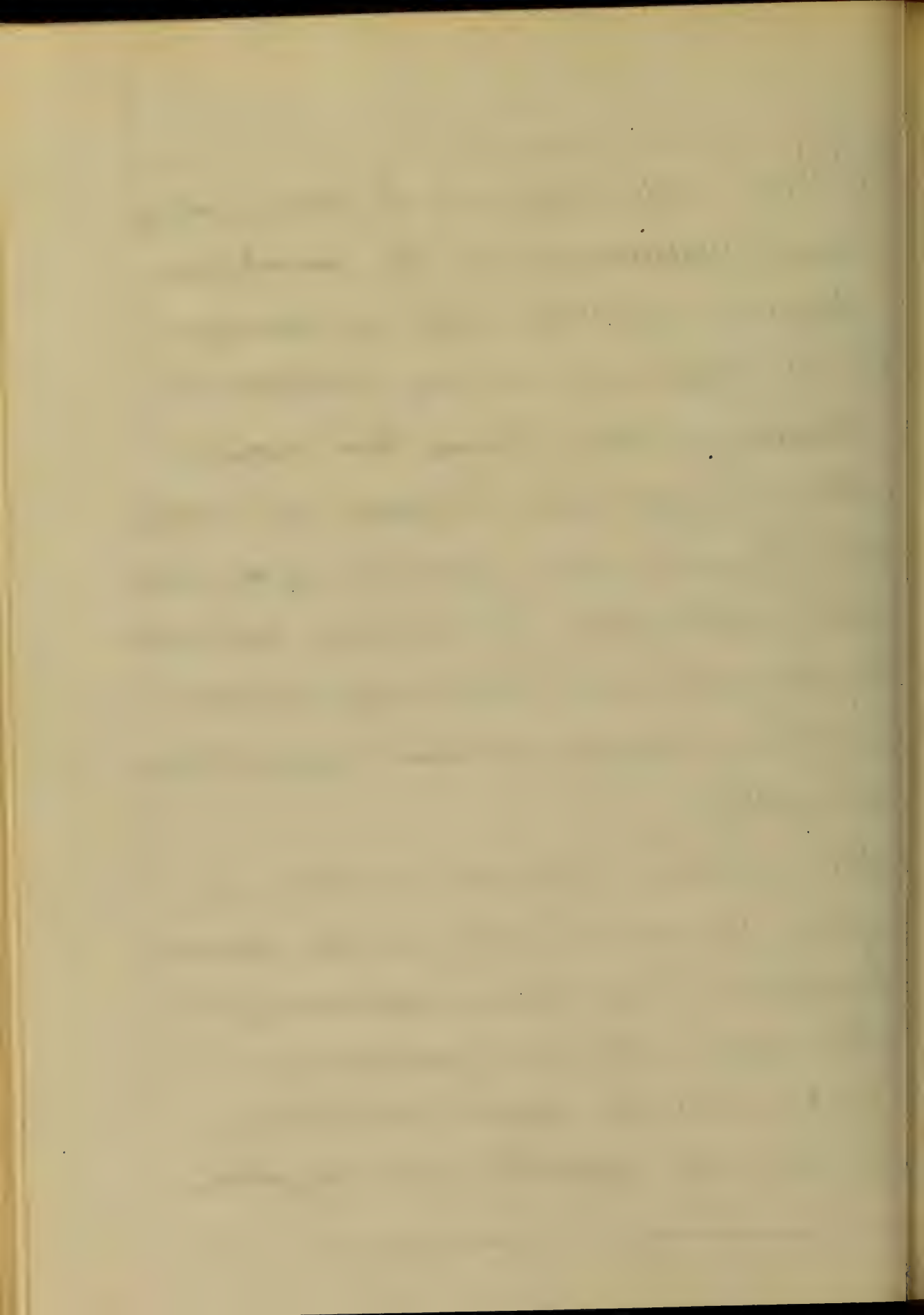
As the disease advances, the patient
generally becomes misanthropic, and
withdraws from all intercourse with
society. His imagination usurps
a dominion over his judgements.
He believes that there is some secret
enemy, who is bent on his
destruction, or that he is labouring
under some dreadful disease,
from which he cannot recover.



And with regard to such feelings
and apprehensions, he entertains
such an implicit belief as always
to be displeas'd at any attempt to
dissuade him from his error.

The Complexion is pale and sallow
the Countenance wan and dejected
his affliction is made evident
by perpetual taciturnity, excessive
weaking, watchfulness, and extreme
timidity.

The increased morbid action is
often Communicated to his physical
functions; but more especially to
the organs of the hypochondrium,
indicated by hepatic obstructions,
impaired appetite and digestion



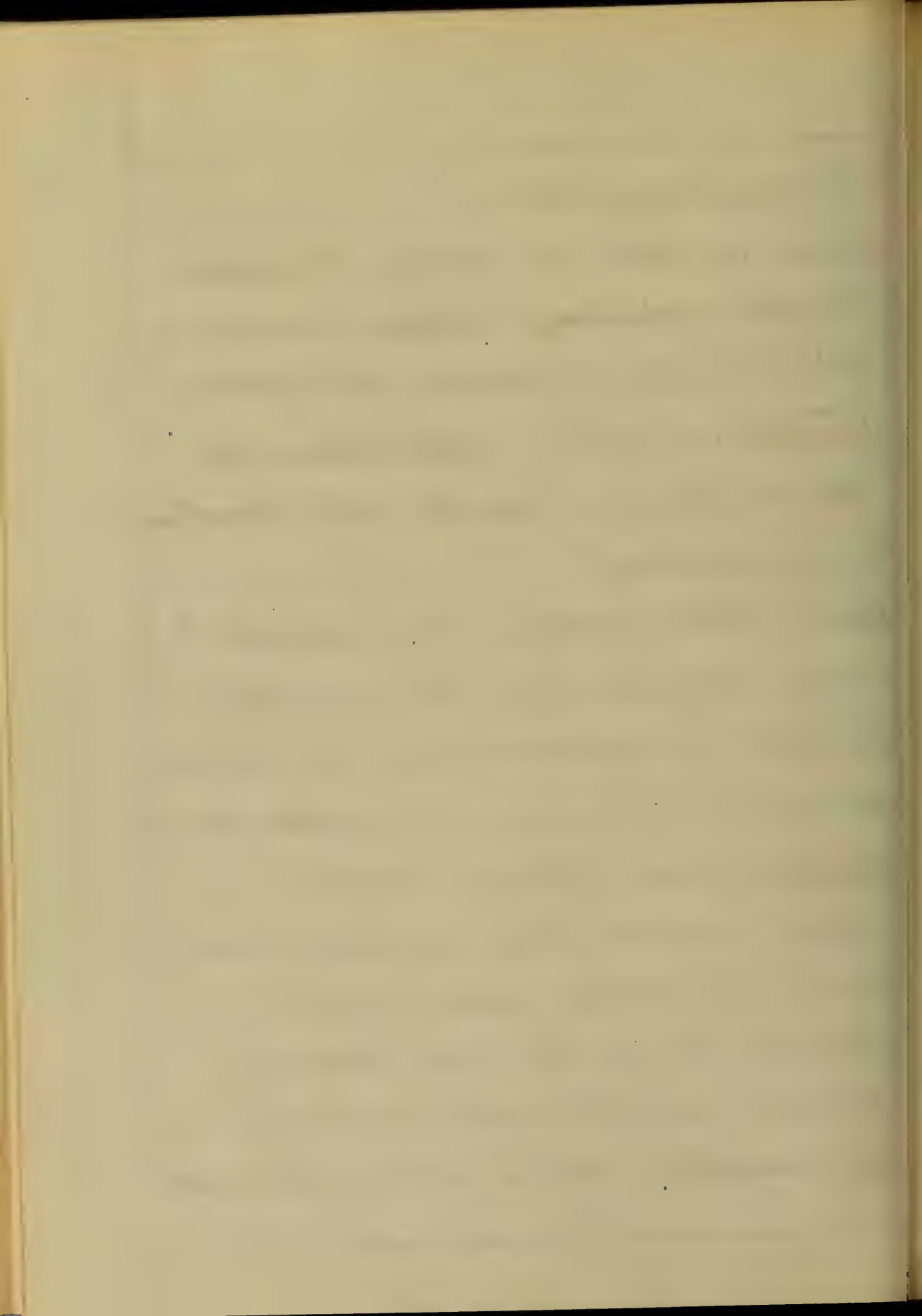
Constipation, &c.

Life is now a heavy burden
to the unhappy sufferer, and in a
state of despair, he either
terminates his afflictions by
suicide or sinks into idiotism

(Cure of Melancholy)

Upon this part of the subject I
have little to say, in addition
to what is recommended by medical
writers, for the cure of hypochondriac
dyspepsia, and Chronic hepatitis;

From what has already been
said, it would appear that
Melancholy is no necessarily
concomitant with intellectual
organization, but is rather the result

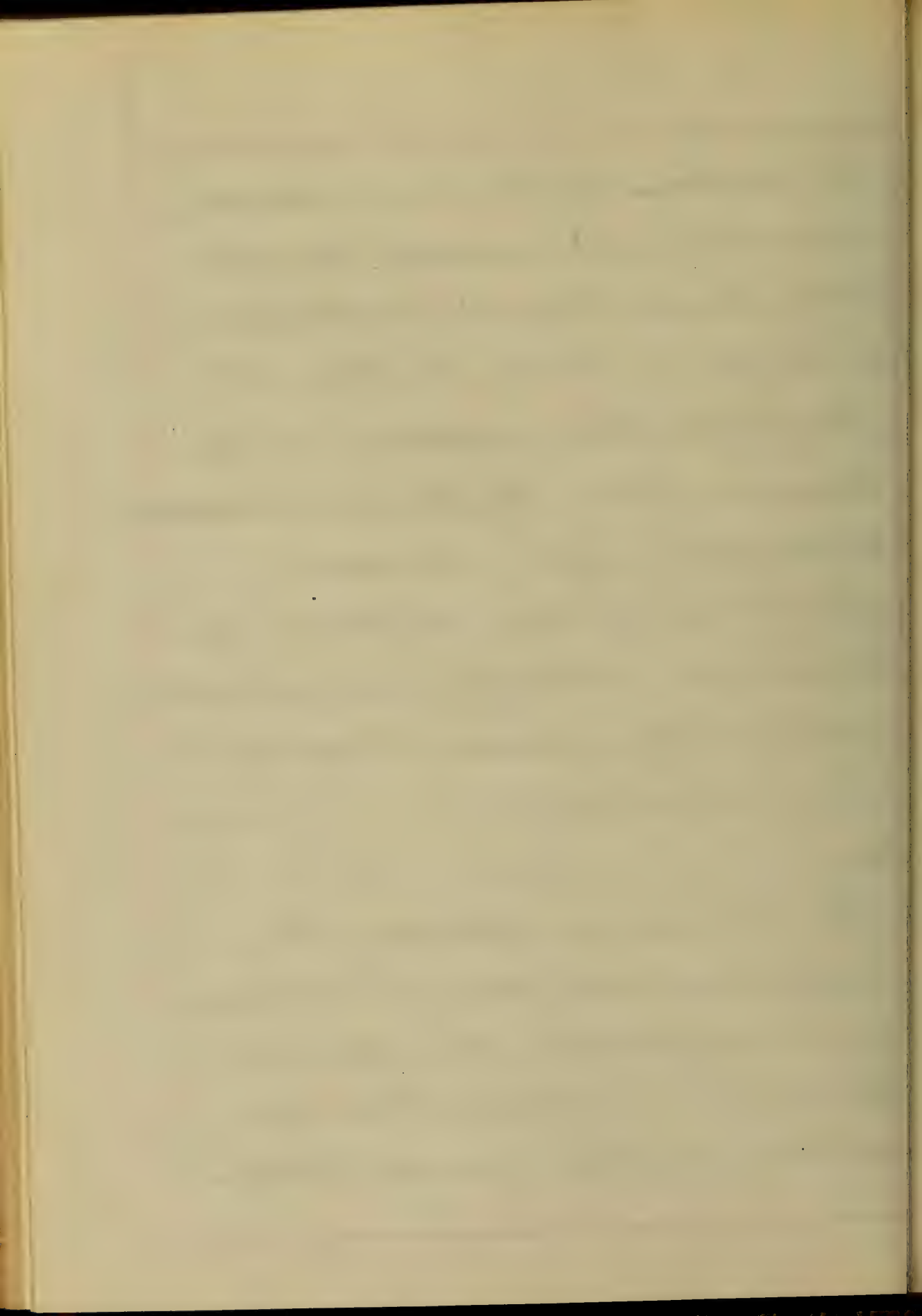


of pernicious habits and improper
education. It would require
more time than I intended
to devote to these sketches to
illustrate this position in a
manner that might be considered
satisfactory and decisive.

Melancholy being a disease of
mental debility, two indications
immediately present themselves to
the physician

1st

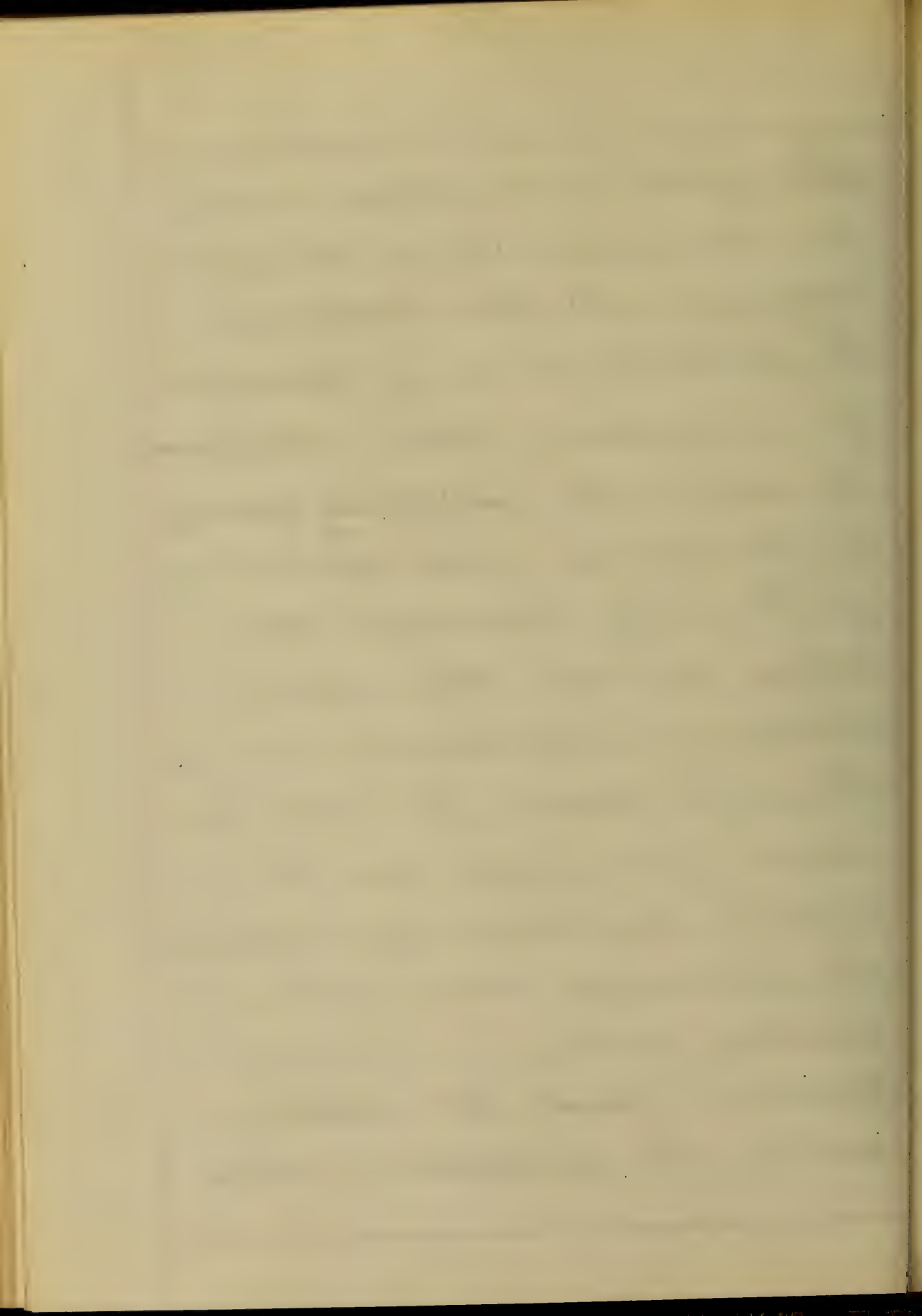
To remove or mitigate the
causes, which serve to continue
and aggravate the disease,
and to impart tone and
action to the mind itself



The first indications will
be answered by a diligent
inquiry into the habits of
the patient, and if found to
be irregular and intemperate
it will be absolutely necessary
to convince him at once
of the only resource, upon
which he can rely for
happiness and hope.

That he must fly as the
most dangerous foe, the
habits and habits of dissipation,
the midnight well and
bewitching band.

That he must at once
retire the footsteps by which

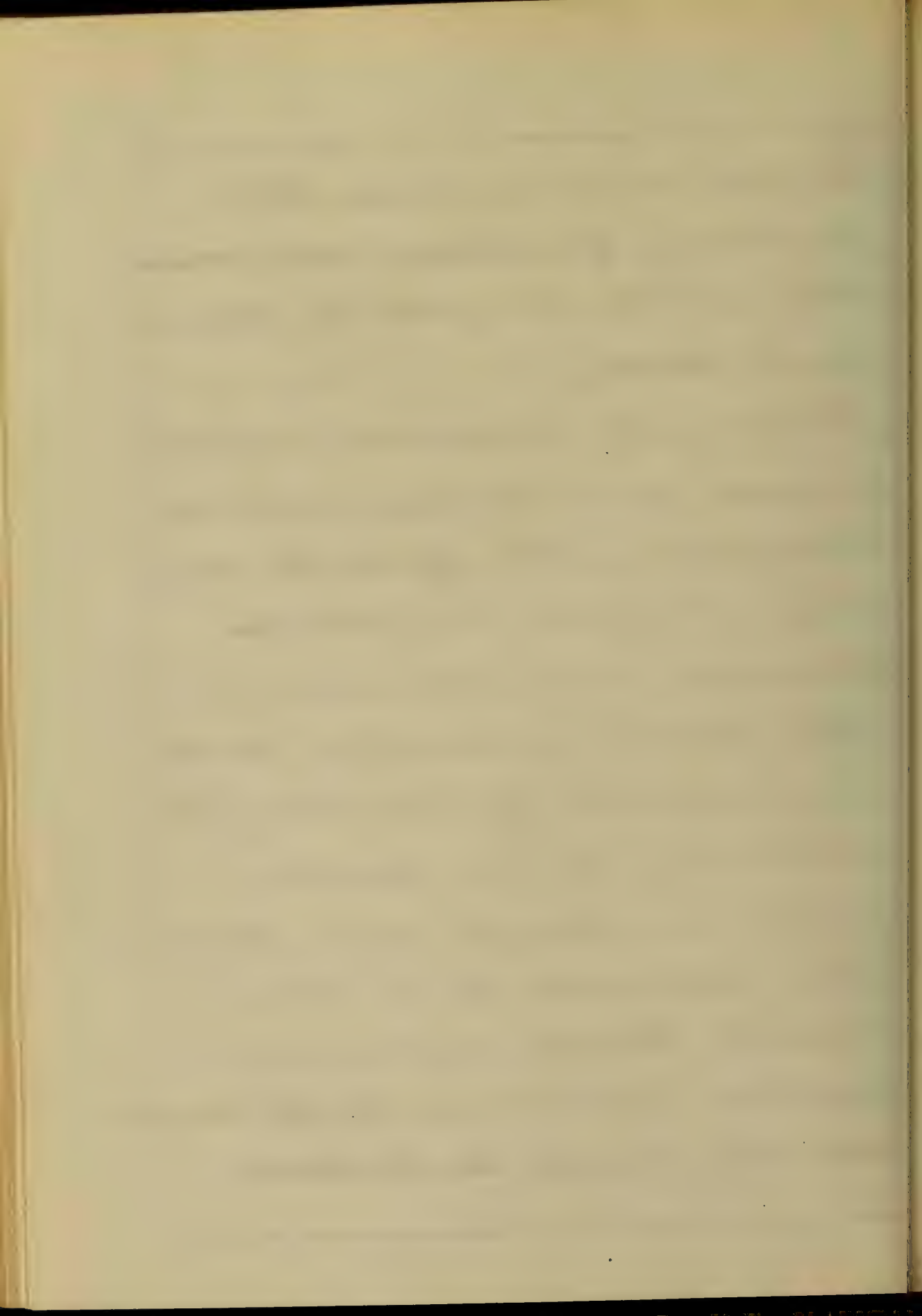


he has betrayed from the
simplicity of nature, and confine
him within the path of judgment
and sobriety.

Should the combined co-operation
of friends and physicians fail in
accomplishing this object, the case
may at once be filed as
desperate and incurable.

The second indication will
be answered by diverting the
attention of the patient
from his feelings and situation.

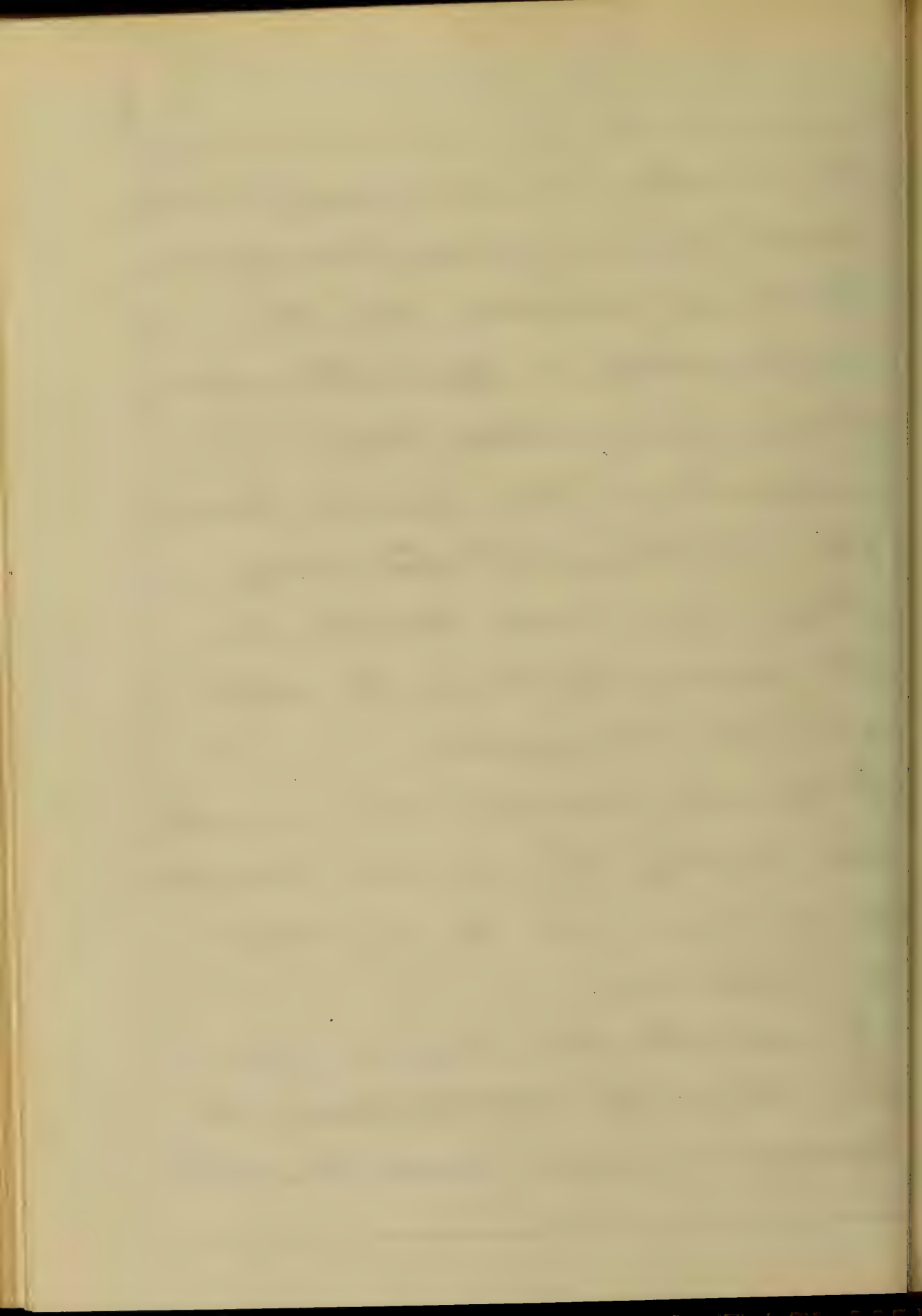
The associations of his ideas
must be changed by an entire
removal from every object connected
with the cause of his disease.



A graceful, cheerful society, travelling
Music reading, (never however upon
Medical Subjects) are best
Calculated to affect this object
Tone and action can be
imparted to the Mind through
the Medium of the body
Temperance and exercise are
the engines by which this effect
is to be accomplished.

I cannot however, recommend
too highly the great importance
of exercise in the treatment
of Melancholy.

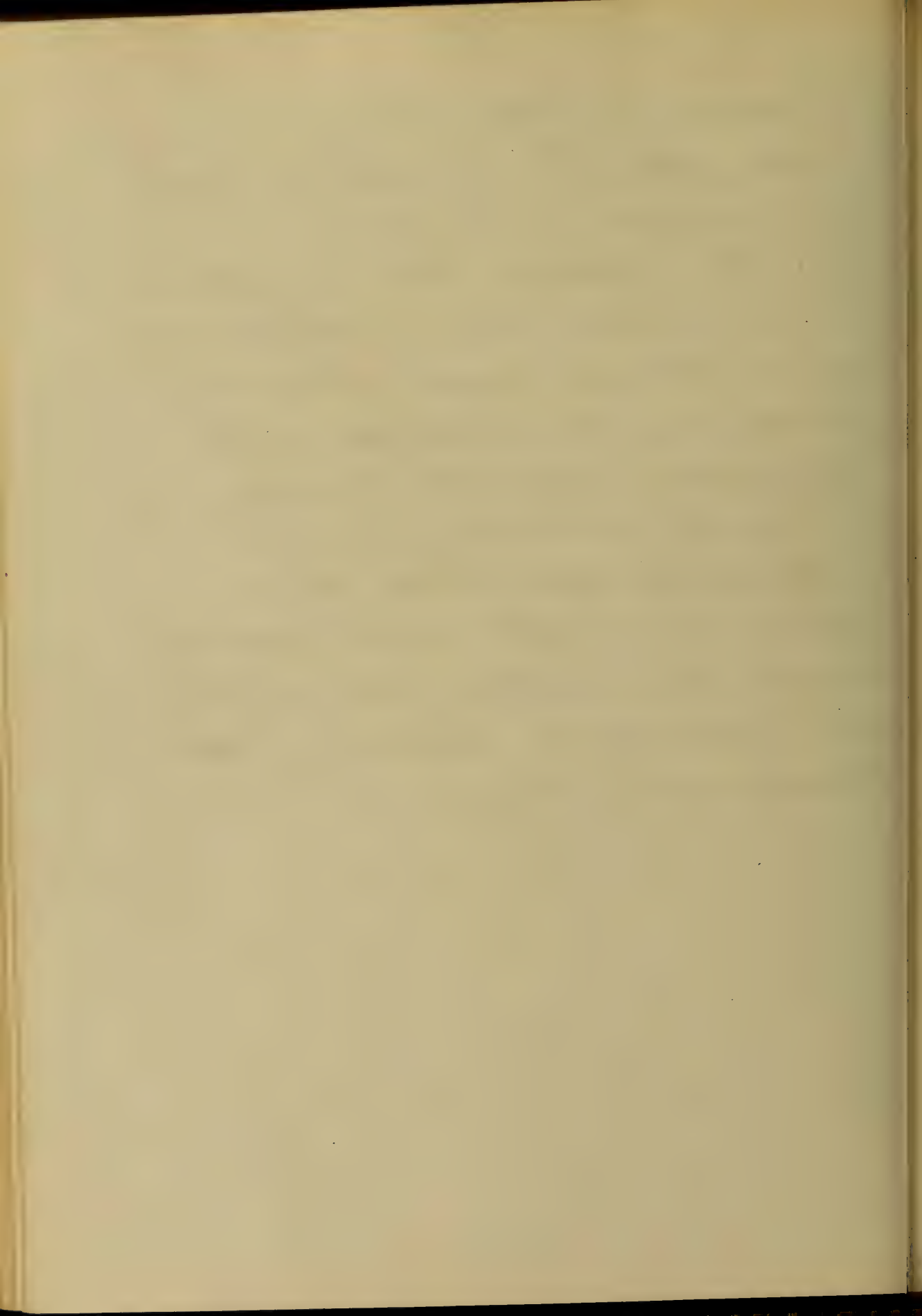
It abstracts the Mind from
the pain of recollection the
disappointments of hope, and the

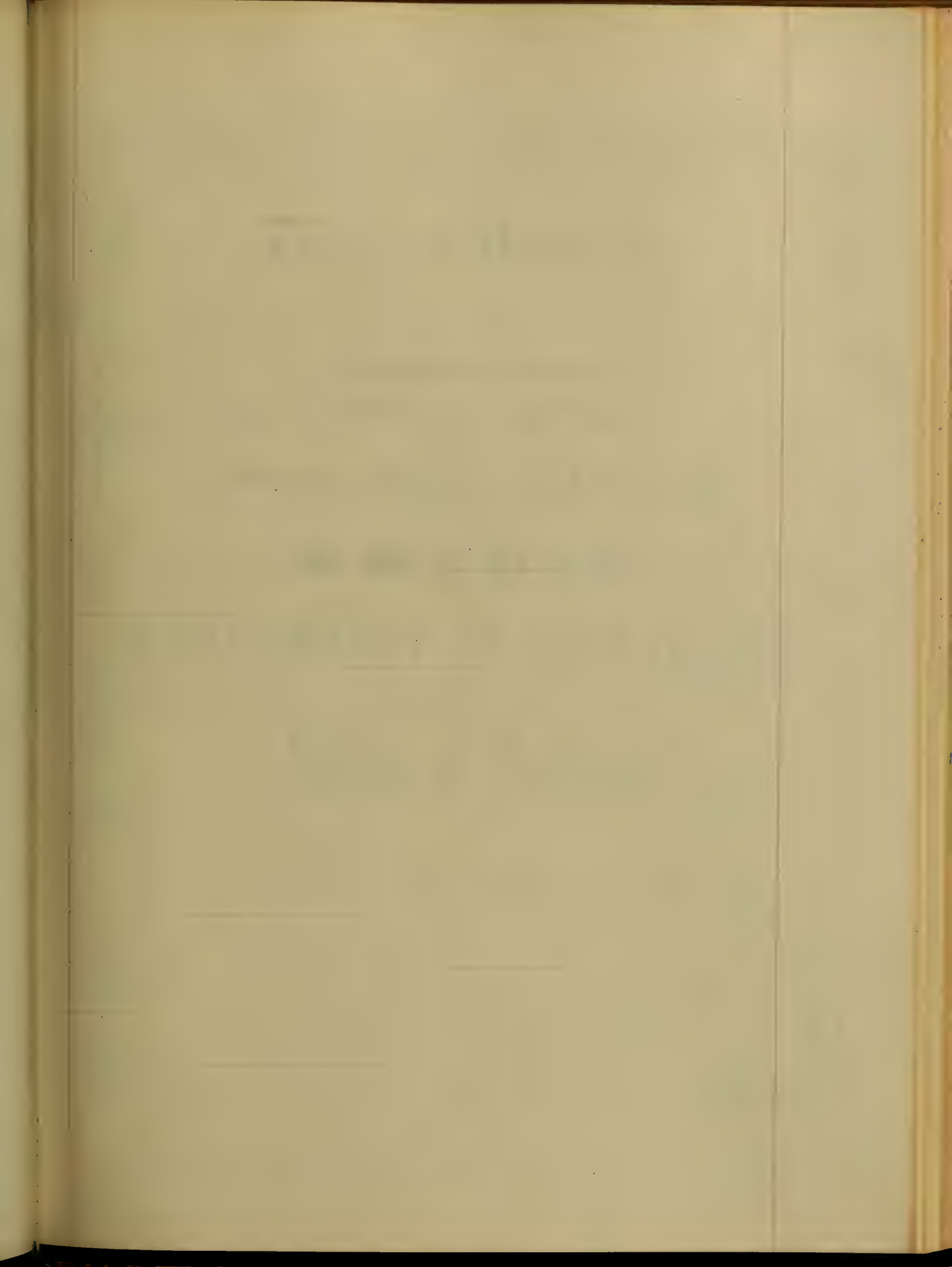


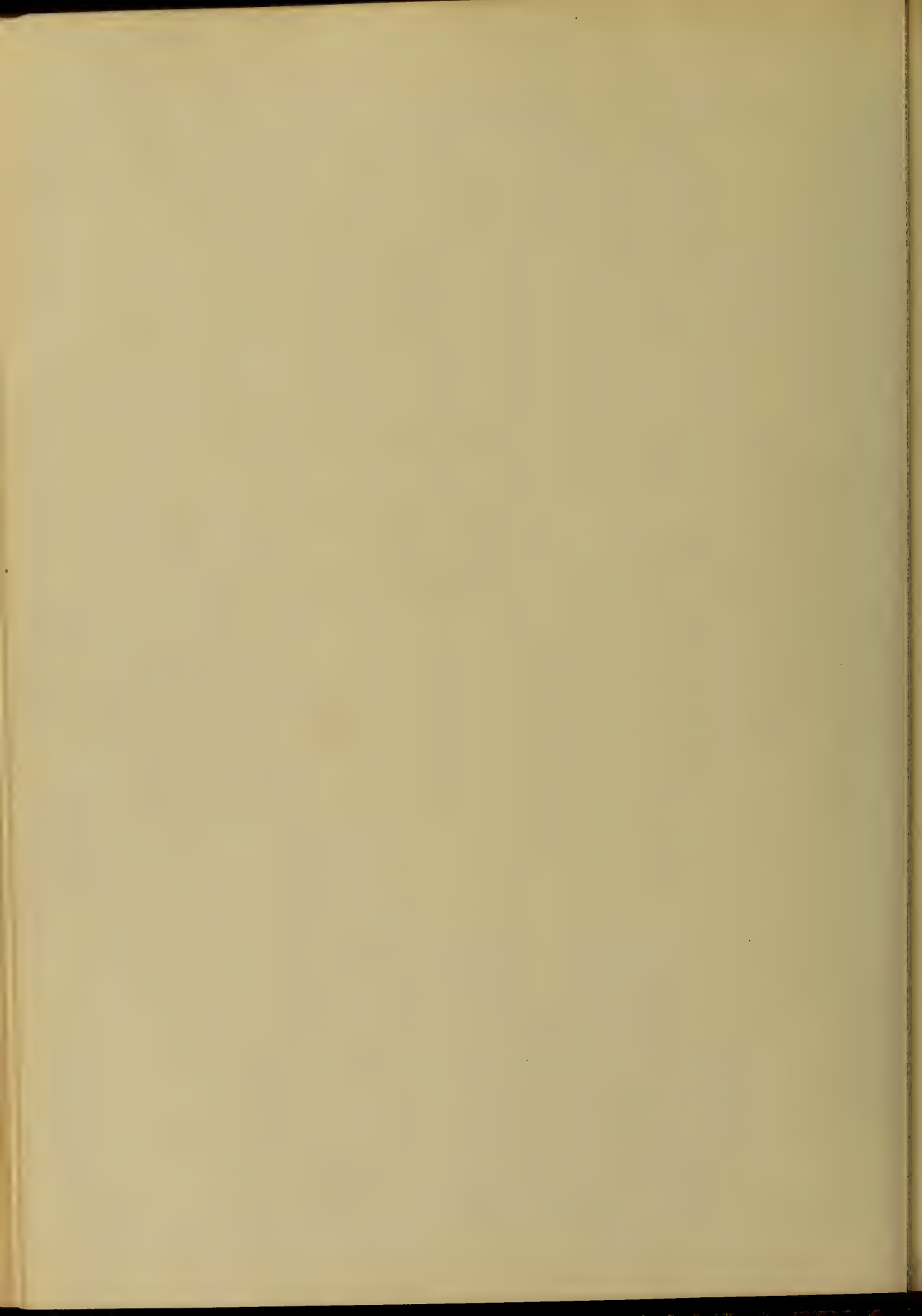
Miseries of Appearance

I here see the necessity of drawing
this subject to a close.

For this subject, when considered
in a moral and metaphysical
point of view, presents an extensive
field for the researches of the
philosopher and the divine.
I cannot conclude however
without the hope that some
person of talent and opportunity
will undertake and render
the subject its justice it so
conspicuously deserves.







AN
Inaugural Dissertation

ON

Anaesthesia,

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

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FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

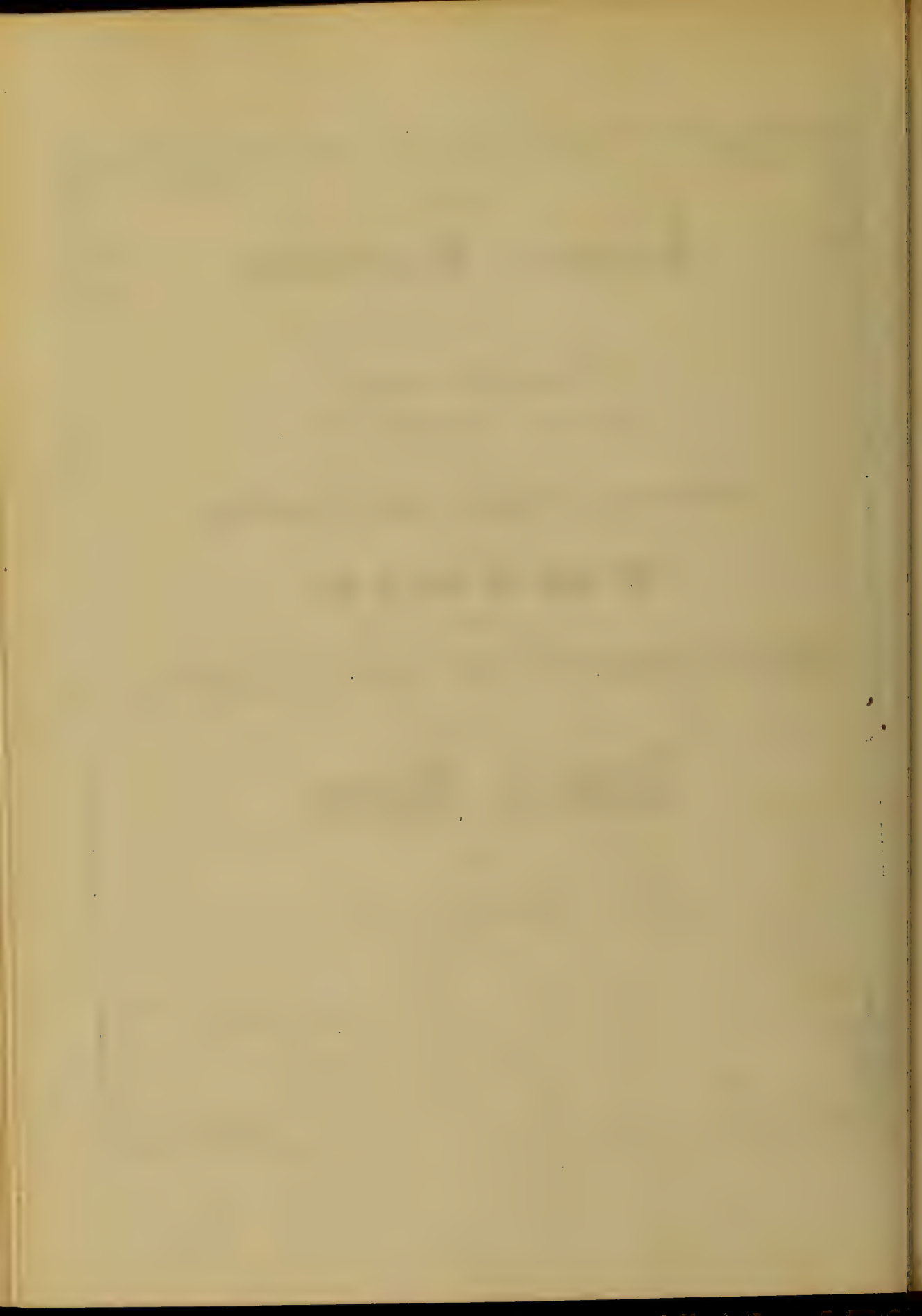
Silas Baldwin. B. A.

Of

Maryland.

Session of

Feb. 15th 1867



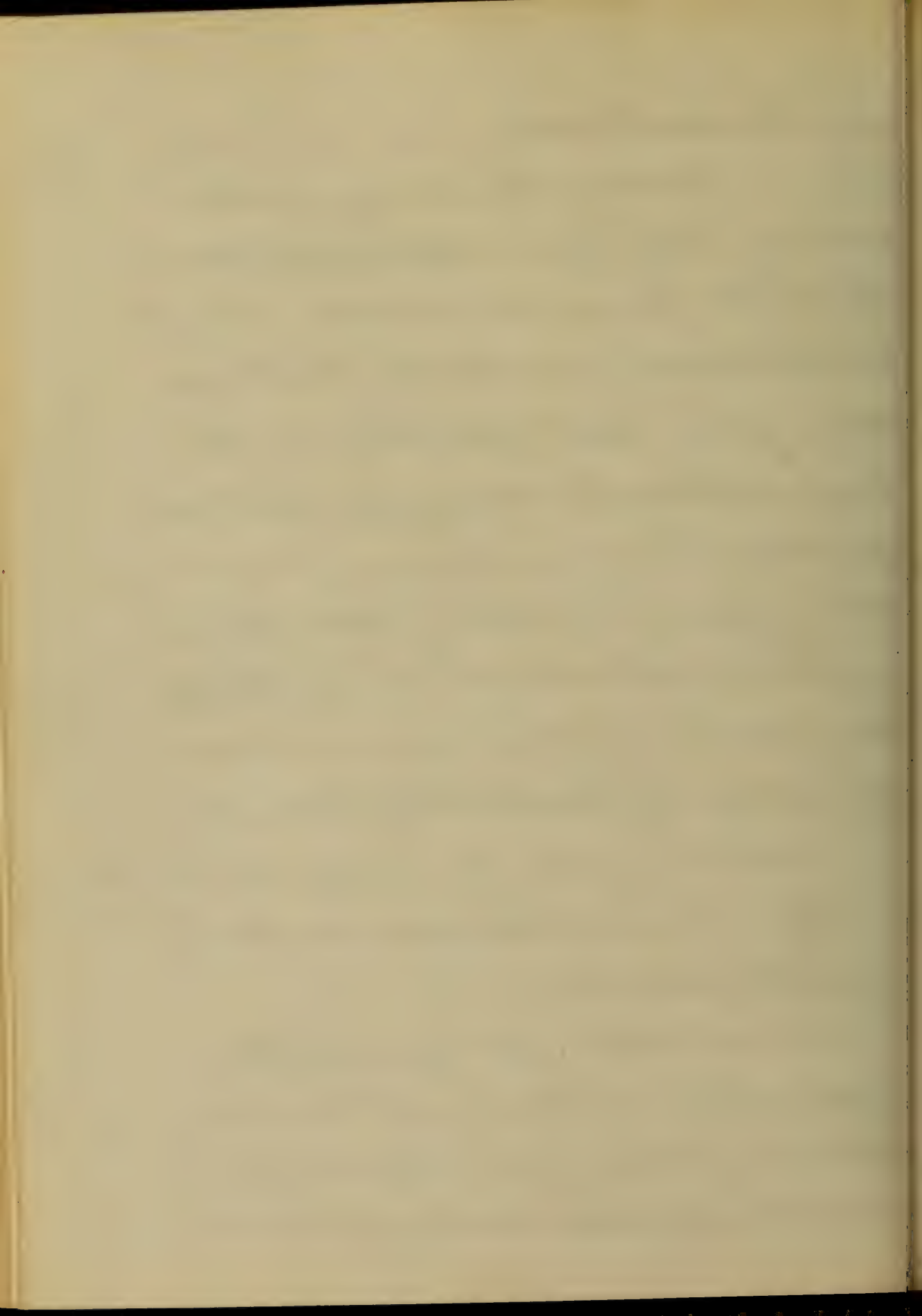
Anaesthesia.

Among the many facts which have been developed, and lead to the rapid advance, almost revolution in medical doctrines during the last fourth of a century; Although many of vast importance to our science; there are none equal to that of Anaesthesia.

Scarcely not one which of itself has contributed so much to the liberation of humanity from pain,

"Which is perfect misery, the worst
Of evils, and excessive, overturns
All patience."

The alleviation, and palliation, of suffering comprehends an important portion of the object of medical science, enobling this ob-



ject, and rendering it inferior in usefulness and high purpose to no other occupation.

The mere idea of being subjected to the tortures of the surgeons knife, an idea by no means fantastical, alone, would be sufficient to place many who are not possessed of great courage in a condition to require medical council. This timidity has induced many no doubt to incur dangers, which in many cases have resulted fatally, by procrastinating the surgeons interference in order to be conservative of supping; which dangers are now dispelled, pains avoided, and lives preserved, by the application of this gracious and benevolent discovery.



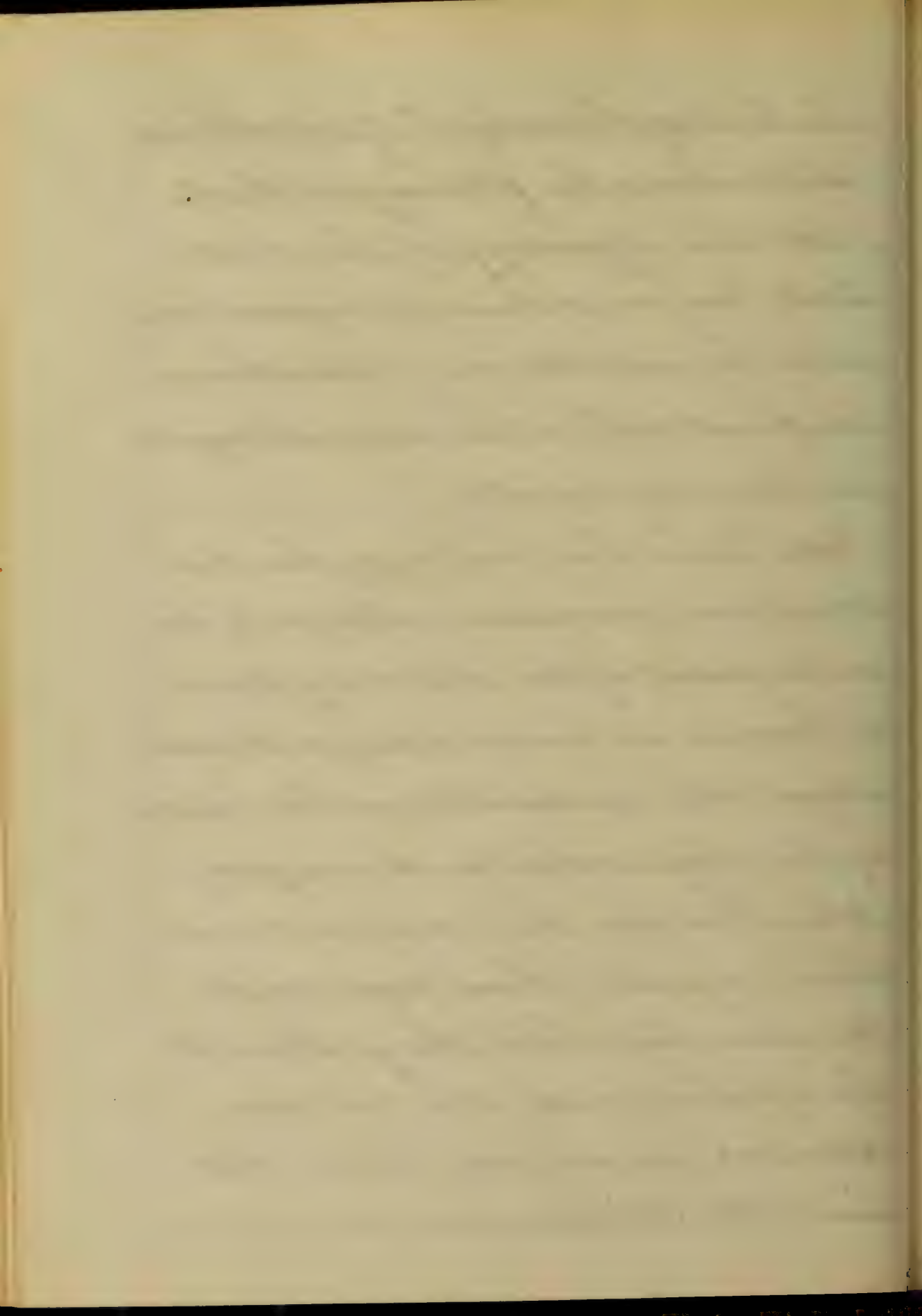
In treating the subject of anaesthesia,
I shall observe the following method.

1st. The etymology of the word.

2nd. Give an outline of my own views
as to the importance of anaesthesia
compared with other medical agents,
or classes of agents.

3rd. Give a brief history of the dis-
covery, and progressive stages of the
development of this discovery, before
it became so universally acknowl-
edged to be invaluable in the hands
of the physician, and surgeon.

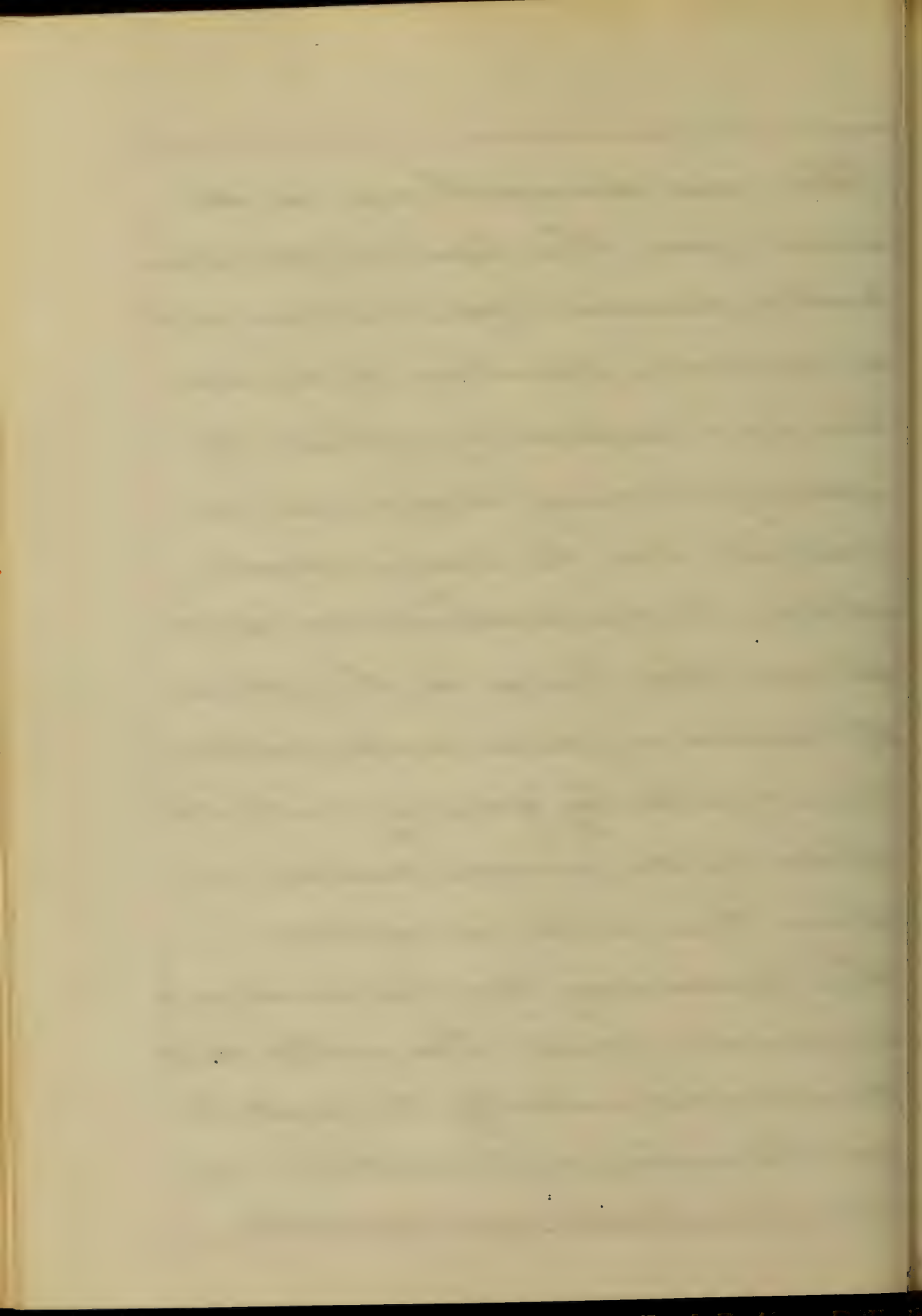
4th. Describe the various anaes-
thetic agents, their mode and
measure in which they should
be applied, and the circum-
stances in which their use
is indicated.



4

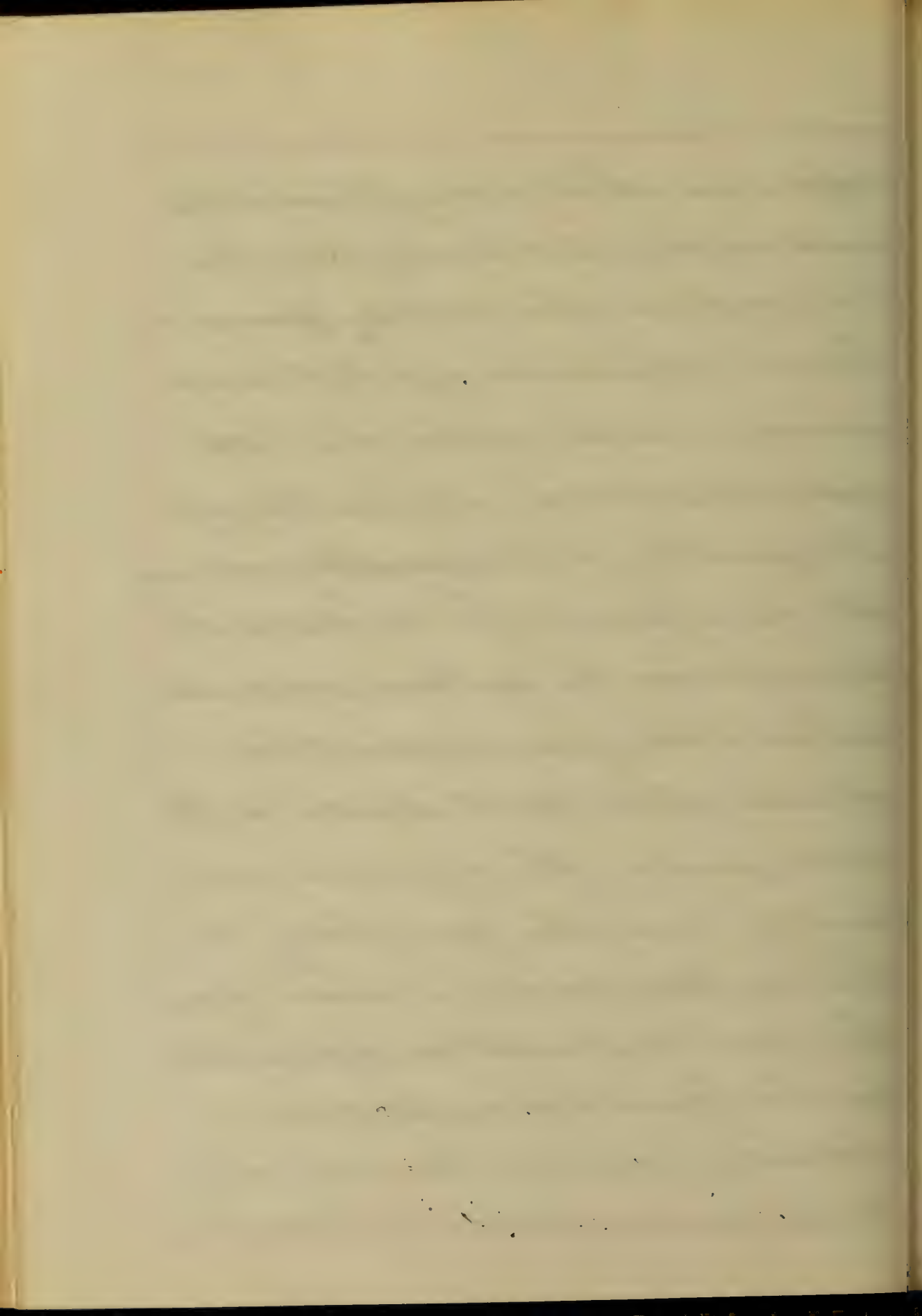
The word anaesthesia is derived from the Greek a, privative, and aco-baronai, I feel. As now used it means a privation of sensation, and especially of that of feeling. It may be general or partial. But the term is most applied to agents which are received into the lungs in the form of vapours or gases, and produce their effects by passing with the blood to the nervous centers on which their action is exerted.

Thus producing for the most part a general effect. The intellectual faculties are probably the first to feel the influence of anesthetic inhalations, a sort of intoxication



5-

supervene, which is very transient, and imperfect power of regulating motion. The sensory ganglia become afterwards affected, and sensation and motion are both suspended, and ultimately, if the quantity of the quantity inhaled be sufficient the medulla oblongata has its actions suspended or destroyed, respiration stands still, and death is the consequence. The affect is generally from the periphery to the centre, and in man from the lower extremities upwards, in the lower animals from behind forwards. The nerves of sensation are affected before those

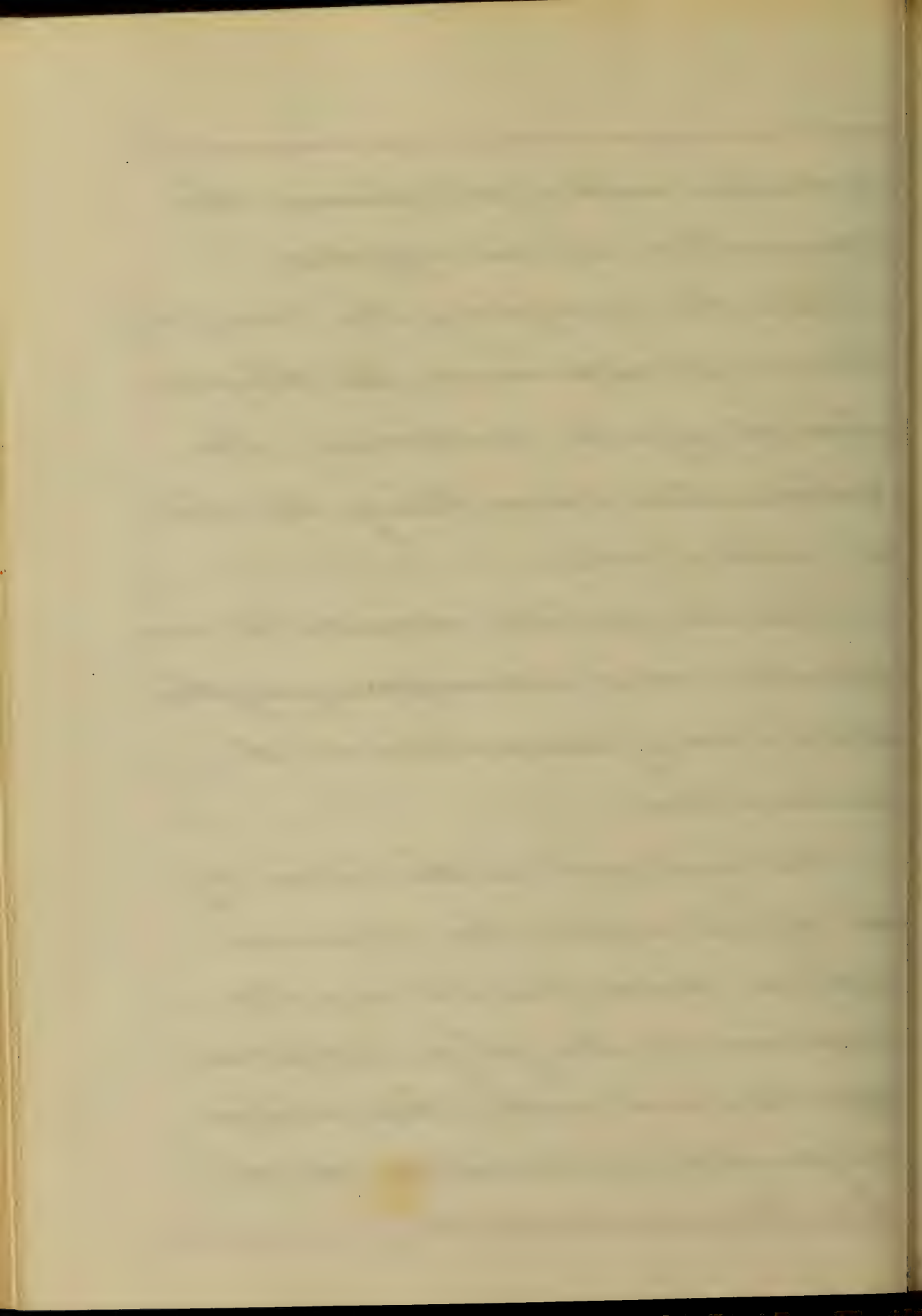


of motion, and of all times the conjunctiva is last affected.

After the periphery, the cerebral lobes next experience its physiological effects, producing the exhilaration resembling alcoholic intoxication.

Next the spinal marrow becomes affected, and accompanying this stage loss of sensation and locomotion.

Next and last in the train of its effects upon the nervous system medulla oblongata experiences its physiological effects, and with this stage respiration is arrested, and life becomes extinct.



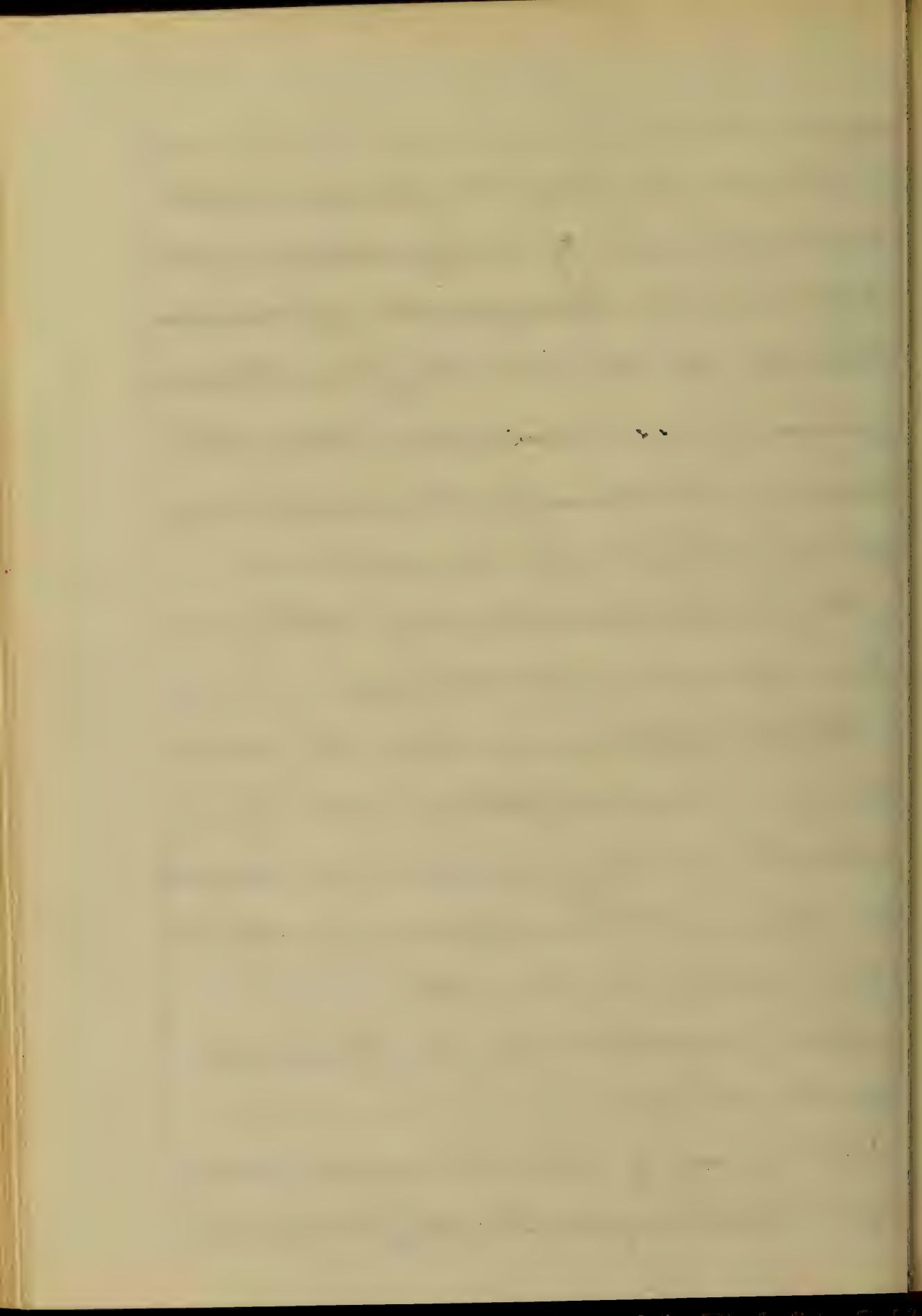
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No one can fail to appreciate the vast amount of importance to be attached to these aspects of anaesthetics, in the hands of a skilled physician or surgeon; and their discovery certainly compares very favourably as to importance for usefulness to any other in the science of medicine.

What appliance can be more noble or ennobling than one by which we can palliate or arrest a degree, of the suffering which humanity is heir to?

Such appliances we have in anaesthetics.

The first of exalted and merciful duties for the physician to

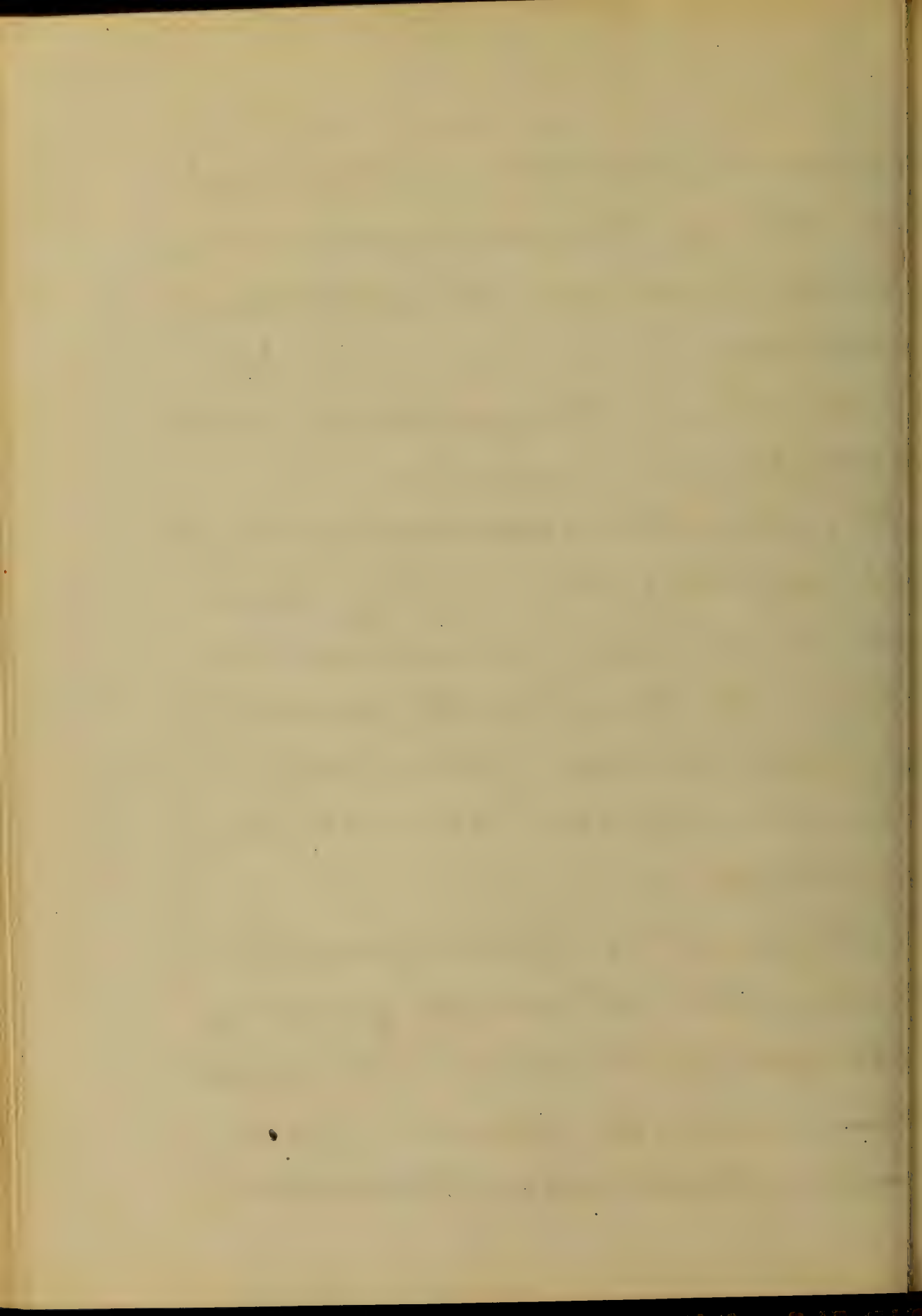


perform, is to preserve and prolong the lives of those who have committed to his care their tenderest interests.

The second to avoid arrest and alleviate their sufferings.

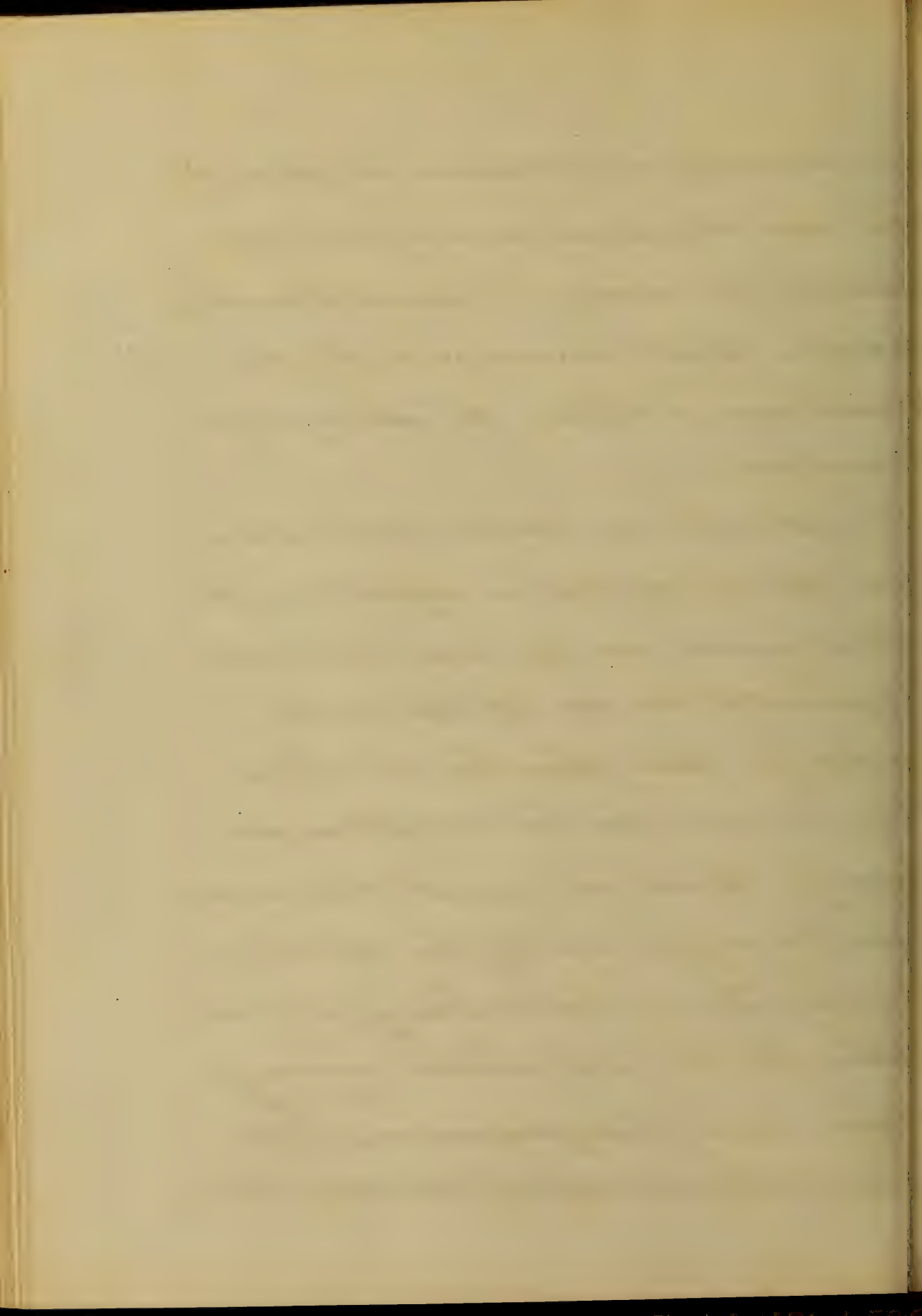
The first is to be accomplished without subjecting them to any pain which can safely be avoided; so there is no branch of the practice of medicine upon which the avoidance of pain has not an important bearing.

Therefore it is by ^{no} means surprising that the minds of many who appreciate the science of medicine, and its elevation, and advances, should have be^{en} directed to



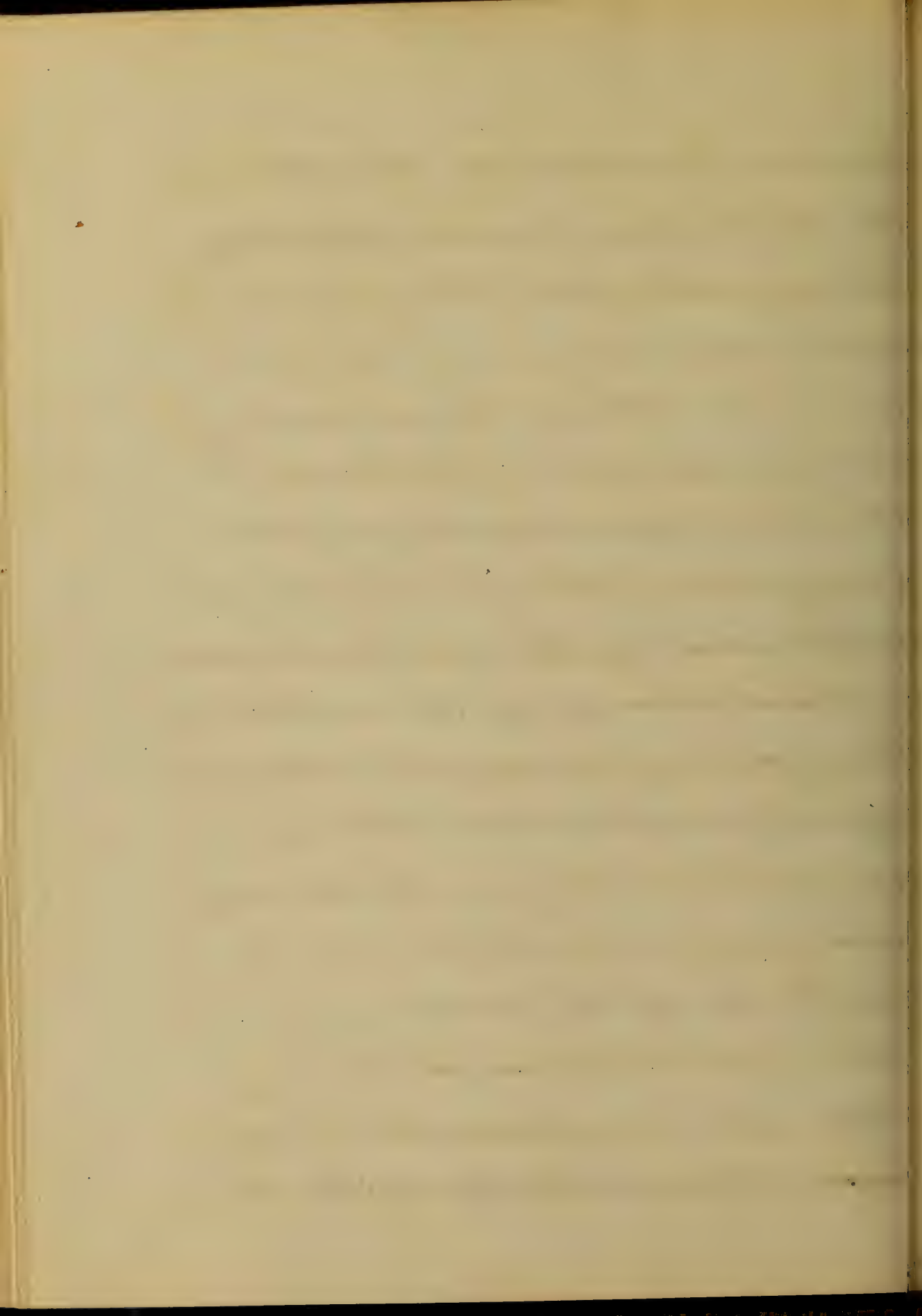
the discovery of a means to prevent the unnatural suffering concomitant with many surgical operations, as also that connected with the discharge of certain physiological functions.

And when we contemplate the simplicity of certain agents, with whose action we are now so well acquainted, we are struck with surprise that this should have been delayed for so recent a discovery. And we cannot but regret for the sufferings of the past, owing to the want of light being evolved from the chaos in which many ^{laboured} before us in the profession, but from which we of modern times



are being so rapidly liberated by the advances of modern physiology. Having attempted feebly and perhaps ineffectually, in a brief space to give an outline of the etymology, and physiological effects of anaesthesia; and to prove the magnitude of importance to be attached to its employment, by the medical man in the discharge of his sacred duty of mercy among ~~among~~ the sick and suffering; I shall now attempt to give a brief history of the discovery and progressive stages in the completion of the means by which this end is accomplished.

For which information I am indebted principally to the lec-

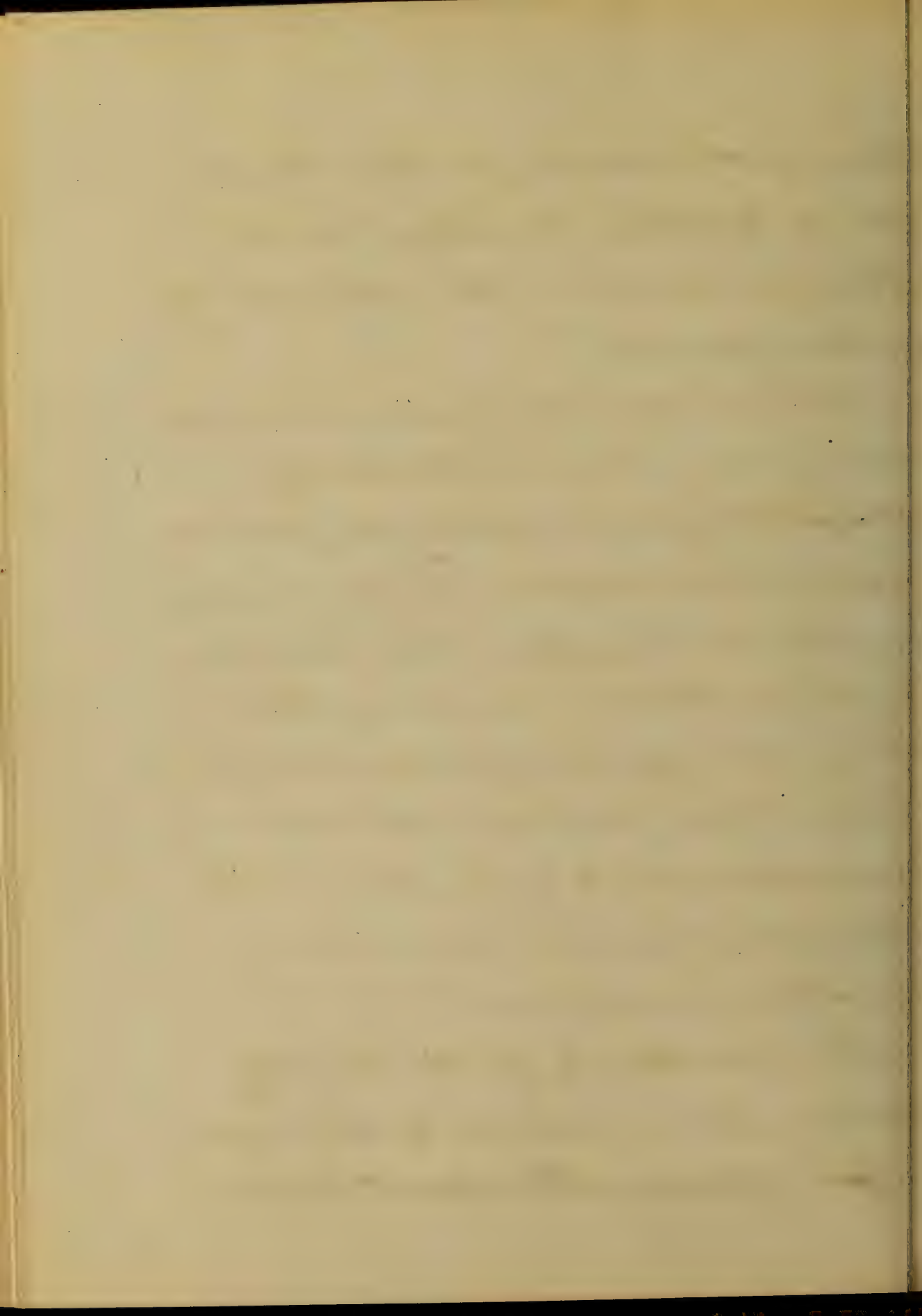


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ture of the accomplished Profes-
sor of "Materia Medica and
Therapeutics" in the University
of Maryland.

