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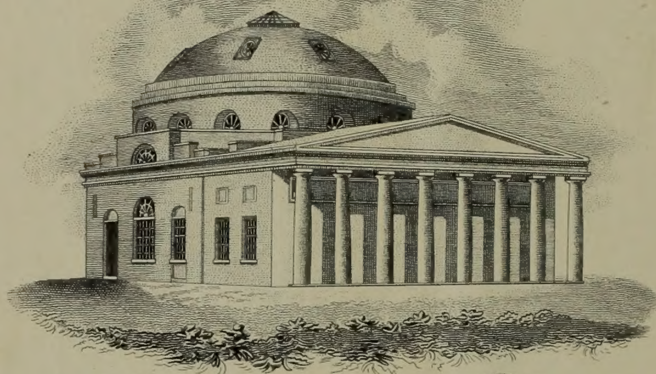

University of Maryland

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.

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UNIVERSITY OF MARYLAND

THESES

1875(b)

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Thomas, William N.	Typhoid Fever	
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[1] Sources consulted have E. Jules Trader in the graduating class of 1876.

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Author	Title	Notes
Catlin, William J.	Intermittent Fever	

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UNIVERSITY OF MARYLAND

THESES

1875 (b)

Webb, ~~Wm. Kelto~~ William Kelso	Typhoid Fever	54p.
Mitchell, ~~C.~~ Clarence L.	PseudoMembranous Laryngitis	22p.
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An

Inaugural Dissertation,

On

Typhoid Fever.

Submitted

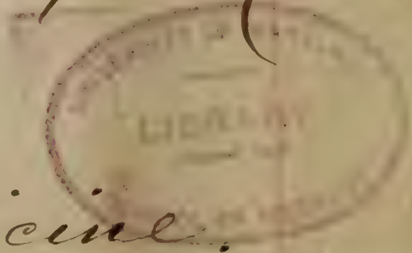
To the Provost, Regents, and Faculty of Physic,

of the

University of Maryland.

for the degree of

Doctor of Medicine.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by Wm. Kelso Hebb.

1875.

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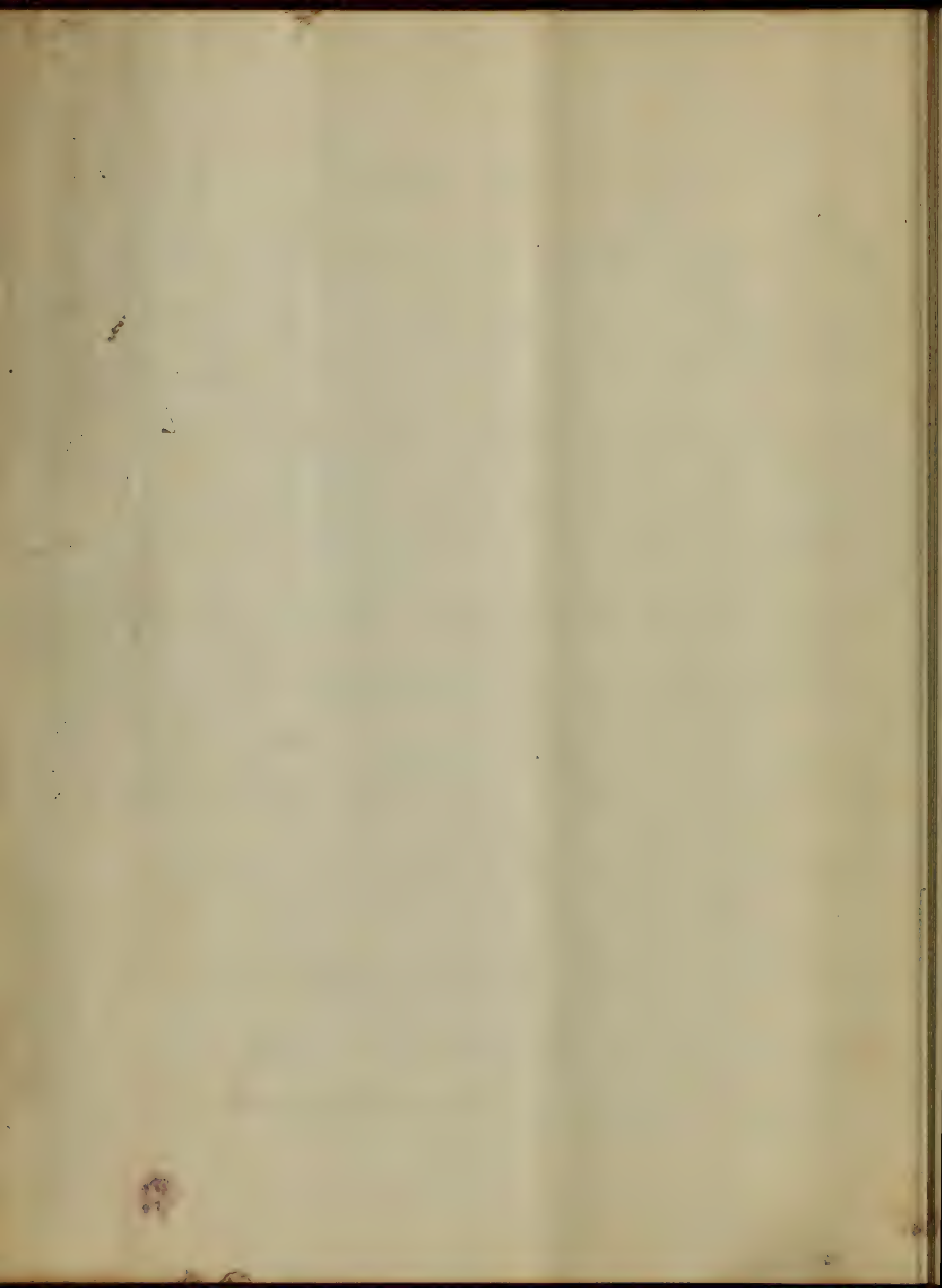
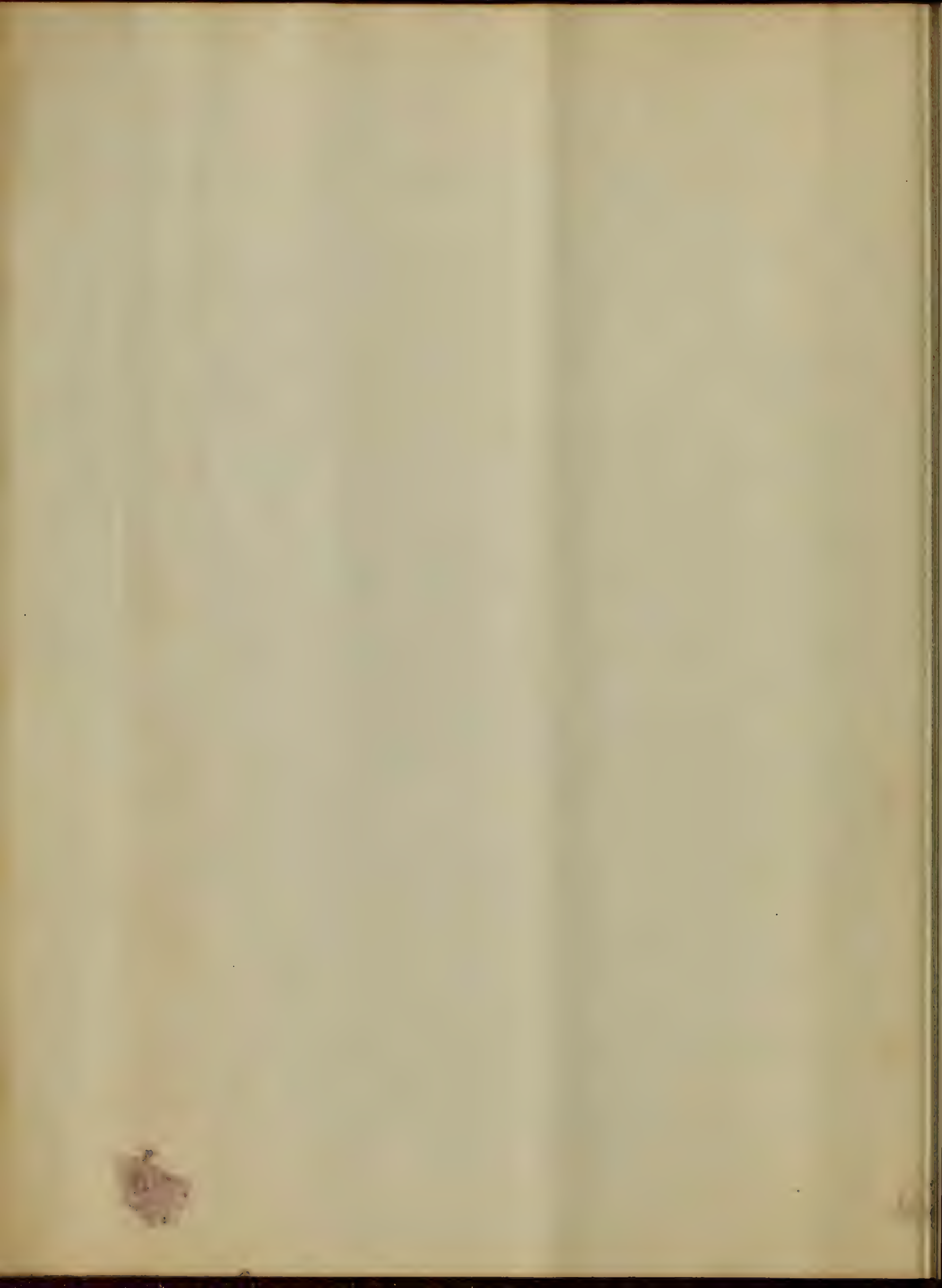
Typhoid Fever.

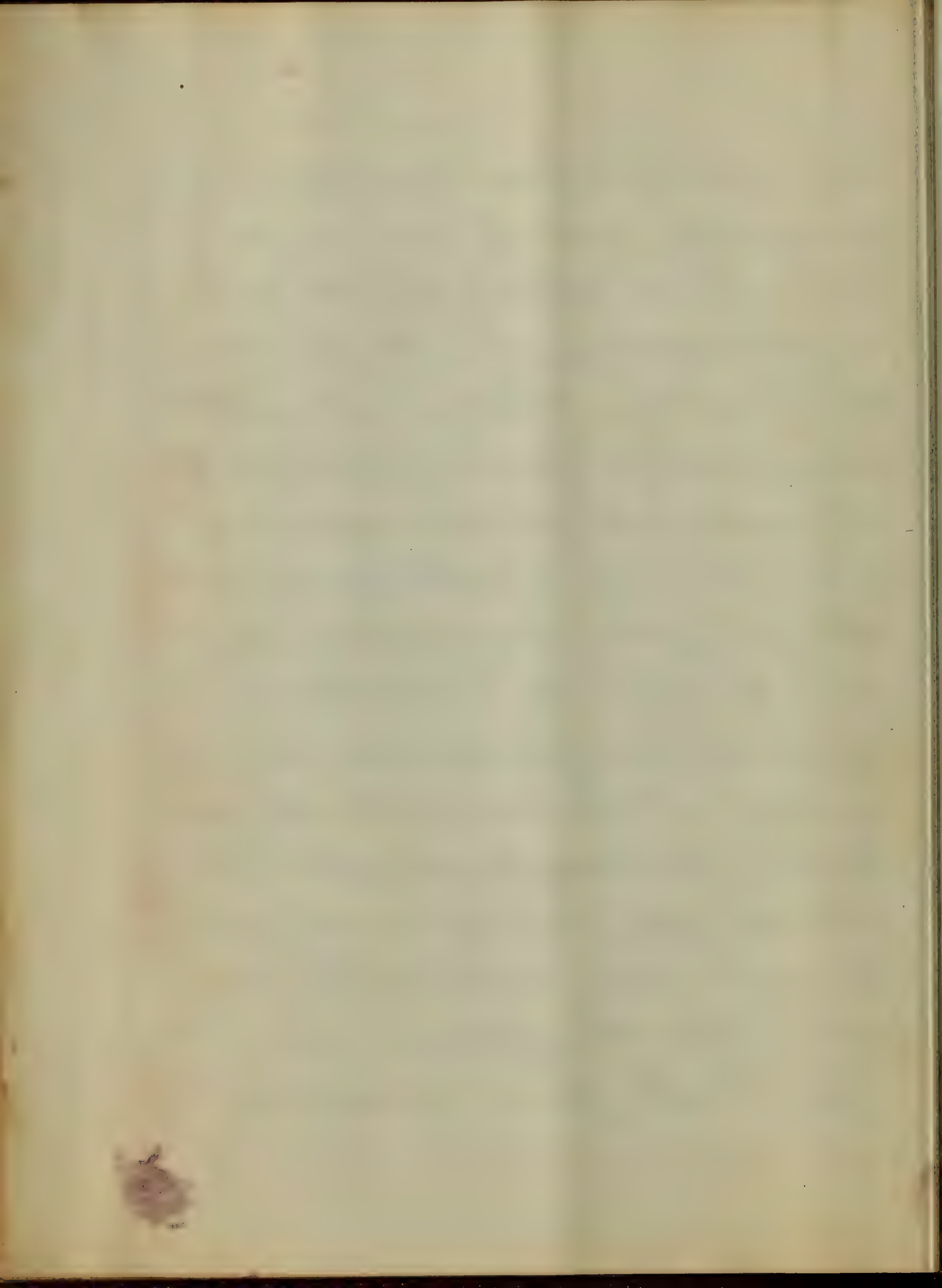
The name typhoid signifies typhus-like, hence the application of the term to this particular form of fever, which, though it closely resembles typhus in some respects, is a separate and distinct disease. - This name however, is open to objection; as it has been applied to various other forms of low fever, consequently giving rise to no little confusion. - The name enteric has been suggested by Prof G. B. Wood, on account of the intestinal lesions, but as these lesions occur as complications, rather than as causes of the disease, this name is also objectionable; as it would be apt to lead to



the error of supposing these lesions to be the cause of the disease. The name abdominal typhus, has been applied to it by german authors. Murchison denominates it pythogenic fever, upon the theory, that the materies morbi is putrescent matter, which is absorbed into the blood. For this theory however there is no solid foundation; as the true cause of the disease, has not as yet become settled in the minds of the profession. This name therefore is objectionable as involving a false hypothesis. We shall therefore continue to call it typhoid, until more light upon the subject, shall reveal us a name, which shall be more expressive. Anatomical Characters. The intestinal

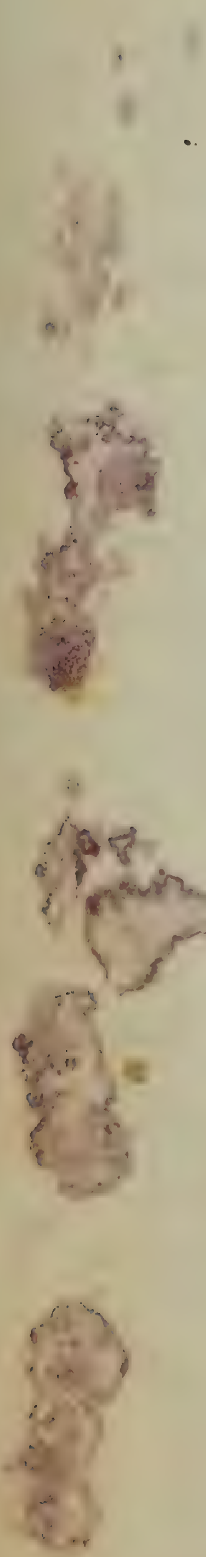


lesions in this disease, are found principally, in the Peyerian or agminated, and the solitary glands of the small intestine, & in the glands of the mesentery. These glands first become enlarged, from hyperplasia of the individual cell elements, out of which the serous sacks are composed. Sloughing then takes place, in those glands which are nearest the Coecum, and extends upwards, the time between the beginning of the sloughing process in the lower glands, and those that are uppermost, varies greatly; sometimes, the lower glands slough away entirely, before the upper ones begin to suppurate. The glands are supposed

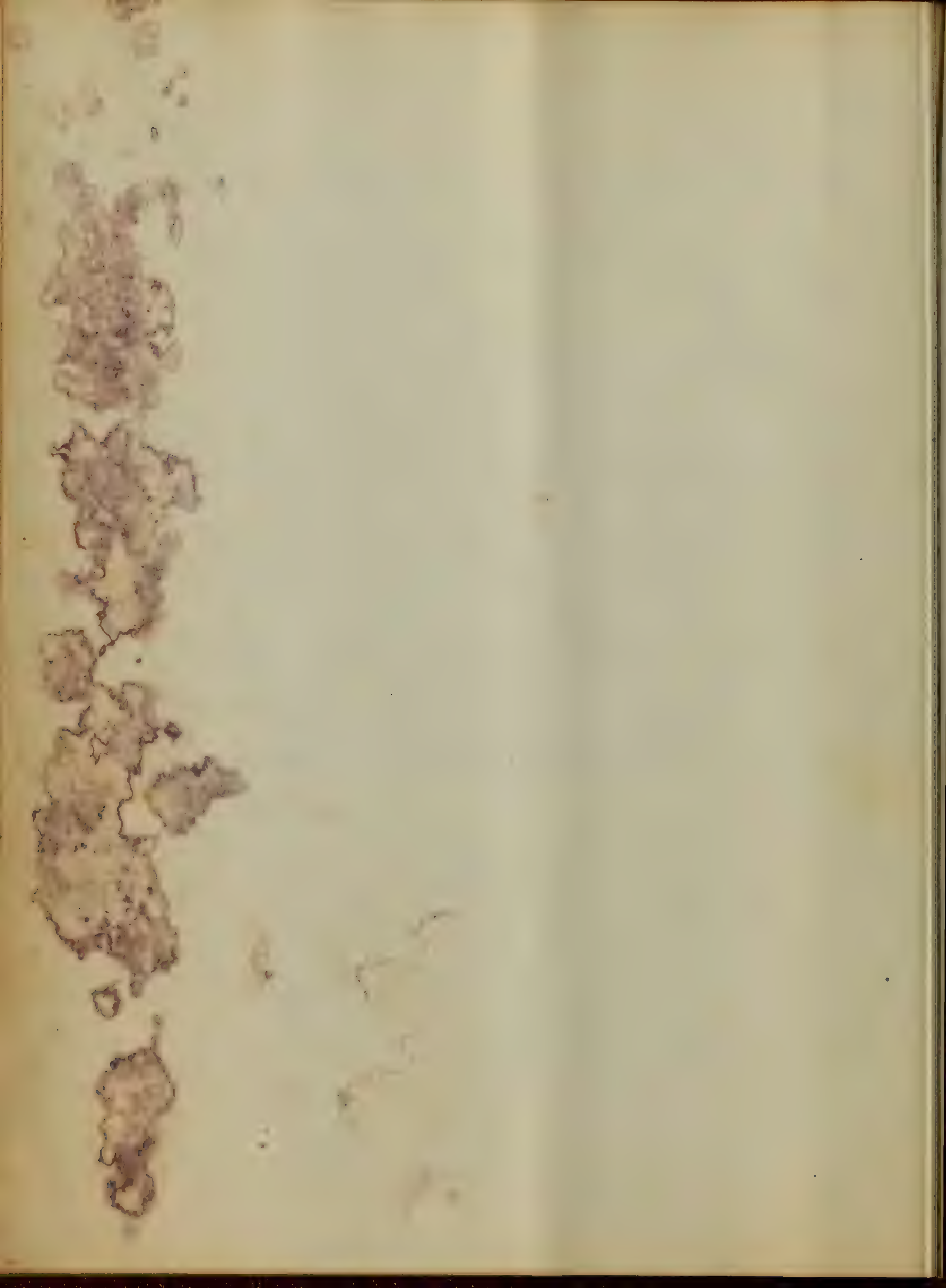


to become congested, before suppuration takes place, but this is rather conjectured. The glands in some cases are very much enlarged, being raised one two or three lines above the surrounding mucous membrane. They are also indurated to the touch, and sometimes present a serrated margin; in some instances, there appears to be an overlapping of the mucous membrane around the margins of the glands, presenting the appearance, of an "undermining process going on beneath the shelving border." The mucous membrane covering the affected glands, is generally of a pinkish or purplish hue, the corresponding portion of the peritoneum is also much injected.

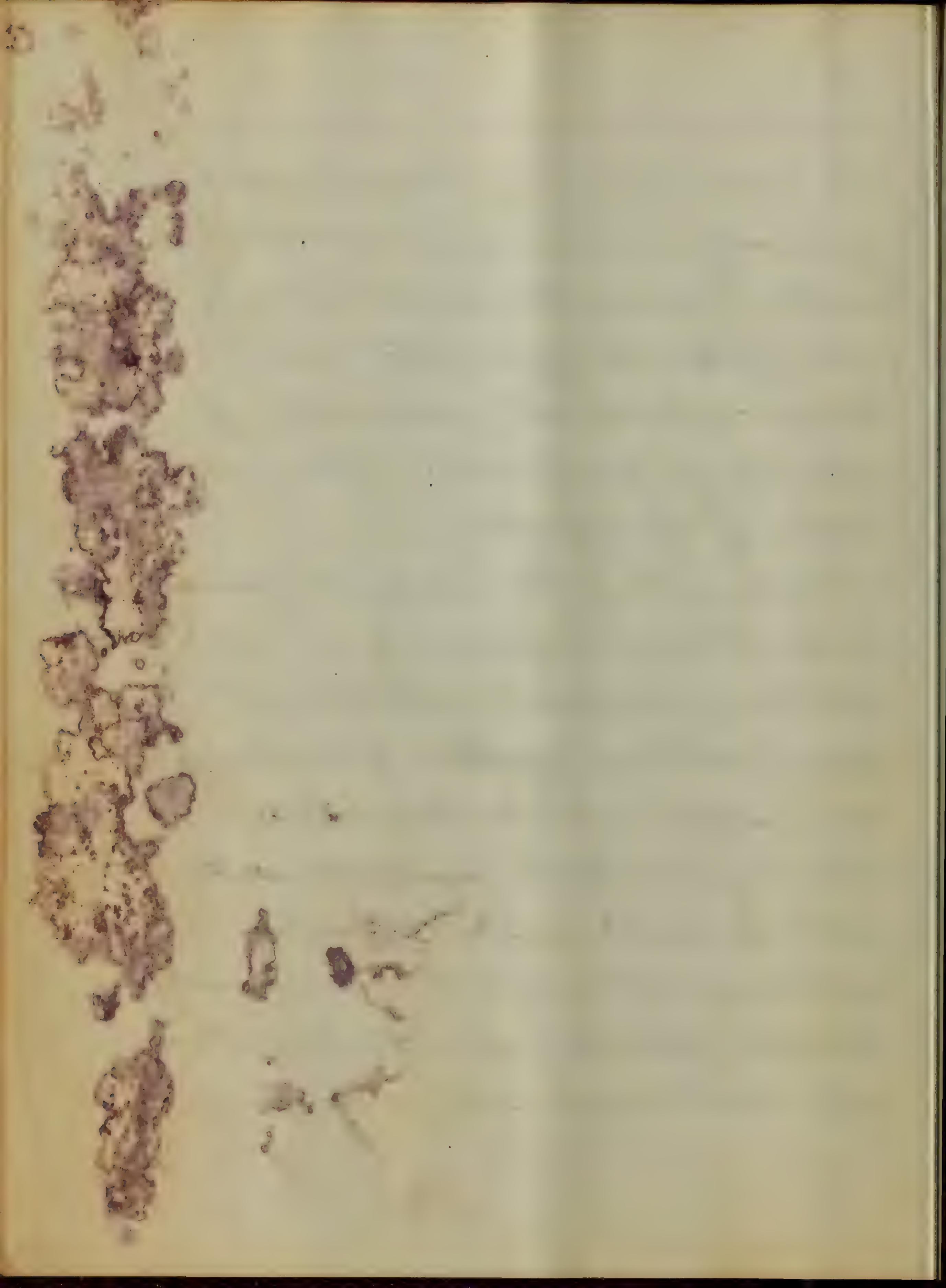
The glands slough away, ulceration fol-
lows, and if perforation does not take
place, the muscular fibers of the intes-
tine are destinctly vissible at the bottom
of the ulceration; so that they, with the
peritoneal covering, alone constitute the
wall of the intestine. The healing process
or the process of cicatrization, then commen-
ces. A thin layer of serous membrane first
forms, and gradually thickens, until fi-
nally, no trace of the ulceration remains,
save the marks of the cicatrix. The cicatrix
in no way constricts the intestinal ca-
nal. I should have stated, that the
sloughing process, is rarely completed
before the end of the first week. If pa-
tients die during the second week, the



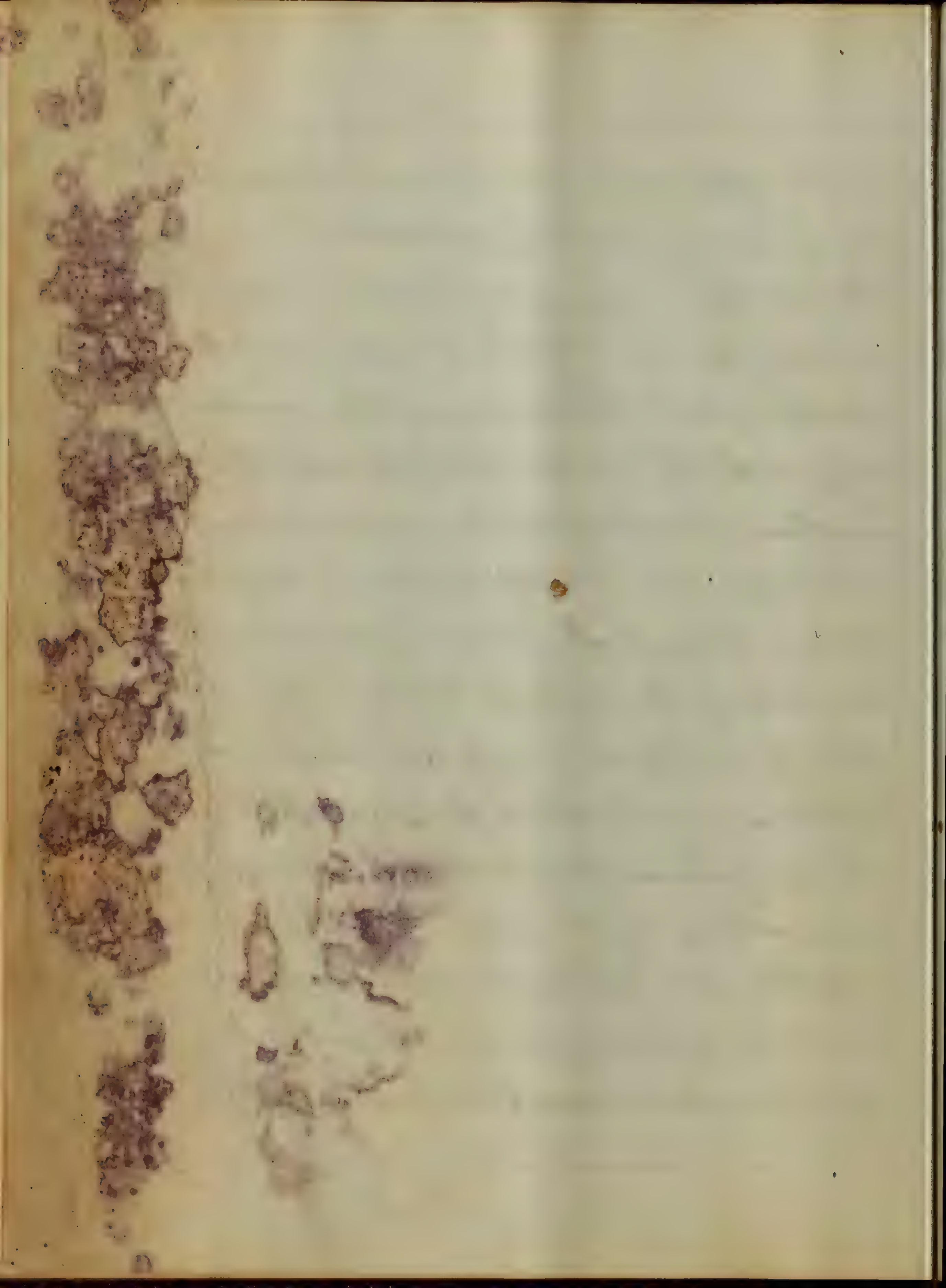
sloughing process is generally found to be going on. Perforation from ulceration, following the suppuration and sloughing, is of common occurrence. Sometimes perforation is produced by sloughing of the affected part of the intestine. In the former case, the perforation is generally small, being about the size of a pins point, while in the latter, the opening is often quite large. In either event however, as a general rule, fatal peritonitis will almost invariably follow. The sloughing, says Dr. Flint, is evidently due to ne(chrosis), resulting from arrest of the circulation (ischaemia).



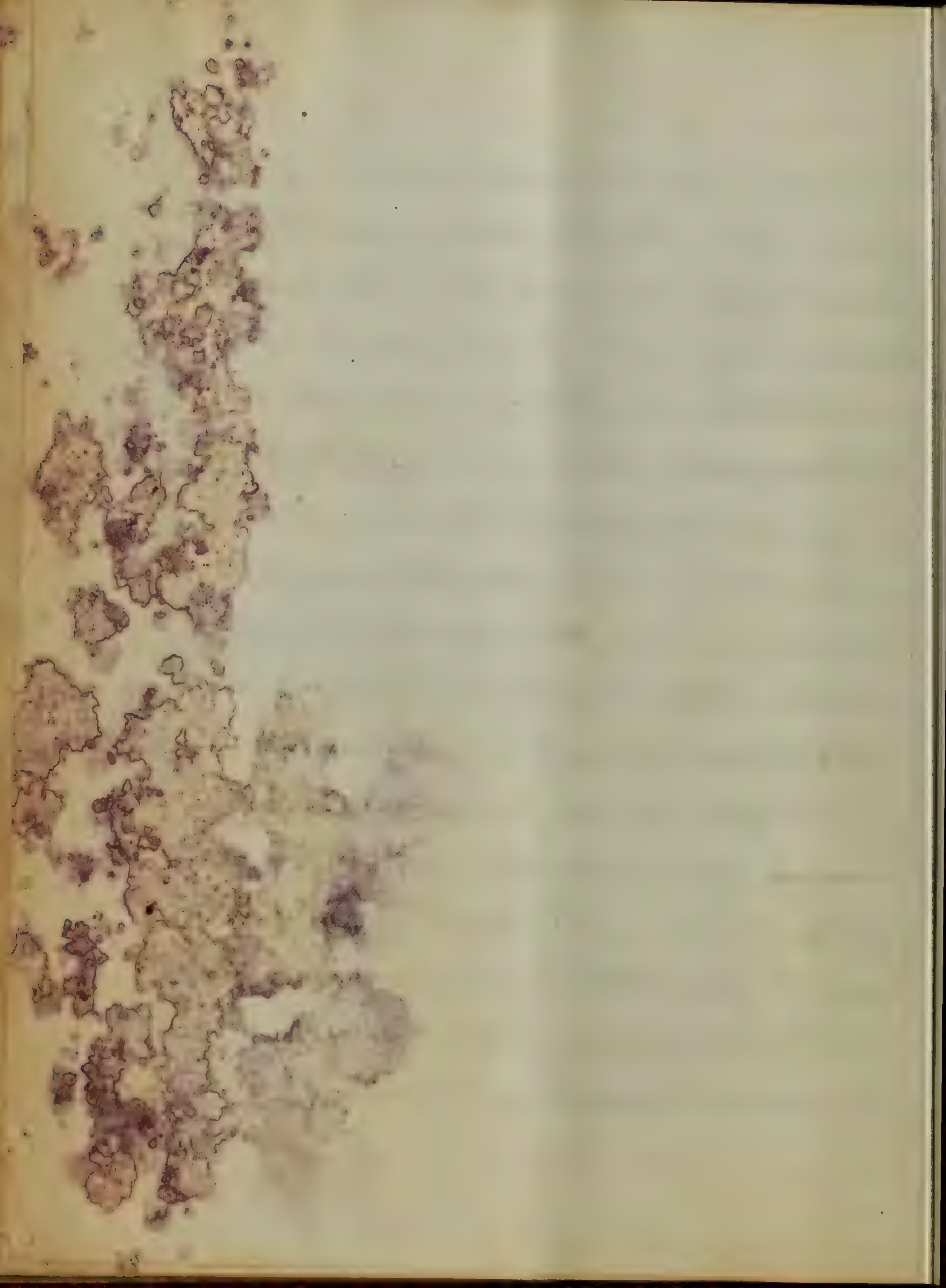
The process of healing or cicatrization generally commences about the third week; it is sometimes exceedingly slow, extending far into convalescence; hence the necessity of exercising great care in the regulation of the ingesta.-
The glands of the mesentery sometimes become enormously enlarged, attaining in some instances, the size of a hens egg. these glands sometimes suppurate, the slough being discharged into the peritoneal sack, with the usual result. This however is not always the case, as these enormously distended glands gradually decrease in size, as the suppuration & sloughing



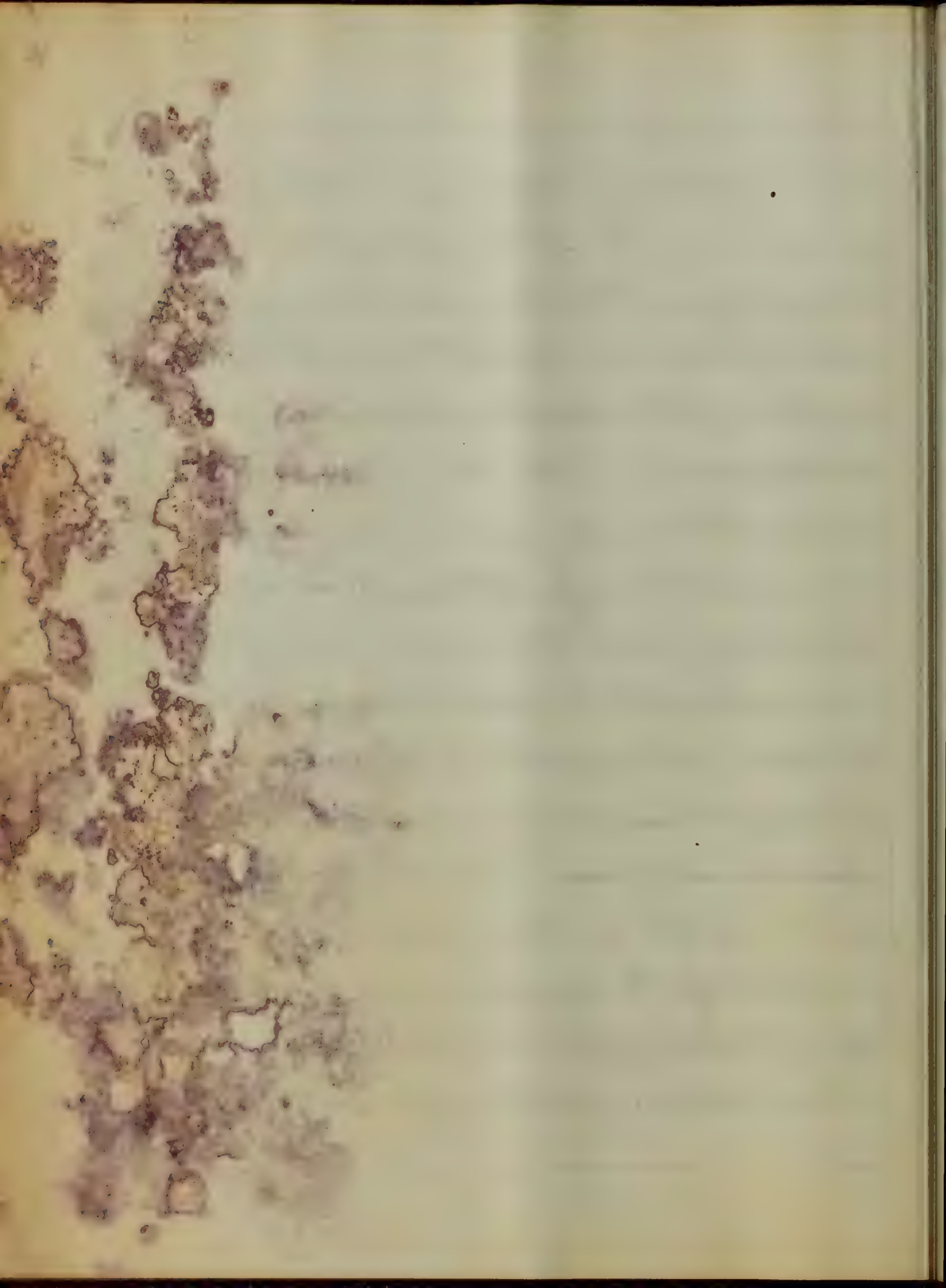
in the upper glands diminishes, and are finally entirely absorbed.
It has been my good fortune, while preparing this thesis, to examine a pathological specimen of the mesentery with the distended glands; though in this case the glands were not quite as large; as stated above is sometimes the case. In this particular case, the size of the enlarged glands was that of a pigeon's egg, or perhaps a little smaller. This patient did not die of typhoid fever, but from a condition resembling typhoid; which Prof. Osler styled, the typhoid state; had he lived long enough, in all probability typhoid fever would have been developed.



There are sometimes lesions of the brain after death; these consist, of serous effusion into the lateral ventricles, and into the sub-arachnoid space. There is also considerable cerebral congestion. There is no effusion of fibrin; consequently, the lesion is no evidence of meningitis, this complication being rare. It is doubtful however whether these lesions are peculiar to this disease or not; as they are often found after death from other diseases, having no connection whatever, with typhoid fever. The intensity of the cerebral symptoms, are not proportionate to the phenomena presented by parts of the nervous system, other than the



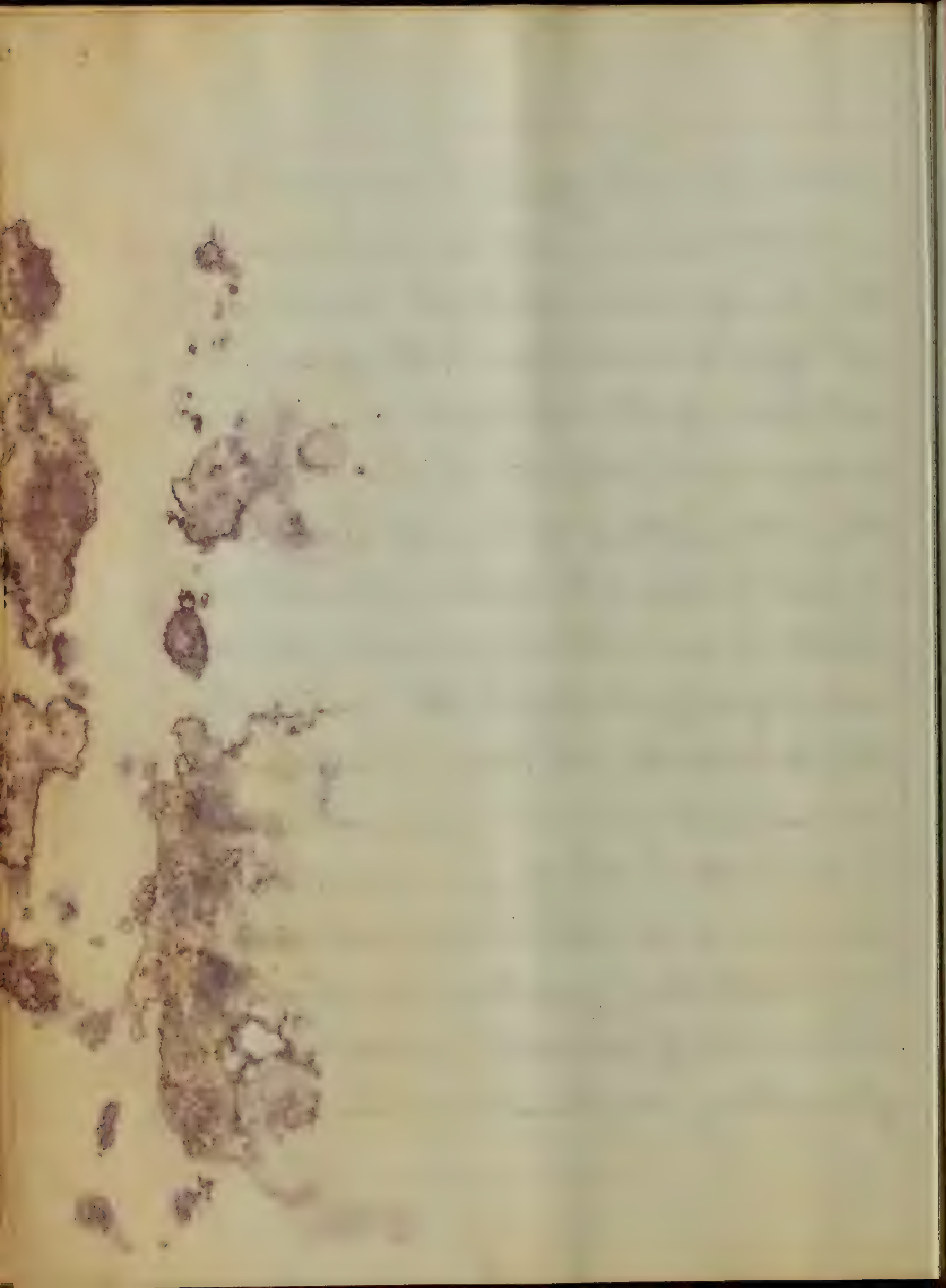
brain, these presenting nothing ab-
normal. The spleen is often en-
larged & softened; congestion existing
also to such an extent as to cause
rupture of the capsule & hemorrhagic
extravisation into the peritoneal
sacks. The kidneys are sometimes
very much congested, and at others
extremely pale; the urine is albu-
minous, and in some cases, deficient
in urea; the muscles sometimes
undergo change; they become waxy &
sometimes granular; this condition
is attributed to the coagulation of the
contents of the myolemma, it generally
affects those of the thigh, abdomen,
chest, tongue, diaphragm &c. As a



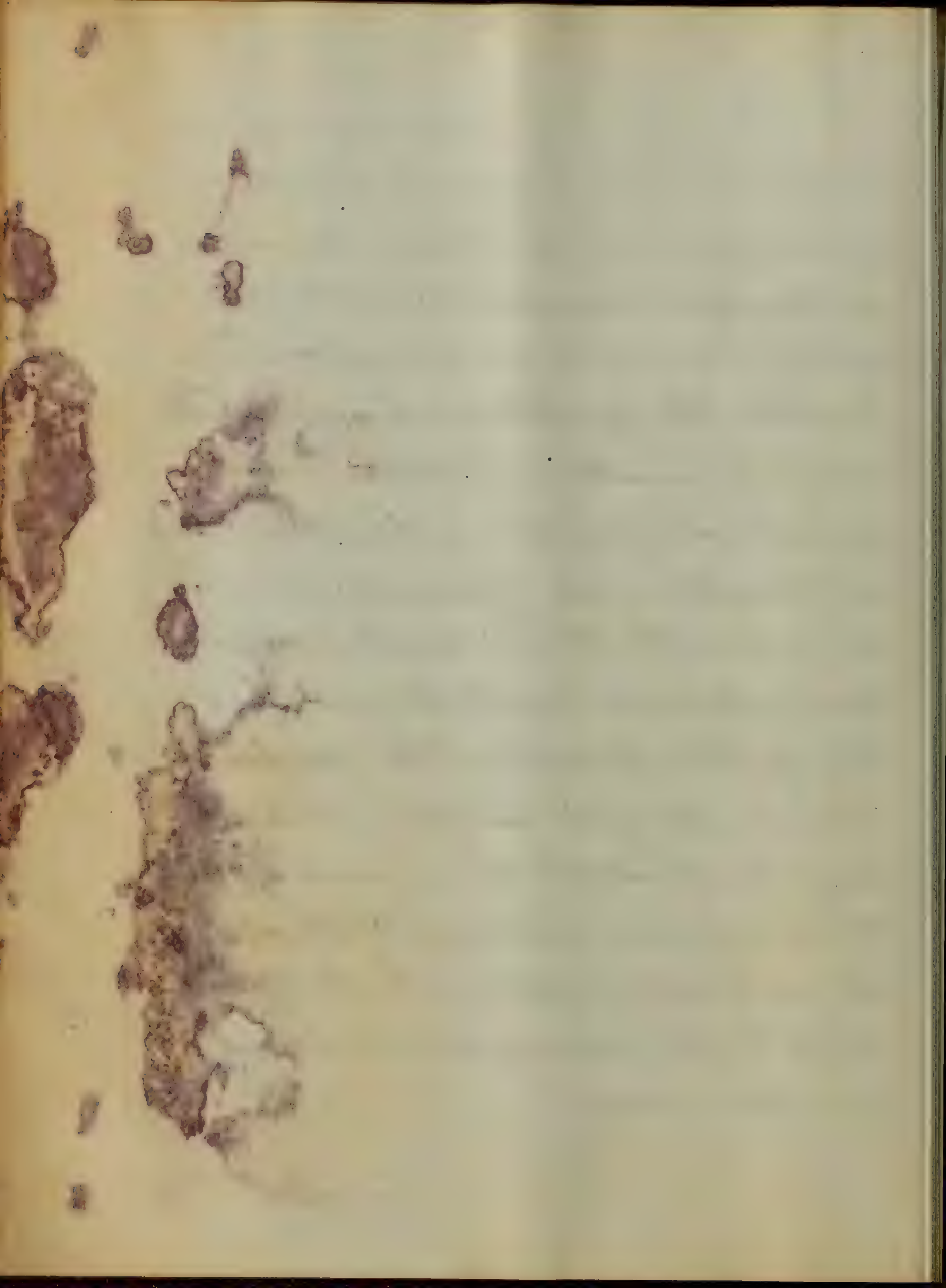
effect of this change, rupture of the vessels, & hemorrhage, sometimes takes place.-

Clinical history.- Typhoid fever is seldom developed abruptly, the patient as a general rule feeling badly for a considerable period previous to the actual manifestation of the disease. The time occupied in the development of the disease, is considered by some to be prodromic, by others, to be a stage of the disease; which latter theory, according to Flint, is the most rational of the two. It is considered best, to divide the disease after the forming stage has past, into septinary periods, the disease continuing one, two, three, four, five, six, & seven

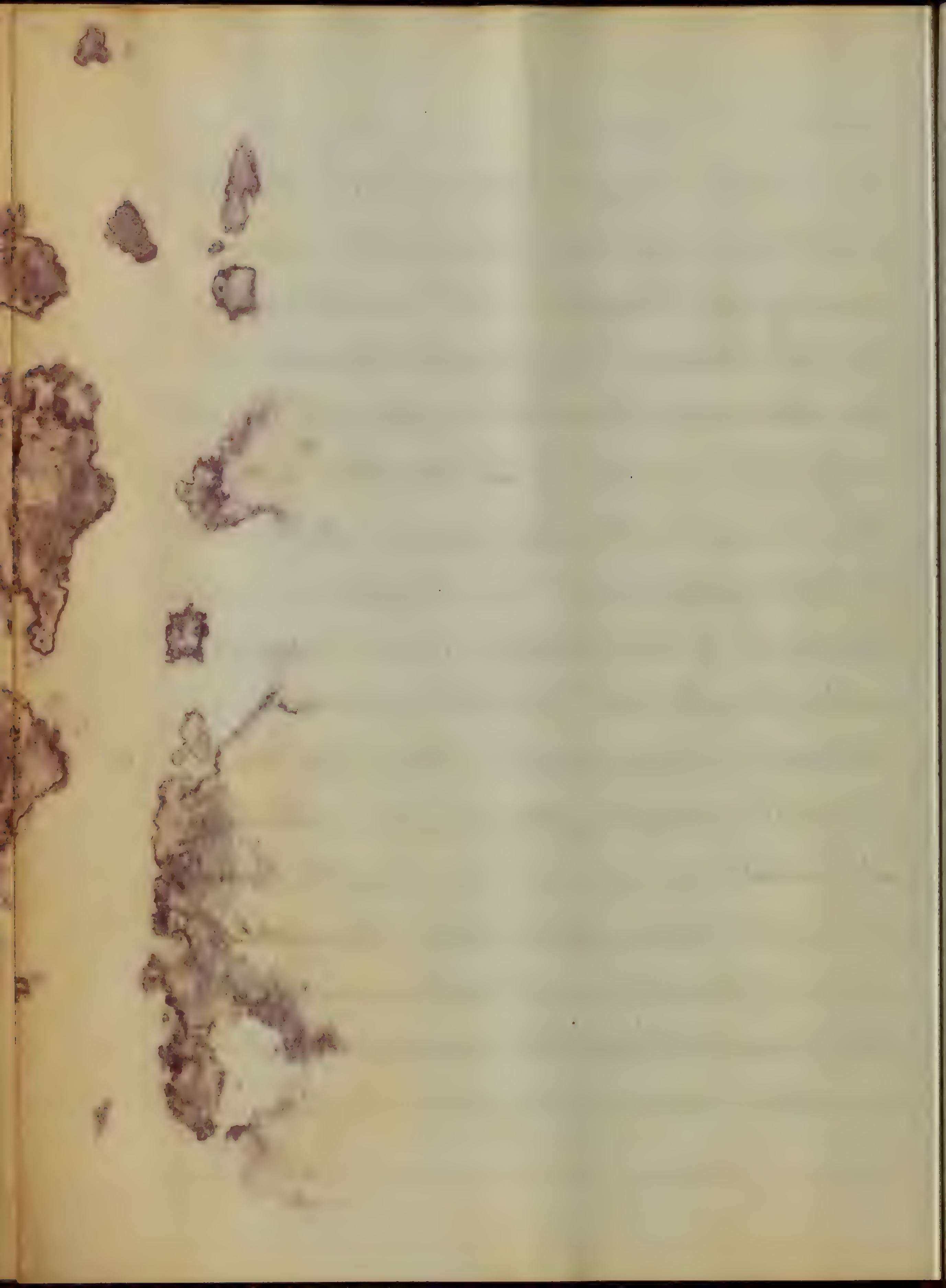
weeks. In a large proportion of cases, patients are unable to remember, the precise time that the disease, or its symptoms began. It is consid-ered best by Dr Flint, to reckon the commencement of the disease, from the time, the patient takes the bed; but this is not a correct criterion; as often the patients are not seen until the dis-ease is fully developed. It is best there-fore, to consider the disease as having commenced, upon the appearance of the first chill or chilly sensation. The symptoms to which our attention are particularly called, are a slight chill or chilly sensation, with increase of axillary temperature, cephalalgia,



confined principally to the frontal region, pain in the back & loins, epistaxis & diarrhoea, besides the eruption, which is however not always present. The symptoms however which are of the most importance in diagnosis, are epistaxis & diarrhoea, which are almost invariably present, especially the latter. Dr. Flint makes the following division in the clinical history of this disease: 1st the symptoms as presented by the countenance and general aspect, 2d the nervous system, 3d the digestive system, 4th the skin, 5th the respiratory system, 6th the circulatory & 7th the urinary which will be described in order.

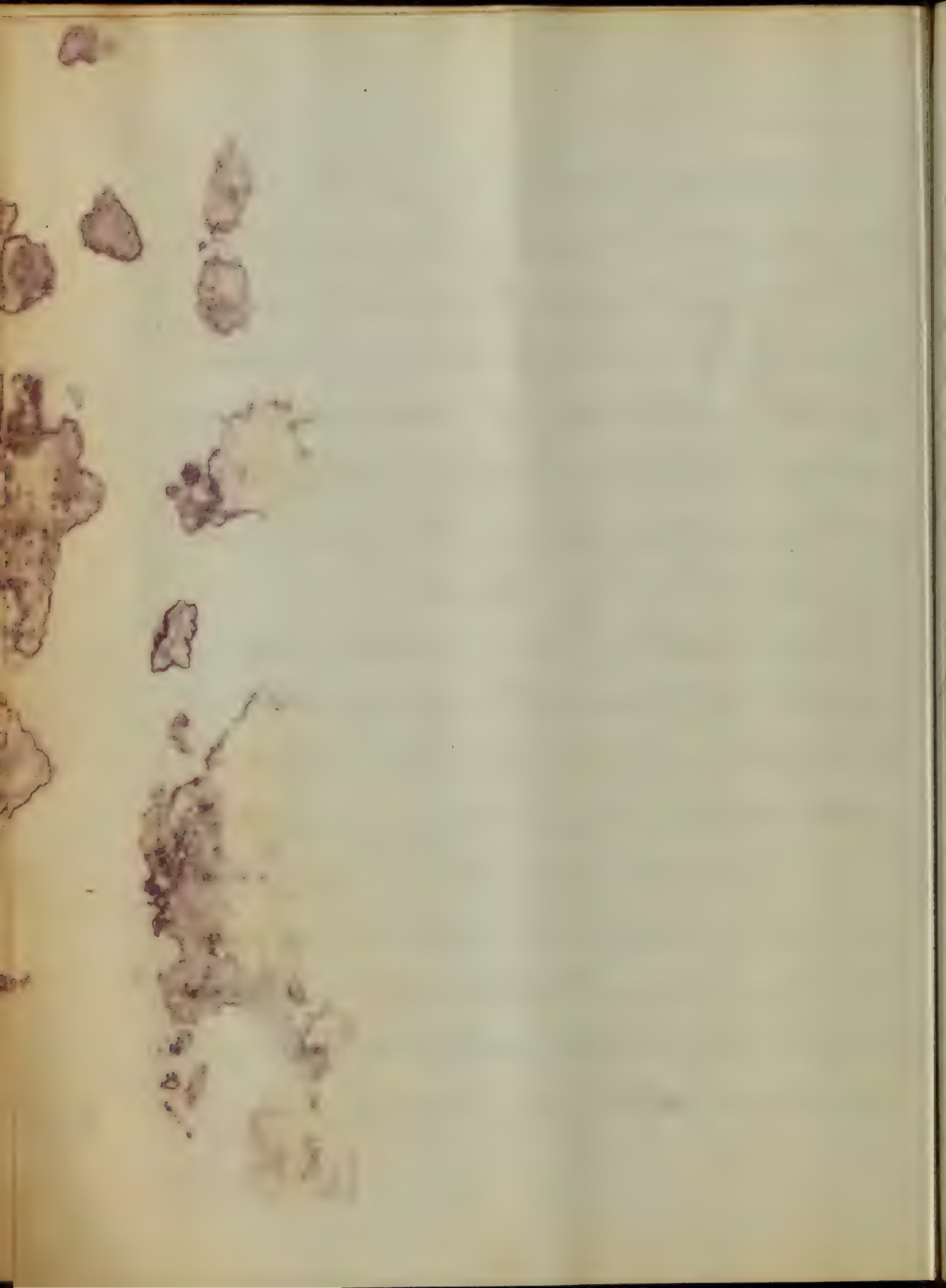


Countenance & general aspect. In the first stage of the disease, there is no manifest change in the countenance; as the disease progresses however, the countenance becomes suffused, and slightly reddened; still later on in the disease it assumes a dull and listless appearance, and often an appearance of stupidity; circumscribed redness upon the cheeks generally indicates pneumonitis. Next to the face, the redness appears upon the hands and arms, and gradually becomes diffused over the whole body; disappearing on pressure and returning after the pressure has been removed. The constant occurrence of this redness

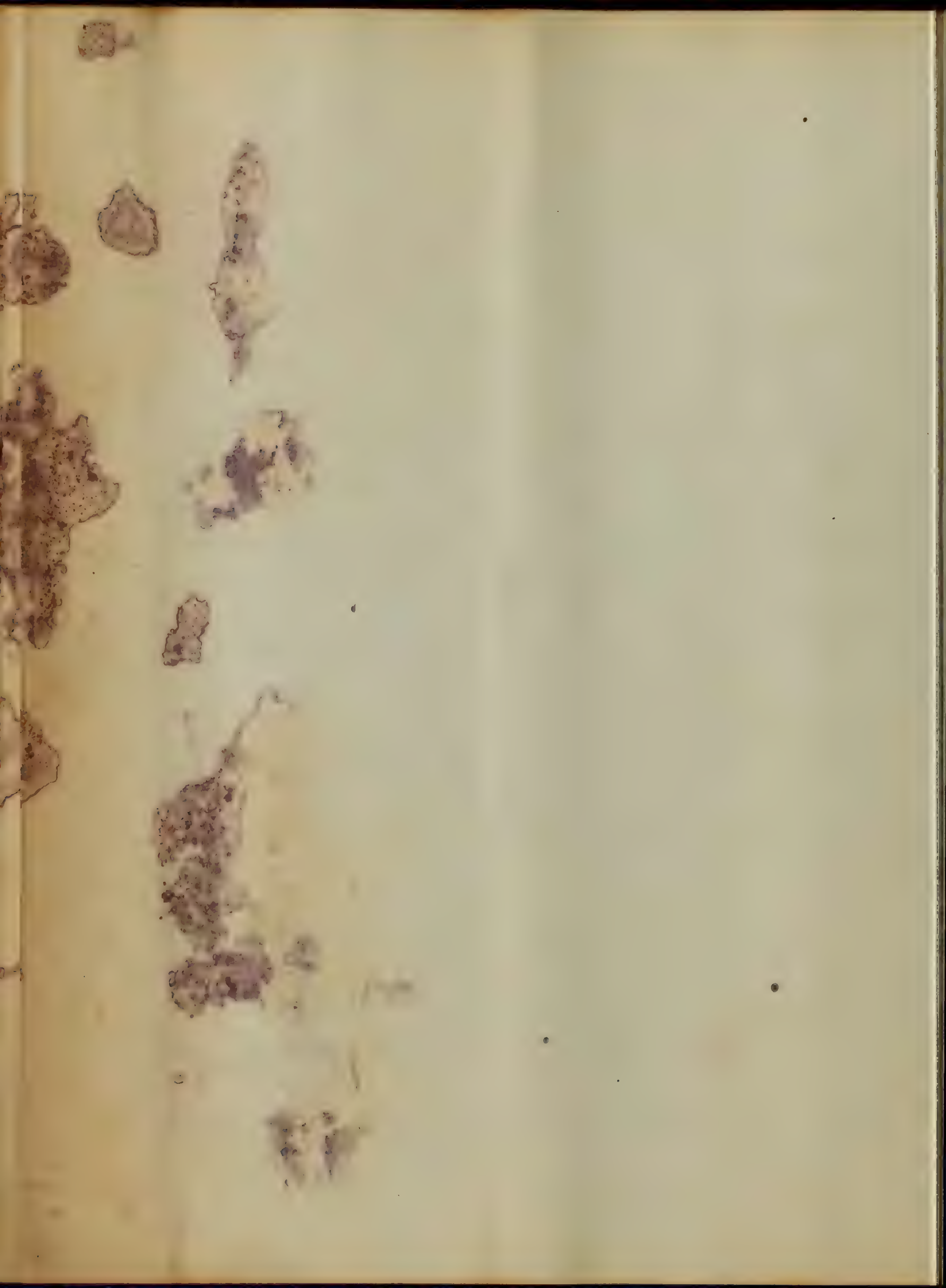


in a less degree than in typhus, is evidence that it has some pathological significance. It is rational to consider it, as being due to paralysis; affecting through the vaso motor nerves the peripheral arteries. Slight redness & congestion of the conjunctiva is sometimes marked.

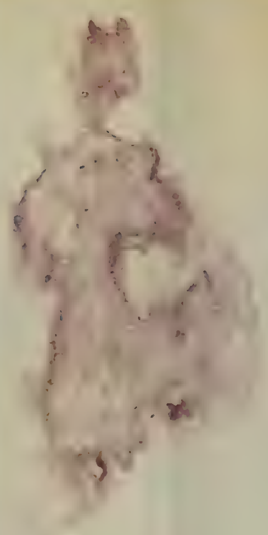
Nervous system. Pain in the head is more or less prominent, as a symptom of the disease; but not so intense as that which always accompanies acute meningitis. The cephalalgia appears generally about the second week, sometimes during the first week, and sometimes even at the commencement of the disease. Delirium is also prominent.



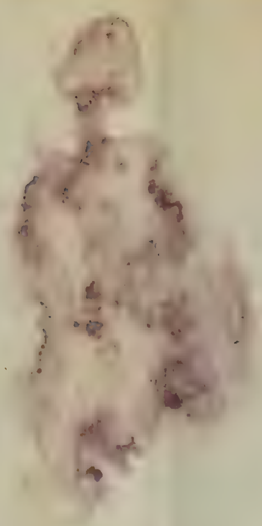
in some cases; appearing about the third week, and is generally of the passive or muttering character. Patients sometimes become restless, rising from their beds and sometimes succeeding in getting on their clothes. They will generally however, suffer themselves to be quietly led back to bed again. They are often subject to delusions imagining themselves in some instances, to be immensely rich, but fixed delusions are rare. Patients are coherent but not rational; when questioned, they will give unreliable answers so that nothing can be judged of their condition by what they say. When the delirium assumed the low muttering form, the mutterings



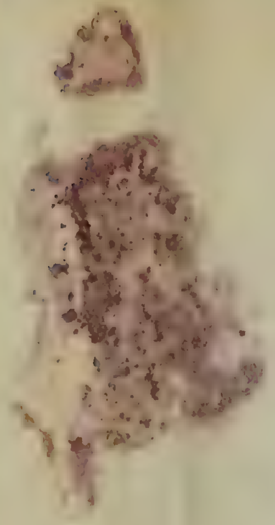
generally have relation to their various persuits &c. There are some other forms of mental disorder which claim notice. The patients in some severe cases relapse into an apathetic state, manifesting an utter indifference to every thing around them; they will not ask for water, though the tongue may be dry & parched and the general condition of the mouth indicative of thirst; in fact the organism is thirsty, but the mental perceptions have become so blunted, that they can not appreciate the wants of the system. I should state in passing however, that they will drink the water with avidity when offered them. In severe cases they will not eat therefore



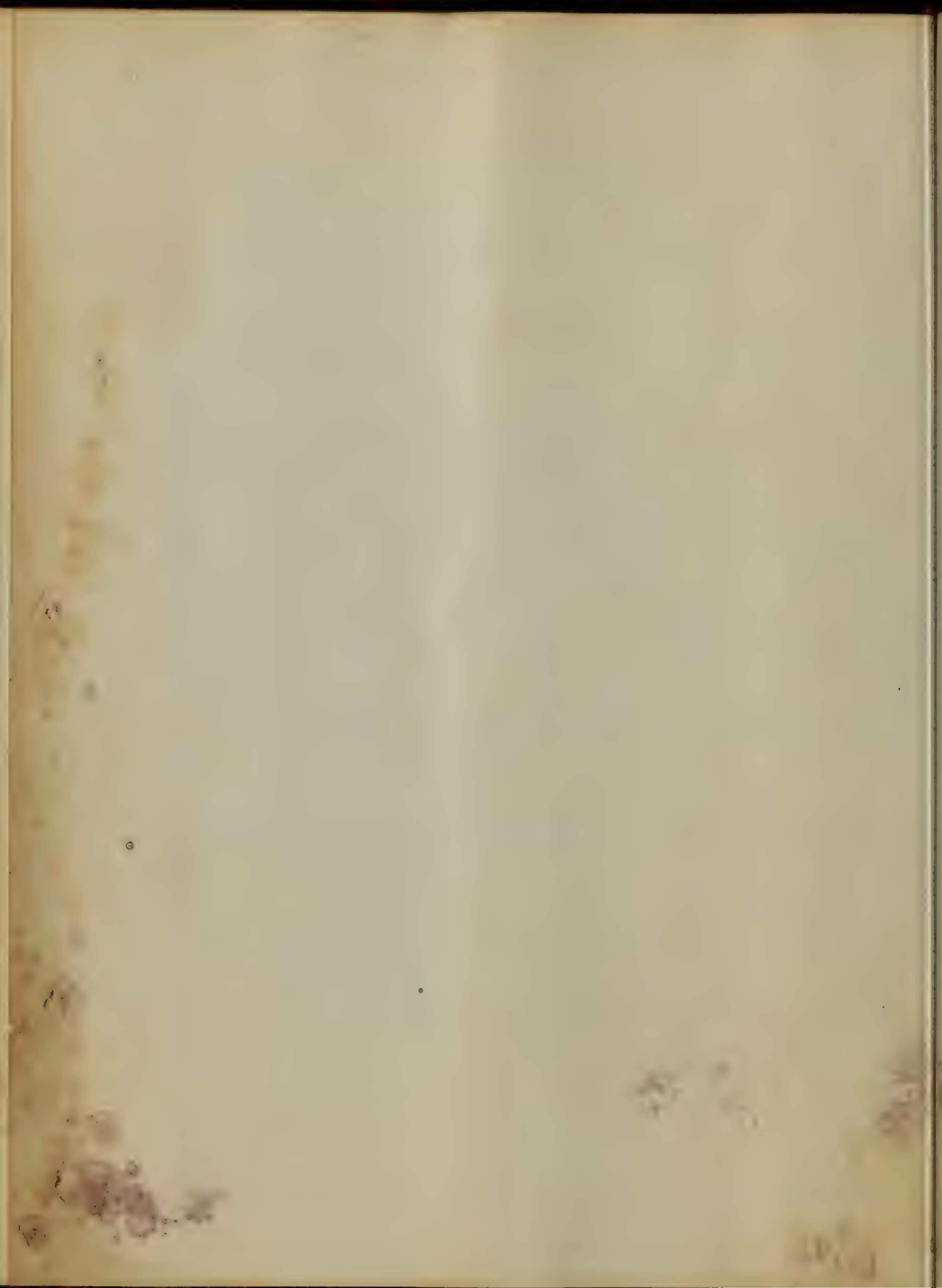
it becomes necessary to feed them, by introducing the food into the mouth if possible, and if not, it should be administered per rectum; it being of the utmost importance, to support the powers of life, until convalescence is declared. Should the latter event take place, the difficulty will be the other way, viz. to prevent the patient from taking so much nourishment; this should be carefully guarded against. The patients in the more severe forms of the disease will not change their position in bed, & often the feces and urine will be evacuated in bed unknown to the patient; this takes place not from paralysis of the sphincters, but from utter indifference