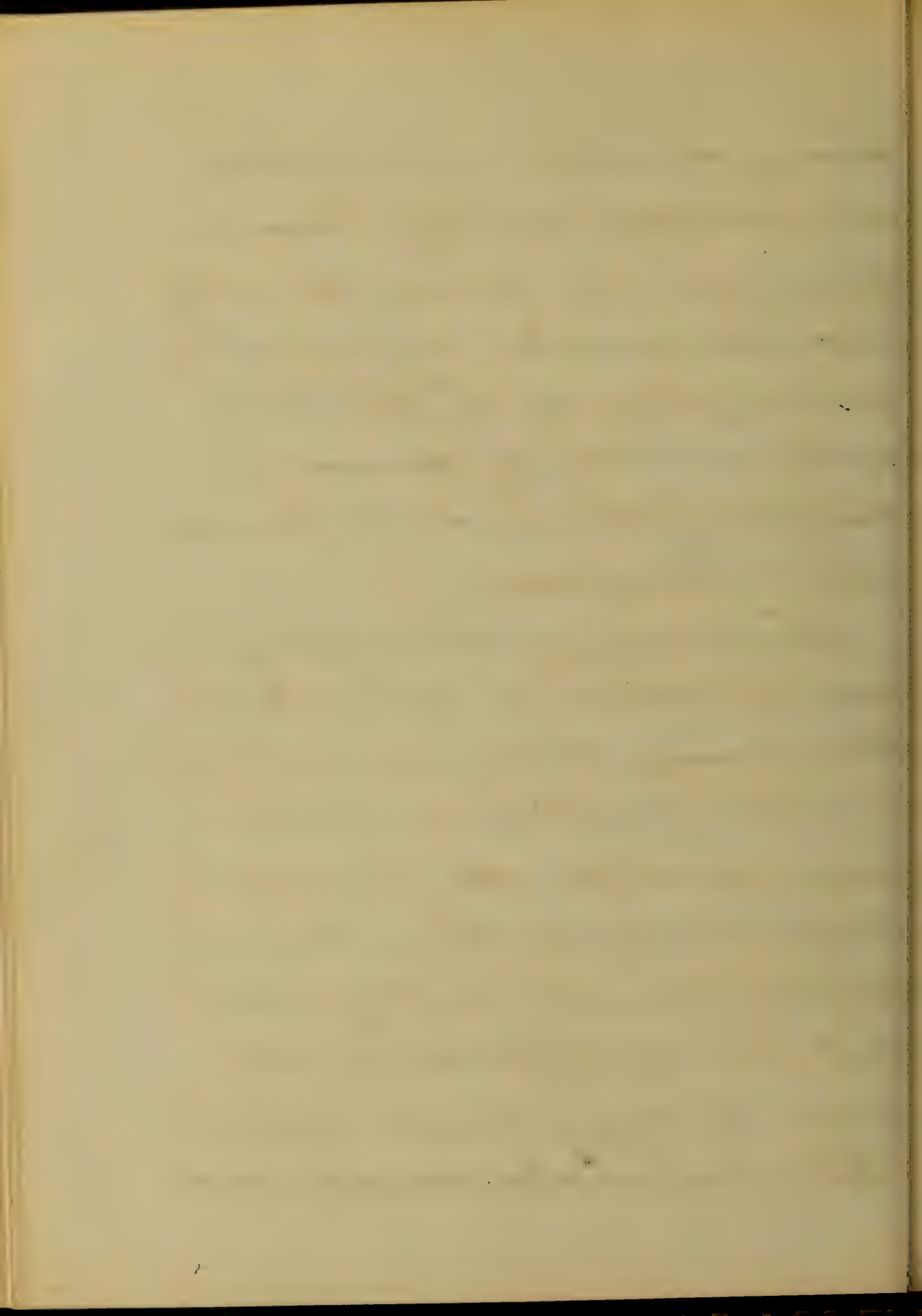
I shall consult my own observation
during my stay in "University
Hospital," for the affects to be gained
and fears anticipated in the employ-
ment of these agents. This has been
sufficient to assure me, among other
things, of the efficiency and value of
anesthetics, and that the dan-
gers attendant upon their ad-
ministration have often been
greatly overestimated.

It is certainly great cruelty
to subject a patient to the ago-
nizing pains attendant upon



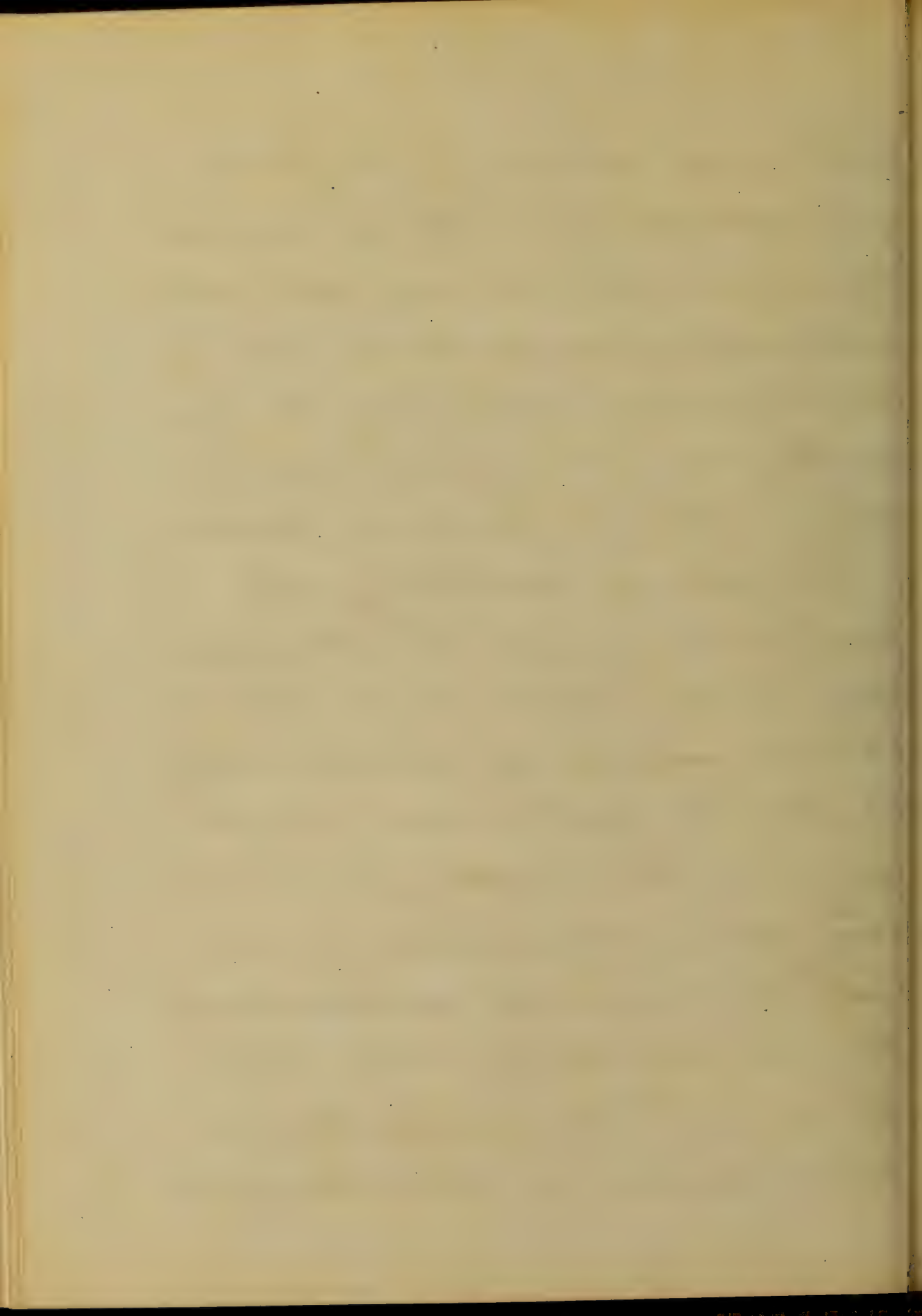
many surgical and obstetrical operations, morally harmless if we possess a means morally harmless, and but very slightly if at all physically so, ^{to prevent it.} Such an agent we certainly possess in Sulphuric ether and its kindred agent Chloroform.

The discovery of the employment of anaesthetic inhalations like many others of importance has been claimed by and the honour connected with, if honour it can be termed when it was probably more the result of accident than of ingenious investigation, by different individuals. Chloroform inhalations were used



as long ago as 1796 by Dr Pearson of England, but with no eminent degree of usefulness, and not to the production of anaesthesia, but in the treatment of pulmonary diseases. They are also mentioned by other authors of the same period.

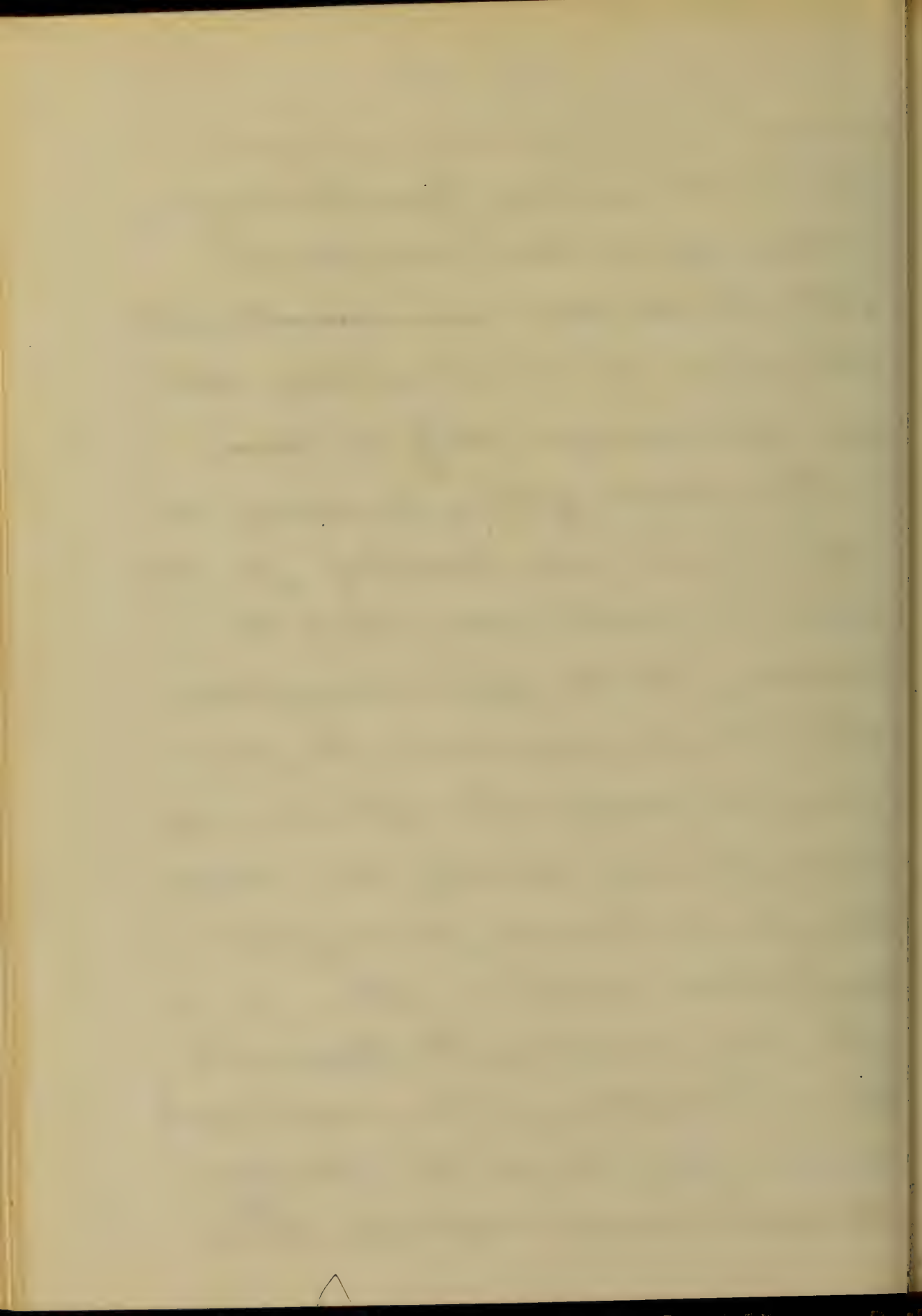
The idea of controlling the pain of surgical operations has long been a favorite one, and various means, at various times resorted to with a view of realizing it. These attempts had very generally failed, or met with but partial success until the introduction of ether inhalation. Sir Humphrey Davy reported success in controlling pain



in his own person by inhaling nitrous oxide, and Mr Horace Wells made some experiments with the same agent not entirely without success as early as 1844.

The credit of this discovery is due to our own country, for it was not until 1846, that Dr Morton of Boston after many cautious trials, performed the first operation under the influence of anaesthetics, namely the extraction of a tooth, and the agent used was sulphuric ether.

He then induced Dr Warren to use inhalations of the same agent in an operation at the Massachusetts General Hospital. This



operation was performed Oct. 15th 1846. And the effect was but partial. On the next day another operation was performed by Prof. Hayward, in which operation ether was used with the effect of rendering the patient completely insensible to pain. This was the beginning of the discovery, and from this it spread through the civilized ^{world.} with an astonishing rapidity, and from all sources were promulgated most extravagant reports of its success.

In January 1847 ether inhalation was first used to contrroll the pains of parturition by J. Y. Simpson M.D., of Edinburgh.

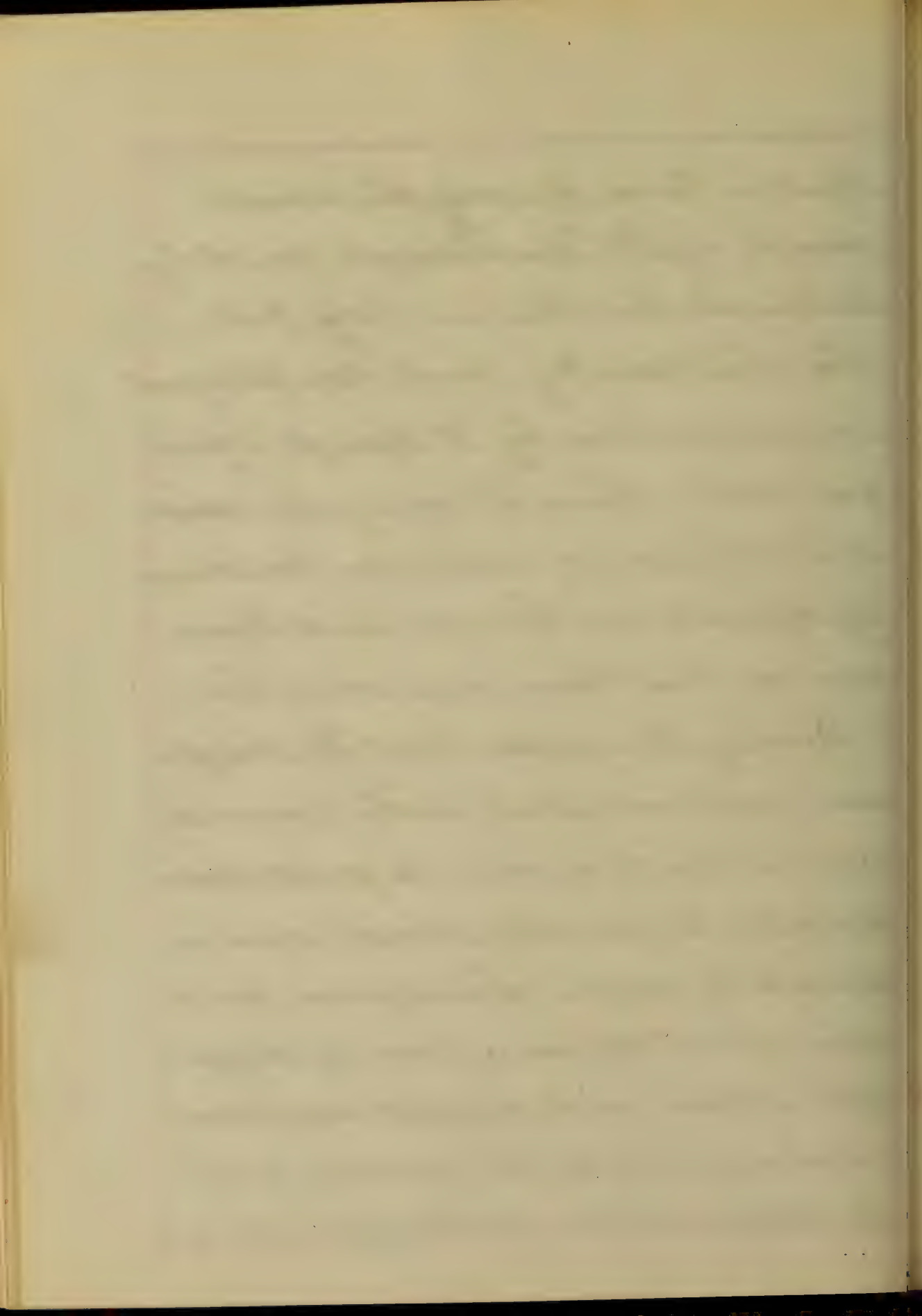
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And in Paris during the same month by Dr Deschamps, and by Dubois at his Clinique Feby. 8th.

In this Country first employed in parturition by Dr Kemp April 7th 1847. Thus it may be said that the use of ether in Midwifery spread over Europe and America in less than six months.

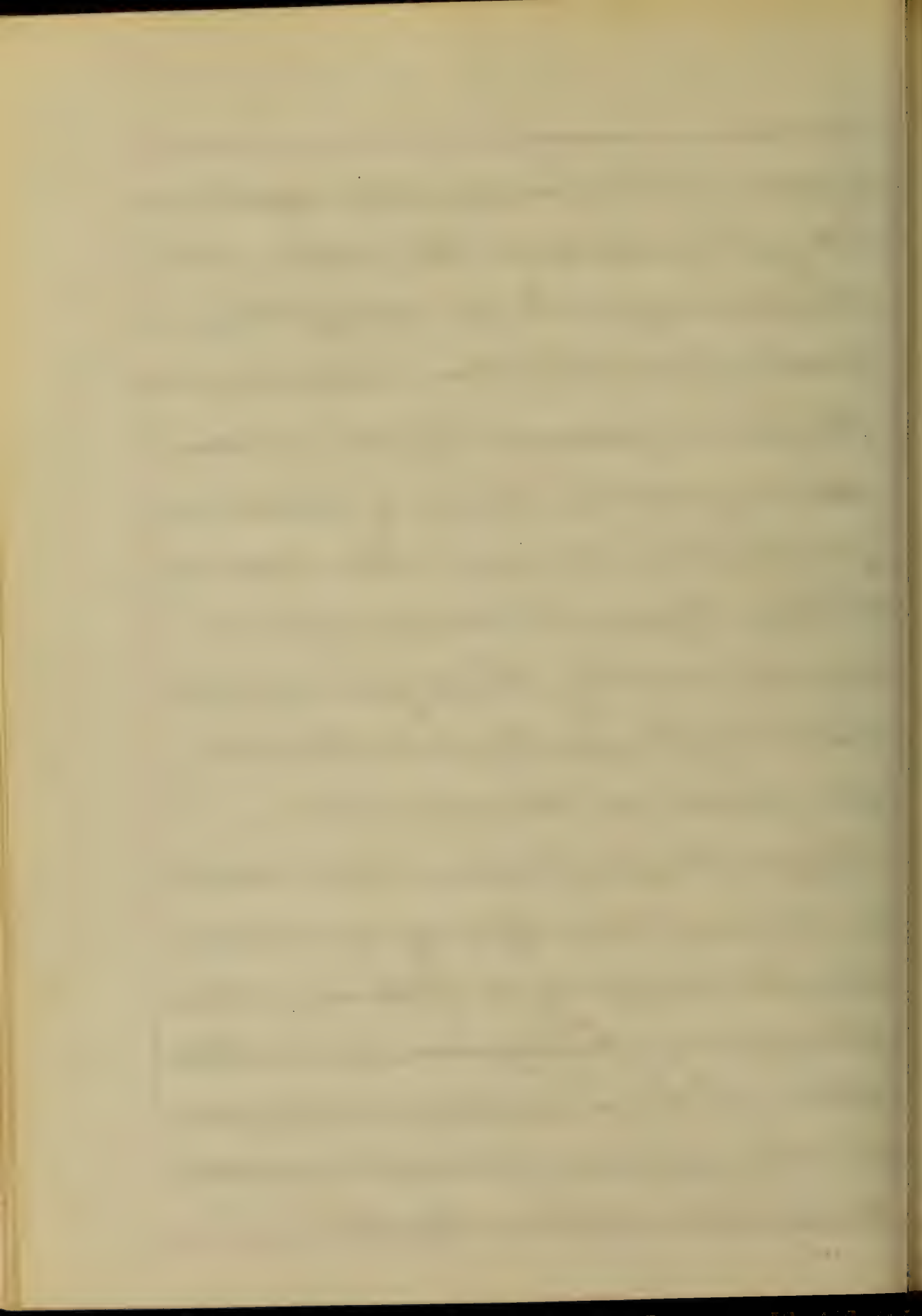
During the year 1847 Dr Simpson experimented with various agents with a view to find some substitute for ether, and was induced to prefer chloroform, and soon used it in a case of difficult labour with perfect success.

Introduced to the notice of the profession by so distinguished

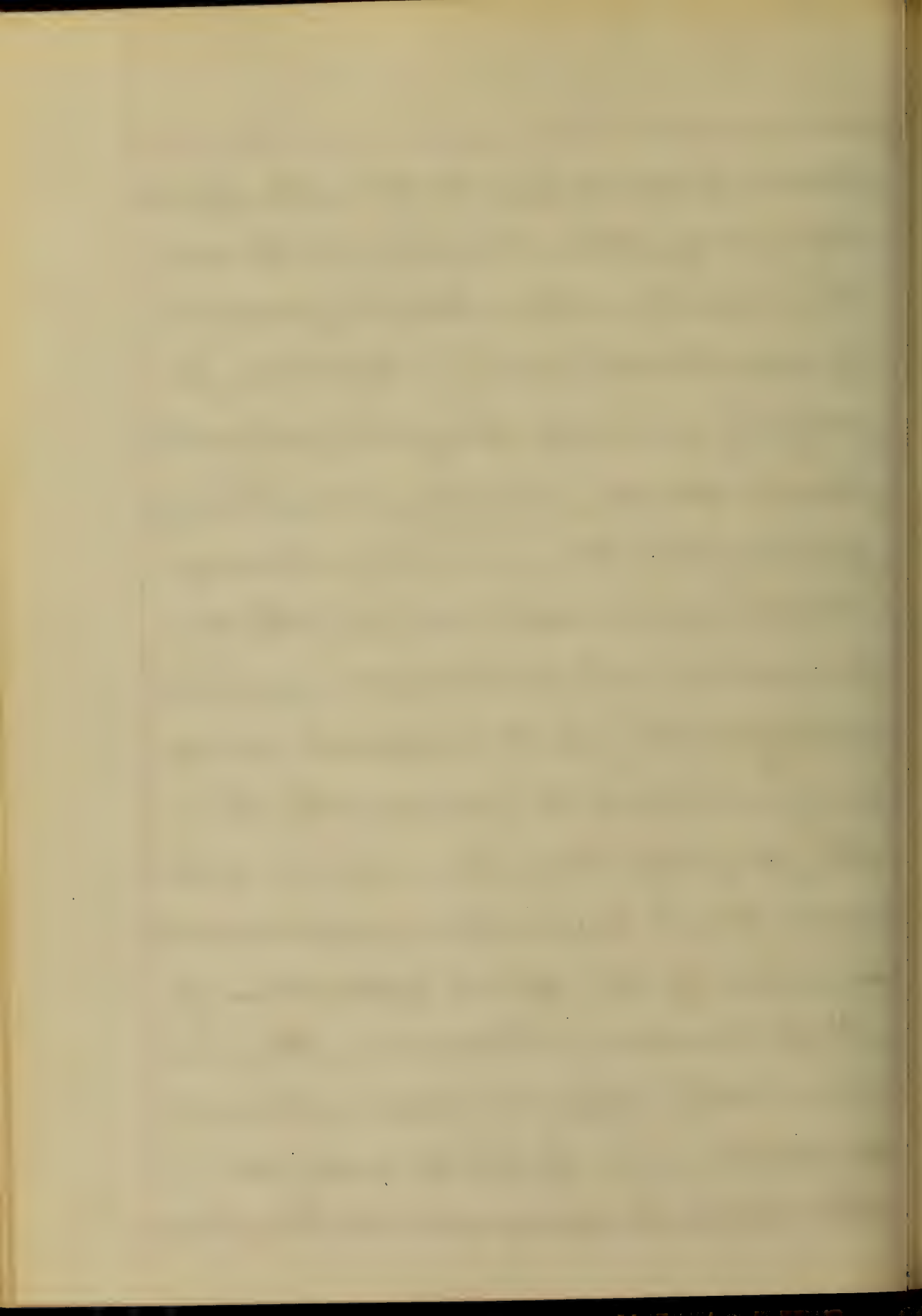


a person as Dr Simpson this agent was likely to supplant the ether, but a check was give to the use of this artificial in particular and anaesthetics in general by the occurrence of several cases of death reported from its use. Then anaesthetics began to loose ground as rapidly as they had gained it, but not all, for they continued to be used in many cases.

Different agents have been used as anaesthetics by way of inhalation, principally sulphuric ether chloroform, chloroform, and chloric ether. Ether is an artificial preparation, the product of alcohol and sulphuric acid distilled together.



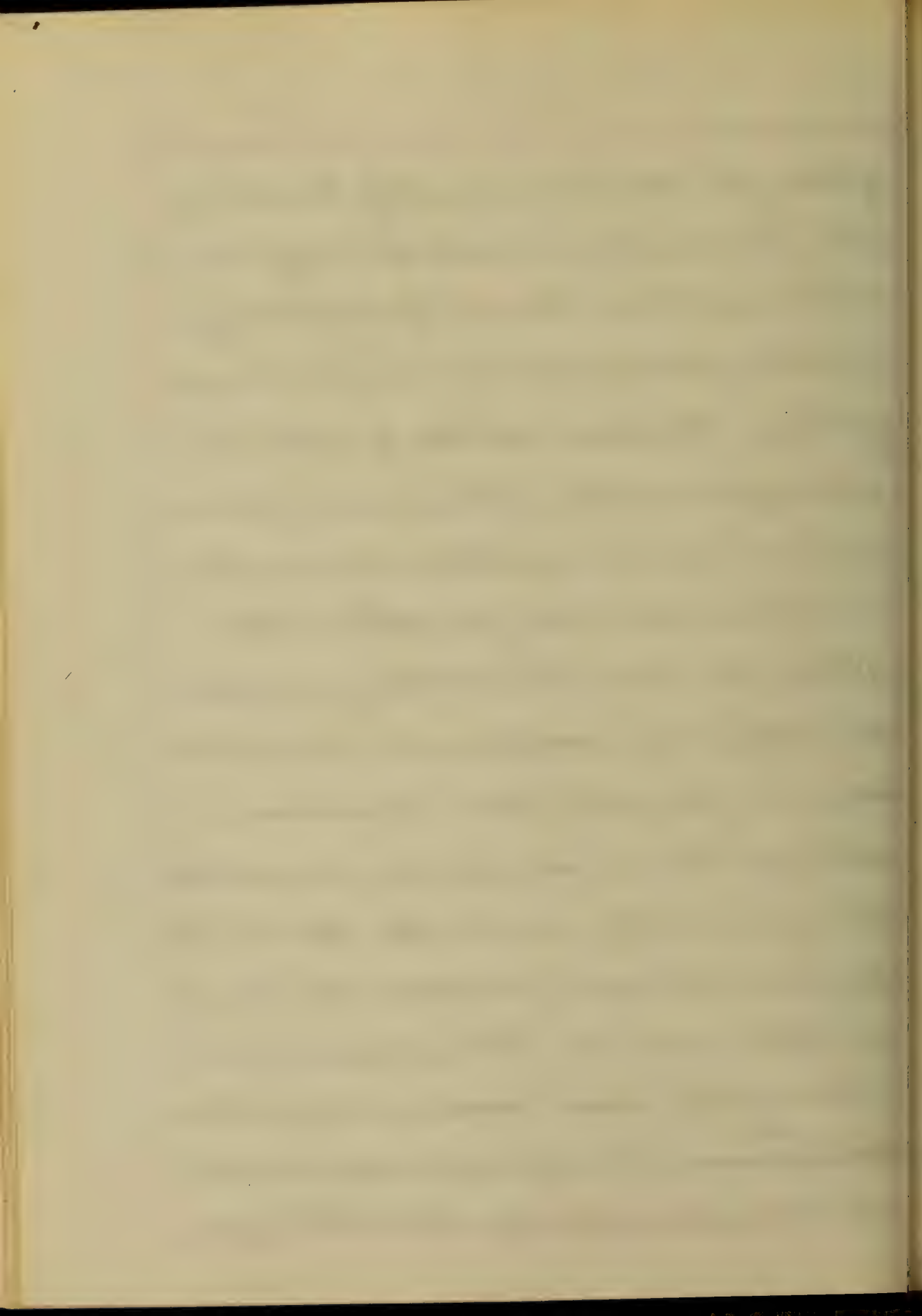
Alcohol = $C_2H_6O_2 = C_2H_5O + HO =$ the hydrated
 oxide of ethel, the action of SO_3 upon
 this equals ether. Which purified
 by redistillation with a solution of
 potassa gives a limpid colourless
 fluid, specific gravity .7500, boiling
 point below 95° . It is extremely
 volatile and explosive in the air
 by ignition. It is a powerful excitent
 and if allowed to evaporate on an
 external part is refrigerant. From
 this property has been used to pro-
 duce local anaesthesia, and with
 success, by the Spiro apparatus of
 Dr Richardson. Chloroform. This is
 chemically different from ether, it
 is composed of C_2Cl_3H , and in
 chemical language is a Trichloride



of Fomyle. Was discovered by Gauthier of New York, Soubeiran and Liebig, about the same time. Made by distilling together, water alcohol and chloride of lime. Boils at 140°. Sp. gr. 1.480, it is not inflammable. It is more powerful as an anaesthetic than ether in the proportion of eight to one.

It is far less stimulating, and the stage of excitement is much shorter, if a full dose is administered this is scarcely perceptible generally, and the patient passes almost instantly into a sleep more or less profound.

This is now more ~~commonly~~ used than ^{ether} ~~Suboxide~~, its superior advantages are principally that it is far



more agreeable to inhale, and much less will produce anaesthesia.

Chloric ether equals 3 parts of ether 2 of chloroform and 1 of alcohol

The same general indications for its use as those of ether or chloroform. While lauding so highly the usefulness and value of anaesthetics, I would by no means recommend their indiscriminate use, for this as every thing else that is good may be abused. There are many ~~trifling~~ ^{minor} operations in which general anaesthesia is used in which it is much better to omit it, than to incur the slight risk, for same risk there is since well authenti-

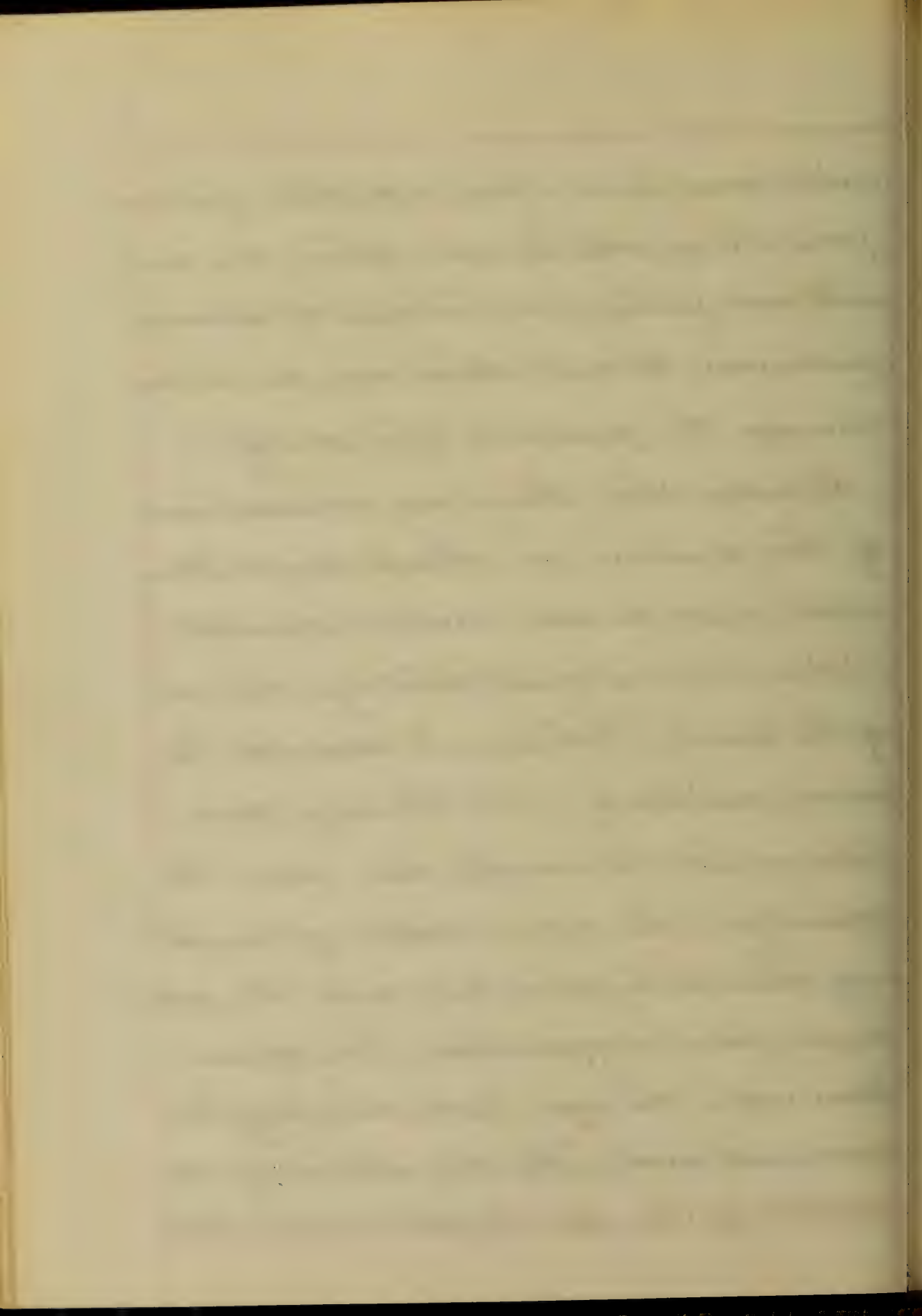
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21.
cated case have been reported of death
from its effects. Therefore when the end
will not justify the means it is most
judicious to omit this use, and dis-
courage the patients timidity.

Besides this there are conditions
of the system in which such pow-
erful agents are contraindicated.

Where there is great debility, disease
of the heart, ^{or} Phthisis, it should be
used cautiously. In bloody opera-
tions about the mouth, lest from the
paralysis the reflex action of cough-
ing should be prevented, and the patient
suffer from suffocation. In opera-
tions upon the eye, lest vomiting be
induced and with the straining the
waters of the eye be forced out. This



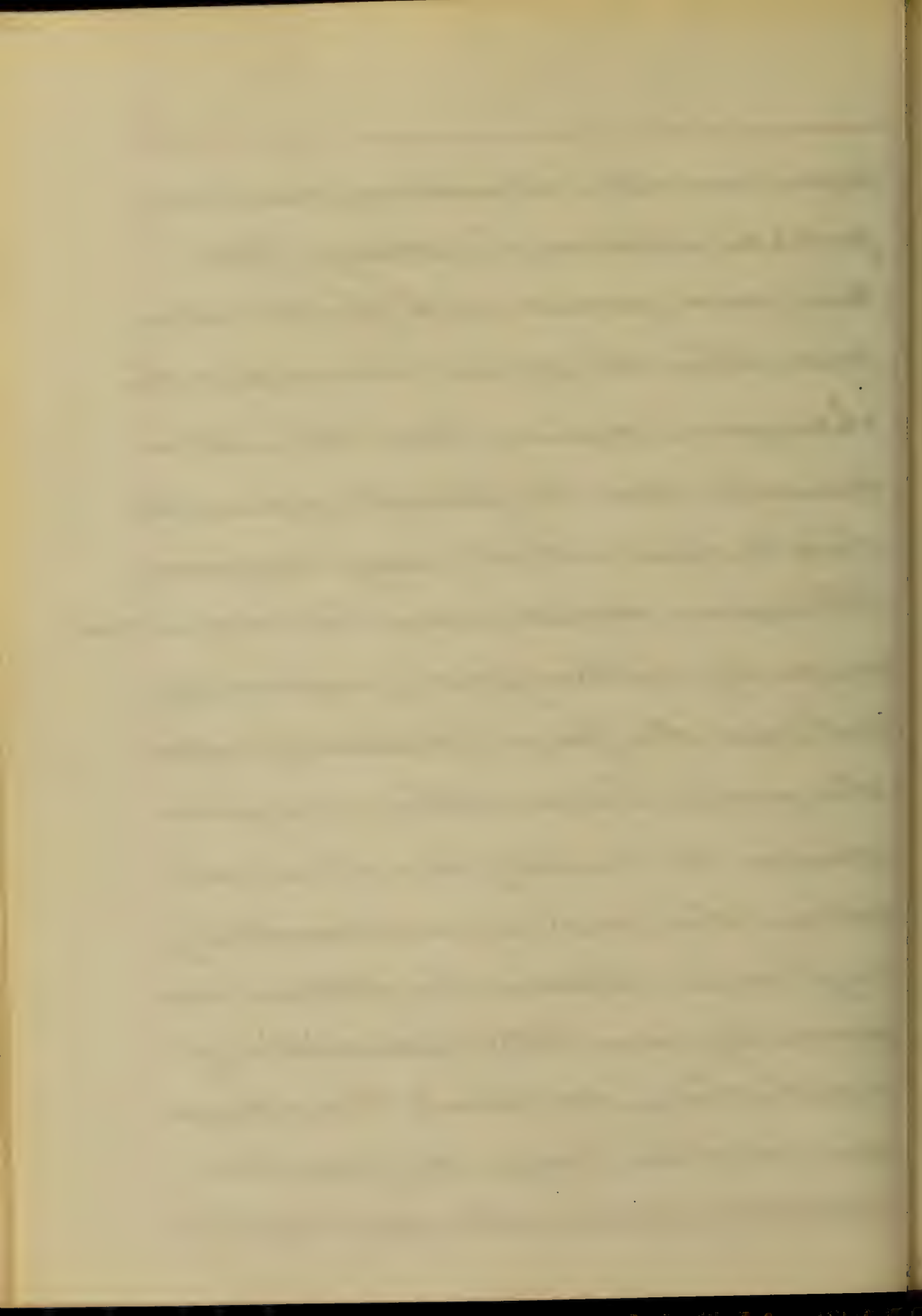
is particularly dangerous after a full meal. Austin says that chloroform with proper care, may be given to any patient who is in a condition fit for an operation. The one consideration he says, is the inhalation of an atmosphere composed of not more than three per cent of chloroform. The ordinary means of administering chloroform is on a handkerchief, made in funnel shape in order to allow the air to pass freely through. Then twenty or thirty drops are poured upon it and the handkerchief held about an inch from the face, while the patient should be encouraged to take deep and full inspirations. Gradually consciousness is lost, but

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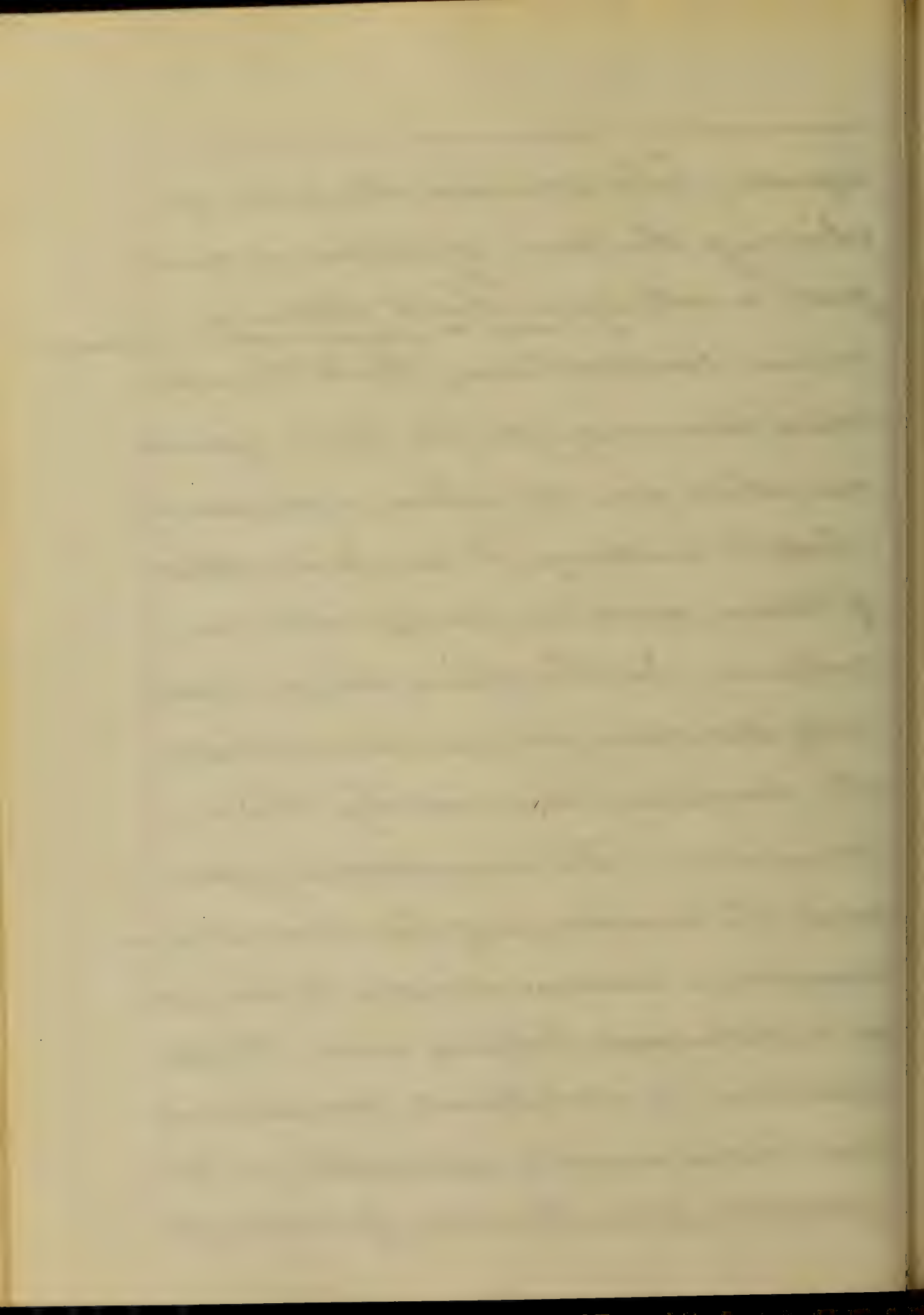
comes muscular relaxation, and deep, perhaps stertorous breathing. Stop, now, and proceed with the operation, and when the patient recovers give the chloroform again. And when it is desirable that the patient revive, let this be done without any confusion.

Chloroform should never be used without carefully watching every respiratory act, and the finger constantly upon the pulse, In no other way can danger be entirely obviated, and not in this save by unremitting vigilance. Women in labour are generally in a better condition of health, than one about to undergo an operation, hence they are better prepared to resist the effects of them.



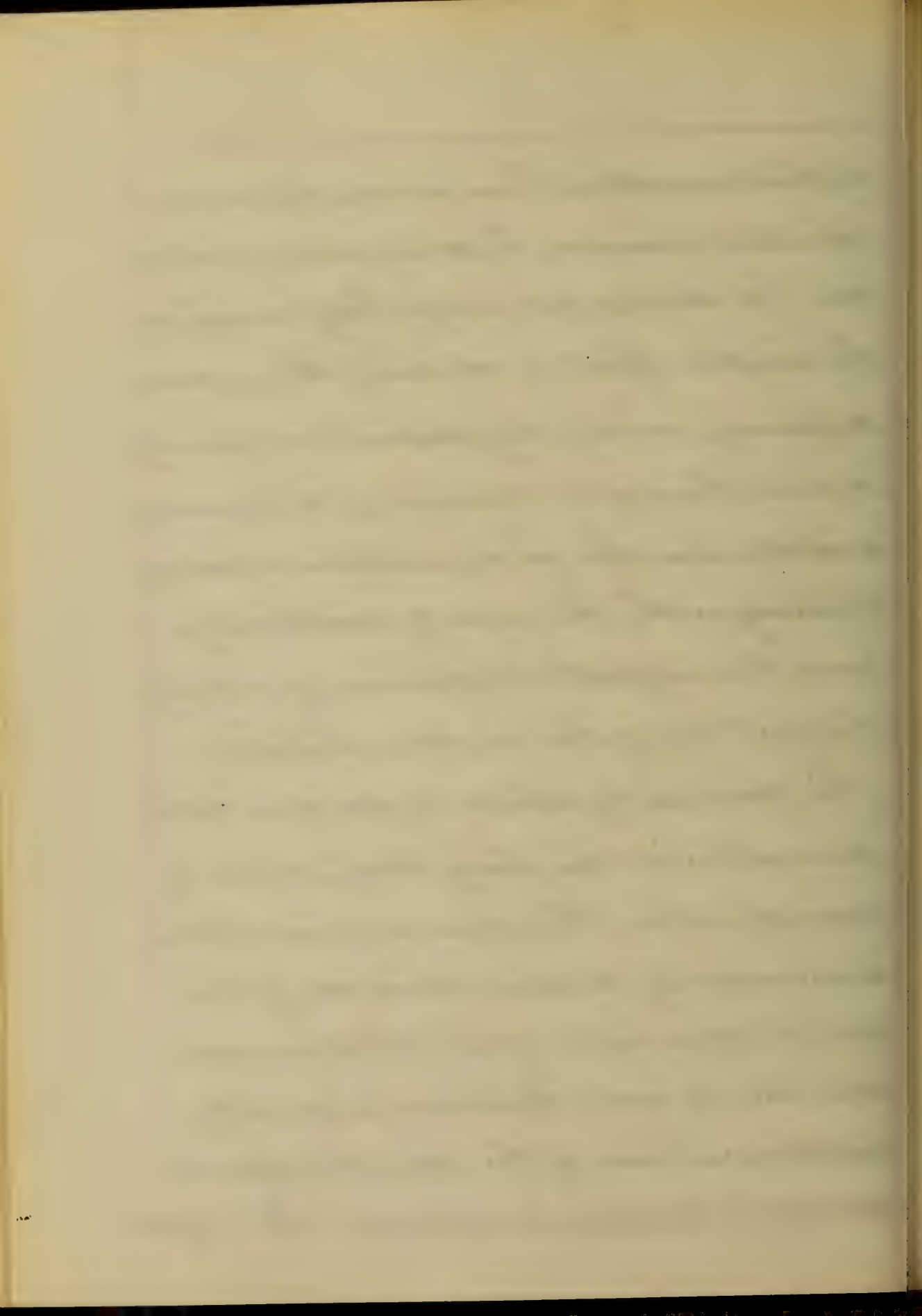
agents. Ether possesses the power of relieving the pains of labour in great part or entirely, without stopping ^{unless the full anaesthesia be produced} uterine contractions. But the only cases necessary for its full effects are where an operation is necessary.

Best to employ it in last stage of labour, and in puerperal convulsion, In the third stage it not only deadens pain but relaxes the muscles, overcoming their resistance. The annihilation of pain and the avoidance of the nervous shock sometimes consequent upon to painful or to prolonged labour, and the facilitation of obstetrical manoeuvres are indispensable advantages to be gained from the use of chloroform



in this connection. These advantages are counterbalanced by some inconveniences. We should not, says Cazeaux, "for the simple object of sparing them some suffering, which they endure courageously deprive them of the career of the husband, and deaden the imagination already trammeling with the joys of maternity, and the ineffable happiness of hearing the first cry of the newborn child."

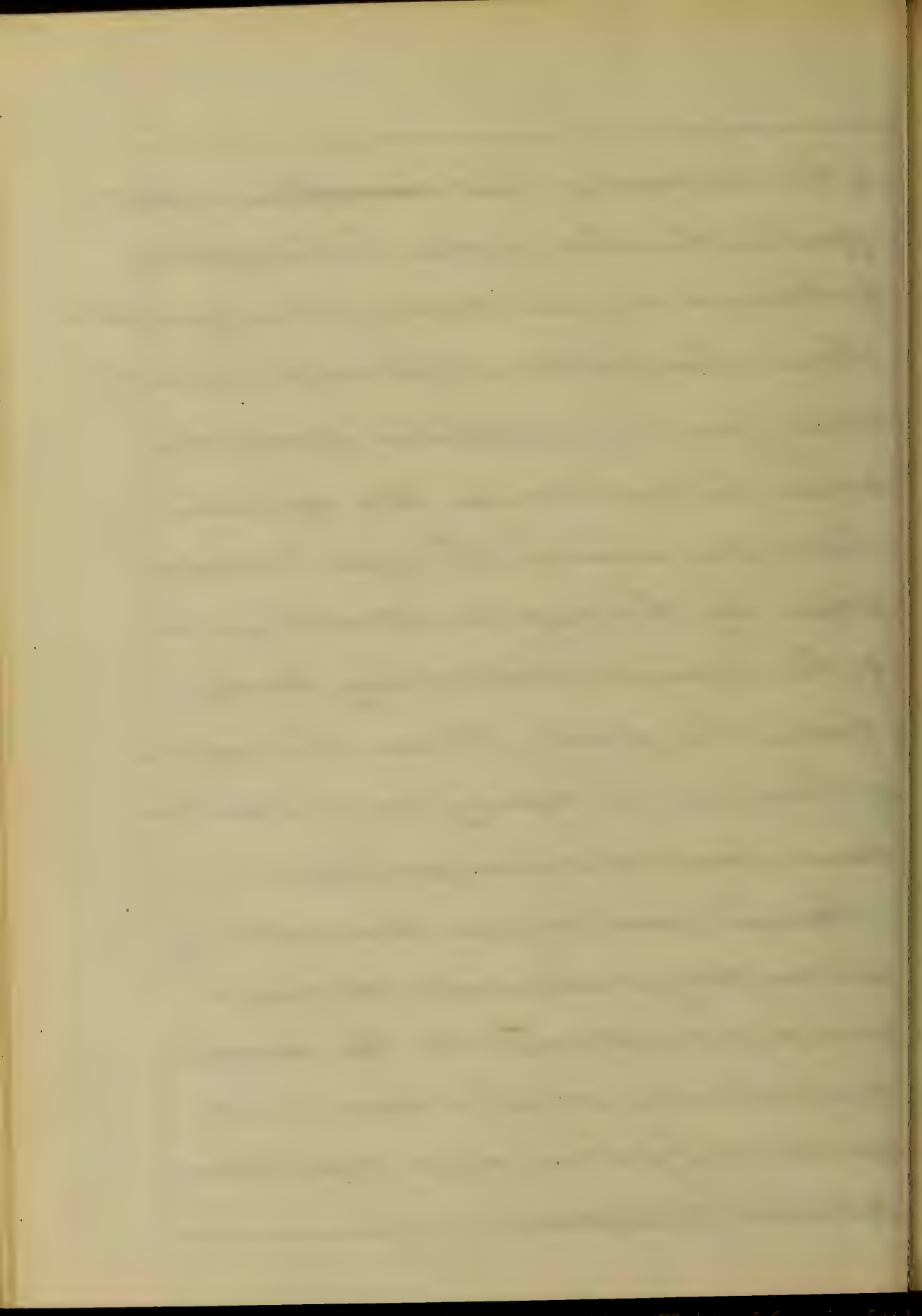
A means by which to produce local anaesthesia has long been^a subject of consideration. This has at last been successfully accomplished by the spirit apparatus of Dr Richardson, which is now by many greatly extolled, as one of the great improvements in modern medicine. The object



of this is to produce local *anæsthesia* without affecting the whole system. This is effected by throwing a very fine spray of the very volatile ether, or what is better *nigoline* which is obtained from the redistillation of coal oil,

upon the part desired to be affected. In a few seconds the part becomes frozen, by the rapid volatilization of the liquid, abstracting heat from the part. Under the influence of these effects many severe operations have been rendered painless.

Though from my own observation of its employment, and success, I would not attach, to it the measure of importance, which I have read ascribed by others, and more competent critics.

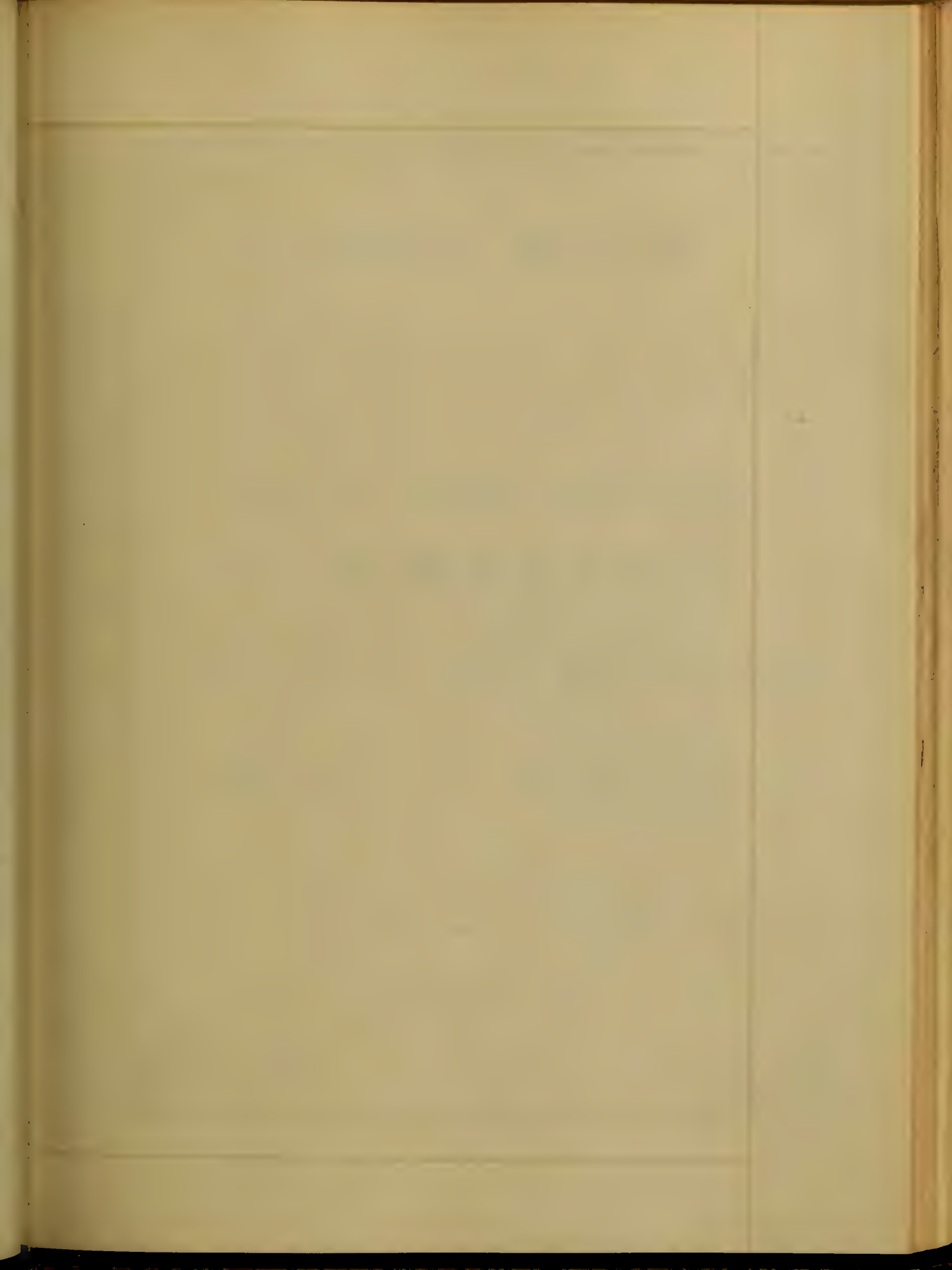


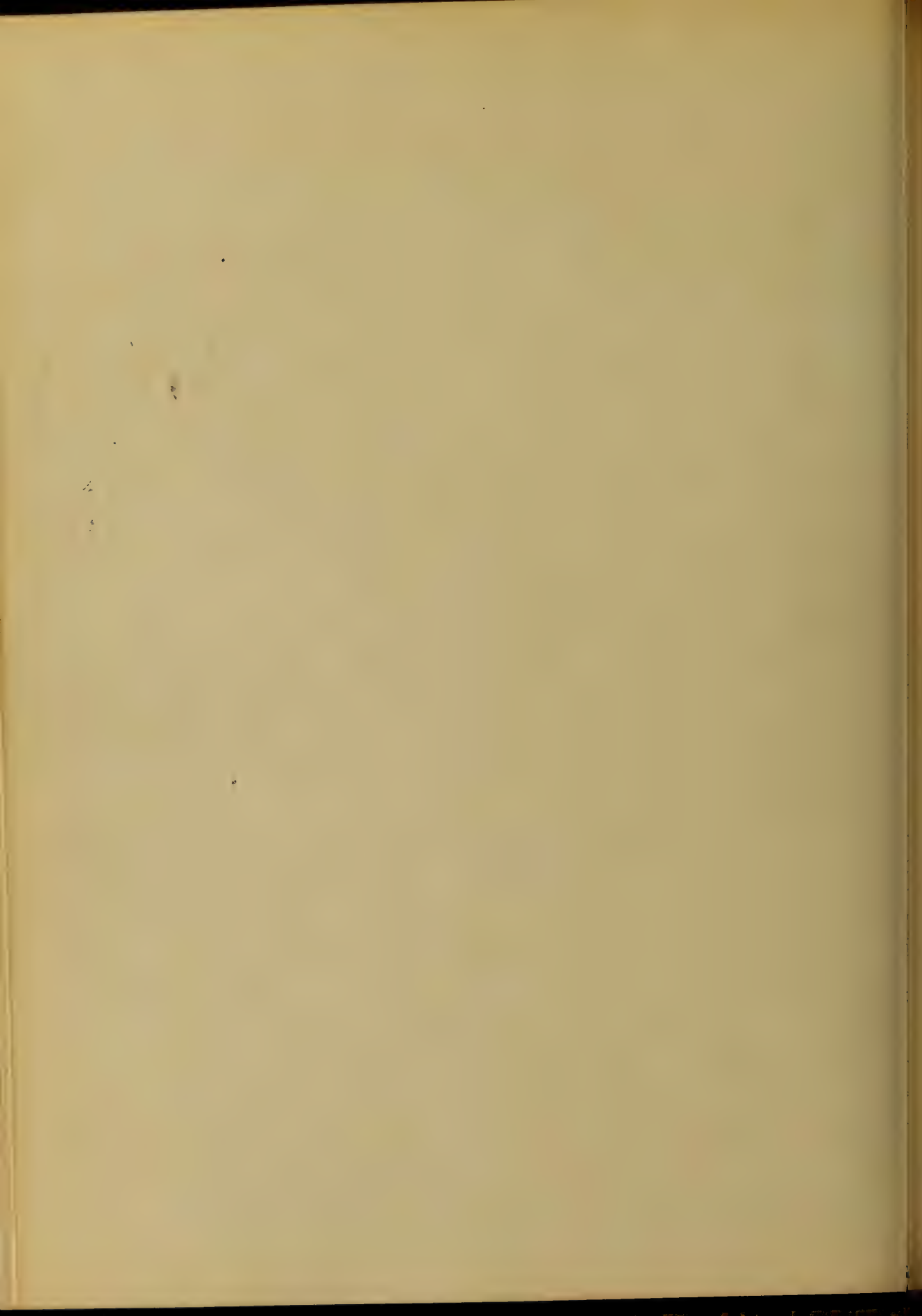
With this the latest contribution
 to anaesthesia I conclude my
 subject thesis, fully aware of its
 many defects, and the imperfect
 manner in which I have treat-
 ed this, to comprehensive sub-
 ject. I have no excuse to make
 of for its deficiency save what
 has been my fault, namely pro-
 crastiating this duty, until
 others are crowded upon me,
 which deprive me of the opportunity
 of devoting to it, the time I ^{would have} desire.

Hopeless of this production reflecting
 any credit upon myself, but ^{hopeful} that
 it may meet the requirements it is
 intended to fulfill; it is respectfully
 submitted.

Silas Baldwin









AN

Inaugural Dissertation

ON

Excrementitious Principles in the Causation of Disease

SUBMITTED TO THE EXAMINATION

of the

Provost, Regents and Faculty

of

PHYSIC,

of the

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

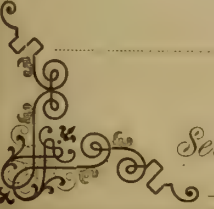
Doctor of Medicine,

by

Wm Alex Harbury

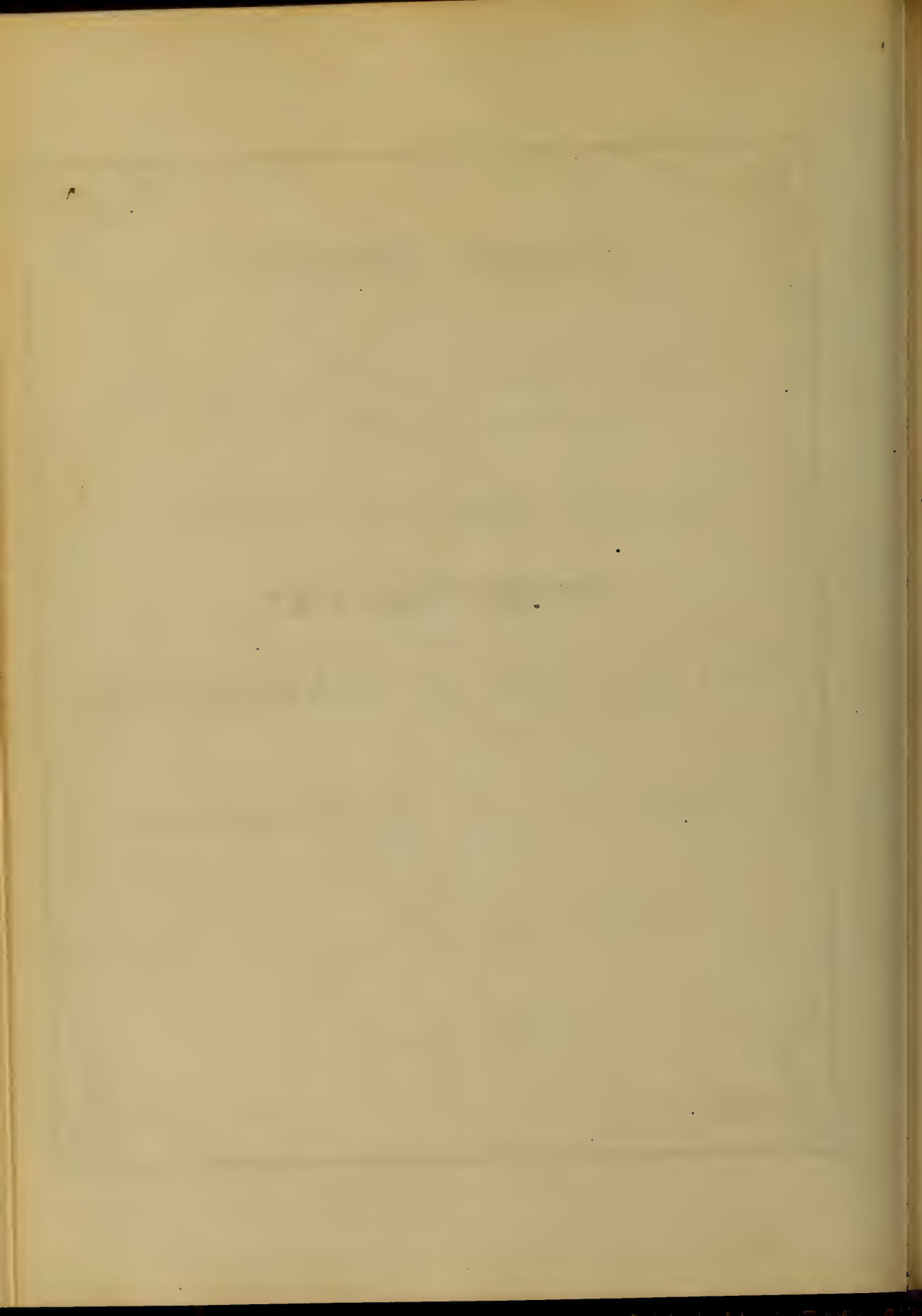
of

Maryland.



Session

1866-7.

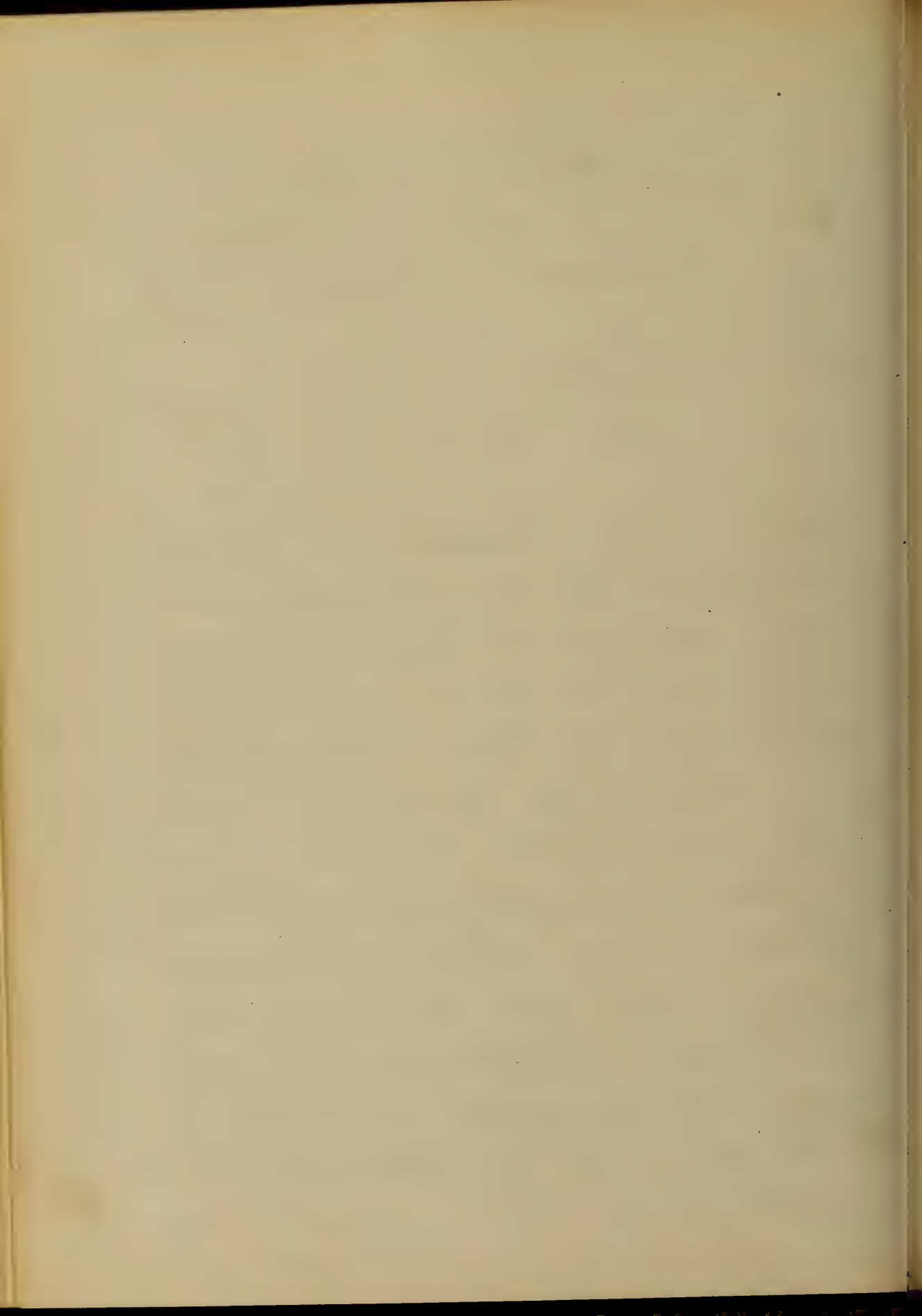


Excrementitious Principles
in the
Causation of Disease.

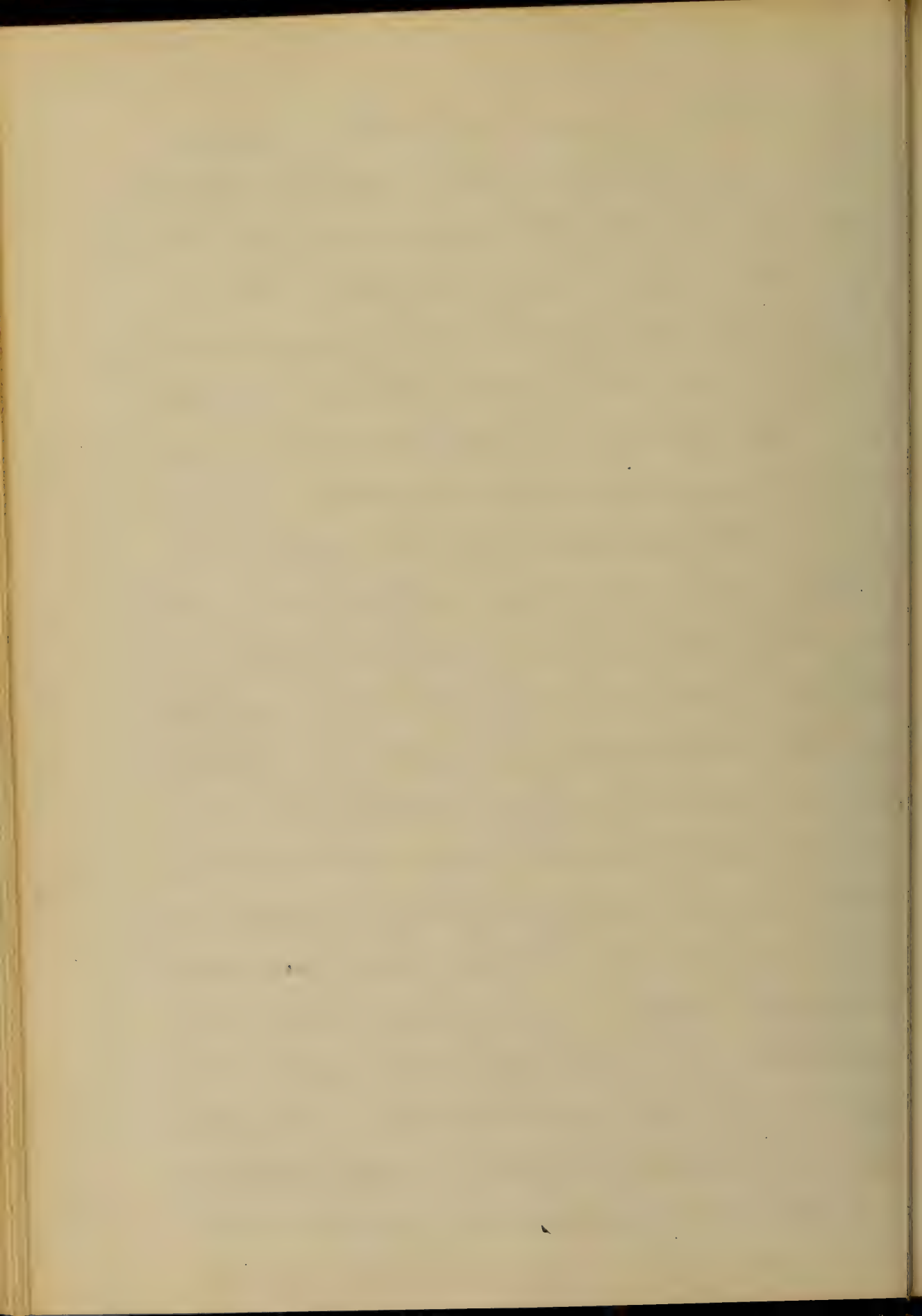
To the Faculty:
Gentlemen:

I do not think it is easy to exaggerate the importance of this subject; for we can scarcely find in the catalogue of diseases a pathological state into which the human system may be thrown whose causation may not be traced to or found to be connected with a more or less excretory functional derangement.

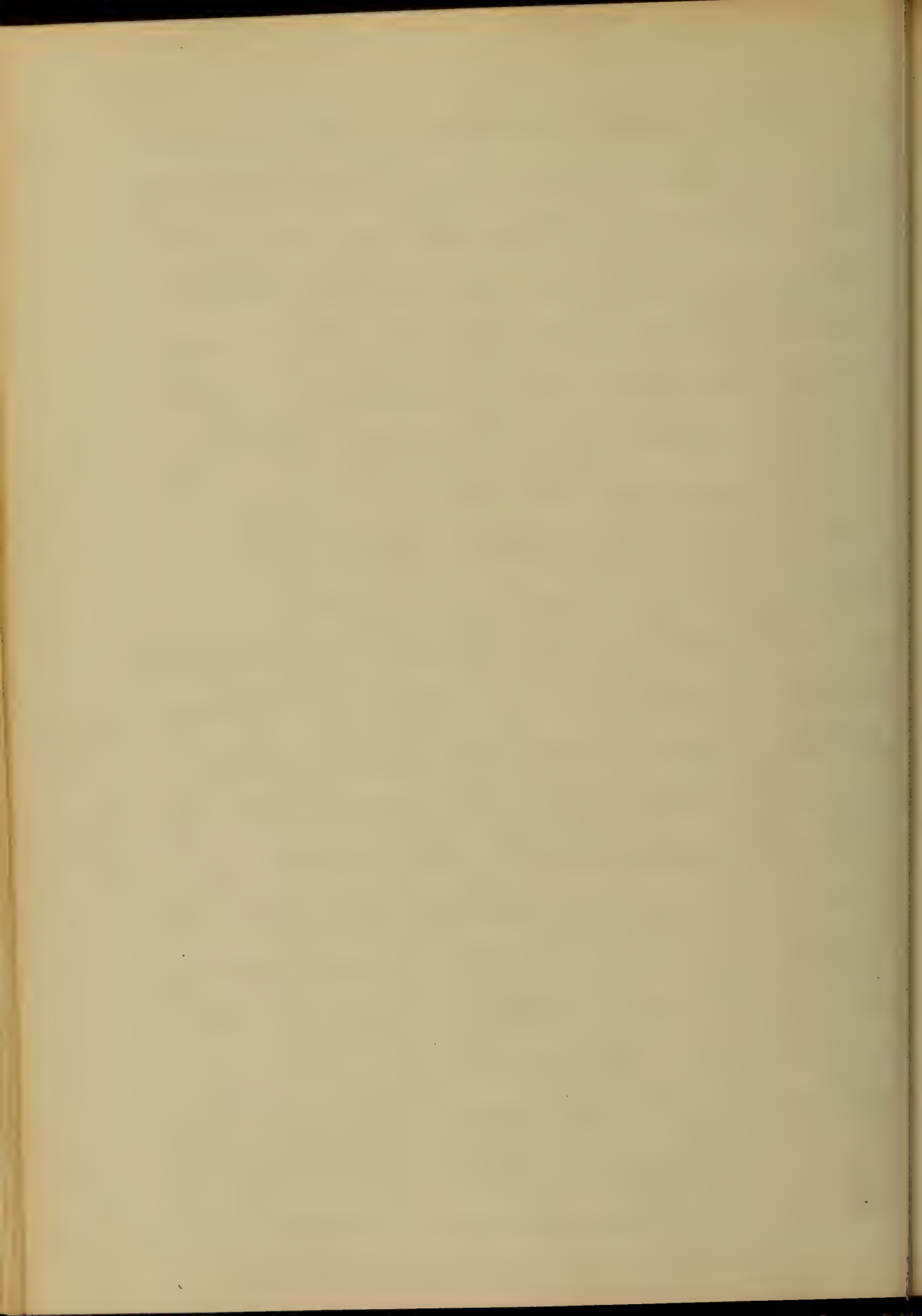
Indeed many abnormal conditions have for their sole cause and continuation the accumulation of substances no longer subservient to the needs of the system; while in other cases we may often trace the departure from health to



the effects of some alteration or modification of one or more of the elements out of which the different parts of the body are formed. And by whatever agent this condition may be brought about—whether in the form of miasmatic or venomous or poisonous matters—whether from the generation in excess of intrinsic morbid products—whether from the accumulation of excrements from functional derangement of the depurating organs—whether as the result of a constitutional predisposition or from the combined action of many modifying influences—by whichever of these means noxious elements enter or are generated in the system it is chiefly through the agency of the circulation that their effects are produced; and although, at this time, opinion seems to rest between the old theories of Hu-

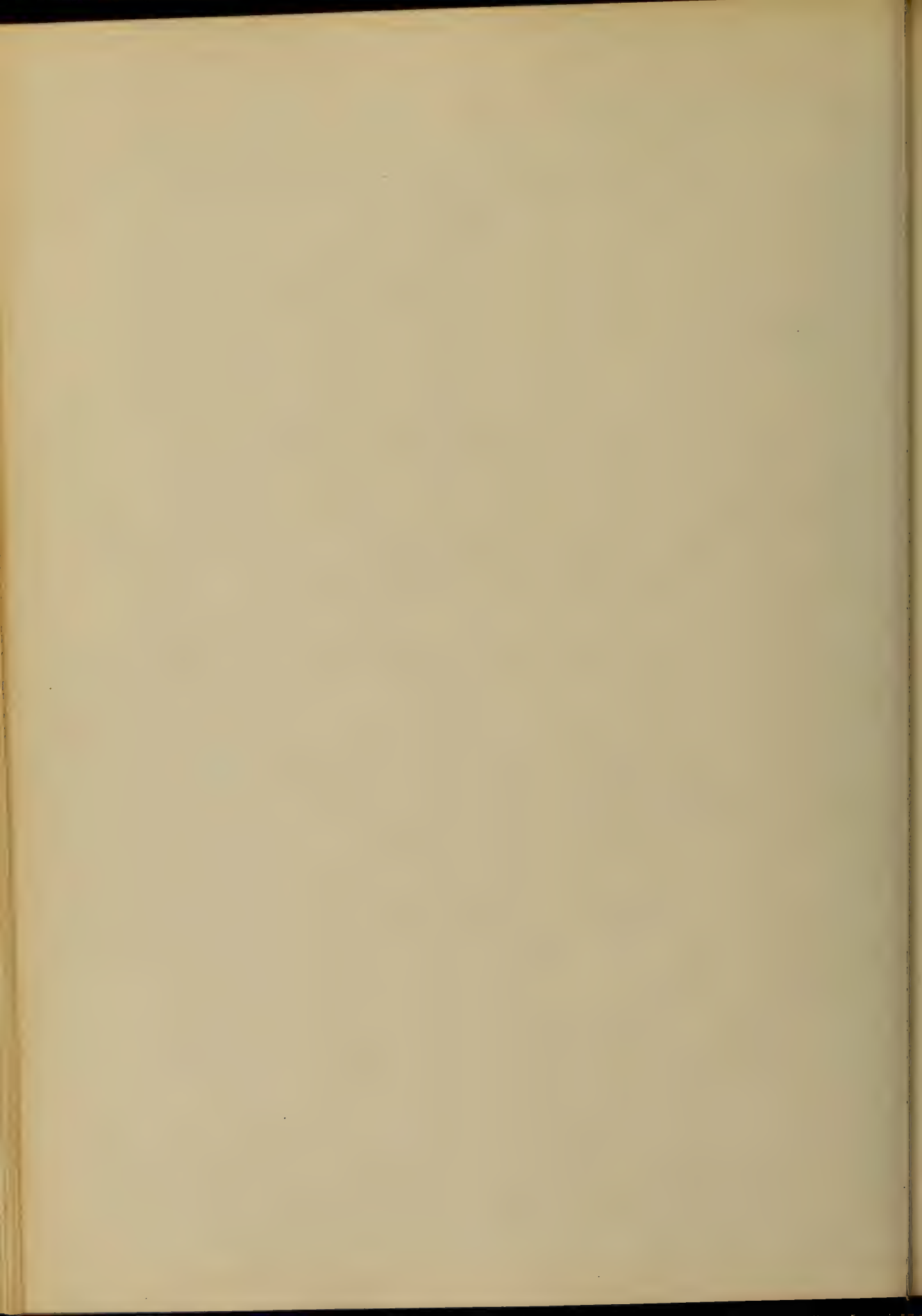


moralism and Solidism, yet, if we except a limited number of local diseases, it is hardly possible to deny that there are few abnormal conditions which are not the result of some modification of the blood or of the blood making process. Reflecting how necessary for the working of the assimilating and of the eliminating machinery is a right state and healthy constitution of the blood, and bearing in mind the conditions upon which depend a preservation of its crasis, we can readily appreciate the action of ever varying deleterious influences under which in the round of every day life the active individual must be necessarily brought. Following this assumption then of a change in the blood in most cases of disease, and adopting, to facilitate a consideration

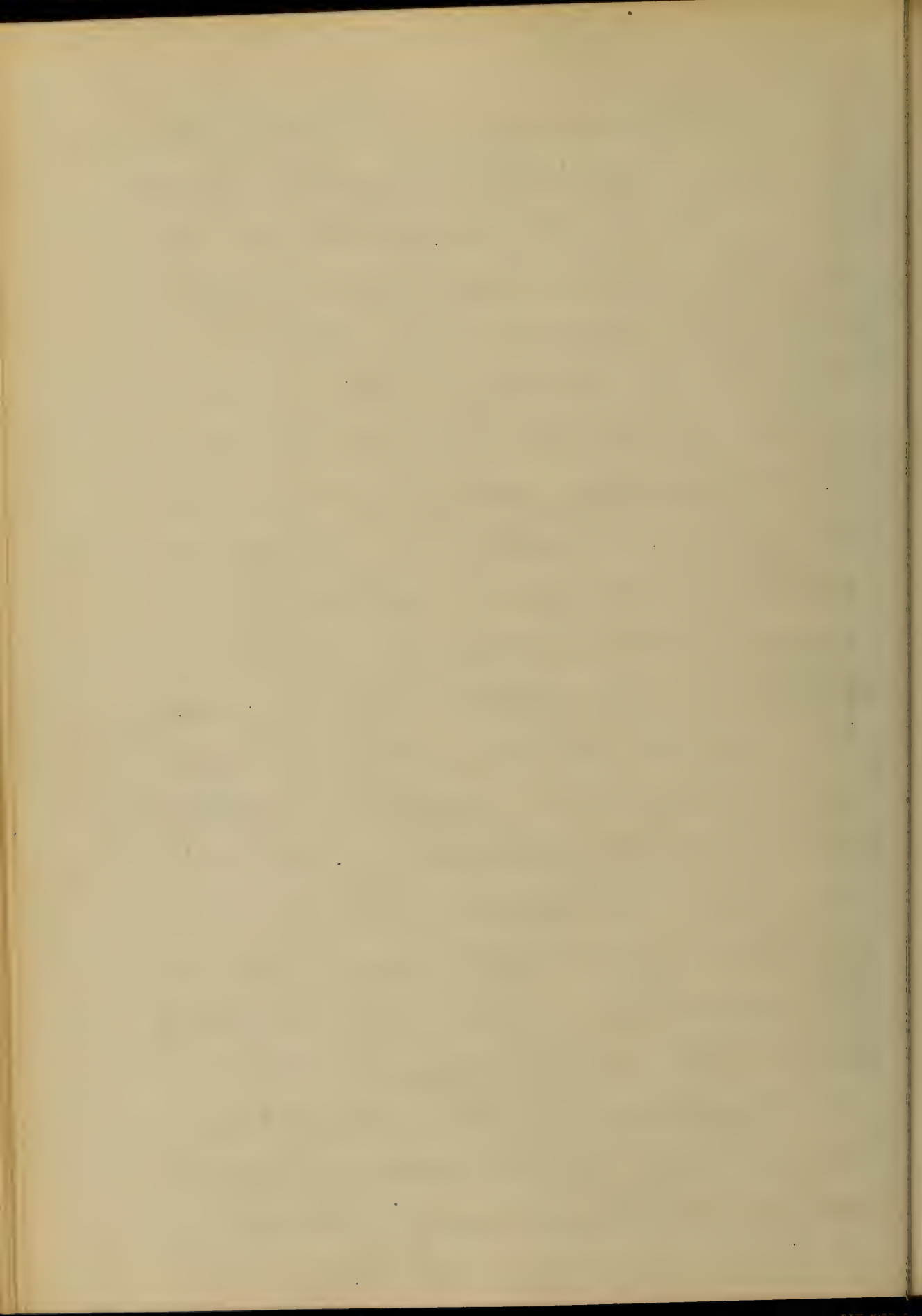


of the subject, a classified arrangement^{iv}
somewhat in accordance with the
one proposed by Dr Flint we have:
Morbid conditions of the blood relating
to its organized or corpuscular element
— to excess or deficiency of fibrin — to
albumen — to the watery portion of
the blood — to fat — to sugar — to
the bilious elements — and morbid
conditions due to the presence
of intrinsic and extrinsic morbid
products.