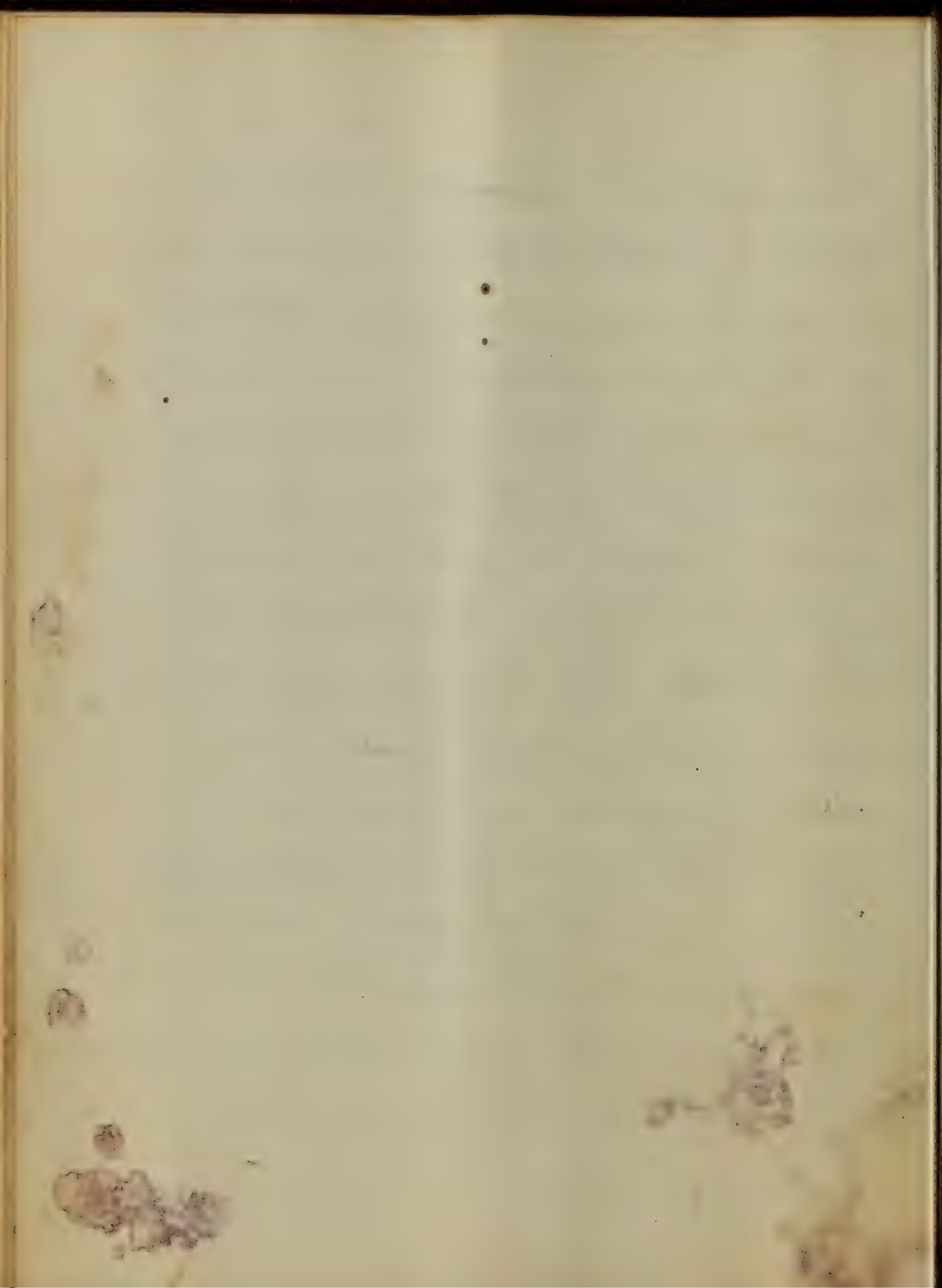
on the part of the patient. Other symptoms are, Carphologia or pulling at the body linen, or at the bed clothes, which symptoms, are indicative of great gravity of disease. Patients sometimes lie in a pseudo-somnolent state, from which they may be aroused, but soon relapse into their former condition. To this condition has been applied the term coma-vigil. In regard to the delirium, this sometimes assumes the low muttering form, at others the delirium is noisy and demonstrative; the two latter symptoms, like those previously spoken of, also indicate great gravity of disease. Convulsions and Coma sometimes occur; the coma vigil



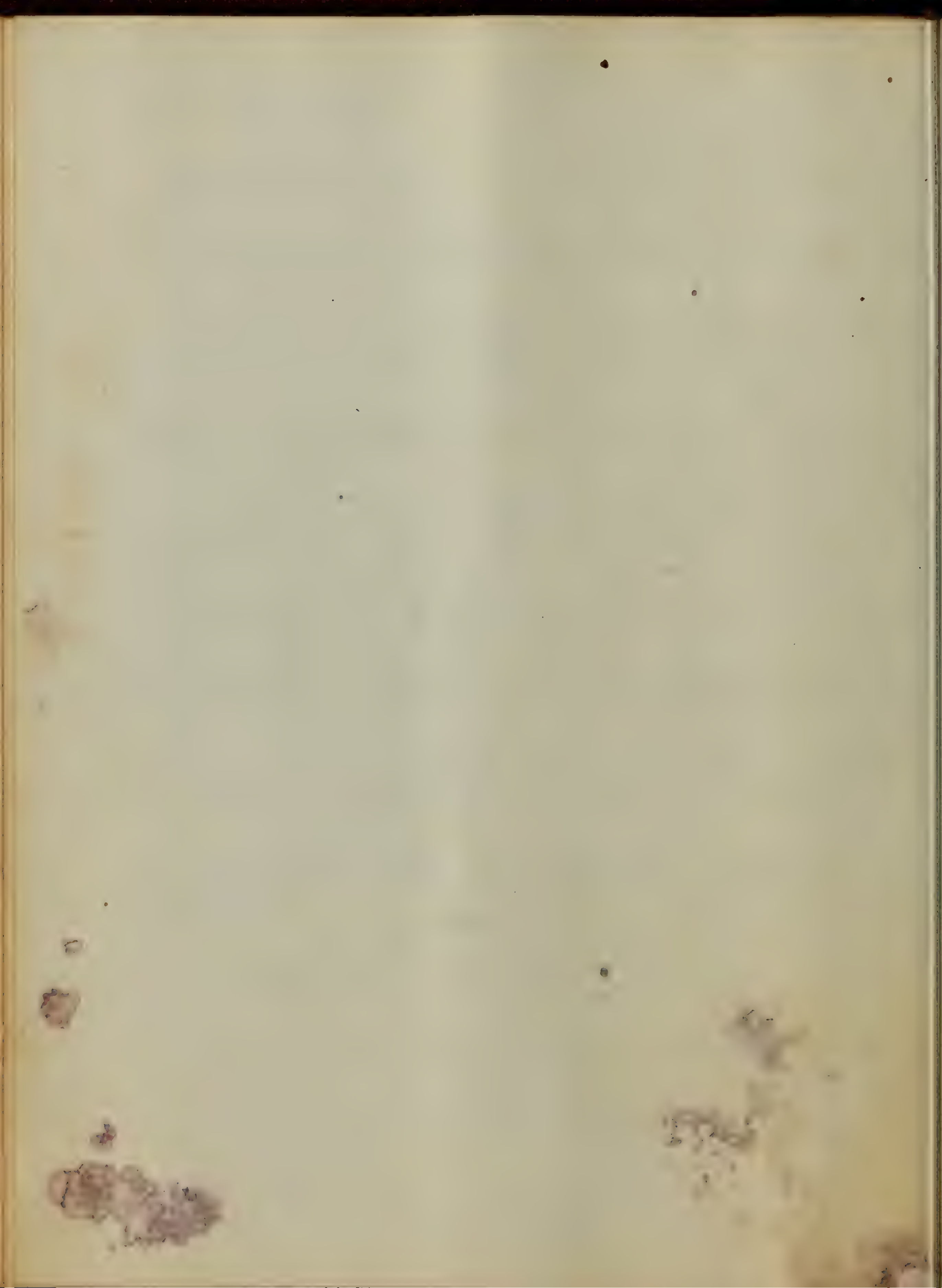
has no relation to the coma. The coma and convulsions, are generally due to uraemia. In these cases, the amount of albumen in the urine is increased. Paraplegia, either transient or permanent is rare. Digestive system.- Anorexia is the rule; not so much from disorder of the stomach, as from, in the severe forms of the disease, an utter indifference on the part of the patient, as to whether he eats or not. This condition of things being brought about, by the dullness of the mental perception, preventing the patient, from appreciating the wants of his organism.-



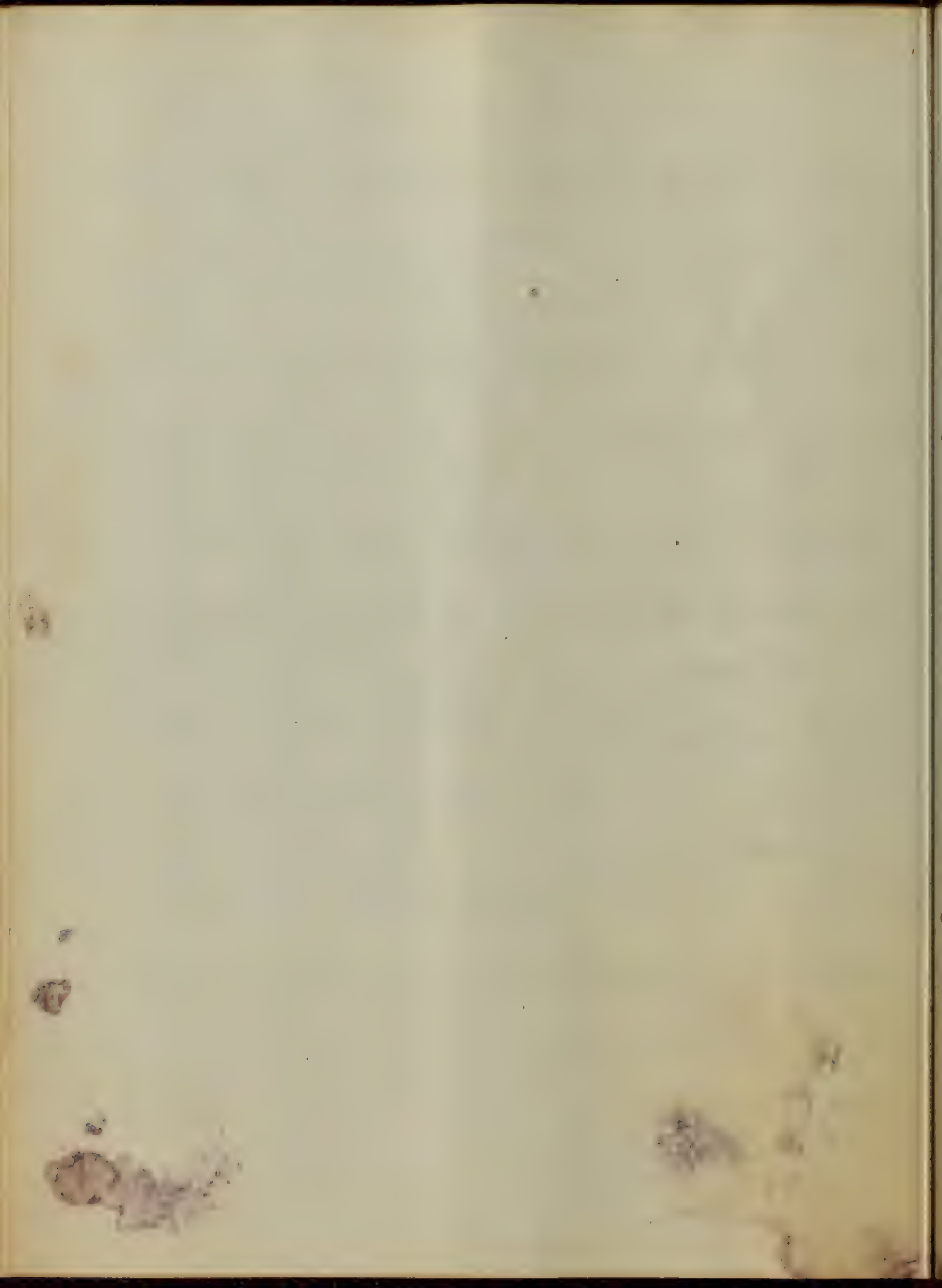
The tongue also presents certain characteristics, which are of importance in the clinical history of this disease. It is often dry and parched, and covered with a white, yellow, and even a black coating, this coating of the tongue varies much in degree, sometimes presenting only a furred appearance, at others heavily coated. The different colors presented by these various coatings, have no diagnostic significance, as indicating mildness or gravity of the disease. These coatings frequently disappear and reappear again at intervals, when the deposit disappears, leaving the tongue remaining and moist, it may be looked



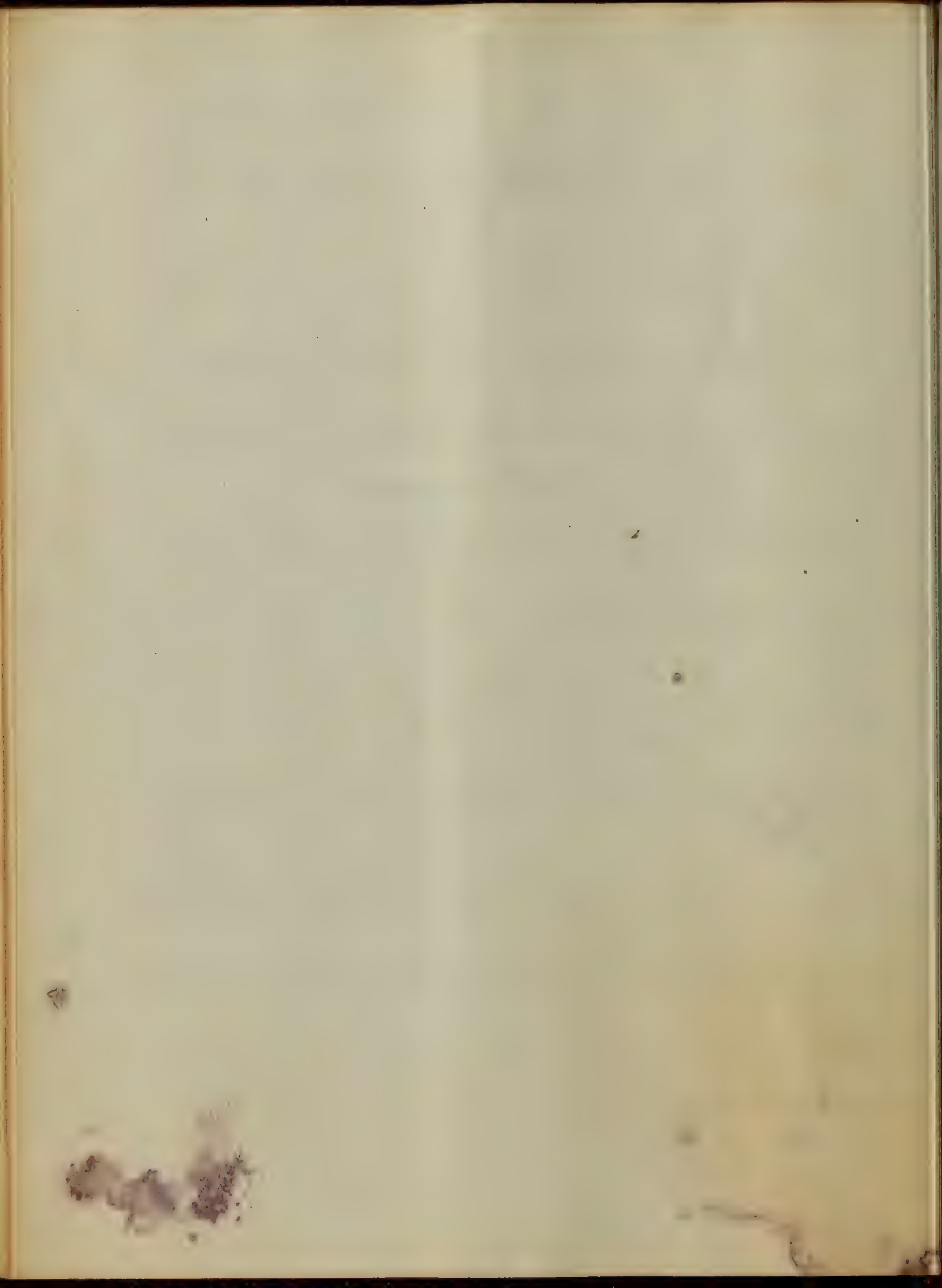
upon as indicating convalescence. In some severe cases, there may be noticed a tremulousness of the tongue, somewhat resembling that of delirium tremens; this generally precedes serious ataxic symptoms. It is sometimes protruded with apparent difficulty, and after being protruded is suffered to remain so, apparently from forgetfulness. It sometimes also becomes dry hard & fissured, at others, reddened & shining. This dry and hard condition occurring in coma-vigil, is owing to the patient's being with his mouth open. A deposit on the teeth or sordes sometimes appears in this disease; the gums become soft and tender, and in some cases hemorrhage takes place



from this situation. The parotid glands also, become considerably enlarged, presenting the appearance of mumps; with this difference; that in typhoid fever suppuration takes place thereby considerably retarding convalescence; while in mumps no such condition of things is brought about. Vomiting is only of occasional occurrence in typhoid fever, diarrhoea is almost invariably present; which, with the ochre colored discharges, is one of the most striking and characteristic points in the diagnosis. The reaction is alkaline. Constipation occasionally exists; involuntary discharges of faeces sometimes takes place from paralysis of the sphin-

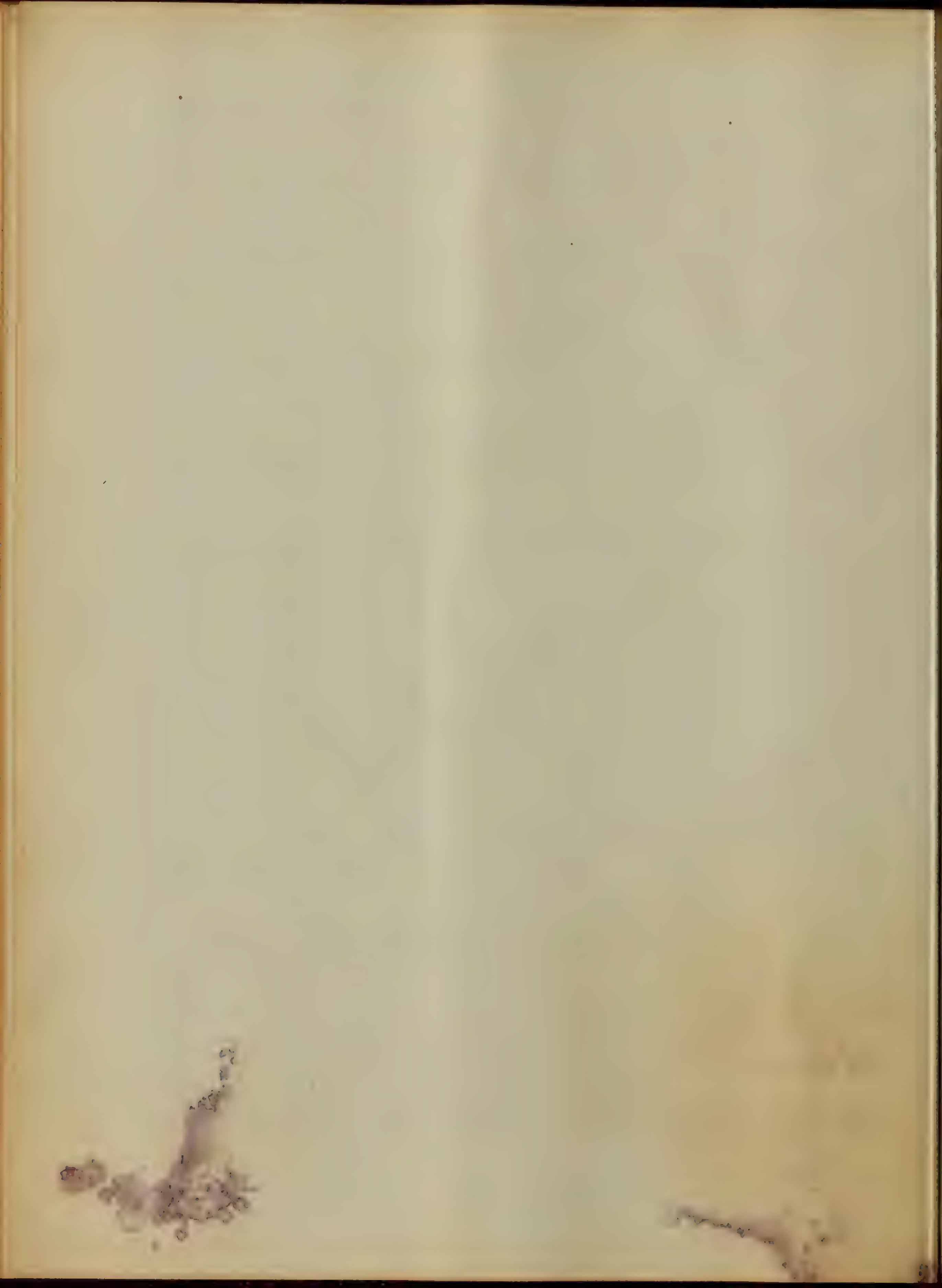


tee and. ... Hemorrhage from the bowels takes place in a certain number of cases; the tendency in such cases is not to an inevitably fatal result, though death sometimes takes place from this cause. In regard to the abdominal symptoms; there is more or less rigidity of the muscles in that situation, with tenderness on pressure; sometimes however, on account of ... mental condition of the patient, considerable pressure is required to produce pain. There is also tympanites, with considerable distention of the abdominal walls; and gurgling upon pressure, not only manifest to the ear, but as a tactile

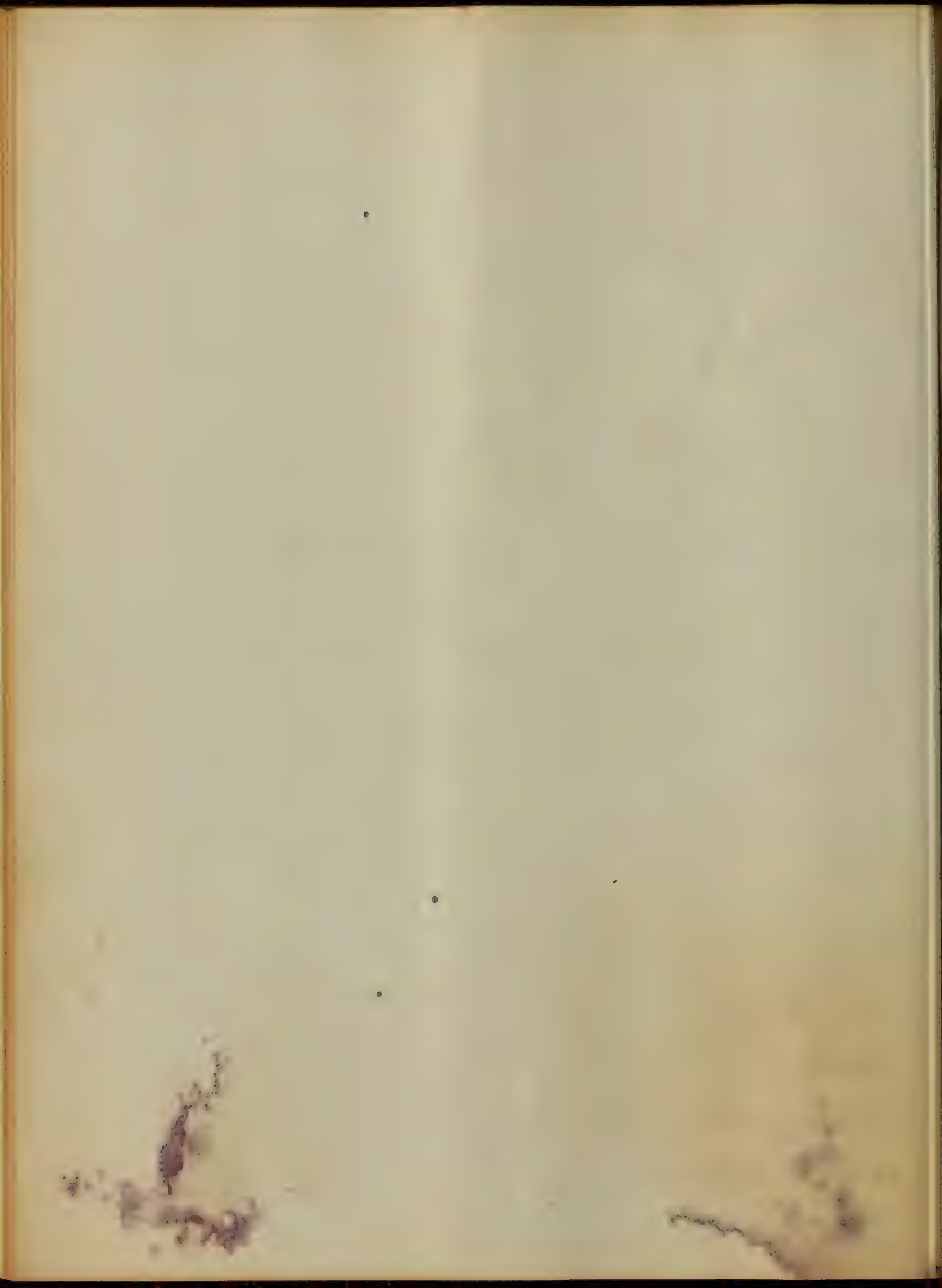


sensation. Perforation from ulceration or sloughing, will almost inevitably produce total peritonitis. Cases in which recovery takes place, being those in which there has been no perforation, but in which, the inflammation was of the adhesive character. Sometimes the peritonitis is developed sudden-ly; in such cases the opening is generally large, admitting of the discharge of a large amount of the intestinal contents into the peritoneum. In other cases the opening being small, produced by the ulceration alone, suffers the inflammation to be induced gradually.

Skin. The eruption dating from the forming stage appears on the seventh or

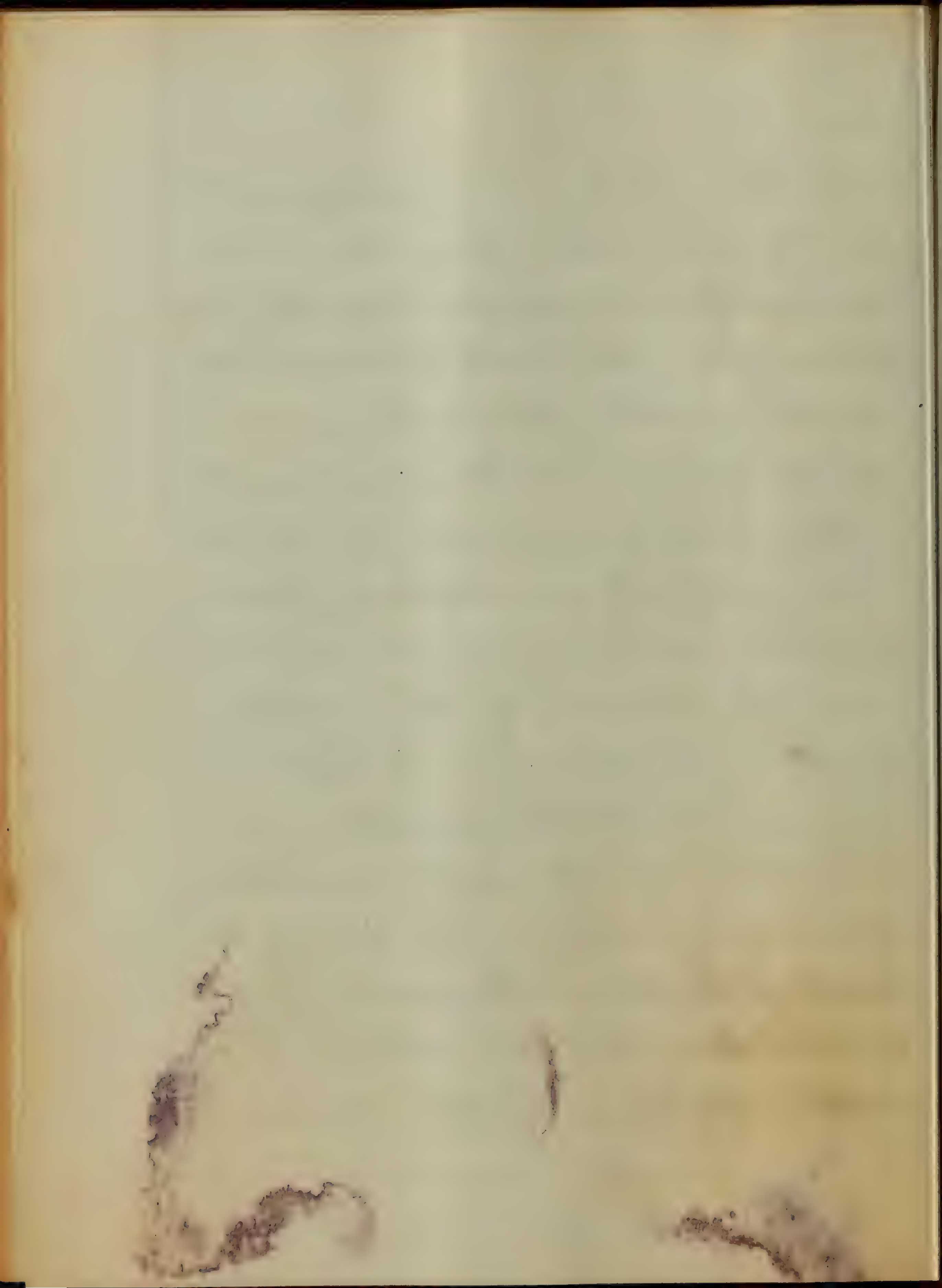


a fourteenth day, and from the time
that the patient is confined to the
bed, from the second to the twelfth
day. This eruption is characteristic
of typhoid fever. It is of a pinkish
or rose colored hue, and is raised percep-
tibly above the surface, being therefore a
papular eruption. These papules are
according to one author lenticulated or
lens shaped. They momentarily dis-
appear upon pressure and return when
the pressure is removed. They are gen-
erally few in number sometimes
only four or five spots making
their appearance; they are not however always
present, and are not reliable in making
the diagnosis; the disease however should not
be excluded, on account of their non existence. In



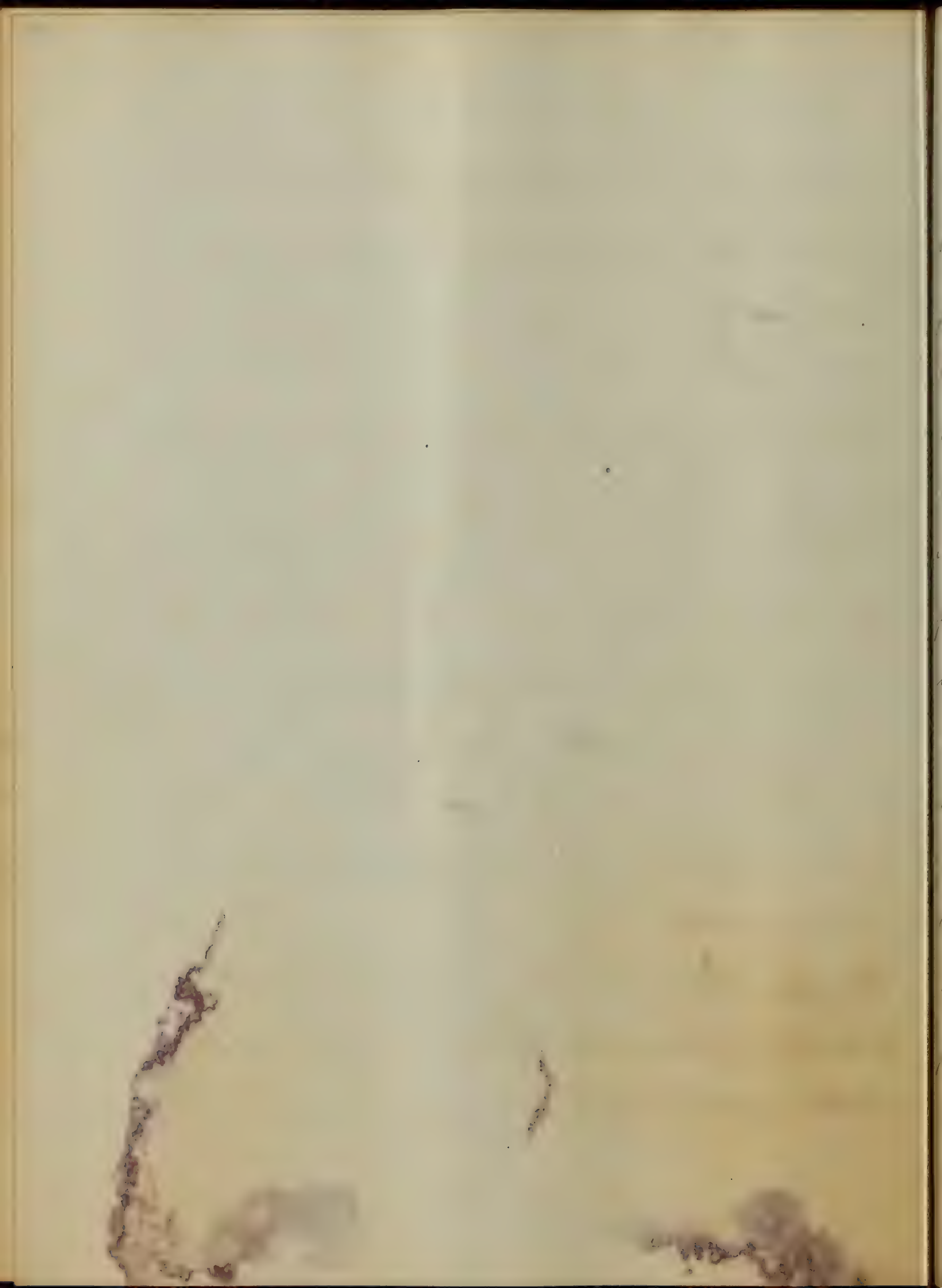
most cases these spots number twenty one or two, and are generally found upon the chest and abdomen; and sometimes, on the back immediately behind the abdomen. Occasionally, they are diffused over the lower extremities. Purple colored spots or petechiae sometimes make there appearance but are not significant. Large purpleish spots, from three to eight lines in diameter and of irregular outline appear in some cases; these also have no significance, as regards intensity or gravity of disease. Sudamina are observed in some cases; and were regarded by Louis, to be of Con-

siderable importance in a diagnostic point of view; this theory however is considered to be erroneous, as they often appear upon the neck chest and abdomen in other diseases, or fevers, in which there has been much perspiration; and if my memory serves me rightly they occasionally occur in hard-working men; in whom from the character of their employment the perspiration is kept up pretty constantly. The eruption is not apparent after death, neither is it always present in life, during the course of the disease. It occurs oftener in children than in adults. Perspiration is frequently abundant, and

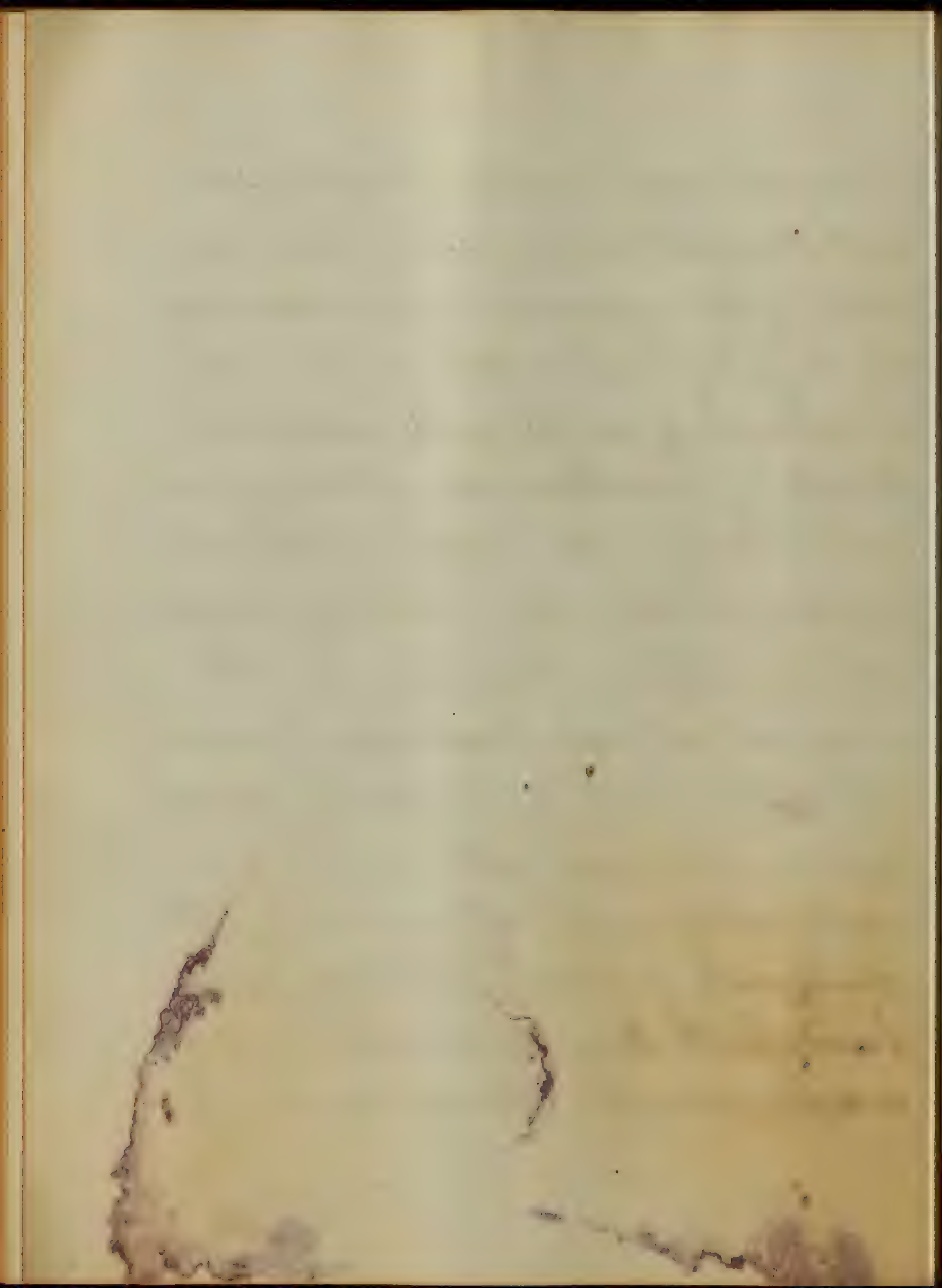


is present irrespective of those cases in which it occurs in approaching convalescence, or approaching death. Observation has shown no connection between this perspiration, and antecedent events. Gangrene is apt to occur in those parts most exposed to pressure, spontaneous gangrene sometimes occurs from arterial thrombosis in all probability. Bed sores are apt to occur upon the nates, hips &c; this may be obviated by frequent turning air pillows etc.

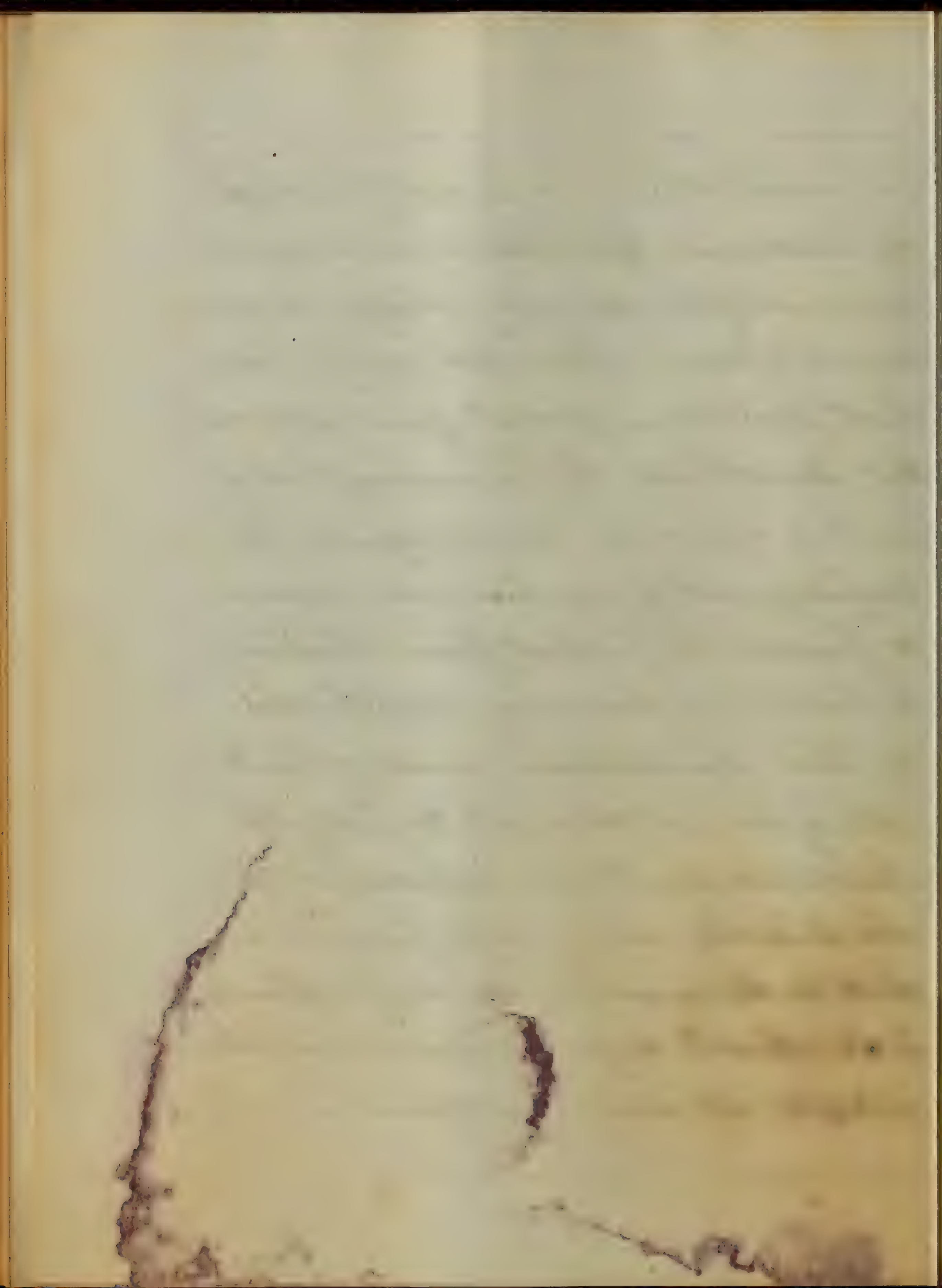
Respiratory System.. Cough is not always prominent as a symptom, but a more or less slight cough, is



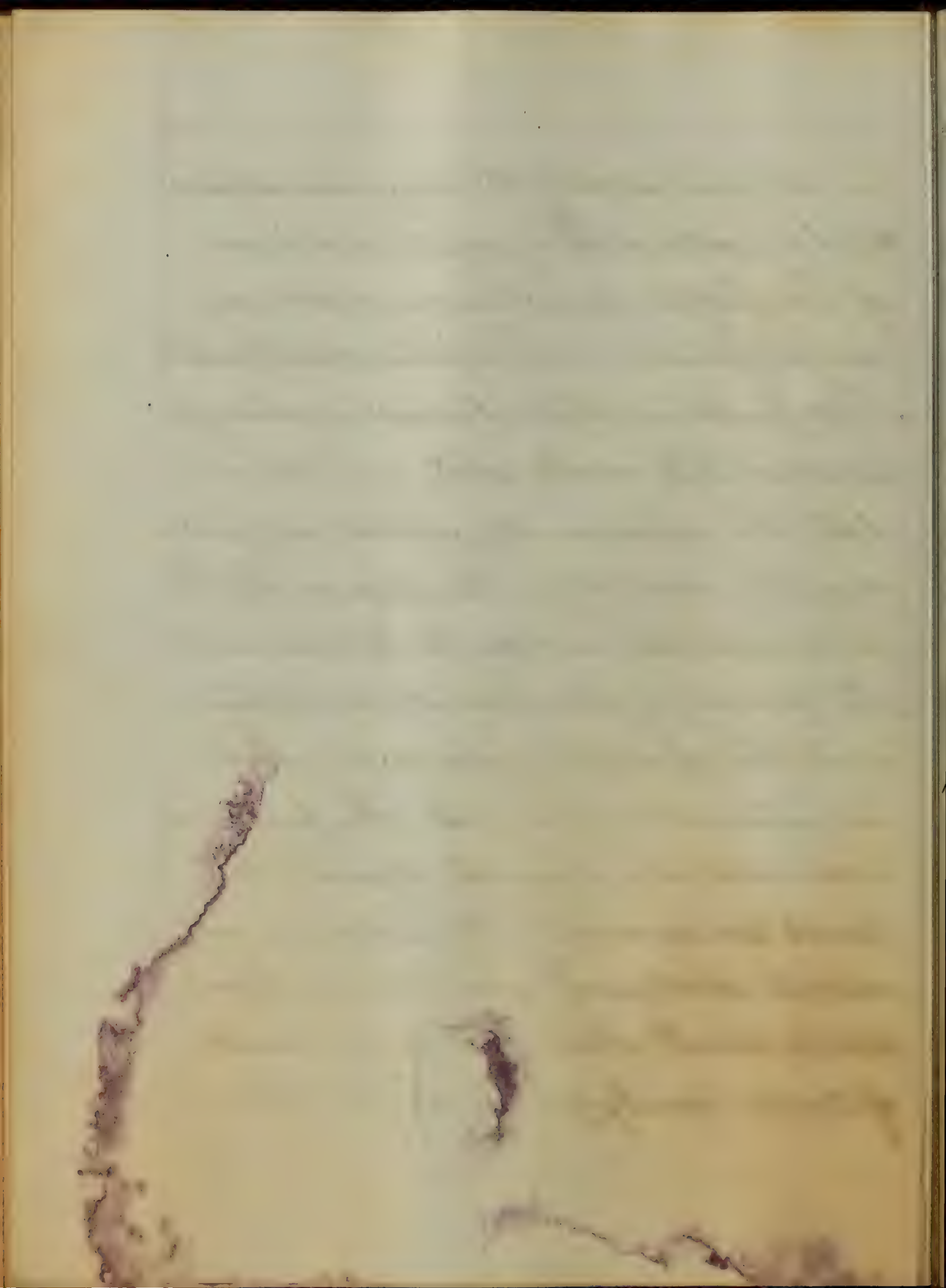
most always present; indicating sub-
acute bronchitis, or in some cases, con-
gestion of the mucous membrane of
the lungs. Pneumonitis is generally
indicated by cough and accelerated
breathing; but these are not always cor-
rect criteria; as the existence of this com-
plication is better determined by the phys-
ical signs. Frequent sighing in the
advanced stages of the disease is gener-
ally a symptom of great gravity; jerking
or spasmodic respiration when un-
complicated, is almost invariably path-
ognomonic of coma, which generally
proves fatal. Convulsions and coma
occurring in this disease, as well as



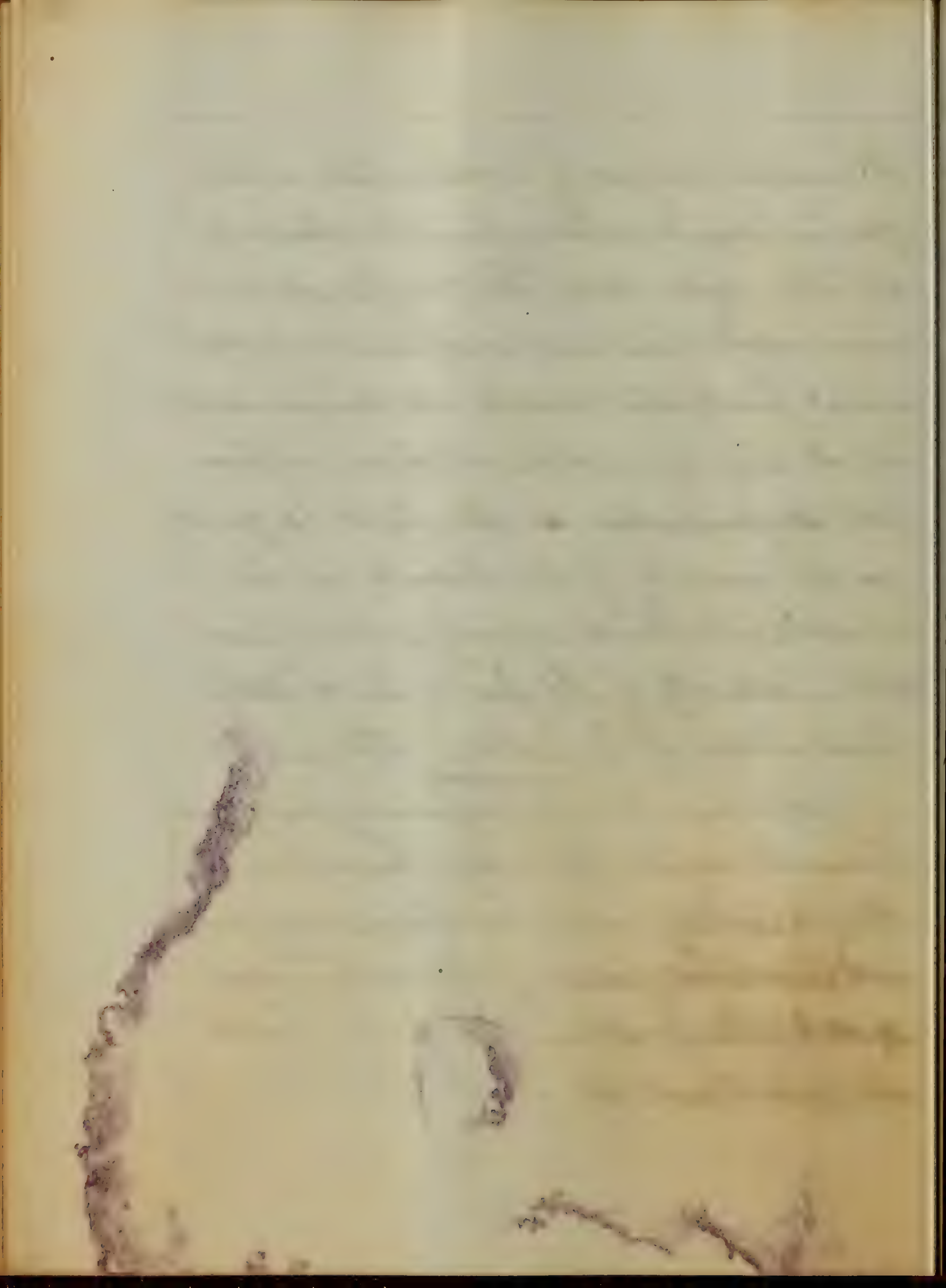
in some others, is probably produced by uraemia. Epistaxis is a symptom in the forming stage, it sometimes occurs after that stage has past, and is in general of no moment. But sometimes the hemorrhage is of such a character, as to require the employment of mechanical means to prevent the patient from bleeding to death, or of becoming so depressed, by this spontaneous mode of blood-letting, as not to be able to rally. The epistaxis exerts no influence upon the disease, as regards prognosis; that is the mere occurrence of it. Should it be allowed to go on unchecked, the results as above mentioned would



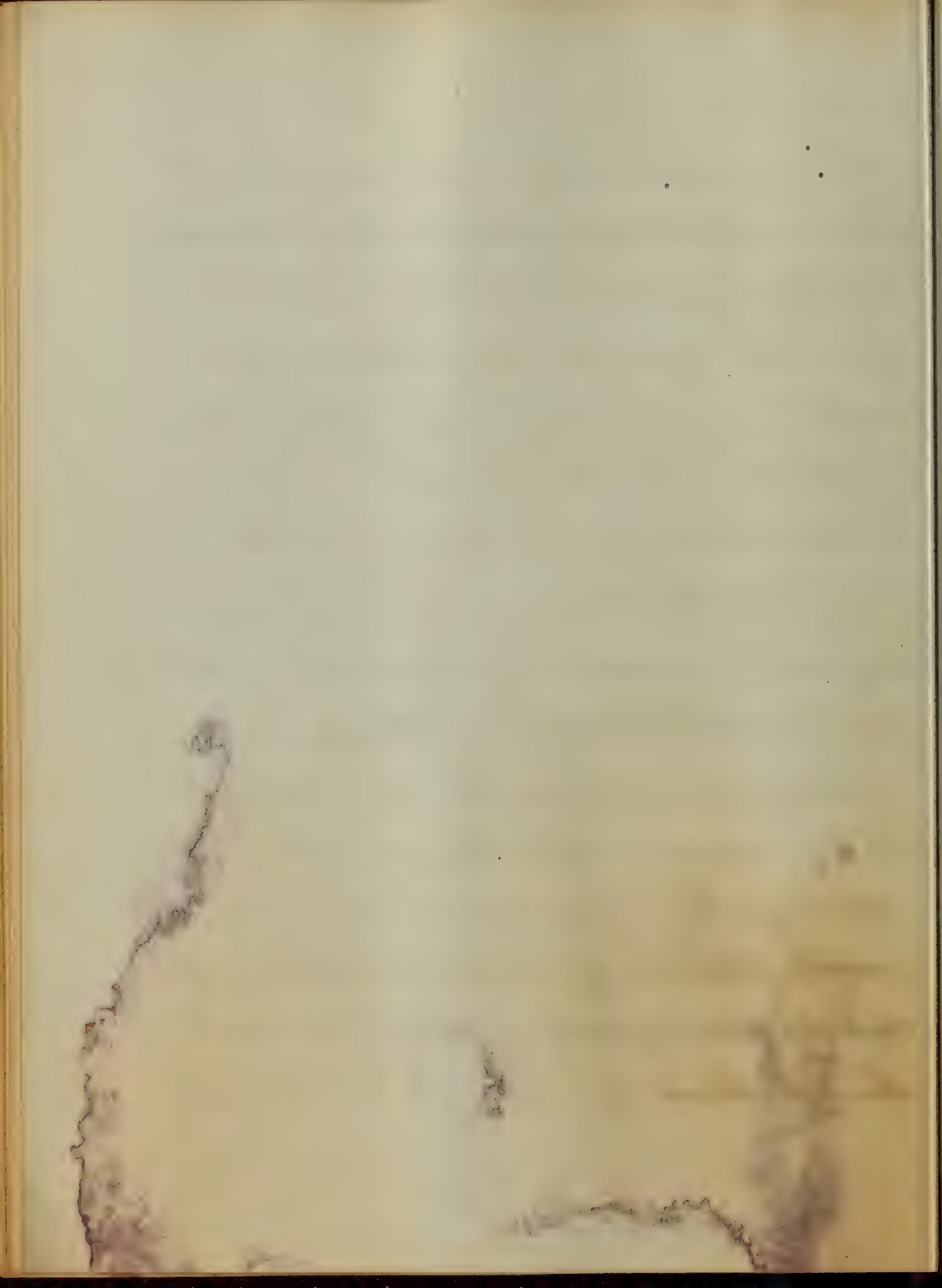
in all probability to very disastrous to the patient. Laryngitis & oedema of the glottis, sometimes occur as complications. – Circulation & temperature. The pulse in this disease is always more or less accelerated, and it indeed the criterion, by which we judge of the severity of the disease. If the pulse reaches 120 beats per minute, the gravity of the disease is extreme; and the danger increases in a proportionate ratio, as the pulse is accelerated or increased beyond this point. Occasionally, the pulse is not much above, and sometimes below the normal standard. Of a number of cases analyzed by Prof A. Flint,



the mean degree of acceleration, was 93. in some others, from 60 down to 40. The rule that the temperature is increased has no exceptions; but in some particular cases, the temperature is as low, if not lower than in health. In proportion as the heat is great, so the gravity of the disease is increased; but death rarely occurs from the intensity of the fever per se. Other peculiarities of the pulse. The pulse in proportion to its increased frequency, sometimes becomes weak, thready & compressible, denoting increased frequency without increased power of the ventricular systole. The first sound of the heart as heard over the apex, is consider-

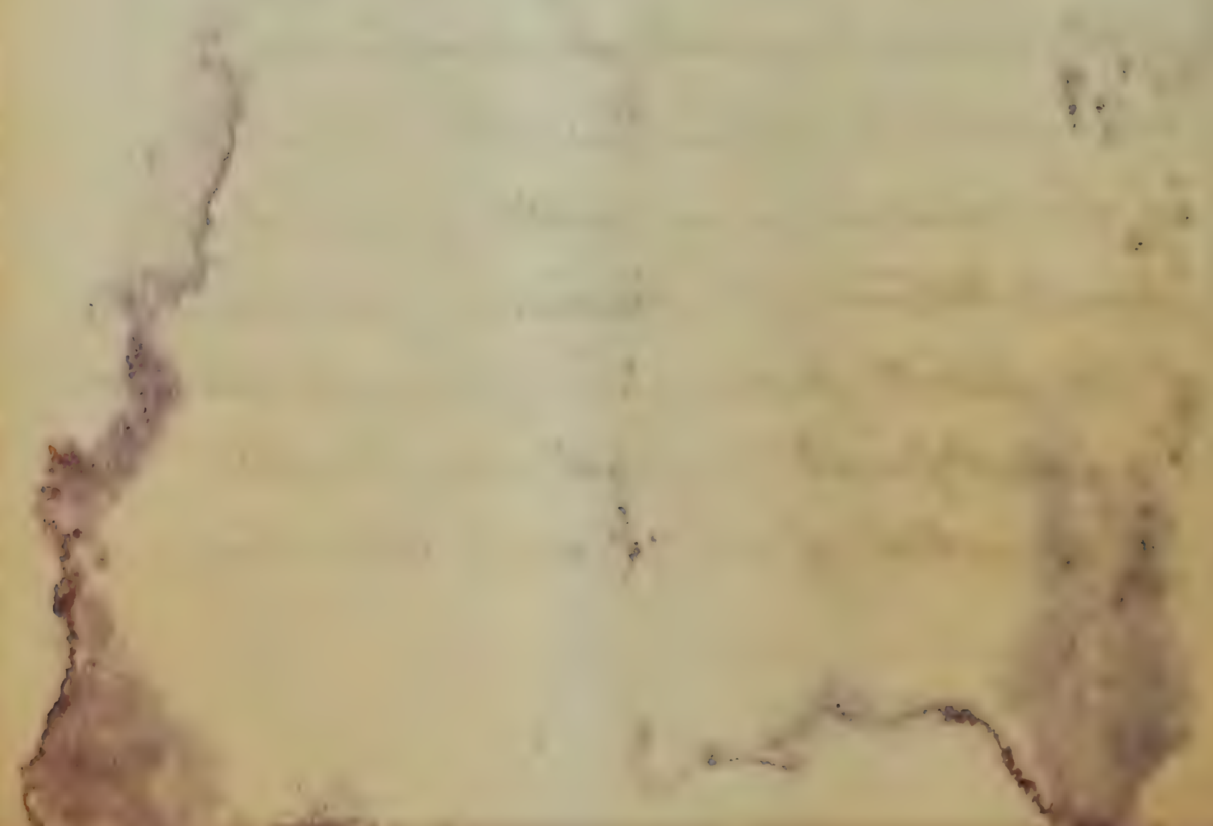


ably reduced, and sometimes almost imperceptible. Sudden rise of temperature almost always denotes the approach of some serious complication, such as pneumonitis, pleuritis etc. The temperature is subject to exacerbations; if the temperature is found to be diminished in the morning, and increased in the evening the prognosis will be favorable; if on the contrary, the temperature is increased in the morning and diminished in the evening the prognosis will be unfavorable; that is, if this is habitually the case; occurring only once or twice, I do not think it could be looked upon

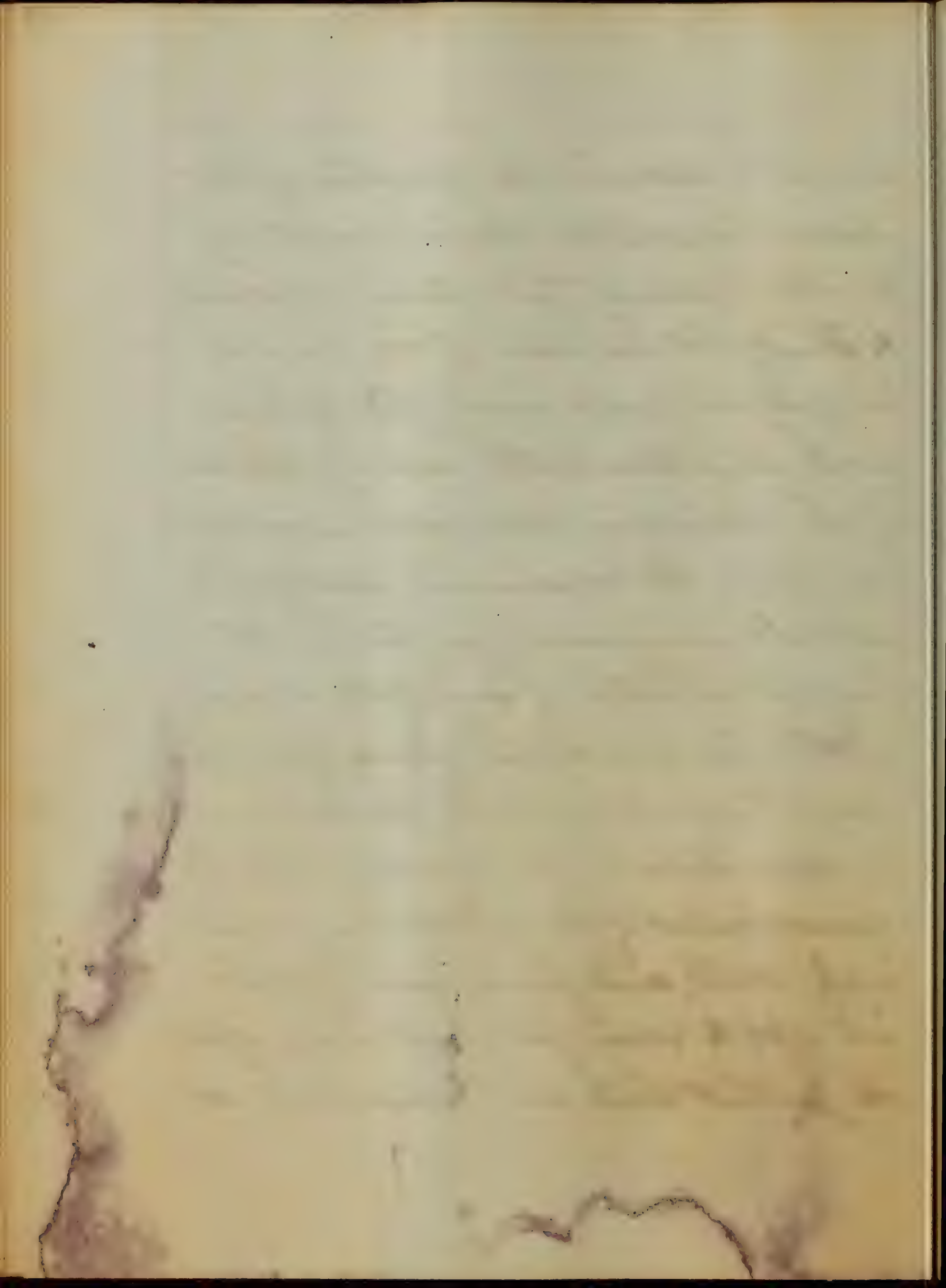


as a symptom of any great moment.
If however, there is a considerable and
habitual increase of the temperature in
the morning, over that in the evening,
a fatal termination may be looked
for. Urine. - In the early stages of
this disease, the amount of urea and
uric acid is more or less increased in
the urine as is also the coloring matter.
The urine is also in some cases scanty &
high colored, albumen is also found in
the urine in some cases, which if it
exist in any considerable amount, is
rather an unfavorable symptom. As
the disease progresses toward a favorable
termination the urine is gradually restored

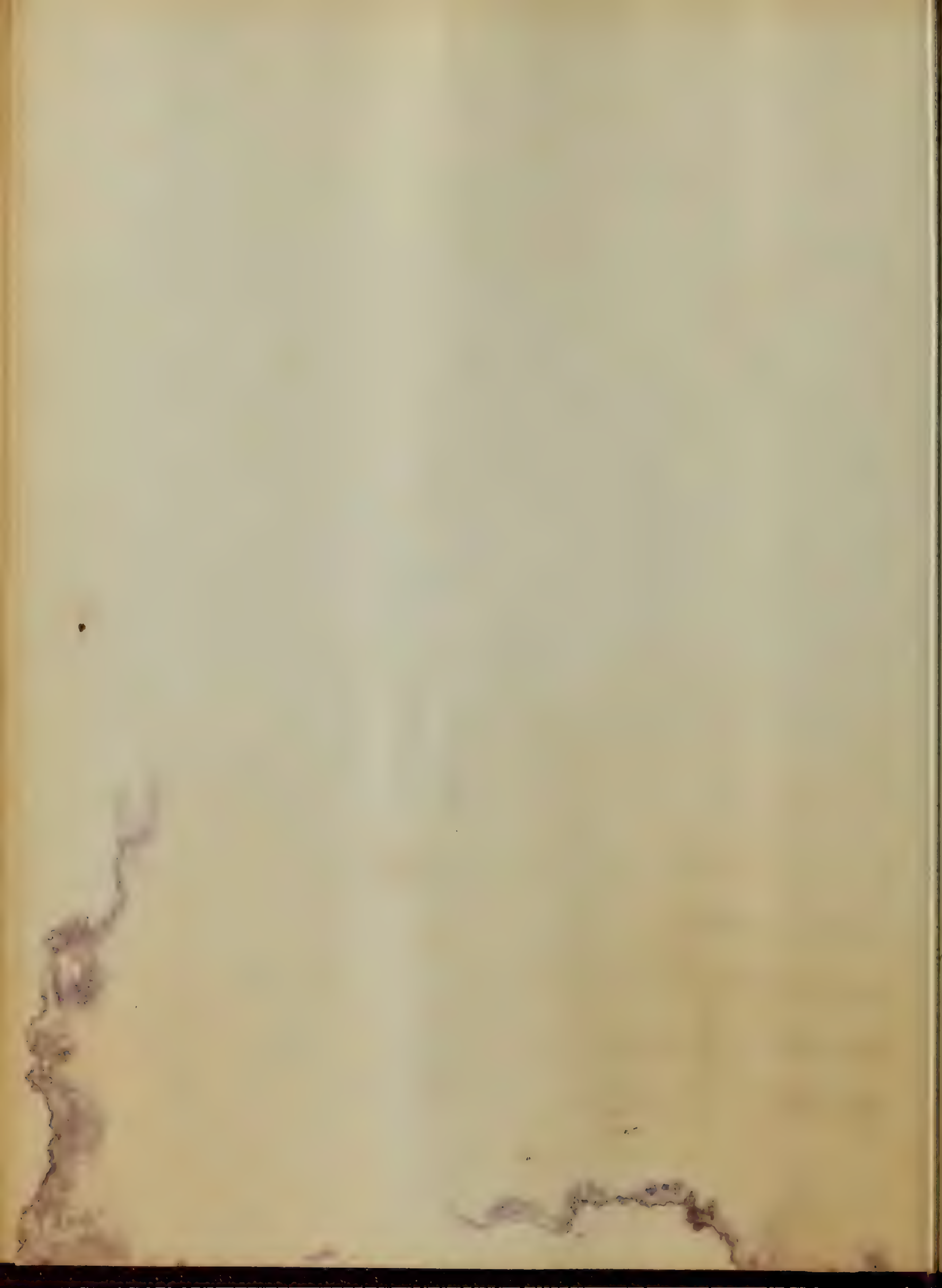
to its normal condition. Albumin in the urine, is considered by Ubeilla, to be due in part to active congestion of the kidneys, and in part to a morbid condition of the blood. If the urea be deficient, which is sometimes the case, uraemic coma may be apprehended. If renal casts are found in the urine, renal disease existing either before, or during the progress of the disease may be suspected. In order to determine the duration of the disease, it is better to select the period between the beginning and end of the febrile paroxysm; of course there is no definite or fixed day for the termination of the disease. According