In the conditions of obesity and
of plethora, in chlorosis and anaemia,
we have apt illustrations of the
morbid states relating to the
organized or corpuscular elements
of the blood; and in the state
of Obesity, although the individual
may not suffer beyond the
mechanical inconvenience of
an increased bulk, yet his
state is far from being normal,

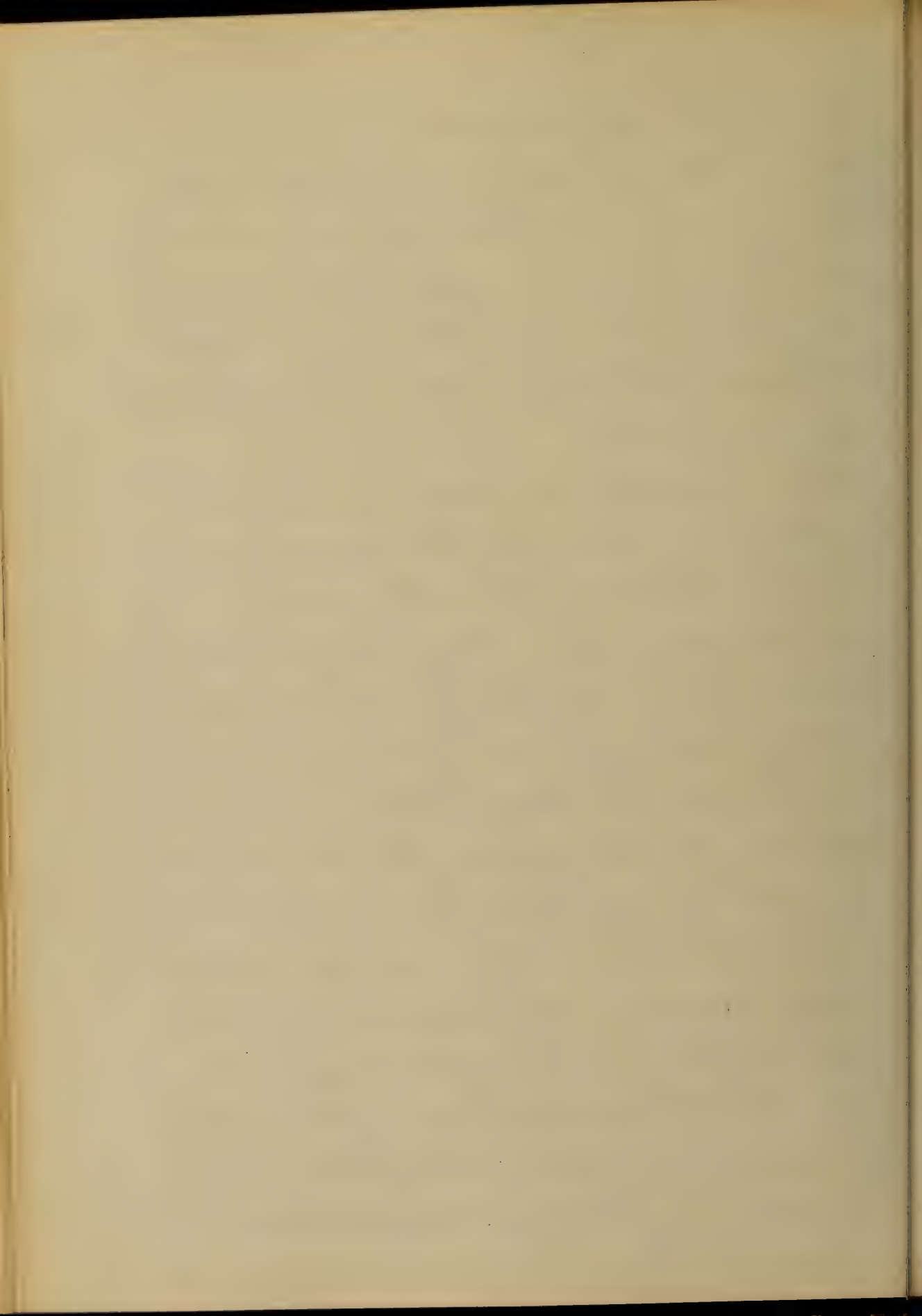


and the amount of adventitious mixed in with healthy tissue may fairly be ascribed to a comparative torpor of the eliminating organs by which certain excrementitious are allowed to accumulate and be deposited along with essential particles. Again in the opposite state of anaemia, whether arising from acute or chronic disease, consequent upon impaired digestion, loss of innervation and a weakened oxidating power of the circulating fluid, we find an accumulation of carbonaceous principles in the system and an inseparably connected state of functional derangement. True; Anaemia may arise from excessive haemorrhage or from loss of blood in any way, but it may not



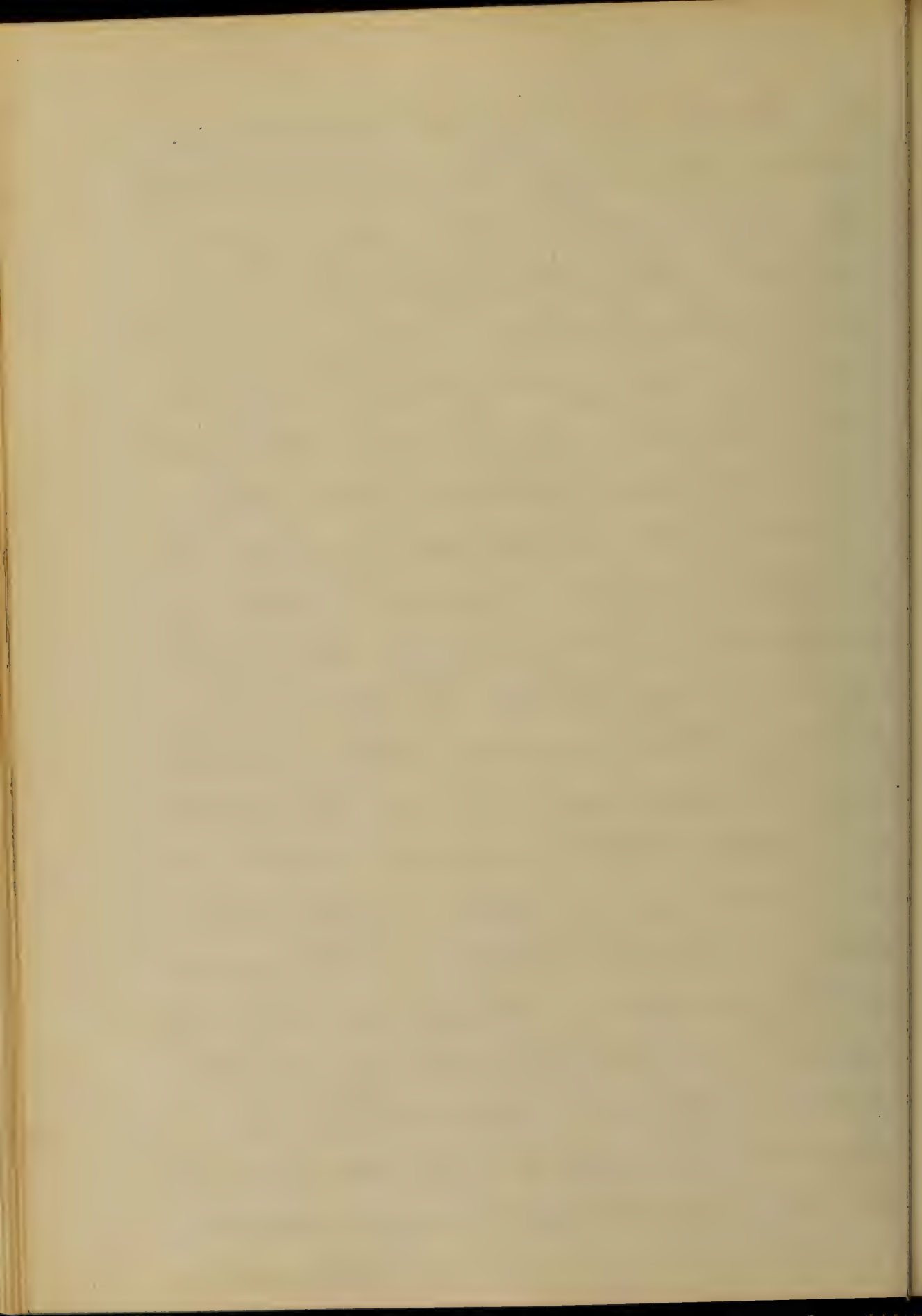
exist for any length of time, nor
may there be any diseased action
going on in the system without
impairing to a greater or less
degree the functions by which
alimentation and elimination
are effected.

The conditions arising from an
excess of the fibrinous element
of the blood stand next in
our order for consideration;
and this is an important
part of the subject; for, as
between the coagulating power
of the blood and its amount
of fibrine, there is a proportional
ratio, at this day when opinion
has swung round from a
standpoint long occupied
in the treatment of inflammatory
disease, the fact, established by
recent investigations, that the
amount of fibrine increases



in proportion to the increasing
attenuation of the blood, has had
no little influence in bringing
about this change. "The size,
form, and appearance of the
clot, were formerly supposed
to furnish very valuable path-
ological indications, and the
treatment of disease was in a
great measure based thereon" x x x

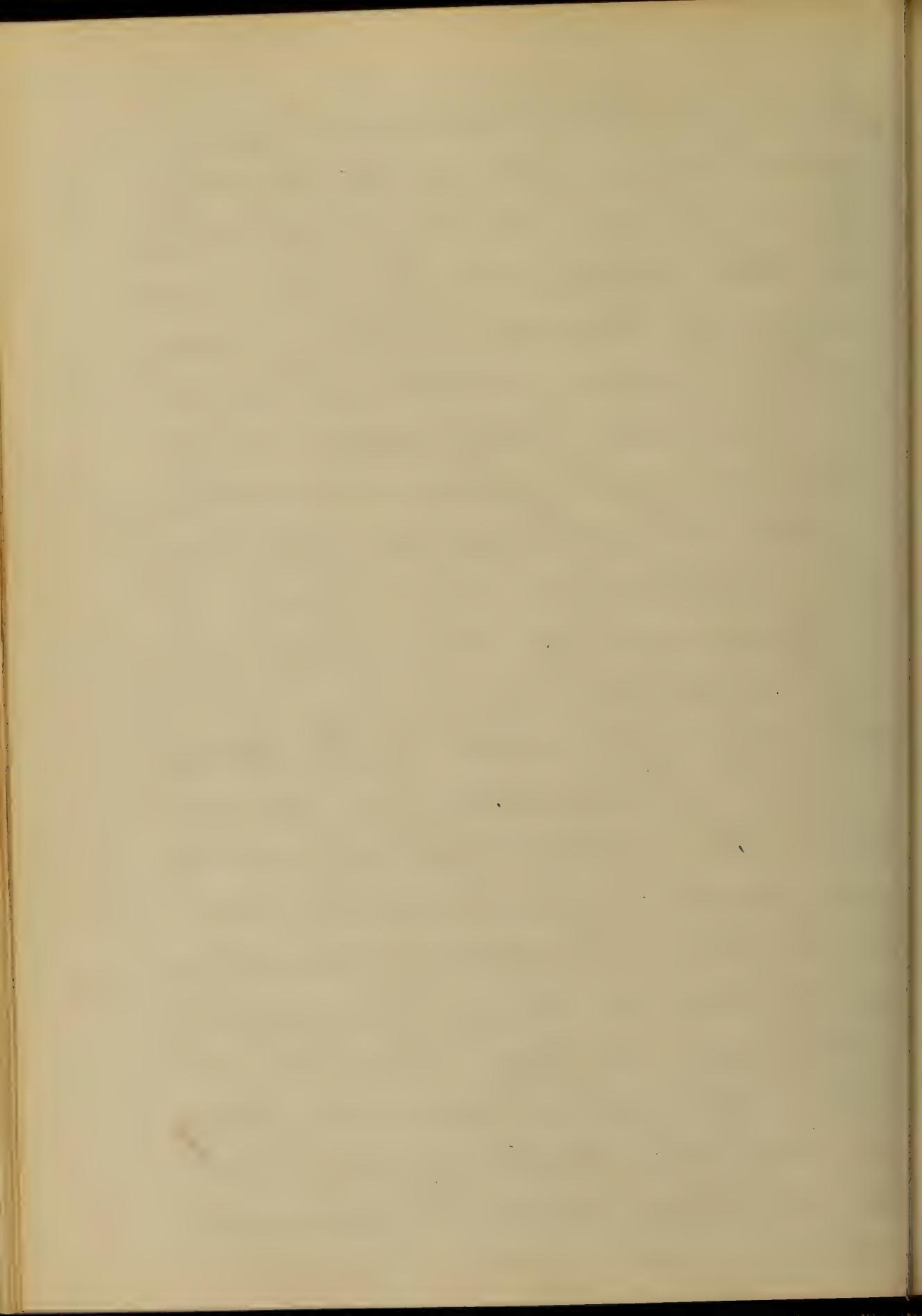
Valuable information may in
some instances be derived
from this source but less than
was supposed before the process
of coagulation was as well un-
derstood as it now is? Heart-
clot, a pathological state which
Dr Meigs claims to have been the
first to notice and by which
most sudden and otherwise
mysterious and unaccountable
deaths, ^{are} explained, is set down
as the result of the coagulating



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power of this preponderating element. This is the most speedily fatal of any malady which may be thus induced, but other results may be traced to fibrin in excess which render serious affections not otherwise dangerous in their nature; and fibrinous depositions upon the valves at the centre of the circulation as a result of inflammation are striking illustrations.

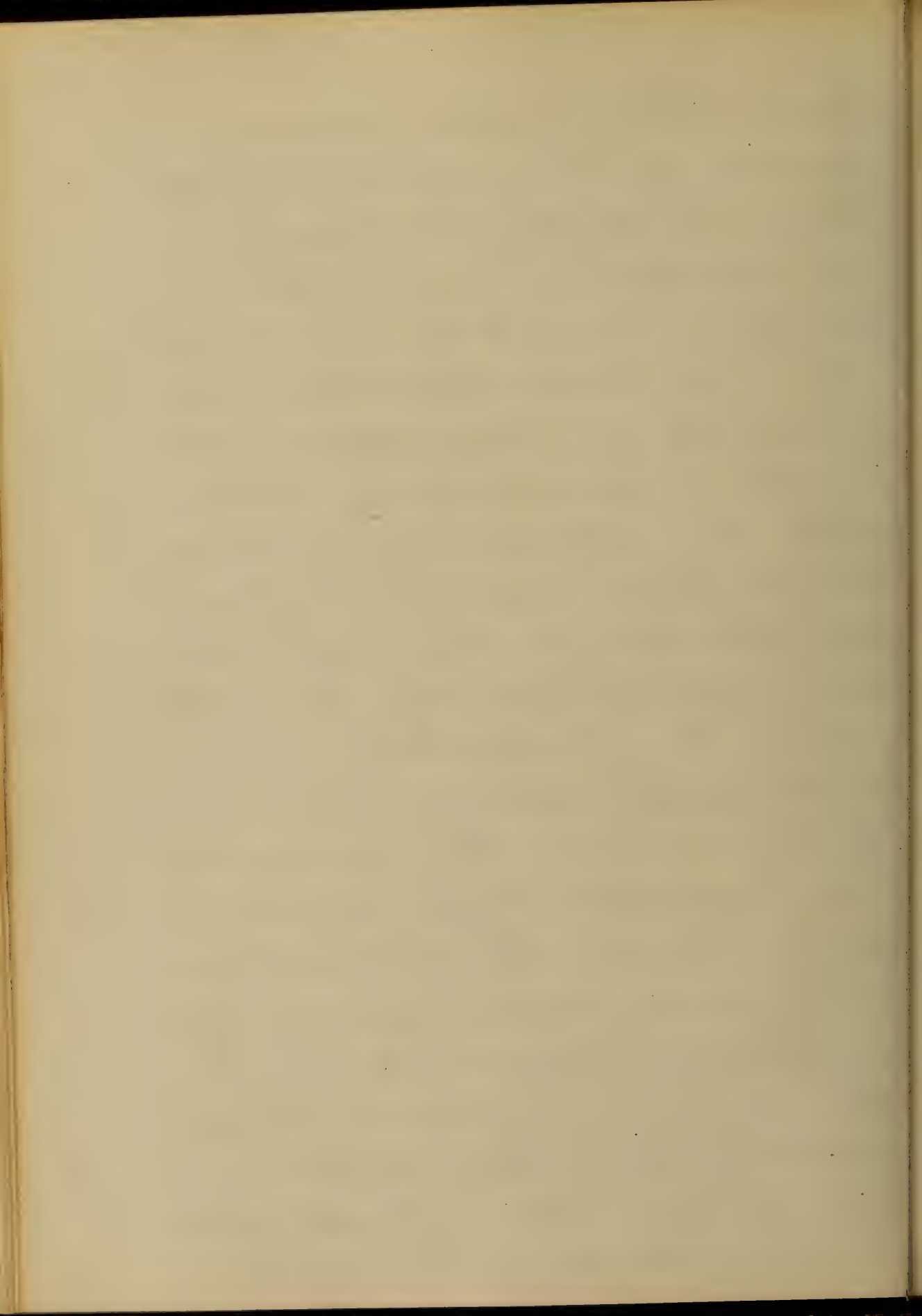
We were informed by Prof. Walsby in one of his lectures in connection with this subject, that these valves are most subject to calcareous and cartilagenous degenerations; and that it is so common for old persons to have these deposits that their generation can scarcely be called a pathological process. He also stated that it is believed that subjects of these valvular



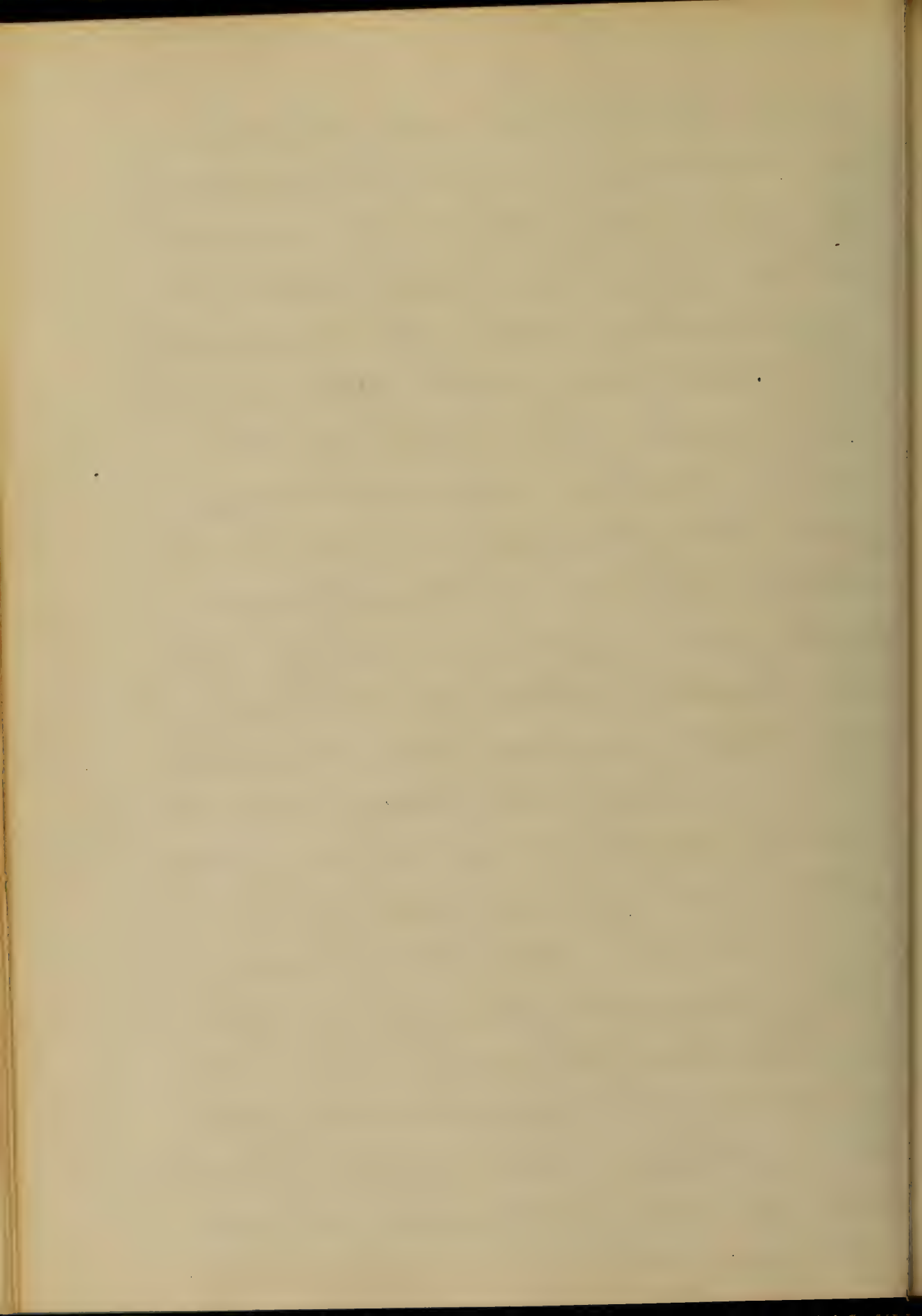
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lesions have at some previous period of their existence been the victims of one or more rheumatic attacks. Dr. Flint says "in some cases in which valvular lesions have not been preceded by rheumatism their point of departure may have been an endocarditis not rheumatic, for it is probable that non-rheumatic endocarditis occurs not very infrequently when its existence is overlooked".

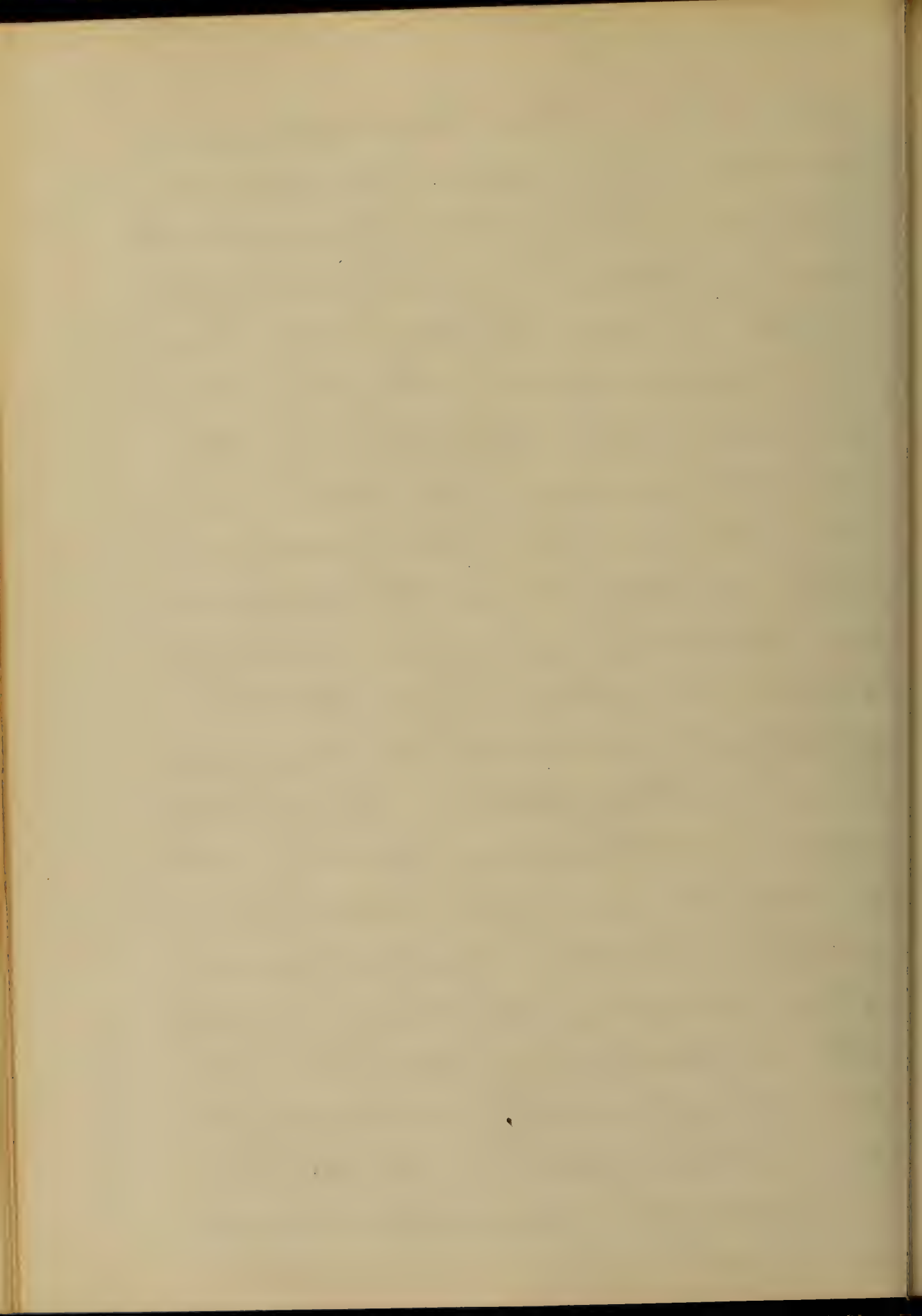
Some pathologists, in opposition to this, contend that endocarditis may not exist at all - the endocardium being a bloodless membrane. These nice points in pathology a student, however, can only give a passing glance, but if established by the adoption of a theory now offered additional evidence will be this



added to the views here sketched.^x
Besides these conditions growing
out of a combined and reciprocal
action of fluid and solid there
are morbid states more immediate-
ly connected with and depen-
dent upon the state of the
blood itself - conditions arising
from the presence of an undue
accumulation of substances
performed and preexisting in
the healthy blood in certain
essential proportions, now, from
some functional derangement,
being developed in undue quan-
tity or being absorbed, after
separation for excretion by
their depurating organs. Thus,
in Glycaemia, says Dr Flint, the
sugar in the renal blood increases
the functional activity of the kidneys,
acting like a diuretic, and hence
the quantity of urine is greatly

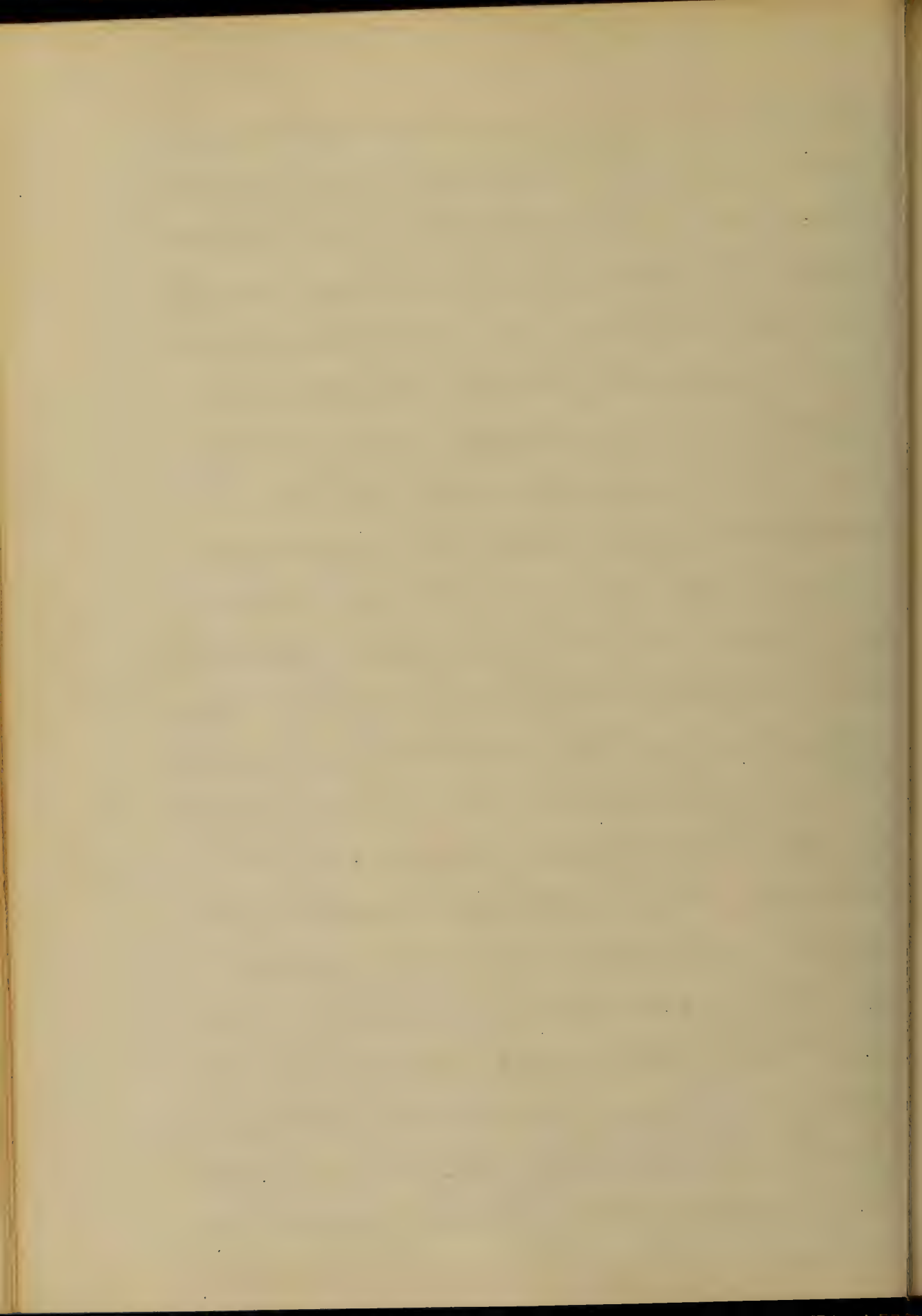


increased": Also "that deficient excretion of urea occurs in acute inflammation of the kidneys, and under those circumstances, the urea accumulates in the blood and gives rise to the condition of uraemia". Further, in this connection, may be instanced in evidence the lithic and oxalic acid diatheses in the production of Calculi, several interesting cases of which Prof. Smith operated upon at the commencement of this course. The ^{re} conditions says Erichsen "are usually dependant on slight disorder of the digestive organs and skin, coming and going under the influence of very trivial causes, generally occurring in individuals in whom there is deficient assimilation dependant upon exhausted

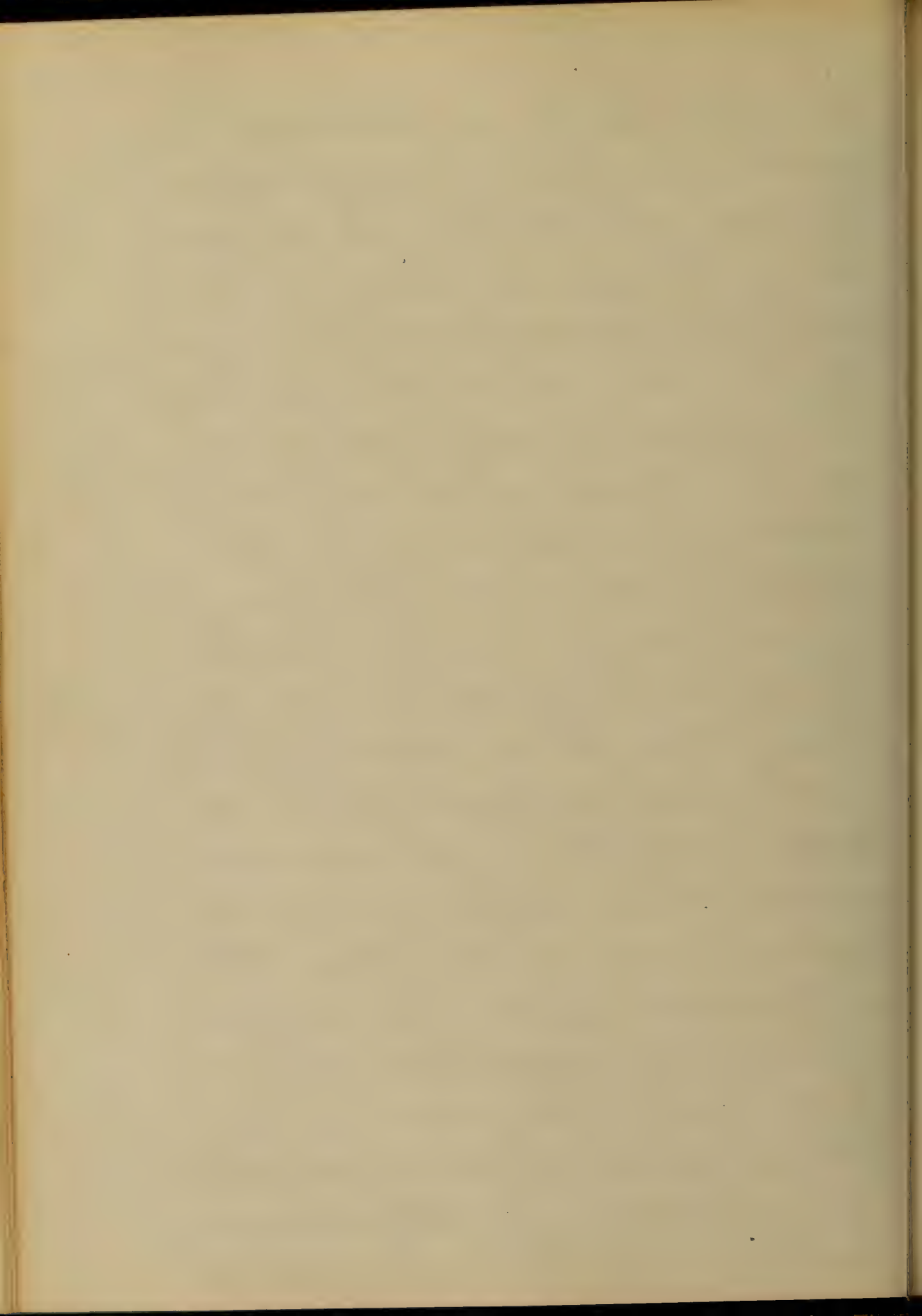


nervous energy, arising from over work, mental anxiety or venereal excesses." We were told by Prof. Smith that if these acids become developed in the urine in excess sufficient to originate a nucleus the natural amount always found in this fluid will, after the abnormal quantity becomes reduced, go on to increase by continuous deposits ~~deposits~~ the calculus thus formed and grown in the bladder.

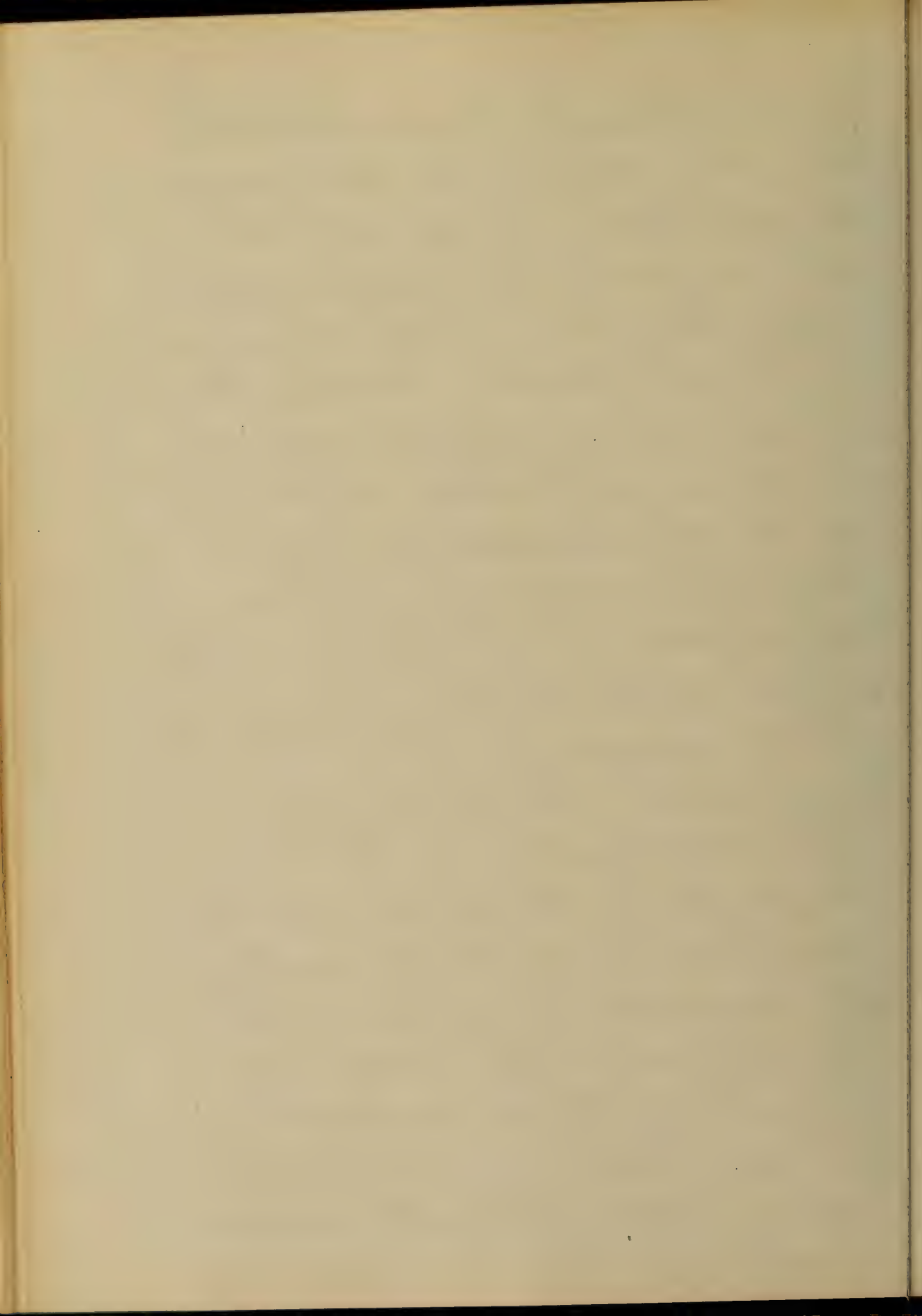
From alterations in the amount of the watery portion of the blood it is not less apparent, when we consider the offices of this constituent, that important diseased conditions may arise; for, said Prof. Donaldson, "Water holds the gases in solution; it dissolves the solids; and is a necessary element in that



ceaseless change of chemical composition and decomposition upon which life itself depends, and it is but necessary to mention the uncontrollable ravages of cholera which though taking its origin from a specific cause works, at least, a large share of influence on the system through the agency of the loss which it entails of its watery constituent; rendering the blood thick and viscid until with a livid skin, a cold surface, a diminished circulation, and an impeded respiration, death closes the sufferings of the poisoned and asphyxiated being. I might produce many other illustrations, and adduce in evidence further considerations, but the foregoing

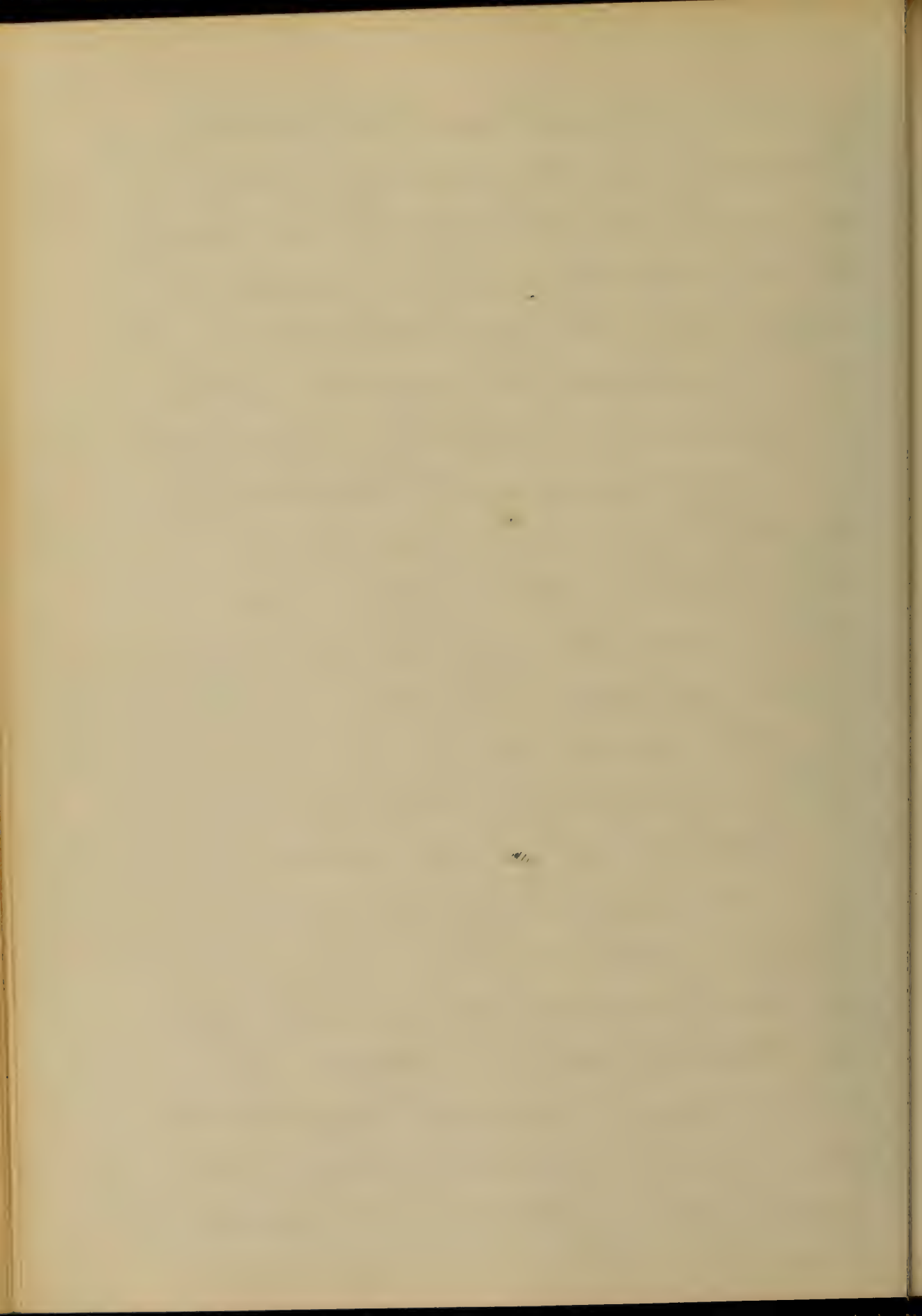


are sufficient to demonstrate the connection I have sought to establish, or, if not this, the importance of the subject. I think, has been shown; and I shall devote the remaining pages which I have allowed myself to a consideration in a general way of a few therapeutic indications and agents with which we may meet some of these morbid conditions. "We have seen" says Dr. Dunglison "that amongst the most important circumstances which modify the indications of cure in disease and the mode of fulfilling those indications are age, sex, original conformation, habit, climate, mental affections, professions and way



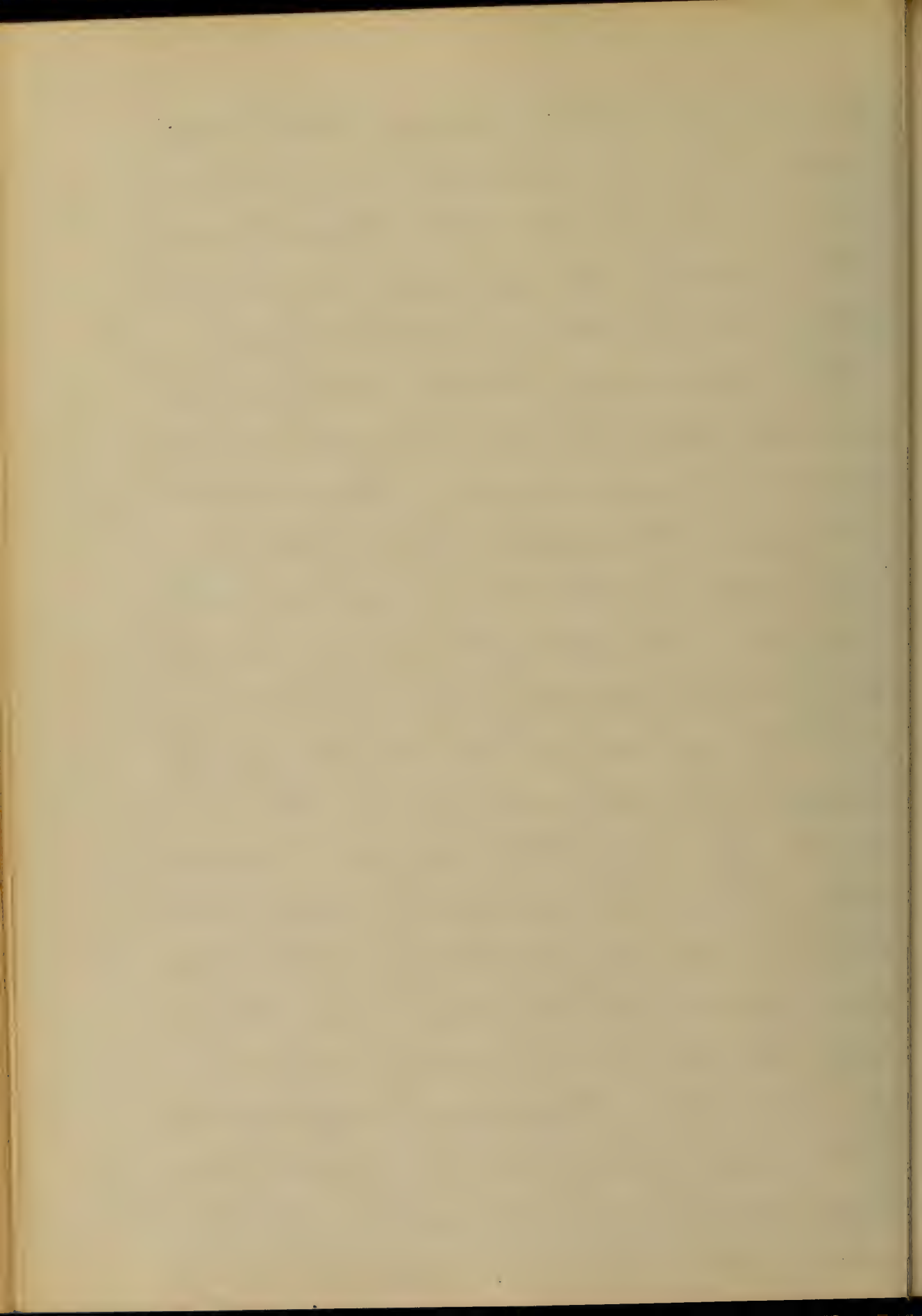
of life, as well as the causes, period and seat of the disease; and all these have to be attended to in order that the Therapeutist may be enabled to administer his medicines with judgment and efficiency." Besides these modifying circumstances relating to the individual there are many others to be remembered, which relate to the medicines, of which the forms and combinations in which they are administered are the most important.

As the agents in producing disease generally reach the system through the circulation so through this important channel are directed most of the agents which are employed to correct the diseased condition. "Hence all the inorganic



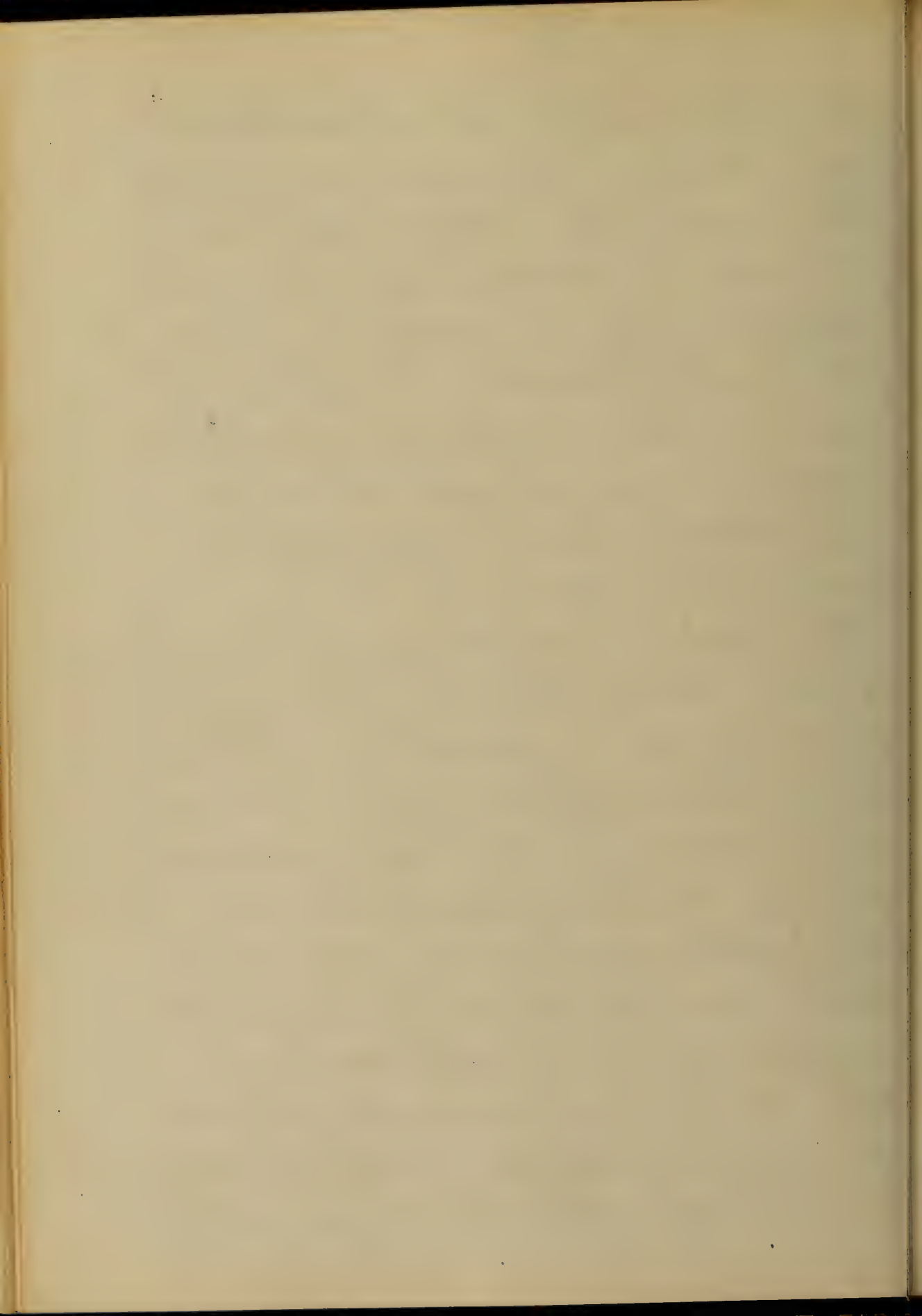
conditions of the blood fully understood", says Dr Flint, "there is reason to believe we should have the thread to guide us through the labyrinth of pathology".

But however, since many indeterminate blood changes must occur; since many conditions present themselves for which we can adduce no appreciable cause we must necessarily content ourselves by watching the progress of the malady, by meeting exigencies as they arise and by endeavouring to conduct the case to a safe termination. But even in pursuing this course we must often grope in the darkness of obscurity and follow the teachings of experience alone, and firmly reject, never regarding the source, what does not stand approved by

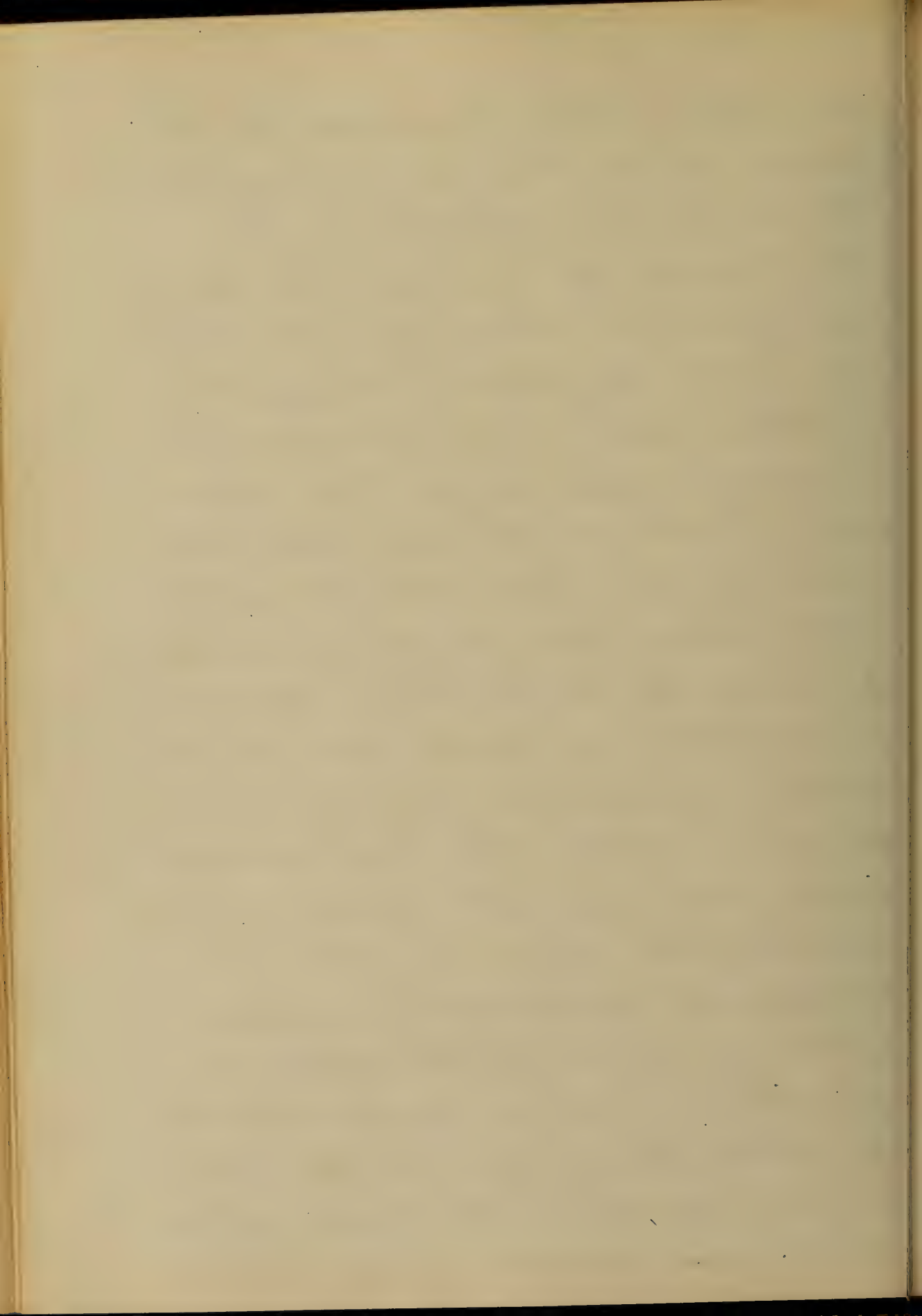


this infallible test. Thus ^{Dr} Buckler's phosphate of ammonia, in gout, although the theory upon which it was instituted has been disapproved by chemical analysis, has established its efficacy, while Garrods salts of potash, resting upon experimental researches, have been reported as totally useless.

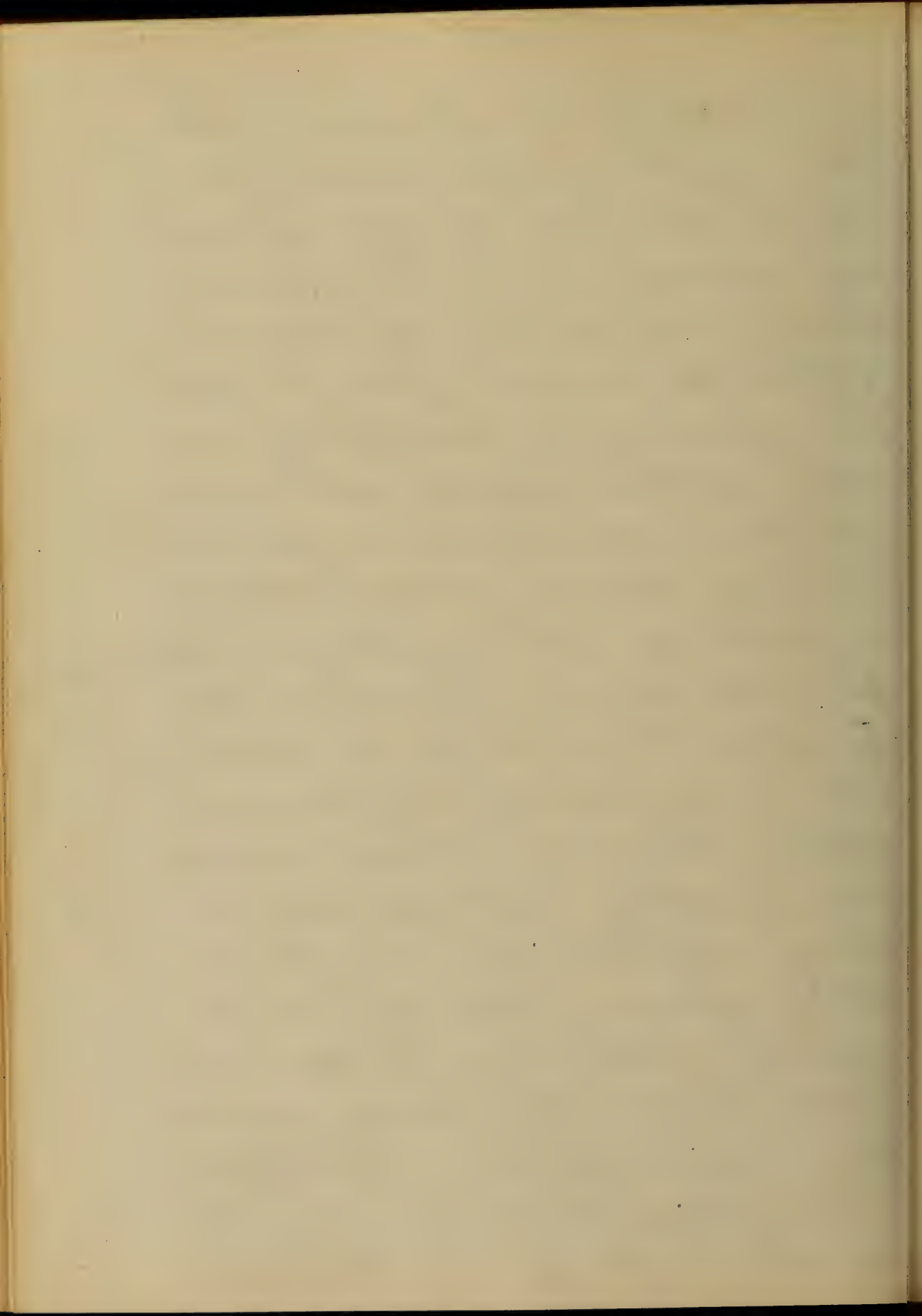
The modus operandi of Peruvian bark, whose potent efficacy breaks the connecting link in the chain of periodic diseases, has as yet never been satisfactorily determined, although it has maintained and ever will maintain in this connection a supremacy unapproachable. The recent experiments of Dr. Barce Jones are shaking the foundation of the old theory of an action of supercession upon which



its virtues were supposed to depend, and it is now thought to work its effects in the treatment of Intermittent fever by a process analogous to that of iron in conditions of the system left by low forms of disease, supplying to it some constituent which has been lost during the fermentation of the malarious poison in the blood. Iron, as a medicinal agent, is scarcely if at all second to bark, regarded simply as a specific, while the various diseases wherein its value is incontestible give it a prior claim to consideration. In many forms of Anaemia its action is as if magical, and, in other cases, experience has pronounced in its favor where its precise mode of operation

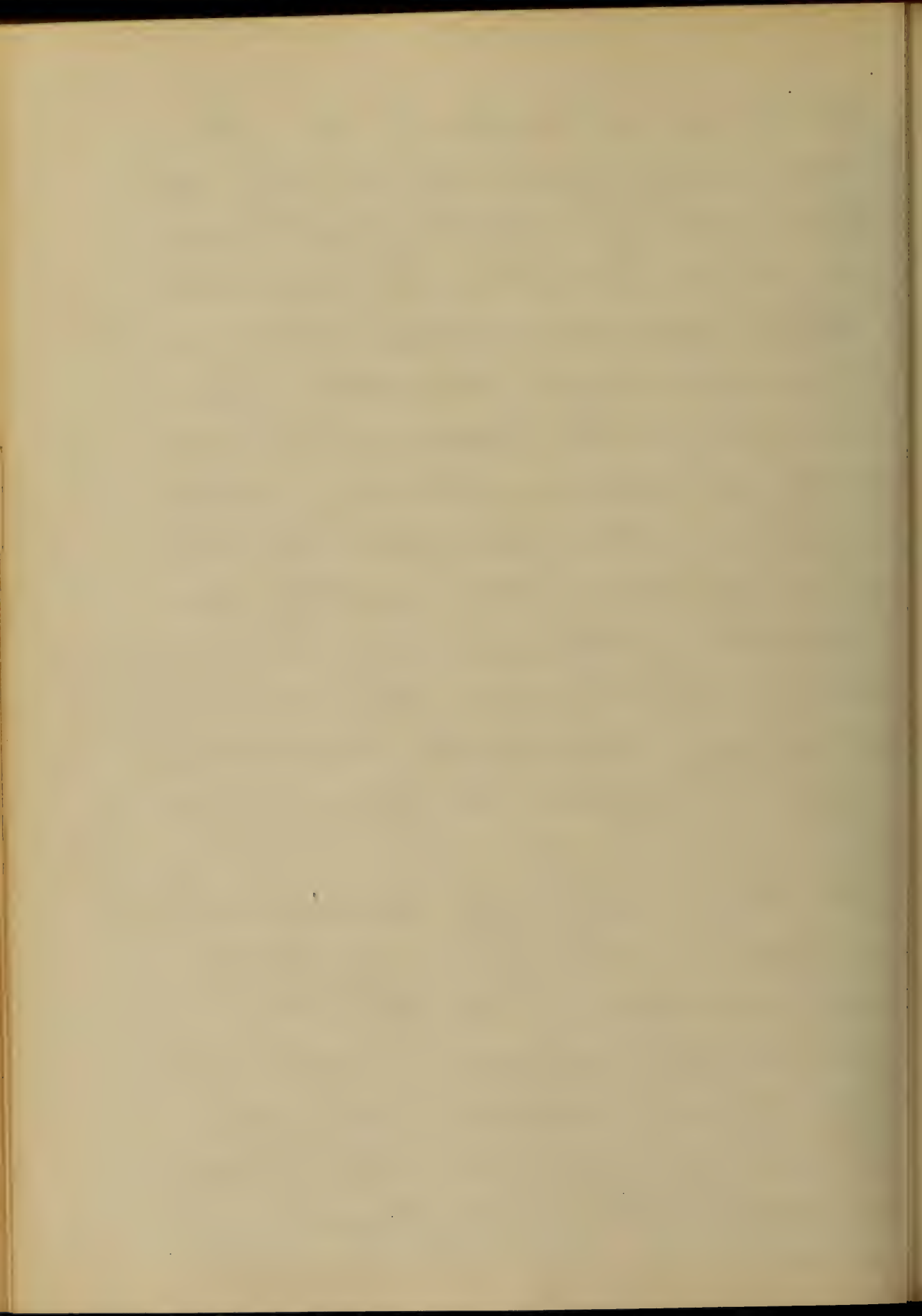


is undetermined. Mercury is a powerful agent, which has stood the test of ages of searching inquiry, in the treatment and elimination of excrementitious principles from the system, and with blood letting and other antiphlogistics will ever, no doubt, be considered as indicated under certain circumstances, in treating inflammatory disease. Emetics are an important class of agents whether we employ them to unload a distended stomach or for their revulsive or relaxing virtues; and I may mention the illustration they afford of the different effects produced by medicines according to the doses in which they are employed. Tartarized Antimony, which formerly stood at the head of this class, is



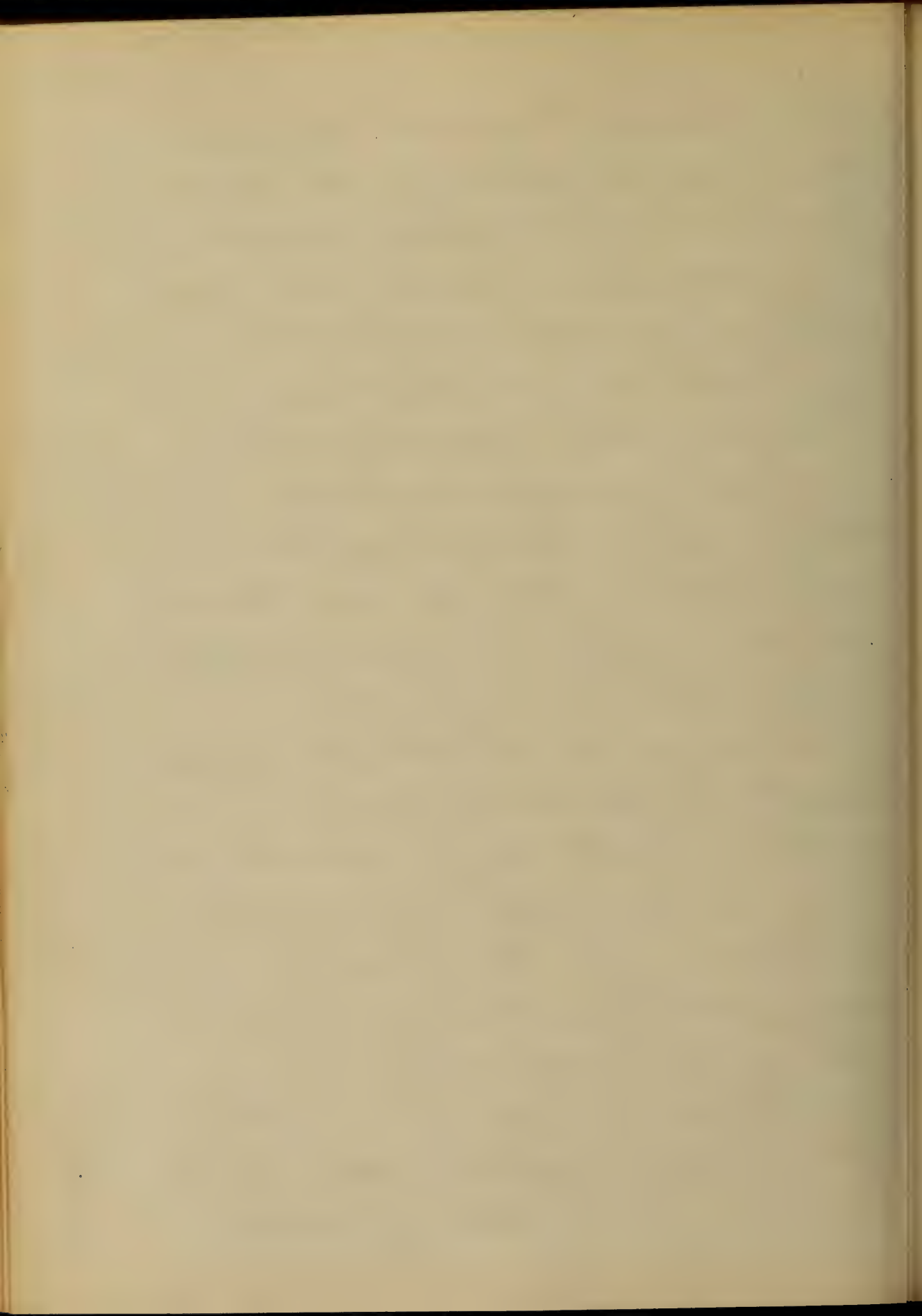
now used principally for its ^{XX} secondary qualities, being superseded by agents less violent in their action. But besides these medicines proper there are laws of a simple character to be observed in the treatment of disease, and the attention to them is often sufficient to accomplish the objects of the medical art; and by disregarding the important requirements of Hygiene the most carefully considered medication will be often rendered fruitless.

"Without wishing," said Prof. Donaldson, in his opening lecture on digestion, "to detract from the efficacy of remedial agents, we cannot say too much for the powers of a proper alimentation".
Indeed many forms of food



XXI
have become a part of the
Materia Medica, and classi-
fications have been made
by scientific men as an
endeavour to meet the
indications in disease.

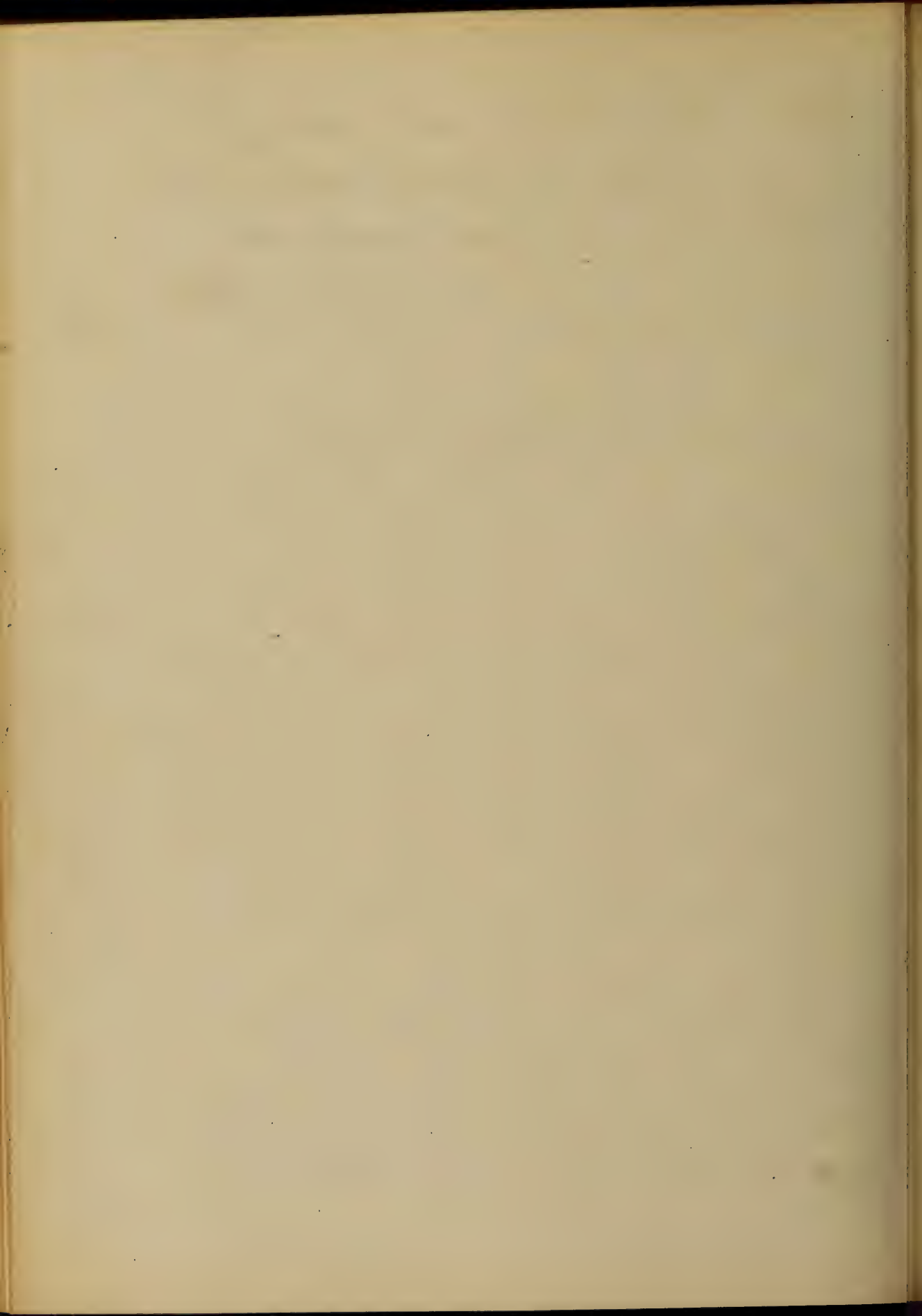
Besides these considerations
a proper appreciation of
the healing powers of nature
will often cause us to pause
in our efforts and employ
patience, as a judicious
measure, to meet the require-
ments of the case; and her
achievements will sometimes
astonish with results far
outreaching the bounds of
our previous conceptions,
which if not humbling
to medical pride teach
the important lesson that
"there is a destiny which
shapes our ends rough



new them as we may."

I am gentlemen, with
feelings of great respect
and high consideration,
your obedient servant,

Wm Alex. Harbun.



AN
Inaugural Dissertation

ON

Scapularia

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

Thomas H. Magruder

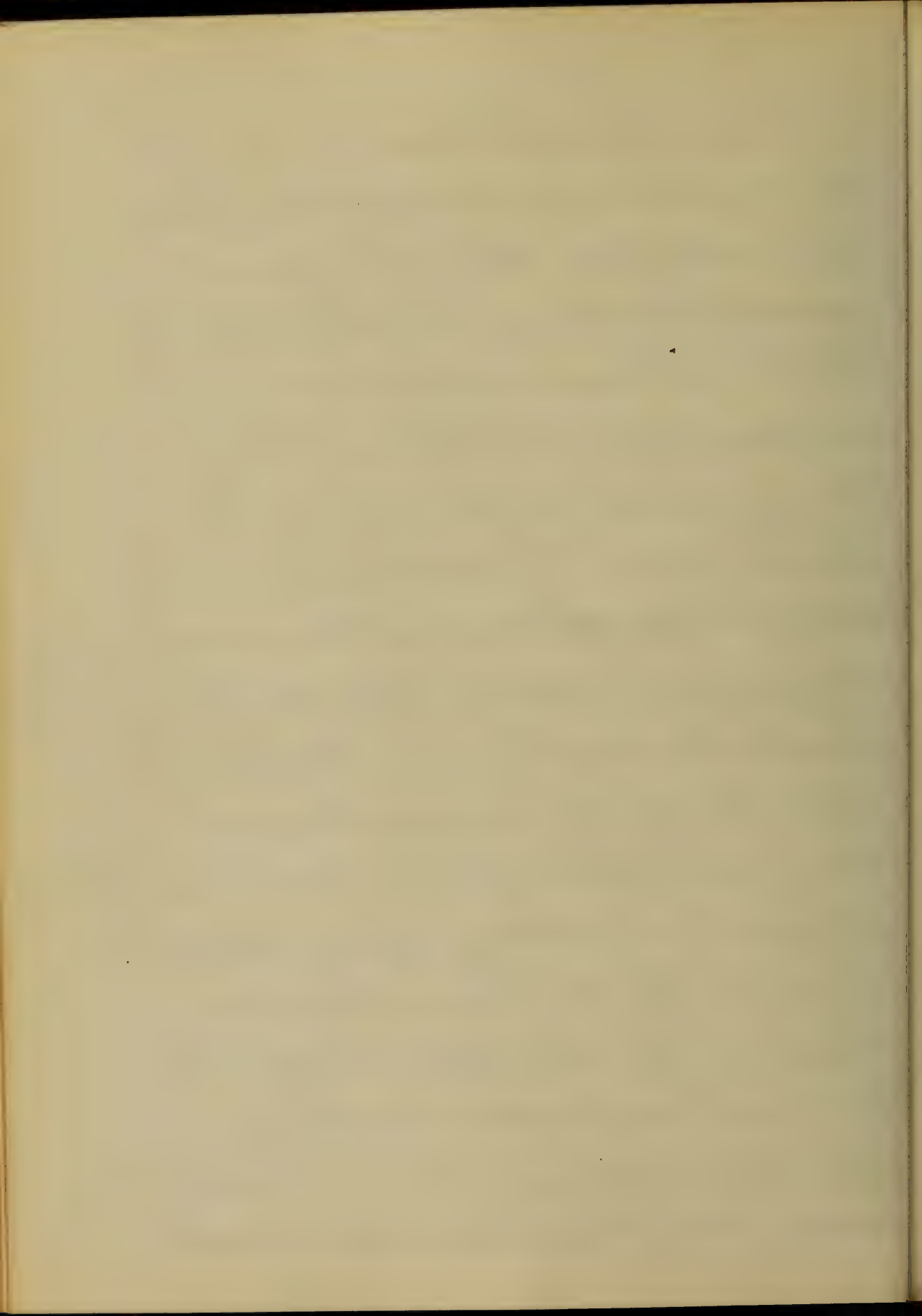
of

Prince Georges County, Maryland

Session of *5th Feb. 1867*

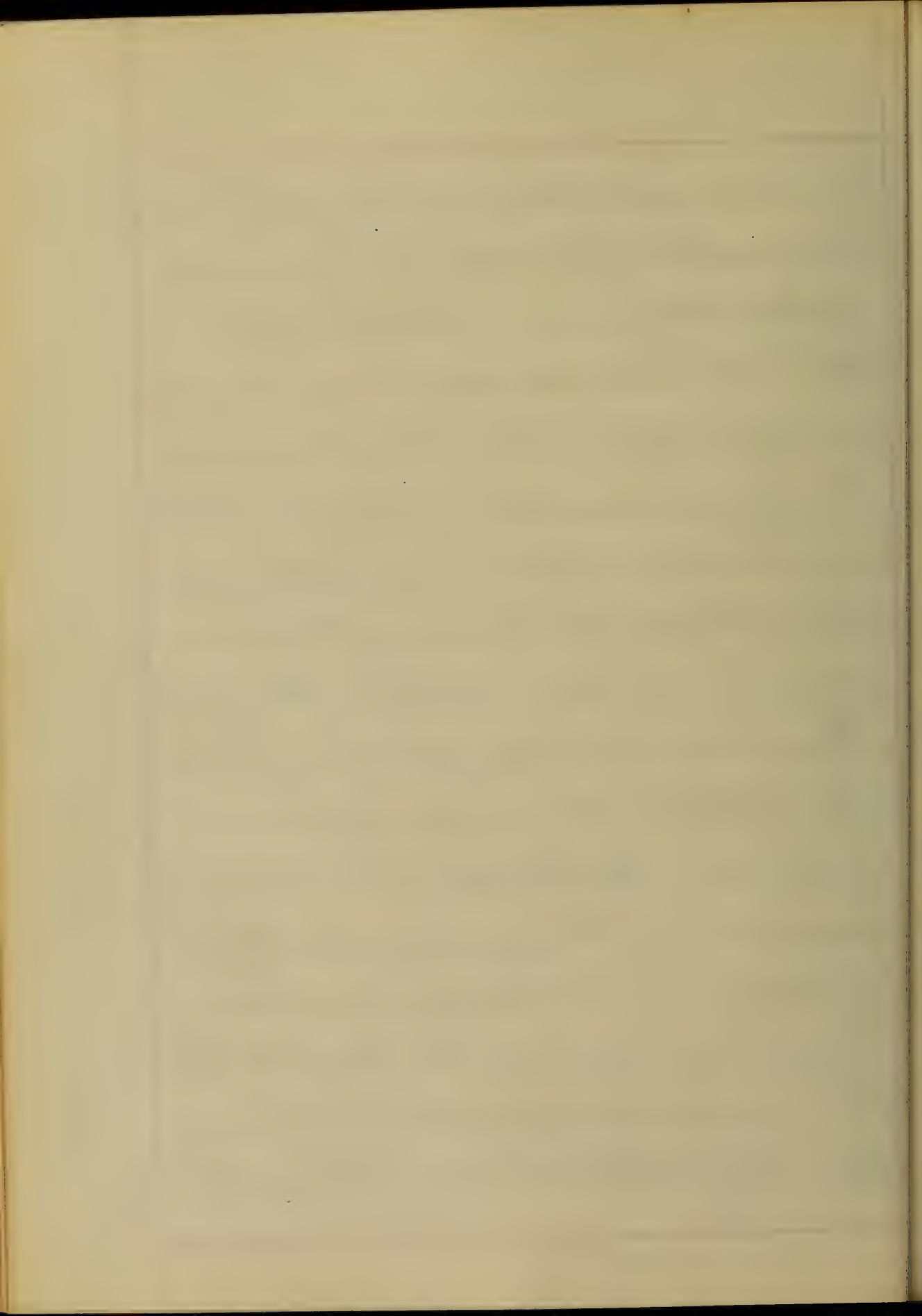
Whooping Cough

This is a contagious disease of a contagious character, generally accompanied by a hoarse cough. It generally occurs in children, the greatest mortality from it takes place during the third year. It usually assumes an epidemic form, and then may disappear for months. There are remarkable variations in the character of the disease, and in the symptoms which attend it, for instance, it may be so trifling, as not to interrupt the child's ordinary avocations for a day, in another case such as are nearly useless, and it occurs with in few cases, but more in a few years. Some severe forms are



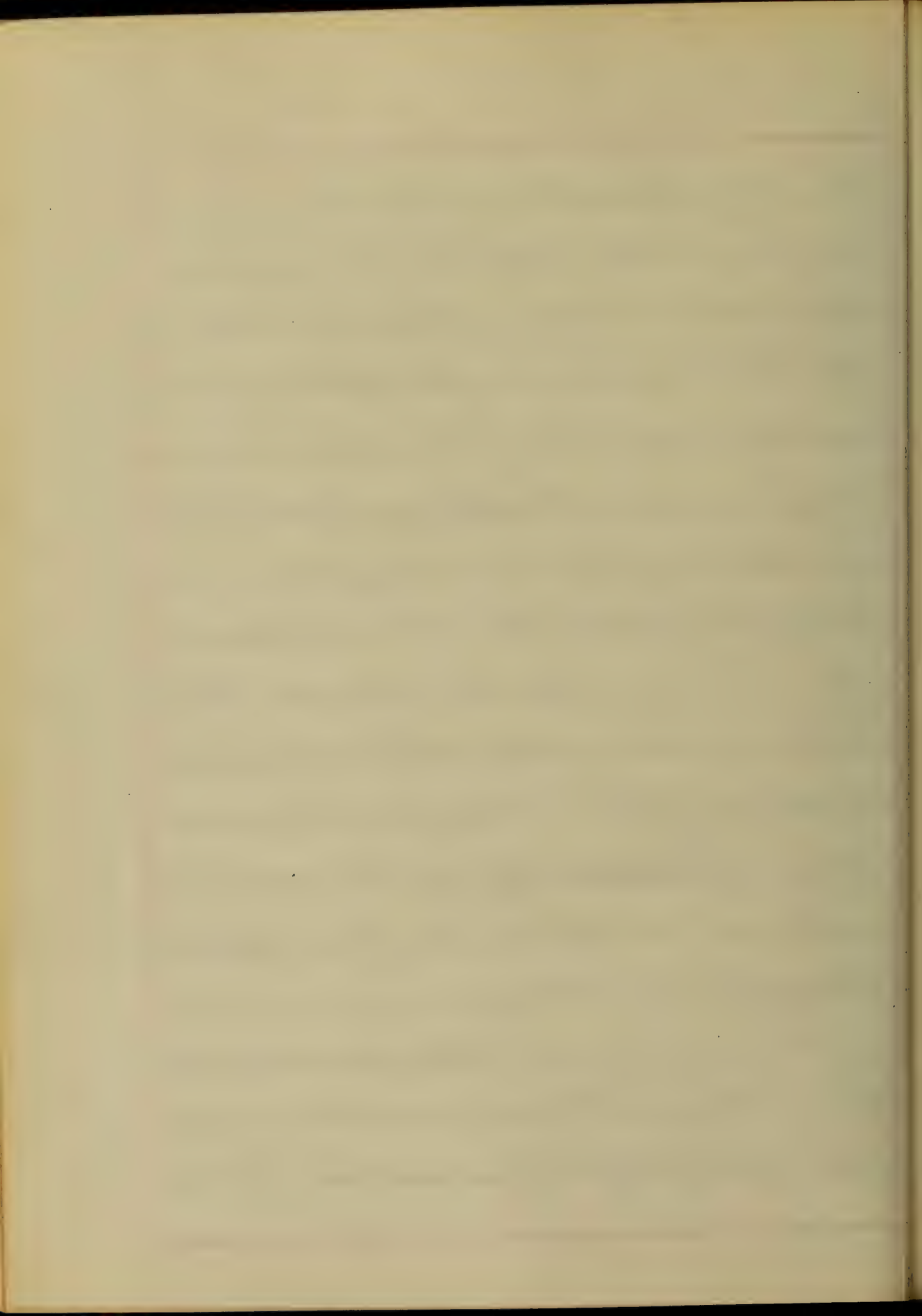
... varieties Scarlatina
Simplex, Scarlatina Anginosa, and Scar-
latina Maligna. In the simple
form, the patient experiences an attack
of fever, very mild, of short duration,
and accompanied by a bright scarlet
rash, with little or no sore throat.

In Scarlatina Anginosa, the fever
is more intense and the skin and
throat are decidedly affected. In the
malignant form, the disease falls prin-
cipally upon the throat, and the fever
assumes a typhoid character. There
is great inflammation, and some-
times sloughing of the tonsils. There
are great suppurations of
the tonsils, which in some cases



fearful character of the ~~malady~~
Scarlatina was not recognized
as a distinct disease till recently
~~with the name of the disease~~
existed a long time ago but has since
been confounded with ~~the~~ measles. Scarlatina
was spoken of by Sydenham, but was
Fothergill was the first to describe it
as a new and separate disorder, that
what is now called Scarlatina
ligna, was then called the Fothergill
fever. The ~~distinction~~ ^{distinction} of this affection
with real scarlatina, has been estab-
lished by late writers.

Measles may be distinguished from
Scarlatina, 1st by the presence of the
rust of Cottare but beyond this, both



By the absence of inflammation
in the first round, the
second. The first round is
the first round in the first round
of the first round in the first round.

By the absence of inflammation
in the first round, the
second. The first round is
the first round in the first round
of the first round in the first round.
It is more elevated, and of a darker
colour, and does not appear until the
second round, however that inflammation
comes out on the second.

Symptoms. In the first round
is ushered in by nausea and vom-
iting generally, which are accompanied
by great heat, and other symptoms
of the first round.





~~The ...~~

As the eruption declines, the
fur disappears from the legs,
the redness from the face, and
the eruption commences the
descent of the ...
from the hands and feet but in
small spots from the trunk

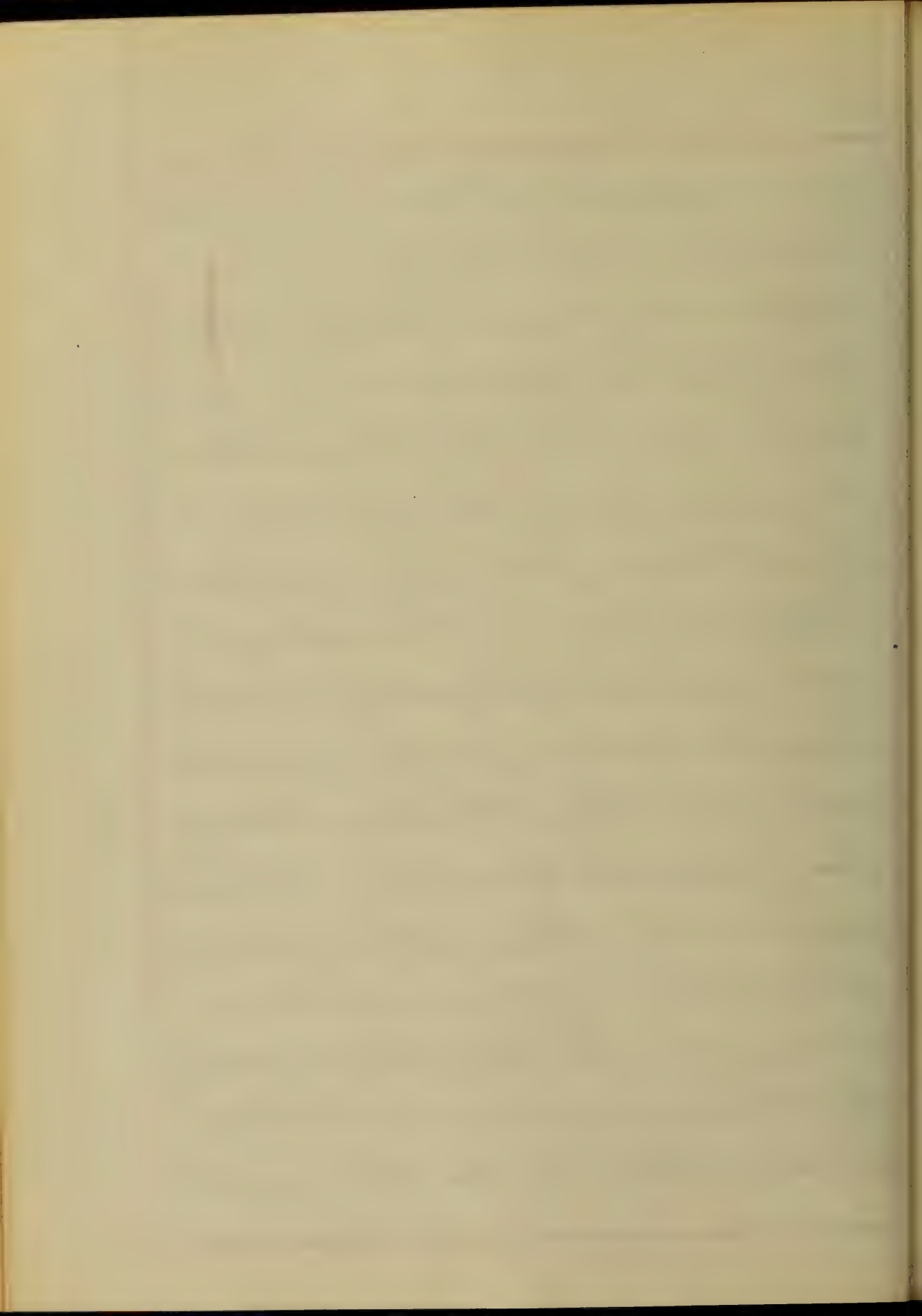
The disease of scarlatina
is not in fastigation, to the ^{abundance of}
abundance but to the quantity of
the eruption of the throat, which
is the distinguishing feature of
scarlatina ~~of scarlatina~~

In the form of scarlatina
the eruption is much more
than in the ...



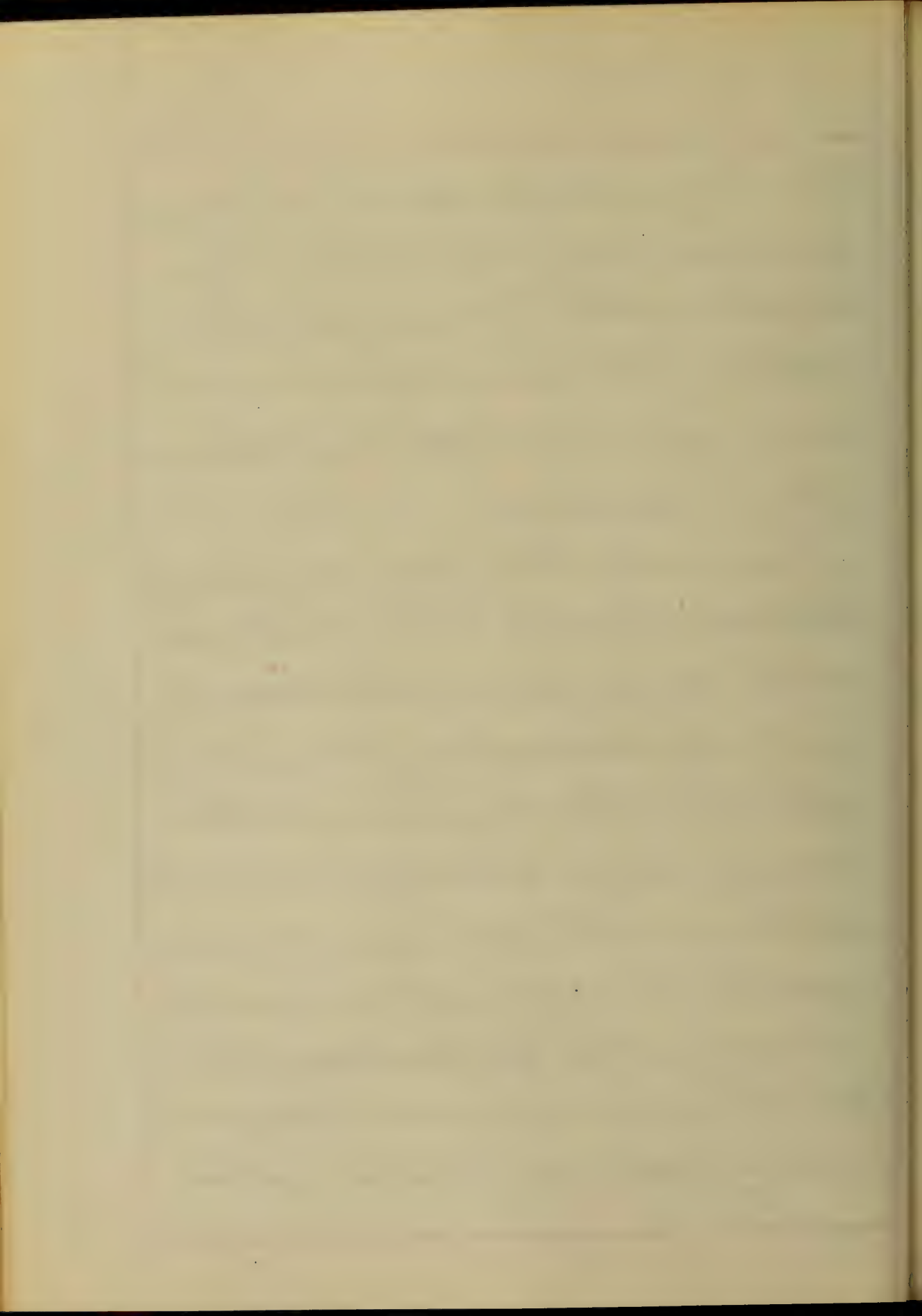


ment of the ...
the ...
stiffness ...
swollen so much, as to block up the ...
the entrance of the ...
In some cases ...
comes on, and an adhesive yellowish matter
is secreted by the ...
nares, excoriating the skin of the up-
per lip, which it runs over. The ...
gland is sometimes affected, and the
cellular tissue of the neck is hard
and swollen. The ...
the ...
is ...



of the disease, it is also a common
cause of the disease, and the patient
is often obliged to use the
water in the uterus, and in
the situation of the canal, and sometimes
a painful situation.

Case of Scars of the Lungs, generally
terminates favourably but when they are
not the chief cause of death seems to
be the consequence arising from the
difficult entrance of air into the
patient's lungs. When they have a
small issue, the inflammation subsides
and the local symptoms begin to
subside in three or four days. The
rest of the disease is cured in a few
days and some will have a great



severity, but is yet unaccompanied by
the swelling of submaxillary glands, nor
do the surrounding integuments acquire
that tension or hardness which we observe
in the latter disease.

Between the severe form of Scarlatina
Anginosa and that still more dangerous
of the disease called Scarlatina Maligna
the difference is more rather of degree than
of kind, in the latter the throat symptoms
are not constant. In Scarlatina Anginosa
the dangerous character of the disease is
not developed, for several days, but in
the malignant form the symptoms
set in with such rapidity, and increase
in force, as to remove the patient off in
a few days, or in the space of a few hours.



appears in a limited, and only partial, in
disappearance. This variety is attended
with feeble pulse, cold skin, and a
prostration of strength. The throat
may sink rapidly, the throat is
by yellow crusts, or may be ulcerated
produced by the separation of these
crusts. The symptoms deepen and death
takes place about the fifth day, may
be sooner or early as the third day.

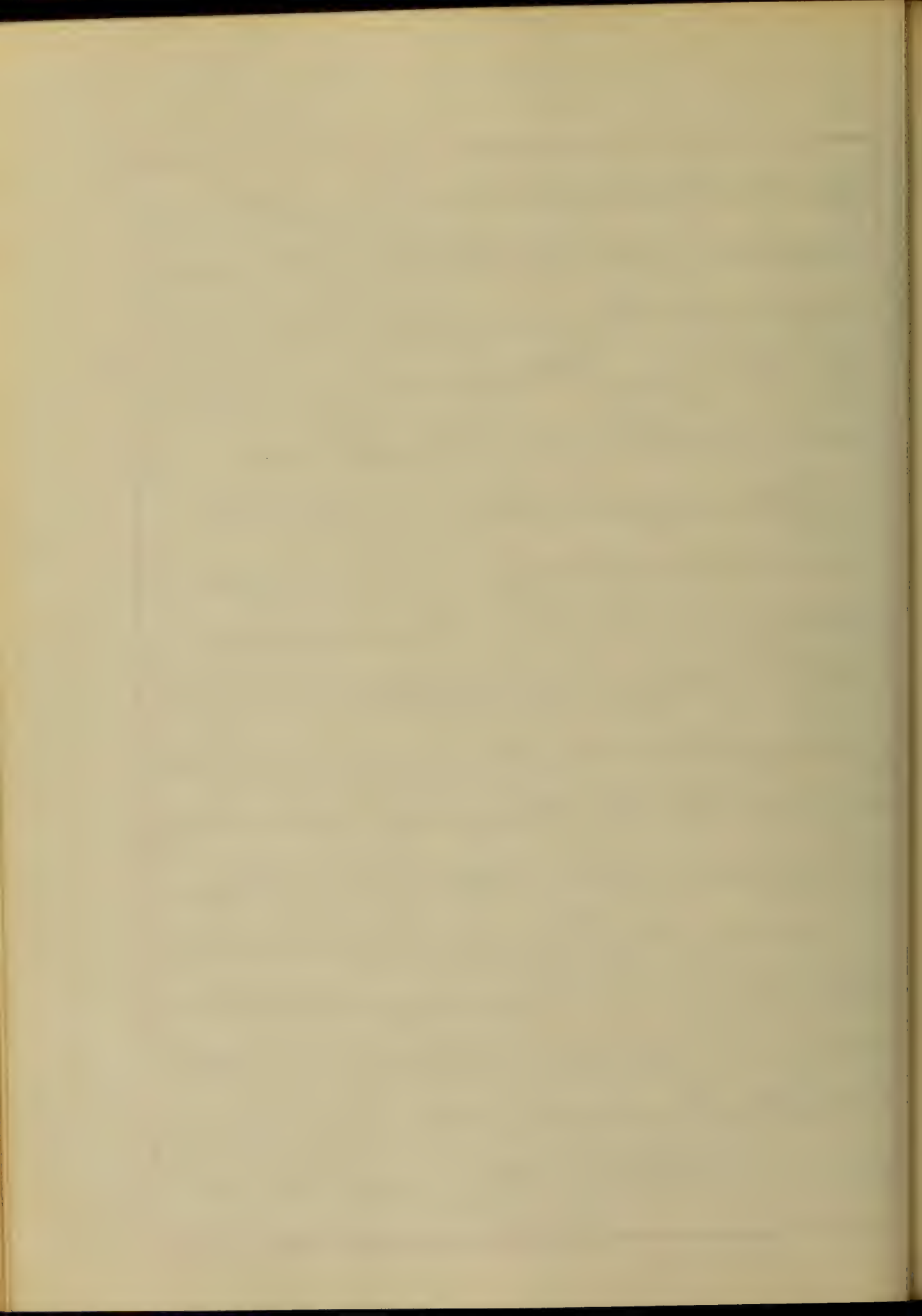
The pulse is small and frequent
the tongue is dry, brown and tremulous,
the eyes white, and foul breath.
The throat swollen and ulcerated.
In such cases any treatment very
weakly does very little good.

A frequent consequence of



of the throat affection is inflammation
of the Eustachian tube becoming
deafness either by closing the tube or
by destroying the Membrana Tympani
or the small bones of the ear.

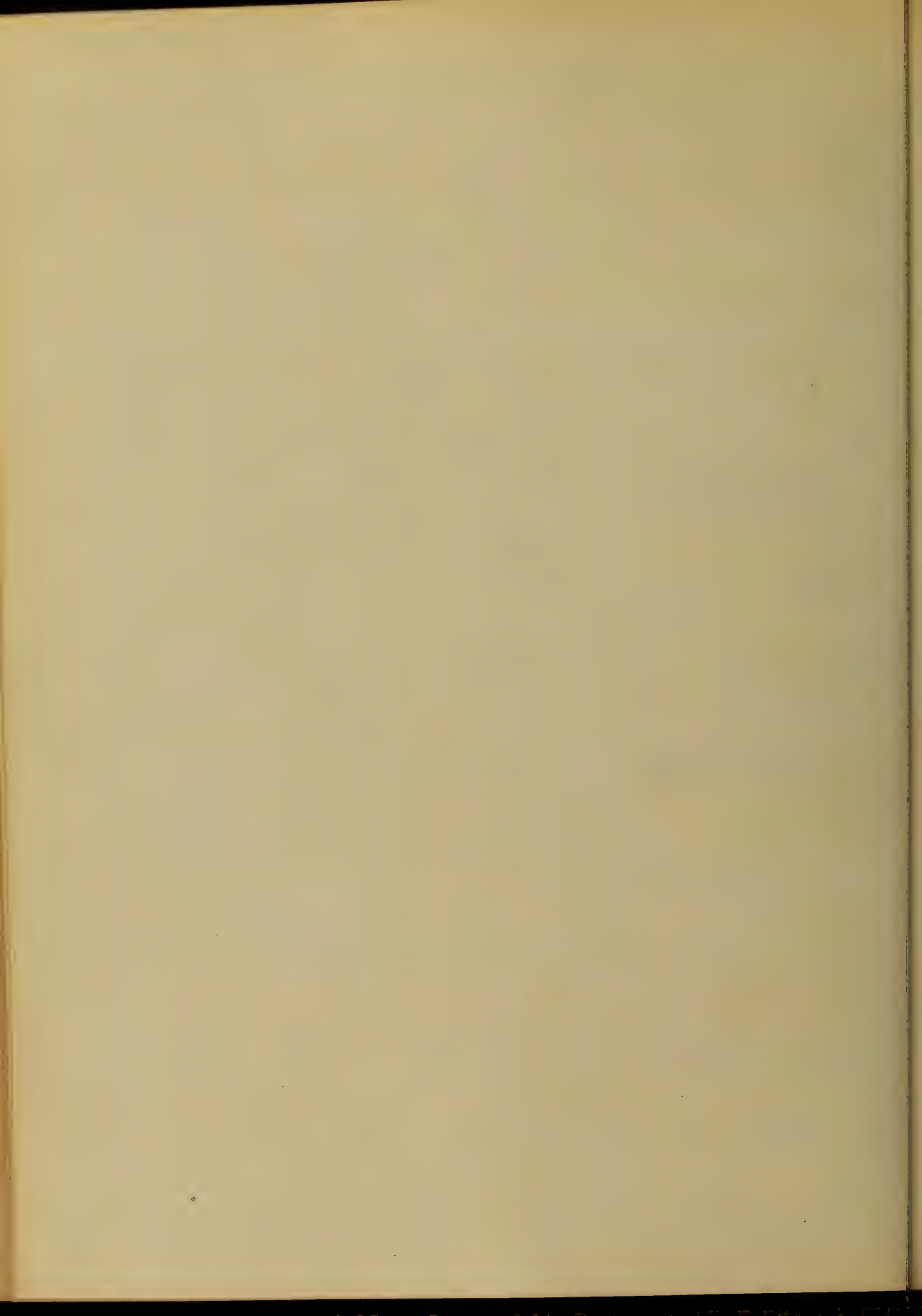
Putrid and female are subject to
Scarlatina, in such cases it is generally
fatal. Few diseases leave
behind them, a longer train of evils.
Among the most frequent and disagreeable
are syphilis and Gonorrea which form at first
the glands of the neck. The discharge
of pus is sometimes at the nose, and
the patient has in several instances
been seized with hectic fever. Ozaena is another
result. It may also cause an
inflammation of the sinuses, which



may result in ankylosis. But the
most common result of this
infiltration of the synovial
membranes is more common after a mild, than a
severe attack, and children are more
liable to it than adults. Patients
are more liable to droopy during
dequamation, the cause is supposed
to be the premature exposure of the
d. v. of skin to cold. The droopy
is usually temporary in the form
of a sinus, though sometimes it results
from the head, or heart, is involved, the
disease is dangerous. The urine
or blood is not treated with arsenic,



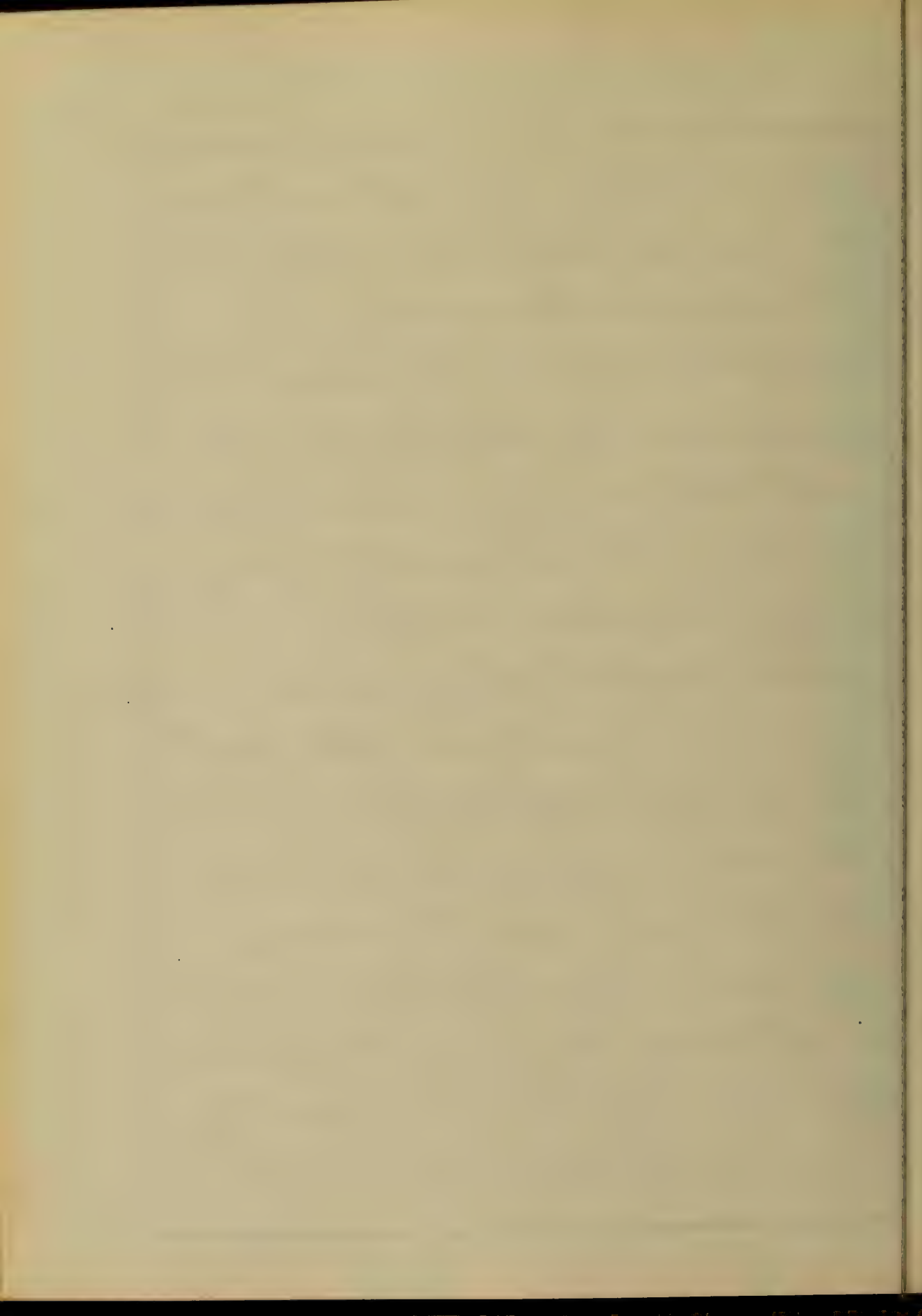
The latter condition is of the transient, the
average ~~condition~~ duration being four or
five days. The specific gravity of the
urine is usually high, and the quan-
tity usually small. It is stated by
some authors that in certain forms
of stranguria, blood has been observed
without being preceded by the usual
symptoms of the disease, and it is
supposed to be the absorption of the
poison and ~~the~~ its direct action on
the ~~urine~~ on the kidney. Stranguria
is another frequent result of infection,
which may prove obstinate, but
generally yields to treatment.
The bowels is sometimes affected
and the patient passes into ^{the} prostration.



not only does it contain lime
but also a large amount of lime,
and hence, it is a good
solvent, and may be added to its
composition, such as pharyngitis, pleuritis,
peritonitis, and bronchitis, the latter
occurs most as frequently after
exhaustion, and is fatal.

Post mortem appearances,

Sometimes after death
the eruption of white cuticle from
the body, and purple or livid
spots may be seen. The redness
disappears from the face though
it often remains if the skin
continues to be inflamed, and
the redness of the face is

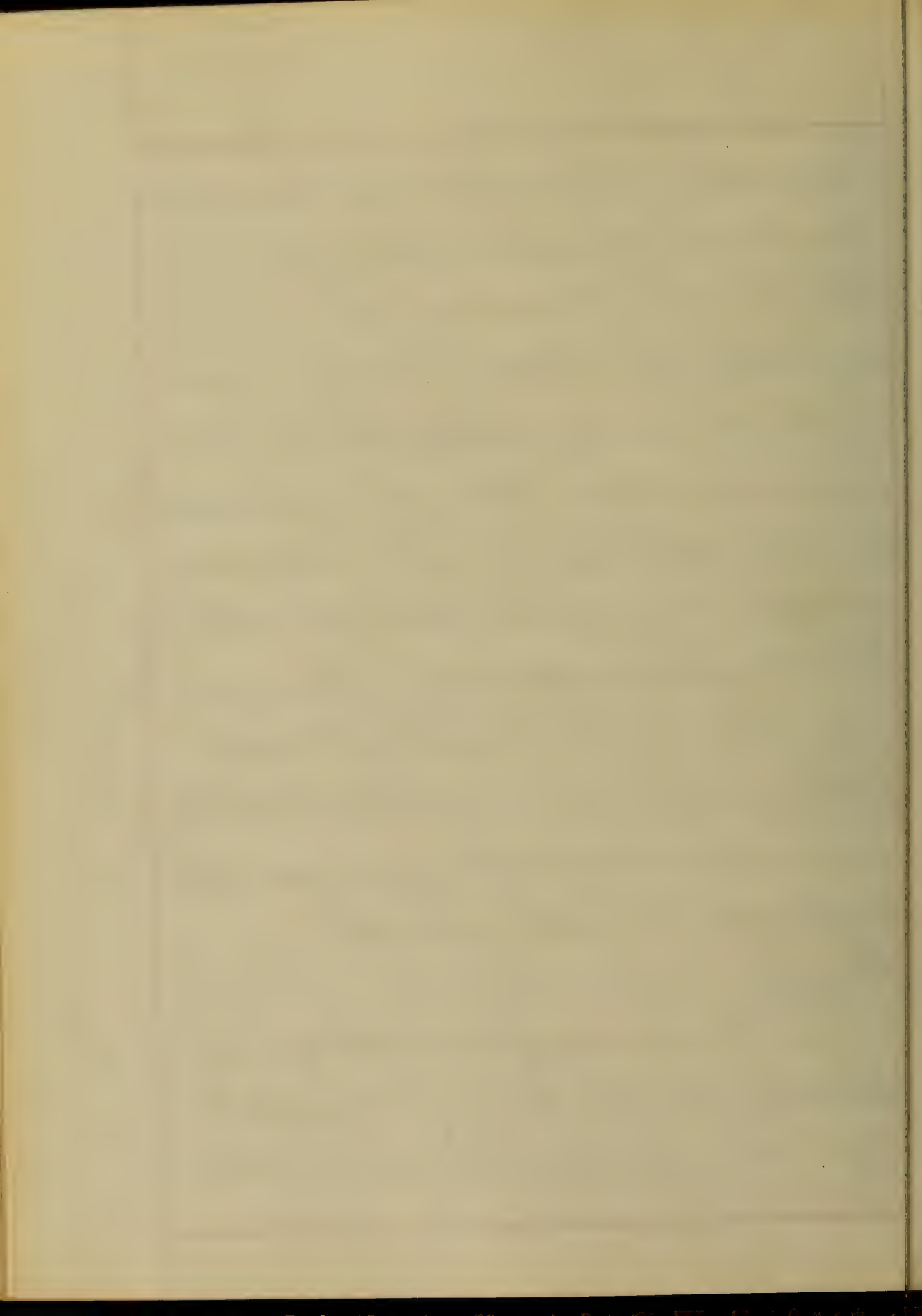


any canal also exists in
the kidney are inflamed, also
the blood of persons that
sometimes may be mixed with water,
and is diluted, the red corpuscles
are increased in number, the mucous
membrane of bronchi, stomach, esophagus
and trachea, is red and inflamed.

The substance of the heart and
kidneys is softer than natural, the heart
is very flaccid and tears readily, it may
be distinguished by its size.

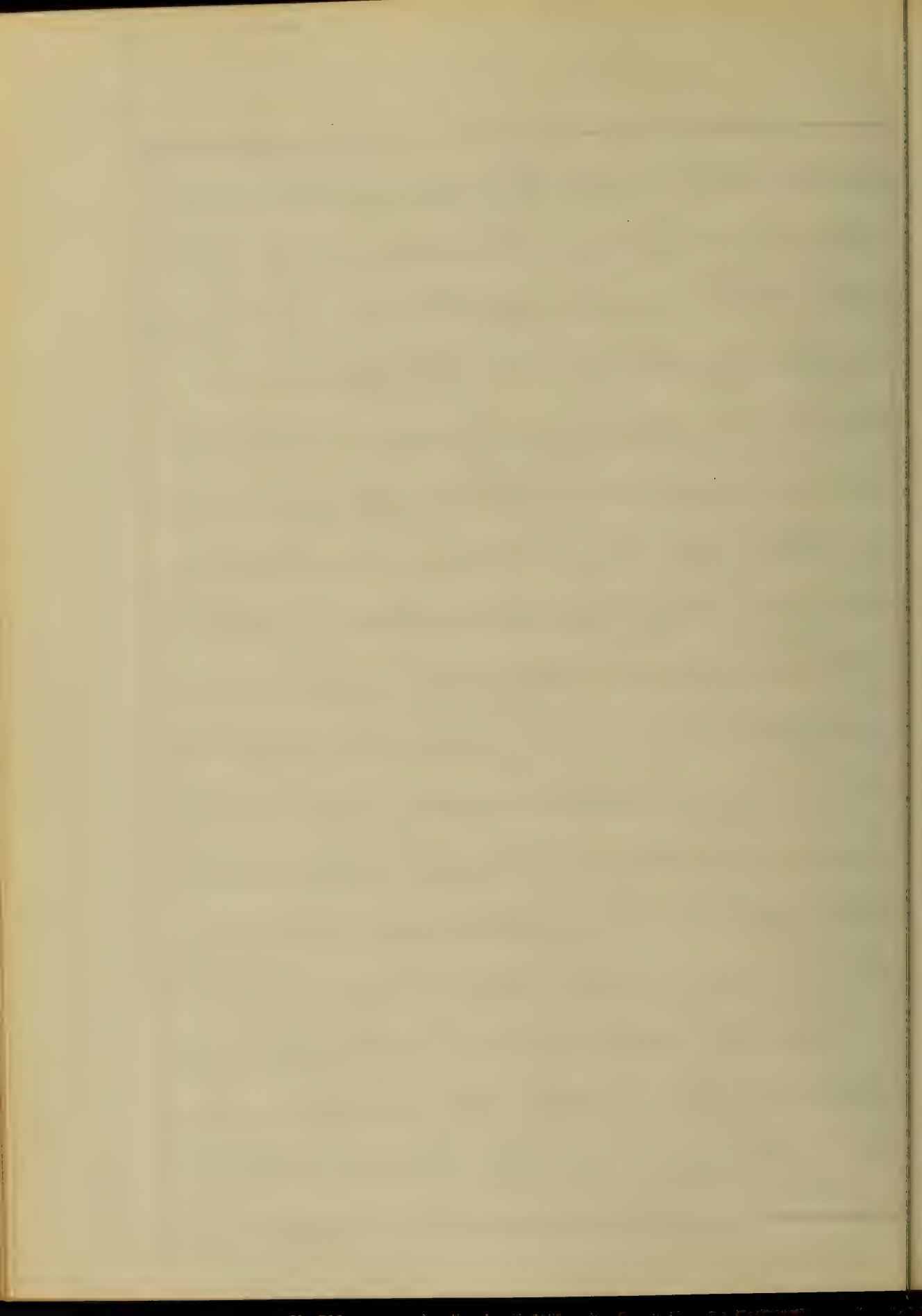
Causes

The cause of scarlatina is
probably specific, and is believed to
be derived from a certain substance



described to some, because of the
operation of the various influences of the
atmosphere, the operation of the
differing qualities of the soil,
different causes, giving rise sometimes
to a mild and sometimes to a violent
form of the disease, - sometimes appearing
in an inflammatory, and others a typhoid
character, or causing a particular
direction as in the case of the
in passages; There are a great
number of persons who are susceptible to
the contagion of this disease, and
it prevails at all seasons of the
year. It only occurs to the same
person but once, generally.

The source of infection



Three weeks, on an average about
or five days.

Prognosis.

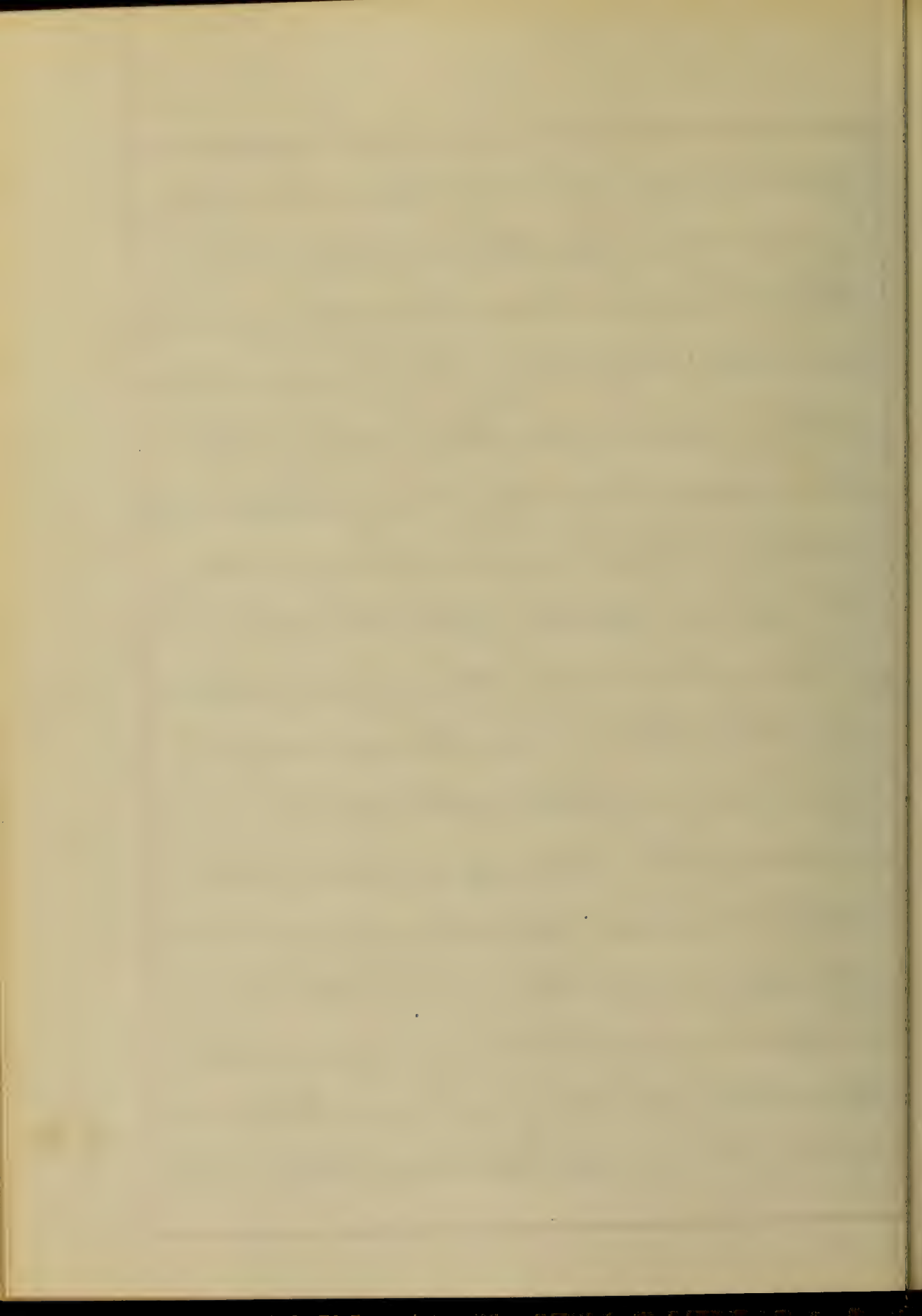
The result is very uncertain,
the mildest forms sometimes as-
sume the most deadly character,
patients die when supposed to be
free from danger, while cases de-
cided to be most dangerous, with
in recovery, Even when the case
has reached recovery, there is
there is great danger from some
of the secondary affections.

There are certain that some
may be the cause of the disease
and may be the cause of the disease.



of the ...
usually ...
then ...
result ...
been ...
the case ...
particular ...
of the ...
to when ...
practice ...

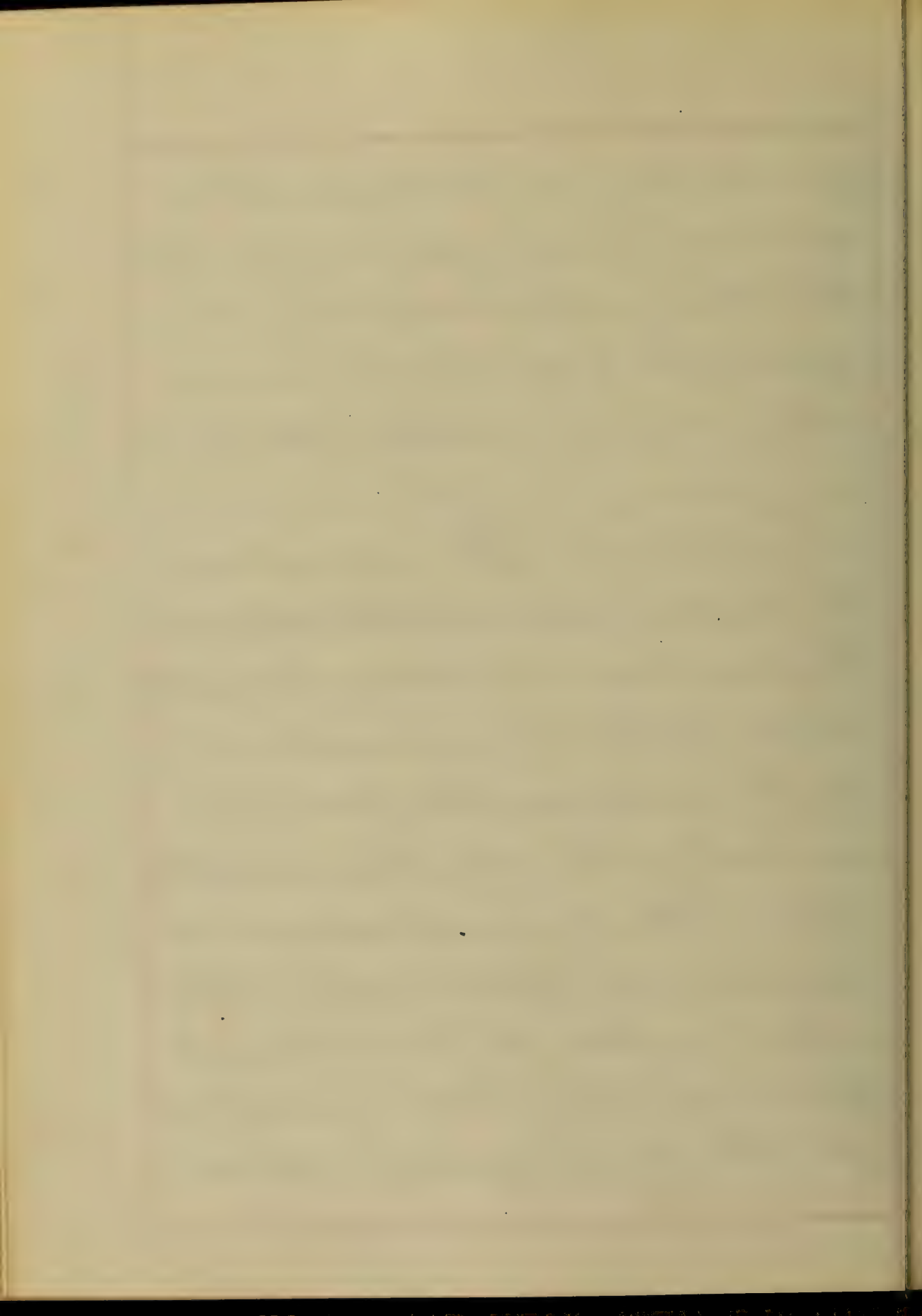
Among the ...
appearance ...
step ...
or ...
of the ...



into the cavity, inflammation of
internal organs, gangrene of
skin, and great prostration of
strength, by febrile, protracted
disease, and morbid humors.

5

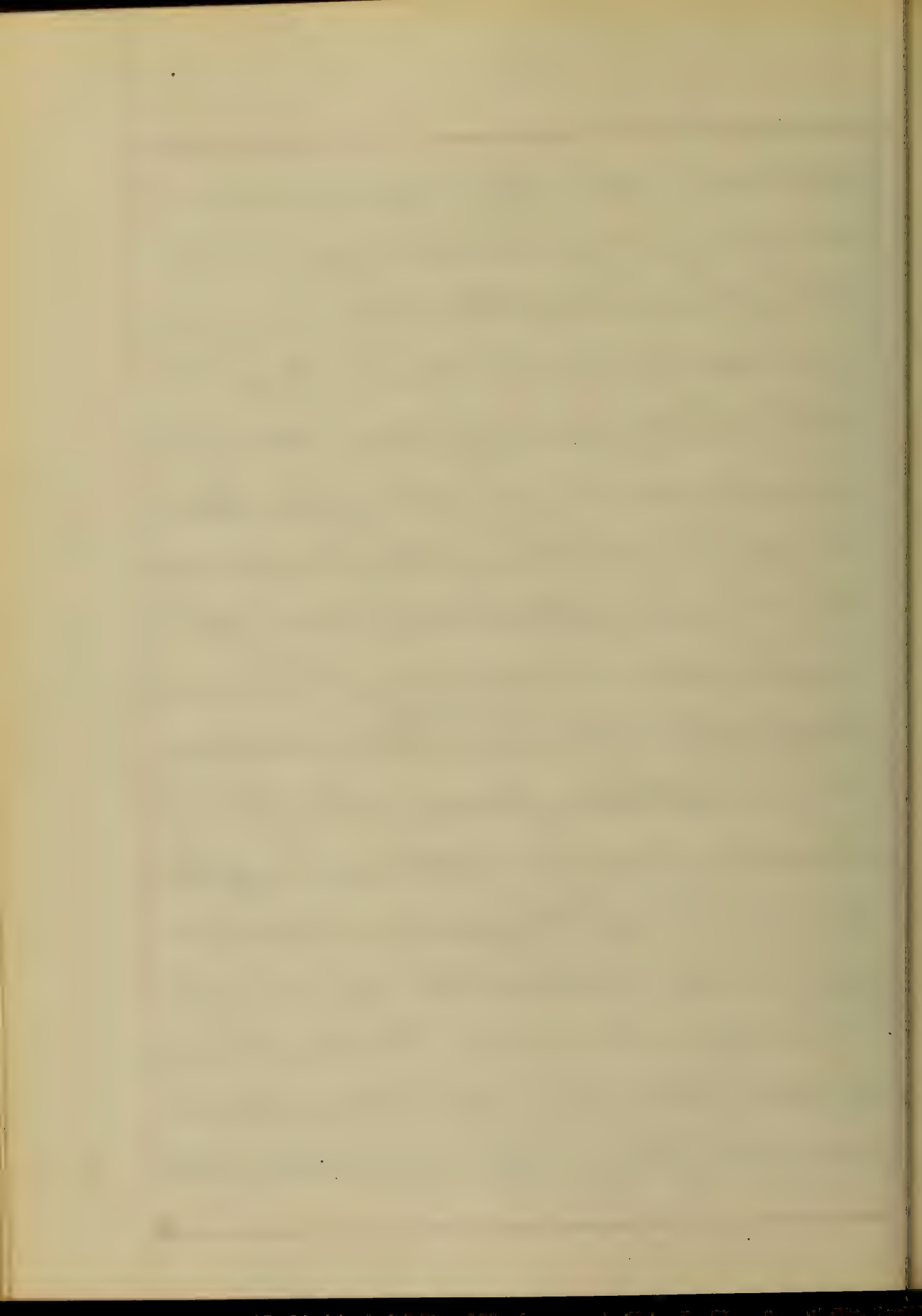
Treatment. The milder forms of
the disease require but little interference.
The best thing to be done is to keep the
child in the house, in a cool well
ventilated room, spare diet, and
antiseptic hygienic remedies, during the
course of the fever, also sponging the
surface with tepid water, if there
is heat of skin. An immersion with
hot or sweet suds, to be substituted
for the sponging, will be useful



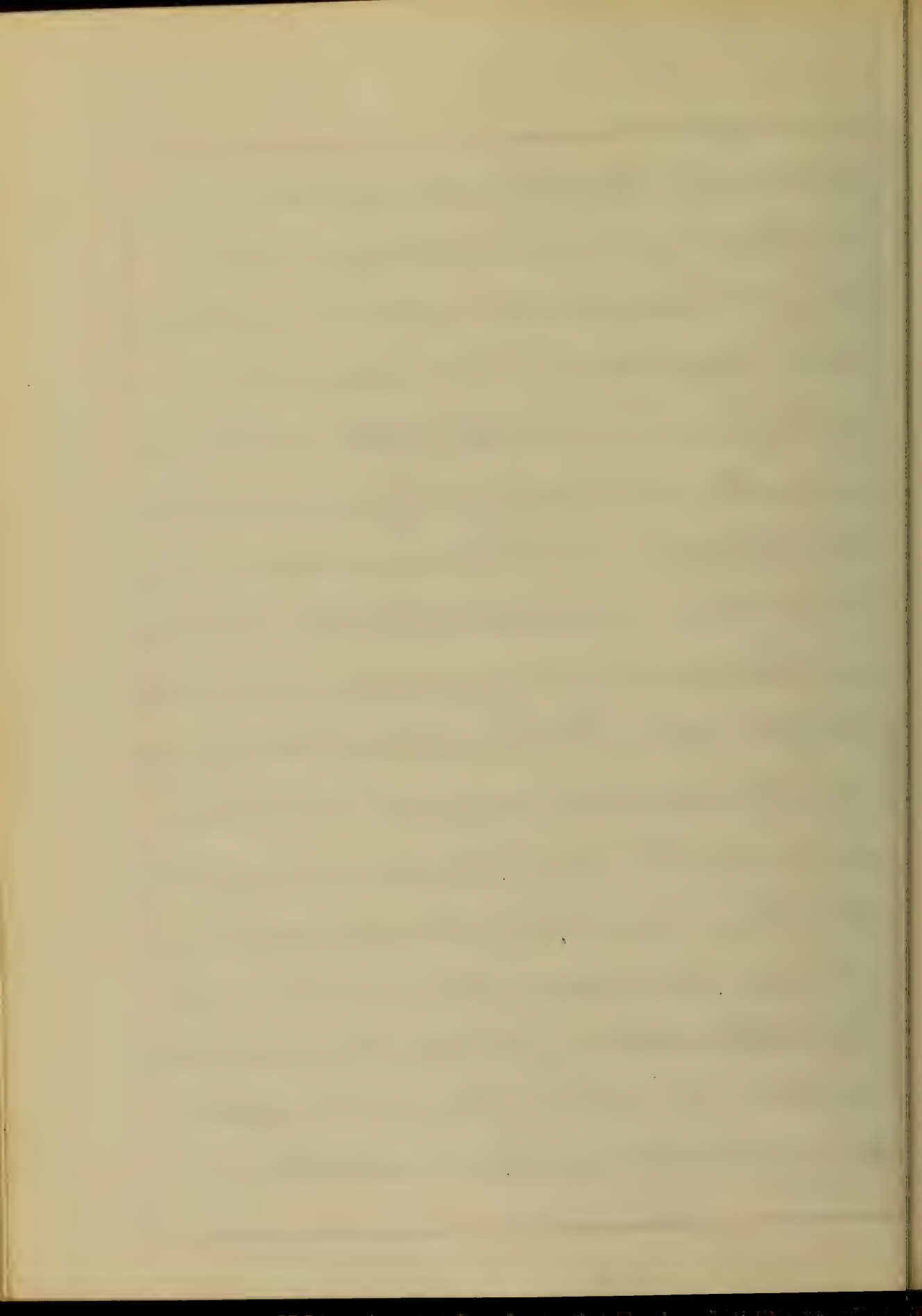
The best way of treating the
Disease is by the use of
I will not prevent the use
of the catheter, Giving the frequency
of the catheter, the same should be
performed twice a day, but not
the same is a day, once a day is
sufficient, However mild the Discharge
may be, the patient should not allowed
to have his bed in ten days, and if
in less than three weeks, the diet should
be time must be plain, and in
relation, and his bowels should be
kept open, & yet the catheter is never
removed by some at the outset of the
disease, The catheter should be kept
open, and if it does



not at a few hours, a dose of castor oil
should be administered, a large quantity
of saline aperients. If there is much
inflammation, a cathartic powder is indicated. If the
stomach, however, is not very irritable,
the child should not go out when the air
is cool for sometime after. Flannels should
be worn next the skin, to prevent
it from becoming superfluous. Sometimes
Scarlatina Anglica. There is a distinction
between the scarlatina, a cold affusion
should be used, to the head, after
it is over. If the pulse is strong and
full, leeches behind the ears, or some
bleeding may be necessary. The bowels should
be kept open, by mild cathartics. Some
times milk should be given, if the child

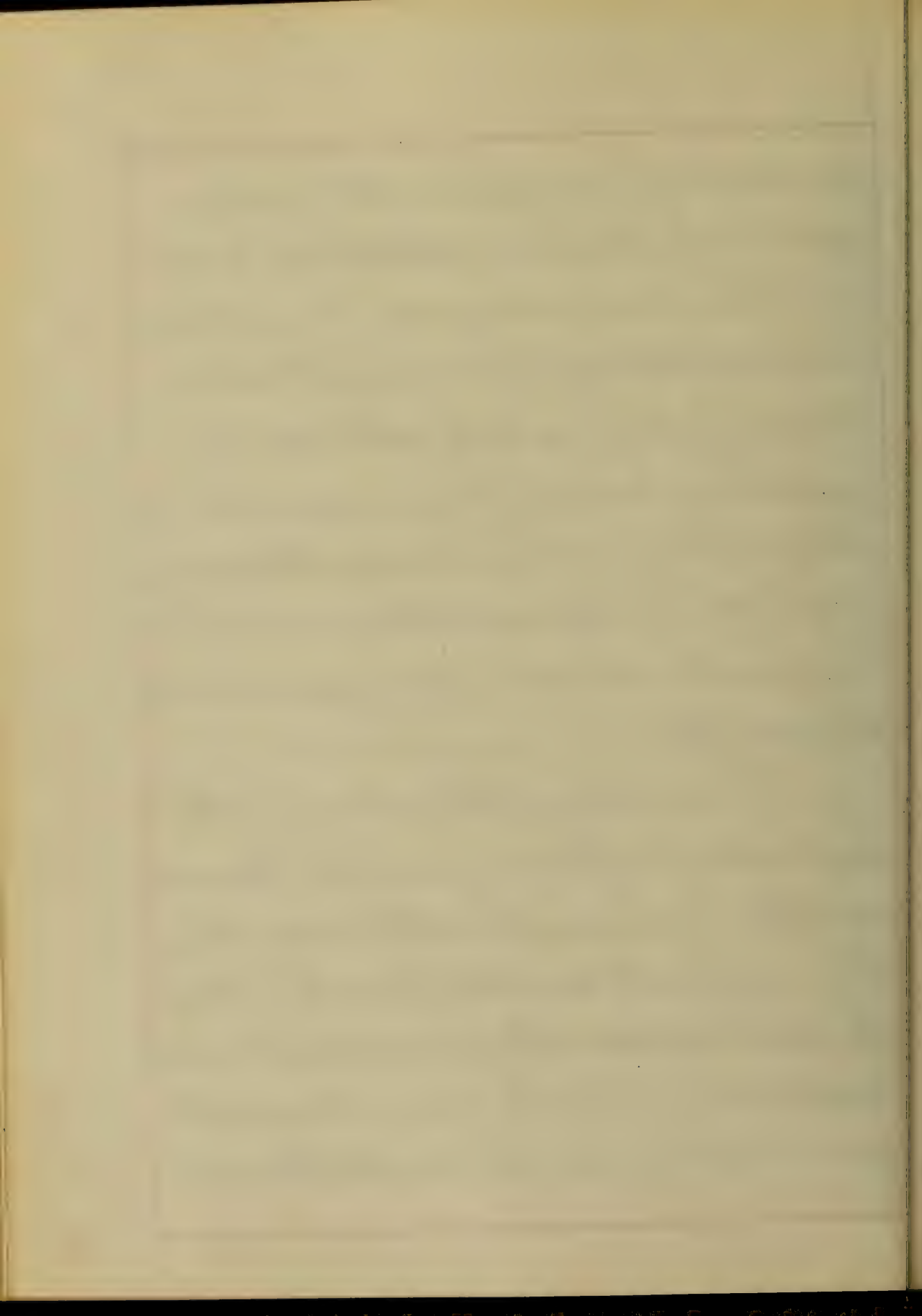


of the urine, the effluvia of acids in the
highly acrid. Cold should be used in all
the great. Some preparation of Sarsaparilla
nervous symptoms, should be given, if the pain
is frequent, the Digitalis. If the urine is
acid, as in the state of Catarrh, or the retention
the patient is debilitated, and broken down,
Sarsaparilla should be resorted to, Sulfate of Magnesia
and Nuxbama. Pot. & B. are admirably adapted
to this purpose. The throat should be carefully
watched in every case, and when there is
swelling of the tonsils, it should be gargled,
with some demulcent fluid, as infusion of
Slack, or slippery elm, or water sweeten-
ed with sulphuric & muriatic acid, or with
meyer. A weak solution of Sarsaparilla
and a common salt, or a solution of



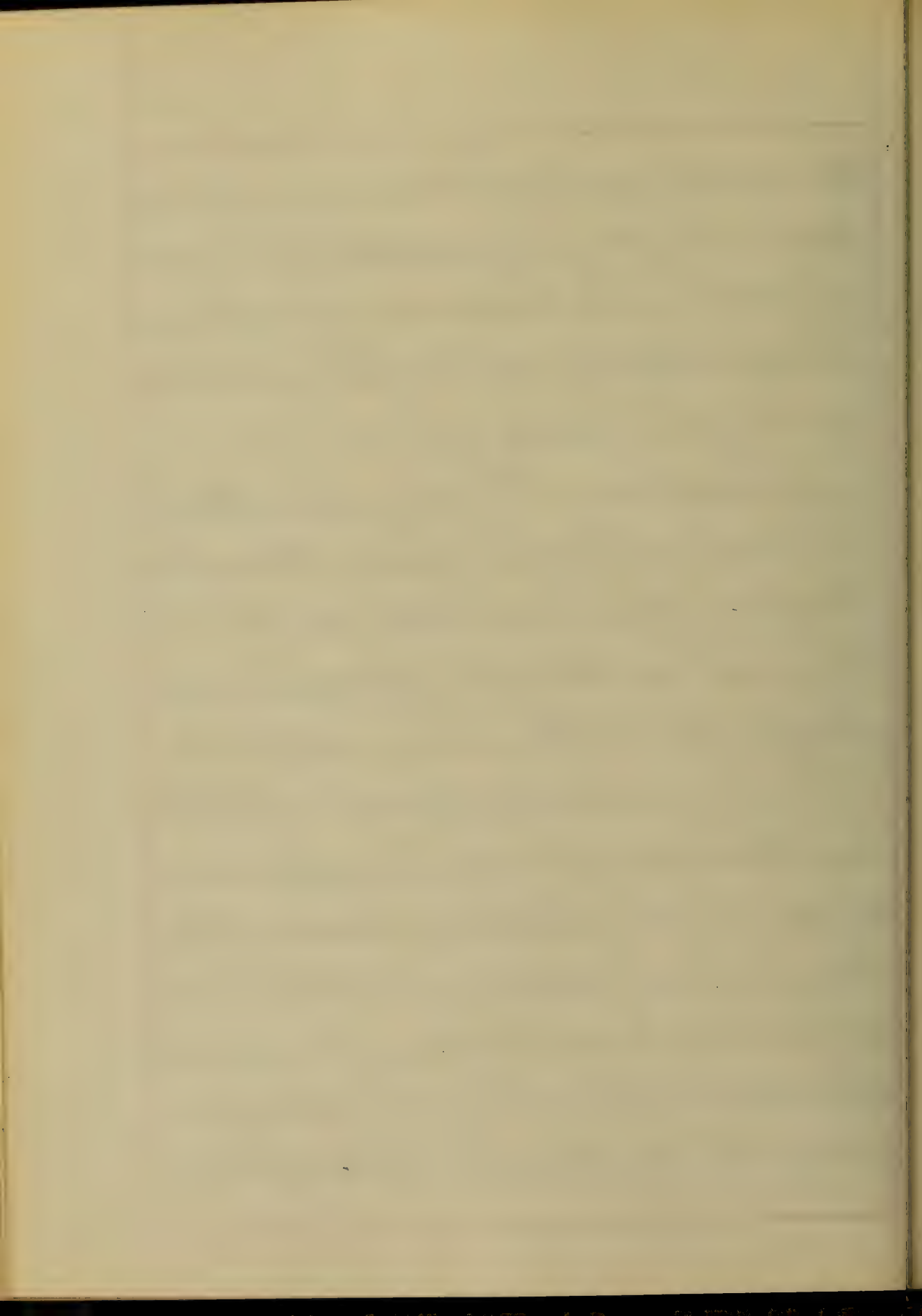
Sulphate of zinc, mixed with the gummy extract
applied to the ulcers of the throat, the extract
of silver is also very good, Mercurochrome
mixed with honey is also used. If the child is
too young to gargle, the substance may be
injected by means of a syringe. Iodine
Perhaps is very good as a disinfectant, of the strength
of $\frac{1}{2}$ to the $\frac{1}{4}$ of the tincture has been used, and found
very good in the severe forms of the disease, in
the secretions.

The swelling of the gland of the
neck should be treated, by painting the part
with the tincture of Iodine, two or three times a day. When
the suppuration commences, poultices should
be applied, and the patient's throat
supported by means of a spatula, or any other
method, the patient should be kept in a
warm bed, and the bowels kept open.



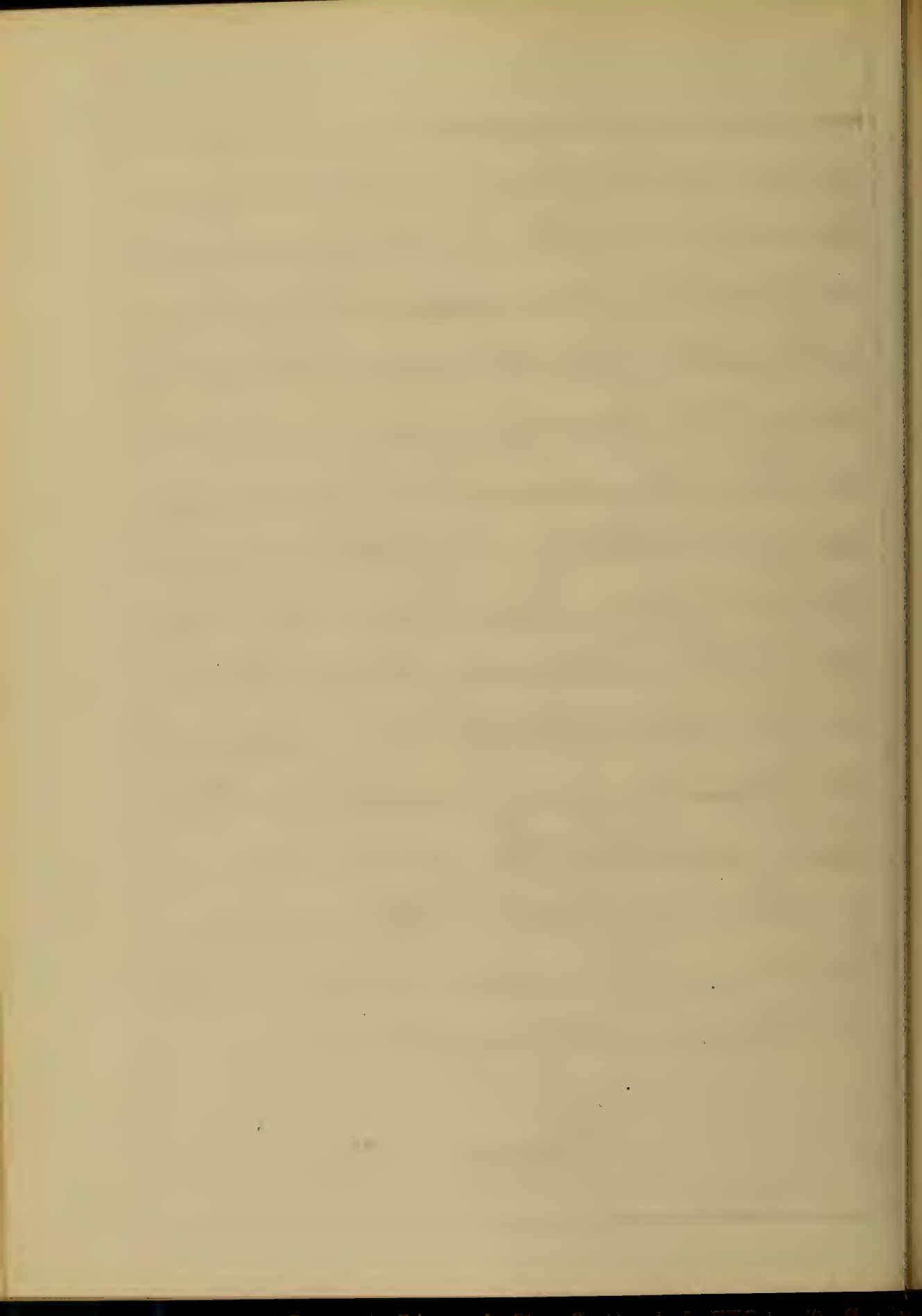
this disease, and is attended with, delirium,
tremulousness, prostration, the rigidity
of the arms. The cerebral symptoms
should be treated by purgatives, demul-
cents, sedatives, &c.

Prophylaxis. It is very important
to send children ^{to} school, & to
therefore when the disease was
in use, it was thought a preventive, but
been found. Belladonna will cause
a smart rash and a redness of the face,
but this is procyon in turn upon which
is not its prophylactic power, in this
disease. In a very many instances the
disease is avoided persons from South
Carolina, and again in his country
is perfectly useless. But the weight of



testimony as in favour of its power in
prophylactic virtue, it has been employed
in the form of powder, good solution, Symp
of the rat in $\frac{zj}{ij}$ of some aromatic infusion,
and of this the dose may be given to a child
one year old, and an additional dose, for
every additional year, of the child's age.
The half grain is divided in ten doses,
one of these twice a day, to a child two years
old, to older children doses proportionate,
The sixth grain of calomel, with the
same quantity of the golden sulphur
of Mercury, with a little sugar, has
also been used as a prophylactic, but
has been found to be of little use.

of
February 1807



AN

Inaugural Dissertation

ON

Development of the Osseous System,

SUBMITTED TO THE EXAMINATION

of the

Provost, Regents and Faculty

of

PHYSIC,

of the

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

Doctor of Medicine,

by

Elbridge H. Gerry

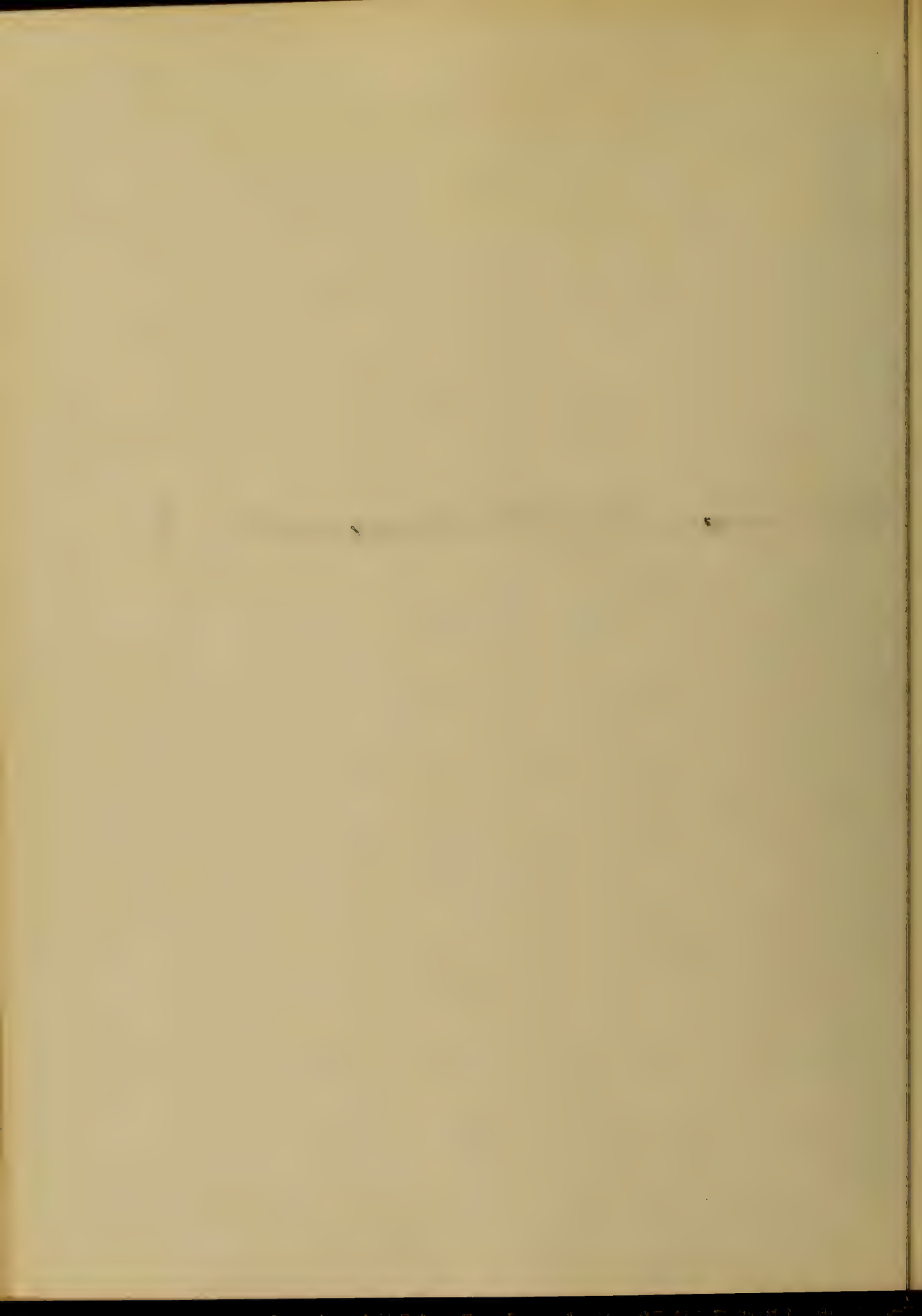
of

York County, Pennsylvania

Session Fifty Ninth - 1865-67



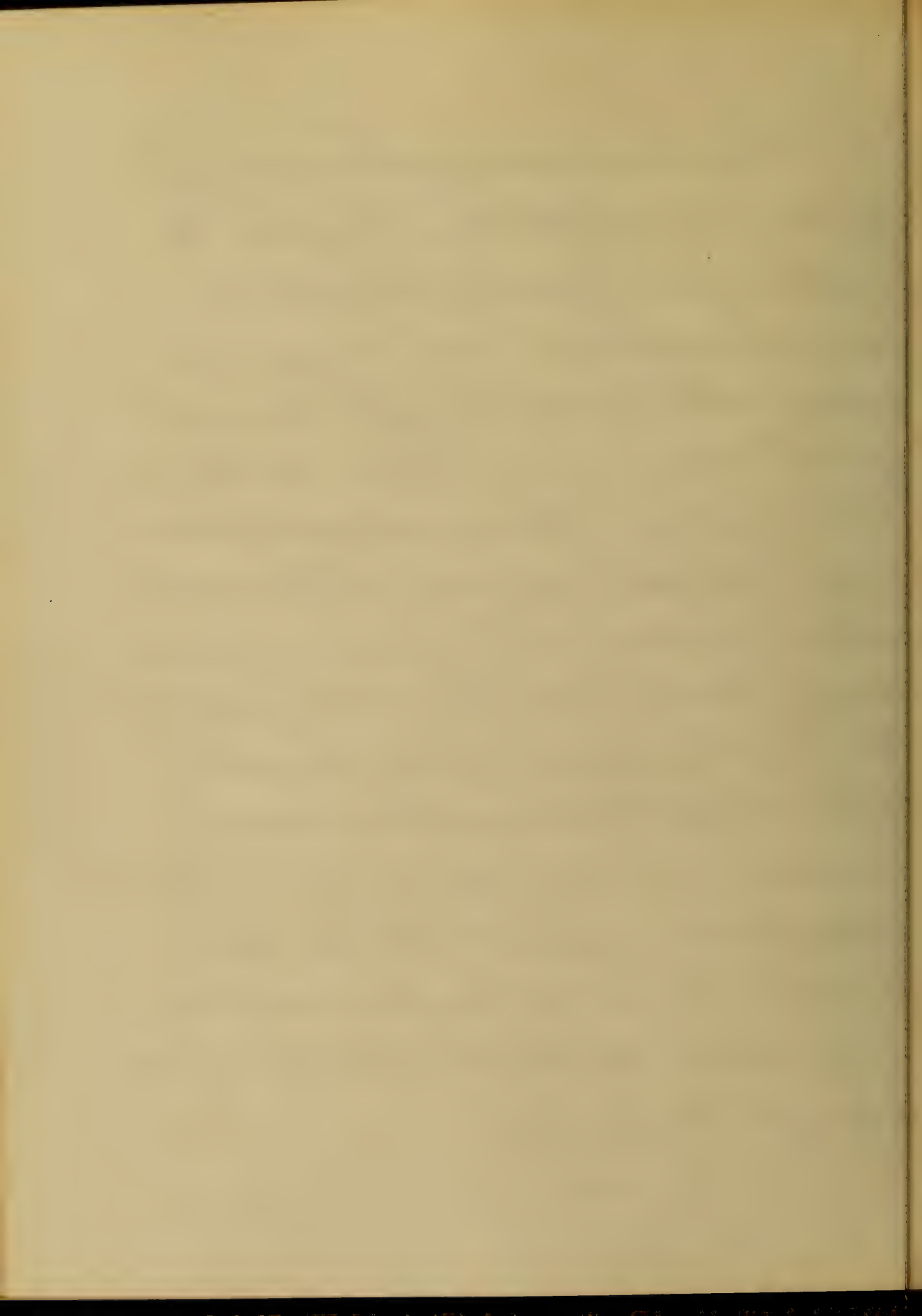
Development of the Assesment System, Mar.



When man surveys the works of nature, its adaptation of system to system, part to part, phenomena arise by which he may puzzle his imaginative and fanciful brain for ages to come, and yet be in mystery.

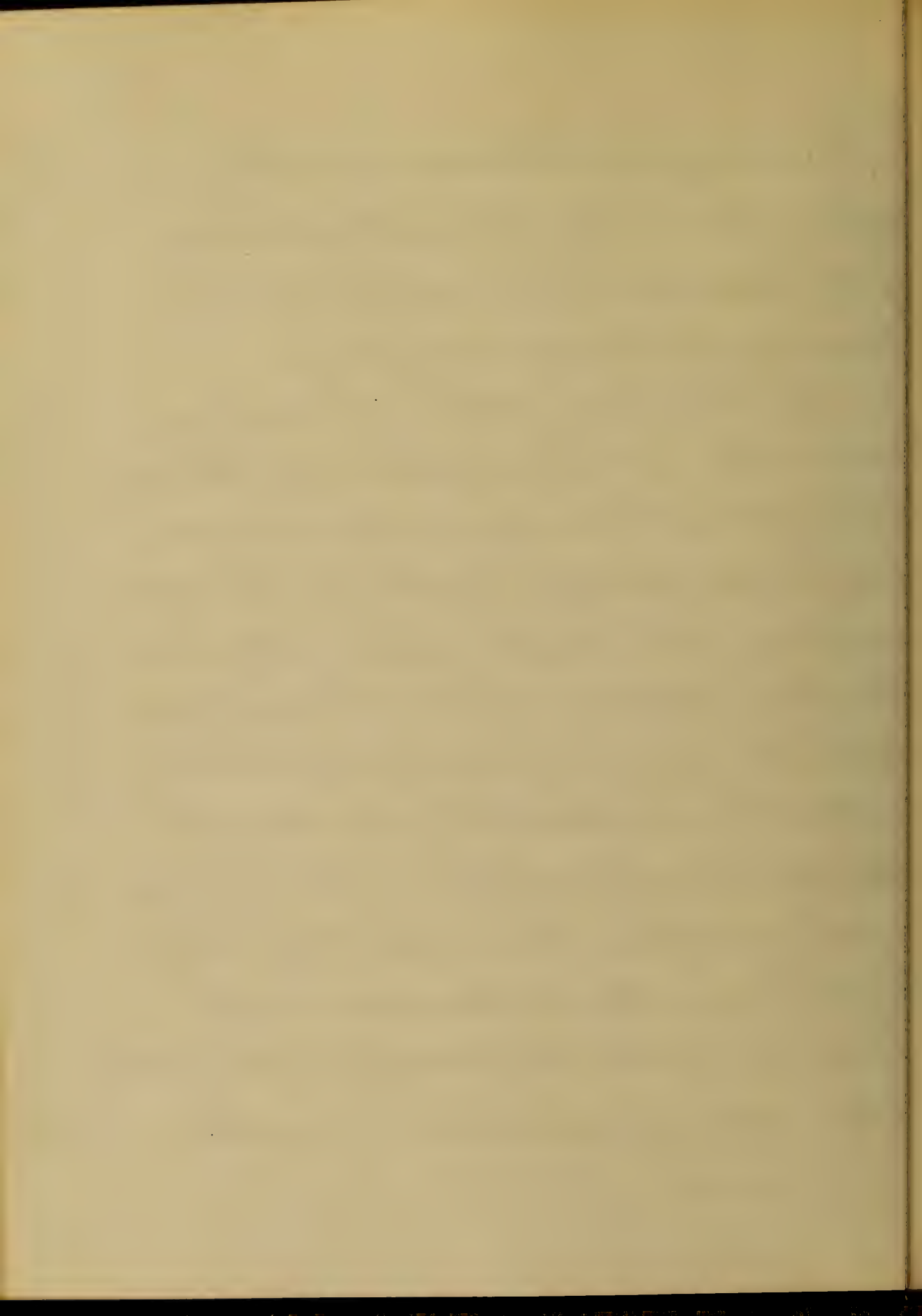
Theories have sprung up and faded as if by magic, one man assents, another contradicts, and what have we gained simply doubt, anxiety and perplexity.

With all this diversity of opinion among the Medical Profession, the Science of Medicine is slowly making inroads upon disease, and it is to be hoped, that the day is not far distant, when every disease shall yield to a speedy and successful treatment.



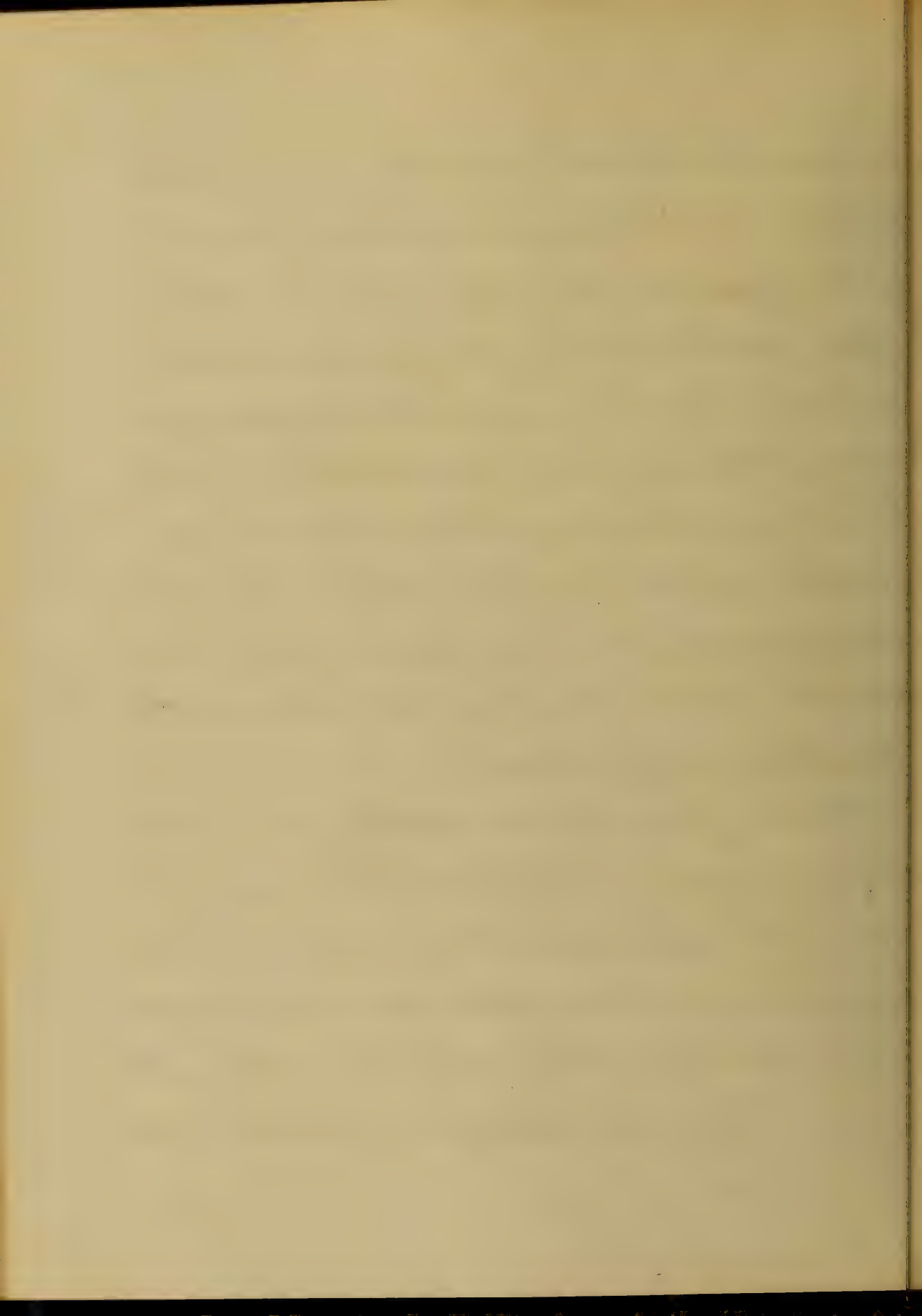
To accomplish this end every Physician should have a knowledge of the anatomy of the human body and particularly, a knowledge of the Osseous System.

The body of every animal consists of various tissue, which are divided by Wilson into eighteen kinds and further resolved into four classes, viz, Simple fibre, homogeneous membrane, cells and amorphous matter. Tissue has three properties physical, chemical, and vital, the vital properties are, assimilation, contractility and sensibility. The animal structure is supposed to have its origin from a cell, and the cell is capable of being organized in the Blastema, or in other words it originates in a mass of liquid matter. Cells multiply from a matrix or primitive

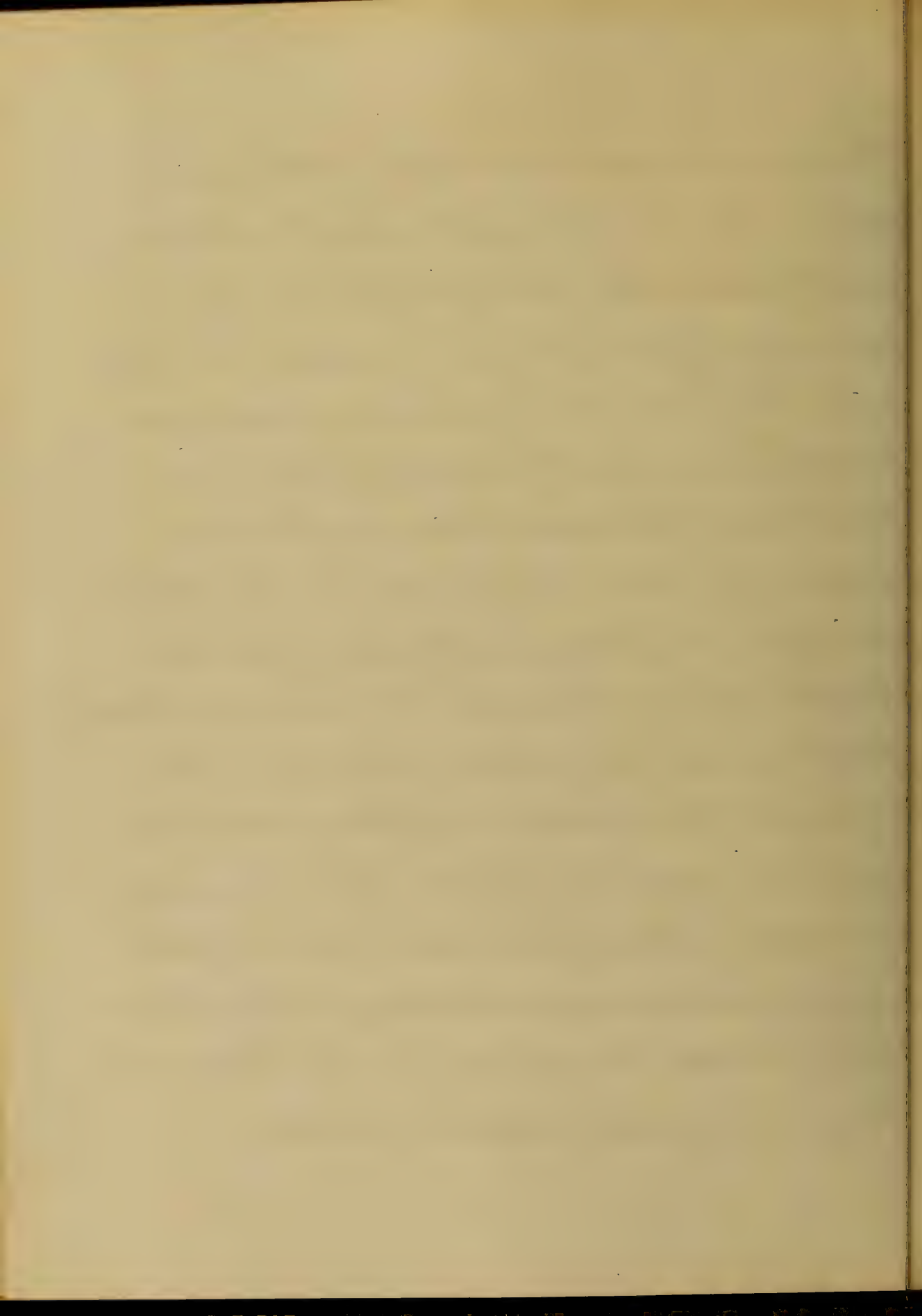


cell, within the cell wall, having a nucleus with a nucleolus, and each one is capable of development, being, to use the language of the mother cell, "In relation to each, other, cells may be alone, or connected together by an intermediate substance, as in cartilage, and bone, these cells arrange themselves in rows and the substance around them (limb) and vascular canals, are formed, which concentrate to some point, which is termed the "Punctum Ossificationis."