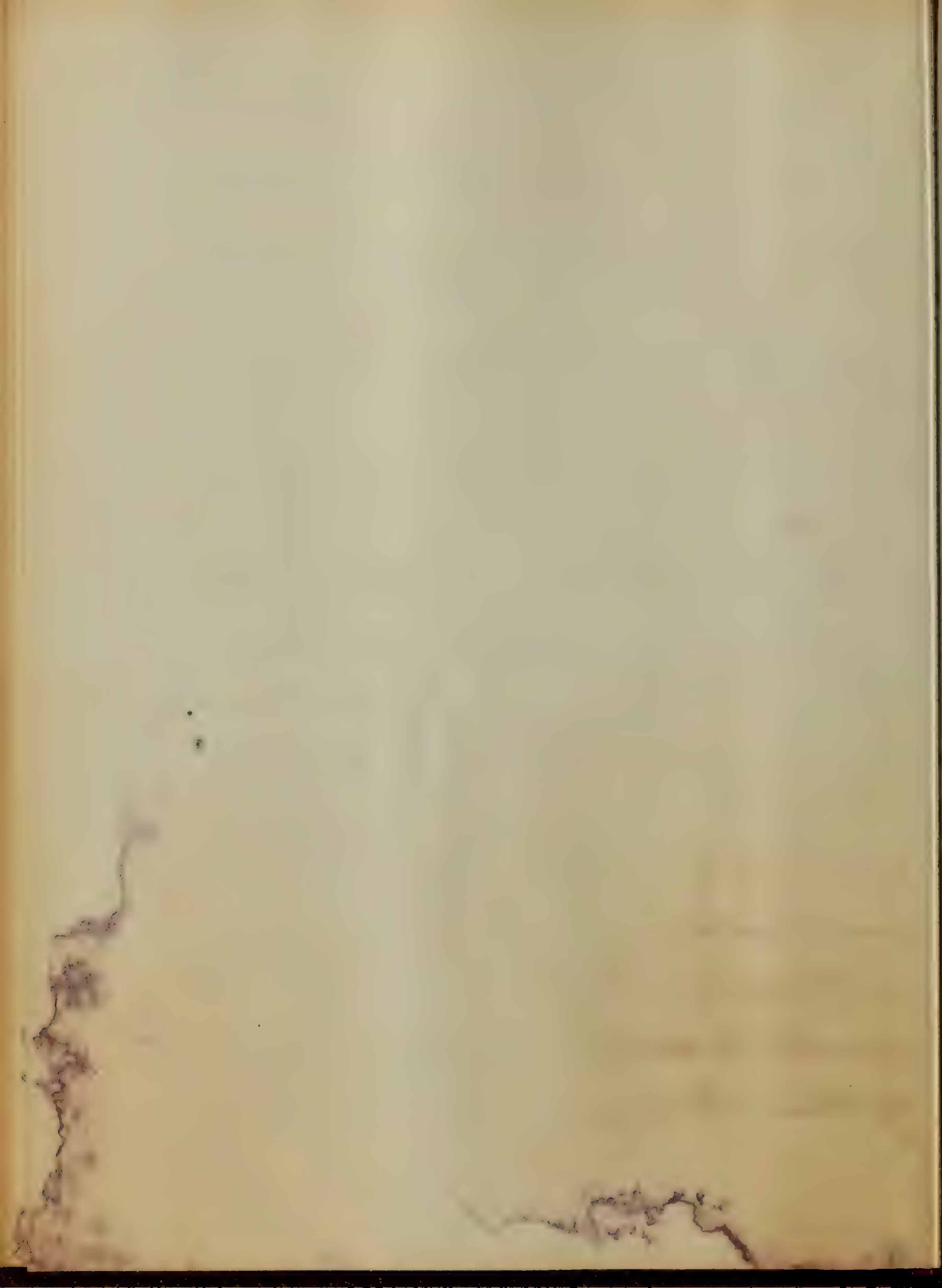
to some observers, the duration of the disease is sixteen days, according to others twenty four days, according to Hunt, the duration of the disease in forty two cases analyzed by him was as follows: The average duration of the disease in these cases was sixteen days, the maximum twenty eight, and the minimum five days; the longest duration of any case occurring under his observation being fifty eight days. Convalescence is seldom rapid in this disease, the recovery like the commencement of the disease being exceedingly slow, and paroxysms of fever are apt to occur for some days after the patient has been considered con



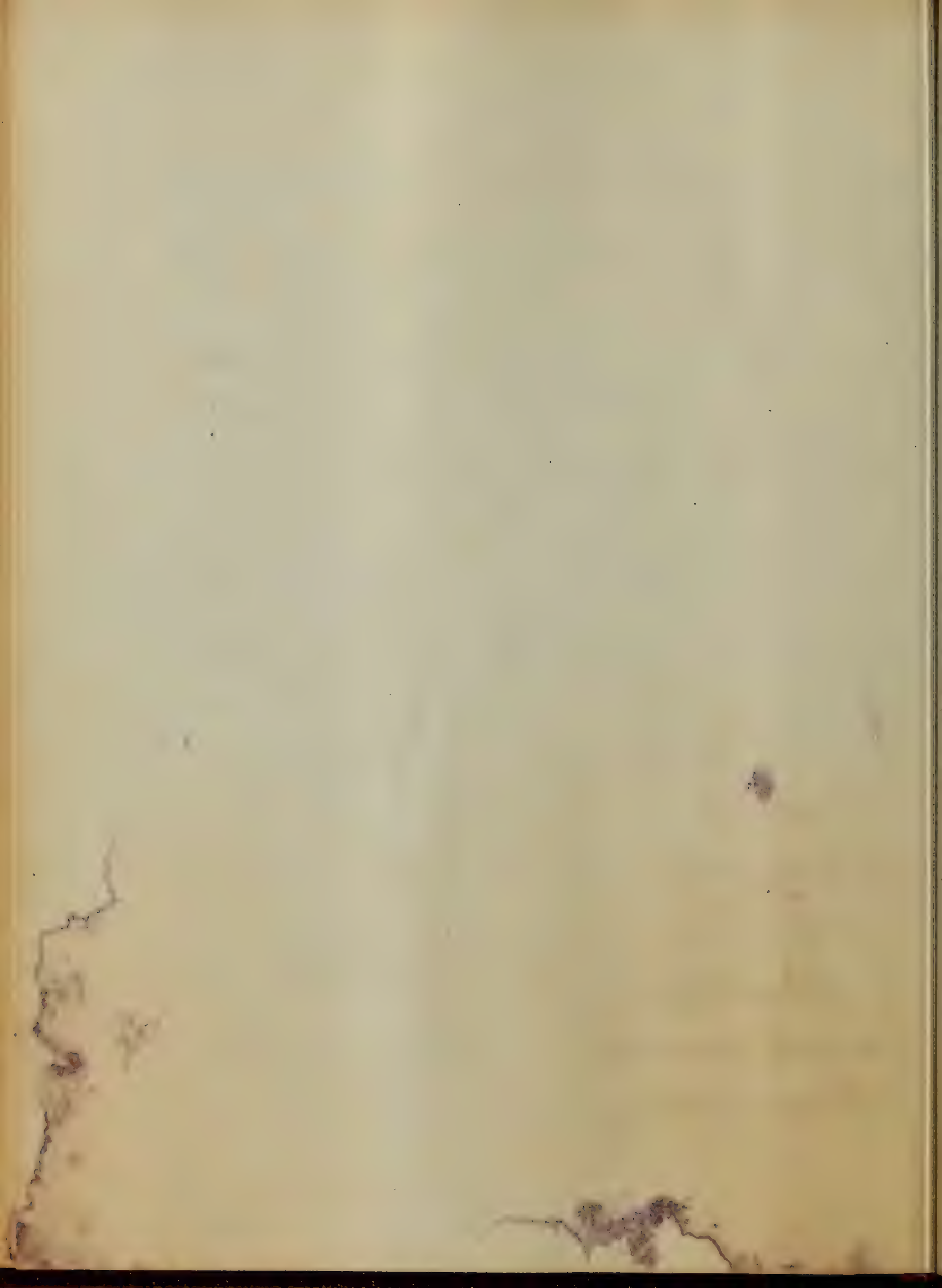
valescent. More or less fever is produced by the change of diet from the liquid to the solid form. More or less fever is also apt to occur as the result of complications after the fever proper has subsided. Sudden reduction of temperature, or complete defervescence when there are no complications, and when not followed by hemorrhage from the bowels is in general a sure sign of convalescence.- These are sometimes complicating diseases.- rubeola, scarlatina, diphtheria, and in some cases, the disease is associated with typhus. Pulmonary tuberculosis, and sub-cutaneous abscess occasionally occur as sequels. Death by slow asthenia sometimes takes



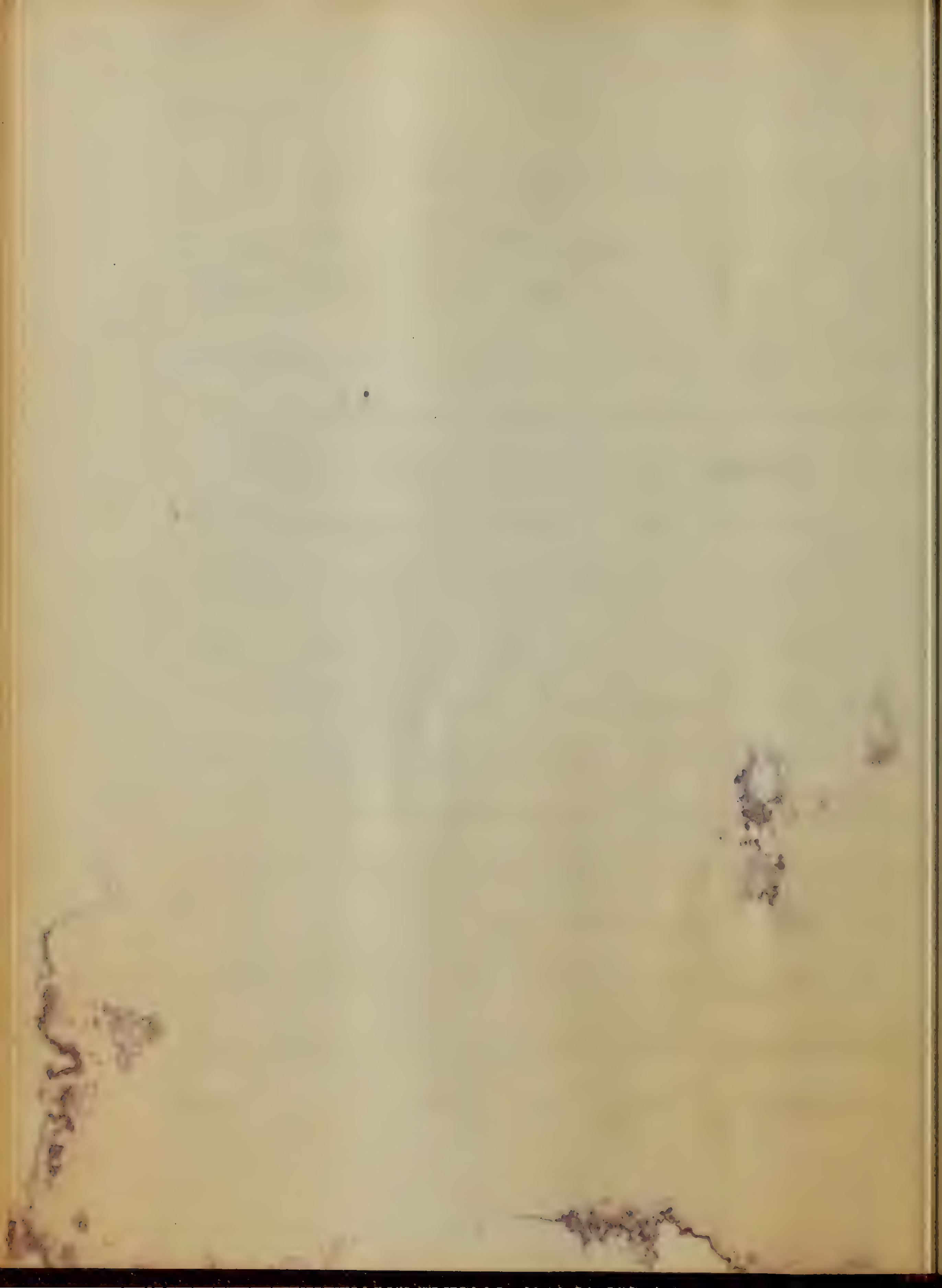
-ised. Often however, the assimilative functions are more active after recovery than ever before; the patient gaining not only in weight, but in strength.
Causation. = Typhoid fever is not confined to any particular country or district, it is endemic in all parts of the world. It has a decided preference for the young, generally attacking those, whose ages range from twenty five to thirty. The liability to the disease diminishes, as the patients exceed this age. It rarely occurs in persons who have attained the age of fifty years; though a case has been reported as occurring at the age of fifty three. It is generally believed that



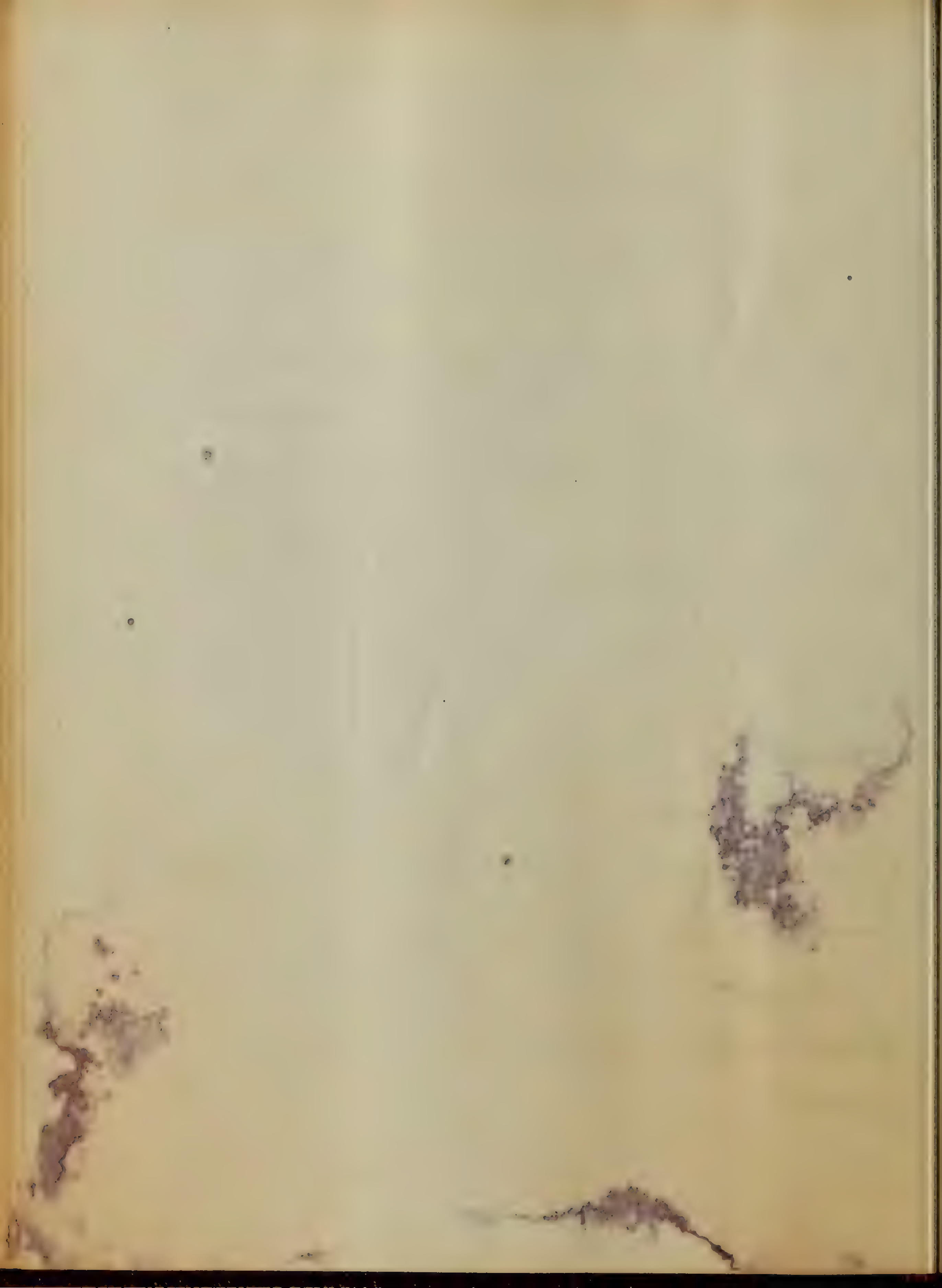
the functions of the pyerian glands
cease as the patients advance in age,
hence the absence of intestinal le-
sions in these cases. Cases of so-call-
ed remittent fever, are very often cases
of typhoid. As regards sex, males
and females are affected in about
equal proportions. Occupation, social
position, habits of life etc, exert appa-
rently no causative influence. The peri-
od of incubation generally occupies
one or two weeks, though it does
not exceed one or two days in some
cases. This disease is not proper-
ly speaking contagious; that is it
is not generated by actual contact.
The causative influence whatever it



may be, is generated outside of the body and produces its effect through absorption into the blood. What this causative influence is, has as yet not been ascertained, some supposing it to be putrescent matter, others suppo-sing it to be the result of vegitable de-composition, and others again suppo-sing the germs of the disease to be trans-mitted, through the agency of the al-vine excretions, the emanations from these excretions contaminating the water drawn from wells in locali-ties in which the disease is prevalent. The disease sometimes arises spon-taneously. In view of this fact, and in view of the fact that unclean[illegible]

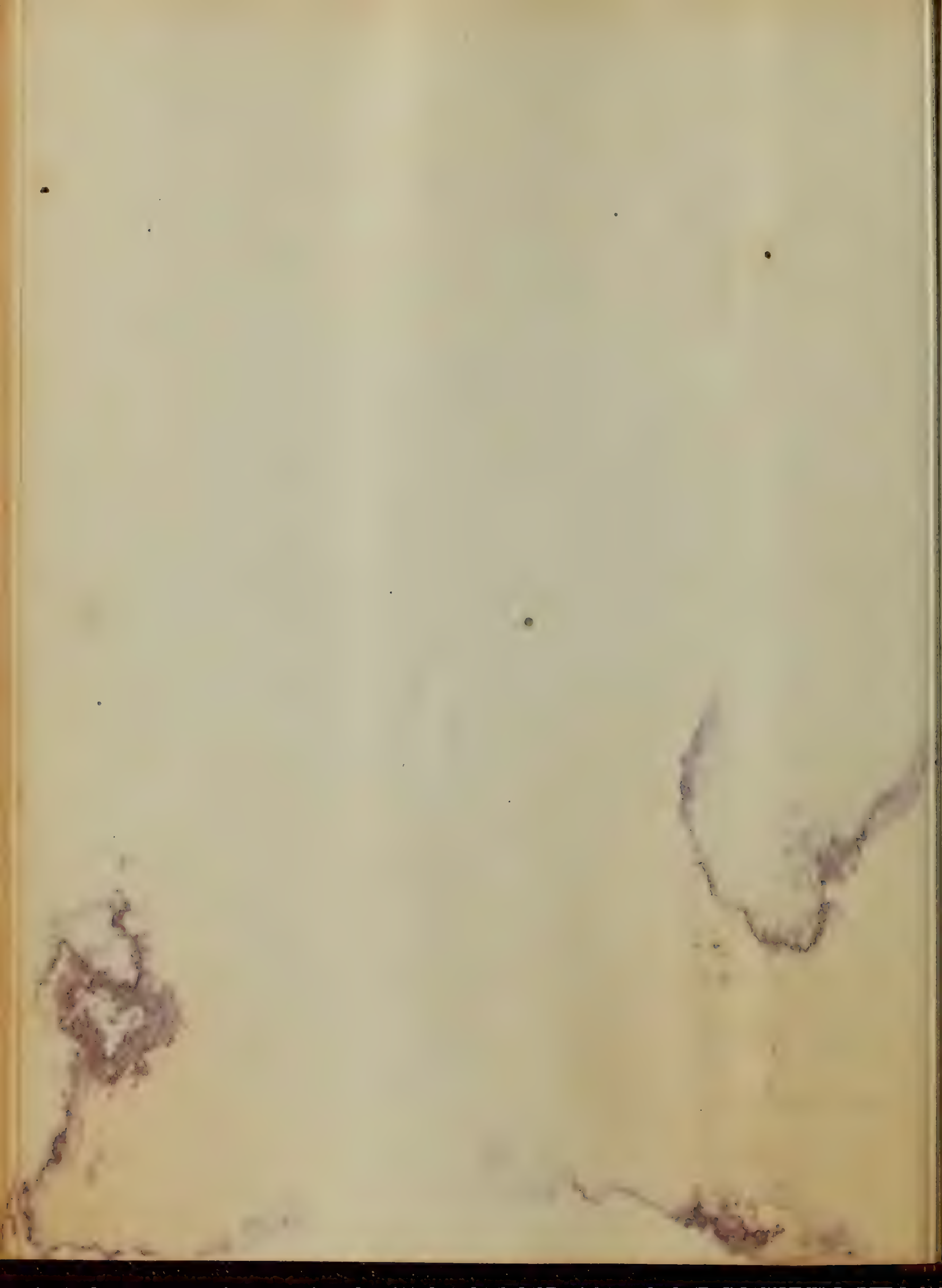


in cities and large towns, in the form of filthy streets, decaying matter, animal as well as vegetable, badly trapped sinks, collections in waste pipes etc, may act as auxiliaries to the producing cause of the disease, it is right and proper, that they should as far as possible be removed, so that the appearance of the disease in any locality, may be prevented from diffusing itself throughout the whole community. If these precautions are carefully observed, the disease may be prevented from making any headway, or at all events, very little, and thus, many valuable lives may be saved.

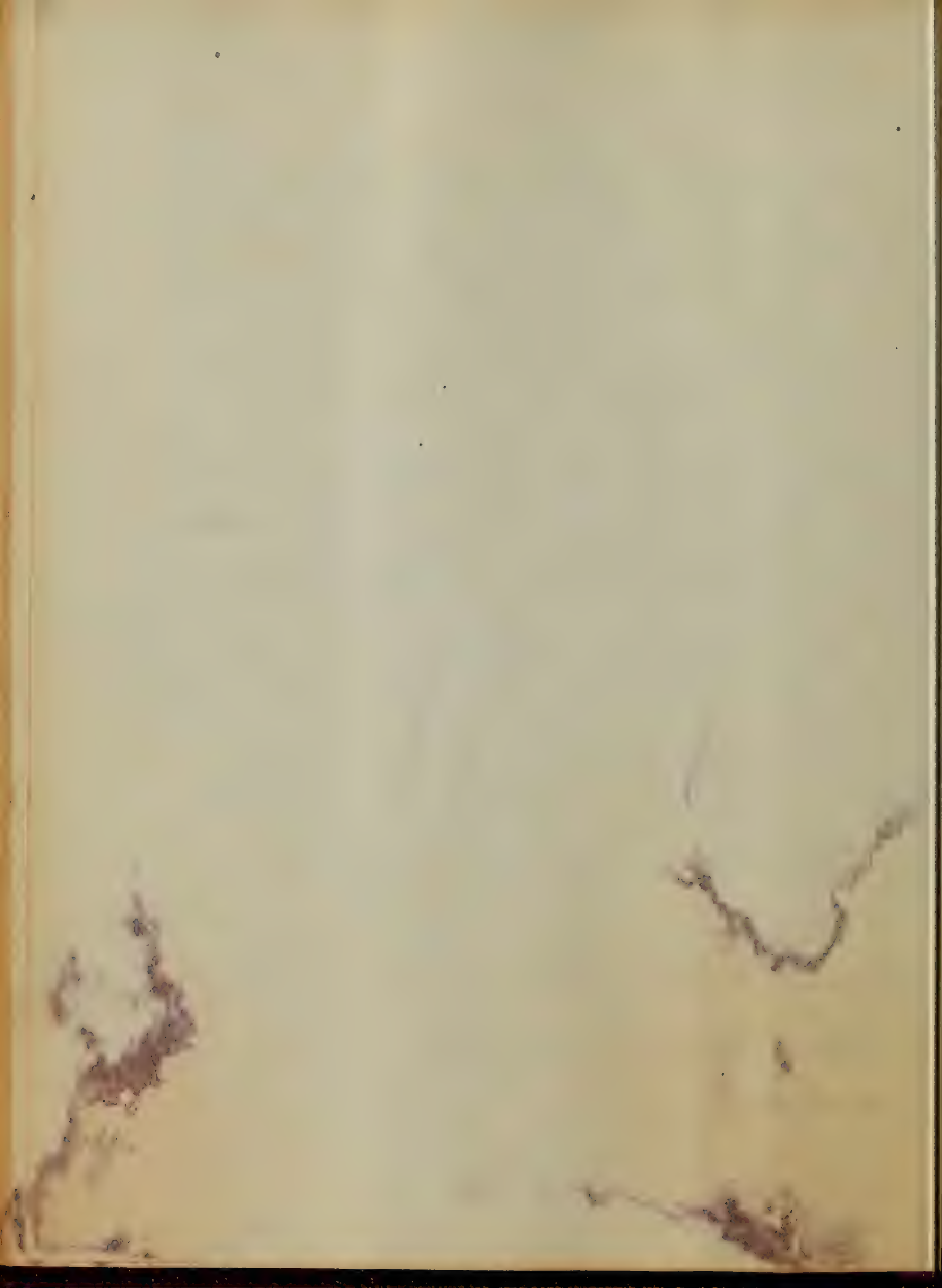


Diagnosis.– In diagnosticating typhoid fever, it is important that a recognition and distinction of symptoms which do not belong to the clinical history of this disease should be made. There are some points in the clinical history of typhoid fever, which are of importance in making the diagnosis. Among these may be mentioned, first the acute or forming stage, second increased heat of skin, which continues to increase regularly for the first three or four days, and an increase to 103° F. during the second week. It also involves discrimination from typhus and remittent fever. The local affections with which this disease is liable to

be confounded are; pneumonitis, pleuritis, acute tuberculosis, meningitis and enteritis.- Accuracy in diagnosis, requires an intimate acquaintance with all diseases for which this disease may be mistaken, and also with all the essential fevers.- Acute meningitis is distinguished from typhoid fever, by the intensity of the cephalalgia, with intolerance of light, and sound, early vomiting, and high and active delirium; the delirium in typhoid fever, being of the passive character. Pneumonitis is distinguished from the disease in question by the accelerated breathing, and if the obstruction be great, considerable dyspnoea, crepitant rales in the first stage.



rusty colored sputa etc. Typhoid pneumonia is distinguished from typhoid fever by the existence of the symptoms and signs of pneumonia, prior to the development of the typhoid phenomena. Acute tuberculosis is distinguished by constant cough, abundance of rales, and if there be solidification; a dull, flat, or cracked-pot sound, & if cavities exist cavernous respiration. There is also extreme pallor and emaciation. This disease is liable to be mistaken for enteritis in children, but with care this error in diagnosis should not be made. The thermometer in this disease is of inestimable value in diagnosis, as it indicates the chan-



gies in temperature which are so characteristic of this disease. If the temperature should be, 102° or 103° in the morning, and 103° or 105° in the evening, the disease will be typhoid fever; if on the contrary, the temperature declines, during a period too short for the development of the disease, we are not dealing with typhoid fever. The symptoms which are invariably present in typhoid fever, are cephalalgia, abdominal tenderness, tympanites, epistaxis, diarrhoea with ochre coloured discharges, hemorrhage from the bowels, and the eruption. With the exception of one of these symptoms viz the eruption, the above-mentioned may be relied upon in making out*

* I should make another exception in regard to the hemorrhage from the bowels, this not occurring regularly, in cases in which recovery takes place.

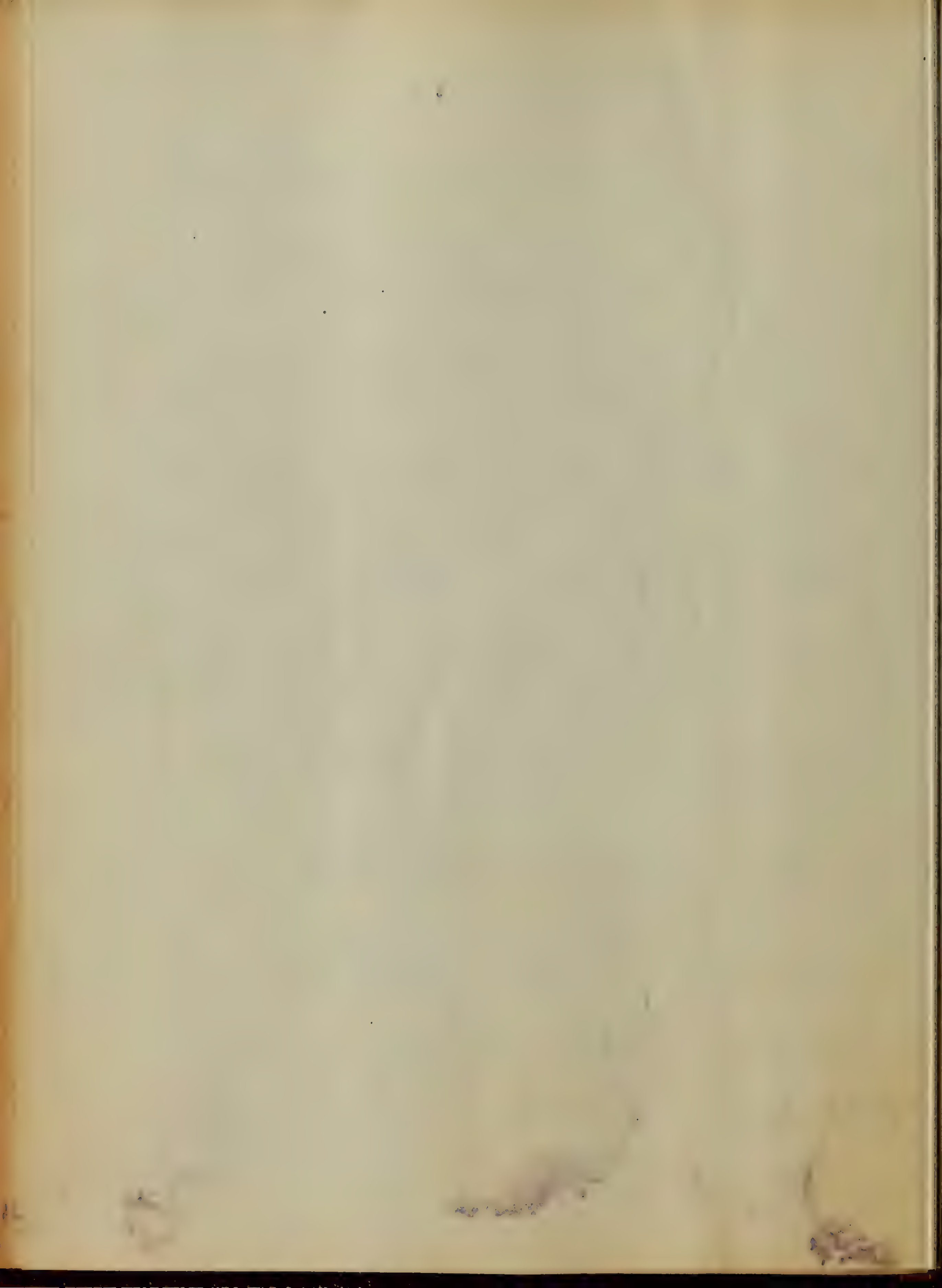
the diagnosis. Paramount to them all however, is the length of the forming stage, and the intensity of the febrile phenomena. - Prognosis. This disease rarely proves fatal per se; a fatal issue in almost all cases being due to complications. The most frequent being, pneumonitis, peritonitis, perforation and hemorrhage. Coexisting disease as for example chronic disease of the kidneys, or any other disease that greatly debilitates the patient prior to the typhoid attack*. It is a fact worthy of observation however, that robust and healthy persons are more apt to succumb to the disease than those who are not so strong. Death sometimes takes

*will also help to render the prognosis unfavorable.

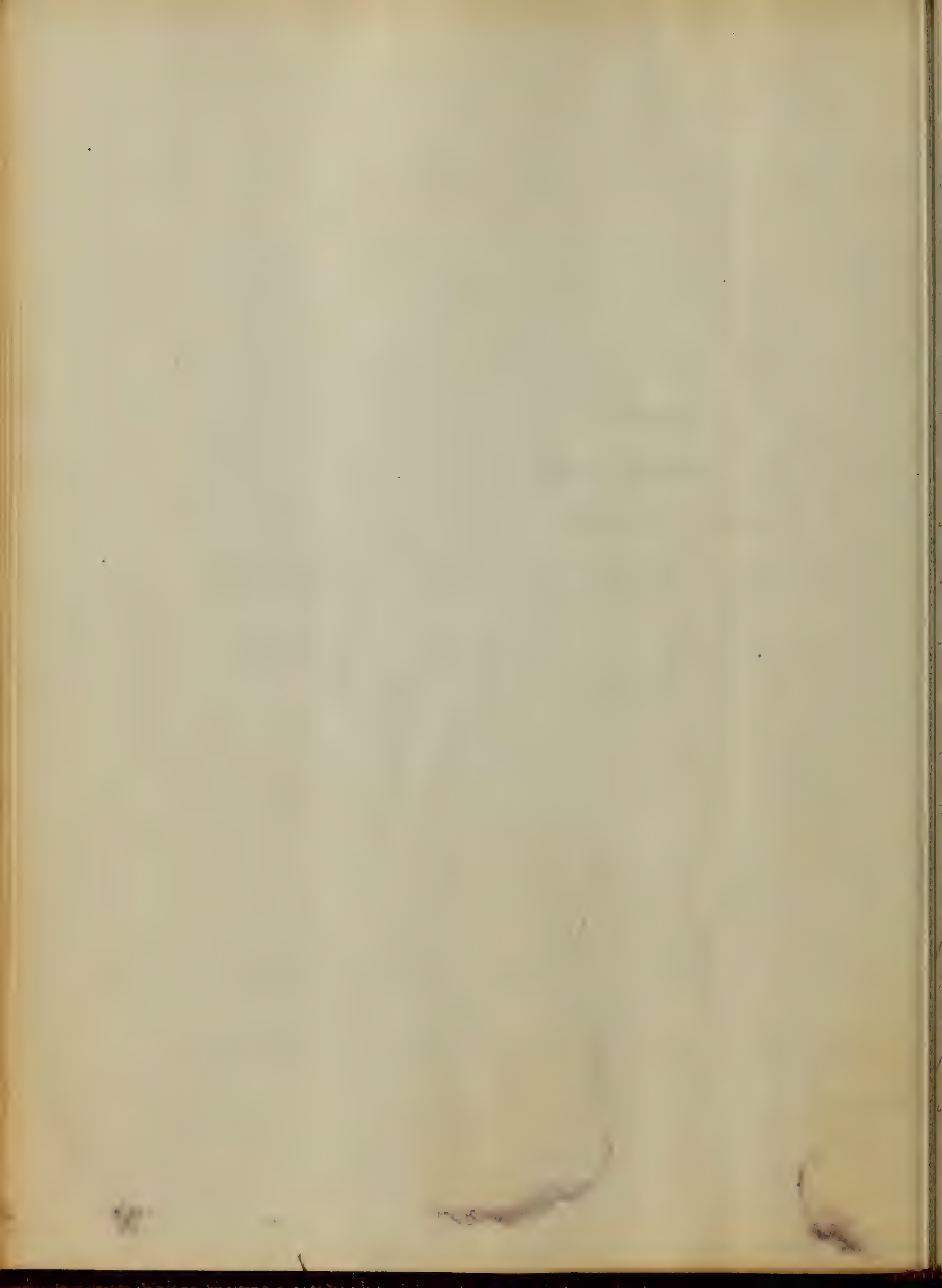
place from these asthenia, in cases in which there exists uremic coma op-posed is often combined with the asthe-nia. Carphologia, subsultus tendinum and active and wild delirium are ominous. When the pulse is small, frequent, and compressible, with weak-ness of the first sound of the heart, the condition of the patient may be consid-ered as dangerous in the extreme. In fact these symptoms often betoken the approach of death. Cases characterized by great prostration are also likely to prove fatal. Pneumonitis though rather a serious complication, does not preclude recovery in most cases, provided it be con-fined to one lobe of either the right or left lung.