Bone is first soft and cartilaginous in the child and young of animals, but by age it becomes hardened, consisting of organic and inorganic matter combined. The animal matter gives to bone its elasticity, while the earthy matter gives solidity and hardness. Heat will remove

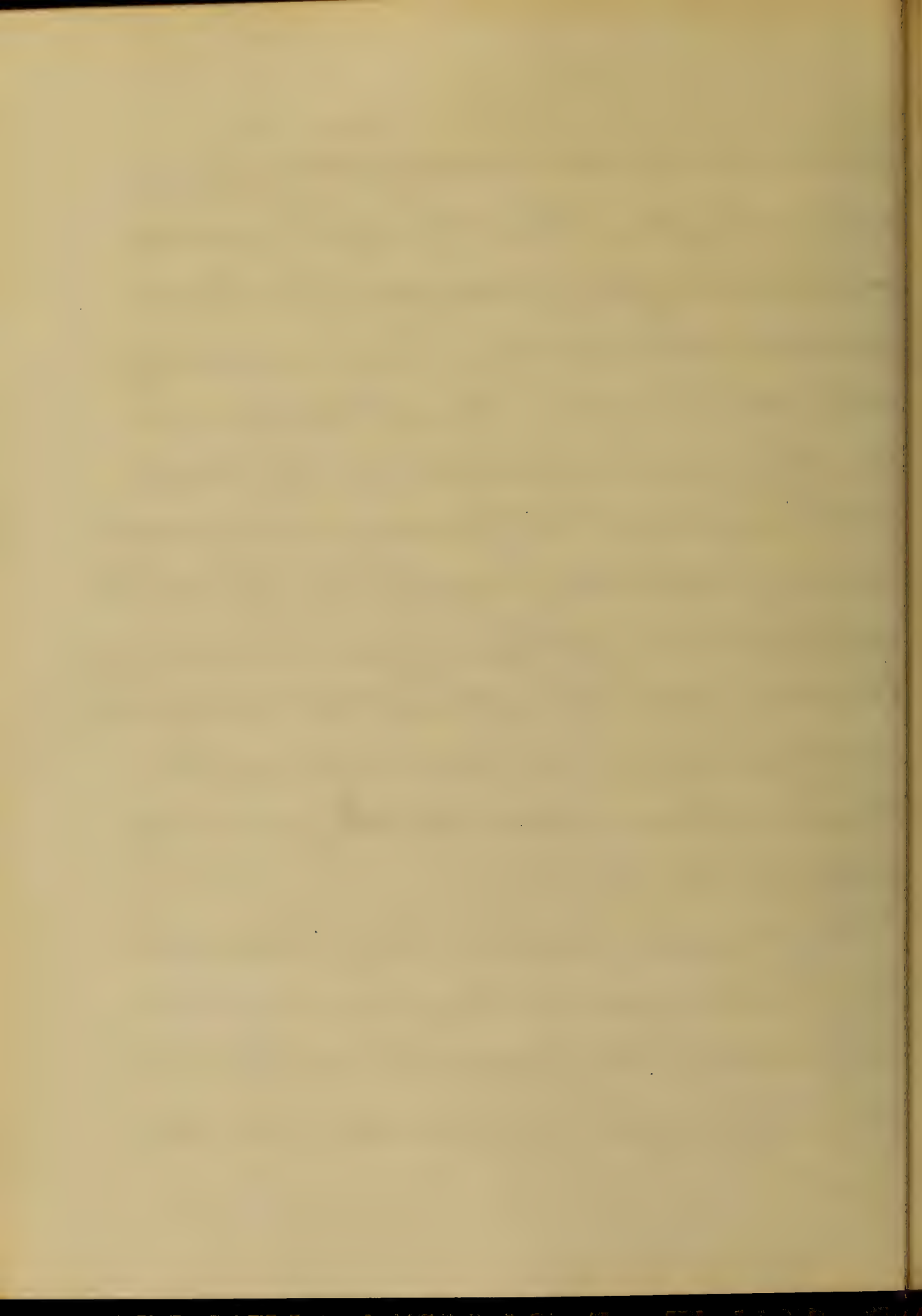


the animal matter and acids the earthy matter. The animal constituents of bone to earthy matter are in the ratio of one to two, they are said to differ in different parts of the body and hence no particular maximum can be obtained, youth and age make a material difference. Bone is a firm hard substance, of a dull white color composing the skeleton of the higher order of animals, it gives support and shields the softer parts and is the hardest substance of the animal body, having elasticity and toughness. Bone is composed of two portions, the compact or outside in texture like ivory and the cancellated, the compact consists of small fibres arranged in laminae and through these fibres the Haversian canals pass for the transmission of vessels into the cellular portion.



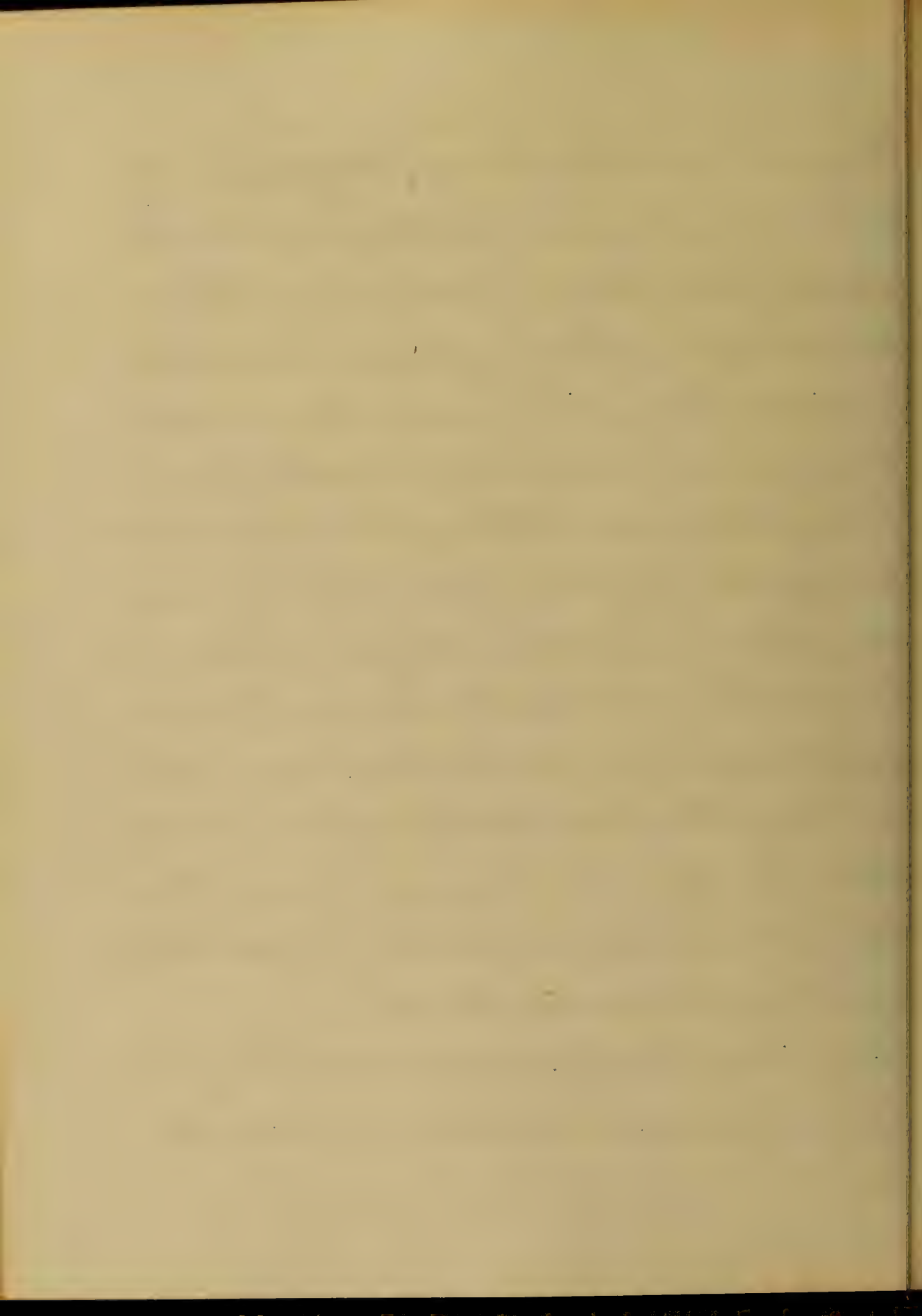
The cellular structure increases the volume and strength without the weight, and diminishes the effect of concussion. The cells communicate with each other and are occupied by medulla or marrow. The dark spots in the lamellae formed in circles round the canals of Haver, are called lacunae, and tubes connecting each other are called canaliculi, the communication of these carry the blood to every part and nourish it, the outside is preserved and nourished by a membrane called the periosteum and a medullary membrane on the inside of bone.

Bones are divided into three classes, long flat and irregular. long bones, are levers and assist in the powers of locomotion, they are divided into four and five extremities.



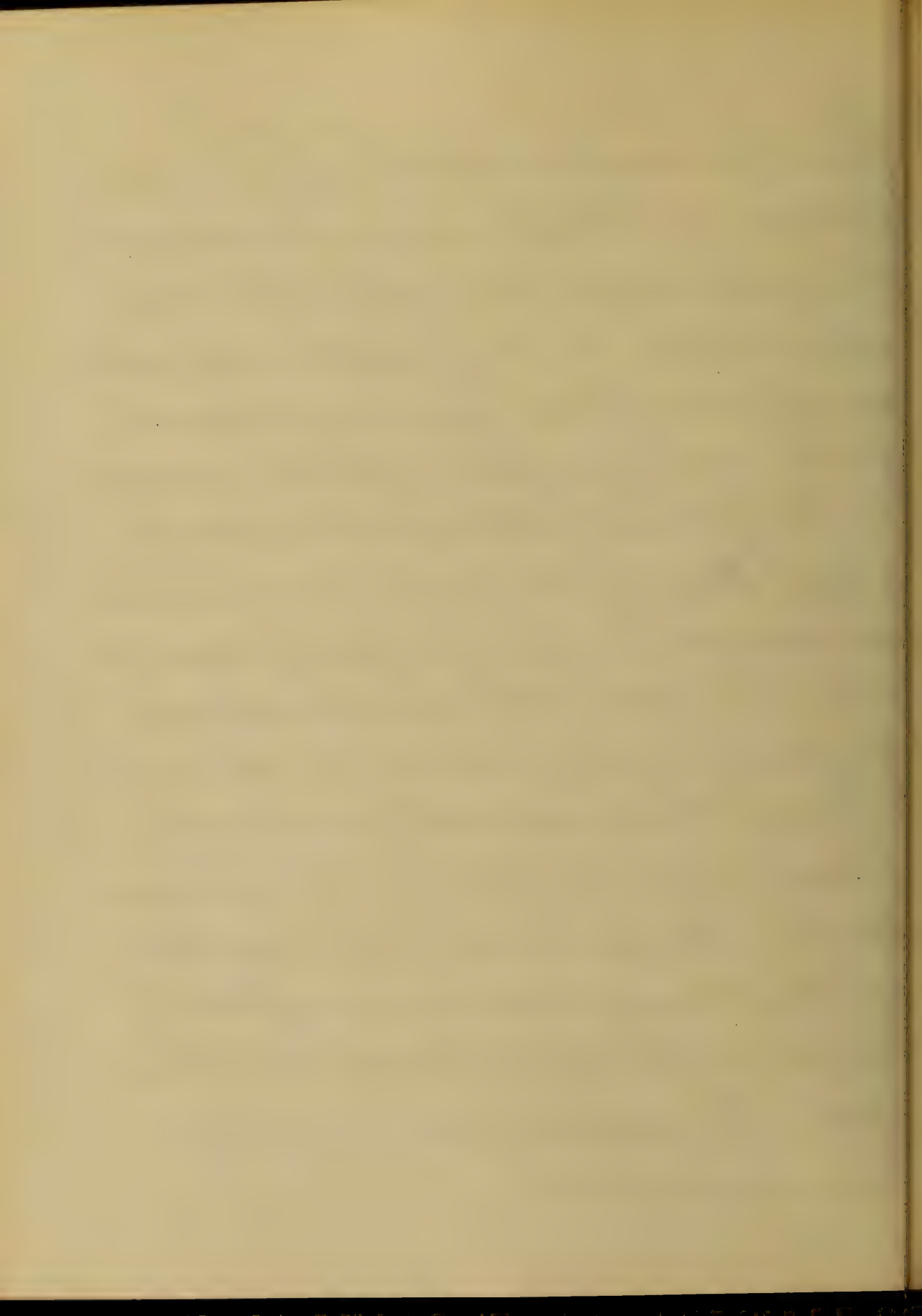
The shaft is hollow for medulla canal, the walls being compact for strength, while the extremities are large having spongy tissue for muscular attachment, and convenience in articulation. The bones are the clavicle, humerus, radius, ulna, and meta-carpal bones, also, femur, tibia, fibula, meta-tarsal bones, and the phalanges. Flat bones are for extensive protection, these are the occipital, parietal, frontal, nasal, lacrymal, zygomatic, scapula, osso innominata, sternum and ribs. Irregular bones, such are the temporal, sphenoid, ethmoid, sacrum, coccyx, vertebra hyoid, turbinated sup, and inf, maxillary, palate, carpus and tarsus.

Every bone has depressions, rough surfaces, eminences and a meatus for its nourishment,

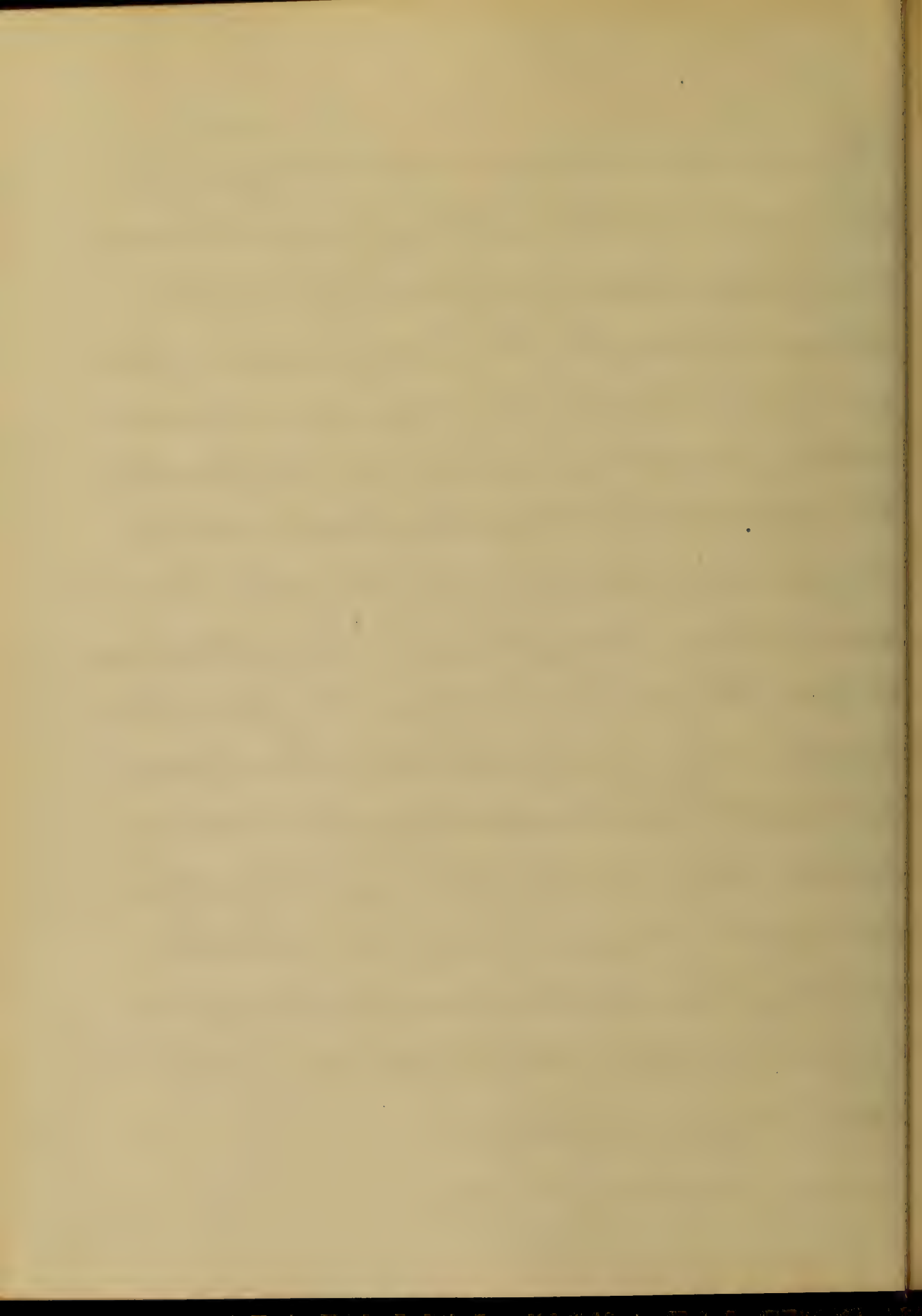


these depressions and eminences may be
classed, as articular, and non-articular.
The eminences, are tuberosities tubercles,
ridges, lines and spines, the depressions
are fissures, furrows, groves, notches and
fossae, each used for a particular purpose.

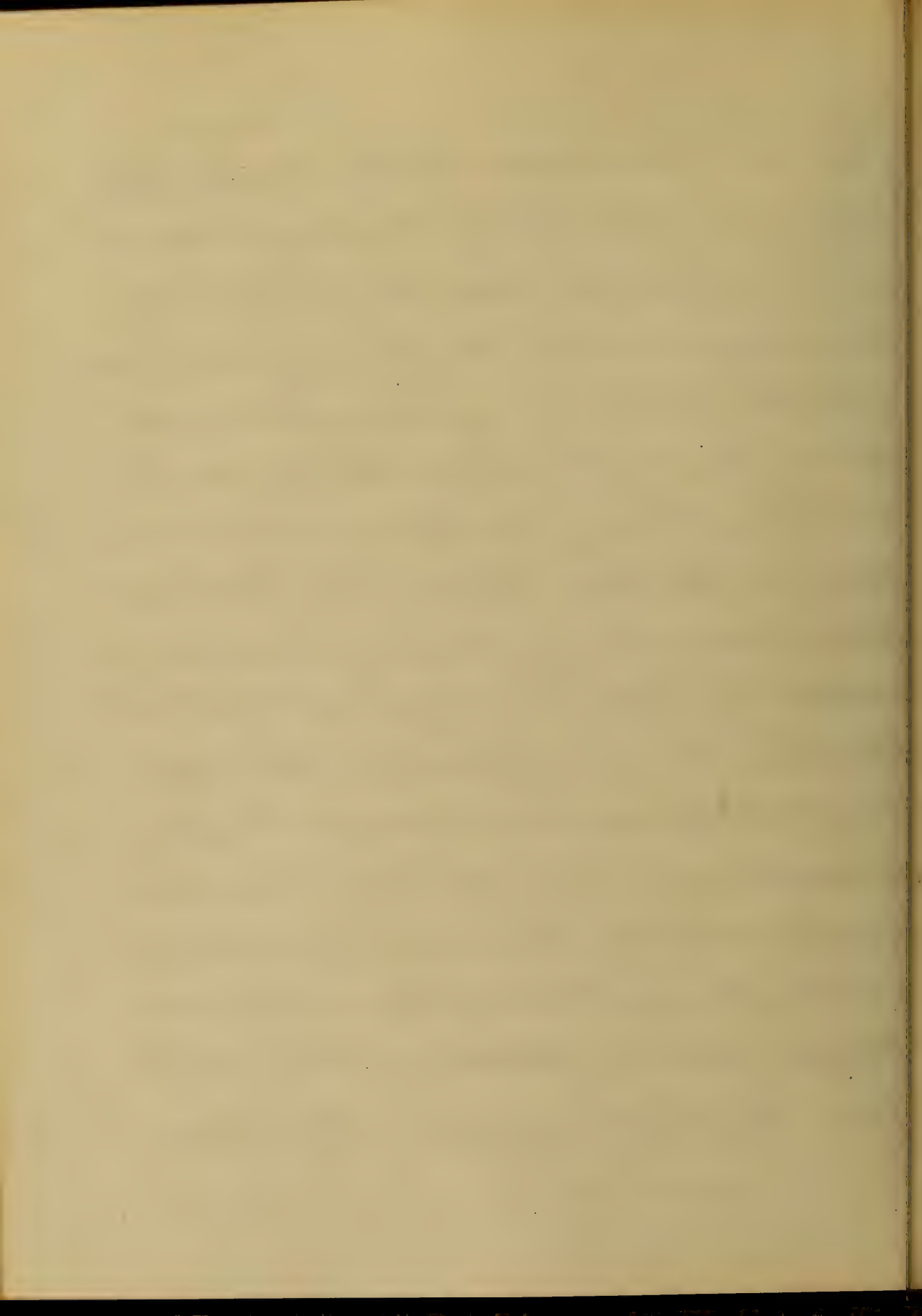
The typical vertebra, consists according
to "Prof." Owen" of the Centrum around which
are arranged four arches, superiorly, the neural
arch, which encloses the neural axis, formed
by a pair of neurospophysis and a neural spine,
inferiorly, the haemal arch formed by a pair
of haemaspophysis and a haemal spine, and
two lateral arches, bounded by the diapophysis
and the parapophysis and completed by
the pleuraspophysis. The Centrum is the firmest
of the elements, and called, the body.



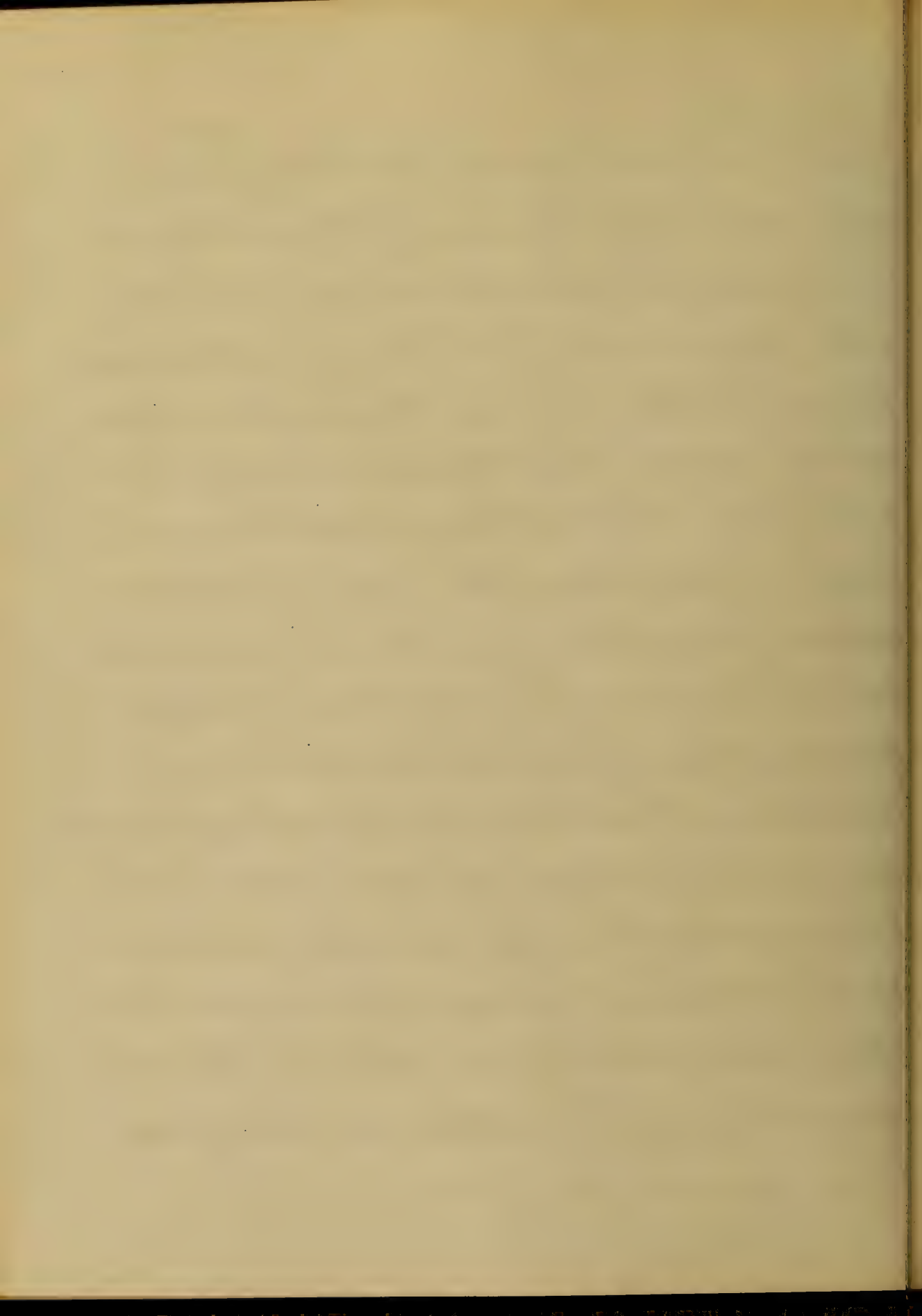
The neural arches are found in every part of
The vertebral column, through which the neural
axis passes, and larg. ly developed, in the
cranial segments. The haemal arches are gen-
-erally deficient in the cervical and lumbar
vertebra, except you take into consideration
The soft parts, but in the dorsal vertebra
they are very largely developed, the lateral
arches being brought into connection so as
to form the visceral cavity. The parts of the
vertebra may be divided into elements and
processes, the first consisting of the centrum,
neural spine, neurapophysis, pleurapophysis,
haemapophysis, and haemal spine, the other
consists of the diapophysis, metapophysis, para-
-pophysis, yugopophysis, anapophysis, hypapoph-
-ysis, and epapophysis.



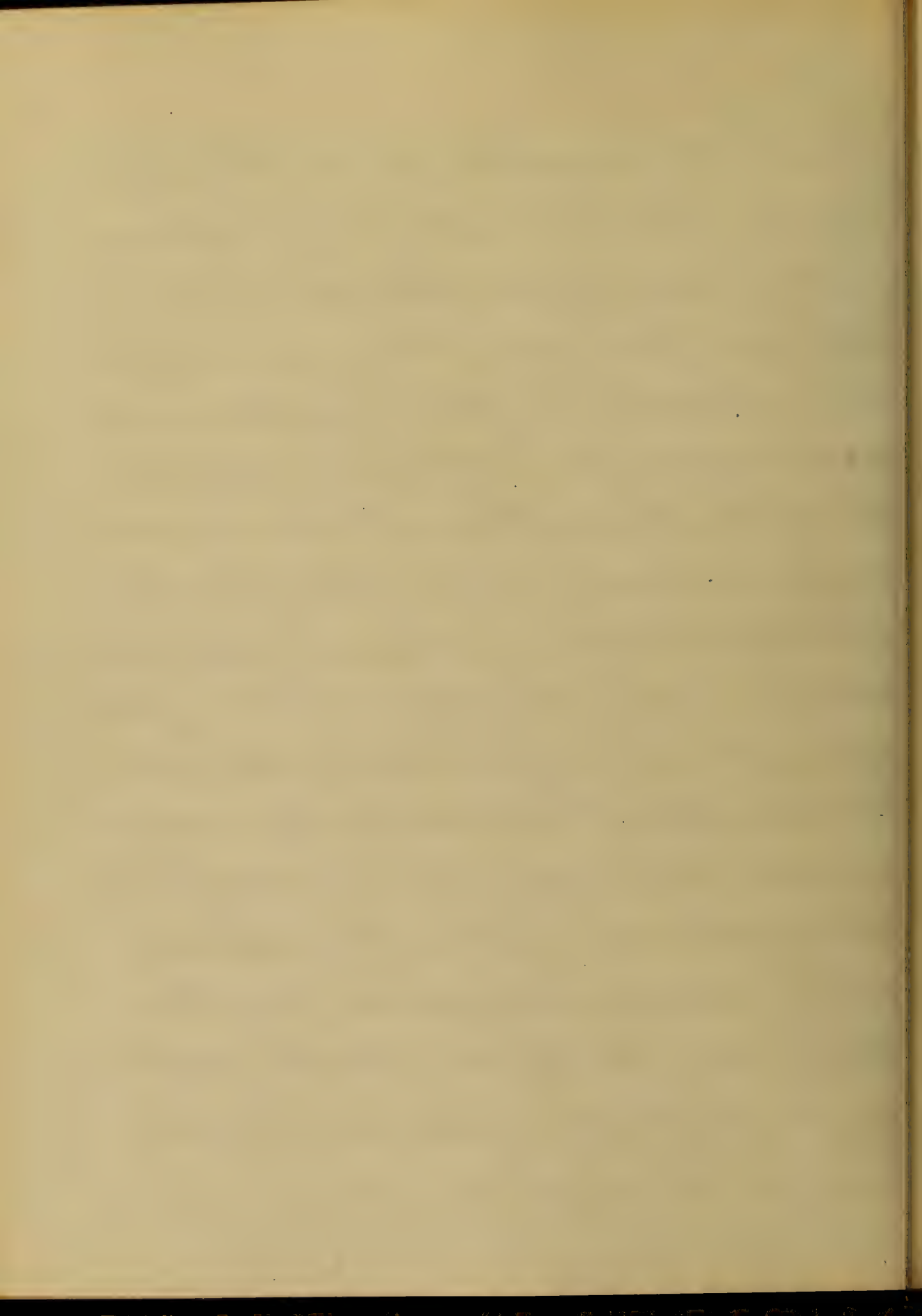
The bones of the human skeleton, are, according to "Gray", independent of the ossamoid, and wormian bones and teeth, two hundred, and four, and divided in the following order, bones of the trunk containing spine, pelvis, and Thorax, bones of the head, containing cranium and face, bones of the upper, and lower extremities. The spine extends from the head to the coccyx having several curvatures, resembling two pyramids joined together at their bases, the upper pyramid contains, all except the sacrum and coccyx. The spine is composed of twenty six bones or as some term it, counting the sacrum and coccyx as separate, in all thirty three which are termed vertebra, exclusive of those which form the skull as given by "Prof" Cruik.



which are four, occipital, parietal, frontal
and nasal. The divisions of the vertebrae are
cervical, dorsal, lumbar, sacral and coccy-
geal, seven in the first, twelve in the second,
five in the third, five in the fourth and four
in the last, the last ten unite in the adult
and form but two bones. A vertebra consists
of a body and an arch, or seven processes
and a spinal foramen, there are two pedicles
and two laminae forming the arch, the pro-
cesses are, four articular, two transverse, and
one spinous, these bodies are placed upon each other
to give support to the head and trunk, the
processes act as levers for muscles and assist
in the protection of nerves, apertures are between
these for, to allow the nerves to pass from the
cord. Several of the vertebrae are peculiar of

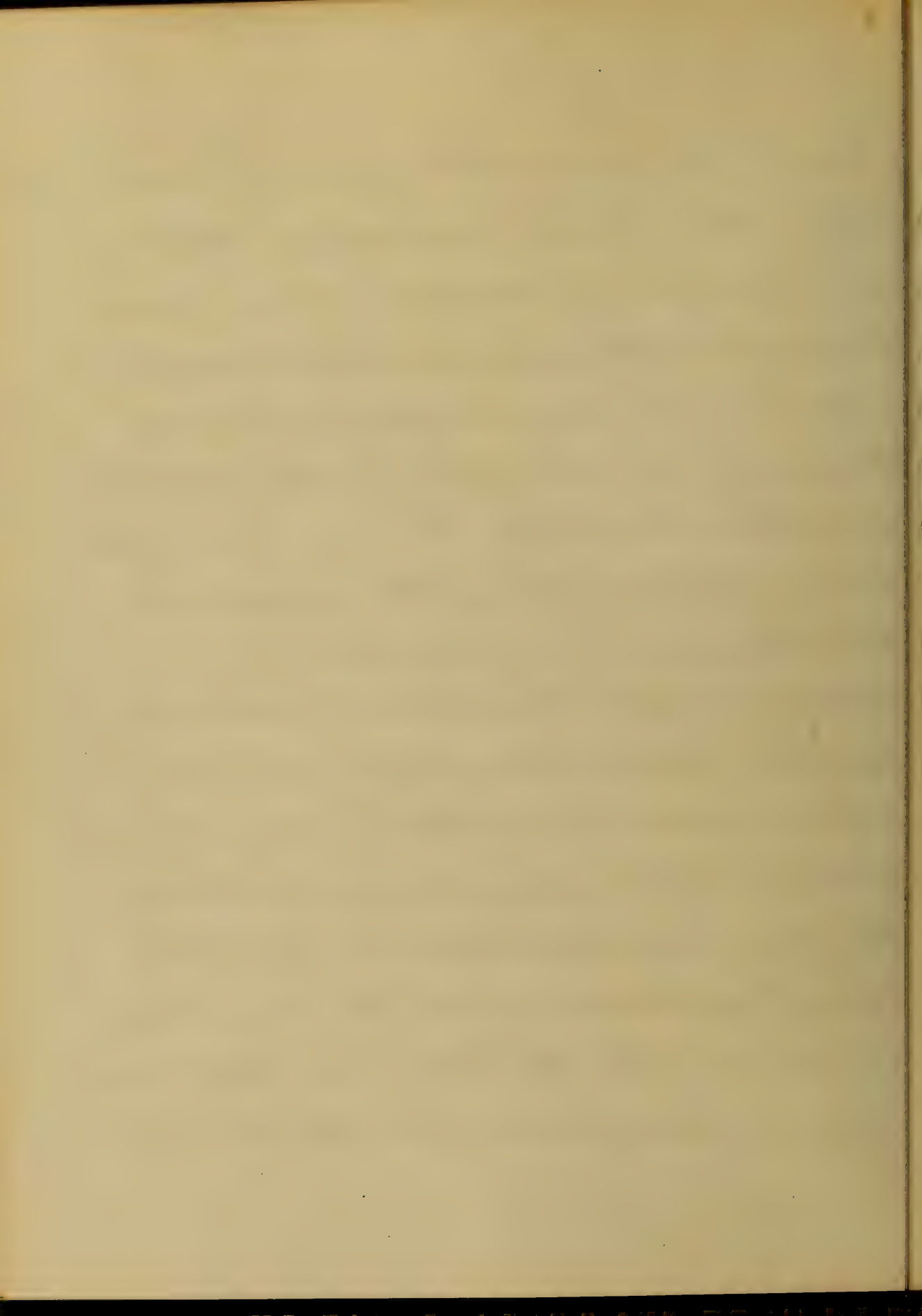


These the Atlas and Axis, the first has neither
body nor spinous process, the body being formed
by the odontoid process of the Axis, which is a
Tooth like process, and forms a pivot, on which
the head rotates, the Atlas supports the head,
processes and facets determine the peculiar-
ities of the other vertebra. The sacrum and
coccyx in the adult have nothing peculiar
to distinguish their vertebra, as they are united
into two bones for the support of the body and
upper extremities with the aid of the ossa
innominata or hip bones. The hip bones are
similar shaped and divided into three
parts for the sake of explanation, i.e. ilium,
ischium and pubes, the ilium forms the
prominence of the hip and the three unite
in forming the acetabulum, in which the



head of the femur rotates. In the hip bones
are notches, spines, foramina &c; these
bones with the sacrum and coccyg form
their articulation. The pelvis or basin, which
is divided by the linea pectinea into
true and false pelvis, all above the line is false
and below true basin. There is a slight differ-
-ence in the curvature of the coccyg in the
sexes, the males being more curved.

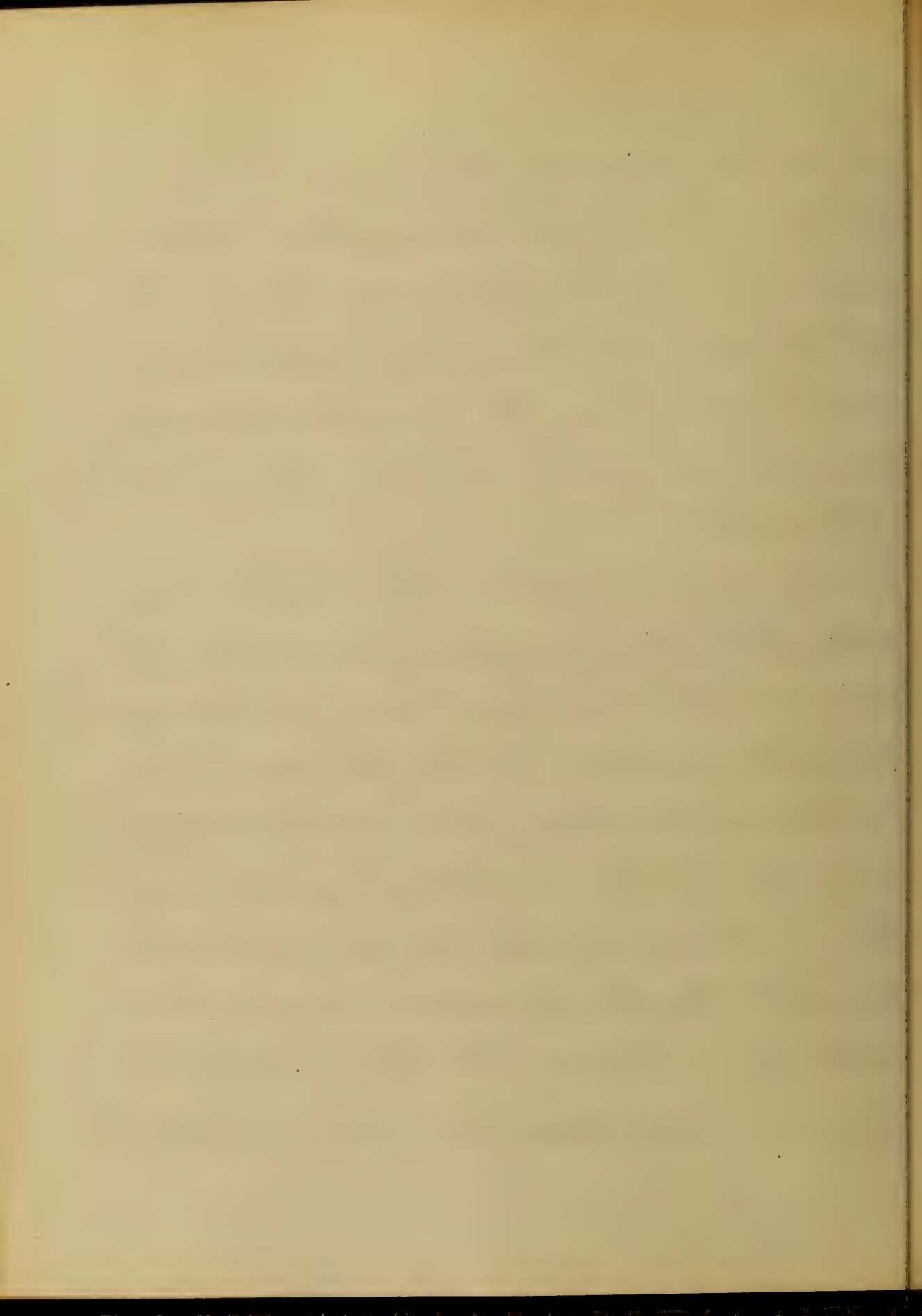
Associated with the vertebra by articulation
are the ribs, which are usually four in number,
twelve on each side, anteriorly articulating
with the sternum and forming the thorax.
They are divided into true and false. The
true ribs articulate with sternum, which
is a curved bone resembling us "Gray" infers
us an ancient sword. To this the true ribs



are attached by means of cartilage, some being the
the false five three of which are attached to the
cartilage, while the last two are floating ribs.

The thorax or chest is formed by the dorsal
vertebra, ribs and sternum the costal cartilages
unite the ribs to the sternum and give elasticity
to the chest.

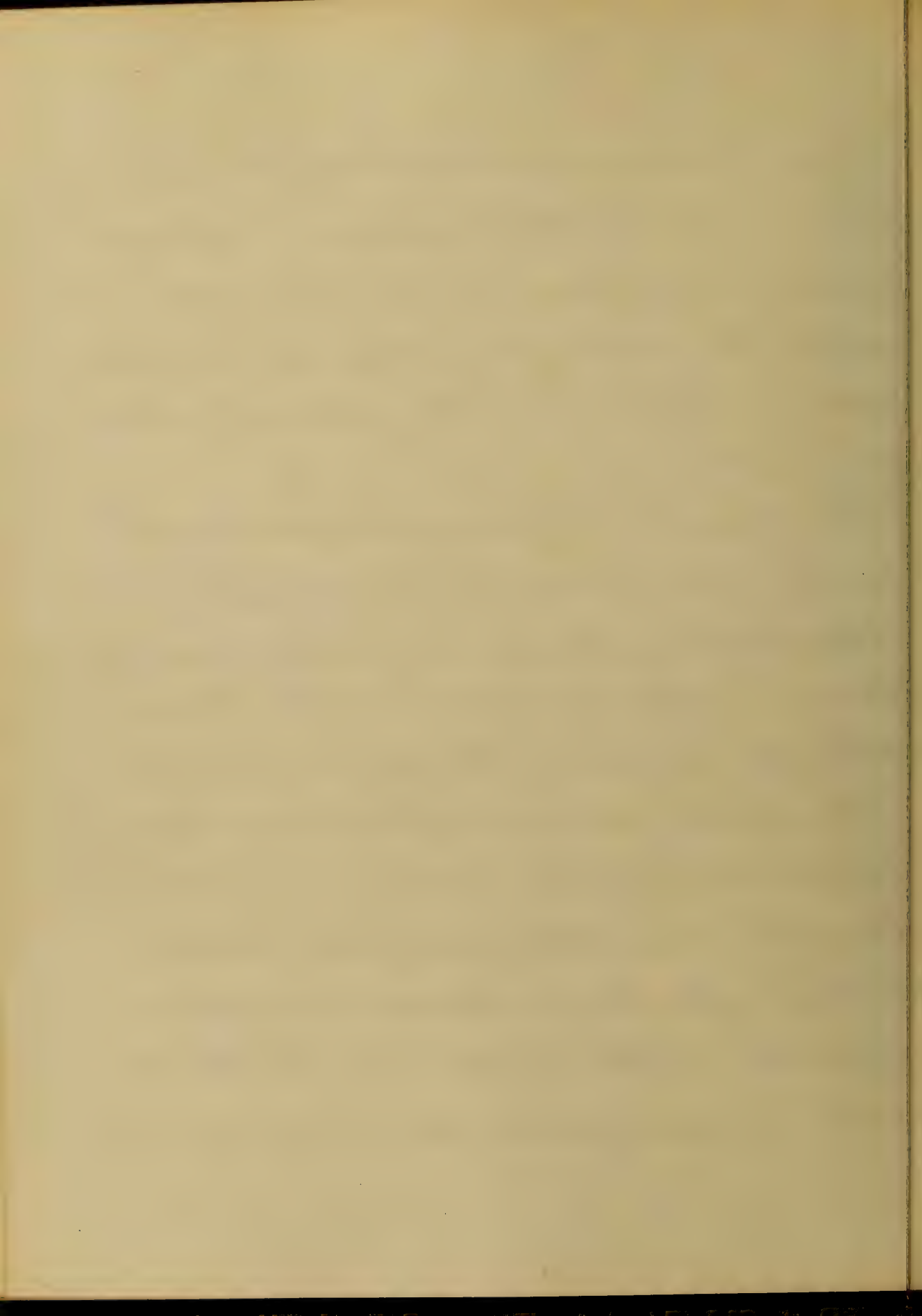
The superior expansion of the spinal column
is the skull composed of twenty two bones, divided
int. bones of the cranium and face of the former eight
of the latter fourteen. The bones of the cranium are
occipital, two parietal, frontal, two temporal, sphenoid
and ethmoid. The bones of the face are two nasal,
two sup. maxillary, two lacrimal, two malar,
two palate, two inf. articulated, vomer and inf.
maxillary. The bones of the skull have depressions
eminences and foramina, all for important



processes also may be called sutures, fontanel's, ca-
vities, and fissures. The cranium is for the pro-
tection of the brain and part of the nervous
system. The skull is joined to the vertebral column,
resting on the axis and atlas attached by means
of ligaments.

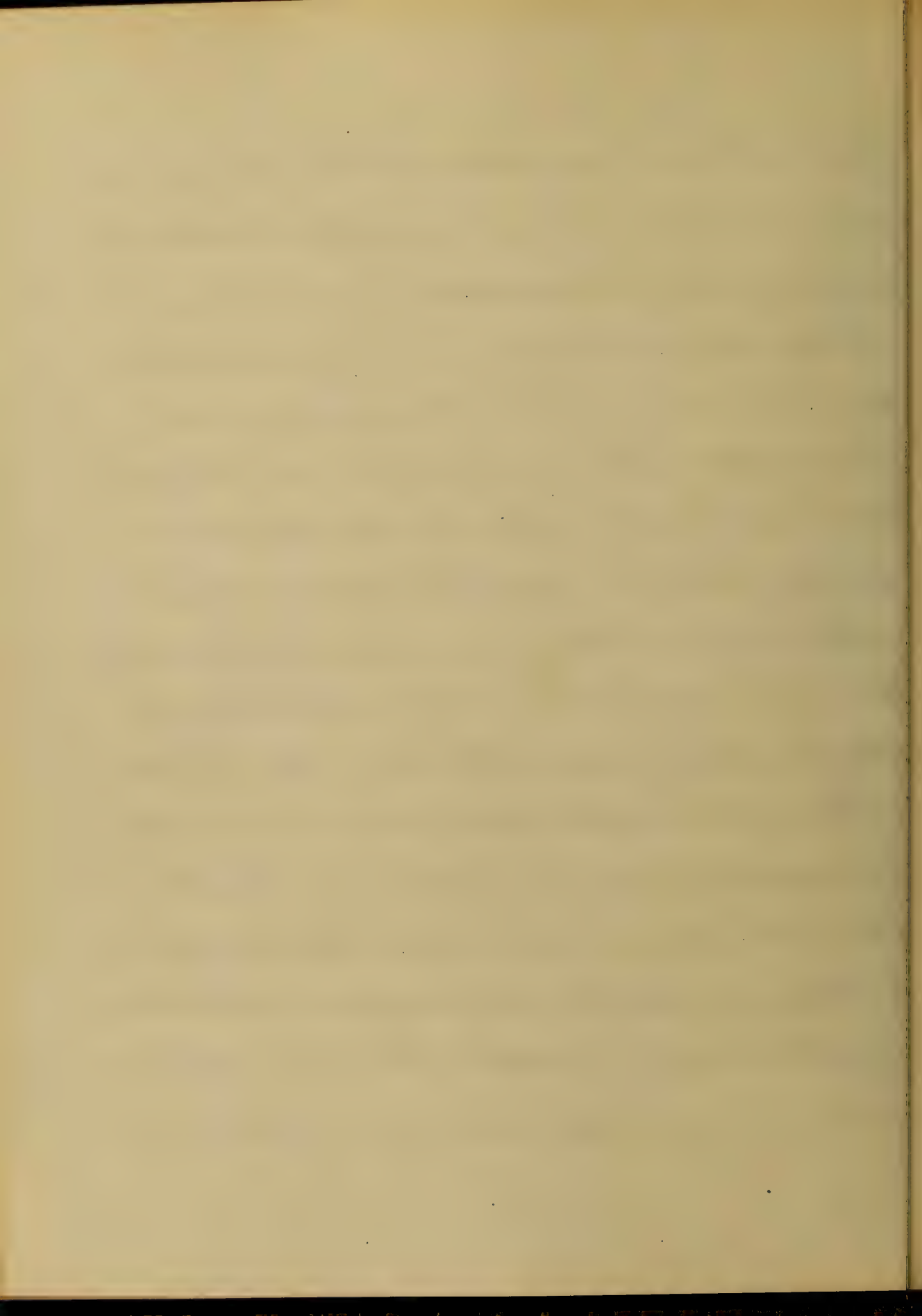
The upper extremity bears a close relation to the
lower and are termed the diverging appendages
of the vertebra. The clavicle is a long bone lying
along the upper and front part of the thorax
articulating with the sternum and scapula.

The scapula or shoulder blade is a very im-
portant bone, situated on the back of the thorax
from the second to the seventh rib. having
border's, angles, fossas, processes, and a spine, it
articulates with the humerus in the plevoid
cavity, the processes protect the cavity and soft



parts, while in connection with the muscles it gives symmetry and roundness to the shoulder, the processes are called acromium and coracoid.

The humerus consists of a shaft and two extremities, reaching from the shoulder to the elbow, articulating at its upper extremity with the glenoid cavity of the scapula, this portion has two necks, the anatomical and surgical, with two tuberosities, a groove and ridge called the bicipital, the shaft has several ridges for attachment of muscles, the lower extremity articulates with the radius and ulna, having two depressions on one side and one on the other termed the coronal, radial and olecranon, it also has two condyles, they are the external and internal for attachment of muscles. The radius and ulna are two bones placed side by side constituting



The forearm, they articulate with the humerus at their upper extremity and with each other, having two processes, olecranon and coronoid, also two sigmoid cavities, with for the radius, a head, neck and tuberosity, the lower extremity of ulna articulates only with the radius having on the one side a process called the styloid.

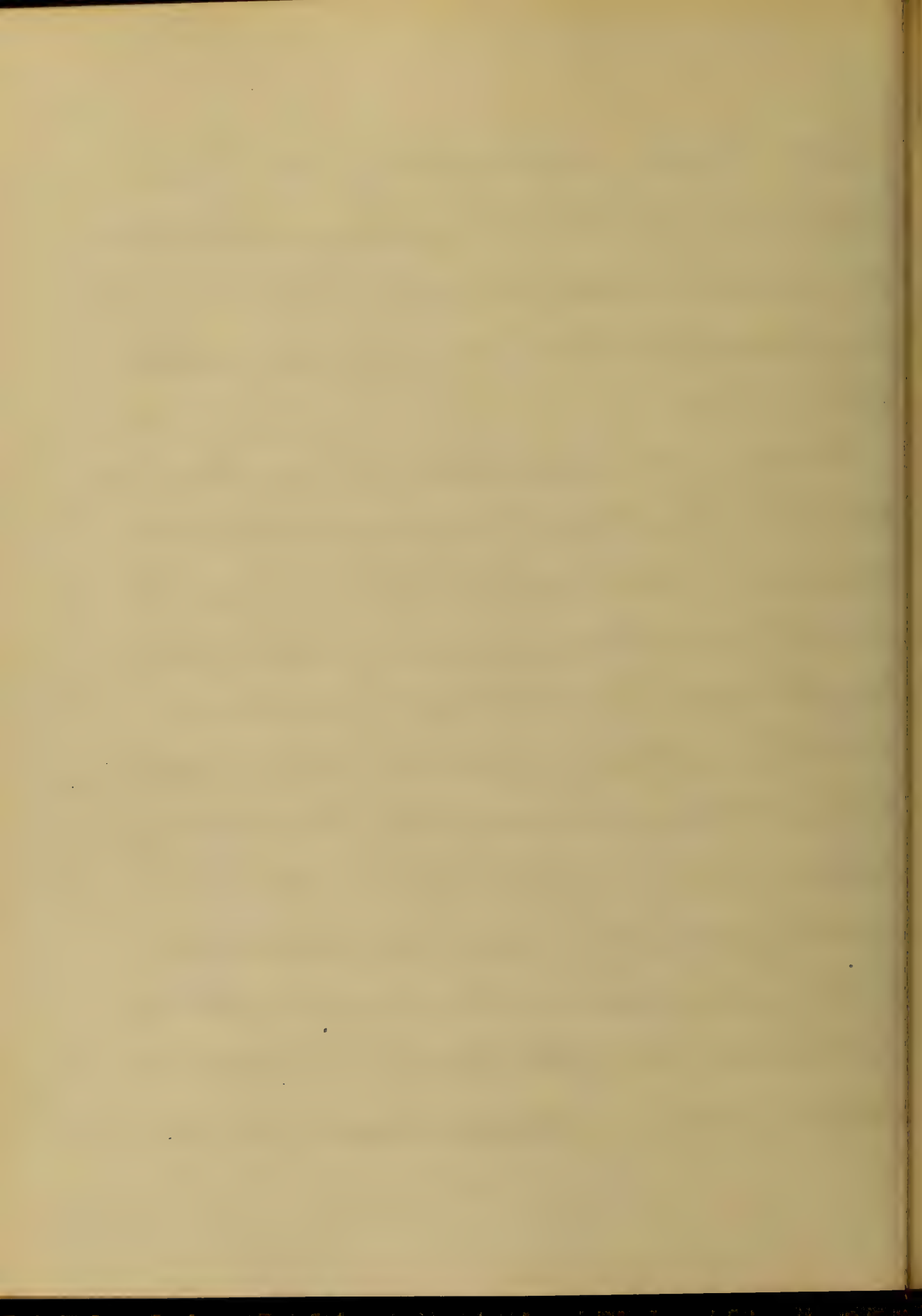
The radius at its lower extremity articulates with the ulna and the bones of the carpus termed the scaphoid, and semi-lunar, it has also a styloid process and a sigmoid cavity. The bones of the hand are divided into carpus, meta-carpus and phalanges, there are eight carpal bones named from their shape and arranged in two rows, the os-magnum is the largest and the pisiform the smallest. Meta-carpus consists of five bones each having a head, shaft and base.



Phalanges of fingers contain three bones,
the thumb two, these bones have a shaft and
two extremities and are named, thumb, index
finger, middle finger, ring finger, and little
finger.

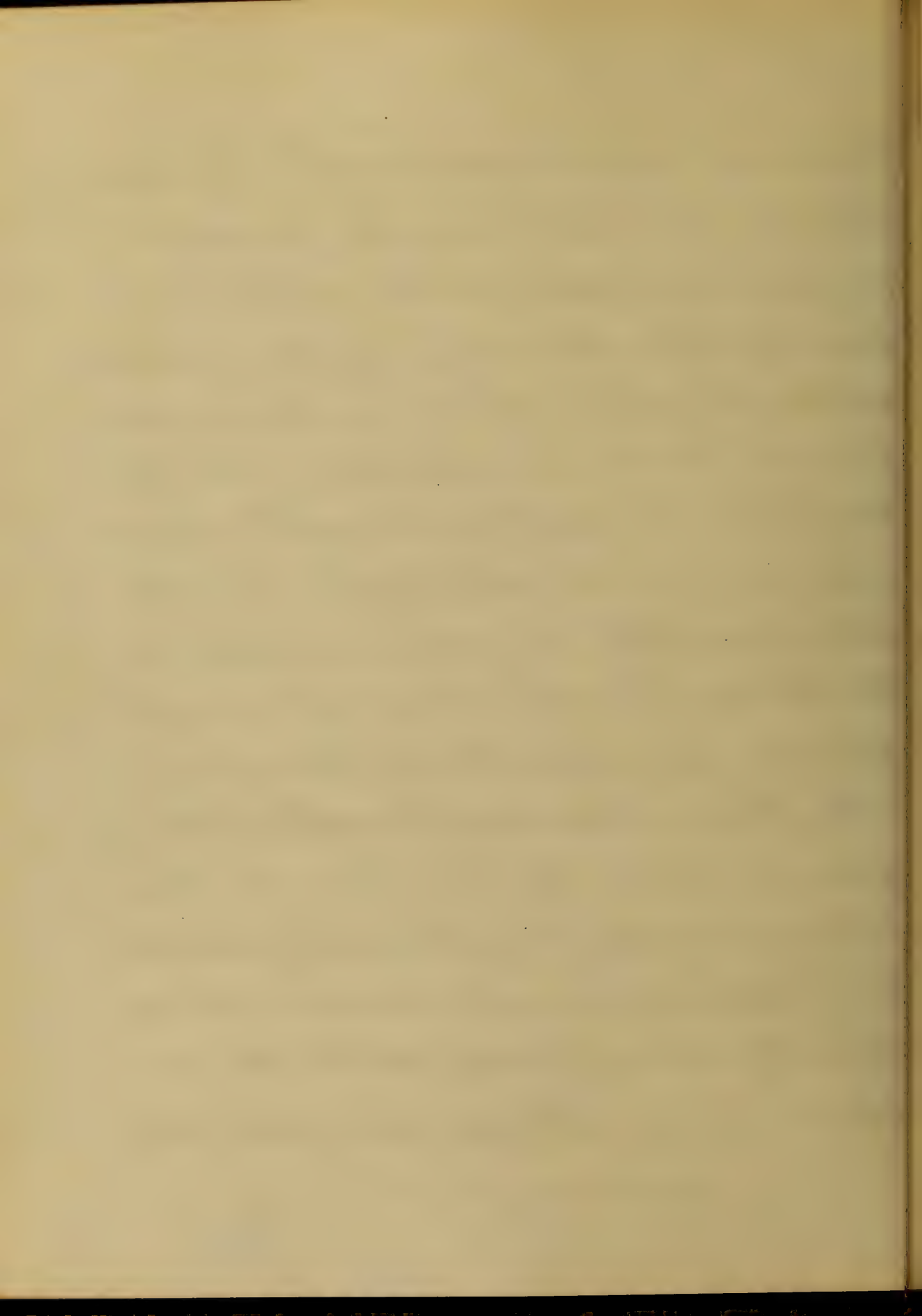
The larynx is situated in the neck, connec-
ted with the root of the tongue and a part of
the larynx, has no articulation and consists
of a body and four cornua, it is called the
hyoid bone, shaped like a horse shoe.

The lower extremity is divided into femur, tibia,
fibula, patella, and bones of the foot, the femur
is the longest bone of the human skeleton,
reaching from the acetabulum to the knee,
having a shaft and two extremities, the head
articulates in the acetabulum of the os-pubis
nata, the neck and tuberosities with the spiral



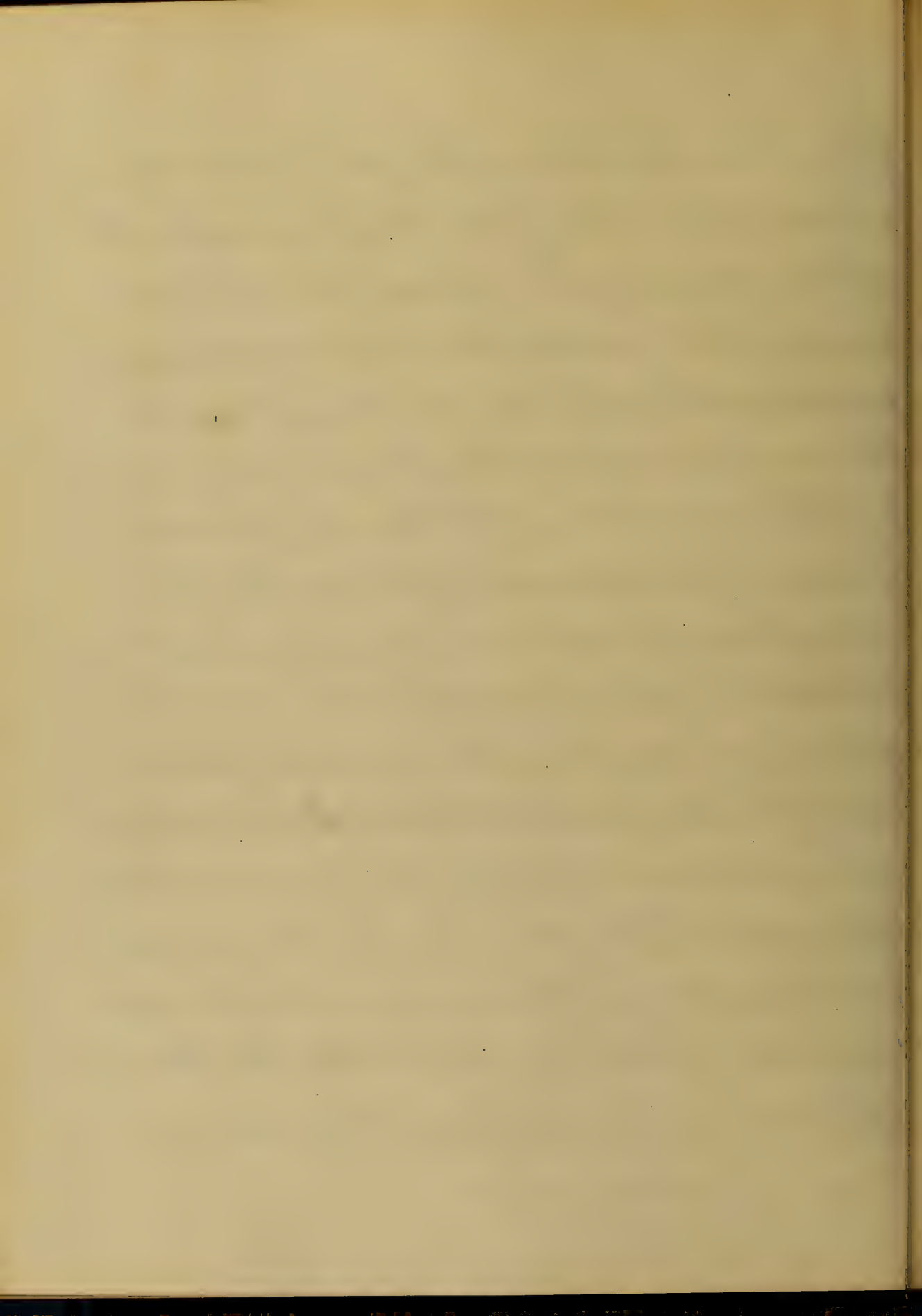
line are for important purposes, the linea aspera is a prominent crest having two lips and a rough space, this crest divides into three lines and two bifurcations, having a triangular space called the popliteal, the lower extremity has a fossa in front and a notch behind with two condyles, in the fossa plays the patella a large sesamoid bone, the articulation is with the tibia and patella. The patella is situated in the tendon of the quadriceps extensor and it is commonly called the knee pan or cap.

The tibia is placed on the inside of the leg commonly called the shin bone, the head is large and thick for articulating with the femur, it has a spine, external and internal tuberosity and a tubercle, on the external tuberosity is an articular facet for the head



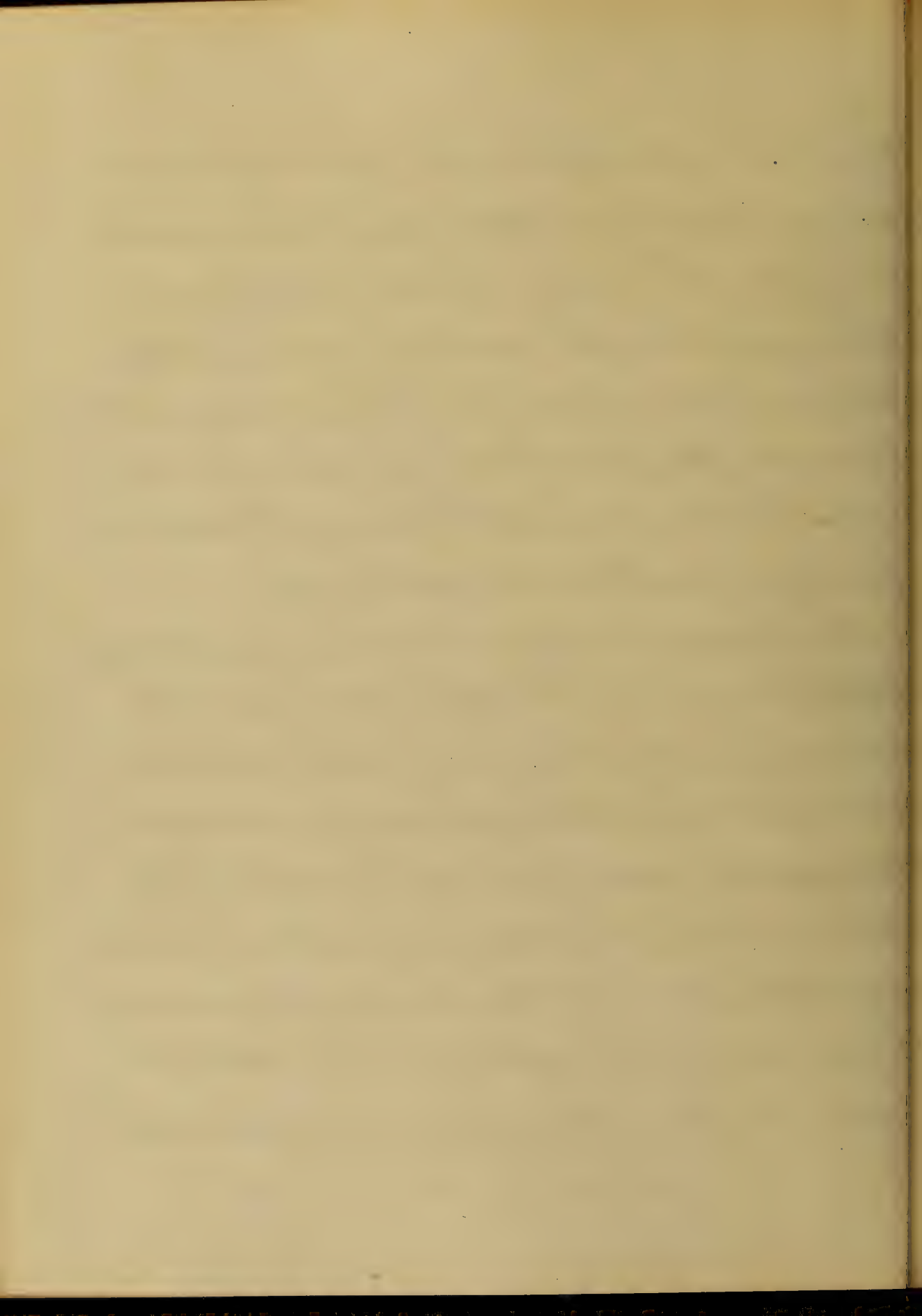
of the fibula, the tendon of the patella is inserted into the tubercle in front. The fibula articulates with the tibia at the external tuberosity and has a styloid process. The inferior extremities articulate with each other and the astragalus, there are two malleoli, the external belonging to fibula and internal to tibia. The foot consists of tarsus meta-tarsus, and phalanges, the tarsus differs from the carpus in only having seven bones instead of eight, the os calcis is the largest bone of the tarsus constituting the heel, in the posterior part of this bone is inserted the great Tendo Achillis.

The meta-tarsus consists of five long bones in relation with the toes, there are five toes on each foot, consisting of three rows, with the exception of the great toe, which like the thumb has but two. The sesamoid bones are small.



round bones developed in the tendons that exert an amount of pressure upon parts, over which they glide. The bones of the ear, as "Gray" gives them, are three, the malleus, incus, and stapes, the malleus named from its resemblance to a hammer, the incus having its name from a resemblance to an anvil, and stapes, called from its resemblance to a stirrup.

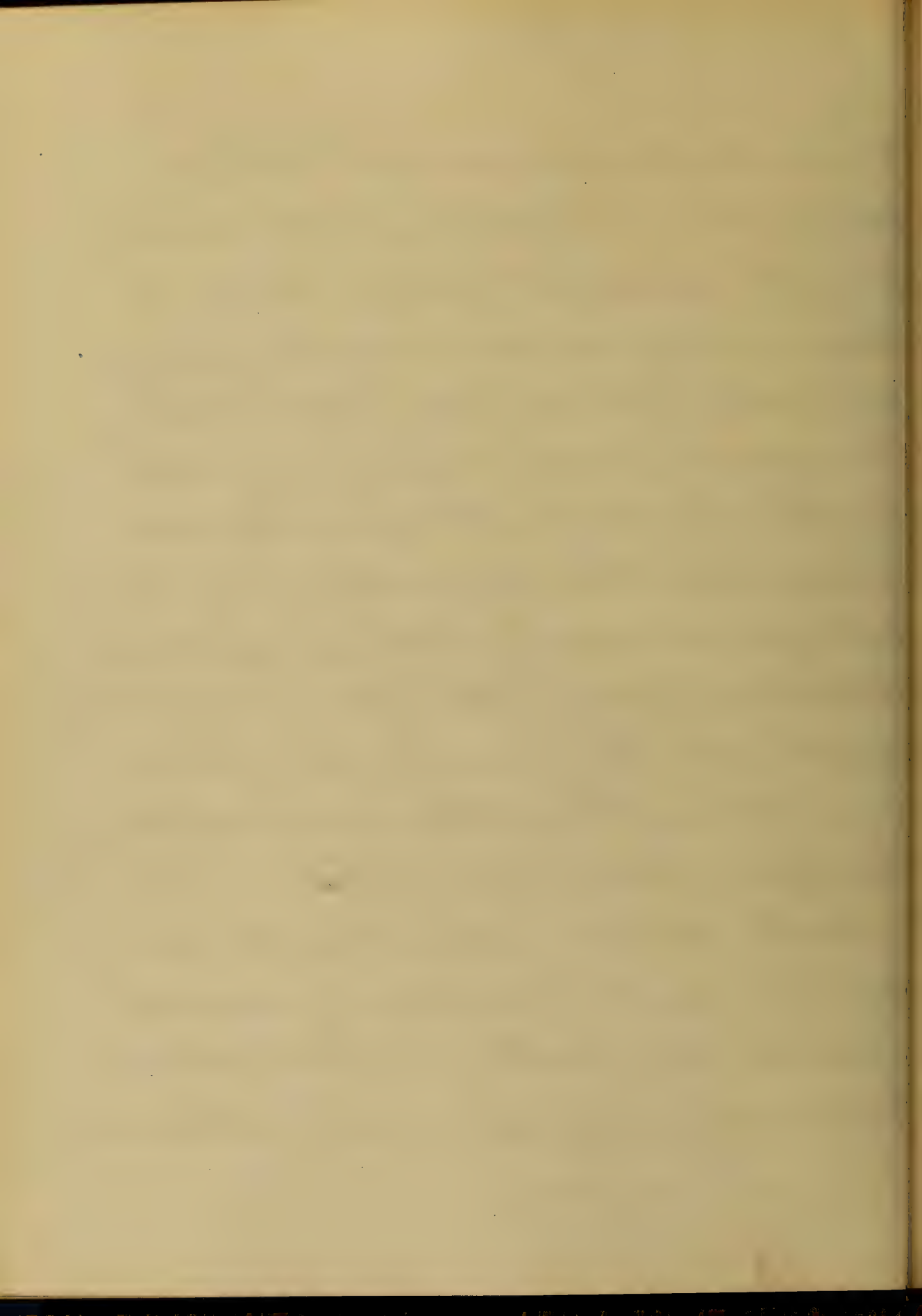
The human subject has two different sets of teeth during life, the temporary and the permanent, the temporary teeth are twenty in number, in each jaw are four incisors, two canine, and four molars, each tooth has a crown, a root and a neck, the permanent teeth are thirty two in number, four incisors, two canine, four bicuspids and six molars in each jaw, the roots are firmly placed in the



providi, the temporary or milk teeth are smaller than the permanent teeth, the ivory forms the main part of a tooth having enclosed a pulpy substance, consisting of many tubes, with walls called the dentul tubuli.

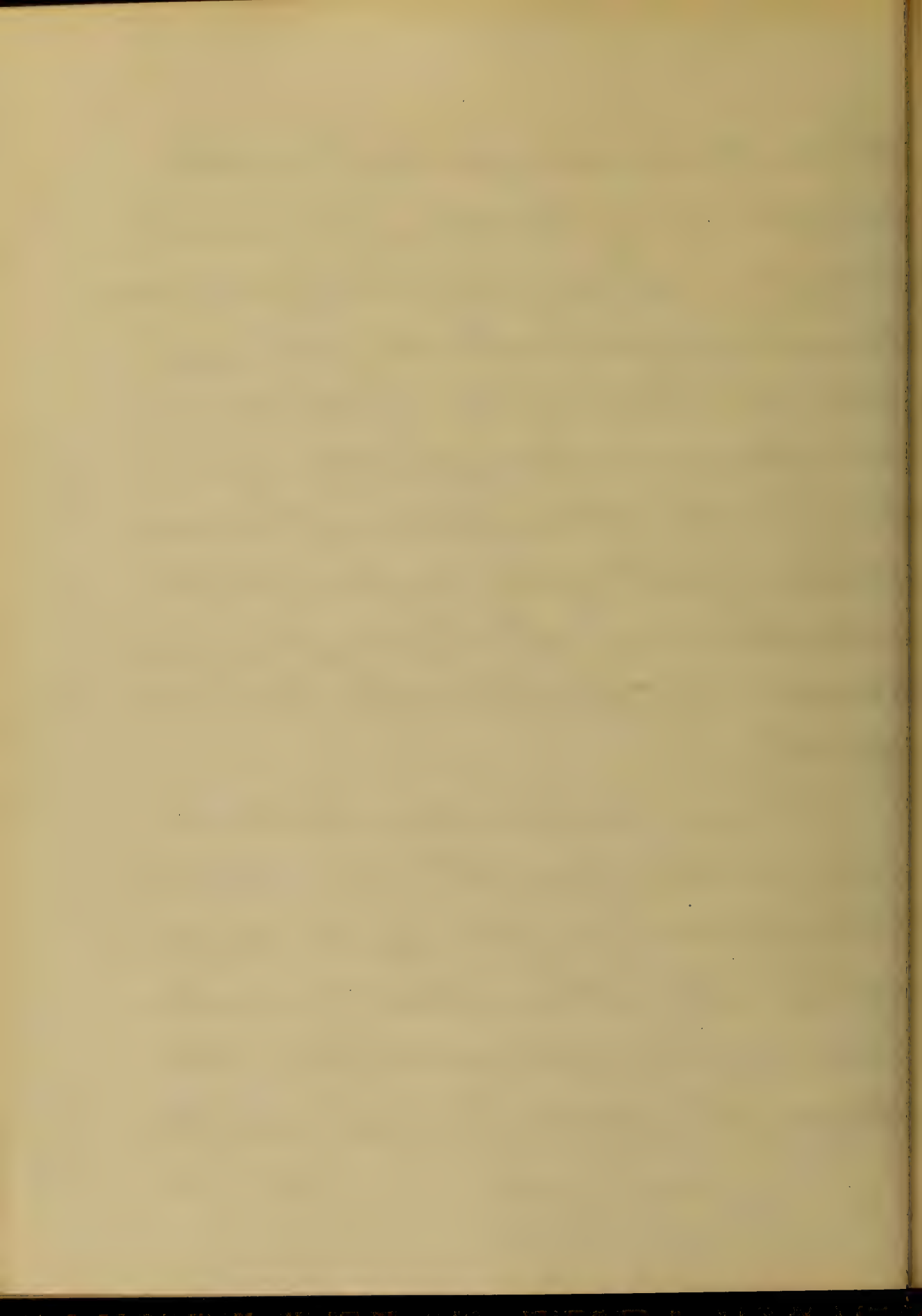
The enamel forms the exposed part of a tooth in a thin layer, the cortical substance is disposed as a thin layer on the roots of the teeth, from the enamel to the apex of the jaw, "it contains sparingly the lacunae and canaliculi radiating from the side of the lacunae toward the outside membrane and the deeply placed dentul tubuli."

In the skeleton, each of these bones, as described are held together by means of ligaments and cartilage, forming according to the motion required peculiar articulations,



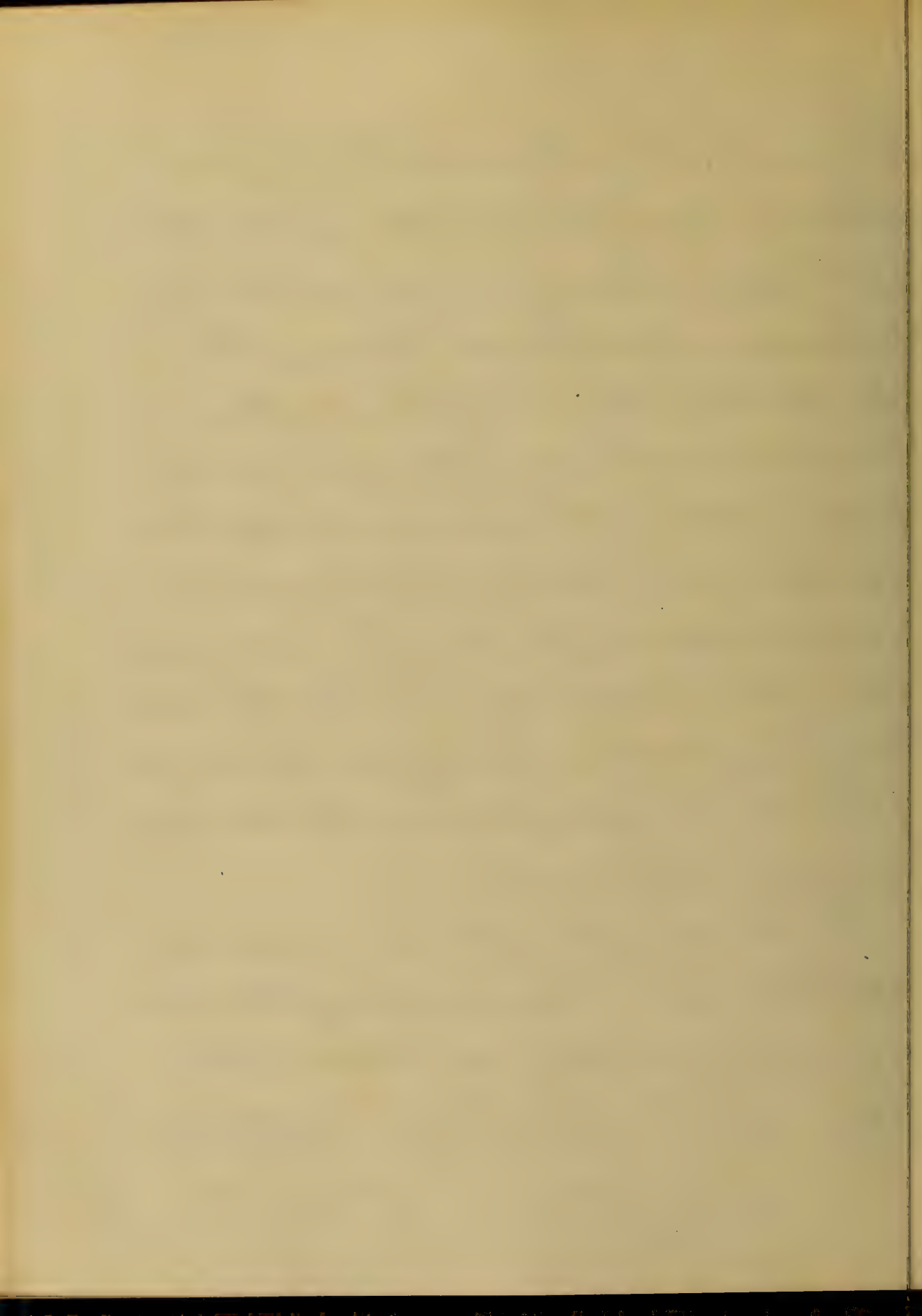
The motion in some are slight, in others almost in every direction. Some assert that it is not only ligaments and membranes that give motion to joints and hold the bones together, but that a certain force is exerted externally, which is termed atmospheric pressure, it is demonstrated by attempting to ascend high mountains, and also, by a small perforation into the articulation the bones will separate.

When we compare the skeleton to man, we behold on the ^{one} side a hideous looking form, complete in its structure, while on the other is beauty, grandeur and magnificence combined, with the one, we associate death and the



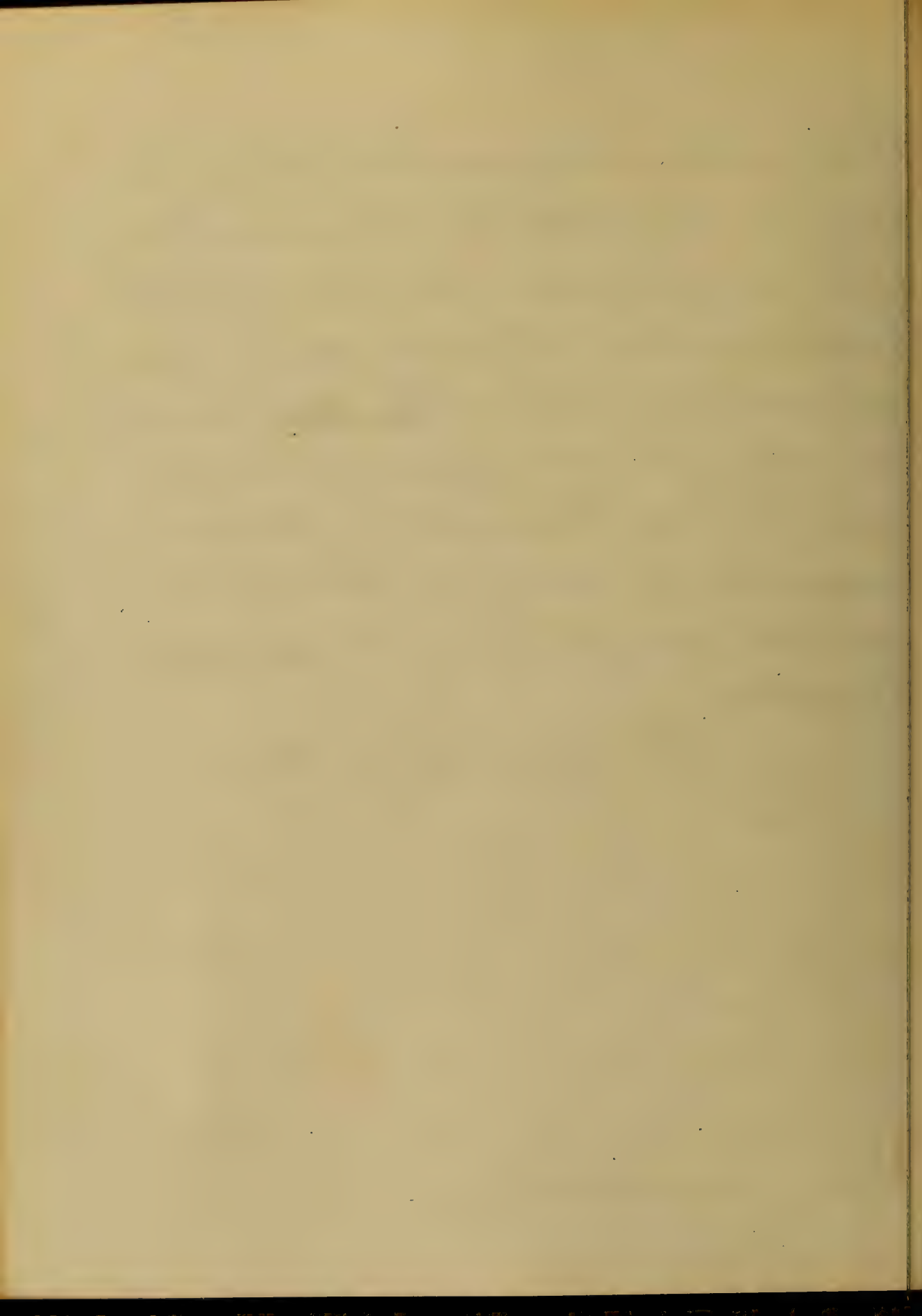
grave, with the other health, life, and activity. Now if the skeleton indicates death and man life, what makes this difference, it is the assistance of the soft parts, of these, I shall mention tendons and ligaments, muscles and fascia, arteries, veins, nerves, lymphatics membranes the skin and its appendages and the viscera, also the different organs, 'ie' organs of sense, organs of digestion and their appendages, organs of circulation, organs of voice and respiration and the primary and generative organs.

All these go to make up man, and with all of them, he is incomplete, there is one thing wanting and that is the "Soul" which shall live forever, though



The body may decay and all things else
may die. immortality is the soul's birth-
right. our spirits are children of the "Father",
breathed by him into the nostrils of man
and partaking thus of "His Own" immor-
tal nature must live forever, wherever
man is found, there will be truths in-
numerable, declaring that the "Soul" is
immortal and that he is the το κεινον
of creation.

Elbridge H. Gerry. Pa.







AN

Inaugural Dissertation

ON

Mercurius Vivus

SUBMITTED TO THE EXAMINATION

of the

Provost, Regents and Faculty

of

PHYSIC,

of the

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

Doctor of Medicine,

by

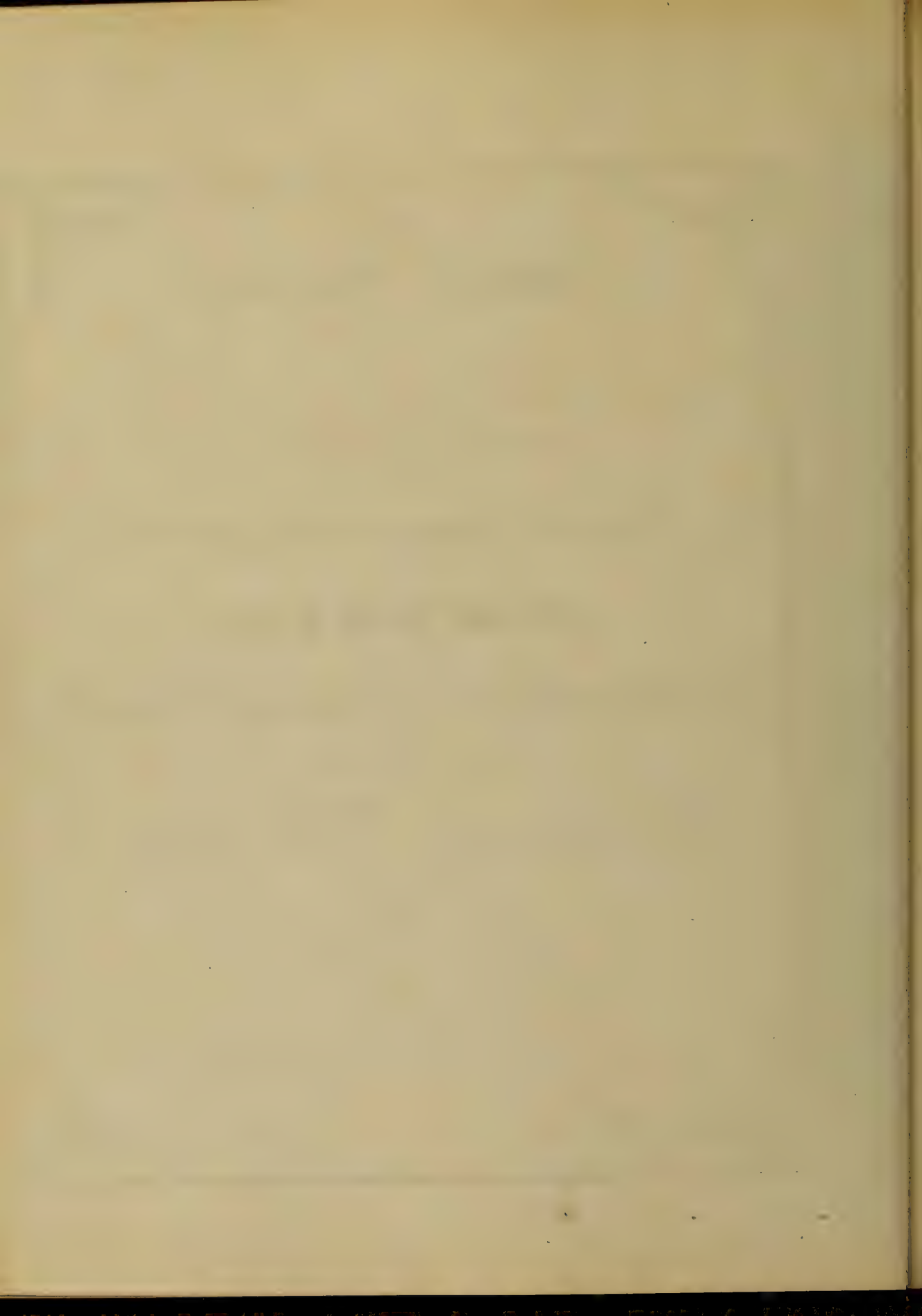
Geo. Cotton

of

North Carolina

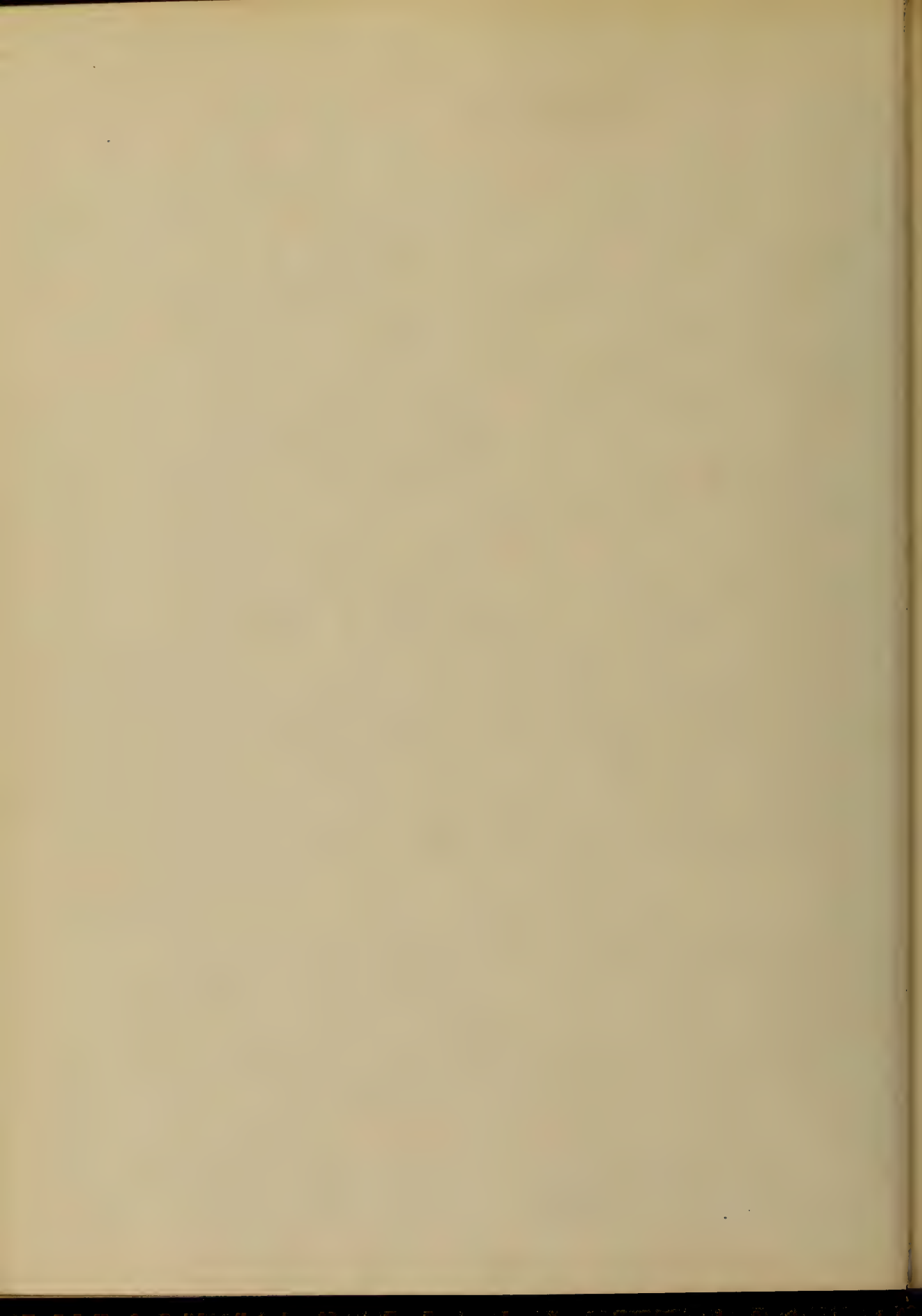
Session

1867-8



Veratrum Viride

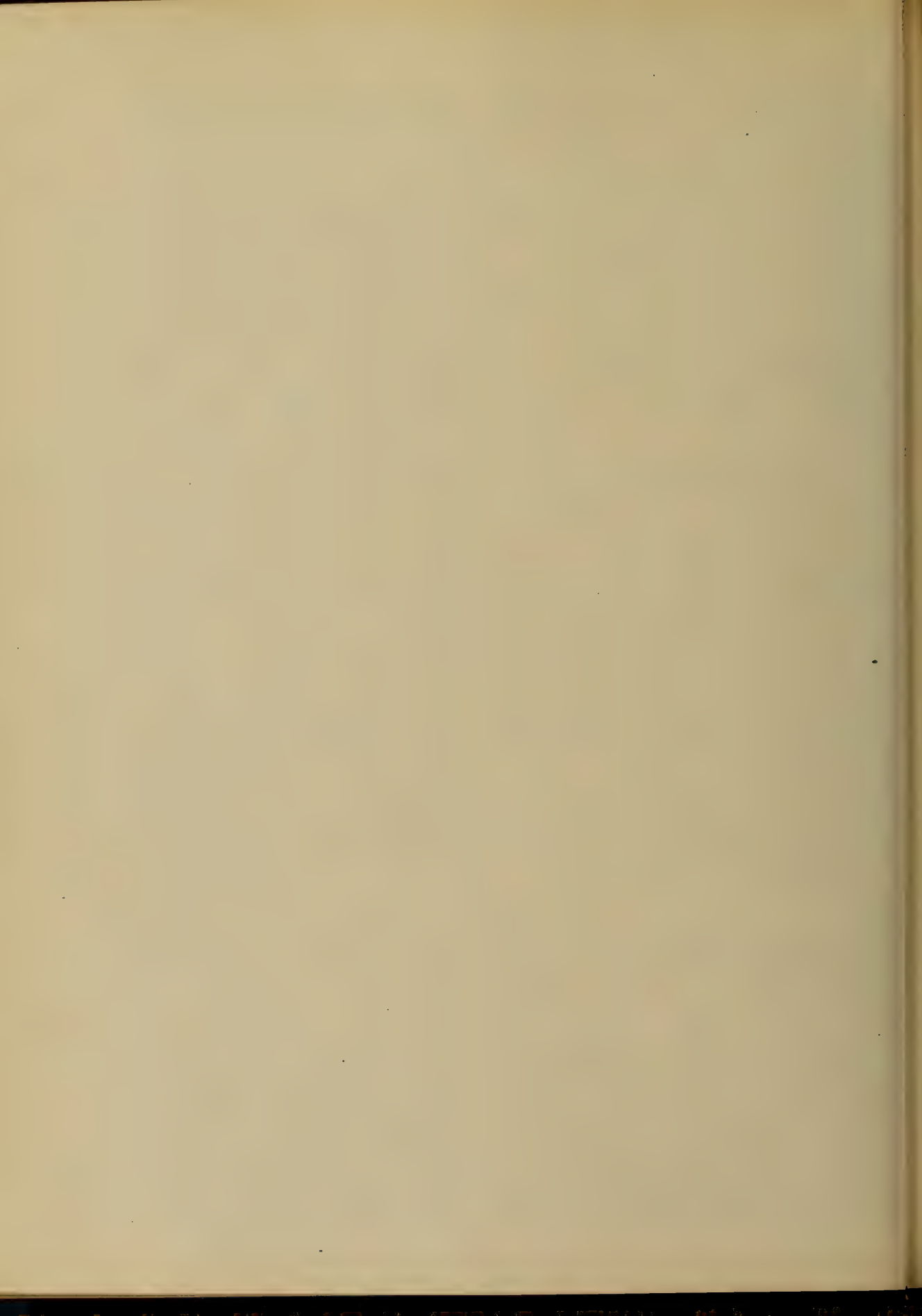
Having my right as so much has already been written upon this subject, I scarcely know what more I can say; but in order that I may come out my intention, we will first speak of its botanical history. American Hellebore is, I suppose, a native species of *Veratrum* of this country, commonly known as swamp hellebore. It grows in all parts of the United States east of the Mississippi River in low and damp situations, its root is thick and arises out of numerous white branches. The stem large and very high, has leaves of a yellowish green color, taste of a bitterish sweet; when taken in the mouth it creates a most acrid and burning sensation, and when swallowed the same effects are experienced in the stomach and



Laurea. Its virtues are obtained by
macerating the root in water or alcohol.

I should have chosen to confine myself
to its medicinal effects and the
times application. But the papers
and essays without number have been written
upon this humble matter in the Pharm-
acopoeia, with opinions of different
authors or different in the name and
experience of each, so much so indeed
it is almost ridiculous to the

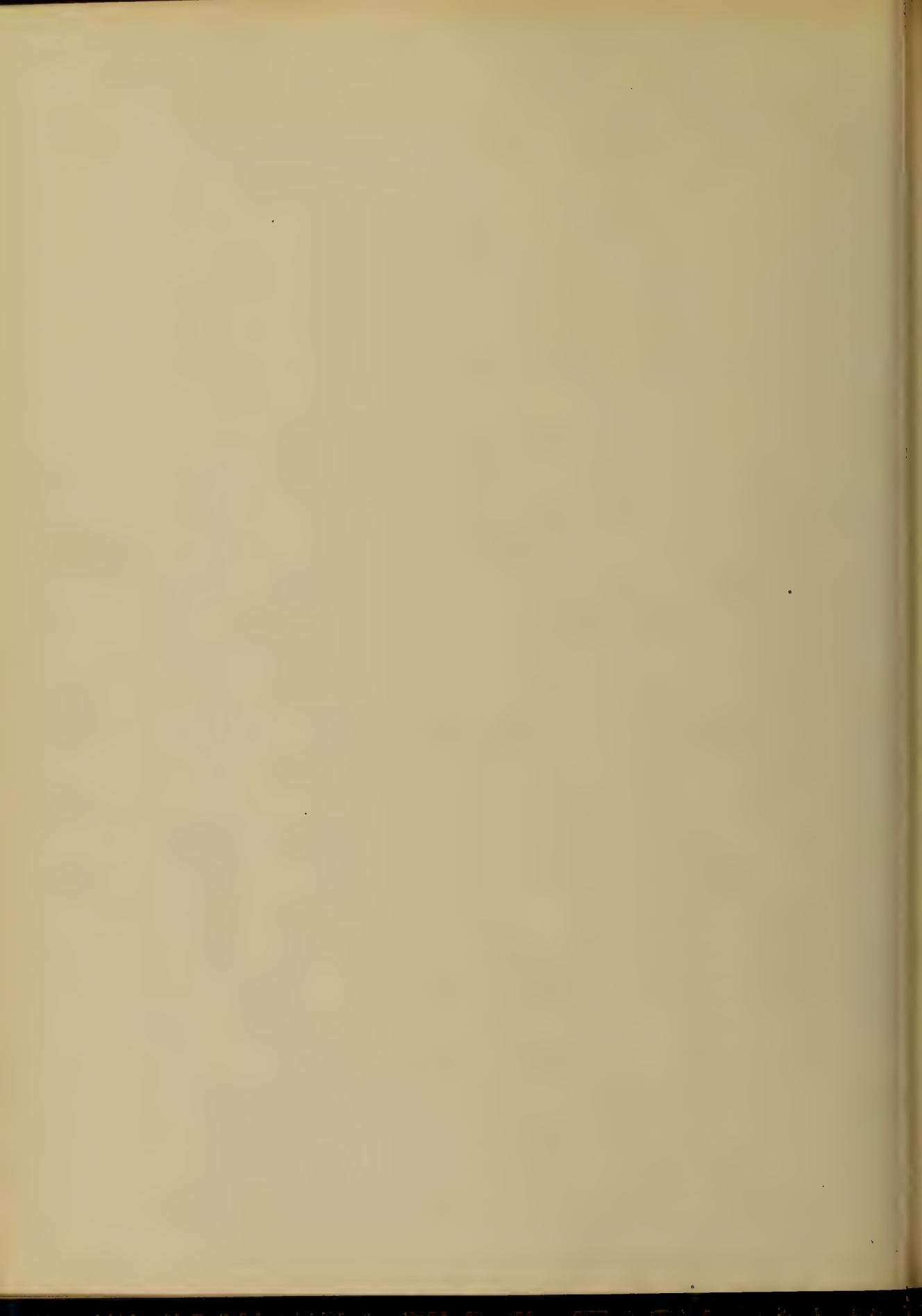
Medical student to undertake a
subject the result of which has
produced so many different theories.
Veratrum viride is beyond doubt
what I should call an irritant
sedative, no matter whether that
impression is first produced
upon the nerves, and transmitted
through them to affect the
action of the heart or not.
The condition of the system
and secret is the same.



Dr. Osage & Parrott seem to
be the scientific investigators of
this peculiar drug, and to them
is due the praise of its discovery,
as much so as the inventor of
the needle gun or the 40th Parrott.
This drug when applied to the
cuticle in its fresh state, it will
produce irritation of the surface,
and slight ulceration, in powder
it is highly irritant to mucous
membranes, when snuffed in the
nostrils it produces violent sneezing
and as I have before stated a
most acrid and burning sensation
in the mouth and fauces; when
swallowed in an our dose, it creates
an alarmingly feeble pulse with great
epigastric uneasiness, retching and
vomiting, cold clammy skin, anxious
expression of countenance, with all
the concomitants of a collapse.
Its effects on the pulse are most



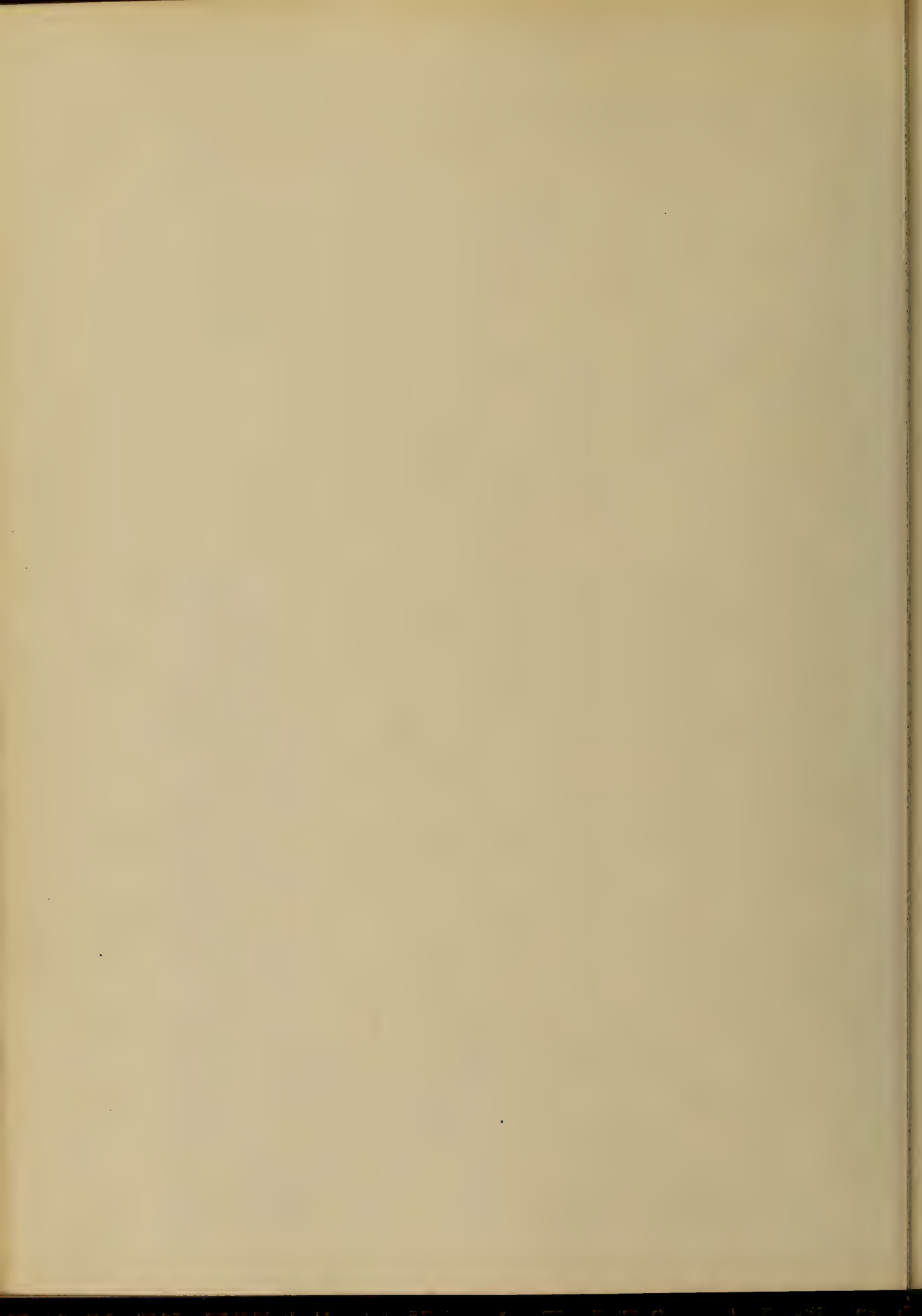
Remarkable and peculiar, of ten
reducing ~~them~~ from 80 to 33 or 40
in a minute, producing rapidly the
phenomena I have first described,
a pale, cadaverous surface covered
with cold sweat, at the same time
the patient is affected with vertigo,
dimness of vision, dilated pupils, accom-
panied with stiffness of muscles,
with more or less involuntary actions.
This is especially so with the stomach
which organ frequently acts by
the voluntary contraction of its own
muscular coat independent of the
diaphragm. This peculiar effect upon
the stomach can only be accounted
for by the paralytic effects of
the medicine. If such be the
nature of its action upon the
musculo nervous system, would it not
be an excellent remedy in tetanus?
Will not some practical experimentalist
inform us with some light upon



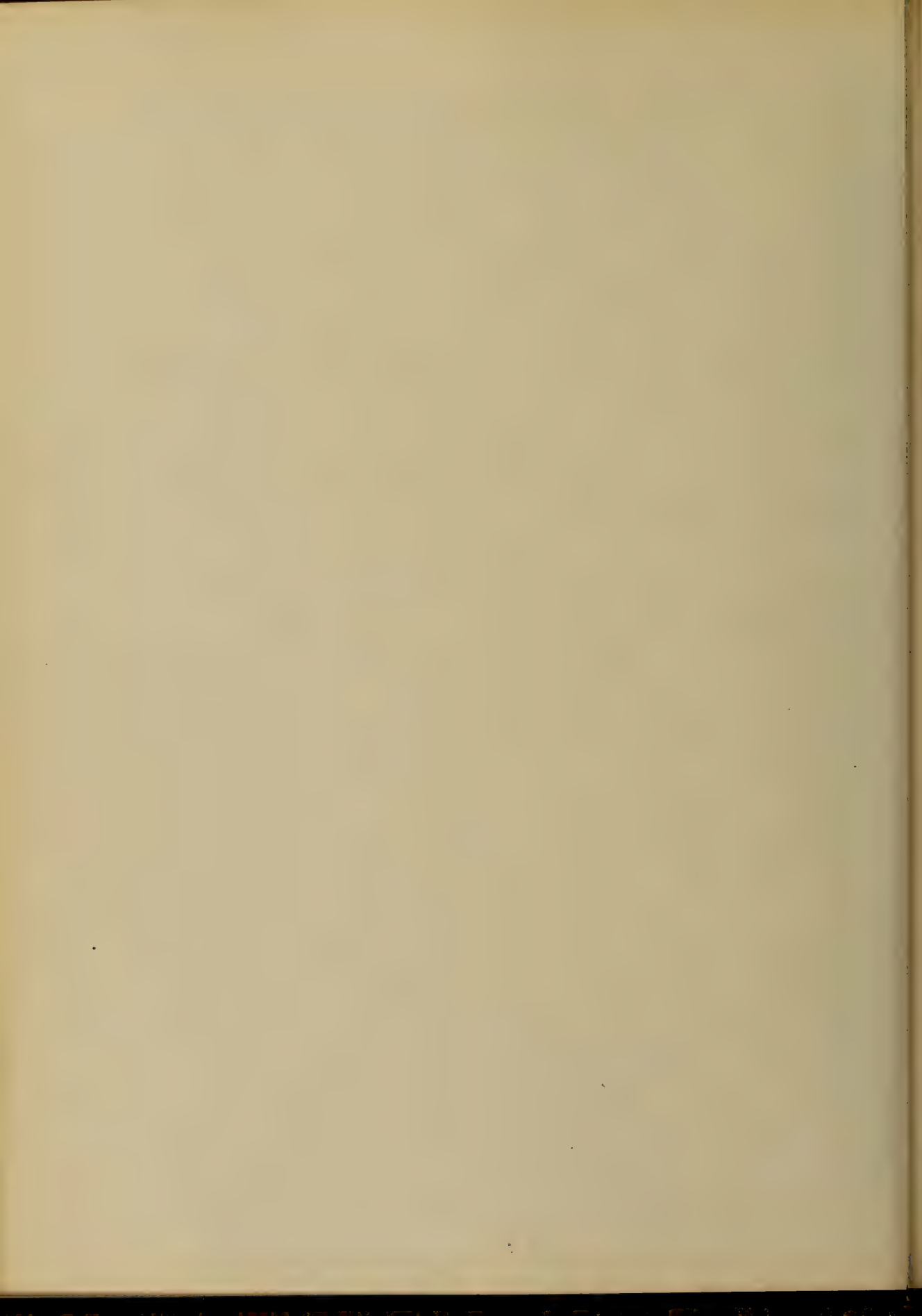
The subject: though it reduces the pulse and controls the action of the heart almost at the will of the Physician, yet it excites the secretory functions more or less of every organ in the human organism, such as the Kidney, Liver &c. It has been reported by most Physicians as a fact, that its action seldom, if ever purges; this is theory and not substantiated by facts. I have known it to produce purgation and also to quieten the action of simple Caratives, this is particularly so when given in asthenic diseases. I must admit from what I have seen of its action, that there is a little disposition to a Cathartic tendency in asthenic cases attended ~~with~~ with high vascular excitement. From the earliest days of discovery in the medical Science it has ever been the case



When any new remedy of much
note is discovered and given to the
profession its indiscriminate use
is the source of much vexation
& disappointment. This invariably has
been caused by want of reference
to the Physiological effects and
[Pathological Discrimination] as to
the proper Sphere of the medicine
itself. Some eminent Physicians and
among them Dr. Hosack, late of
Cincinnati Hospital - &c. &c. were
very much averse to the employment
of Peruvian in certain Diseases.
Thus I considered an uncalled for
Conclusion, and averse to the
Development of scientific investigations.
Mr. Treceator and myself have
found it exhibited time and again
in the lowest stage of Typhoid
fever with beneficial Results,
Nothing can be more detrimental
to the medical science than a want



of practical knowledge, and more
in the application of such an
important remedy in the treatment
of diseases: therefore I deem it
less important and more than
necessary for every medical student
to first acquire sufficient confidence
in himself, and from practical experience
in the remedies submitted to him
of different authors, and his own
personal experience in the
practical treatment of diseases,
with them having acquired such
confidence in himself, and reduced
theory to practice, with such an
armor so he need not be startled
by any new terror which may arise
in the treatment of human maladies.
The striking effects of mercurials
upon the nervous and vascular
system can be better appreciated
by an incident related by Dr. Keegan
who says that the former of the system



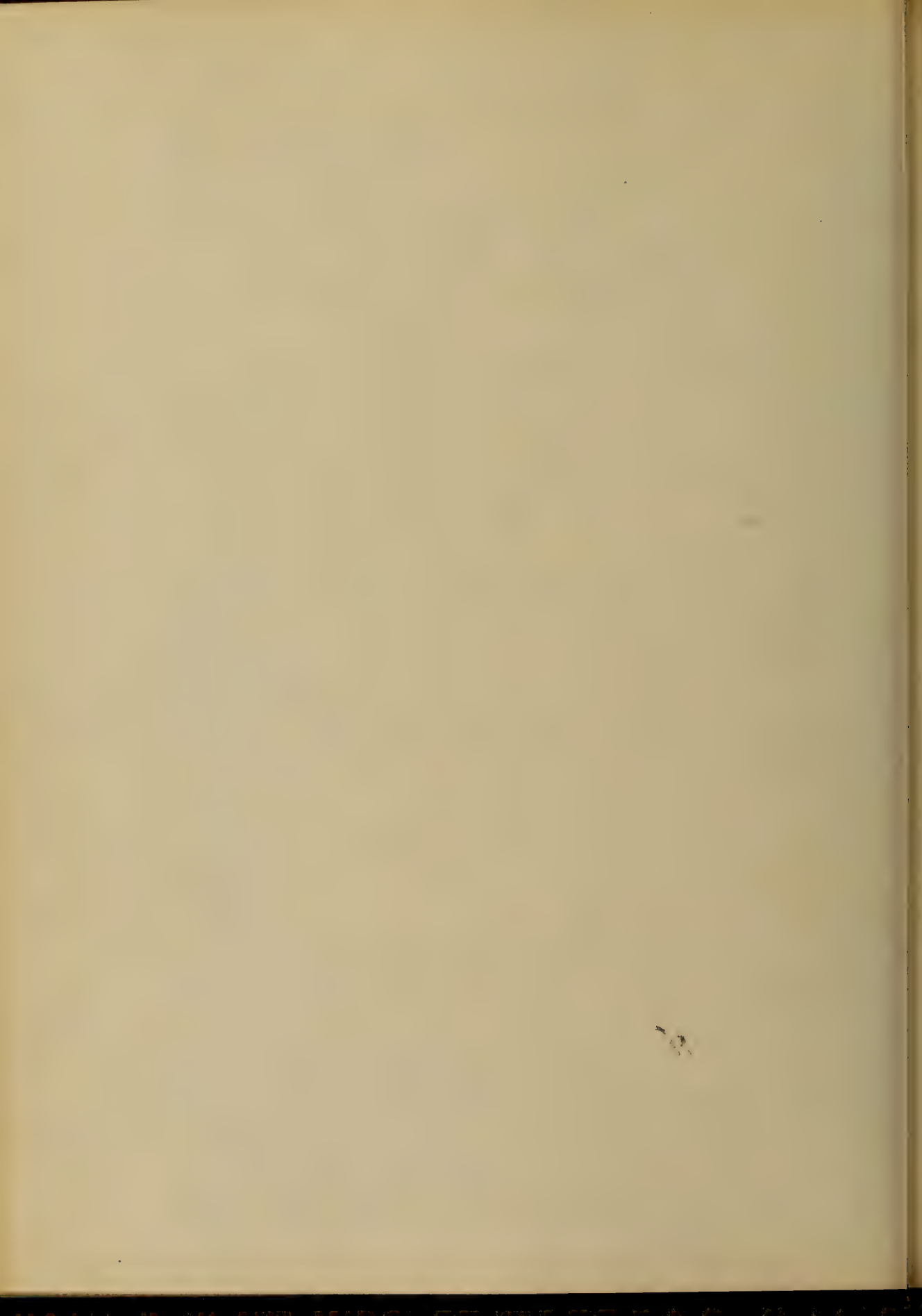
in order to protect their crops from
birds and other fowls they feed
the grain in an infusion of this
root - the American, Gelsemium;
soon after eating this grain the
birds became incapable of running
or flying so they were easily caught
and killed, but if left undisturbed
for any length of time they would
recover in a great measure from
its paralyzing effects and fly away.
(See Medical Jurisprudence Vol 3 ^{part 1} pg 296)
The same effect can be produced
upon the human system independent
of nausea. Should the medicine be
pushed too far so as to produce excessive
nausea and vomiting with other
deleterious symptoms it can be readily
counteracted by a small quantity of
brand, combined with a few drops of
Caucasian. I have known it succeed
in typhoid cases where this effect
is not rather a alarming symptom.



And seen it wear off in course
of a very short time without
the application of an antidote.
The different members of the
medical profession have written
many and expounded many doctrines
relative to venereal. Theories upon
Theories have been written concerning
the profession upon this subject,
each and every one of which has
had its hour to strut upon the
stage and its author to give
it forth. But like all other subjects
human as well as divine, there
remains much to be learned of
the nature & effects of venereal
in the treatment of different
diseases. There is yet much more
than has been written
or experienced. Though, human student
as I am in the cause, I must say,
let not the serious student take
every thing for granted which he



reacts in books. There is yet in
our noble science and profession far
more to be learned, for more ground
to be explored than has yet been
gone over. That veratrum is an
invaluable remedy in many
diseases in proper hands, that its
beneficial action is of inestimable
service to the Educated Physician
and of paramount importance to
numerous patients I do believe. Yet
I don't think it to be a specific:
I don't think it better than the
Cauter in diseases when it would
act like a charm were it the
focuser of the latter. Unhappily
for the profession, professional men
are too prone to ride hobbies, and
ride them down, so in many instances
with veratrum which like lime
or water when improperly used
is assuredly destructive as rather, and
when properly used is perhaps



as great a good to the human race.
When the Physician set him on shore
or some Launches out into some
unknown sea and leaves behind
him the great Chart laid down
in the *Vis Medicatrix Naturae* the
sails be sure to meet with shoals
and breakers innumerable, and
wreck his barge upon some
unknown coast.

Next in order I
propose to discuss its Therapeutical
applications in the treatment of
diseases. I have heretofore given
it as to my opinion that the
American Constitution is an irritative
Sedative; there are many Authors
that consider it peculiarly a nervous
Sedative. However applicable this
may be it appears to me very probable
that the power of the drug
is not exactly in unison. It exerts
its most impressive effects upon



The human system, though true it
may be that to a certain extent
it has secured its place control and quiet
in many instances. Then if it be so powerfully sensitive
to the arterial system, surely its
indications and applicability is
plain to the intelligent student.

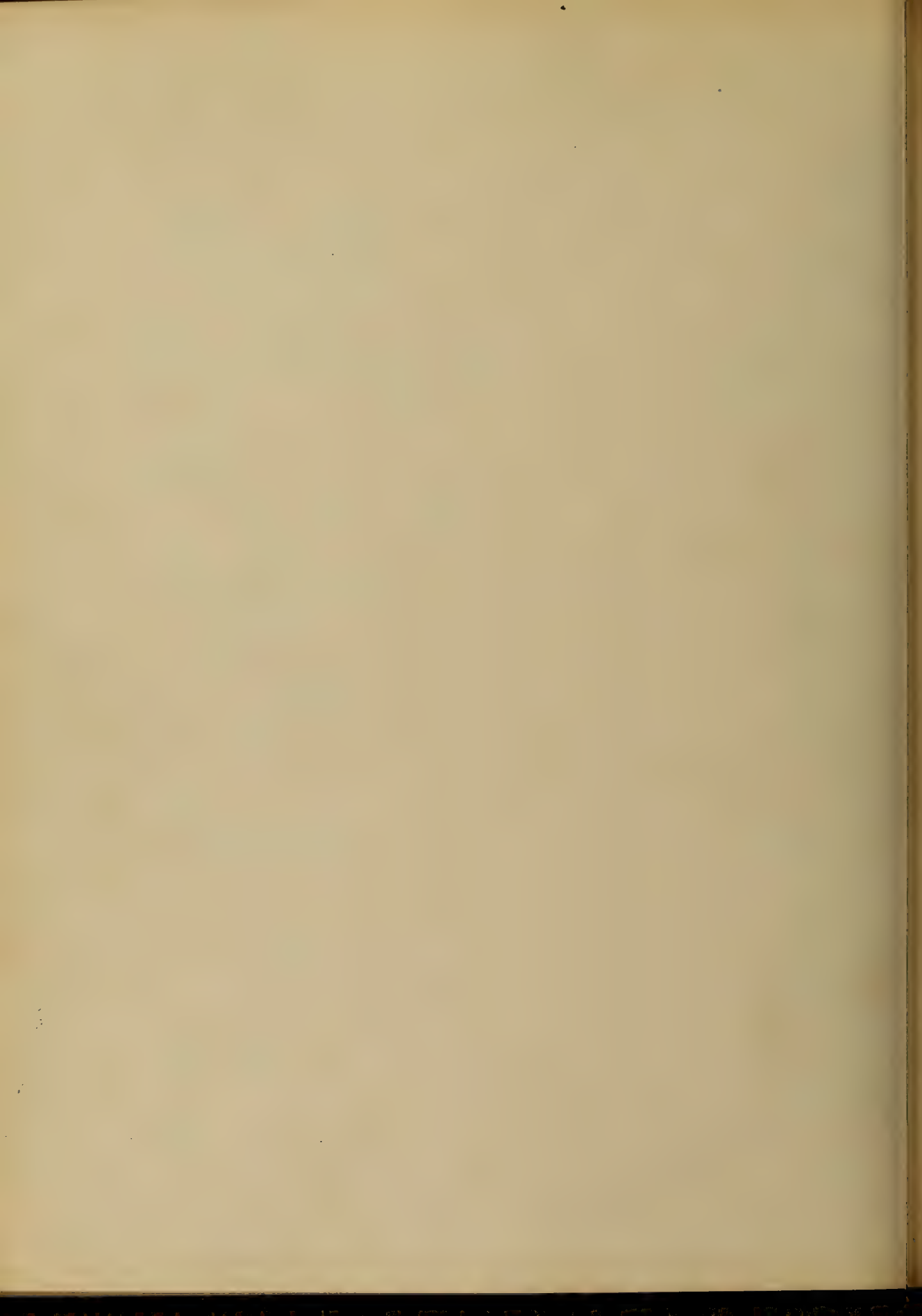
If the above statement be true
then it is especially effective in
reducing the circulation when
morbidly excited, and calming
nervous irritations. Its use heretofore
has been chiefly in the treatment
of inflammatory fevers, and nervous
disorders, in all of which, unless
there is an excessive anaemic condition
of the system it is an excellent
remedy. It first acquired its celebrity
in the treatment of Pneumonia, since
which time many Physicians have
used it indiscriminately in all
inflammatory conditions of the



Pulmonary and Circulatory Systems,
but there are cases and conditions
to be noticed and its indiscriminate
exhibition is to be deprecated by
profession. The medicine is
recommended by Dr Osgood as a
valuable remedy in treating acute
Pneumonia especially when combined
with Opium. I have not had
an opportunity of seeing it
administered in this disease
therefore I cannot vouch for its
efficacious effects. but if my
above statement be true as to its
effects upon inflammatory diseases
I would ^{not} hesitate for a moment in
resorting to the remedy.







AN

Inaugural Dissertation

ON

in Medicinæ Natura

SUBMITTED TO THE EXAMINATION

of the

Provost, Regents and Faculty

of

PHYSIC,

of the

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

Doctor of Medicine,

by

Geo. H. W. Jones

of

Maryland.

Session

Fifty-ninth

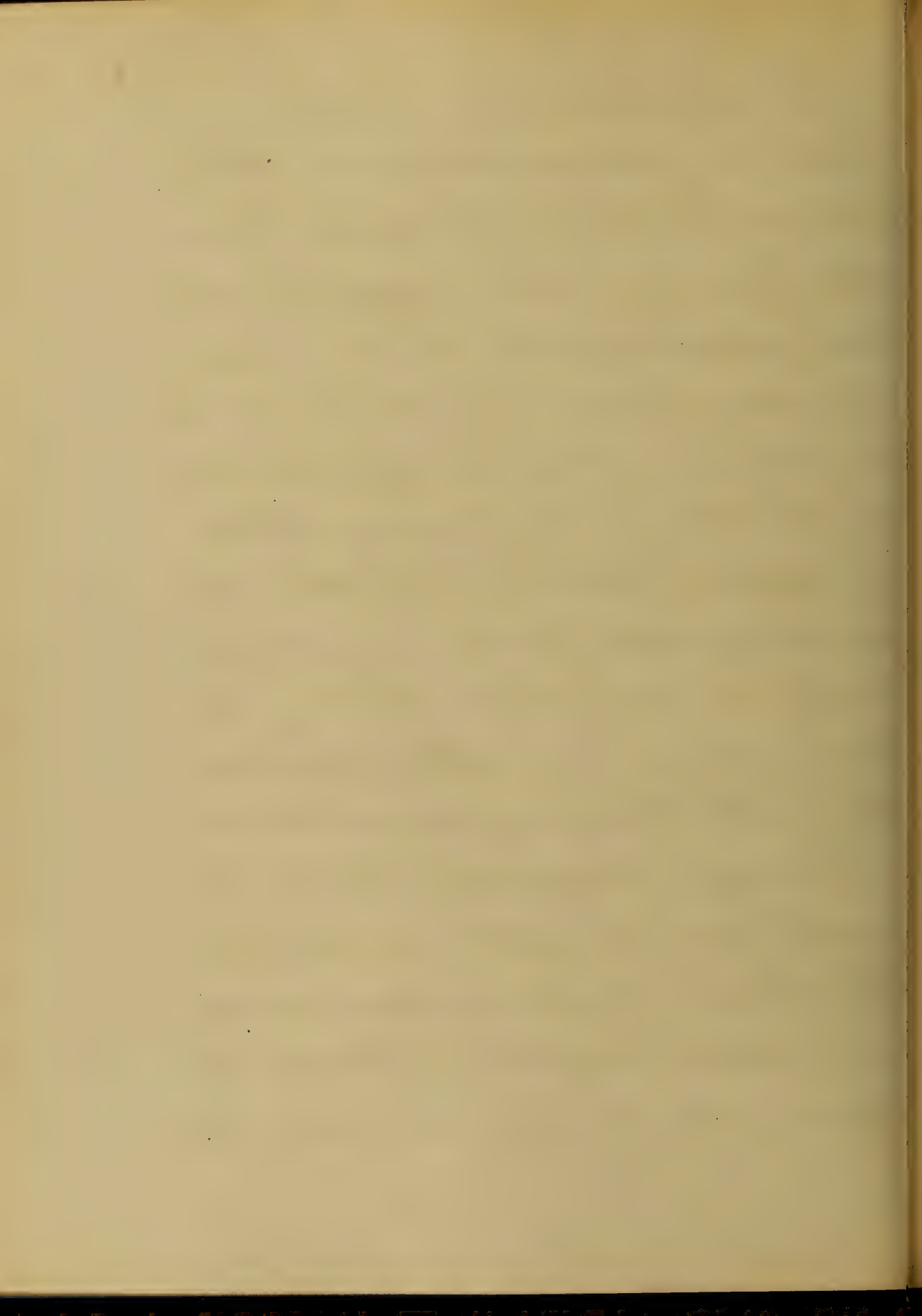
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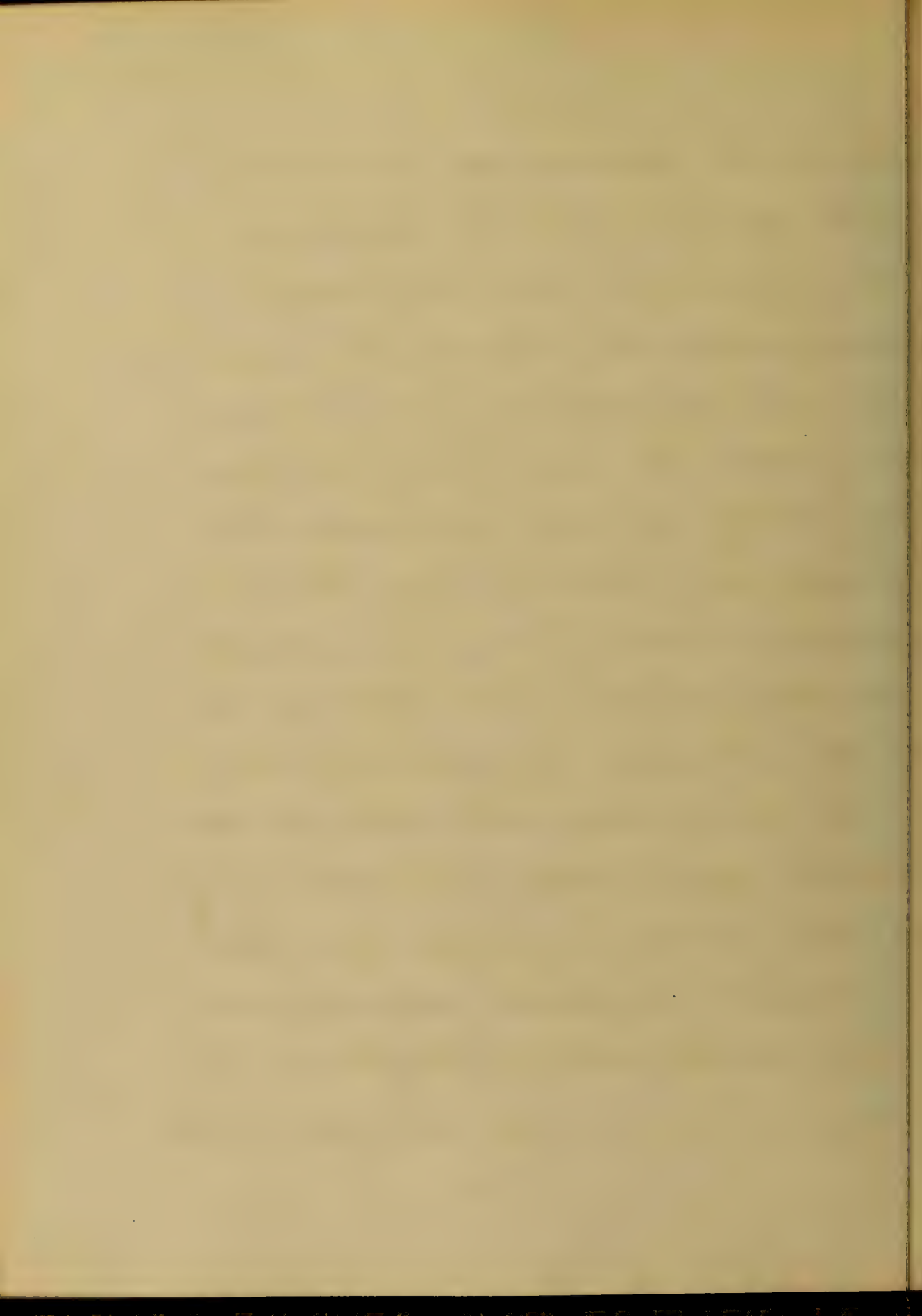
Vis Medicatrix. Naturae.

in selecting this subject for my Thesis,
 I do not for a moment entertain a thought,
 that, I, with my limited supply of prac-
 tical knowledge of the Healing Art,
 can add aught new or instructive. It how-
 ever, being an incumbent duty on me, as
 a candidate for the Degree of Doctor
 of Medicine to write a dissertation upon
 something, relative to the Science of
 Medicine: I have chosen this in pref-
 erence to any other without, indeed,
 being able to give any assignable reason.

To apply therapeutically the best, the
 simplest, and the most potent remedies of
 the *Natura Medica*, in such a way,
 as to alleviate suffering humanity of
 the many ills to which it is heir to.

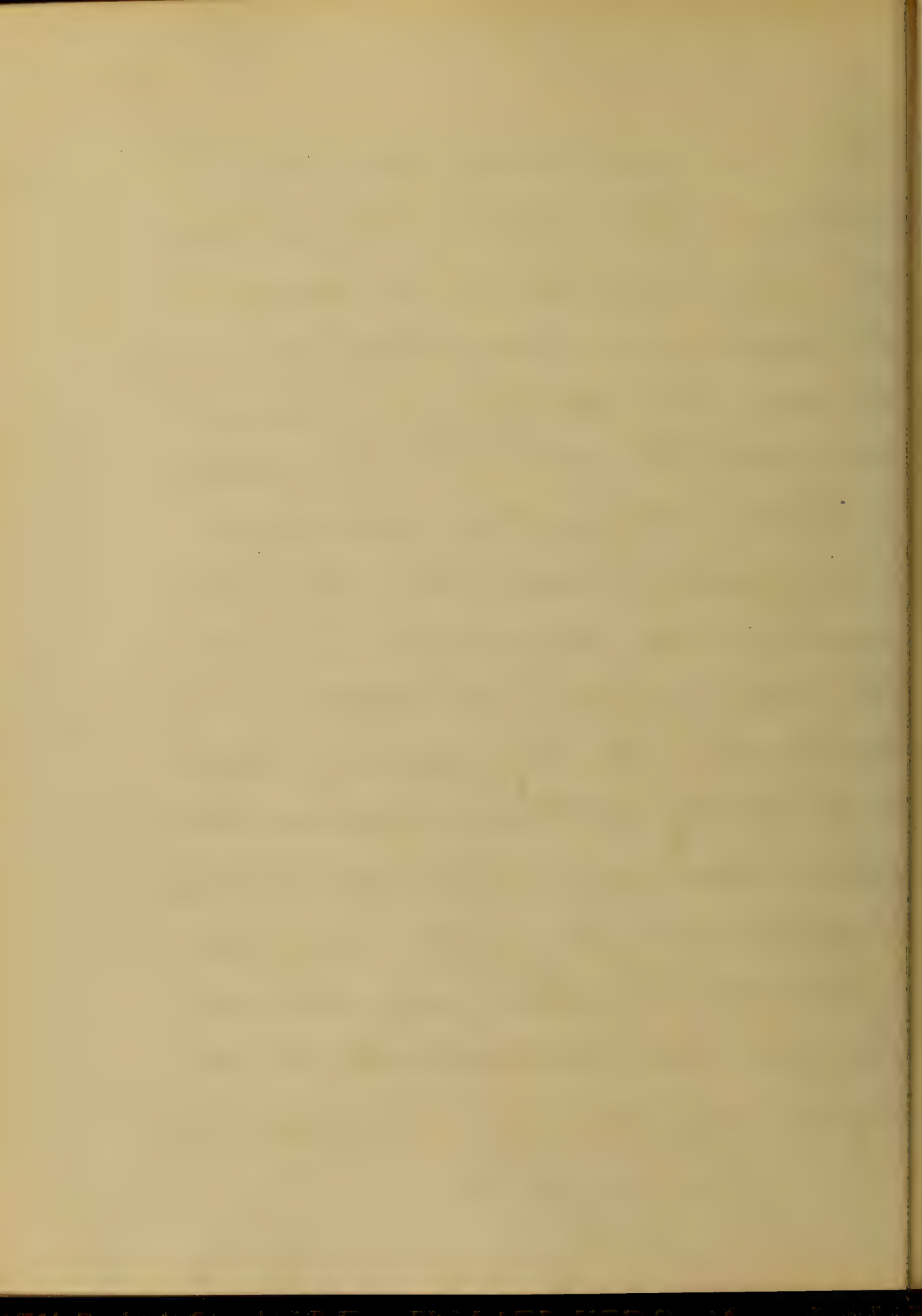


has been the paramount duty and endeavor
 of the medical world, from the time of
 Esculapius, to the present day. Various and
 many indeed have been the theories, that
 have been proposed from time to time to
 bring about this end; some of which were
 as great of evil as of good, and though
 for a time, they would play a prominent
 part on the stage of Science; As research
 and study revealed more intimately the
 hidden mysteries of nature, some new
 theories would arise, - take from the older
 ones the palm, and though their votaries cling
 to them as tenaciously as does "fascia
 to muscle"; they would ultimately have
 to succumb, yield to the pressure of
 opinion, and be thrown into insignificance.



4

Thus a constant change has been continuously taking place, sometimes for the better, sometimes for the worse. It must however be conceded, amid the universal striving for improvement, that, ^{through} the science has been, and is constantly changing, an advance, not a retrograde movement, has been the general result. Though these new theories were often of but little improvement on the older ones; they generally brought some new light to view, that was not known before: which of themselves may have been very insignificant, but when measured by the period, and the number of the labours; it was something to have to record a positive gain, however small.

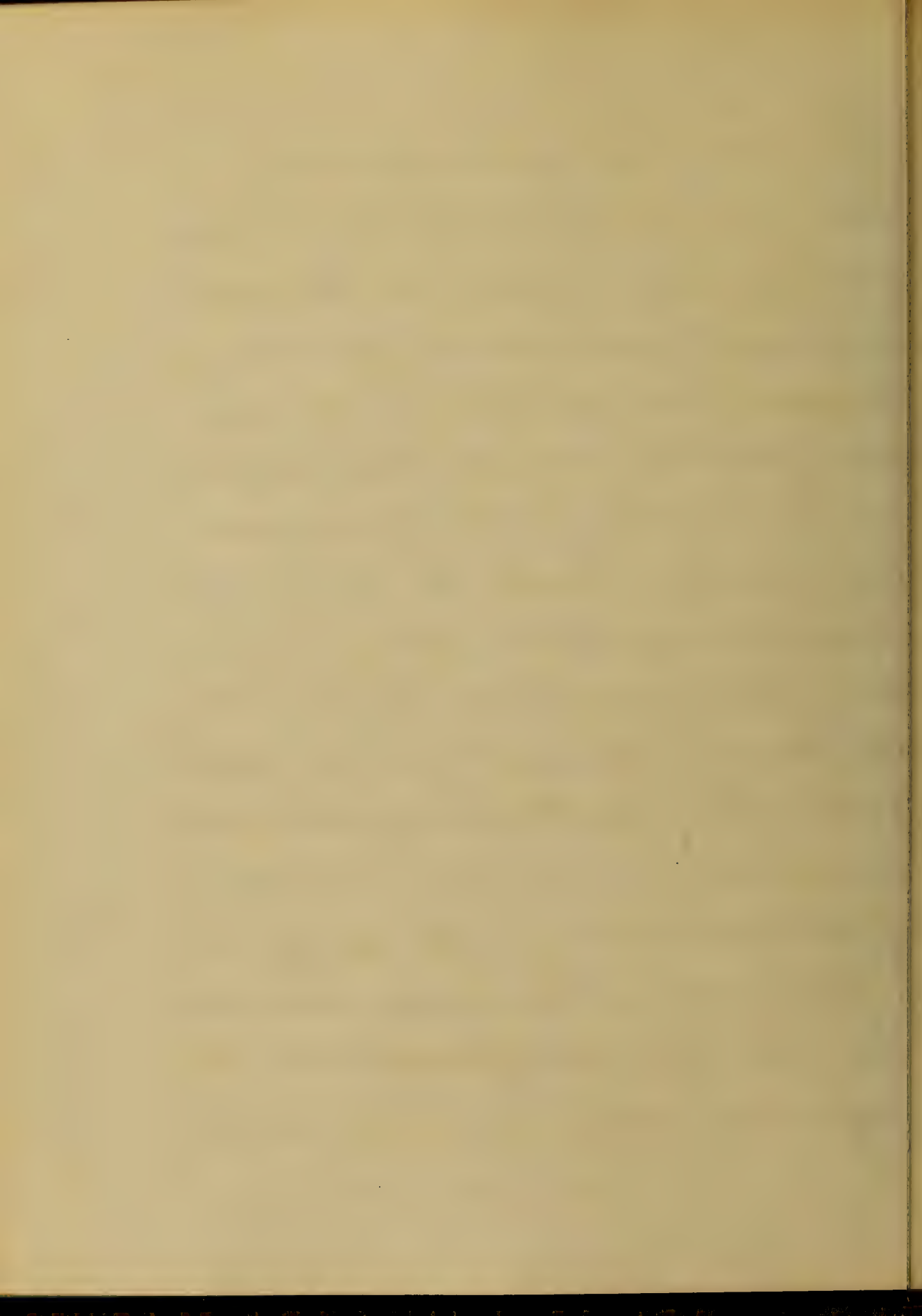


in a field of so much importance.

Thus step by step the Science has been gradually advancing; until it has reached its present ^{highly} ^{stage}, but even now by no means its acme; until the time has come when the hypothetical dogmas of the past, must give way to rapidly advancing Science.

When speculative theories are not put forth and believed, but with them must bring their physiological proofs. - "the true basis of rational medicine". Indeed we may truly say, that the present knowledge of medicine is but an accumulation of facts, gathered through a long series of years.

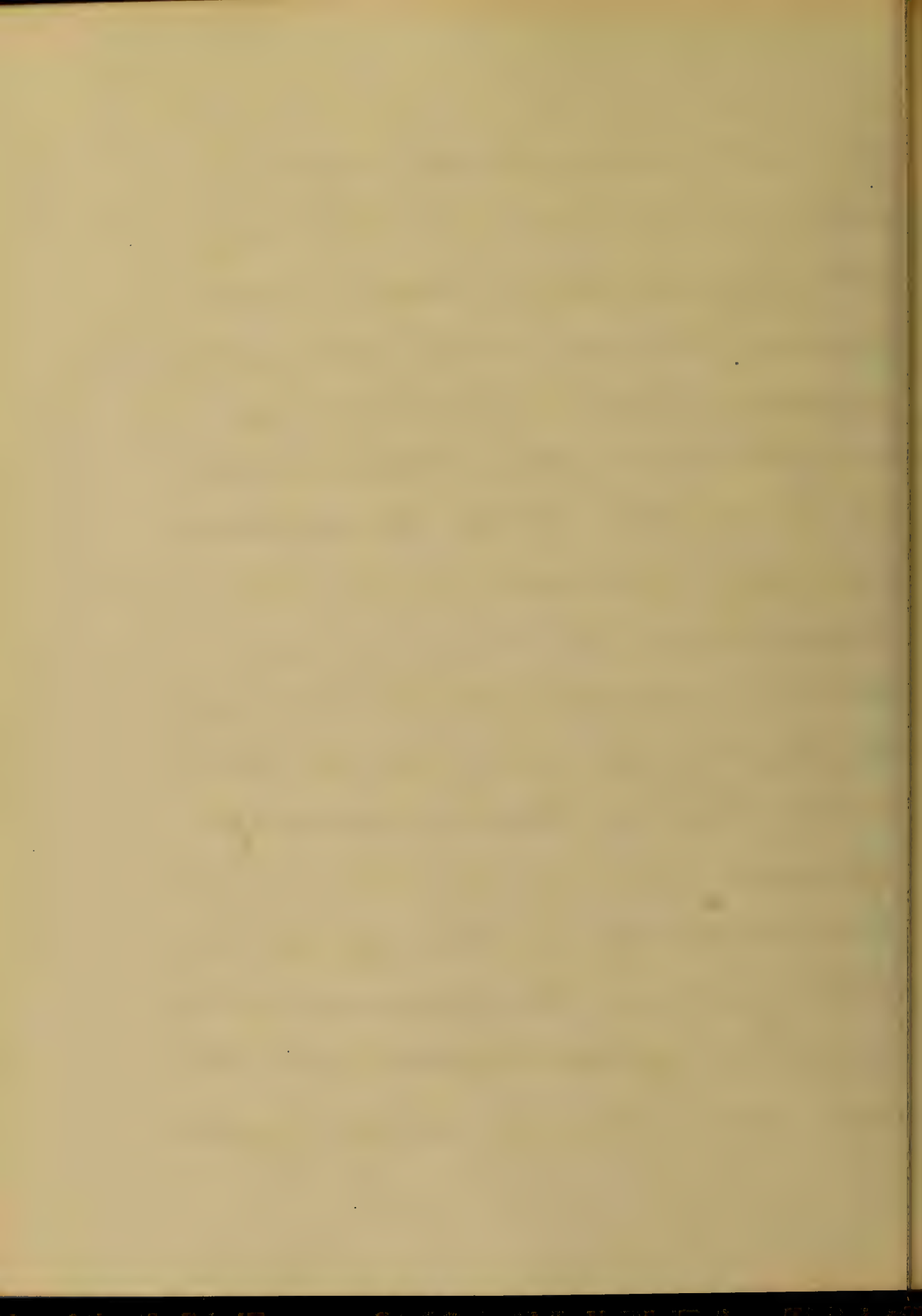
Consequently it behoves every man who has taken upon himself, so important a duty as the endeavor to prolong Natural



6
life, and to lessen human suffering, while it lasts, to devote his whole life to the profession which teaches it, and to use every means in his power, without jeopardizing human life, to add some new light to that Science. "Nature reveals not her mysteries to the careless and inconsiderate observer."

I must, however confine myself more strictly to my subject. I began with the intention of making a few remarks, on the Power of Nature in the cure of disease.

It is believed now by many of the leading men in the profession, that in some of our gravest diseases, we can but assist ^{or} Nature in eradicating them

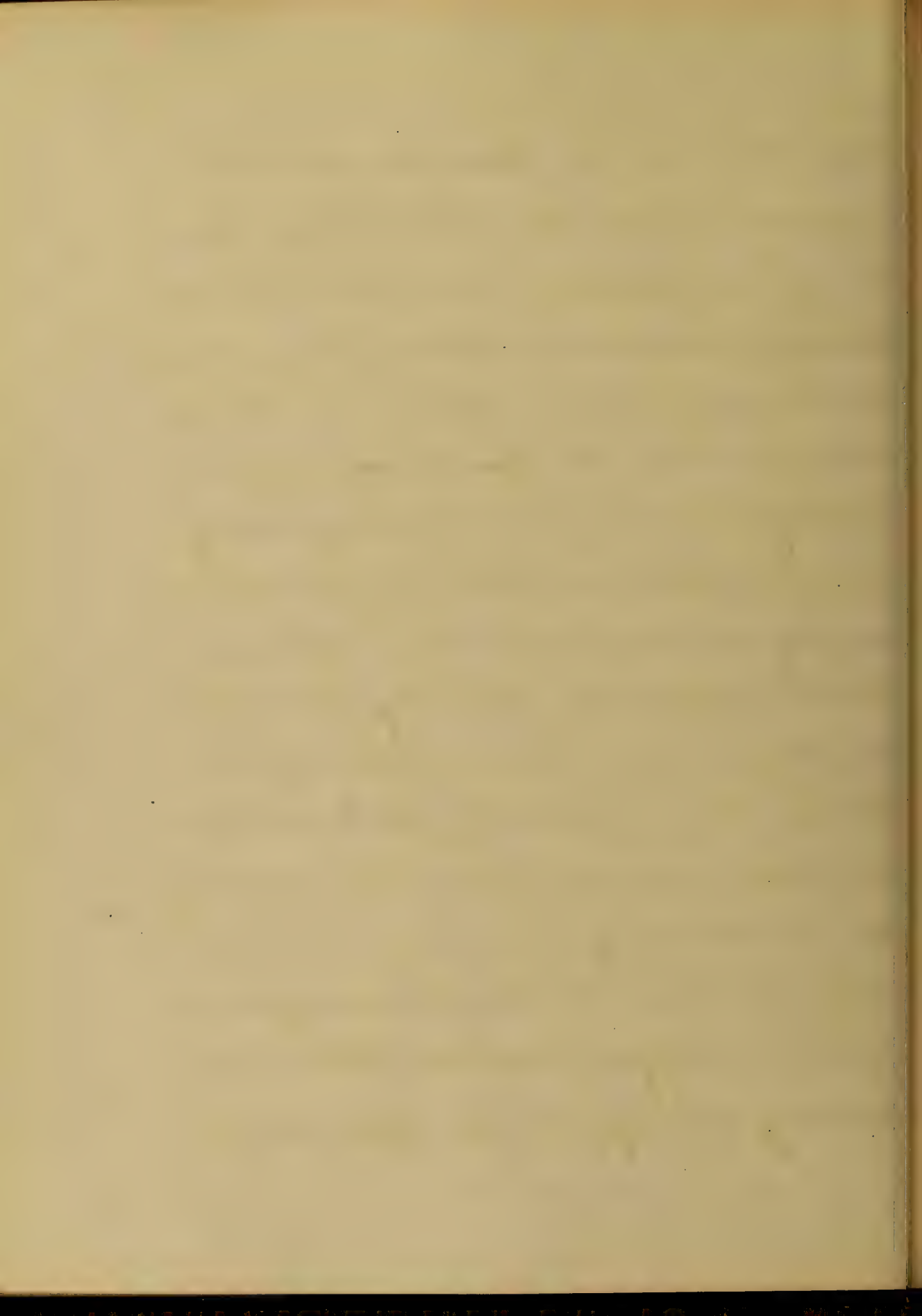


from the system. That in many cases,
 we can no more cut short the slowly,
 but surely advancing enemy to human
 pleasure, when once he has a strong foot-
 hold, than can the dreading warrior
 stop the coming storm. We like to
 see a true Captain to conduct our
 ship safely through, but often, we cannot
 do more.

It is an undeniable fact, that there are
 at present, but very few articles of the
 Materia Medica, that can be considered spe-
 cifics, notwithstanding, our predecessors vanta-
 ed in almost every disease a specific; many
 of which are now known to be entirely in-
 ert, and many decidedly injurious in
 the several maladies in which they were

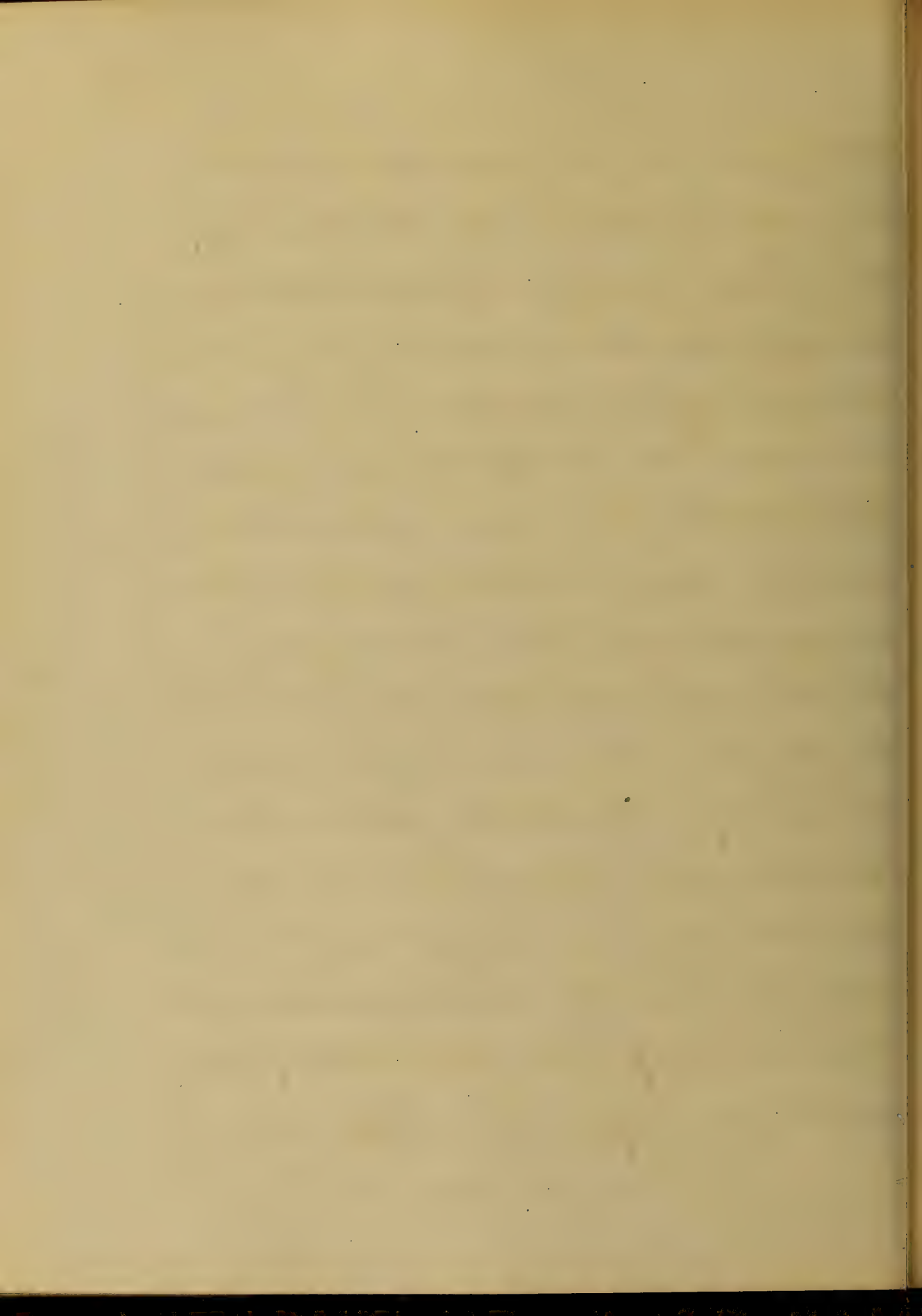


used: Thus when being true, it must be
granted, that no one, whether physician
or lay can positively assert, that he has
made a radical cure with any drug, unless
he knows it to be a specific in the dis-
order in which he has tried it. True
it may have brought about apparently
very beneficial results. Every action of
it may have come up to his most sa-
guine expectations, from day to day under
its influence he sees the poison of the
disease being gradually eliminated from
the system, and soon a cure is made,
as he thinks, by his drug. If however
he again tries the same remedy in a
similar disorder and it fails, he can
not say with any degree of certainty



that it cured in the first case. No doubt
it greatly assisted Nature to throw off
the poison sooner than she would, without its aid.

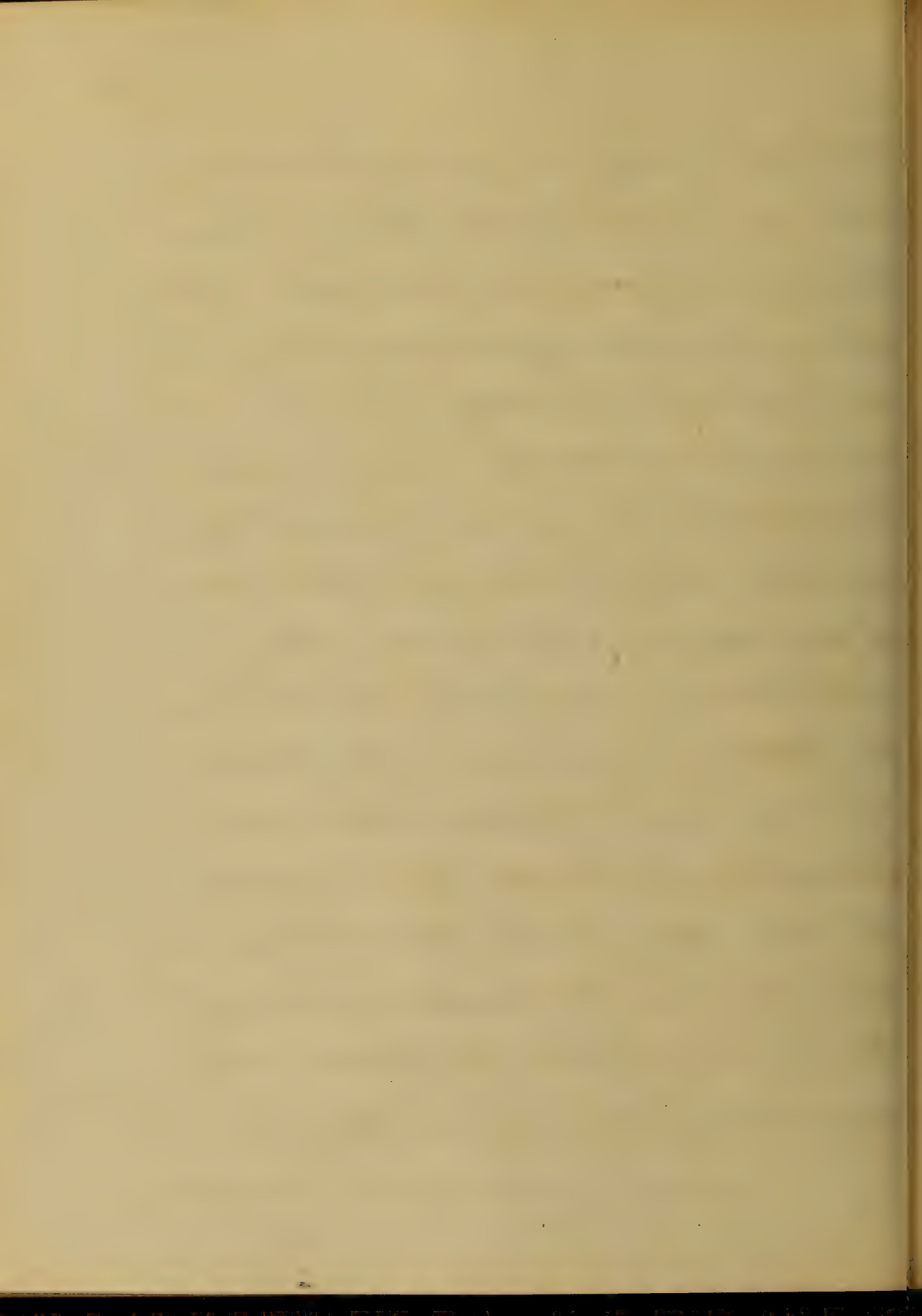
Do not by this believe, that I for a moment
doubt the efficacy of Medicines in Diseases.
We have I am thankful to say a com-
plete control over some of our most
common diseases by the specifics which
we possess. Among these we may name
the several forms of Malarial fever - par-
ticularly the intermittent type - which
nature alone, would be often weeks,
months nay even years eliminating,
from the system; can almost inver-
sally be cured by Quinina and its
Salts in a very short time. Variola -
which formerly carried off, according



to statistics nearly one fifth of the inhab-
 itants of the whole world, let vermin,
 can now be greatly mitigated and often
 entirely prevented by Vaccination. Typhoid
 can generally be cured by Ferrugin. - I will
 go on and add several others to my list.

Besides our specifics, we undoubtedly
 possess many Medicines, which have
 a very powerful beneficial influence
 over diseases; and many which have
 the power of sustaining the vital
 powers until Nature can cure.

Admitting then all of this, I must at
 the same time assert, that I believe
 there exists, in the minds of some of
 the members of the profession; - espe-
 cially those of the old School. - who

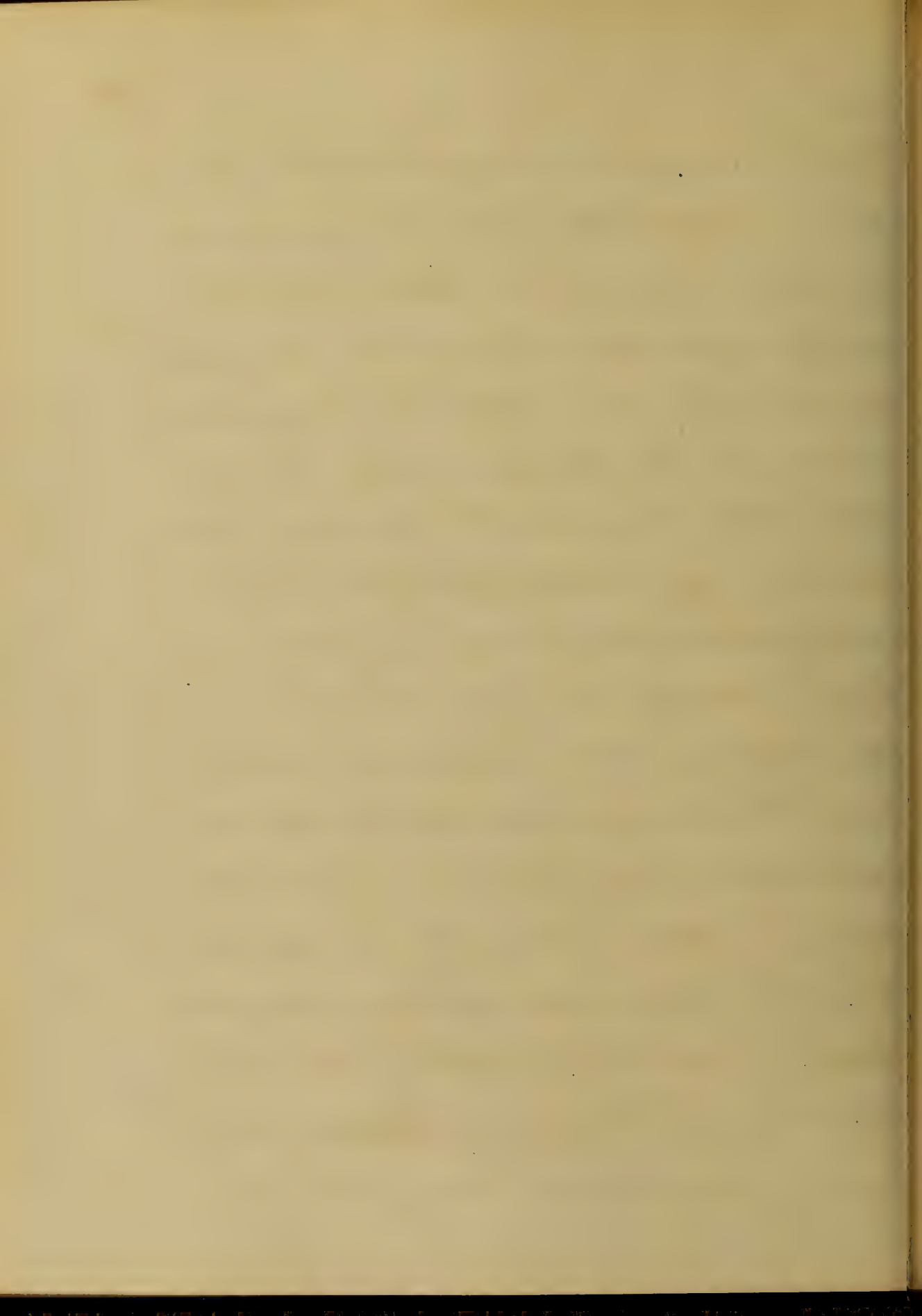


believe there is a specific for almost every disorder, and still more strongly, and almost universally in the minds of the public, a most unjust appreciation of its extent of a peculiar healing power, the *Vis Medicatrix Naturæ*, a power sui generis, with which every living thing of the animal, as well as the vegetable Kingdom is possessed and endowed with.

That there is such a Power in every living body over which man has no control, it is our business now to prove. Let us then in the first place search for it, in those fields, where it will be furnished with the greatest purity: Among the first proofs that occur to our minds, is the vast field furnished



to us by the pathology of the inferior animals. It is an undeniable fact that all of our domestic animals are liable to, and are often afflicted with, various disorders, and that they get well without any medical aid. The Veterinary Surgeon even goes so far as to assert, that the horse is heir to, almost every disease with but one or two exceptions, to which man is. Whether this be so or not, we do know that he is often sick, and that Nature, unaided, often cures. True aid is often brought in, in such cases, but in those only in which Science added nothing to the cure, do I wish to adduce as evidence in my favor. Again, let us seek the wild animals in their haunts. Though we know but little



of their diseases or their results. We do know that punctured and incised wounds, of the most frightful character, inflicted by the hunter often heal by the natural process. Limbs are often broken ossification takes place, the bones are united and often without any deformity, as is proved by the examination of their bodies, when afterwards killed by the Sportsman.

It is known that animals as well as men are often visited by epidemics and that many that are afflicted with the pestilence do not die.

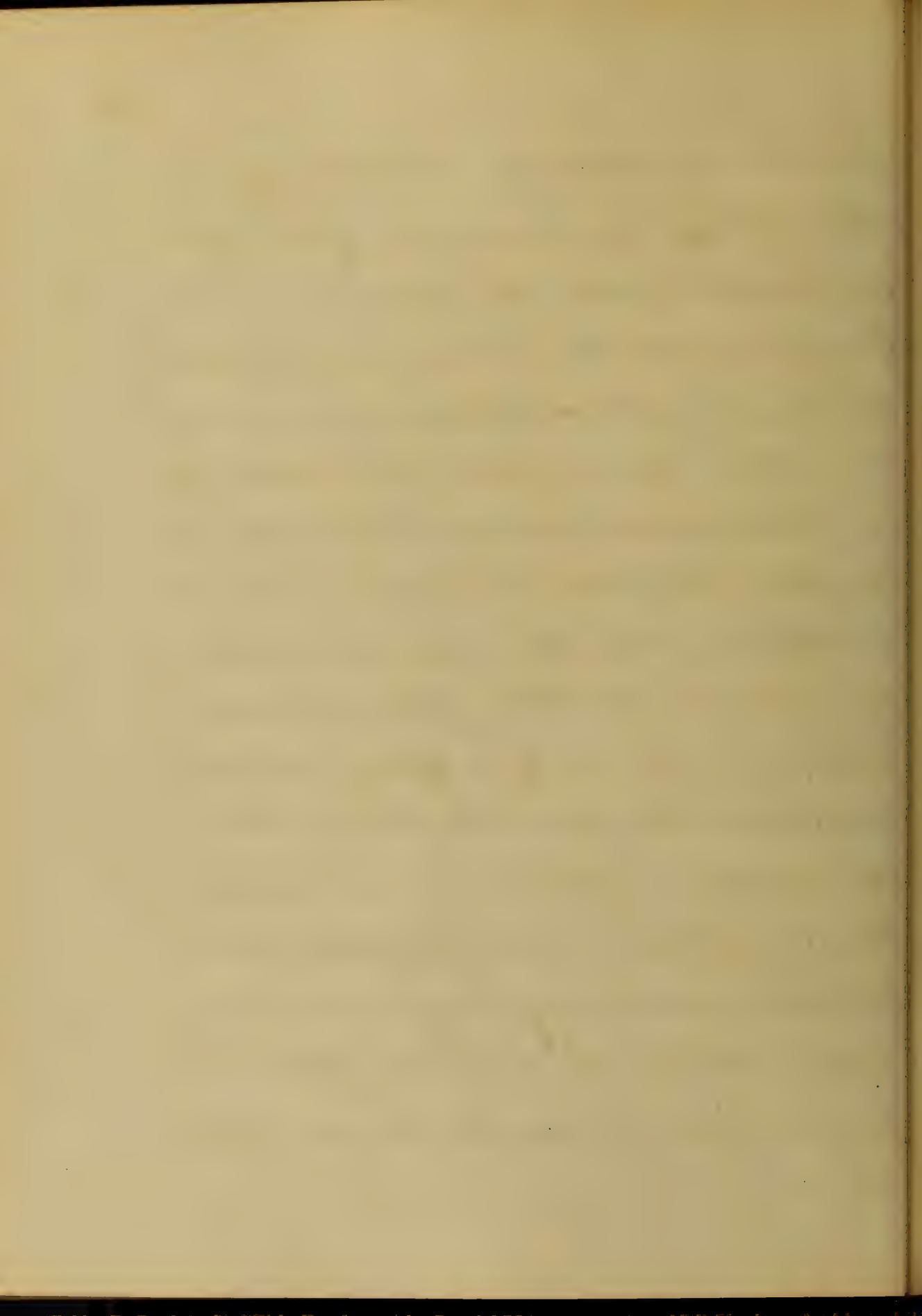
Even if these cases are few and sporadic, the few cases must be attributed to the *Vis Maligna* of Nature.



In thus producing evidence from the inferior animals in favor of the natural cure of disorders in man, I have no doubt it will be regarded as analogical and deductive, not as certain and uol. The analogy is however so close, that we cannot hesitate to draw the inference, and to believe that the same natural changes would take place in man.