The rise of the axillary temperature to 105° indicates great gravity of disease, and if the temperature reaches 107° or 108° the disease must almost inevitably prove fatal. A favorable prognosis may be given, in those cases in which the adynamia is not great, the ataxic symptoms mild, and the complications not serious. A sudden fall of temperature below the natural standard, is rather a grave indication, in some cases, as it is sometimes a forerunner of hemorrhage from the bowels. The physician should always be guarded in giving a favorable prognosis in any case; as the disease sometimes proves fatal after the patient has apparently recovered. It should also

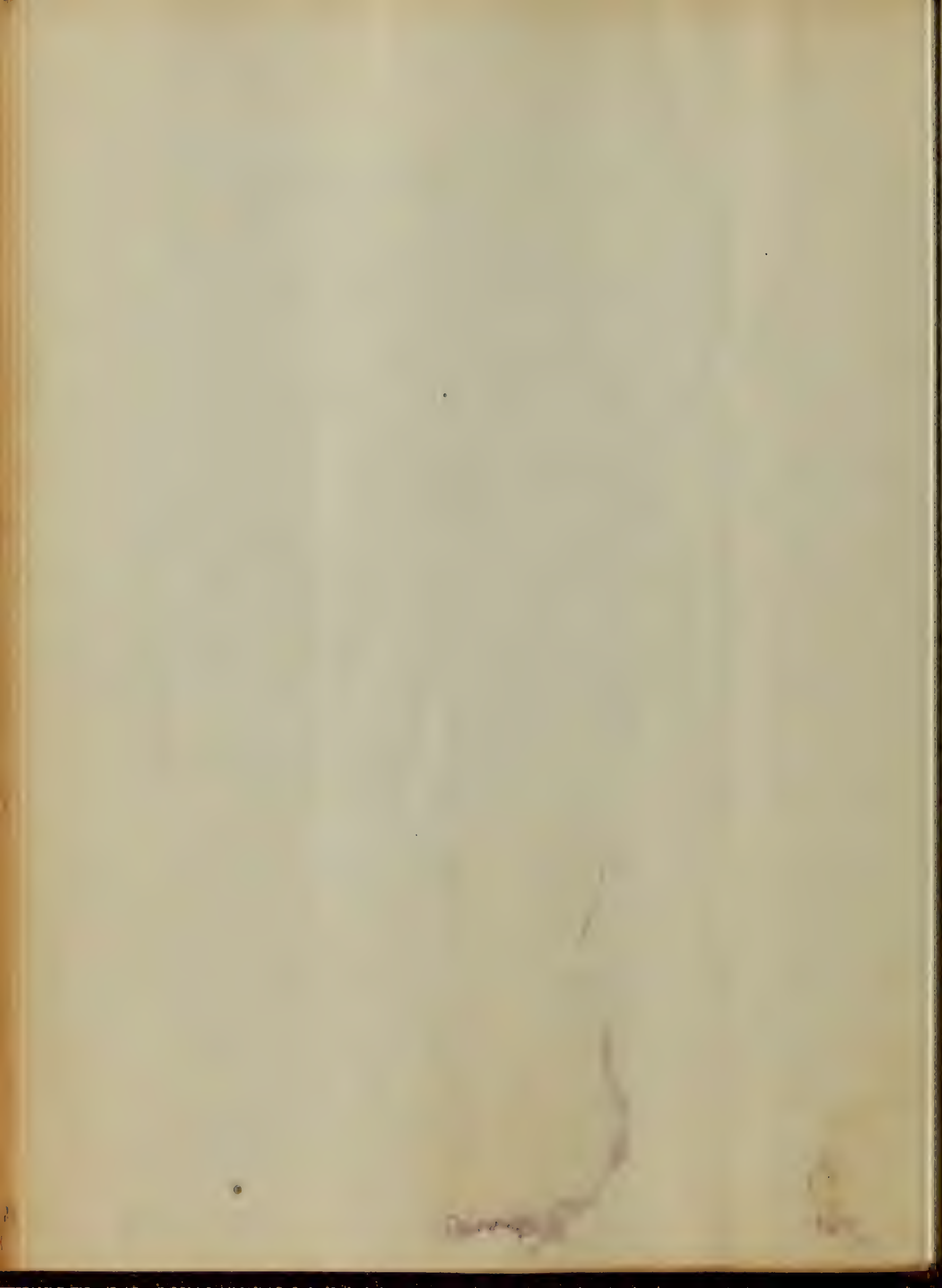
be born in mind, that a fatal issue is just as apt to occur in mild, as in severe cases. On the other hand, recovery has taken place, when the symptoms were of the gravest character. Treatment There are no known means at the present time, to be used as prophylactics in this disease. Quinia opium and hydropathy have been resorted to with little or no success. But these remedies, though they will not cut short the disease, will do much toward mitigating the symptoms. Calomel during the first week has been recommended by some authors, as a prophylactic remedy. Among the antipyretic remedies quinine, opium, digitalis, and the aconi-



rum [illegible] can be used. Digitalis quiets the hearts action, and is therefore indicated when the fever is high; the pulse full and strong, and the axillary temperature, as shown by the thermometer, being 103° or upward. The hydropathic treatment may be used with benefit; the mode of application is as follows: An india rubber cloth is laid upon the floor, over this a blanket is laid, a sheet thoroughly wetted is laid upon the blanket, the patient is then removed from his bed, enveloped in the sheet, and allowed to remain there, from a few minutes to half an hour; he is then carefully wiped, and placed in bed again; in the course of an hour or



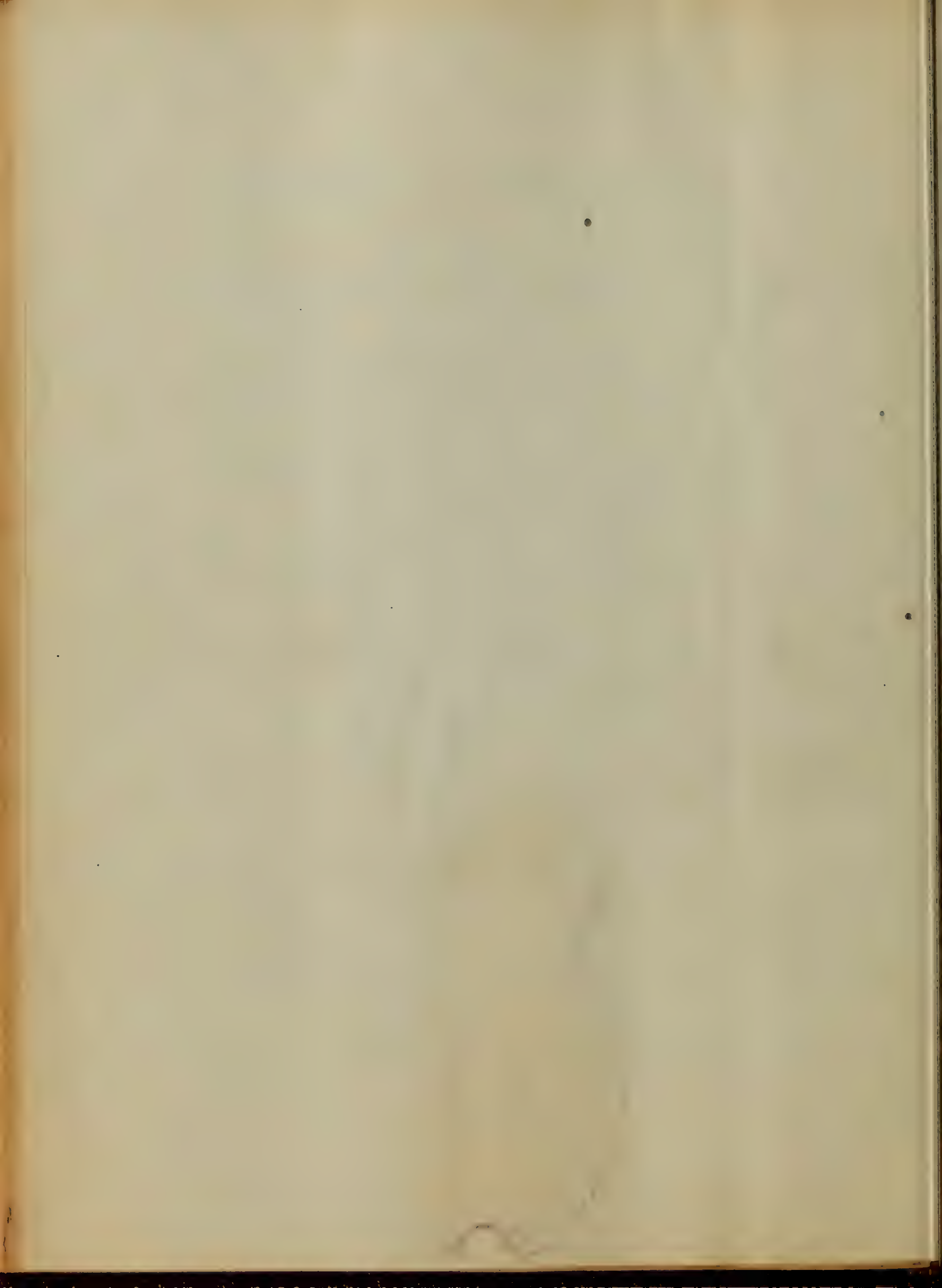
so, he may be dried off before the bath. Should the pulse be feeble, a stimulant may be given, either before, or after the patient has been returned to his bed. There can be no doubt as to the utility of the hydropathic treatment, applied in this way. A milder mode of applying cold to the surface, is to sponge the body with cold water, or with cold water and vinegar; the temperature of the water should be about 65° or 70° F. The temperature (of the body) after this treatment will be diminished one or two degrees; the treatment can be repeated two or three times in the day if necessary, provided it does not fatigue the patient, in the latter event it should be resorted to less frequently. Among



the internal remedies, the mineral acids have been recommended as exerting a curative influence in this disease. Some recommend the phosphoric acid, given in doses of 15 minims every four hours. The hydrochloric acid has been recommended by some, a mixture of hydro-chloric and nitric acids given in the proportion of 20 drops of the former, to 10 drops of the latter [illegible] every two or three hours. These acids may be made agreeable to the patient, by being given in simple syrup, or syrup of orange peel. Prof. Flint of New York has been very successful in the treatment of typhoid fever, by the administration of sulphuric acid; there can be no doubt

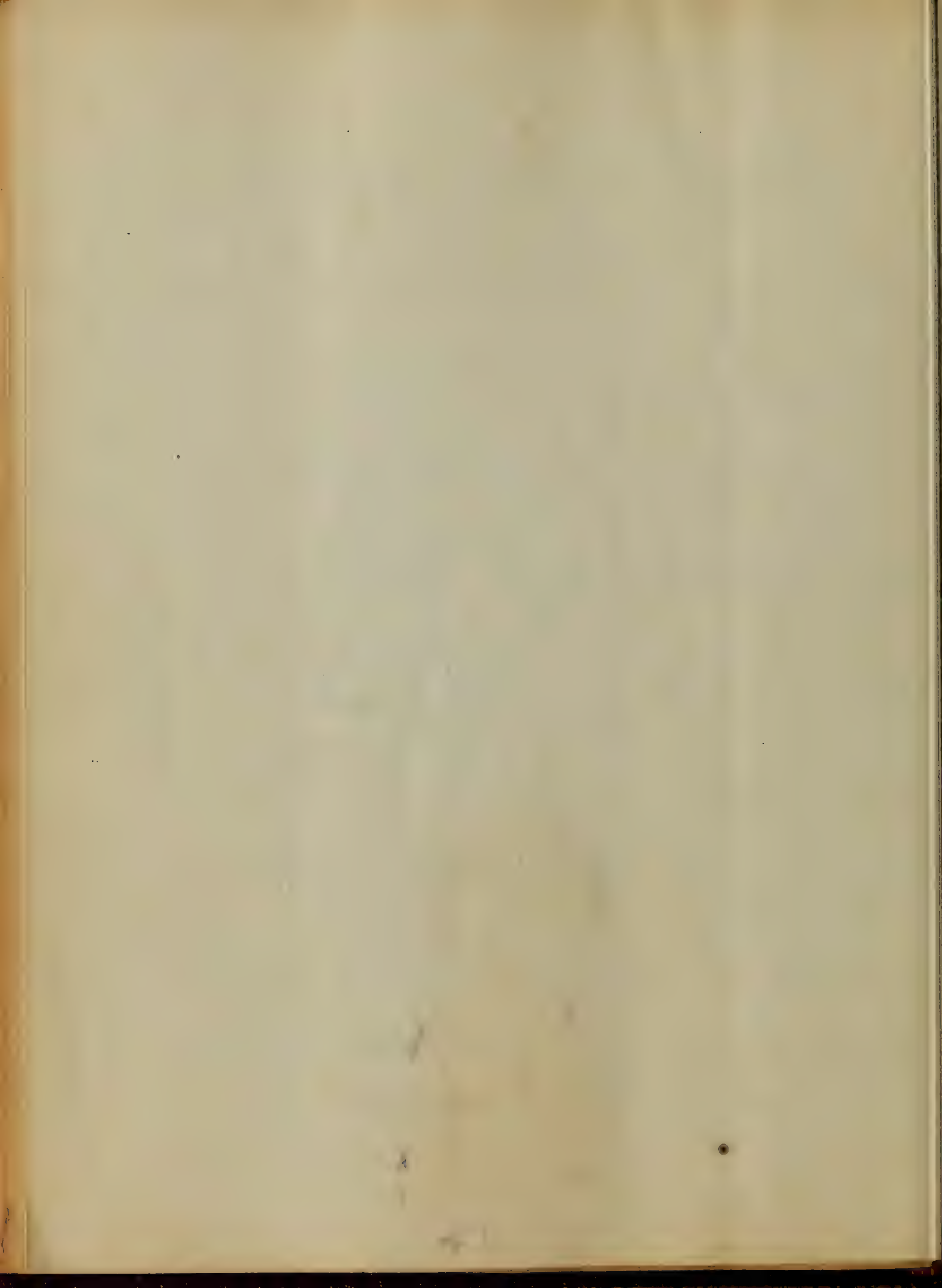
as to the efficacy of this mode of treat-ment. *Turpentine is highly recommended by Prof. G. B. Wood, when the tongue is dry, parched, and fissured, indicating, either the commencement (or the existence) of, ulceration. It seems according to this author, to exert a remarkably soothing and healing effect upon the ulceration. Along with these remedies the patients strength should be sustained by bland and nutricious aliment. Among the complications, cephalalgia claims special treat-ment, which consists of cold applications to the head, in the form of ice water, vinegar and water, and in some cases the ice cap may be employed. Opium in cases of this kind is rather contraindicated ~~the~~

* The turpentine should be given in doses, of from five to twenty minims, in mucilage, every hour or two, until the the desired object is accomplished.



than otherwise. Vigilance should be con-
trolled by opiates, either in the form of the
preparations of morphia, or when the vigilance
is not is not very great, the tincture of opium
might be used with advantage. Delirium
when moderate does not call for treatment;
but when active and persistent, should be
treated with remedies which are indi-
cated in such cases. The tincture of digitalis
is in half drachm doses has been found
useful in some cases. Dr Mory found
this remedy useful given hourly for se-
veral successive hours, about two ounces
being taken in thirty hours; the remedy
apparently producing no injurious effects.
In some cases of active and persistent
delirium good has been accomplished by

the employment of Opium; combined
with antimony; from the 16th to the 8th
of a grain of the Antimonii et Potassae Tart
given every hour or two, until the pa-
tient is relieved. Should vomiting occur,
the remedy should be immediately sus-
pended. Should there be great prostration
the patients should be sustained by
stimulants, their strength to be regulated,
according to the necessities of each indi-
vidual case. In addition to these va-
rious modes of treatment, the patient
should have as much pure air as pos-
sible, and to prevent the spread of the dis-
ease, the excretions should be imme-
diately removed from the apartment in
which the patient is confined. After



convalescence has been obtained, the patient should begin gradually the use of strong and nourishing food, but should not be allowed to eat too heartily owing to the debility of the digestive organs. As the patient gains strength, active but not exhausting exercise should be taken. Observing these precautions, the patient will gradually attain his wonted strength, provided no fatal complication supervene.

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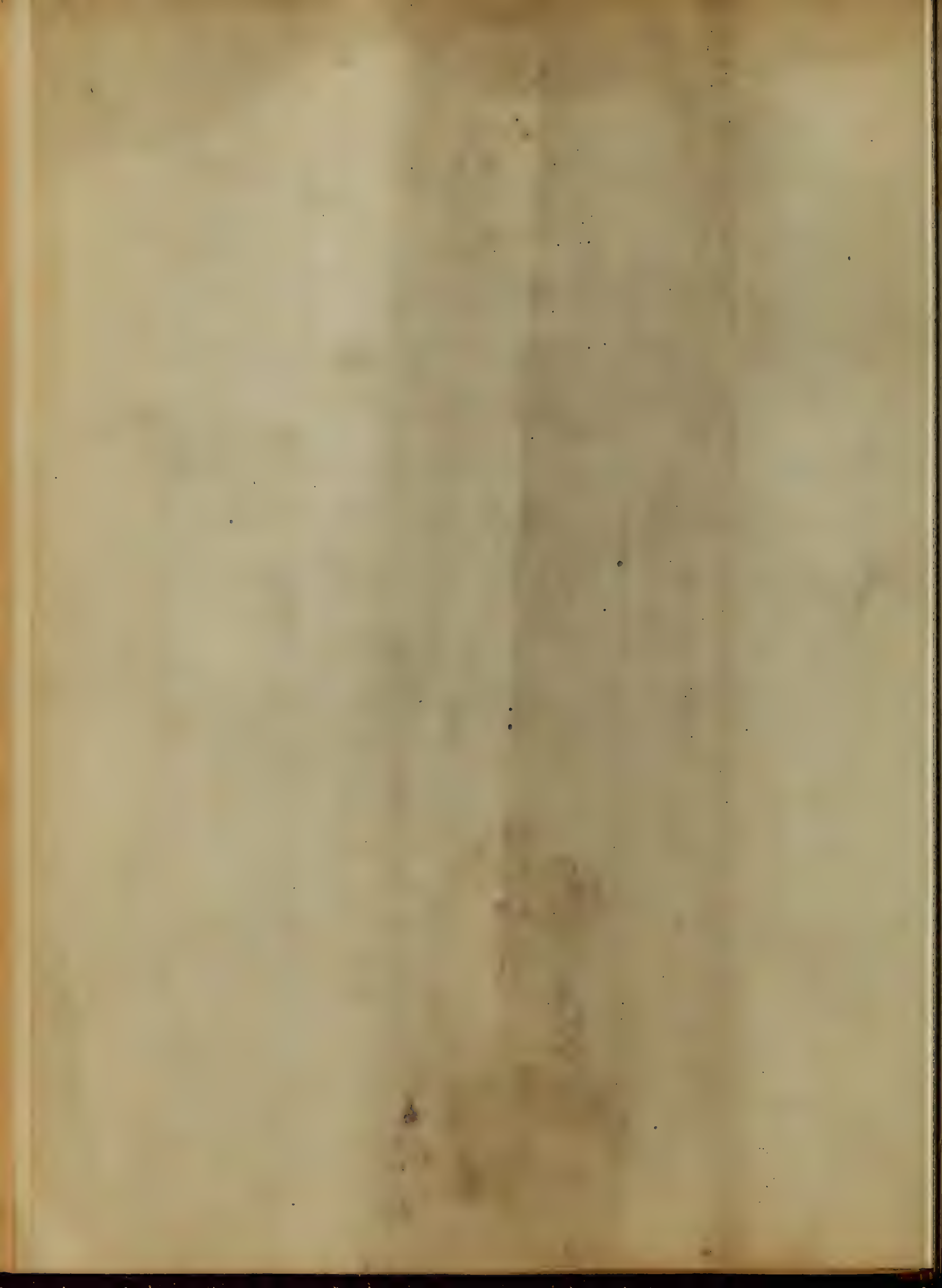
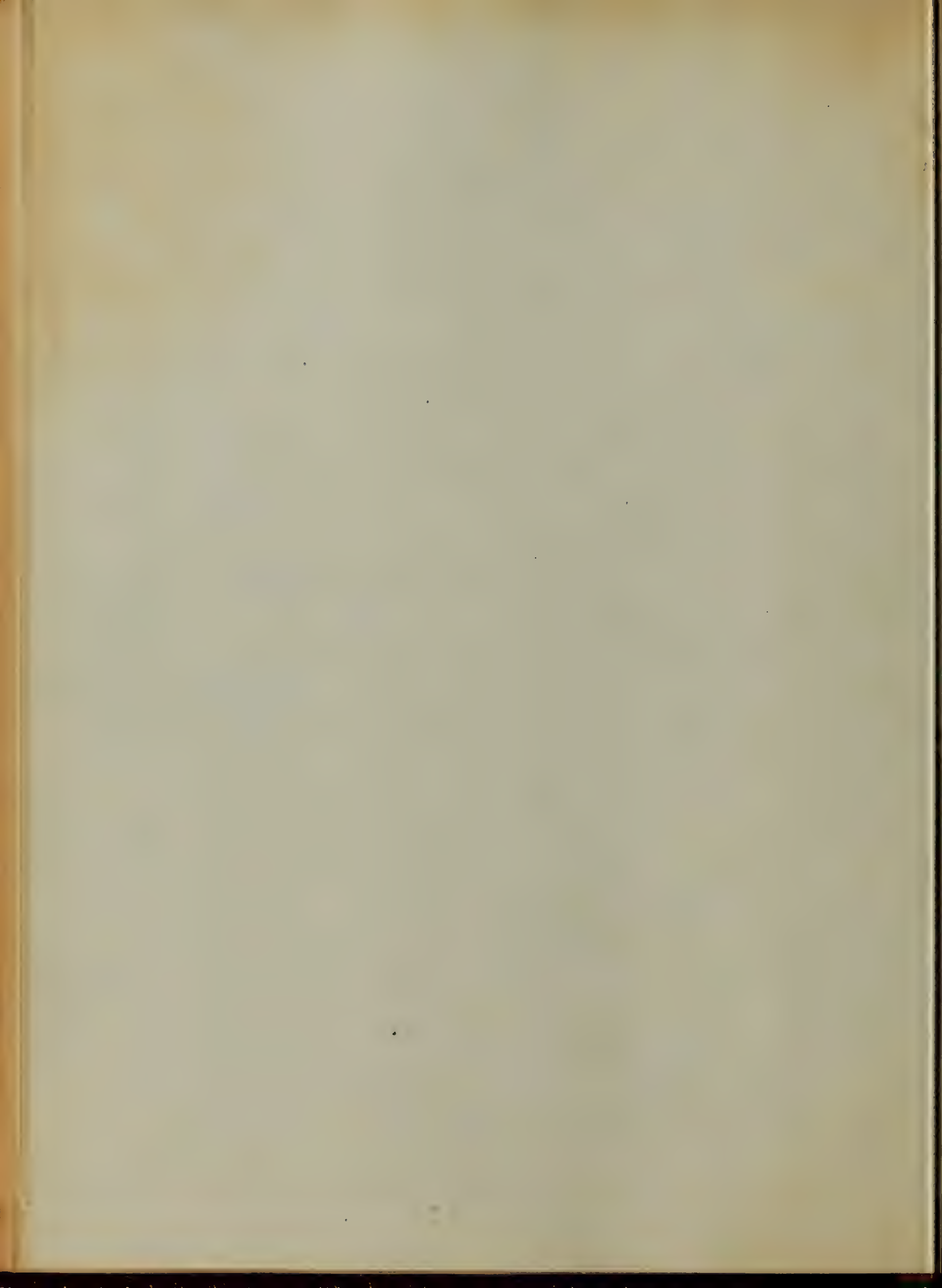
January 23d 1875



1875

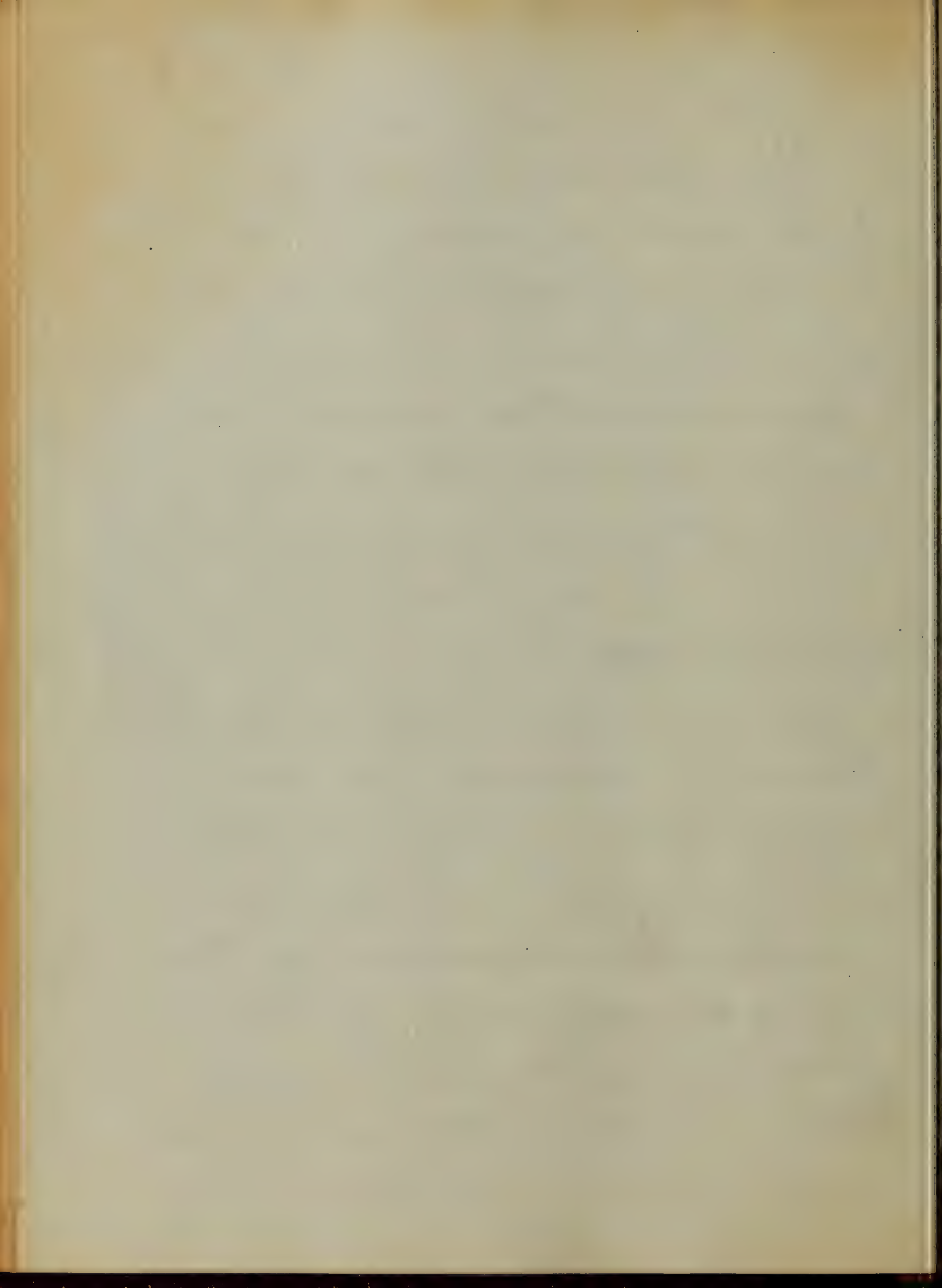
Thesis

by C. L. Mitchell

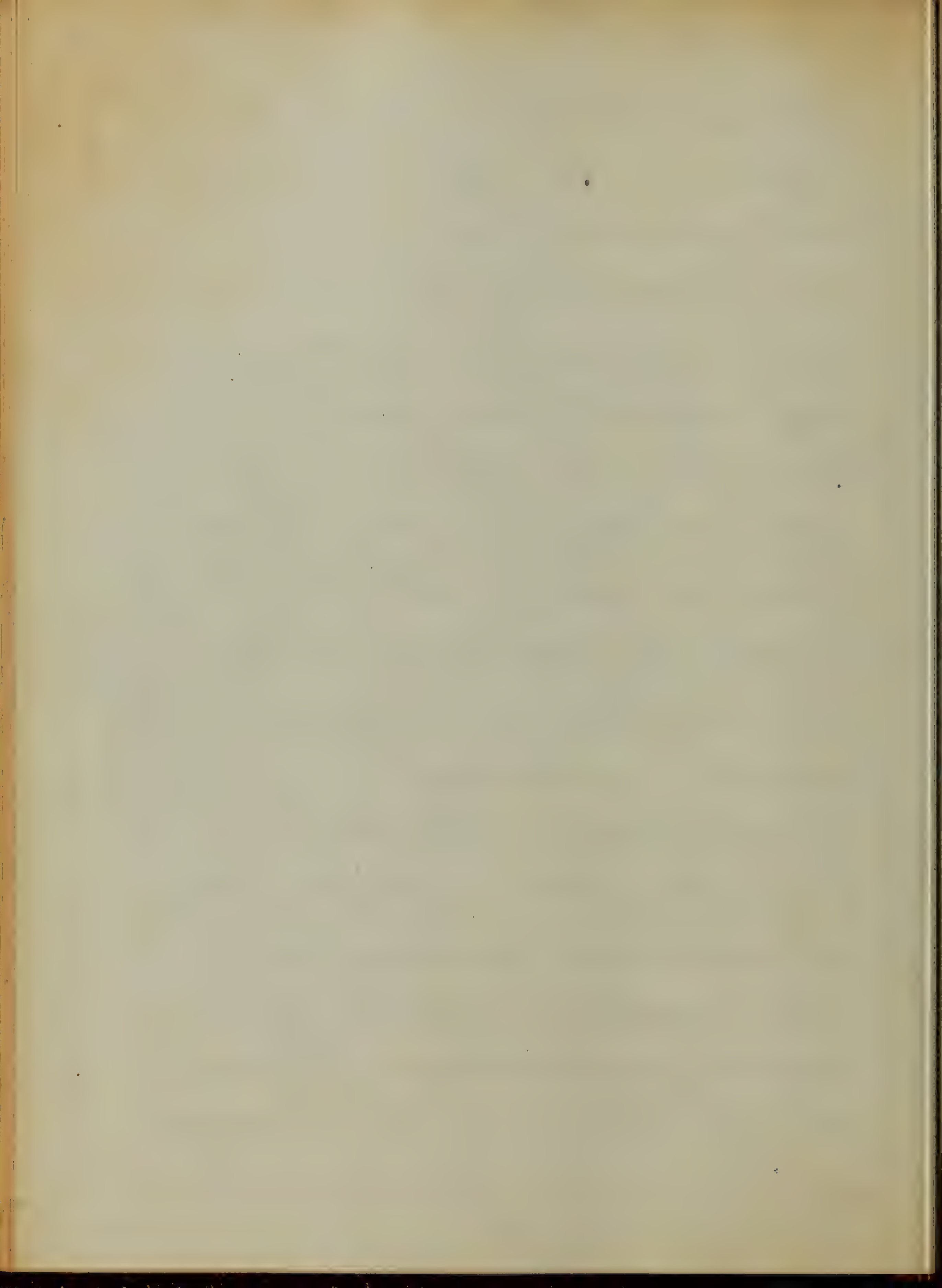


Pseudomembranous Laryngitis

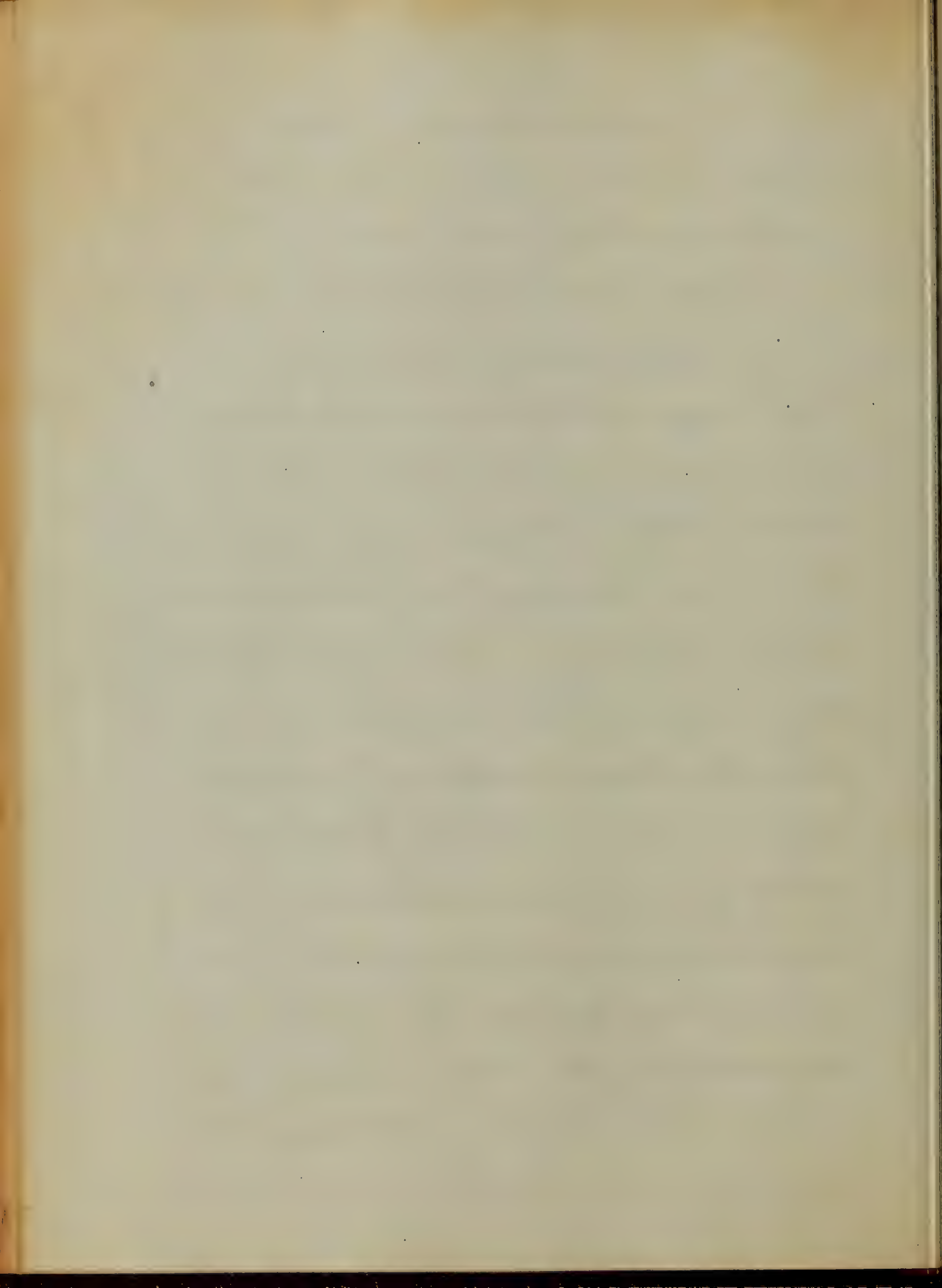
In the selection of a subject for a thesis so various and complicated are the themes from which to make a choice that it requires not a little reflection to procure from the inexhaustible store house of medical science, one to which the novice in medicine can do both justice to himself and those to whom his dissertation is submitted for examination. But yet he must feel as those gone before him, that they have felt the same delicacy and difficulty in performing this a duty, and obligation of all students of medicine. And I gentlemen as one of many, striving for that same goal, a medical eminence.