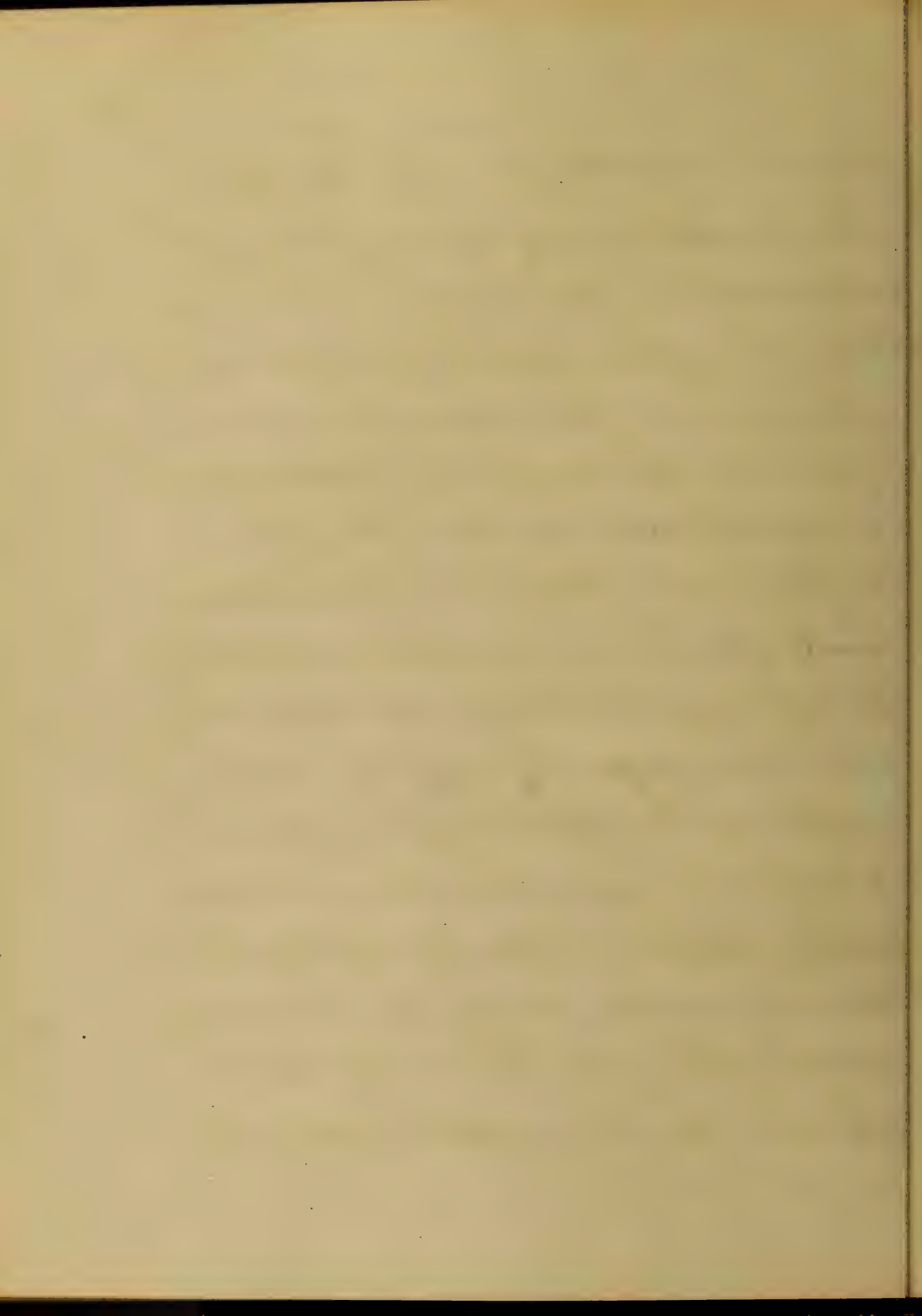
That there is such a power in man as well as beasts indeed none, but the most credulous minds will doubt. It is made palpable to our senses as an every day occurrence.

True diseases in beasts offer a much better evidence in our favor



for them the natural course take place, uninfluenced by joy, grief, fear, hope or distrust in the treatment.

Every physician who has had any experience at all, has seen the influence that confidence ~~or distrust~~ in unmedic has over the minds of patients. Has seen unmedic used which brought about no beneficial results, while the same unmedic, given by a physician in whom the patient had unbounded confidence, produce a most desired effect. I have myself seen the imagination wrought up to such a height, that a placebo produced the same action as a



cathartic, - In the case of a Mrs
Dance - thanks to the Infirmary for
this information, - upon whom a
Feverish fire caused a copious swee-
nation, in a few moments, which
with her she would be consigned
for days.

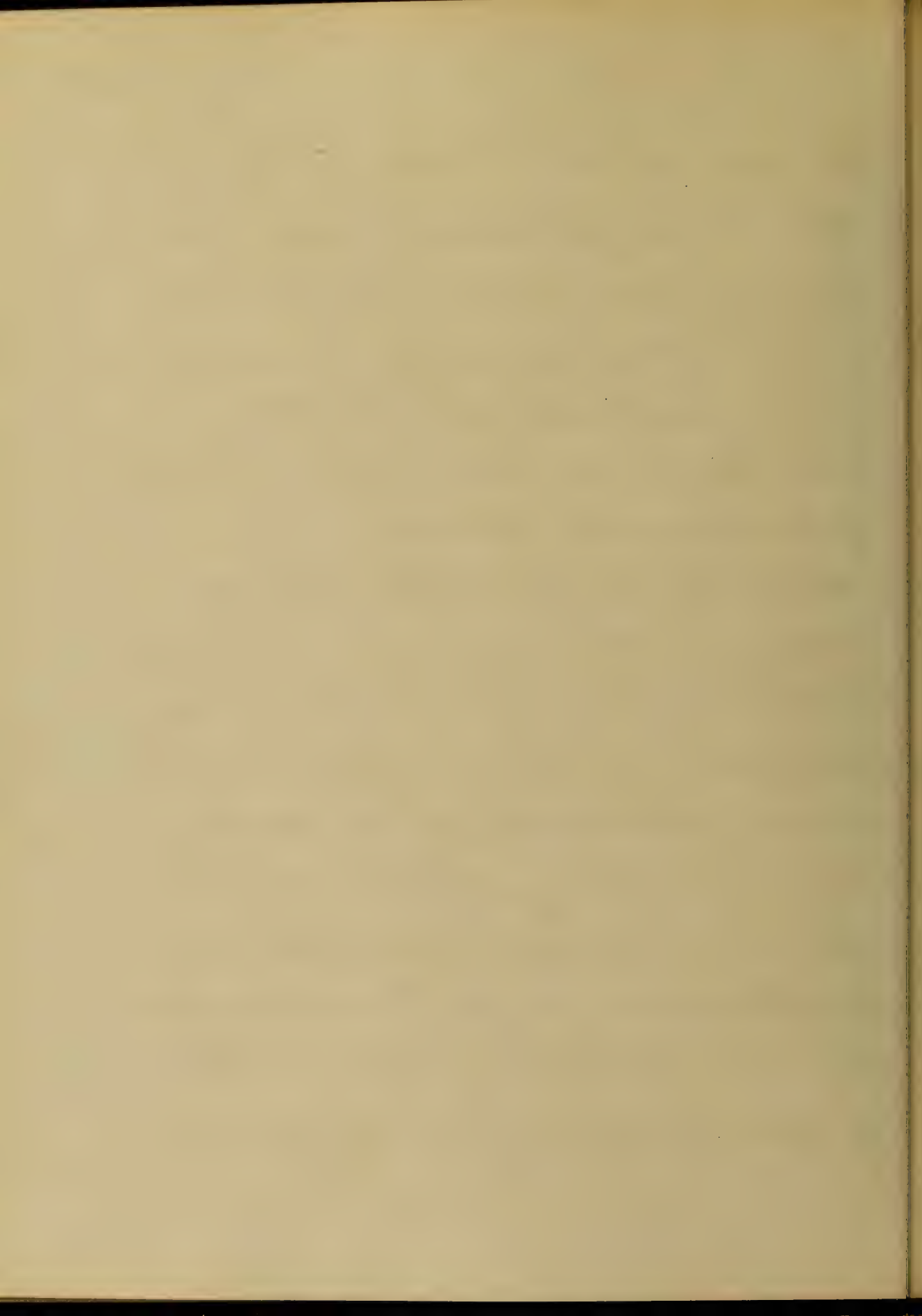
The next field in which we will
seek for evidence, will be one, which
is migratory and impermanent but abso-
lute and positive.

The reports of travellers furnish
is with the fact, that through almost
savage nations from natural instinct
seek relief from suffering, and be-
lieving this relief not to be an in-
herent power within themselves



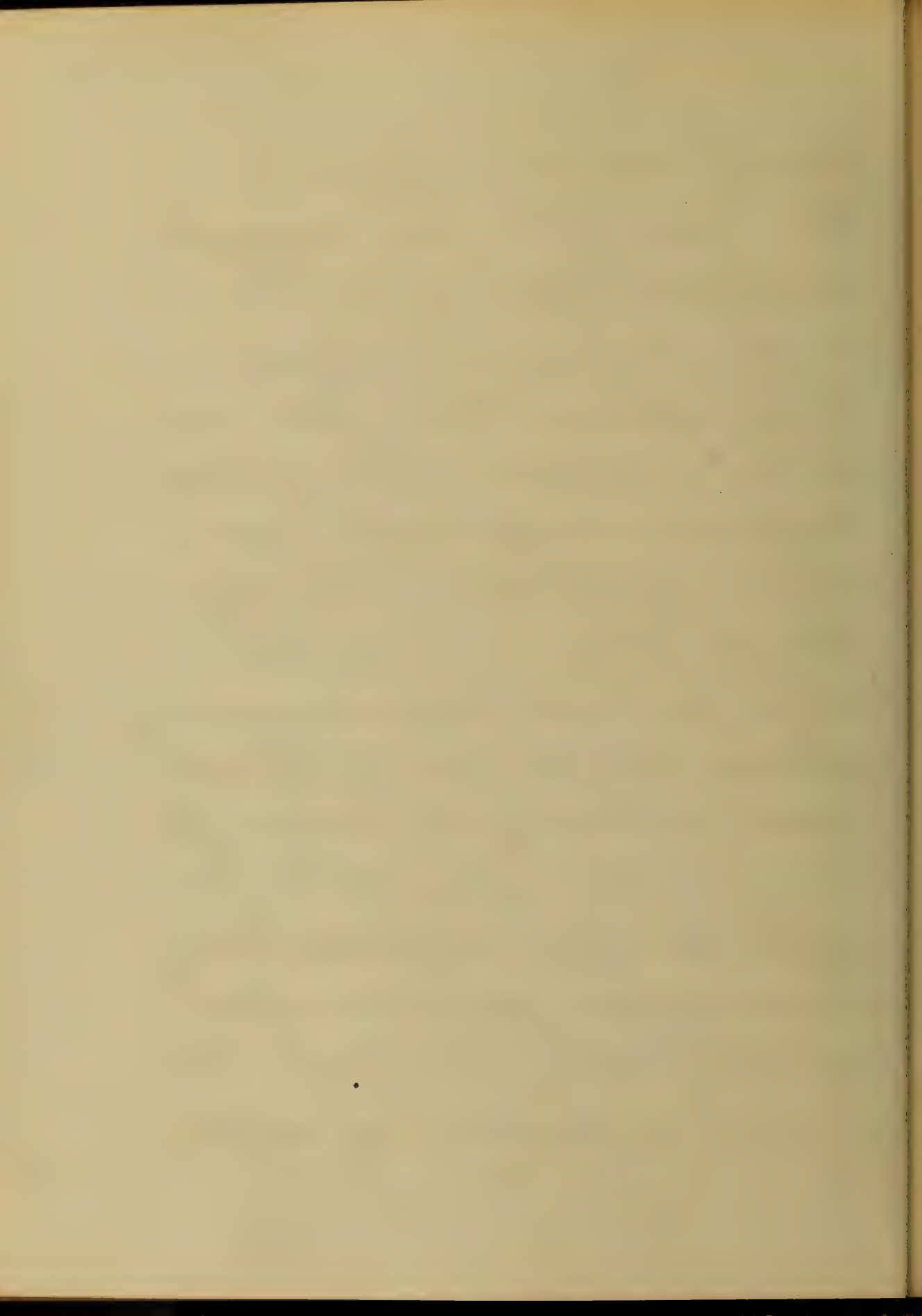
has given rise to a kind of Medical
 Art In many instances however, this
 Art is of no but a Nature; that we may
 justly call it a Medical Art, even
 if they are made but not true,
 to the "Vis Medicatrix Naturae" aided
 by the imaginary powers.

Among the Tonga Islands ac-
 cording to Marmiers, their whole
 Medical treatment consists of in-
 nocent and salutary Remedies.
 But if the cure makes
 here even if they be never so few
 must be said to be Natural.
 We know it to be an historical fact
 that among half civilized nations a kind
 of superstition or religion termed



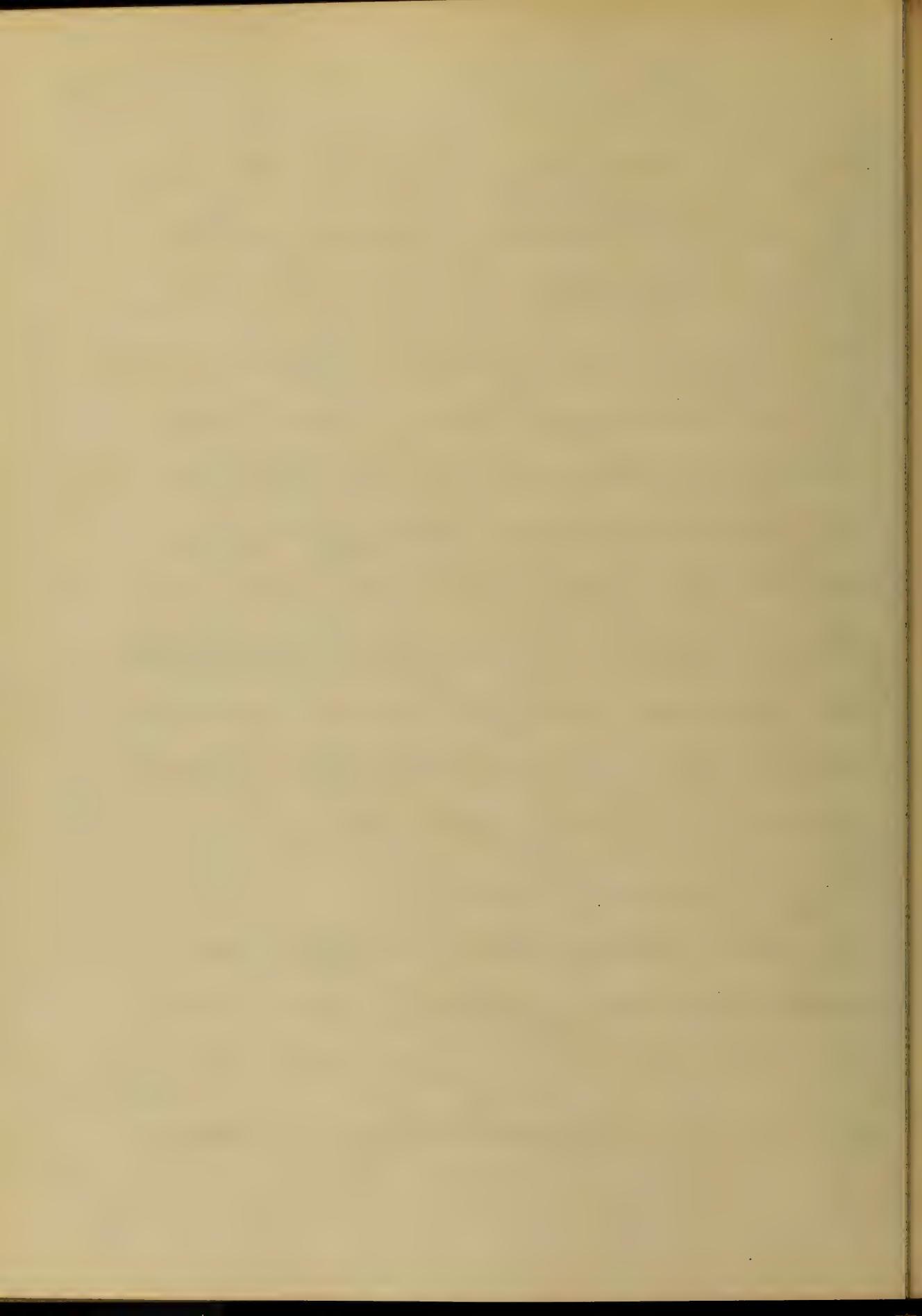
Witchcraft has always existed.

Even a part of our once happy Country did not escape the foul contamination, when civilization was diffused over the whole land. - History tells us that among the earlier settlers of New England, it was practiced to such an extent by old women, not only in pretending to cure diseases, but in bringing on such fearful imaginary diseases, that the State authorities had to prohibit by law its further practice. In many parts of Africa at the present day this Witchcraft is believed to play a most expressive part, both in causing and curing diseases. It of course has no power in producing any except



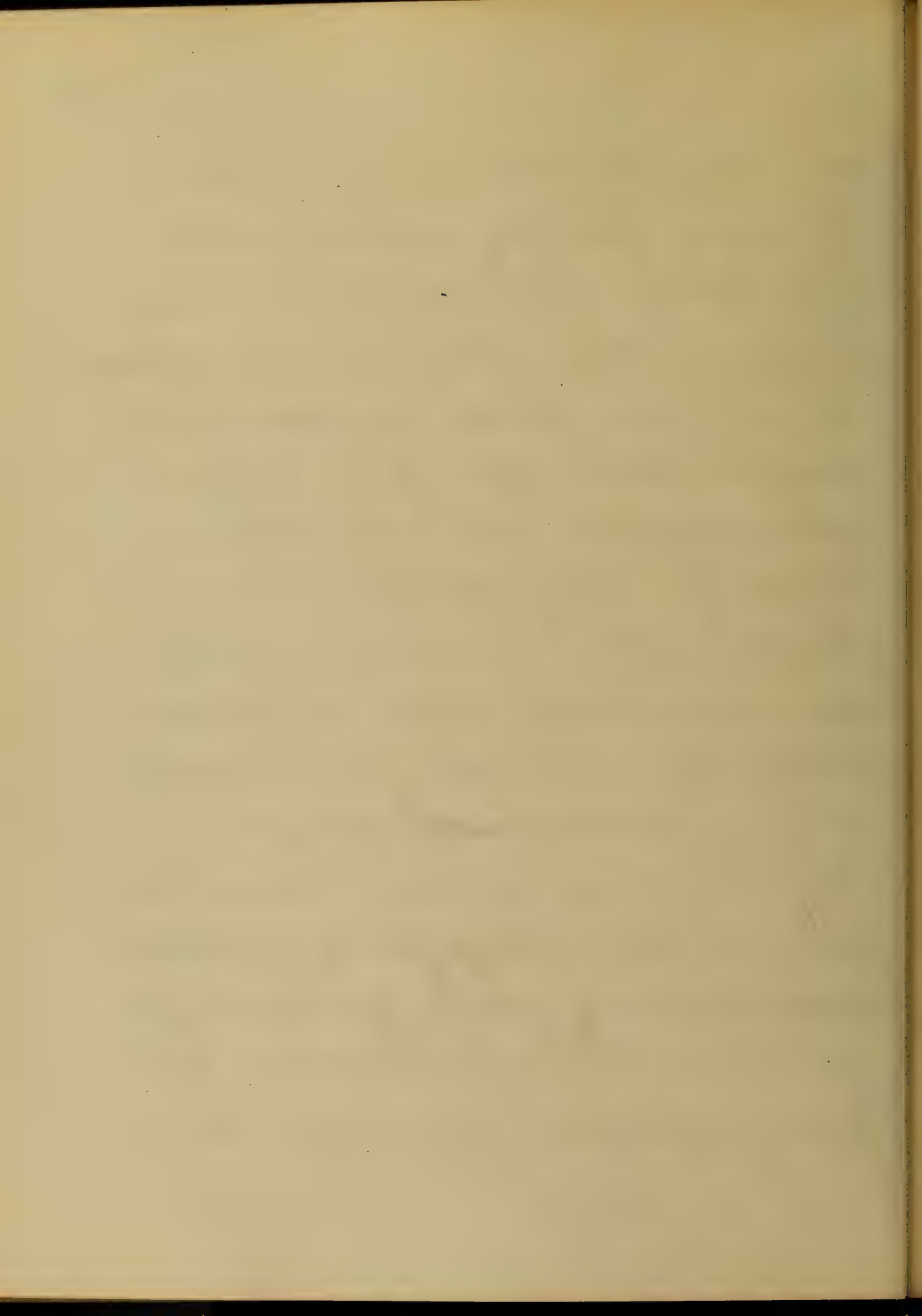
imaginary disorders; But that they are subject to the same Maladies, that other tropical Nations are is well known, and we have every reason to believe that they are not always fatal;— Since their average age seems to be as great, as that of most Nations. More of course must be fatal and their diseases are more prolonged, than they would be under proper Medication. Still the number that survive however small, under the practice of such an hallucination must be only Nature's cures.

Even these supernatural interferences with the workings of Nature were not practiced to a very great extent, among imperfectly civilized Nations in ancient



times. We learn that among the Romans
 - for ages after they became a civil-
 ized Nation, - the Medical Science was
 virtually unknown to them, being practiced
 only by a few priests and divines, and
 these were looked upon by the populace
 with indifference and distrust. Even in
 the time of Pliny physicians must
 have been looked upon, more as a mi-
 sance than a use - when he speaks
 thus of them. "Discunt periculis nostris
 et per experimenta mortis agunt"

May even now in our own land, while
 the cities have a superfluity of Doctors;
 in some Country places, particularly the
 far West, - where the habitations are
 so very scattered, - physicians being



such a great distance from their homes, they may virtually be said to have no medical advice. - Having, to depend almost entirely on the old women of their household; - whose sole treatment consists of cordials, herb-teas and infusions of various kinds, made from the vegetables of their own vicinity. Many of which are entirely inert in the several disorders in which they are used.

And though under such management, persons no doubt die, who might recover under a better treatment; Still after prolonged illness, many do, from very severe attacks recover; - Here again we must maintain that it is ⁱⁿ naturis auctoritas.

There is another source of evidence in

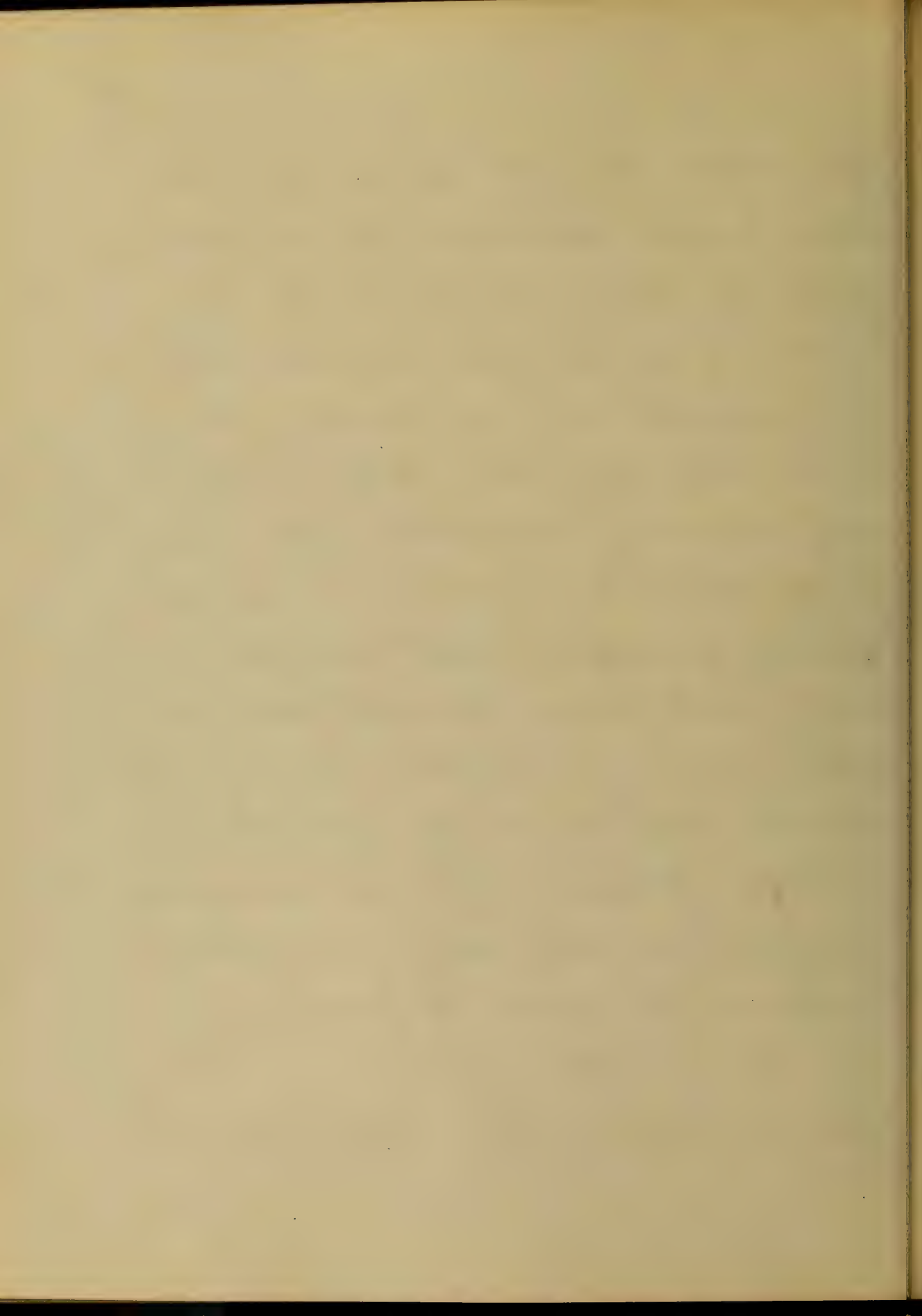


our faces more circumscribed, but at the same time not less authentic: derived from the history of isolated bodies of men, whom adverse fate has thrown far from their homes and human aid. - Who have been attacked with the severest fever, under the most ~~un~~promising circumstances of regimen, climate, and shelter, - far from any medical aid or assistance, upon barren coasts, or where alone the savage rules with "undisputed sway". Yet under all these adverse circumstances; the story of the shipwrecked Mariner tells us that they often survive and after long suffering and privation return home to tell their sad tales. The history of our merchantmen teach the same facts.

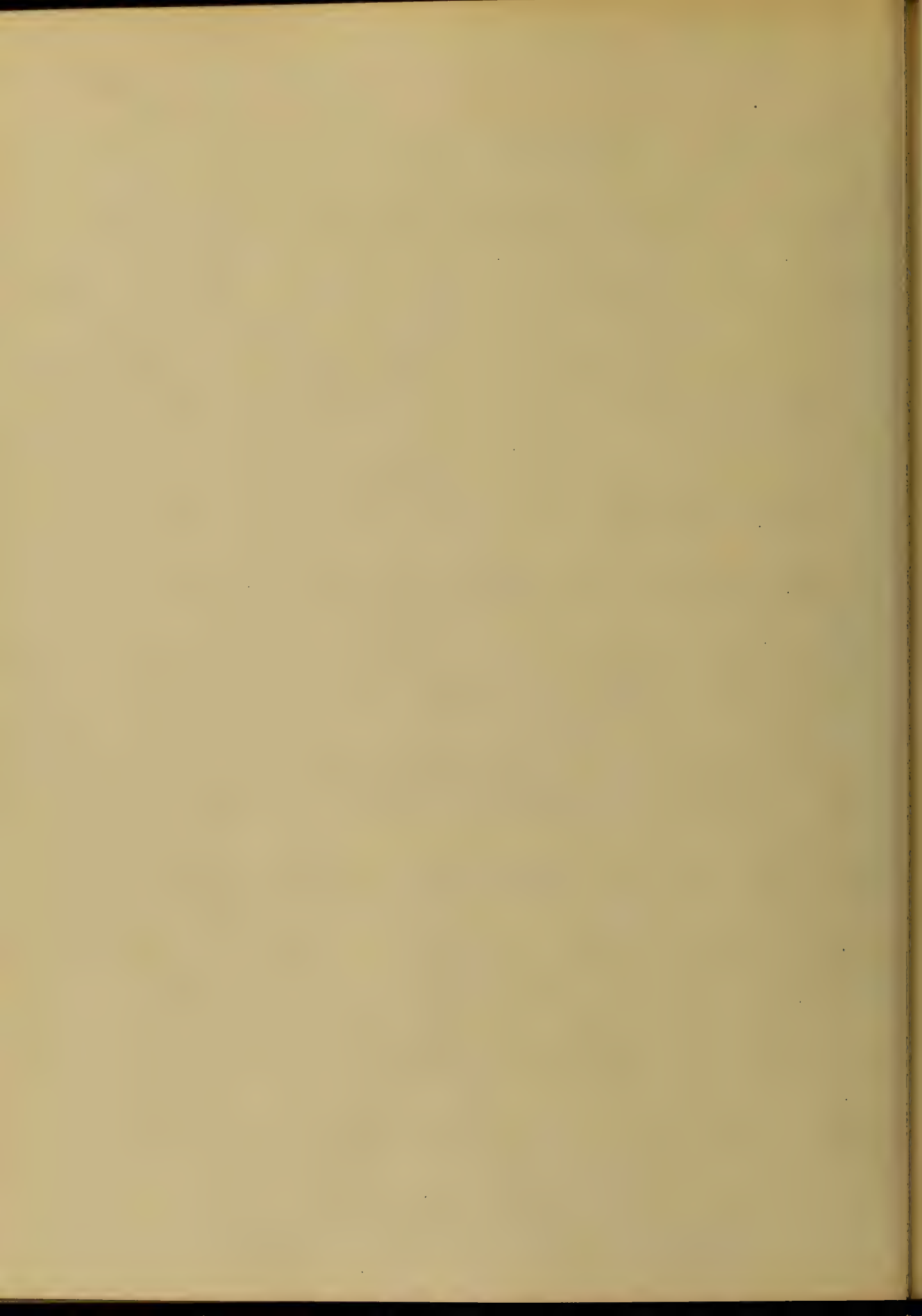


Let us now leave the domain of legitimate medicine, and we will find an ample field for gathering evidence: in the proceedings of the numerous Quacks; who are to be found in every age and every Country. That a large proportion of persons in every community intrust themselves when sick to the exclusive operation or nonoperation of advertised quack Medicines is well known to everyone, and that many on the administration of the so-called remedies; which are advertised to be panacea in every human ill whether of Mind or body, do recover from their diseases under every form of Medication whether Mild or drastic is an undeniable fact.

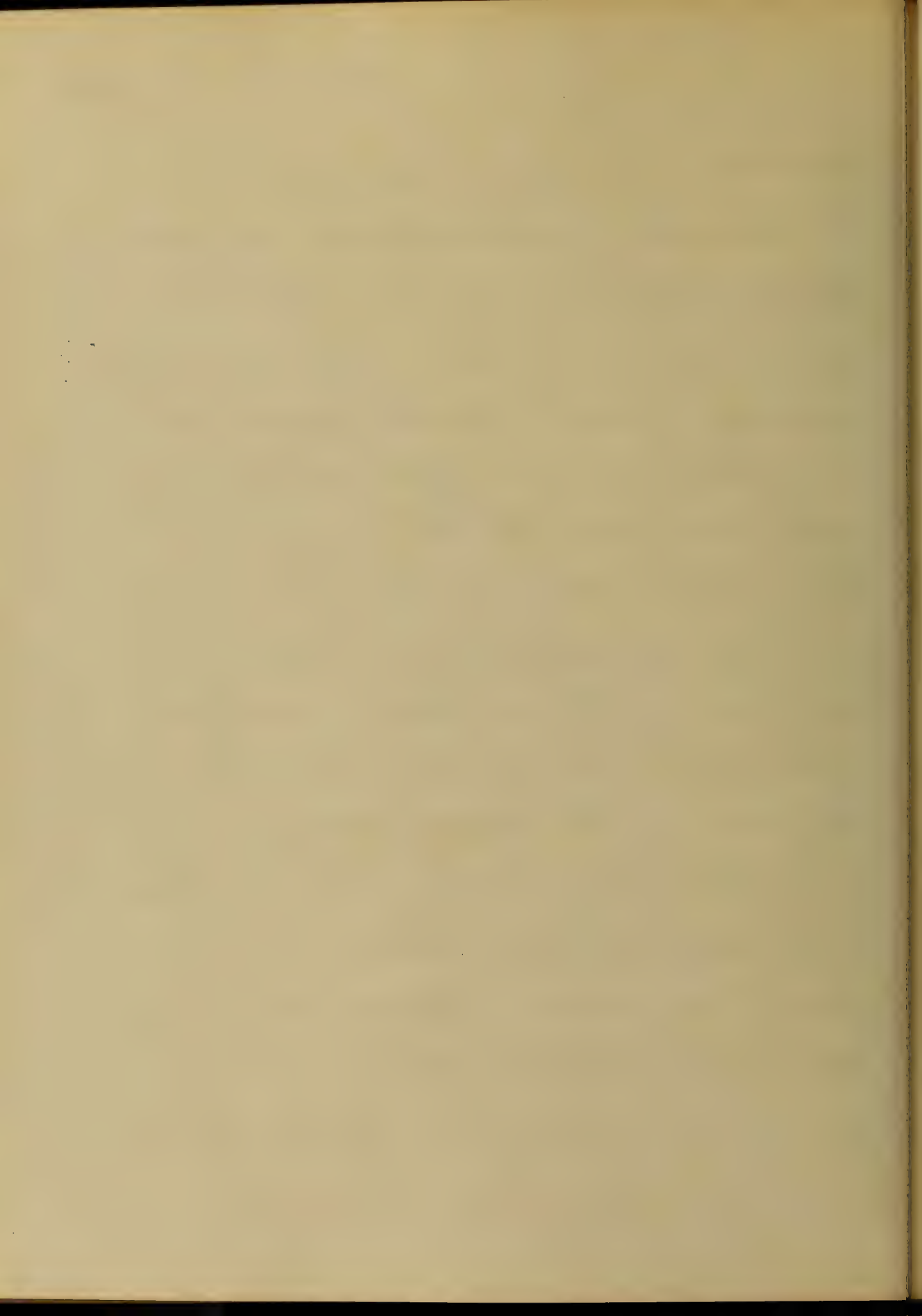
Besides the Quack, there is an other sect



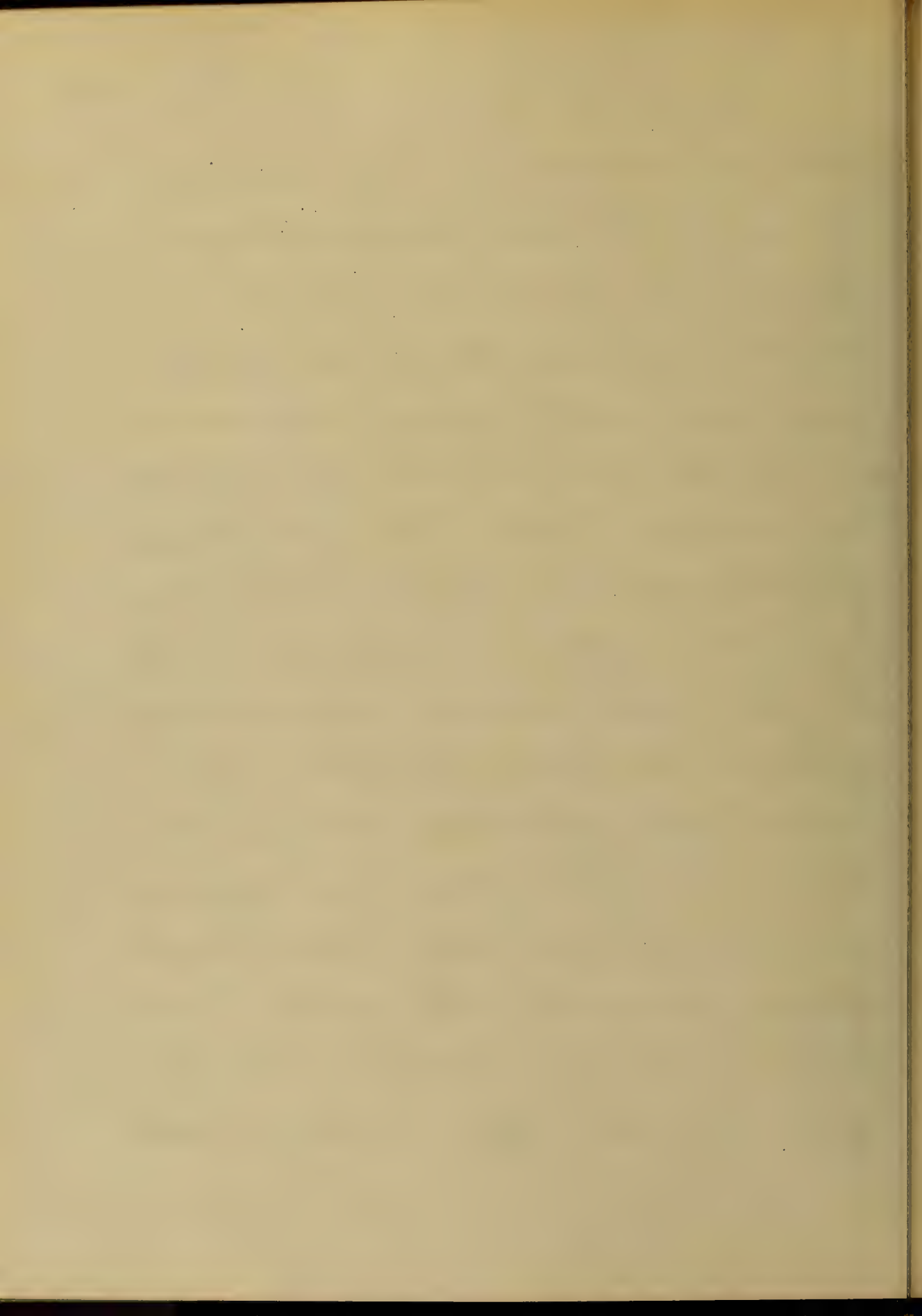
of resources, who infect all of our large
 cities: who furnish us, with more direct examples
 of Nature's Power in curing disease. Indeed
 no records of medicine can supply, in facts,
 so strong in point of force and extent, as that
 furnished by the School, known by the name
 of, Homoeopathy. Since the establishment
 of this practice by Hahnemann, now, I believe
 upwards of 70 years, a large number of
 most civilized nations have been treated,
 according to its precept and practice.
 That is treated nominally by drugs, but
 actually left to Nature's cure aided by the
 imagination. Though the votaries of this
 School have ingeniously tried to make
 their theories plausible, it must be ut-
 terly banished as a doctrine of general



application, and in the pretended, practical, principle, not only unphilosophical, but impossible. Every one who knows any thing of the Therapeutical action of medicine: knows, that the prescriptions, of such infinitesimally small doses, or in other words of imaginary doses of Medicines, must know, that they are utterly incapable of producing any change in the animal organism, except through the medium of the imagination. Thus we have an undisputed right to assume, that all the cures exhibited in the practice of the Homœopaths, are the product of nature, aided by the patients confidence in his professed Medical adviser. I must however confess that I am not such an advocate of his inherent power in Nature to cure disease, as to believe that the practice

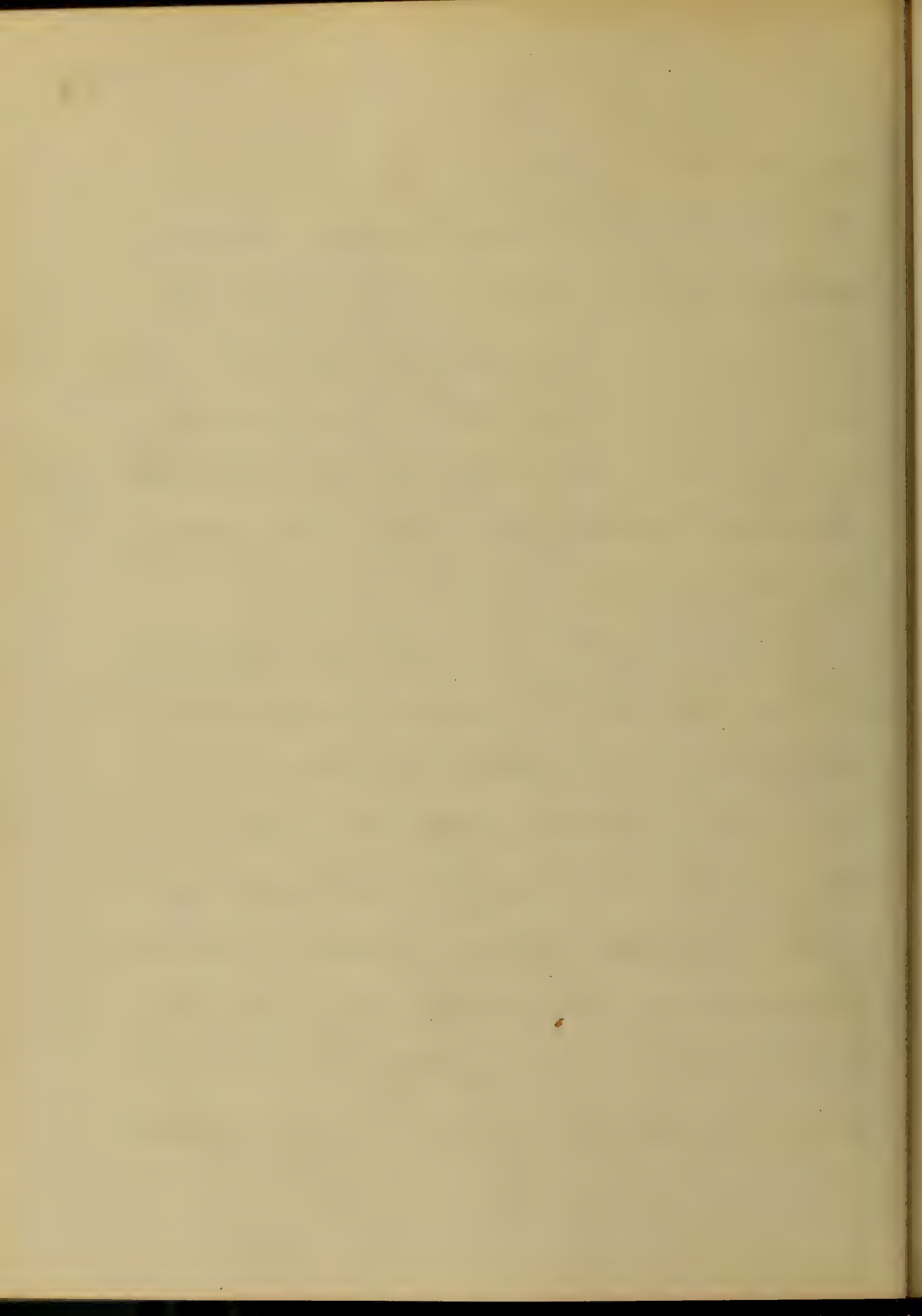


of the Wundepattists' are honest ones, but believe that they have circulated, the reports of their giving no Coleridge, no this, and no that, and such infinitesimally small doses, for mercenary purposes. Only to work on the minds of the public, whom they know to be naturally very credulous. I believe the earlier followers of Hahneman embraced his theories from conscientious motives, and followed his practice from the same benevolent desire to benefit mankind, that actuates the followers of the ordinary system of medicine. But from the very condition of things, we must infer, and that their doctrines have become so wide spread, and with them their practice, so that they get a reasonable proportion of the patients of our large cities. If the mortality was much



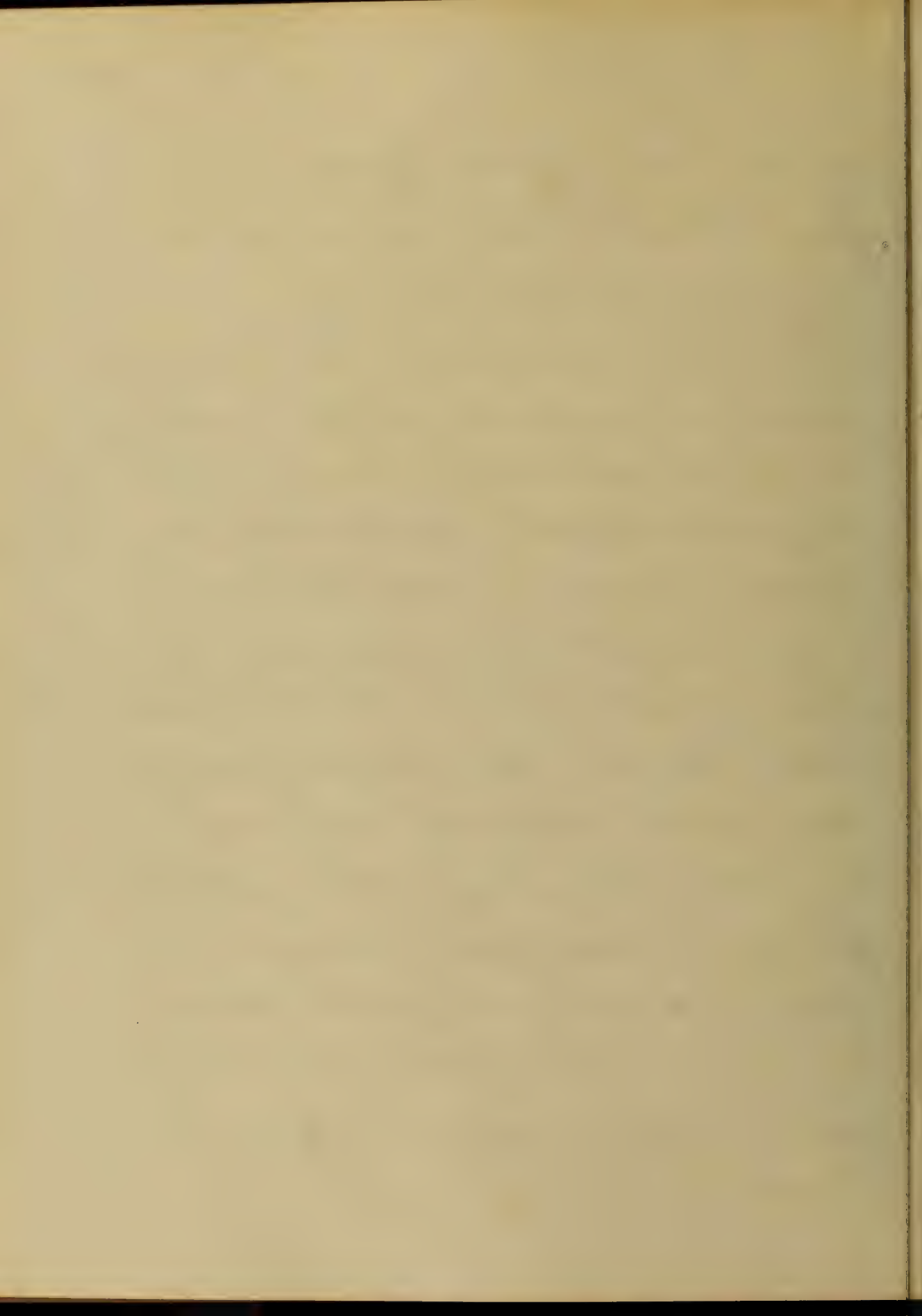
greater than in the regular course of treatment, the public would see cause in outcry against them. I say under these circumstances we cannot attribute a mark to Nature as cause, but must infer, that they infringe on the Allopathist's and give visible doses of medicines.

I hope in the preceding pages I have been able to prove satisfactorily that there is an inherent Power in every living body capable of curing many of our curable diseases, if given its own time, without the aid of Science. Unquestionably such a course will be greatly facilitated and undred much more rapid



in every case by the appliances of
proper medical art, either in its
vegetal or medical form.

The basis of any theory to be drawn
from these conclusions is this, that
the science and art of physic, long
justly and deliberately, practiced with the
intention of assisting nature to drive off
the power of disease, is often, if not al-
ways sufficient of the most beneficial
results. The idea that diseases of every
kind, can be raked out as it were
through the alimentary canal, by drastic
purges, or drawn from the arms in-
termingled with the vital fluids,
is erroneous and false; since such
was the believe among many of the

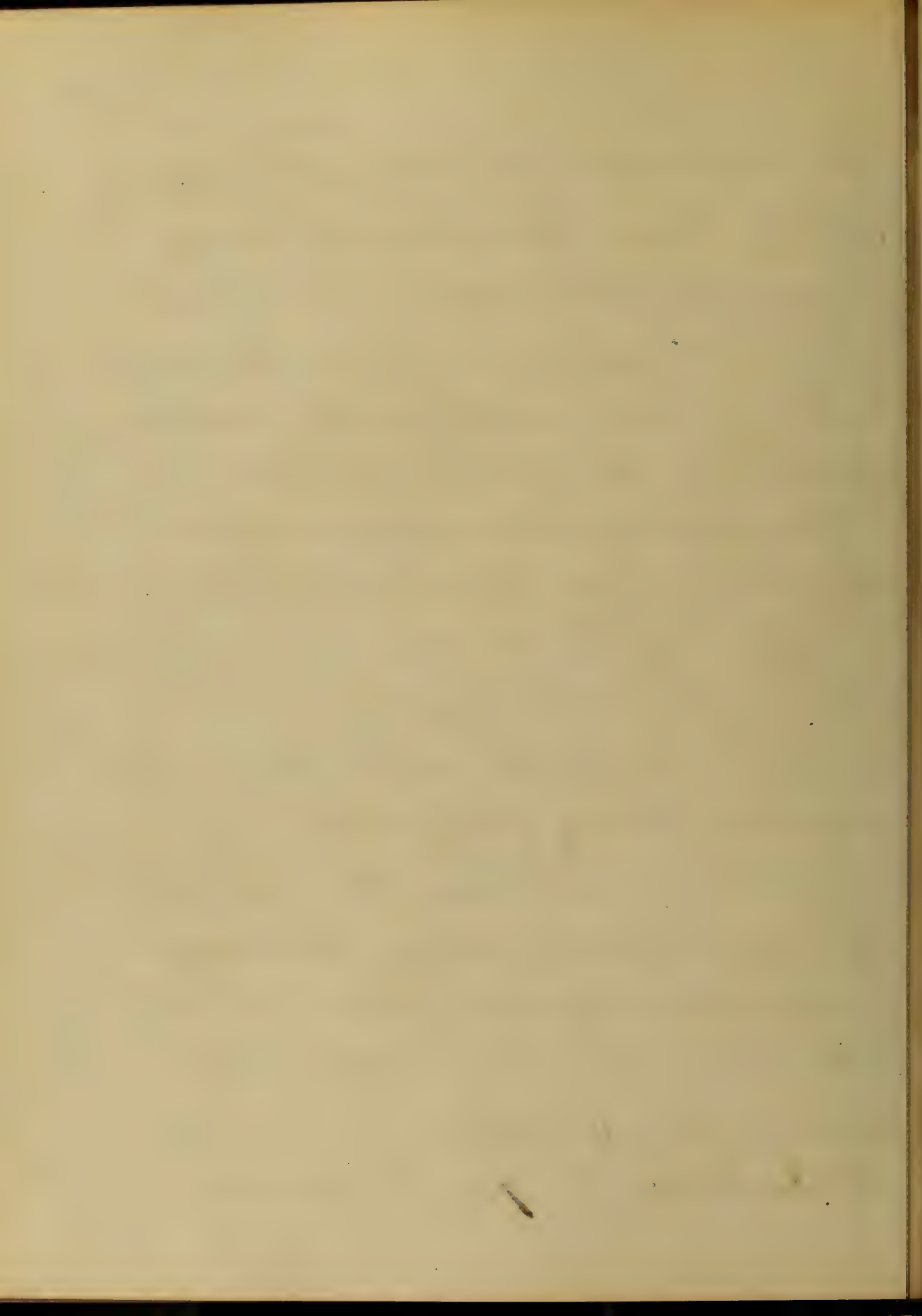


most learned medical professors would very recently. Indeed I must say that I am of the conviction, that the aëriphlogistic treatment carried to the extent it formerly was, particularly in asthmatic disease was malpractice and often caused long and lingering maladies.

In conclusion my honored professors I submit the foregoing to your perusal, and anxiously await the day when we shall meet in the Green Room. To here from my first examination you shall decide, whether I am worthy of continuing the study of that most beautiful and useful Science—Medicine. Whatever that result may be permit me to say I shall in after years lay morning with pleasing thoughts of the pleasant hours I have spent while listening to your Lectures.

February 11th /67

Geo. H. Jones.



AN
Inaugural Dissertation

ON

Respiration

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

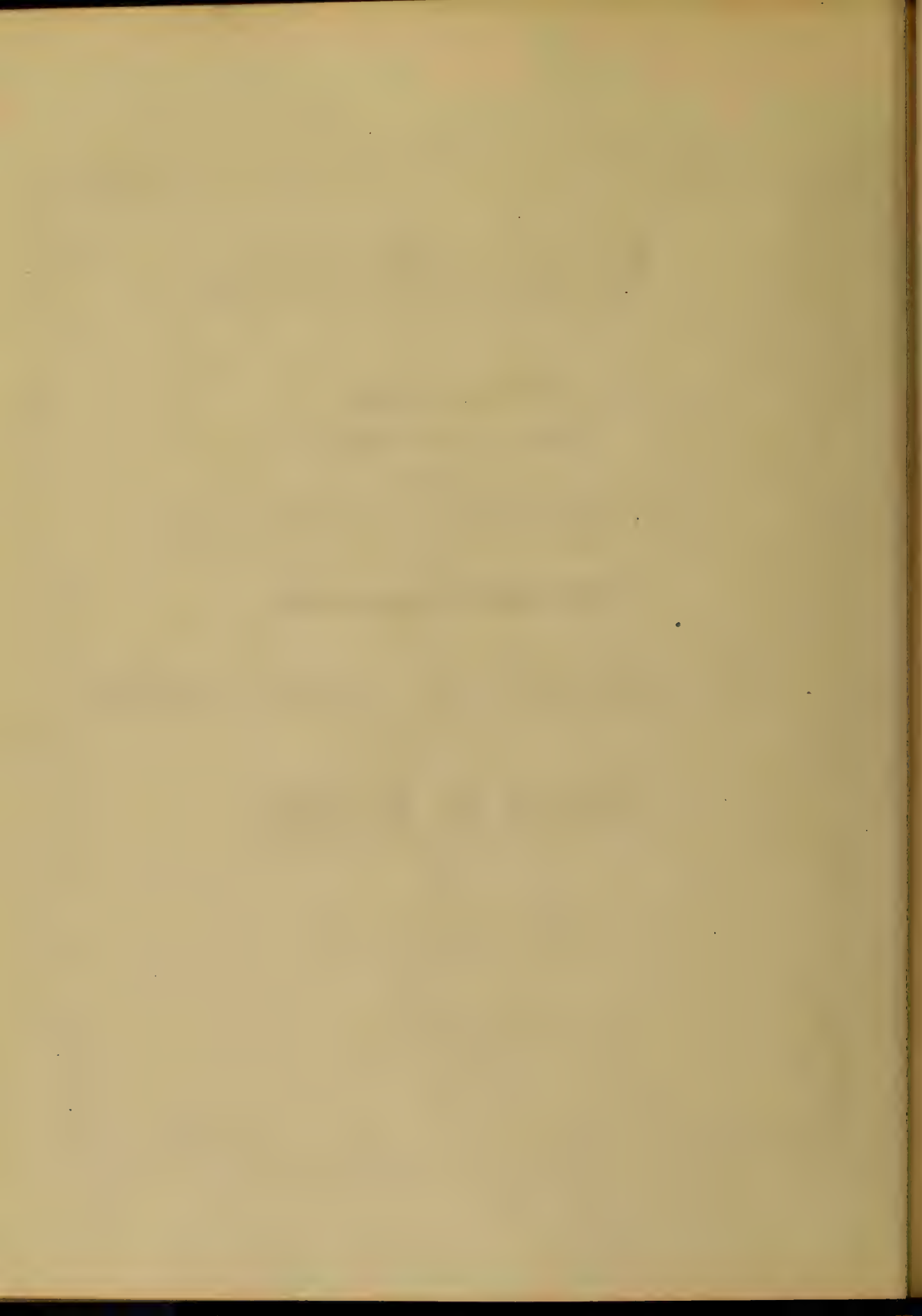
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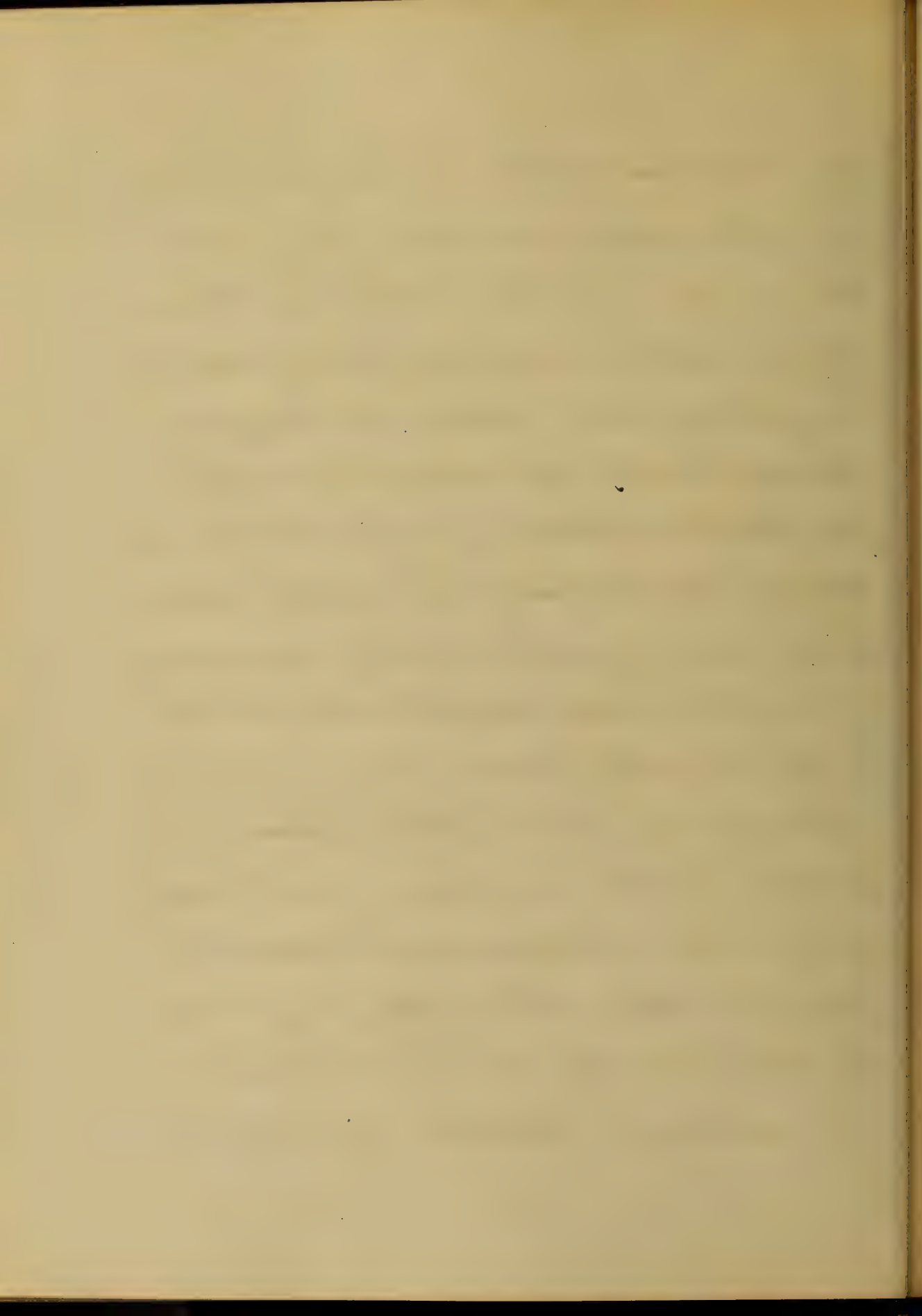
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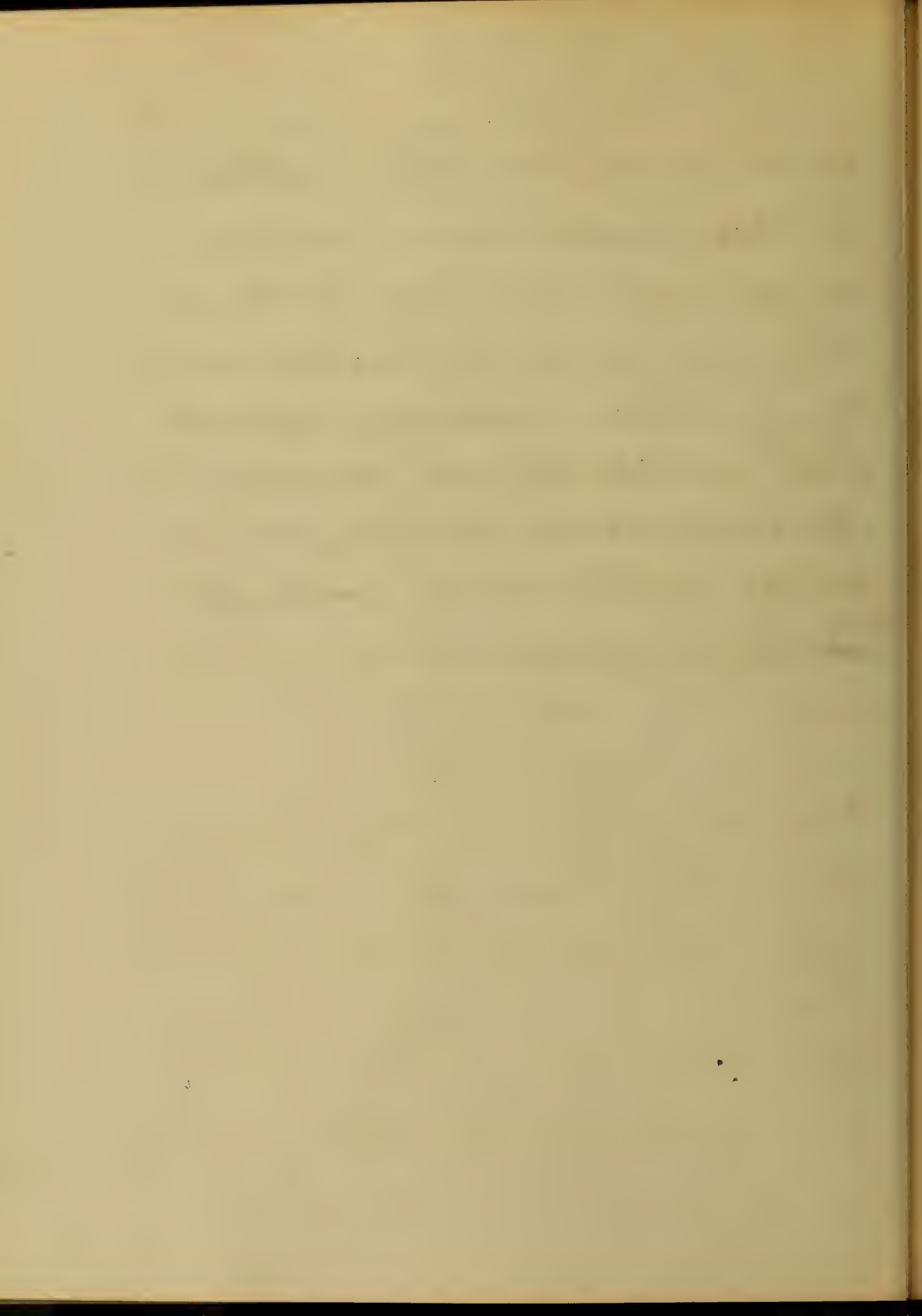
In making choice of the subject for this essay we have been actuated more by a just appreciation of our attainments, than by a desire to gratify that natural longing which we think belongs to us all, for those hidden parts of the science which admit only of crude conjecture and hypothesis; the discussion of which had much better be left to those who from long years of experience, and observations are better fitted to draw just conclusions. Numerous diseases fall within this category, from the apparently trivial though sometimes obstinate intermittents



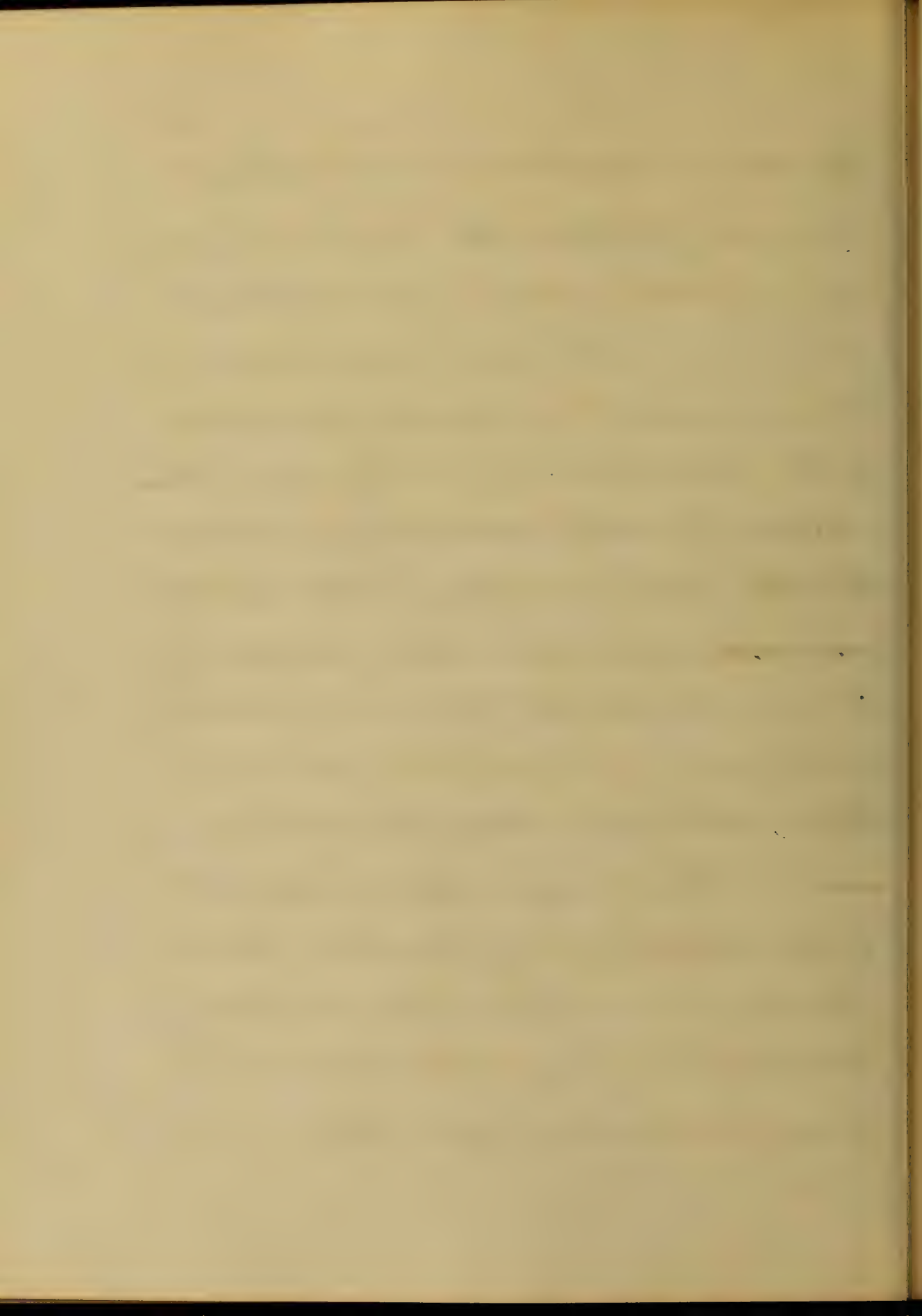
of whose cause we are ignorant,
yet which we can by the likewise
incomprehensible powers of in-
chona quell at pleasure; to the
wretch stricken with epileptiform
convulsions, over which medicine
has little if any control. Such
subjects as these it is to which we
not unfrequently find our atten-
tion directed in glancing over
the compilations of aspiring
youths, on whom have devolved
the duty of composing an accep-
table Thesis before they can ob-
tain the much coveted degree of
Doctor of Medicine. But would
it not be better to leave these



referred questions to the arbitrament
of older and wiser minds,
confining ourselves to the dis-
cussion of those questions which
they by their untiring efforts
have settled beyond dispute?
We think that it would, since
we can but at best rescho the
teachings of others.

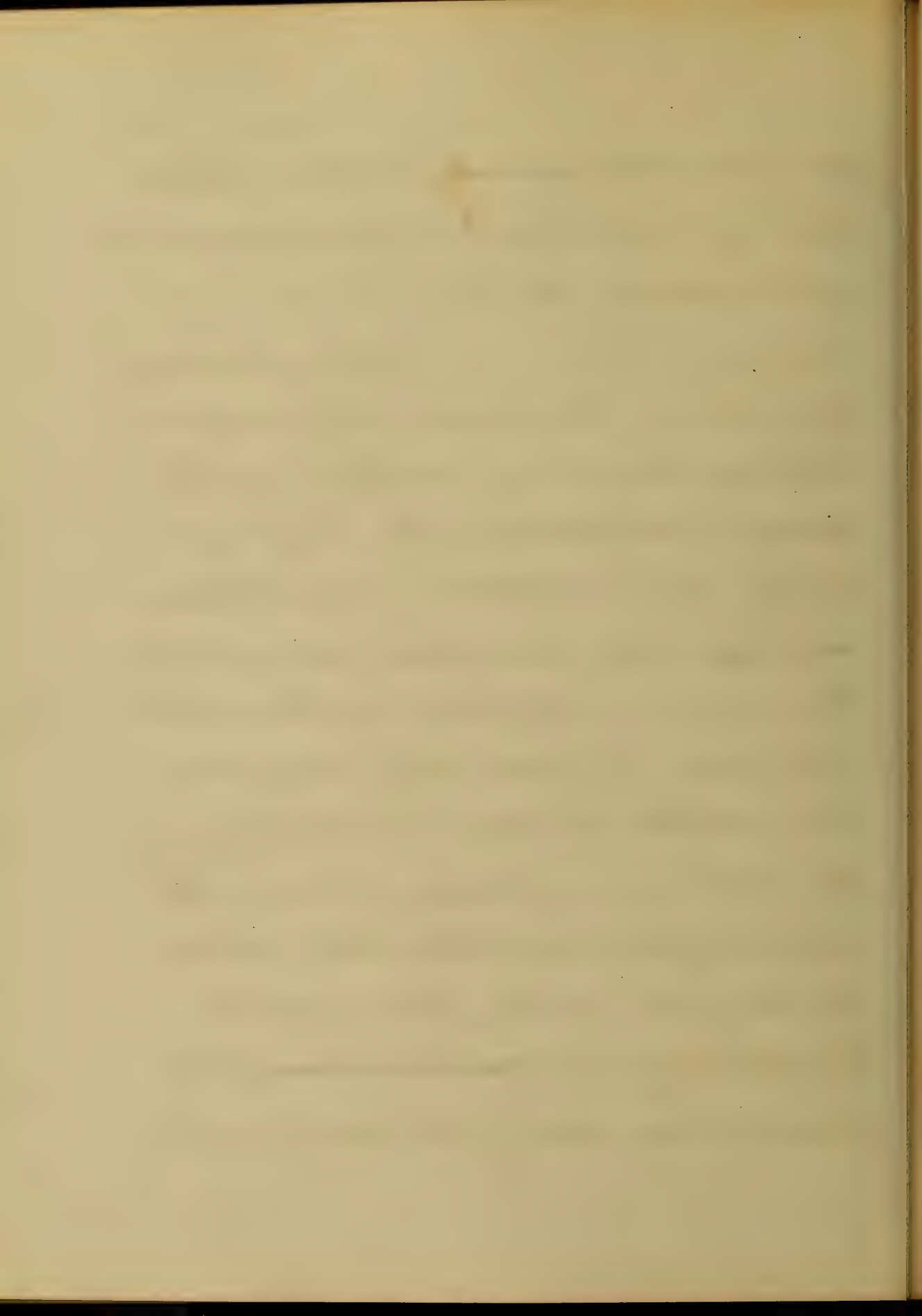


We define respiration to be that process by which the system gains oxygen, and parts with carbonic acid gas. The great importance of this function is made manifest by the fact, that it is only when stimulated by duly arterialized blood that the left cavities of the heart are induced to propel properly their contents. There exists between the three great viscera on which life depends a mutual dependence. The brain deprived of its due supply of oxygenated blood fails to exercise its accustomed power; consequent upon this, and following each other in

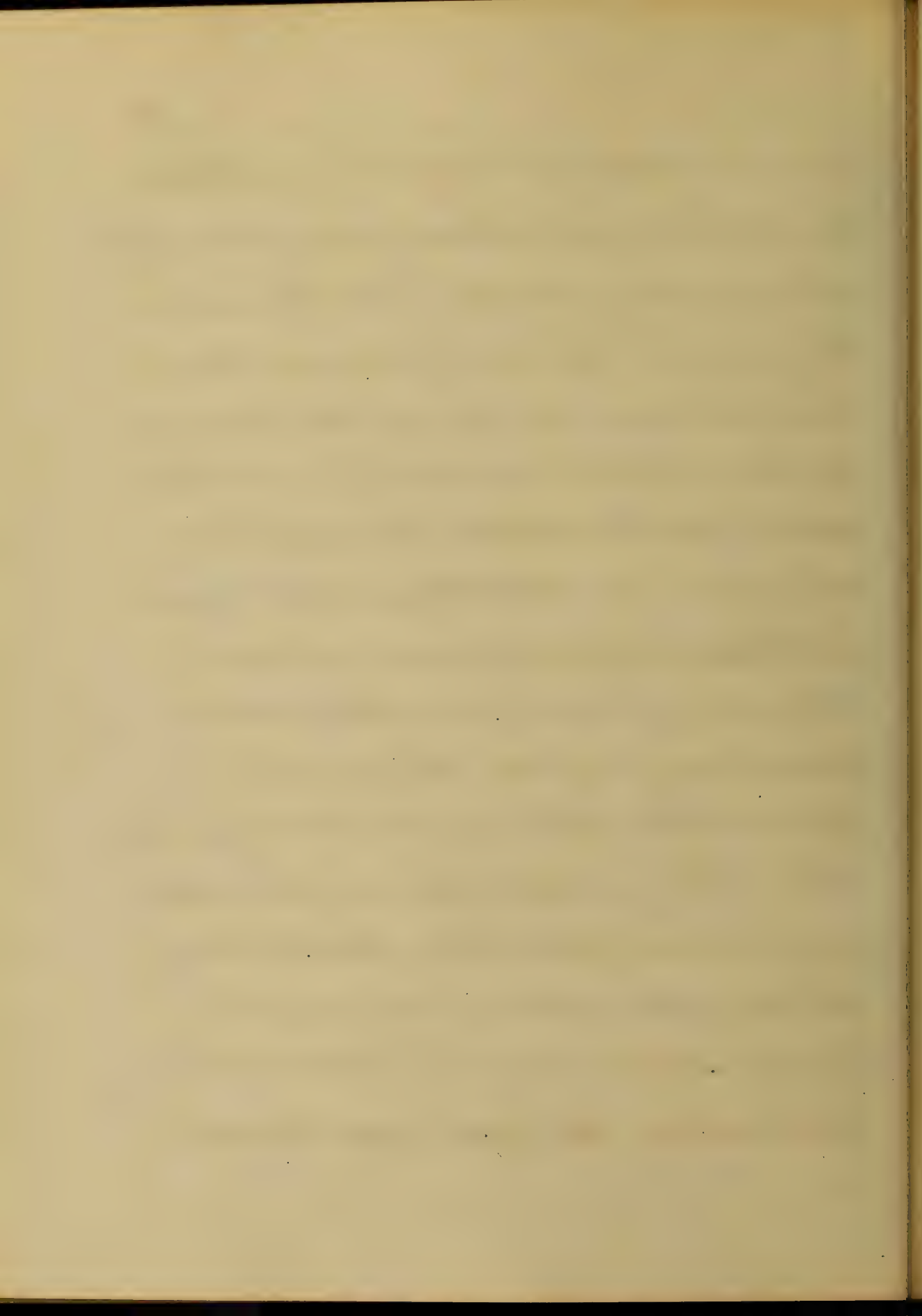


quick succession, we have stoppage of all those vital acts which go to make up life

The organs concerned in the process of respiration are, to say nothing of the nasal passages. The larynx, consisting of a number of cartilages arranged in an hour glass form. These have attached to them the various ligaments, and muscles, which beside regulating the column of air, form the vocal apparatus. Situated within the larynx is the glottis, which consists of a constriction of its walls caused by the false and



true vocal chords. Above we have the epiglottis, attached by one extremity to the receding angle of the thyroid cartilages, and projecting thence over the superior opening of the larynx serving as a means of protection against the entrance of food or other foreign matters into the air passages. The larynx receives nerves from four different sources, from the facials, from the spinal accessory, from the hypoglossal, and from the pneumogastric. The trachea, which is the continuation of the larynx downward is about four inches in length, and extends

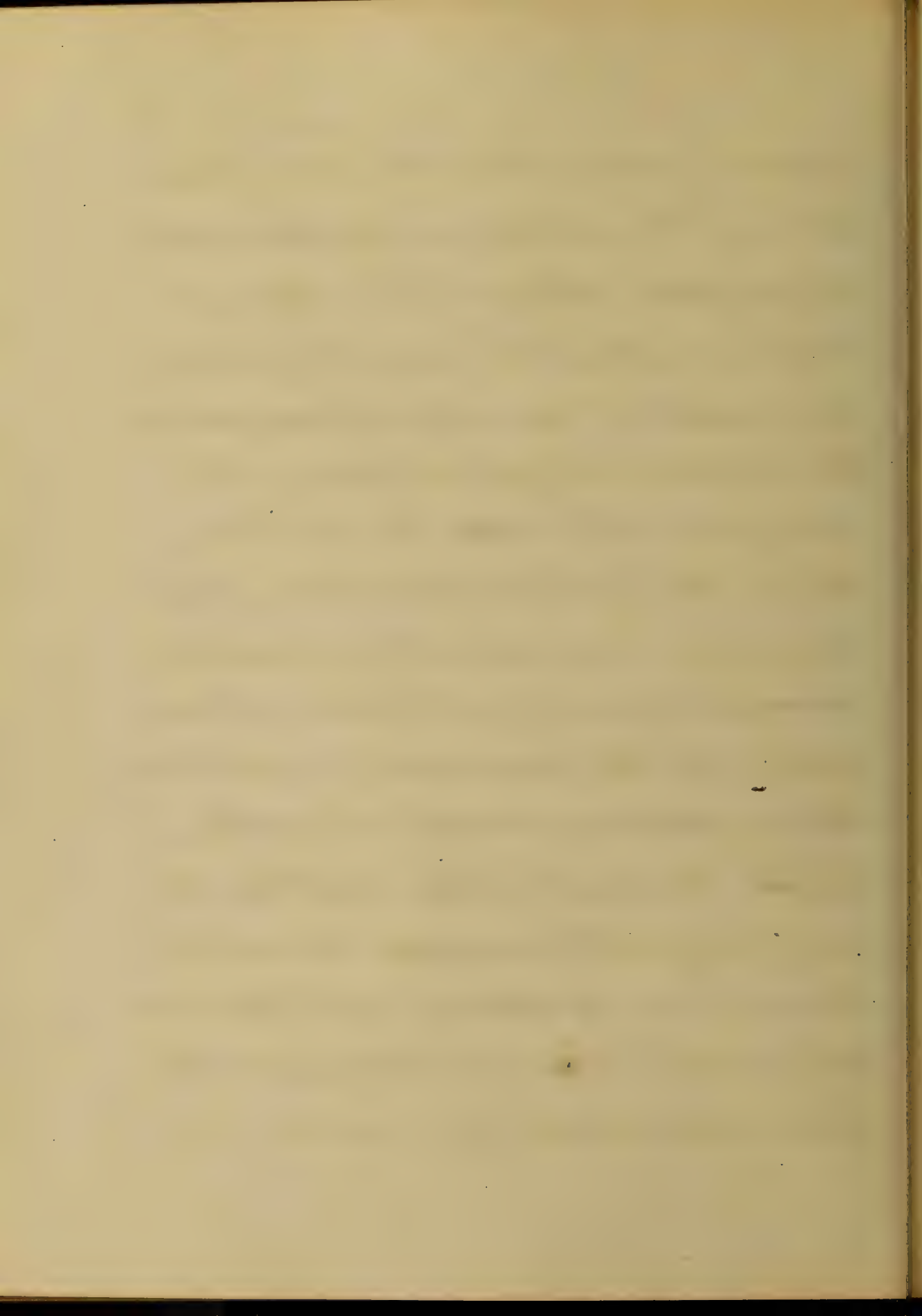


from opposite the fifth cervical vertebra, to the third dorsal, where it divides into the right and left bronchus; these enter the lungs and divide and subdivide, ramifying throughout their entire structure. The trachea is composed of a series of cartilaginous rings fifteen or twenty in number, extending around the anterior two thirds of its circumference, but being deficient at its posterior third; they are connected with each other by a membrane of fibrous tissue which also forms the posterior boundary of the tube. The lungs are two con-

.....

-ical organs situated one at each side of the chest, and separated from each other by the heart and mediastinum. They differ somewhat in size and form; the right being the larger, and being divided into three lobes, while the left has but two. In structure they consist of the minute ramifications of the bronchial tubes, which terminate in intercellular passages and air cells.

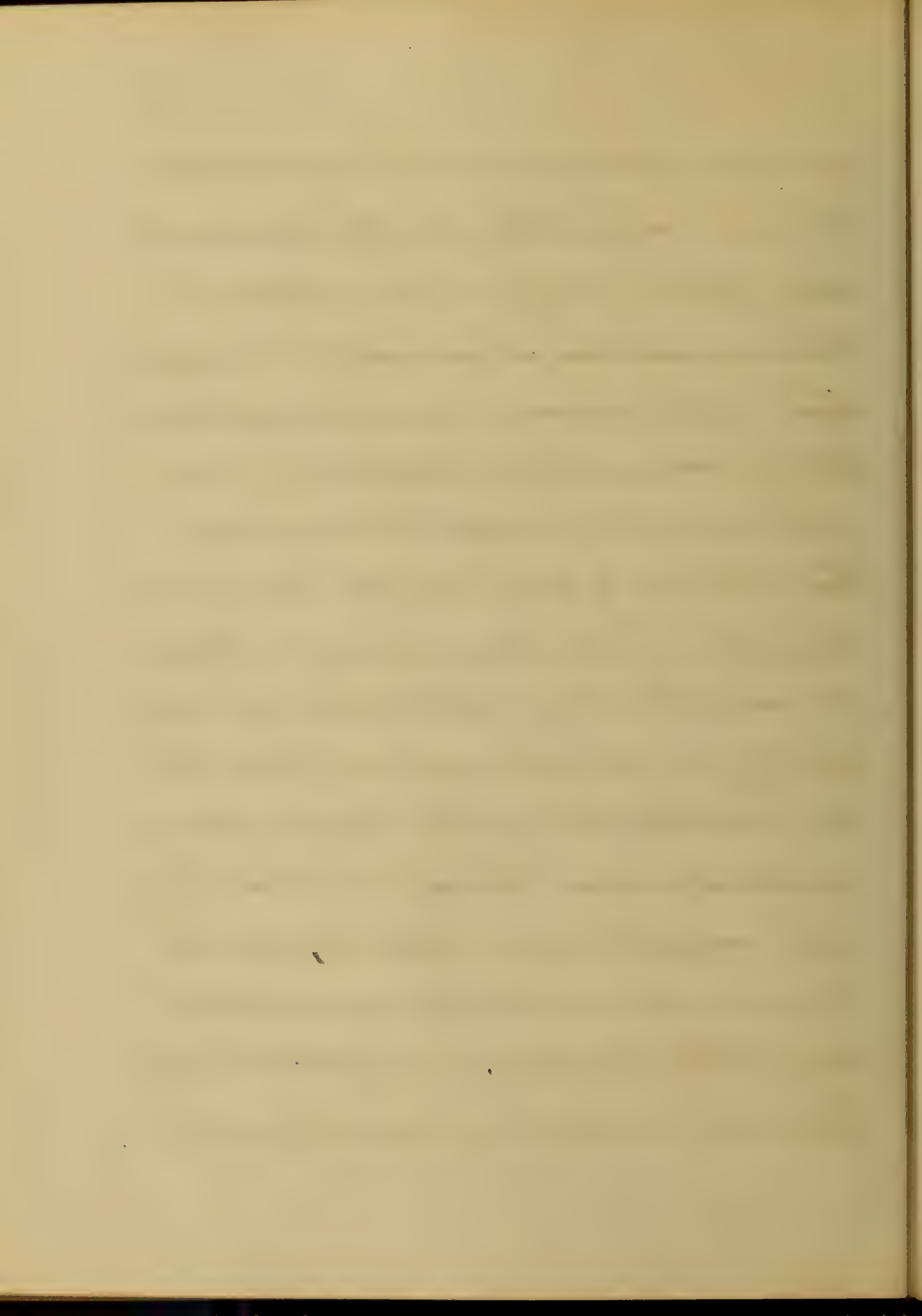
Of the ramifications of the pulmonary arteries and veins; the bronchial ~~arteries~~ arteries and veins; of nerves and lymphatics this network of vessels and



8

nerves connected by areolar tissue constitutes the parenchyma of the lung; which upon examination is found to be divided into numerous small lobes connected together by an interlobular areolar tissue.

These lobes again are divided into smaller lobules, each of which is composed of a cluster of air cells, in the parieties of which the capillaries of the lungs are distributed. Each little lobe is supplied with its own bronchial tube and capillary. The lungs are supplied with nerves from the pneumogastric

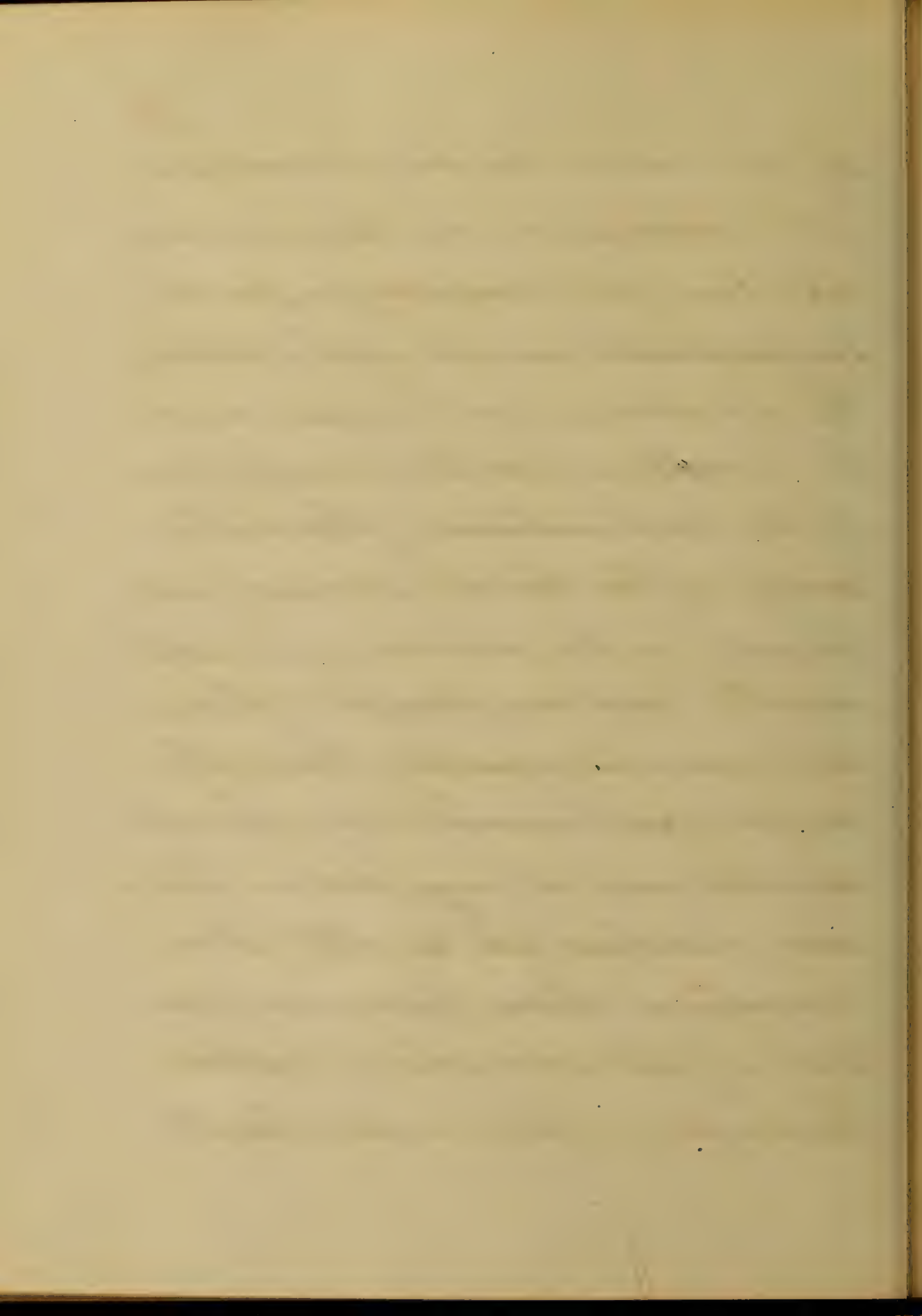


and sympathies. The movements of respiration may be divided into two classes; those of expiration, and those of inspiration. The first of these is a mere passive movement, produced by collapse of the walls of the chest. It is by this movement that the air contained in the lungs, and which has received from the blood a certain amount of excrementitious matter is expelled. The act of inspiration differs from the above in being an active movement, which however is rather automatic than otherwise, being only to a limited extent under the control

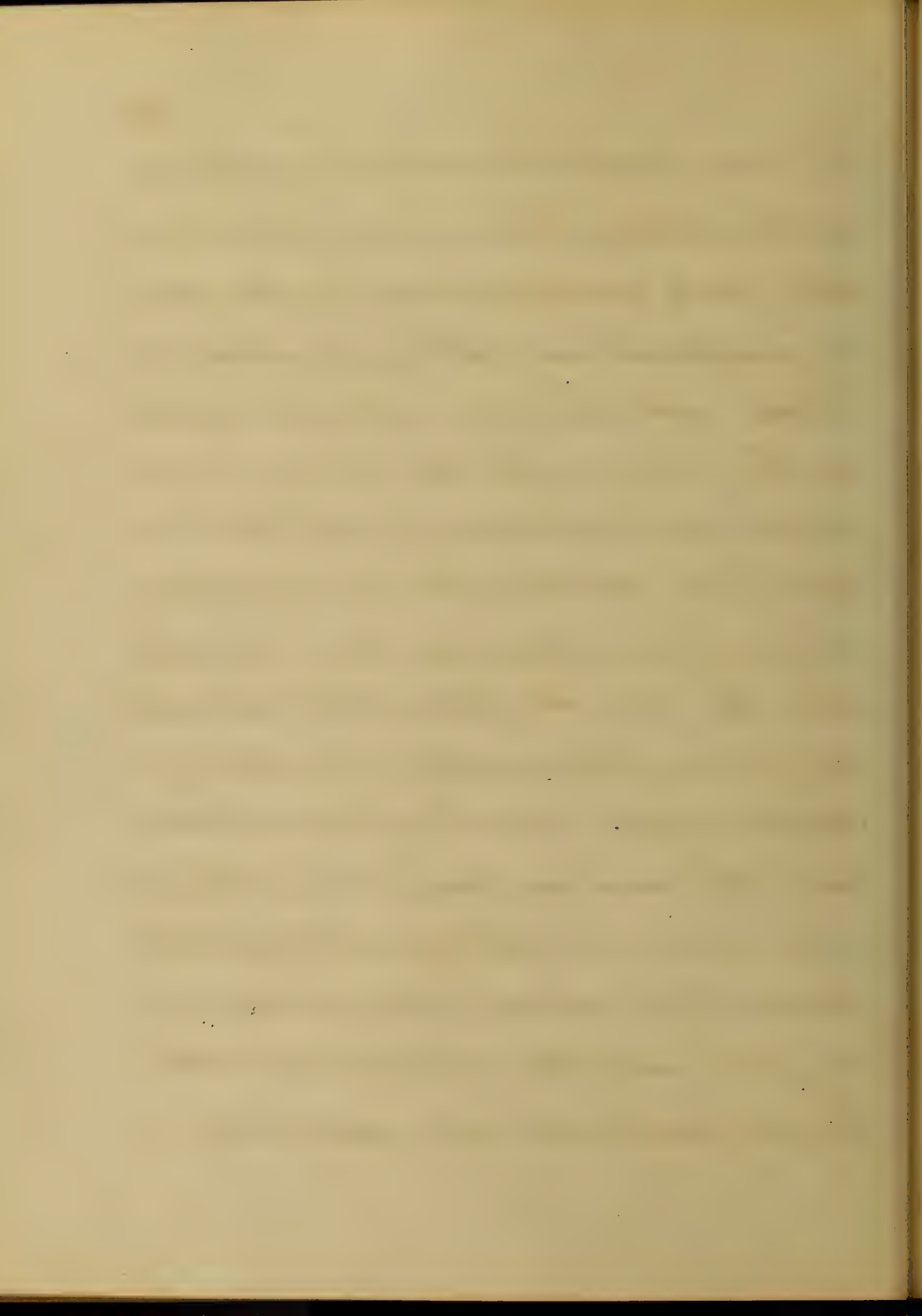


of the will. The principal muscles concerned in these movements are the diaphragm, and the intercostals, aided by the scaleni, the levatores costarum, and the serratus posticus inferior.

By the contraction of these the cavity of the thorax is enlarged; laterally by the action of the intercostals, and in length by the downward contraction of the diaphragm. Immediately upon this dilatation taking place the air rushes in to fill the vacuum thus produced; penetrating the bronchial tubes throughout their entire length.



We have next to consider the nature of the changes produced, first in the blood, and secondly in the air by respiration. We find that the blood has changed in color while passing through the lungs from venous to arterial, and that it has lost carbonic acid, and gained oxygen, and beside these which are the most important changes it gives off a quantity of watery vapor, and some organic matter. If now we turn to the air which has been exhaled we will find that it has lost about five percent of its oxygen, and has received from the blood carbonic acid and other



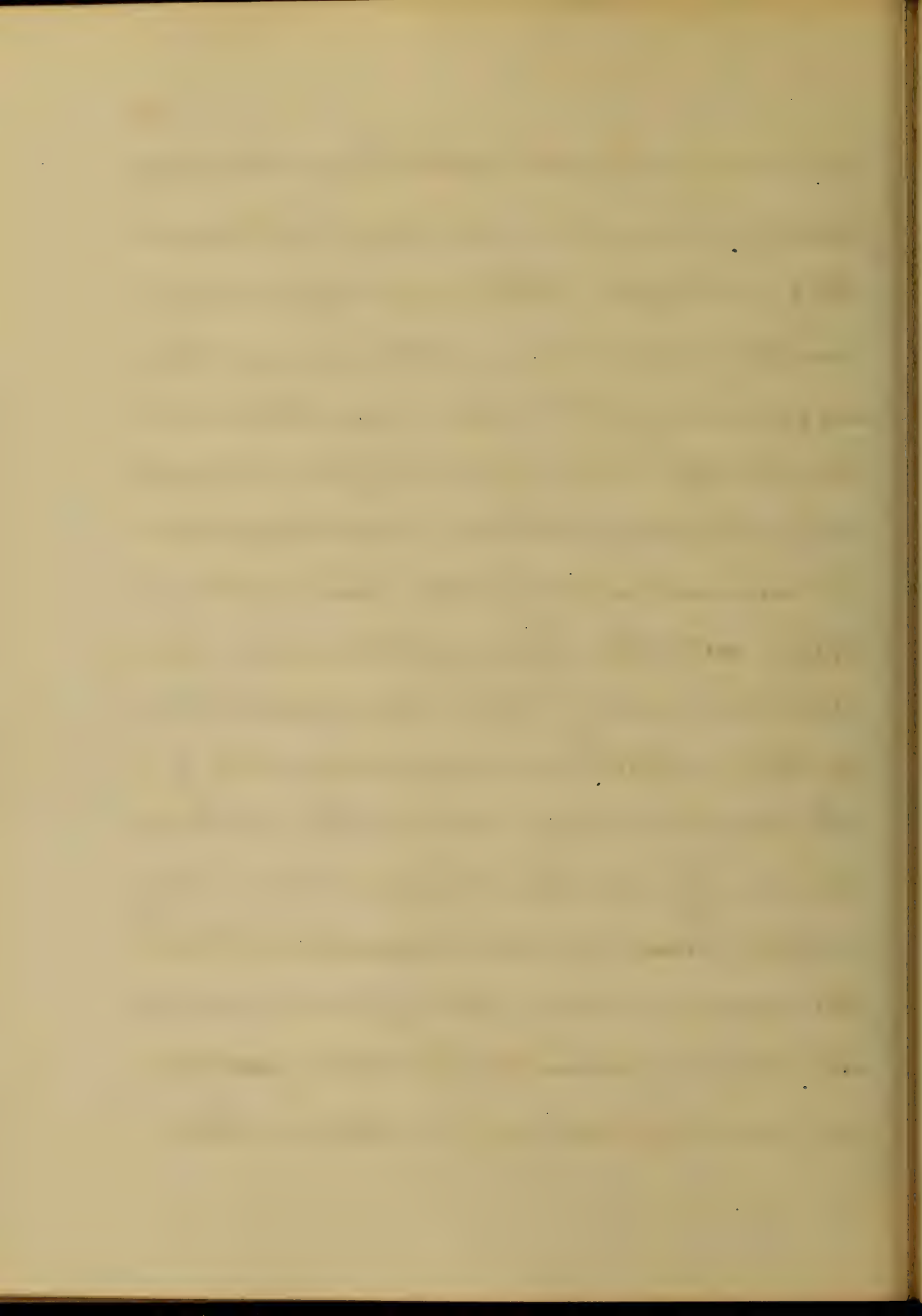
impurities. This interchange of gases is a simple phenomenon of absorption and exhalation; since the oxygen does not as was formerly supposed unite with the carbon in the lungs to form carbonic acid. The process of respiration as at present understood, is effected in the following manner. The blood reaches the lungs charged with carbonic acid, in passing through the capillaries it is brought in contact with the air contained in the pulmonary cells, and an interchange of gases there takes place, oxygen passing in, and carbonic acid passing out. All the carbonic acid



contained in the blood is not given off. This has been shown by Magendie, who found that oxygen and carbonic acid existed in arterial blood in the proportion of ten of the former to twenty five of the latter; while in venous blood they exist in the proportion of ten of oxygen to forty of carbonic acid. We have next to consider the source from which the carbonic acid is derived. It was supposed by Lavoisier that it was the result of chemical action taking place in the lungs; resulting in the union of the oxygen of the air with the carbon ~~oxide~~ of the blood. That this explanation was not correct was soon



shown by the fact that the acid existed ready formed in the blood. It was then thought that it was produced in the capillaries of the general circulation, of this however there is no proof. Physiologists of the present day recognize three sources from which it is derived. The first of these is the lungs; where it is produced by the decomposition of the alkaline carbonates, by the pneumatic acid there present secondly in the blood, where we may with reason conclude that it is formed, since this fluid is like the solids of the body made up of principles, which to retain their

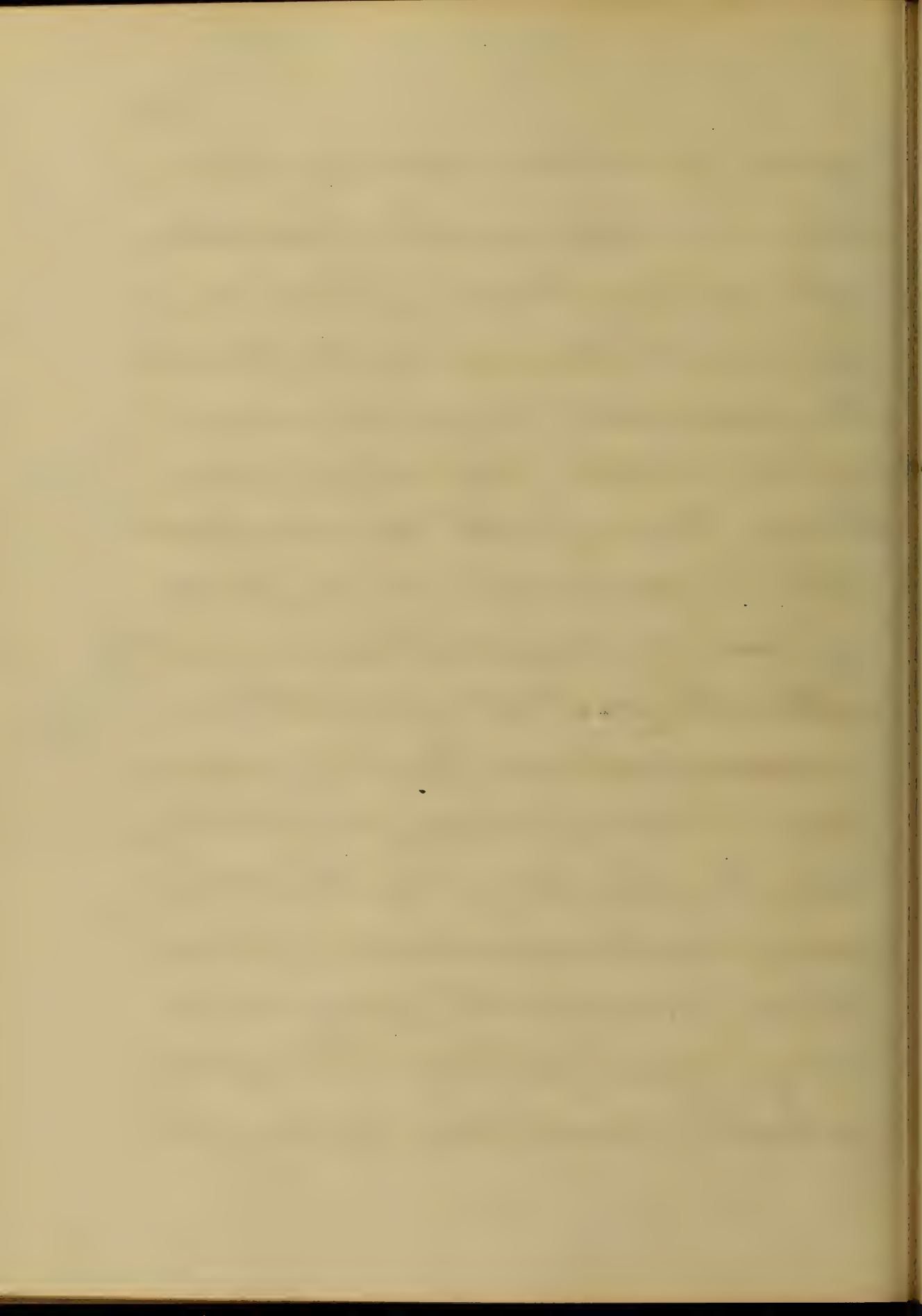


vitality must undergo metamorphosis; one of the results of which is the evolution of carbonic acid.

Thirdly it is derived from the tissues which give off much more than both the other sources combined. Experiments performed by numerous persons show that all time when in a rest state gives off carbonic acid gas, and takes up oxygen; they likewise show that this exhalation of carbonic acid gas is not dependent upon the presence of oxygen, since a very much larger amount is given off in a stated period



when the tissue experimented upon is surrounded by an atmosphere of hydrogen, than when exposed to the air. In the former the amount being 4.07 grains; in the latter only 1.13 grains. From these facts we conclude that the carbonic acid given off during respiration cannot be, either the product of oxidation or combustion. On the contrary there is every reason for believing, that it results from the retrograde metamorphosis, a process which is constantly going on in every organized body. A familiar example of such change taking place



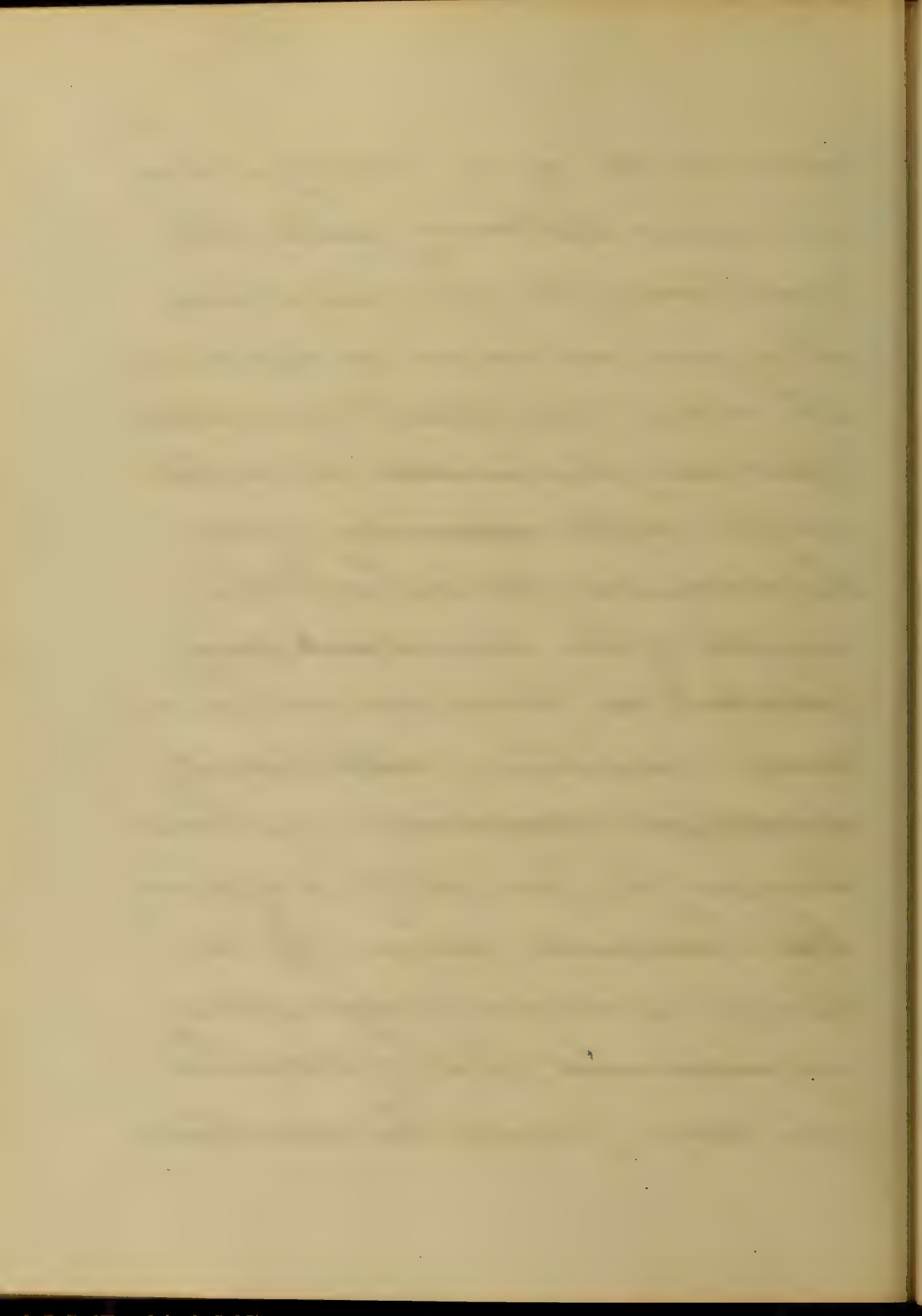
between the elements of a compound body, is seen in the decomposition of sugar, where we find the elements resolving themselves into alcohol, and carbonic acid. The carbonic acid thus formed in the tissues is taken up by the blood; part combines with the alkaline bases there present to form carbonates, which as we have seen are decomposed on reaching the lungs, by the pulmonic acid; the remainder is carried onward in a free state to the lungs to be thrown off. The quantity of carbonic acid given off daily varies with the individual. An adult man in good



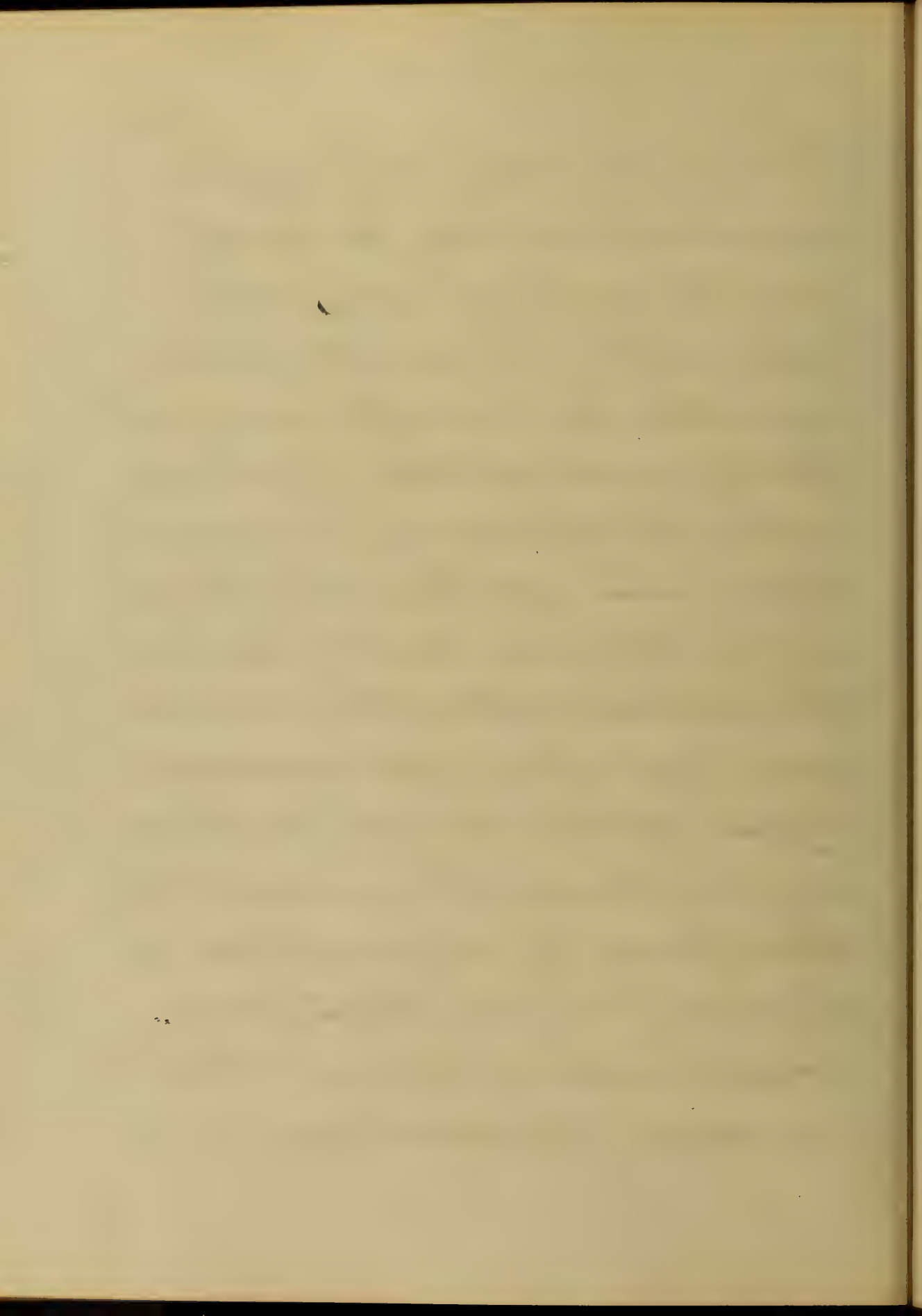
health, exhales nearly 1150 cubic inches per hour, or 15 cubic feet per day. Age and sex influence the amount in a marked degree. Thus it has been found that while a boy of eight years exhales but 564 cubic inches per hour, one of fifteen years exhales 981 in the same time. In males the quantity given off continues to increase until the twenty-fifth year, it then remains stationary for a period of ten or fifteen years, then decreases in amount as age advances. The female exhales at all times a smaller quantity than the male, and it ceases to increase when they



arrive at the age of puberty; it then remains stationary until the cessation of the menses, when it again increases in amount till about the fiftieth year; when it gradually diminishes as in the male, with increasing years. The amount varies with the health of the individual, being greatest in those who are in robust condition, with largely developed muscular systems. During the period of pregnancy the amount given off is largely increased; equalling in amount that of women who have passed the menstrual



period. The amount of oxygen consumed during the twenty four hours is according to the statement of Regnault about seventeen and a half cubic feet. The different articles of food also influence the amount of carbonic acid given off; thus all nitrogenous substances tend to increase the amount, while the carbonaceous lessen it, in as marked a degree. Alcohol in all its forms tends to lessen the amount; to this there is one exception in the case of rum, which from some cause increases the amount of exhalation



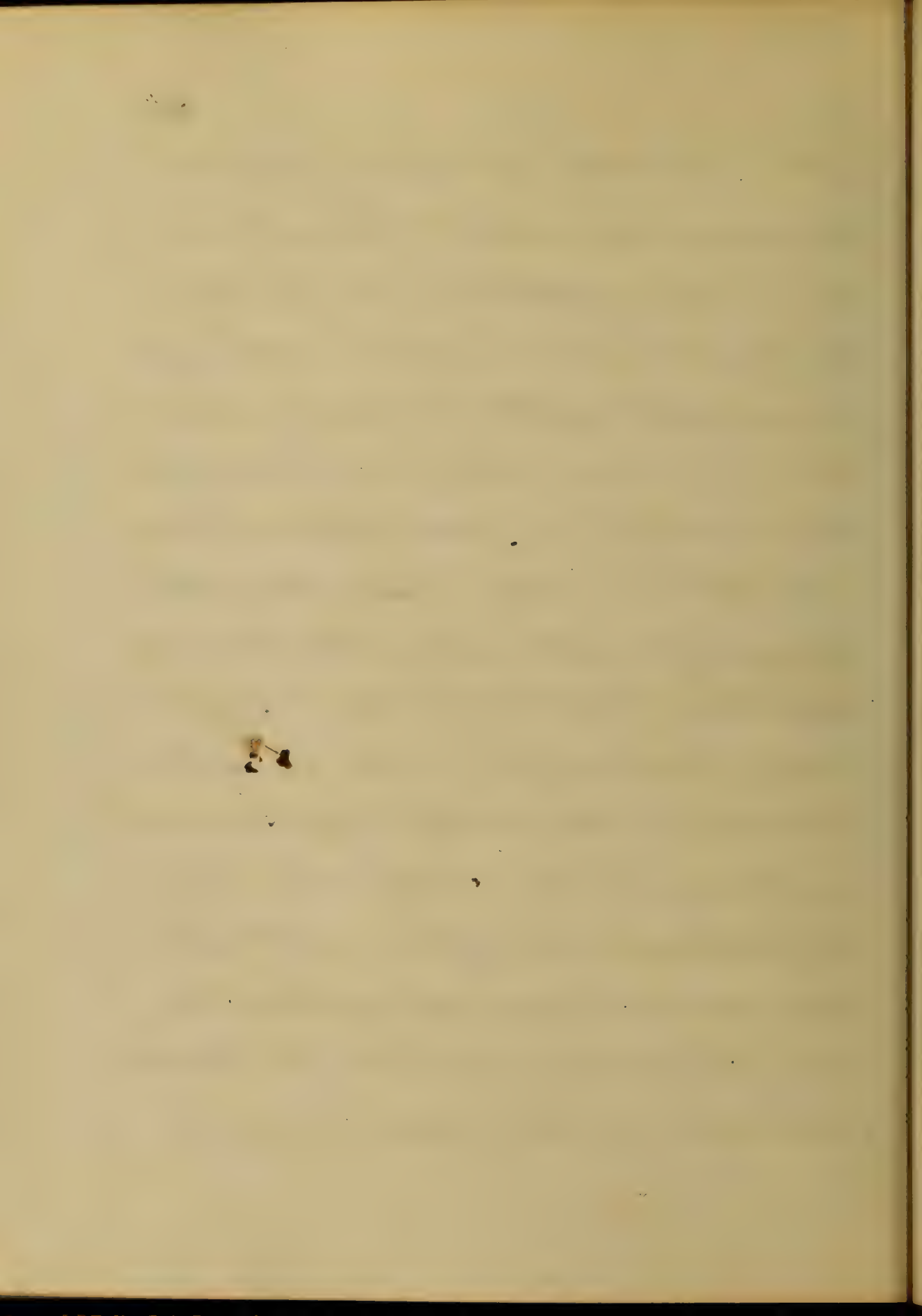
The blood receives about five per cent of the oxygen contained in the inspired air, hence we require three hundred cubic feet of pure air during the twenty four hours, but as there are many impurities in most air contained within doors, physiologists consider that each individual should have at least eight hundred cubic feet; and in hospitals where there are constantly acting many causes which render the air impure, the amount for each individual should be 2500 feet.



The quantity of watery vapor exhaled amounts to about one and one sixth pounds daily.

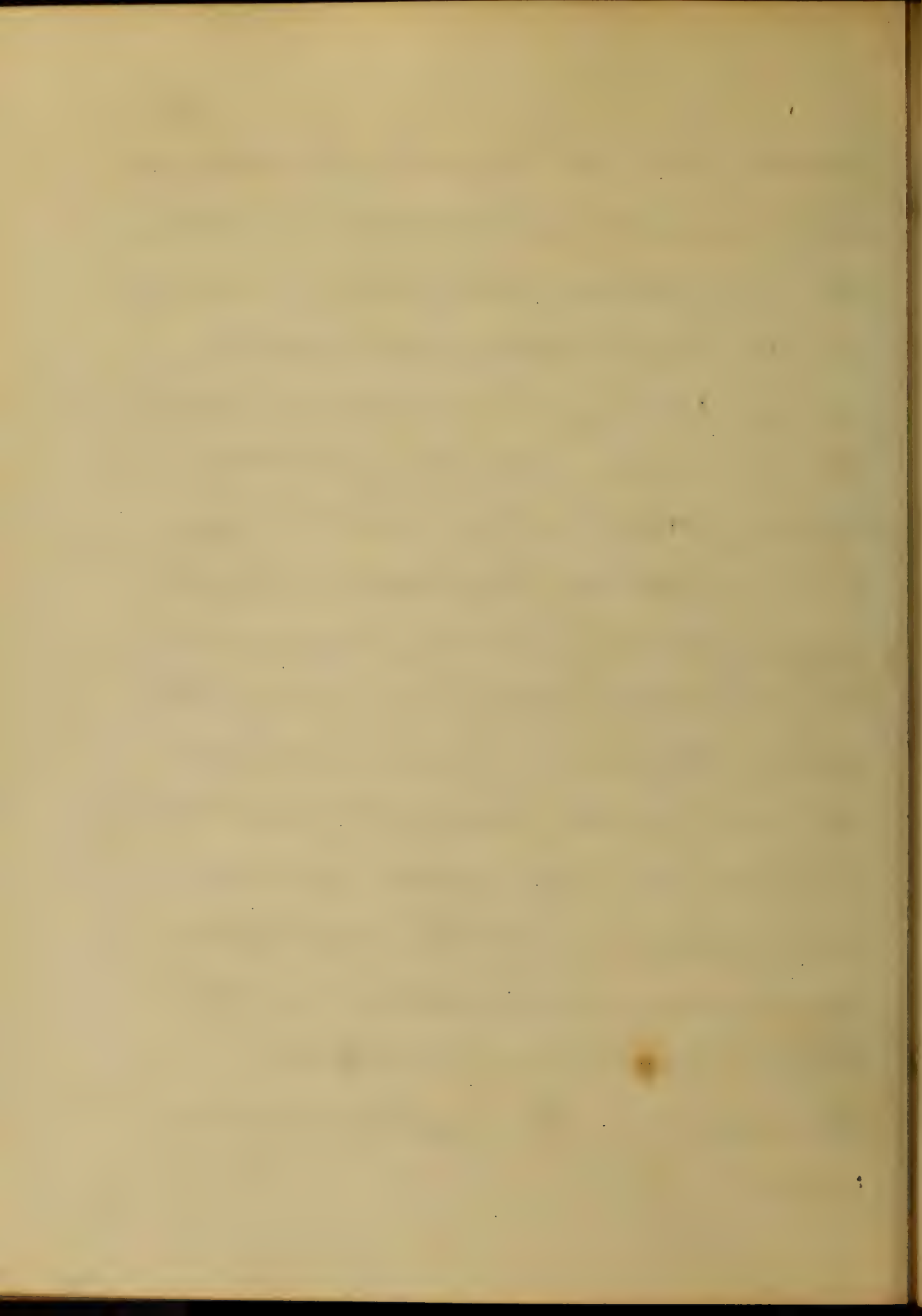
The extent of surface exposed to contact with the air is a subject of some little interest, as it is only by a just appreciation of it, that we can understand the facility with which the blood is enabled to free itself of its noxious properties; and in return imbibe the vivifying element.

Lieberkuhn has estimated this to be about 1400 square feet. The air consumed in respiration may be arranged under four heads. The tidal or that which passes in



and out at each movement,
amounting to 20 cubic inches;
the residual, that which remains
in the lungs after expiration,
amounting to 100 cubic inches;
the reserve which is all that is
taken in during inspiration,
but of which only a part is given
off, it amounts to 100 cubic inches;
the complimentary air or all that
can be taken in and given off
at a forced respiratory movement
amounts to 100 cubic inches.

The lungs are not the only organs
concerned in respiration, the
whole cutaneous surface
takes part in this important process.



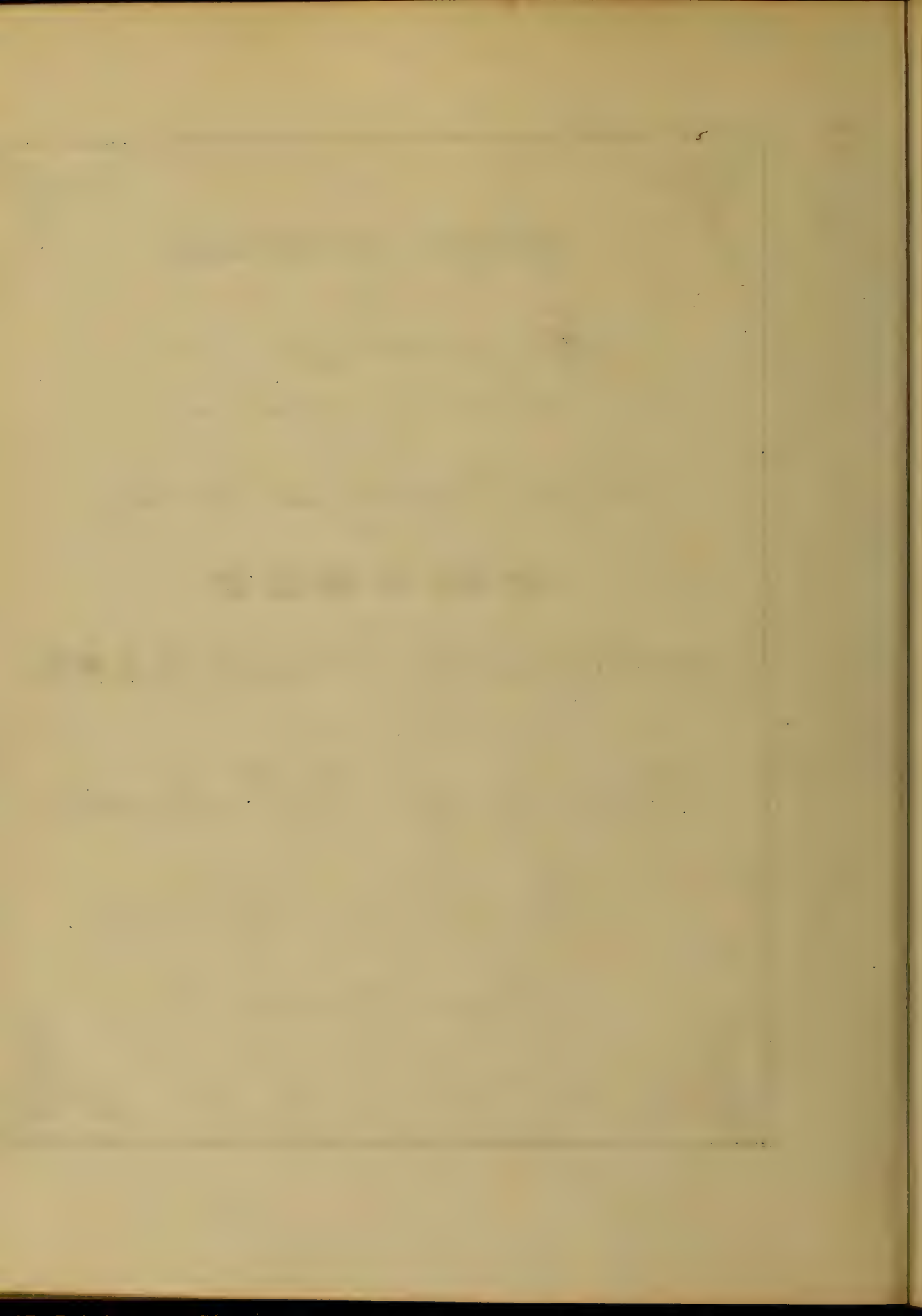
AN
Inaugural Dissertation
ON
Typhoid Fever.
SUBMITTED TO THE EXAMINATION
of the
Provost, Regents and Faculty
of
PHYSIC,
of the
UNIVERSITY OF MARYLAND,
FOR THE DEGREE OF

Doctor of Medicine,

by
Josiah B. B. Wilson.

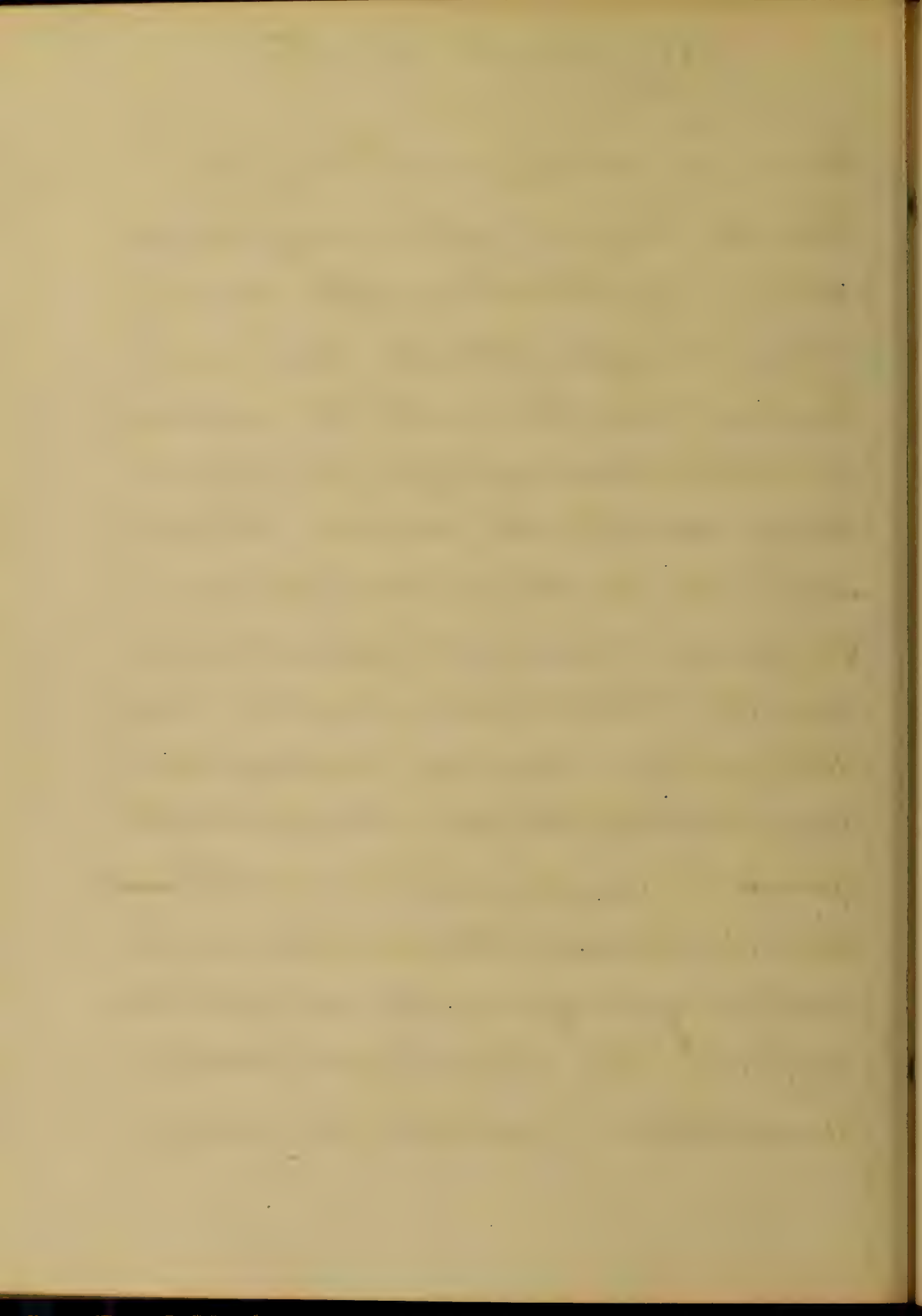
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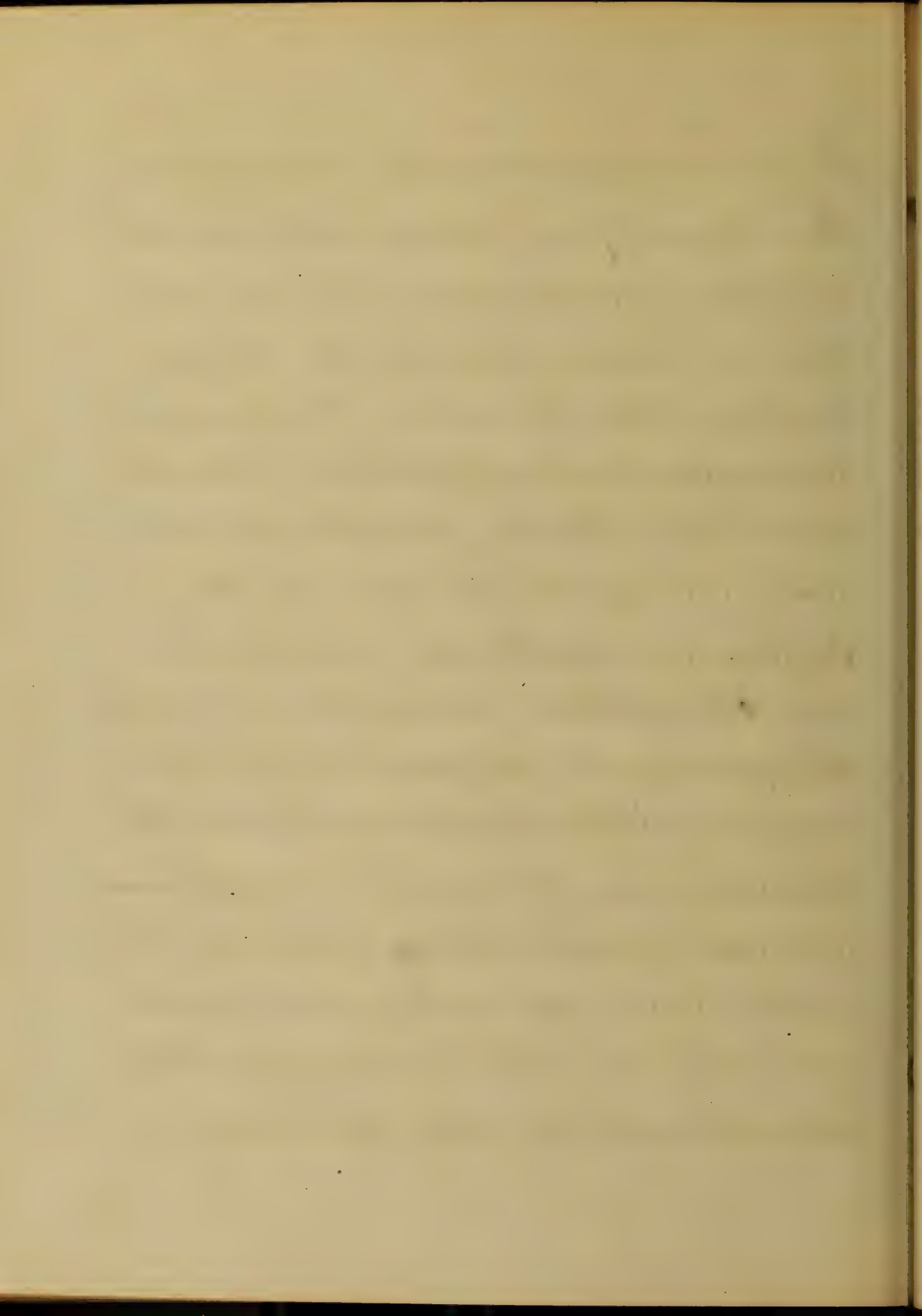
Typhoid Fever.

This is a variety or form of Continued fever, extremely prostrating in its Character, closely allied to Typhus Fever, and, like Typhus, tends to death by lowering the vital Capacity of the patient in a modified degree. It will sometimes be found difficult to diagnose between Typhoid and several other kinds of fever - such as Enteric, Gastric, Gastrointestinal and Bilious fevers. Indeed Enteric fever is synonymous with Typhoid. In this disease there is tenderness and gurgling in the right iliac region; the intestinal follicles, mesenteric, and the glands of

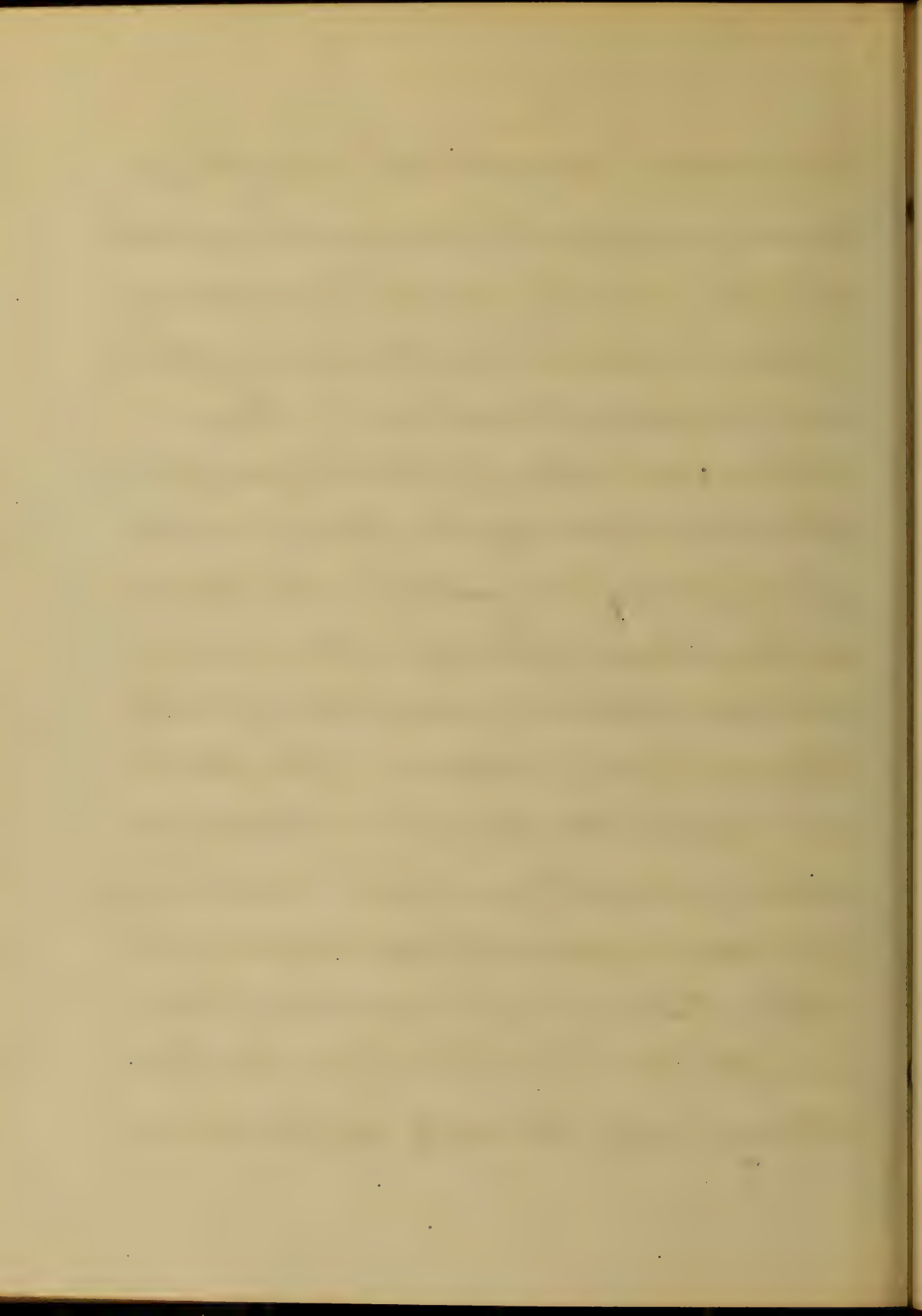


Peyer, are almost always diseased. The locality in which disease is almost universally found, is two or three feet of the lower part of the ilium; the mucous membrane is affected, and around Peyer's glands it is raised up and very soft.

Typhoid matter is deposited in the above mentioned glands; they may be ulcerated or thickened without ulceration. The mesenteric glands are sometimes found containing pus. If the patient die as early as the ninth or tenth day, there is frequently no ulceration; but the mucous



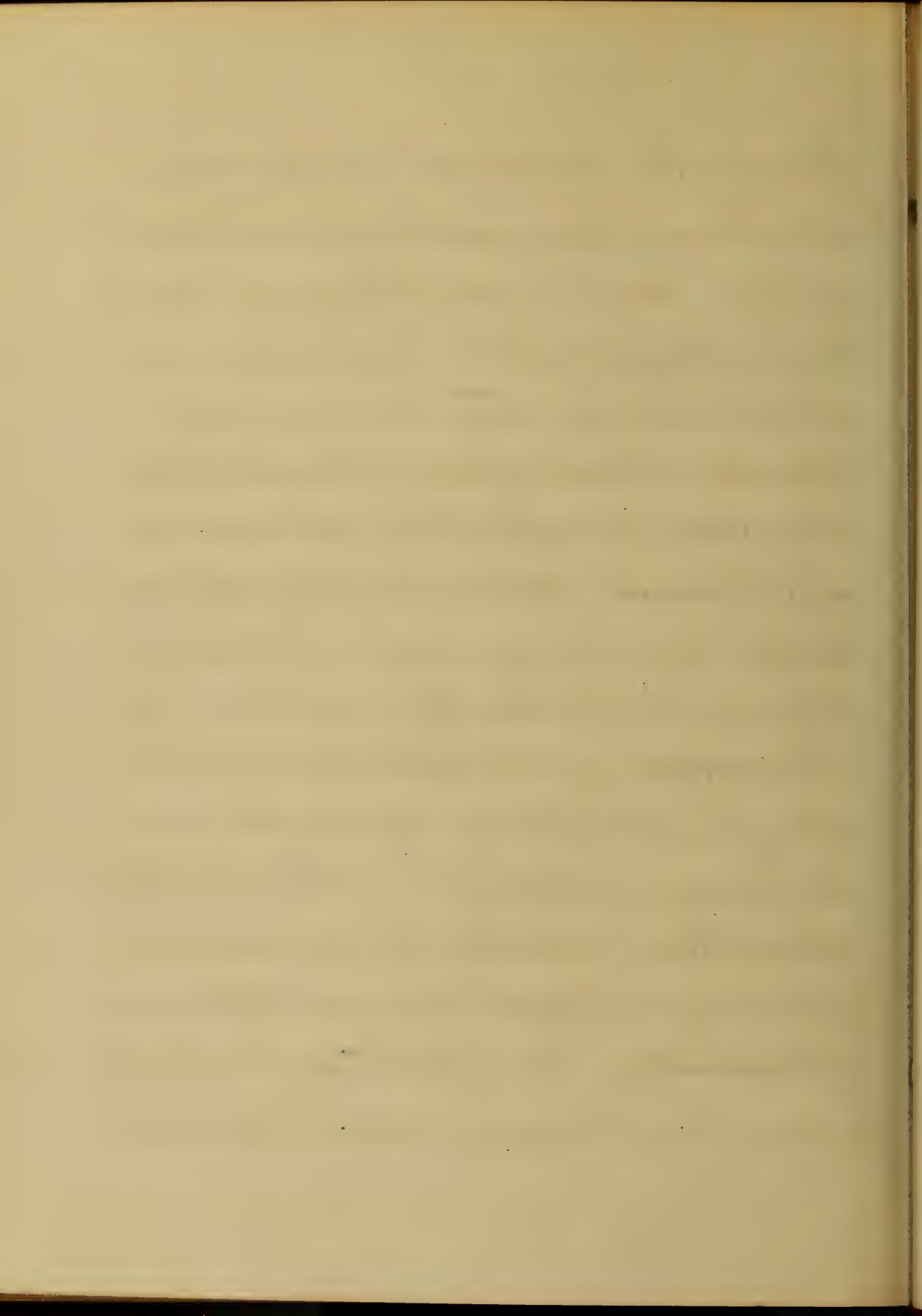
membrane around the glands of Peyer is frequently very much softened. The Spleen, too, is almost invariably found very much softened, - sometimes entirely disintegrated. The Kidneys are also frequently softened; the lower lobes of the lungs are frequently Congested; the blood is very much altered; the fibrin is diminished, and the globules appear broken down. The brain and medulla spinalis do not generally present any morbid appearances; Children generally die before ulceration takes place, sometimes in adults the intestines are ulcerated through into the cavity of the peritoneum.



The morbid poison of this fever first produces general disturbances of the system, then the intestinal glands become affected. Generally when this disease is making its approach, there is a feeling of malaise for three or four days; then there is a chill, headache, accompanied with a feeling of great debility. This disease may be divided into three stages, each stage continuing seven days. In the first stage after the general feeling of malaise, there is diarrhoea. The stools are thin, and there may be twenty or thirty a day, or there may be only one. Violent



headache comes on, frequently
epistaxis, an expression of prostr-
ation, the senses obtunded, some-
times slight delirium and vertigo.
In this stage there is rapid
emaciation, dorsal decubitus,
anorexia, tympanitic abdomen
and tenderness over the epigastrium,
with hot and dry skin, suffused
eyes, pulse decrotic and over one
hundred, glutinous viscid sputa,
cough, sometimes sibilant and
sonorous roushus. About the
seventh or ninth day an eruption
of rosy red spots make their ap-
pearance, in number from half-
dozen to a dozen, on the anterior

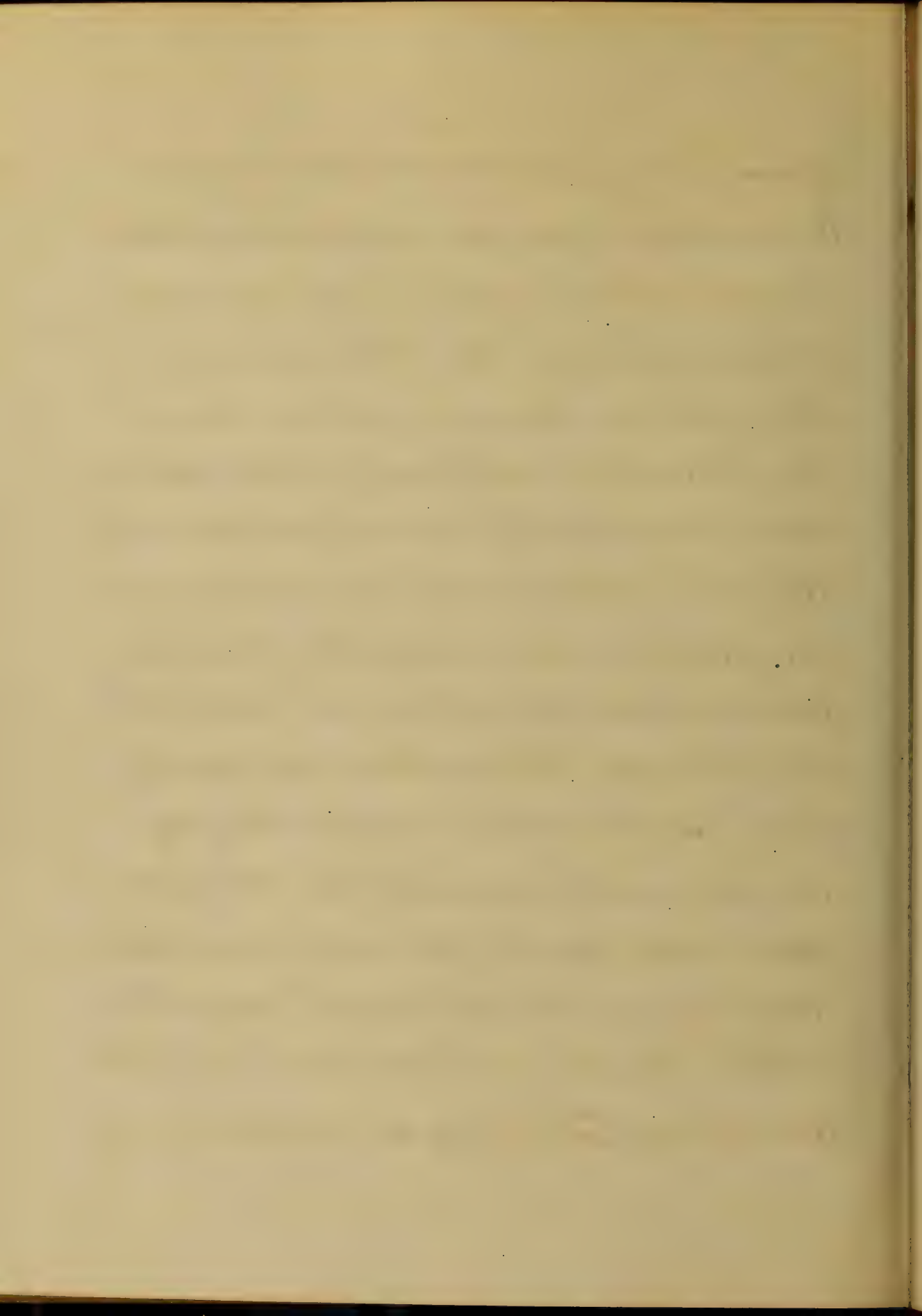


part of the abdomen. There may be several successive crops of these spots. Sometimes thirty days elapse before they appear, and in mild cases they may not appear at all. In the second stage headache diminishes and is replaced by giddiness, more debility, convulsions, delirium, and sometimes Coma; the tongue is coated, tremulous, and redened at the tip, the lips covered with a brownish crust, the thirst becomes less, which is unfavorable. Dysphagia and dyspnoea, not infrequently ^{may} in this stage, which, be caused

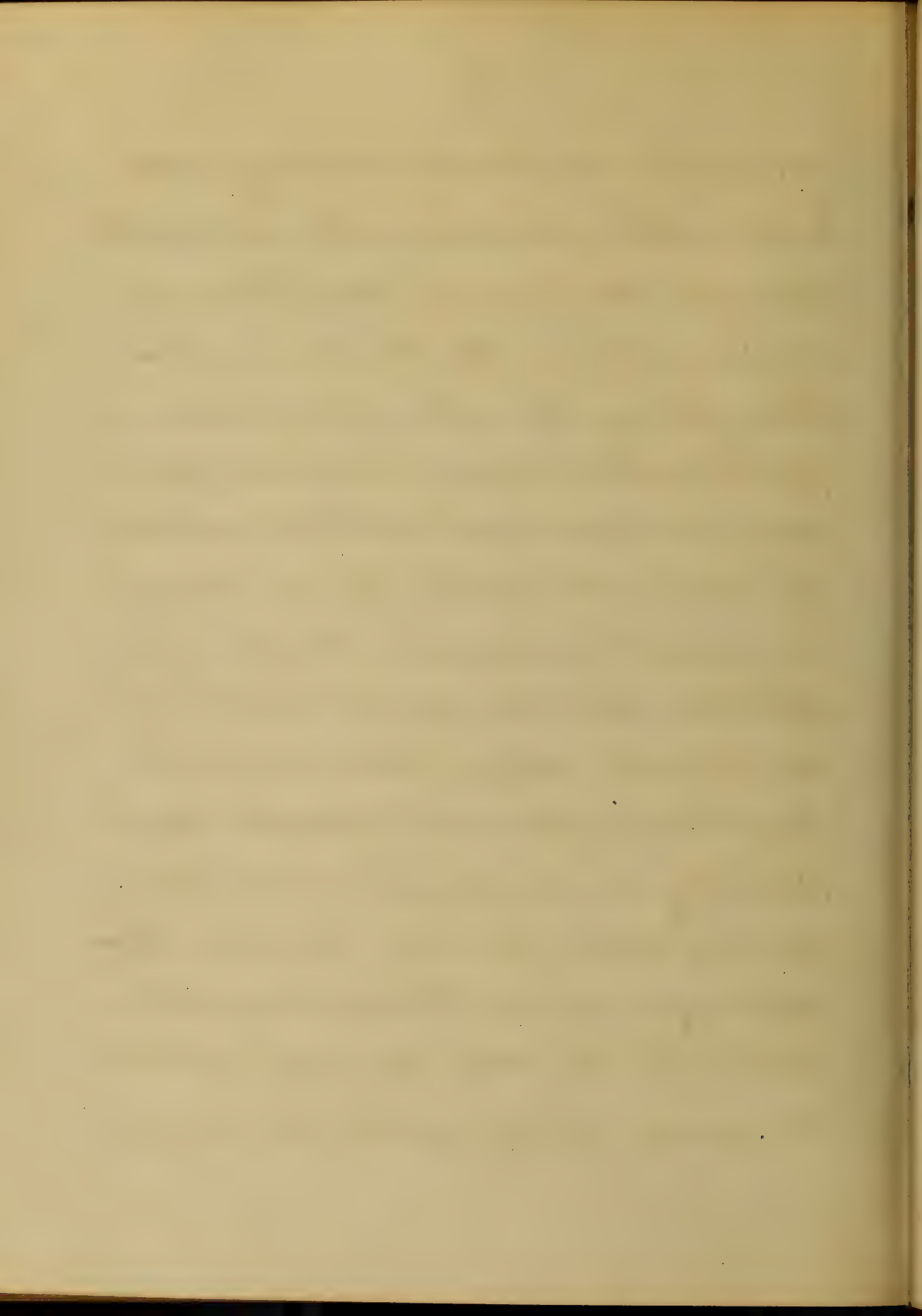


by gas forcing up the diaphragm.
Diarrhoea goes on, ulceration takes
place, involuntary stools and
distention of the bladder.

The pulse, ranging from one
hundred and twenty to one hun-
dred and forty, may fall to sixty
strokes, which wide difference
may be due to morbid heat
produced by ulceration of the
intestines. This sudden falling
of the pulse is an exceedingly
unfavorable symptom and
demands great promptness and
vigilance on the part of the
attendant. From the sixteenth
to the twentieth day a military



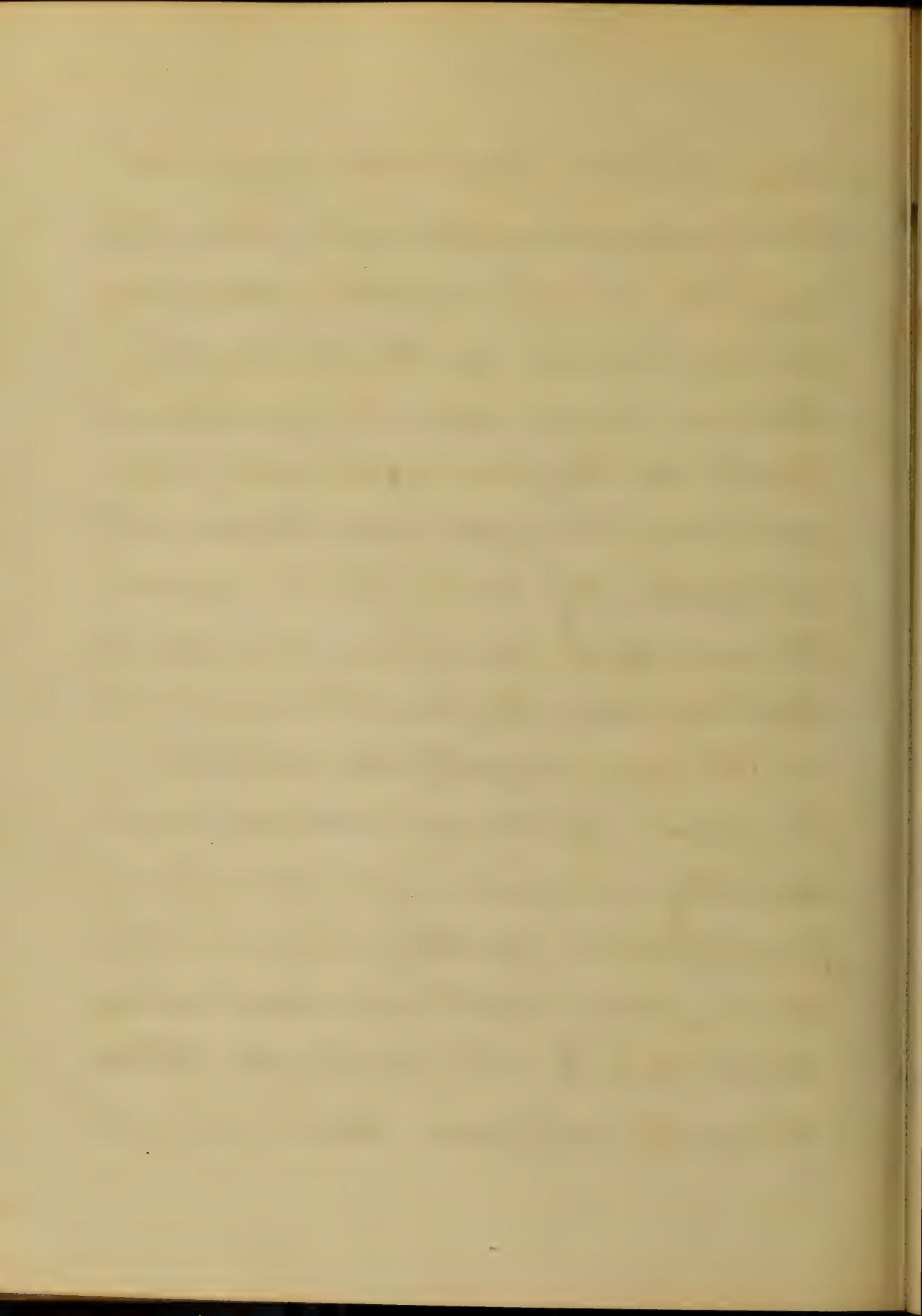
eruption appears on the groins
and in the axillae, - they are called
sudamina, - each contains a
little water. Bed sores and
sloughing sometimes occur in
protracted cases, which are
rarely, or never met with in rural
districts where the fever runs
its usual course. Typhoid fever
attacks all classes and ages of
individuals; but as it seems
to attack persons under the age
of thirty in a much greater pro-
portion than it does persons above
that age, it is but reasonable
to conclude, that persons under
the age of thirty years are much



more liable, and that age, up to the above mentioned period, may be considered a predisposing Cause of the disease.

This disease generally manifests itself in persons exposed to the atmosphere of low marshy Countries, and localities subject to inundations and deposits of sediment and vegetable matter.

Indeed it prevails so abundantly in almost all low Countries, filthy localities of Crowded Cities, and badly ventilated buildings, that it would appear obvious, not



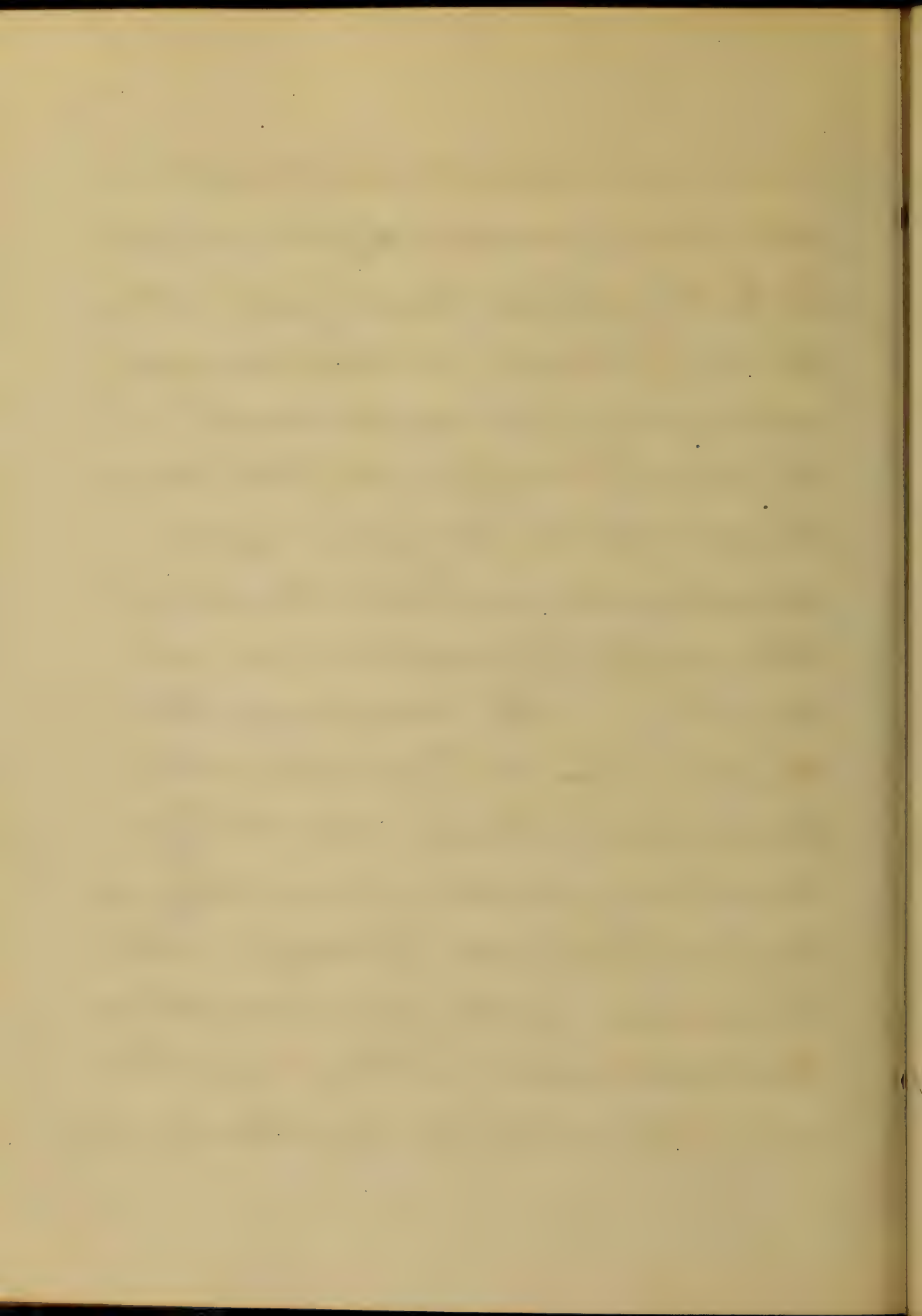
only to the physician, but to the casual observer, that these unhappy circumstances act as exciting causes and frequently give rise to the disease.

But on the other hand, if all fevers depend upon the rapid disintegration of the tissue of the body, it is plain that Typhoid fever may occur without predisposing or exciting causes. For individuals who are not exposed to Malaria, and who have passed the predisposing meridian of life, do sometimes have fever; and as it is due



to the too rapid waste of tissue,
there is no reason why it should
not be Typhoid fever. If, then,
it is Typhoid, to what cause
should it be referred?

It may be referred to the cause
from which so many human
maladies arise; namely, -
the violation of the laws of
hygiene. The origin of this
disease can be traced to the
lower intestines, but what
ever may be the real cause,
it is difficult to say. The
treatment of this disease appears
to be simple. Strict attention
should first be paid to the hygienic

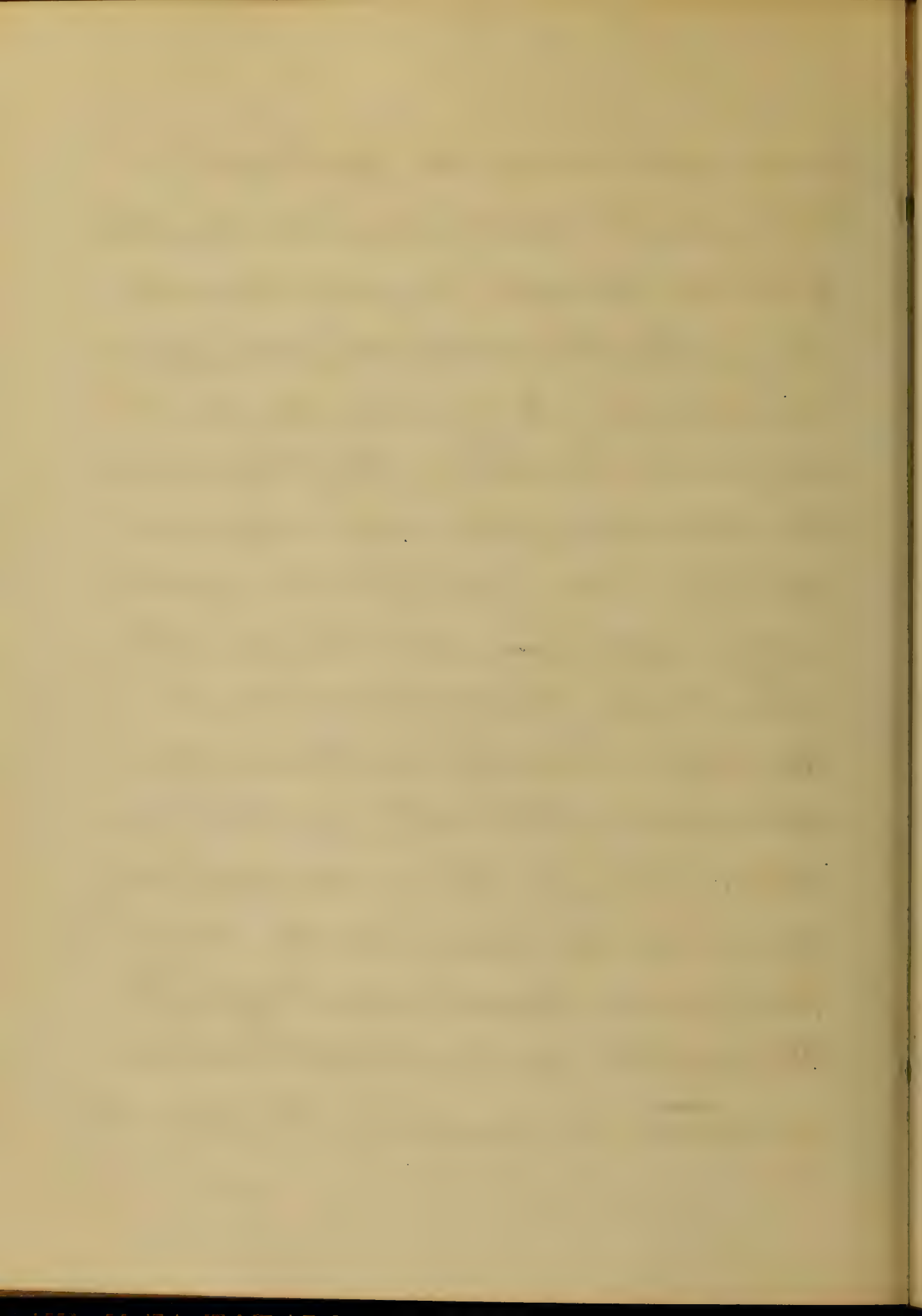


regulations of the patient.

Absolute rest in a well ventilated room, nourishment from the first onset of the fever, nitrogenized food, such as animal broths. Of medicine this disease does not require much; an emetic the first week, and mild aperients may be of great service.

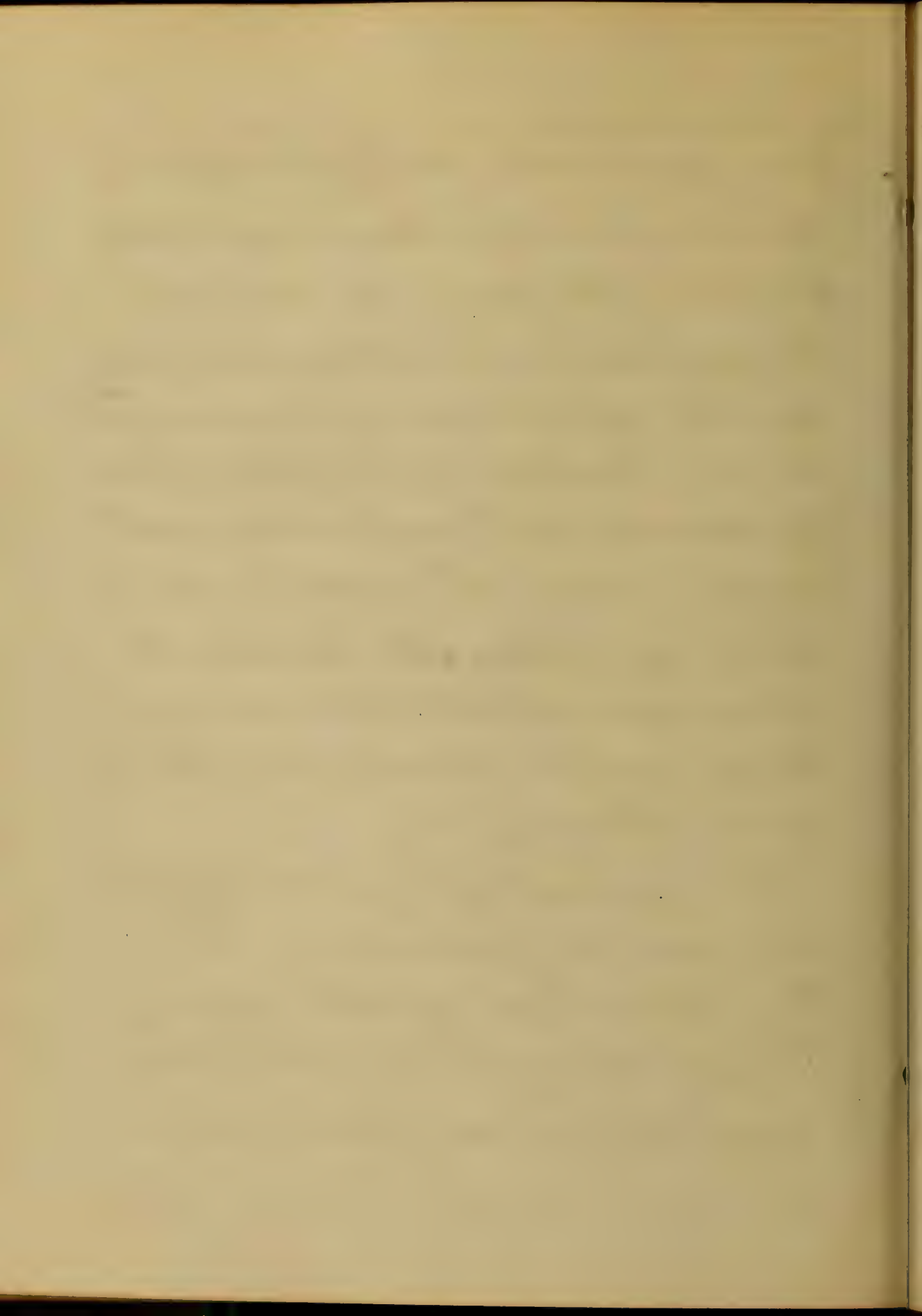
But Sulphate of Quinine, alcohol, Chlorate of Potassa, Oil of Turpentine, and Opium, may be considered the most valuable medicinal agents.

It would be useless to attempt to mention a course of treatment



to be pursued in Typhoid fever. What is best to be done, and all that can be done, is to treat the symptoms as they arise; for the fever cannot be arrested in its course by any medicine, or mode of treatment; and as it is also liable to variation of type, the treatment which succeeds but one year, may not be successful the following.

The general prognosis of the disease is favorable. The temperature of the body, tried from time to time, furnishes a very valuable



prognosis, although it is very
fluctuating through the
entire course. But when
the normal temperature is
reached, which is generally
between the fifteenth and
twenty-first day in mild
cases, and the patient
does not show signs of im-
provement the prognosis
is unfavorable.

Respectfully

Joseph B. B. Wilson