of course am possessed by the same sensation
Yet I cannot help but think that you
will view all imperfections in this com-
position with some degree of leniency
and I, if in after years it should be
my lot to return to the scenes of
youthful labors, feel that [illegible]
tering memories of bygone days will
forcibly remind me of the profitable
moments spent in the sacred [illegible]
of my Alma Mater.
I will first give in [illegible]
of that part of the respiratory appar-
atus to which Pseudo mem[illegible]
[illegible] is confined, and then go over
with the clinical history, Pathology
Diagnosis, [illegible] Treatment

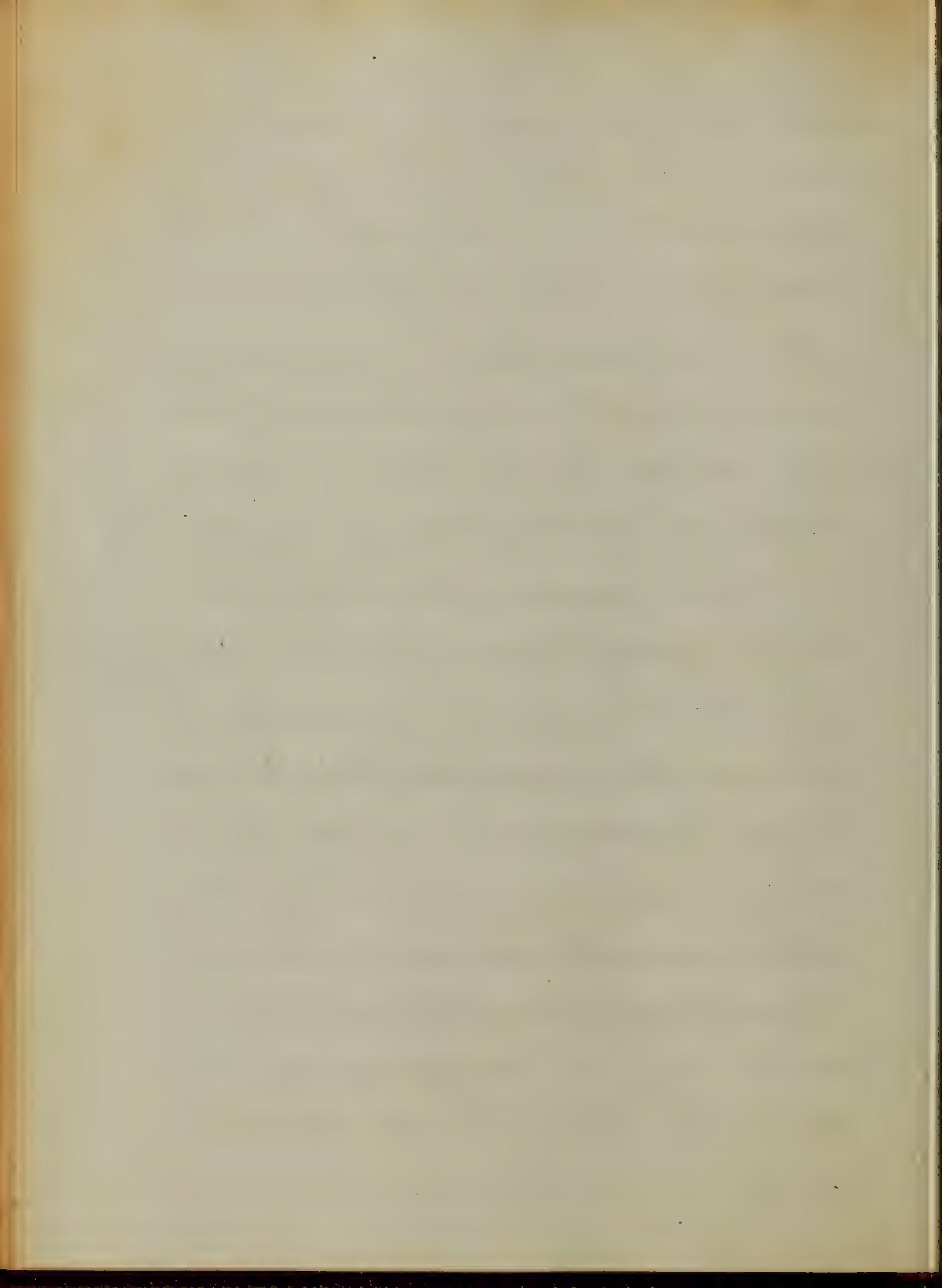


Anatomy of the Larynx. This organ is situated at the upper part of the air passage between trachea and base of tongue, general shape tubular, broad above and cylindrical below, and is composed of nine cartilages held together by ligaments and moved by various muscles. The Thyroid cartilage is the largest, consisting of two lateral lamellae united in front to form the Pomum Adami, more prominent in the male. The Cricoid so called from its resemblance to a signet ring forms the inferior posterior part of larynx. The Arytenoid so called from their resemblance to the mouth of a pitcher, are situated

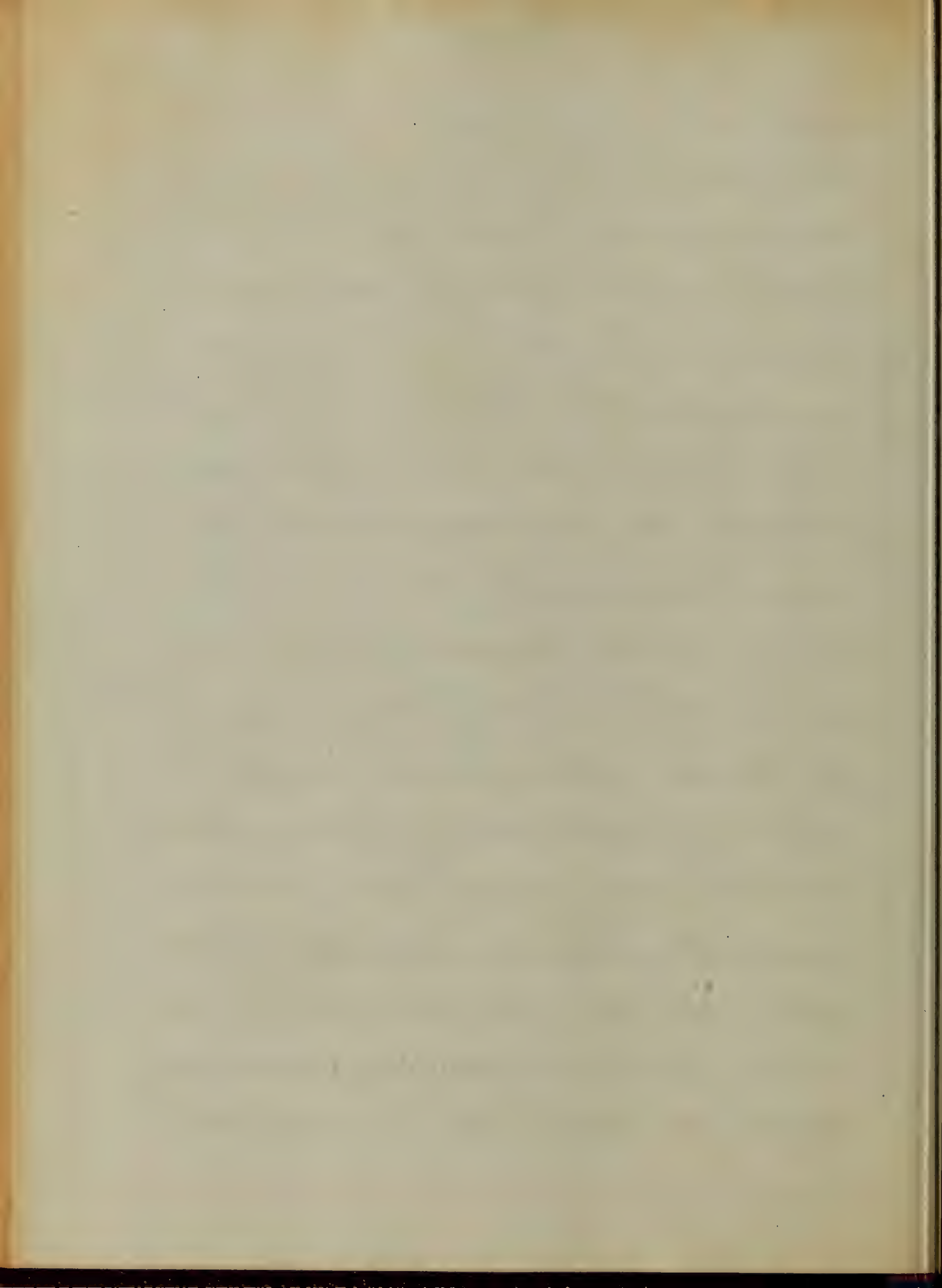


at the superior border of the cricoid un-
[illegible] of larynx. The Cuneiform
or cart of Wrisberg, are situated in the
fold of mucus membrane extending from
the apex of arytenoid, to the side of the
epiglottis. The epiglottis is a thin leaf
shaped fibro cartilage, situated behind
the tongue, and in front of the upper
opening of the larynx, open during
respiration and closed during deglu-
tition. General structure of the Carti-
lages. The [illegible], Cuneiform and
Cornicula, composed of yellow cartilage,
with no tendency to ossify, the others
[illegible] in old age. The cavity
of the larynx extends from behind
the Epiglottis [illegible] border of the.

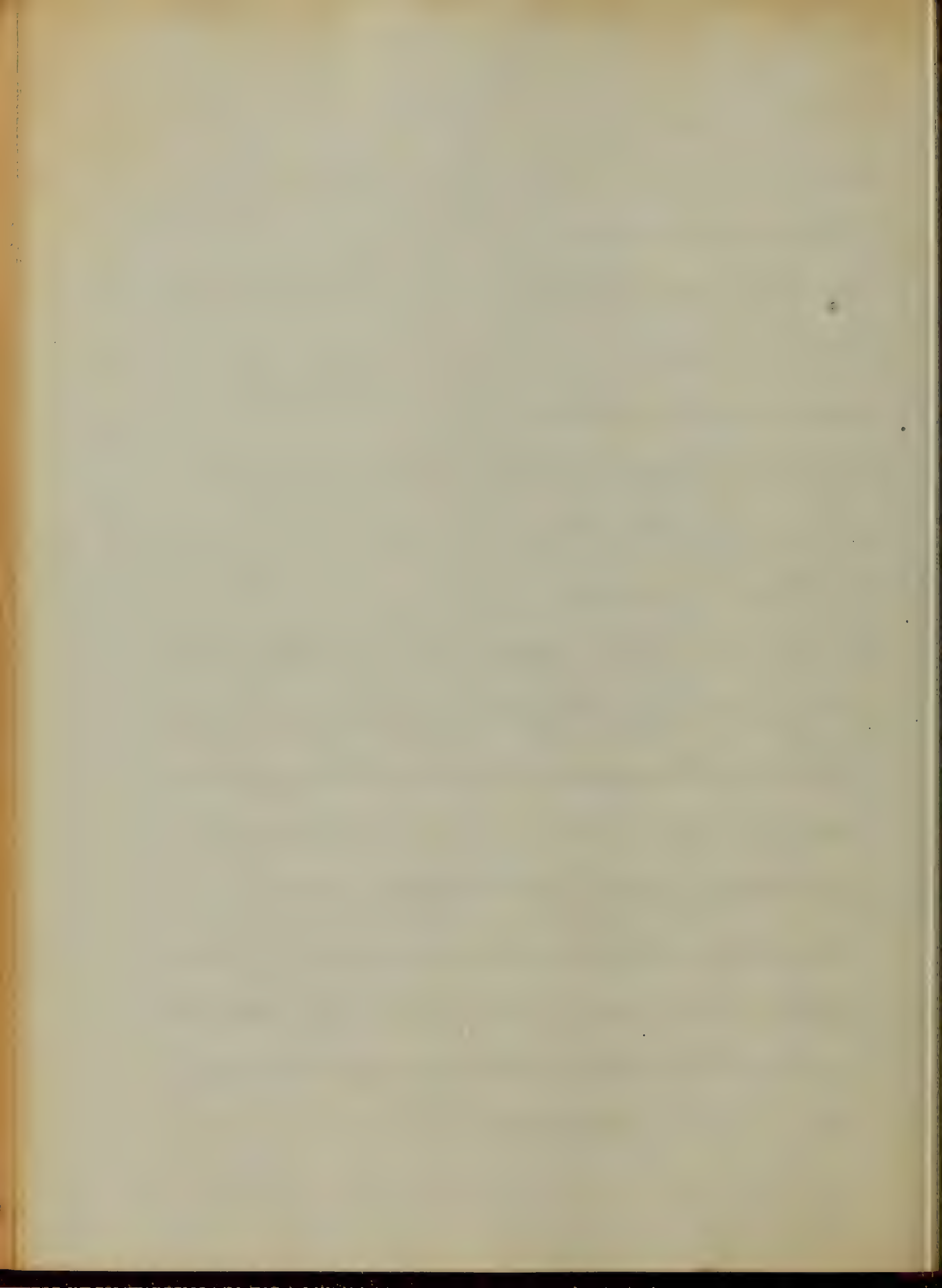
cricoid, and divided into two parts by the projection inwards of the vocal cords, between the true vocal cords is the rima glottidis. The superior or false vocal cords so called from their not being concerned in phonation are merely folds of mucous membrane enclosing the superior thyro arytenoid ligament, and between the true and false vocal cords is the ventricle of the larynx. The mucus membrane of the larynx, the epithelium [illegible] is of the columnar ciliated variety, is continuous with that lining the mouth and pharynx and extends down to the lungs. [illegible] also numer-



ous muciparous glands over its interior surf-
-ace but none on the vocal cords, and is
richly supplied with bloodvessels, and
nerves. The trachea is a cartilaginous
ous tube, flat on its posterior surf.
and extending from the fifth cer-
vical to the third dorsal vertebra,
where it divides into the two primitive
bronchi. Its cartilages number from
sixteen to twenty, extending around
two thirds of the tube and completed
posteriorly, externally, by fibrous tissue
and internally by transverse and lon
gitudinal muscular fibres. Its Epitheli
um is the columnar ciliated. On the
mucous membrane are large numbers
of glands, which keep the surf con-



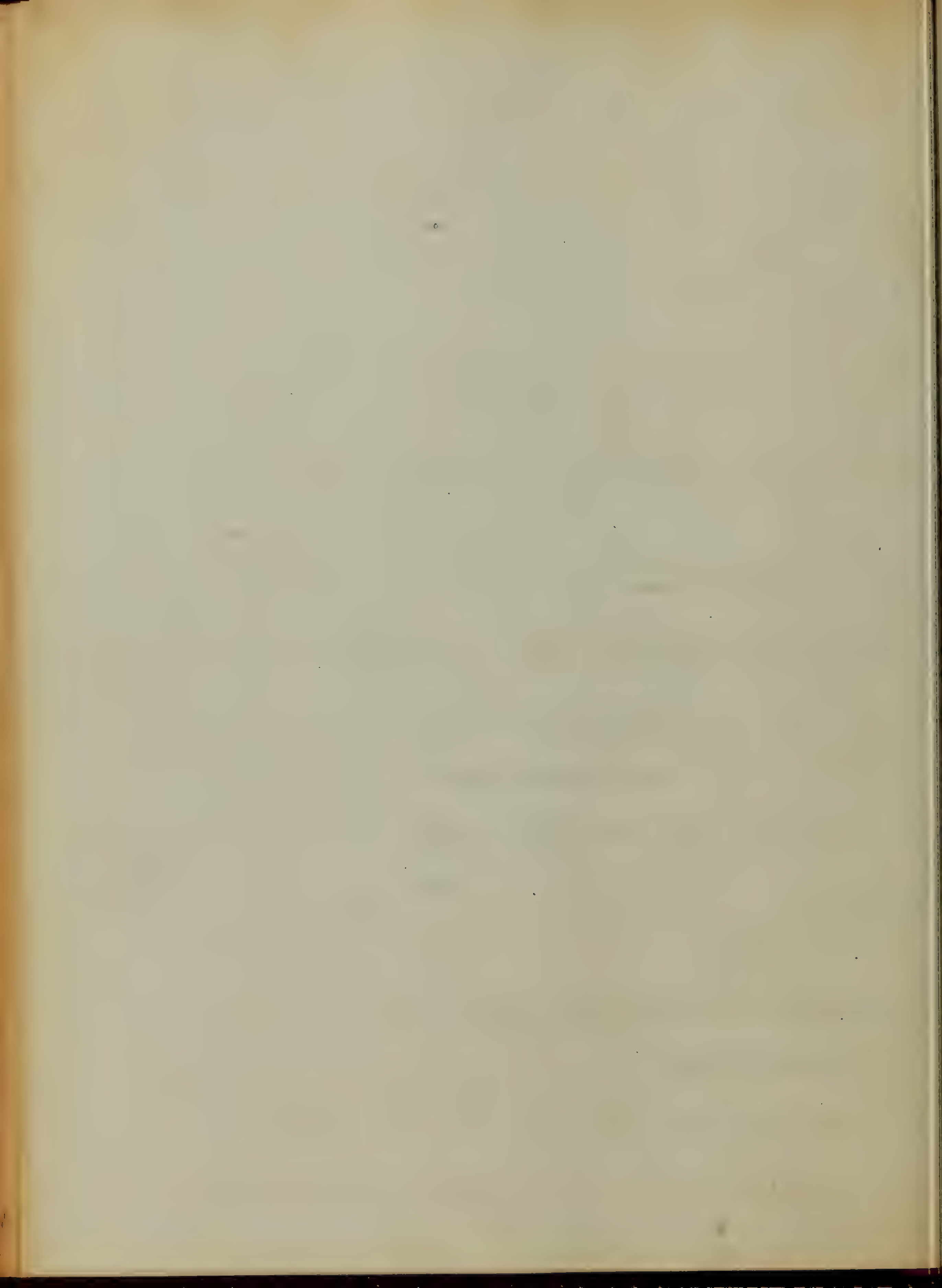
stantly lubricated. and it is also supplied well supplied by blood [illegible]
and nerves. Such is a brief sketch
of the organs [illegible] of the
respiratory apparatus, and I now pro-
ceed to speak of Pseudo membranous
Laryngitis which is generally [illegible]
to these organs.
Synonyms of this affection are Cynan-
che Trachealis, Angina Polyposa, Suf-
focatio stridula, Morbus Strangulato-
-rius. Croup is known [illegible] a disease
of childhood, most probably because
their mucus membranes are so sen-
sitive, There are, two forms, Spasmod-
-ic and Pseudomembranous Laryngi-
-tis, [illegible] croup. Definition. [illegible]



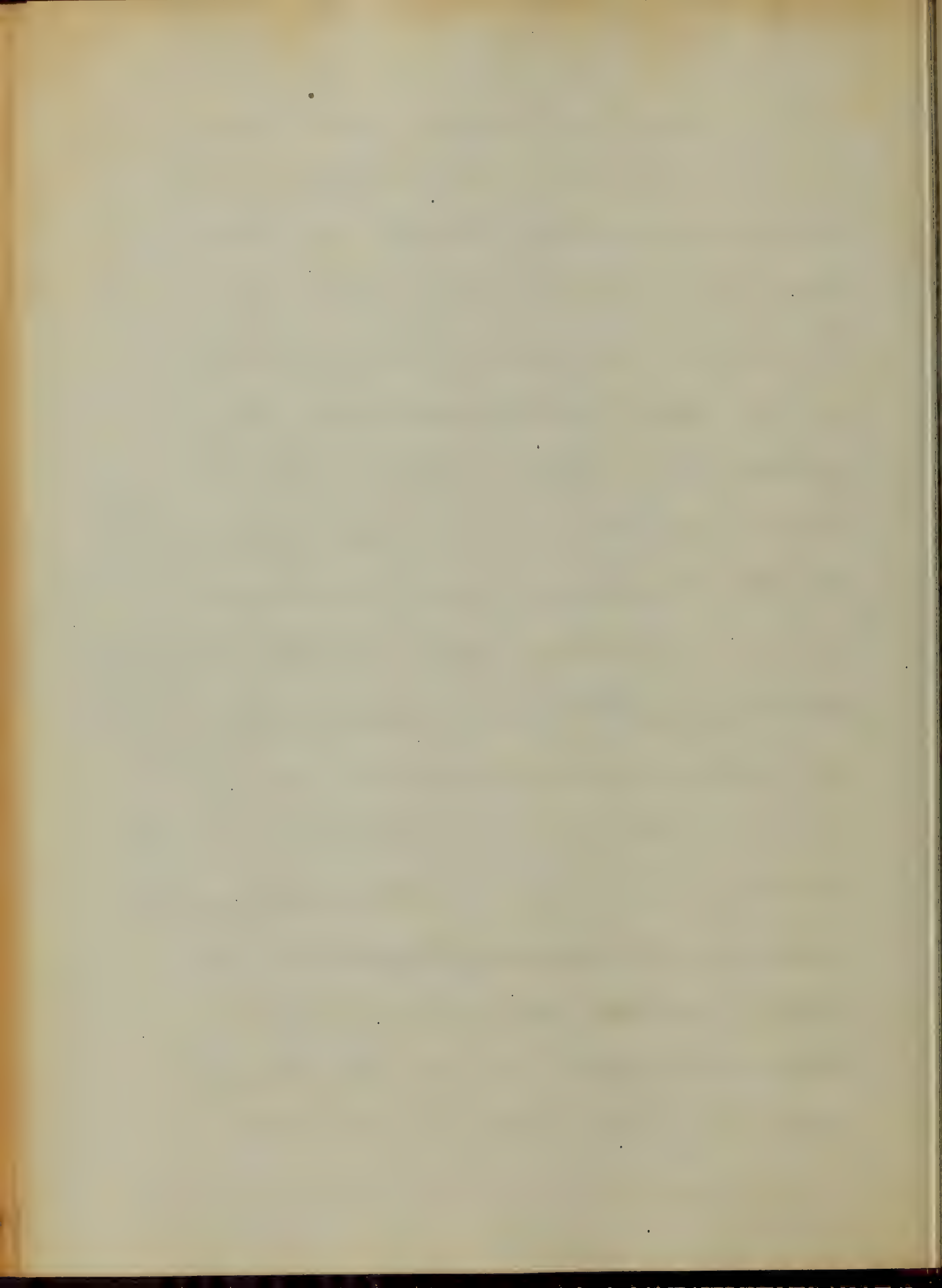
ation of the mucous membrane of the larynx with the formation of a [illegible] or pseudomembrane.

Causes. Some children seem to be more susceptible than others, and sometimes it appears to be hereditary, the chief exciting cause however is exposure to cold. swallowing of irritating liquids, and inhalation of irritating [illegible].
Croup is generally a primary disease but may be a complication of both Scarlatina and Rubeola. It is most frequent in cold and changable weather.

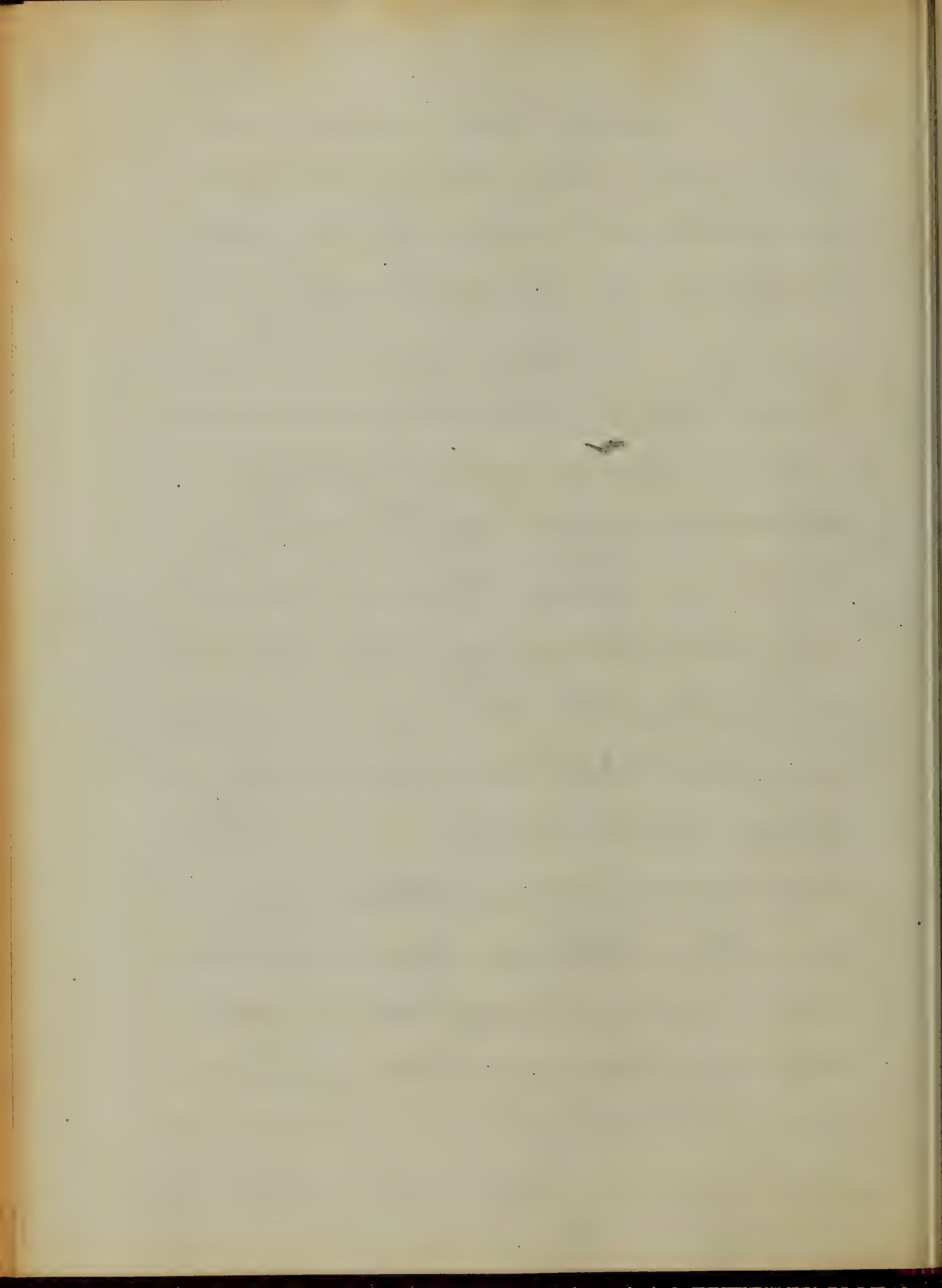
Anatomical Characters.
The inroads of the inflammation are not only on the mucous memb, but



often into the submucous connective tissue, giving rise to oedema. Post mortem examination reveals hyperaemia, thickening, desquamation of the epithelial cells, and the production of muco-pus. Inflammation in severe cases extends down to the trachea and even bronchial tubes. In regard to the composition of the false membrane the theories are various. Some suppose that it consists of fibrin having exuded from the submucous vessels, became fibrillated on exposure to air, its interstices being filled with pus, epithelial cells and amorphous matter.

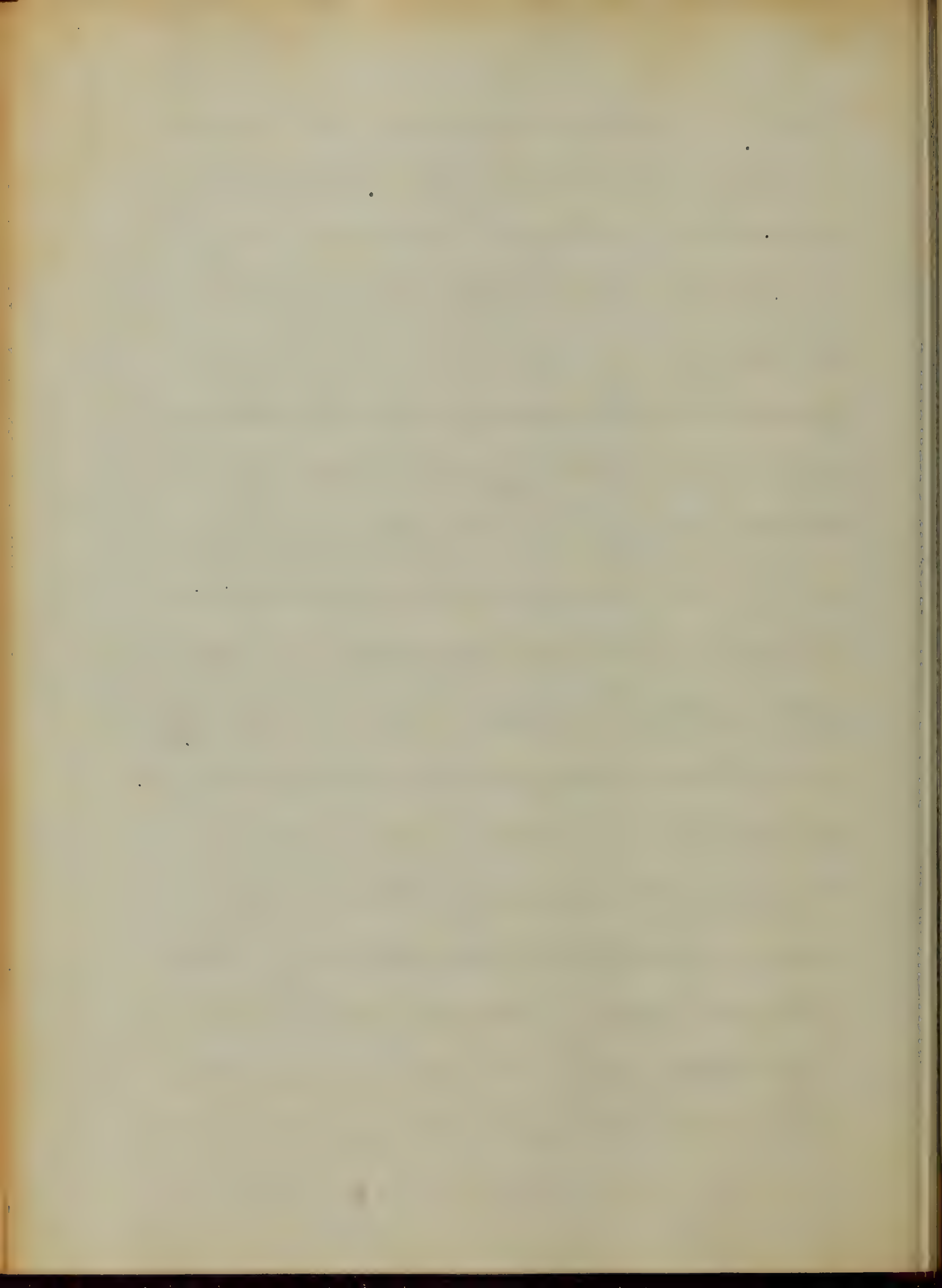


Wagner a distinguished pathologist
denies that it contains fibrin, but
consists of epithelial cells [illegible]
[illegible] generations are pushed
forward from the mucous surface
[illegible] under the microscope
appear as irregular blocks interlacing
with each other. Cornil, Ranvier
Rindfleisch admit that they do
find fibrin so that it is generally
considered that this element is a
factor in their [illegible]. The
false mem may appear in
small patches or form one con
tinuous layer. and as the inflamm
ation extends beyond the larynx, so
does this false mem [illegible] into the

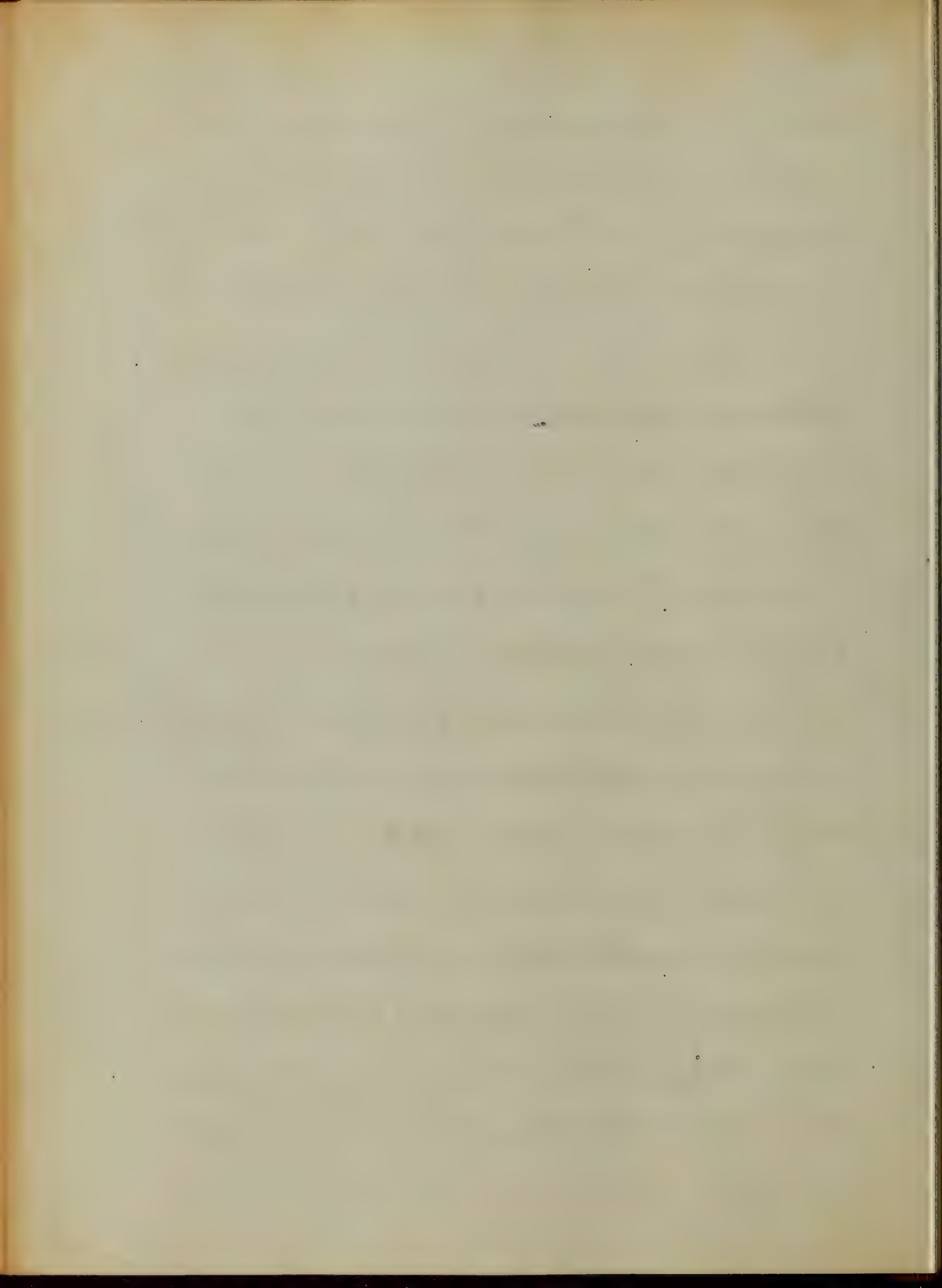


bronchial tubes. In the strong and robust it is firmer and not so easily detached [illegible] the weak and cachectic

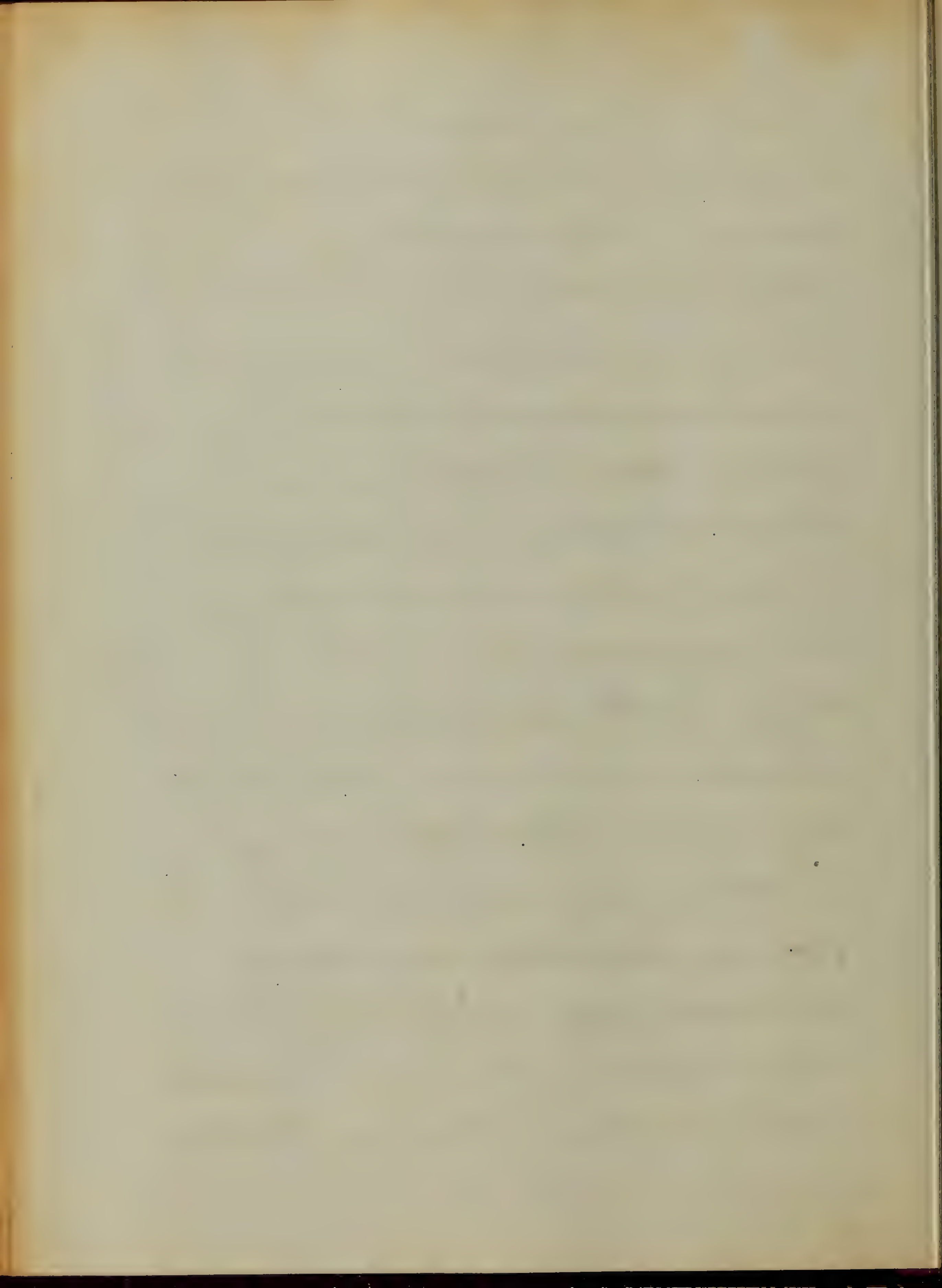
Symptoms. In many cases True Croup is preceded by coryza and pharyngitis. At the commencement there is fever a dry and suppressed cough, which is reduced towards the close of life almost to a whisper. [illegible] if the child be old enough to expectorate is scanty in the beginning, and towards the close of the disease, due partly to obstruction of the larynx, and partly to exhaustion. The respiration is accelerated, but becomes slower in the advanced



stages. The pulse varies with the progress of the disease, there are also alternate remissions and returns of symptoms often with great violence. but this should not deceive the judicious practitioner for often it will be his sad duty "to dash the cup of joy from the fond mother's lips." Auscultation proves the existence of rales at first sonorous and afterwards moist and in some cases dulness on percussion with bronchial respiration indicative of Pneumonia. Duration of the disease five to fourteen days. Death may result from obstruction of the tubes by mucus.

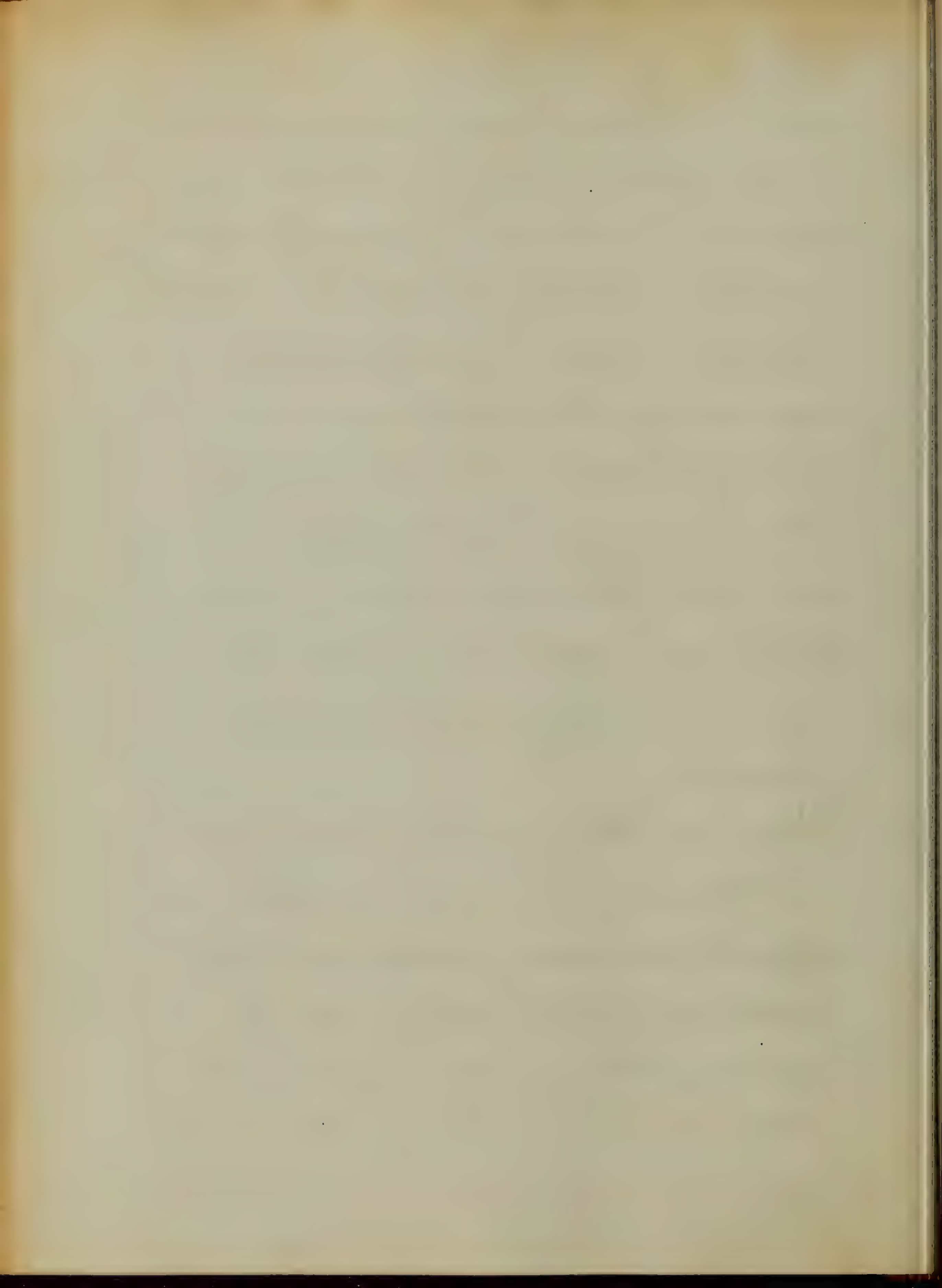


from thickening and submucus infil
tration, or from exhaustion.
Pathological Character.
ation is similar to that of other
mucus membranes, with a neuro
pathic element, formation of a
false membrane, and the blood
is dark colored from want
of oxygenation.
Diagnosis Comparatively easy, the
deseases with which it may be con
founded are Spasmodic Laryngitis
and Laryngismus Stridulus. In
false croup attack is sudden
and at night, in the true, gradual
and a false membrane is formed
which is always absent in the false



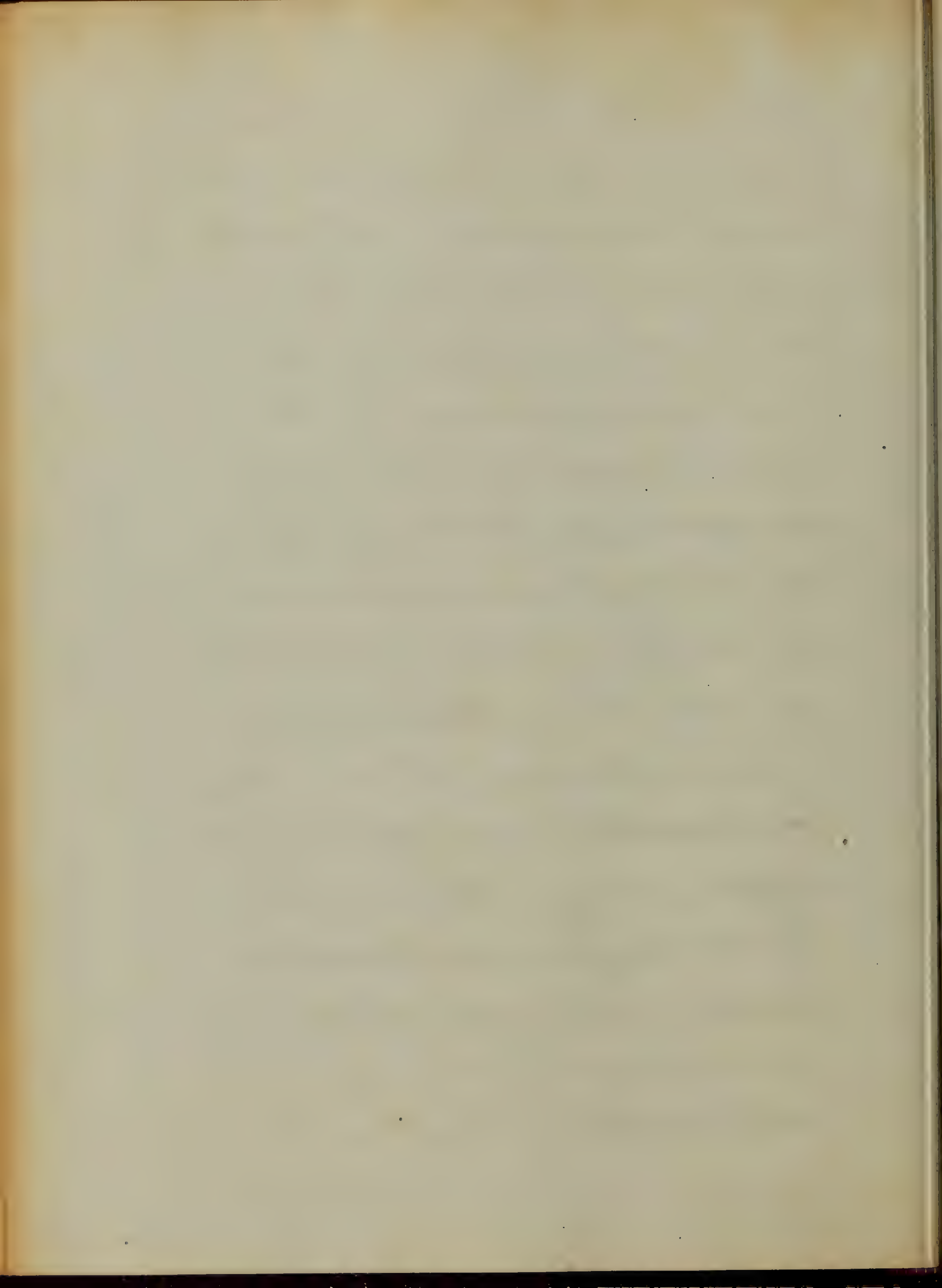
[illegible]ny, as also is the hoarse voice and stridulous [illegible]. From Laryngismus Stridulus by this affect[illegible] being a purely nervous one, by its sudden occurrence without the fever and other symptoms characteristic of Pseudomembranous Laryngitis, and with the occurence of muscular relaxation, all evidences of a morbid condition here disappear.

Prognosis The great mortality from True Croup is [illegible] acknowledged, still with judicious treatment there are cases which recover, and we are forced to the conviction that large success



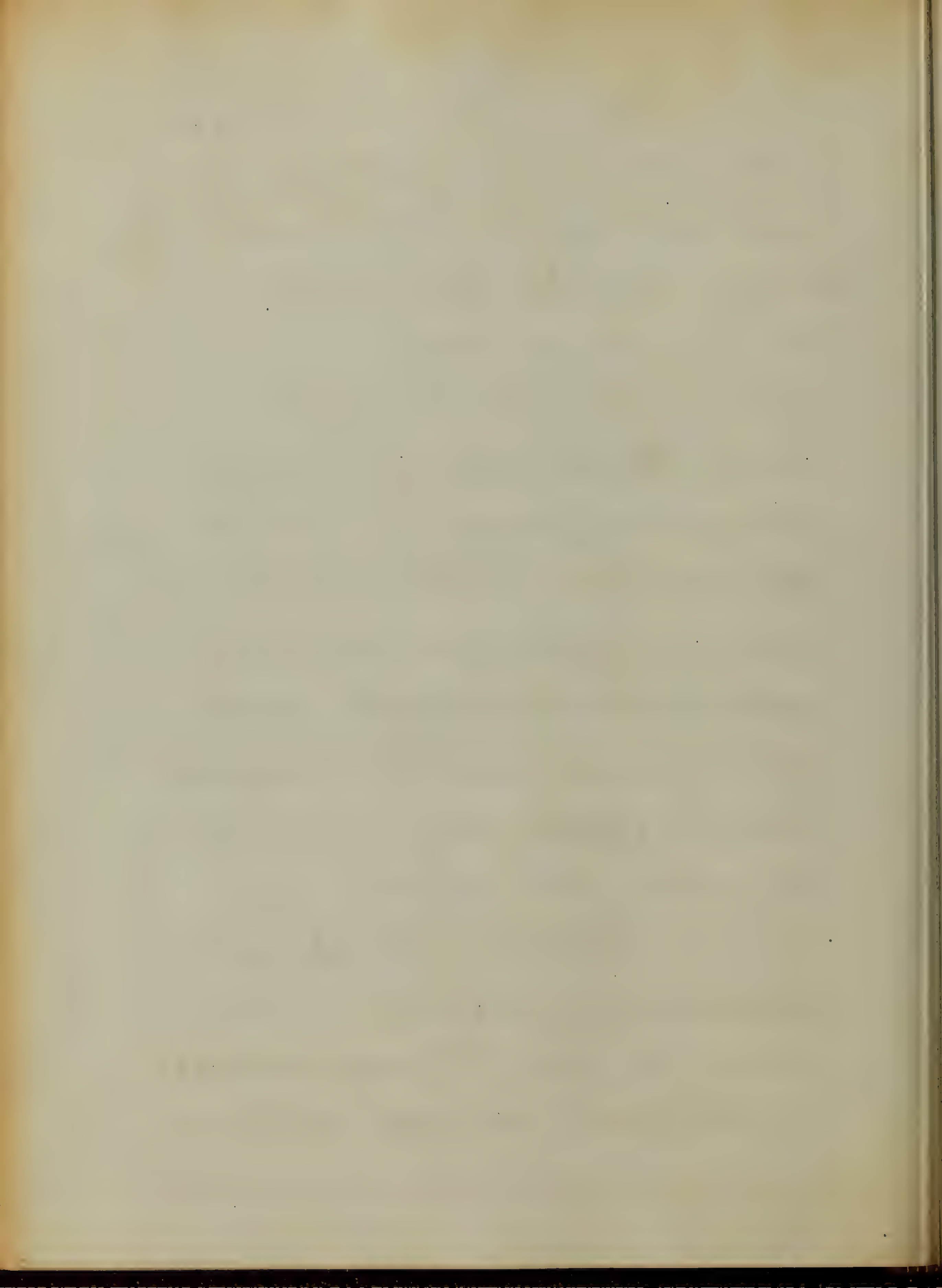
in the management of this disease is not owing to [illegible] [illegible] [illegible] skill, but to error in diagnosis. Accelerated respiration, increase of the hoarseness, and great dyspnoea are all unfavorable signs; while restlessness, somnolency, and lividity [illegible] lips, of fingers and toes, etc., indicate the near approach of [illegible].

Treatment. There is a wide difference of opinion as to the management therapeutically, and hygienically, of this affection the terror of all its victims. Emetics have

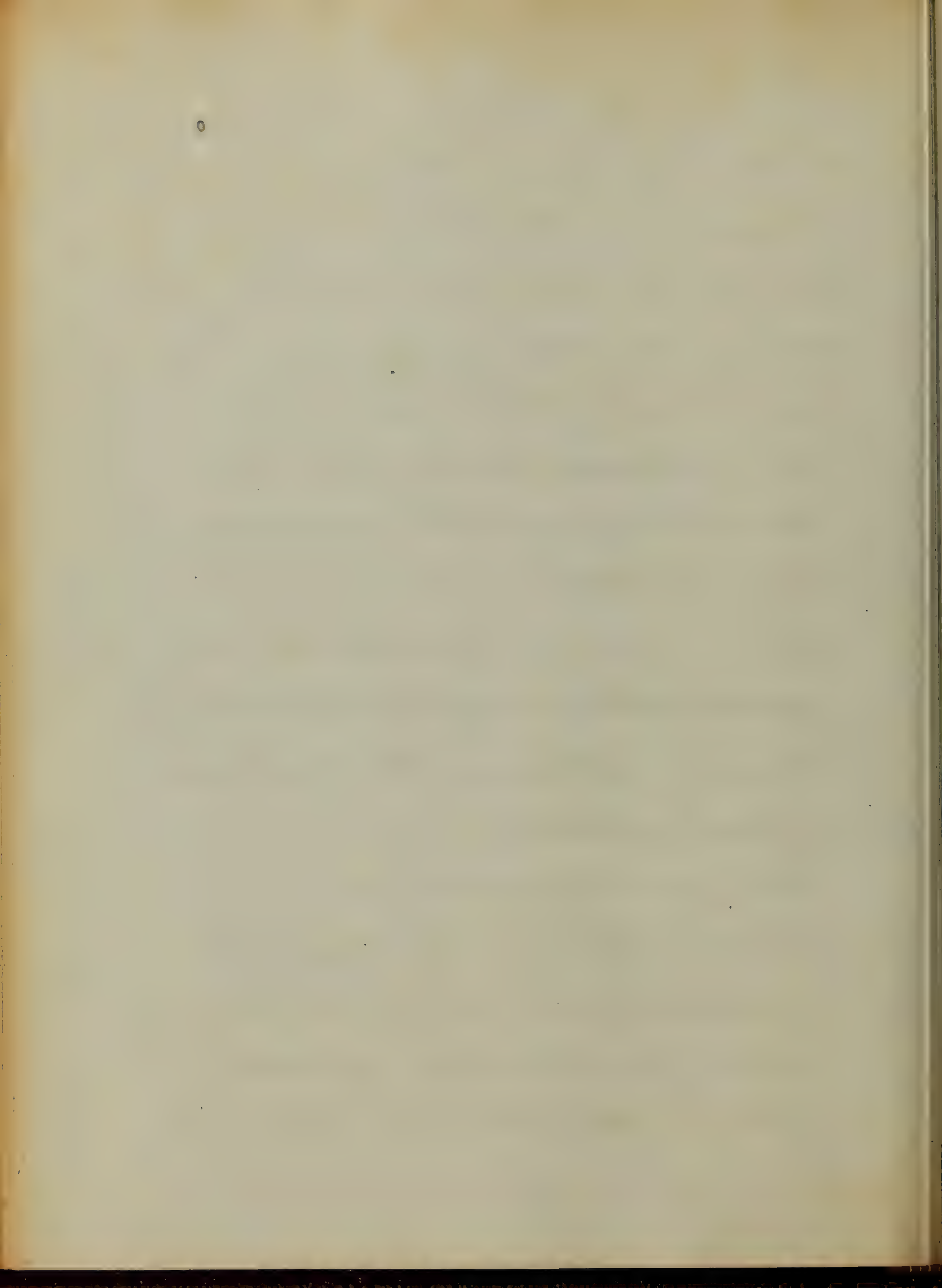


been and are still used with excellent results, but injudiciously exhibited have been productive of much evil. Their action is exclusively mechanical and they have no effect in promoting the dissolution of the false [illegible]. What then are the indications for the employment of these agents? As a rule the depressing emetics should not be used, especially if the subject is feeble and the croup is secondary to Rubeola, or Scarlatina. In the primary form at the very commencement, and the patient is in good health, Ipecac and

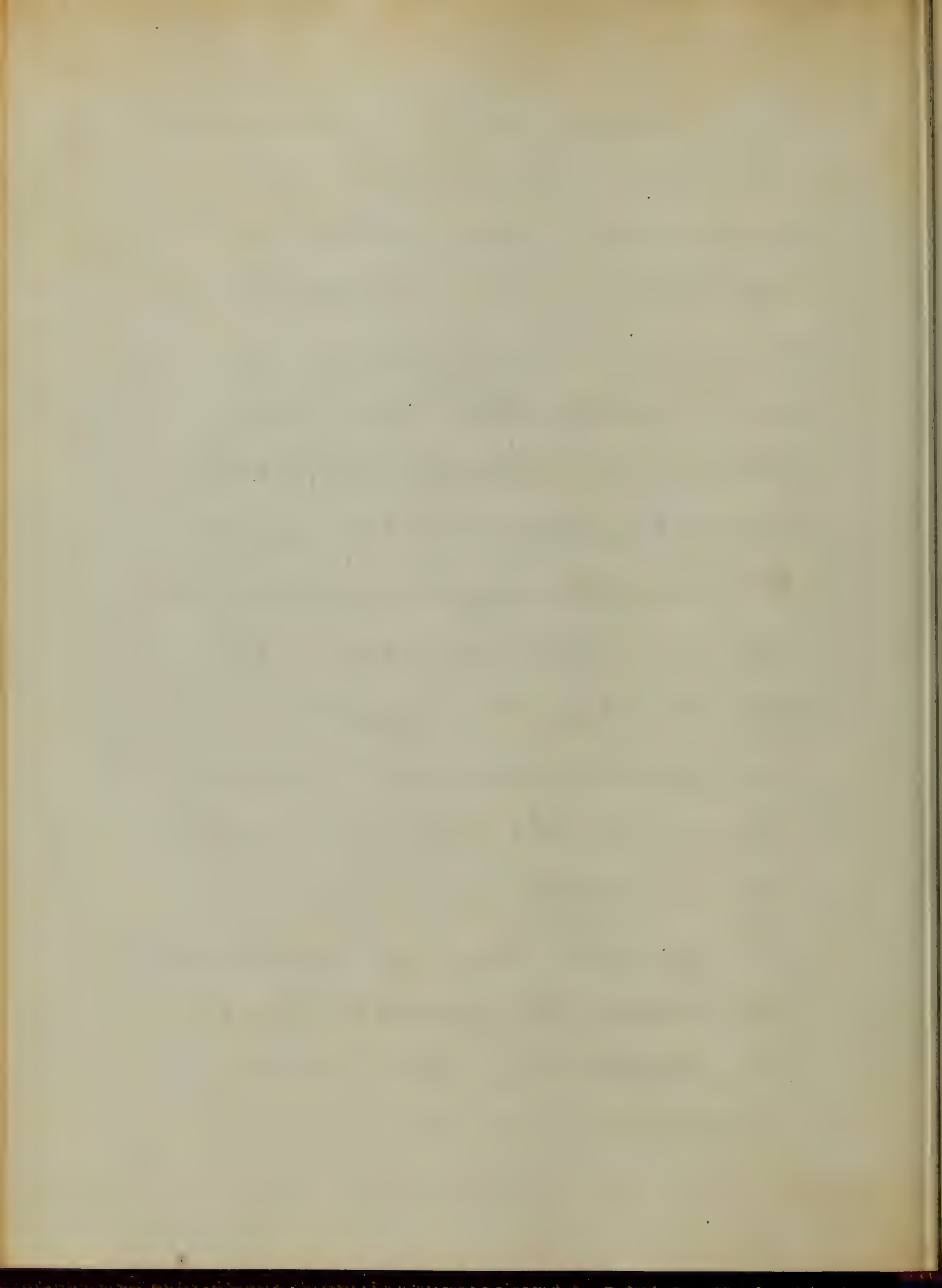
Tartrate Antimony and Potassa in varying doses. In the cachectic and in the secondary form of croup. Golden Sulphuret of antimony or Calcii Sulph. When the child is under three years of age the disease in its initial stage. Ipecac Syr. in gi [illegible] with or without the Sulph. of Alumina and Potassa. every ten or fifteen minutes until the required effect is produced. Veratrum Viride and Aconite as cardiac sedatives may be used to advantage if the fever be high and pulse



be rapid, but only in the primary form, during the first two or three days and before the formation of the false membrane. But unfortunately these agents are often unsuccessful, to what then can we resort with some hope of benefit? According to many writers calomel produces a great alleviation of the symptoms, by relieving the dyspnoea in some unknown way, tho' it does not break up the false membrane, and consequently if this agent is urgently called for, the fear of salivation should not deter



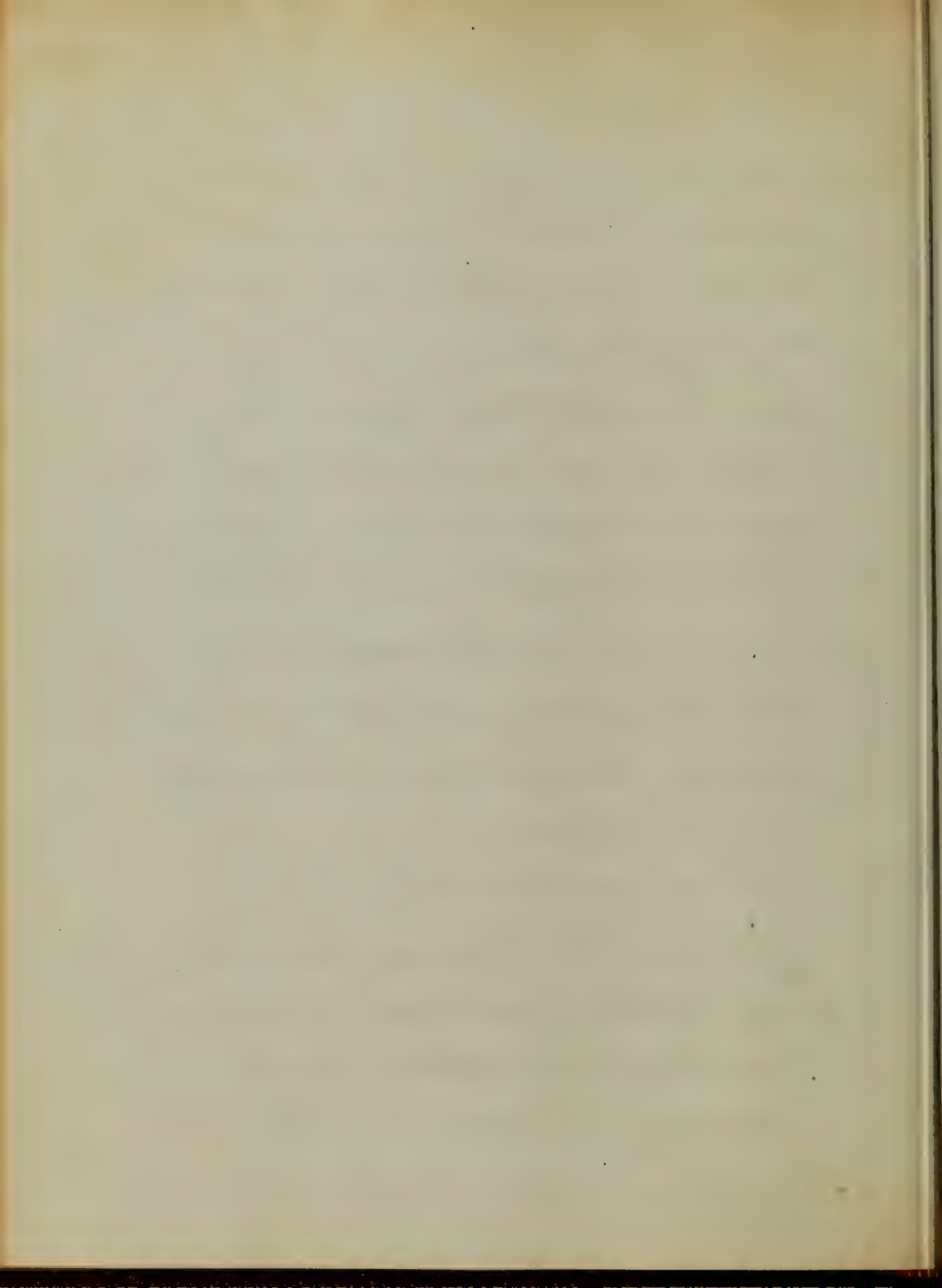
us from using it. Where the dyspnoea is protracted and accompanied by croupal cough, combinations of Ammonium [illegible] and Potassa Chloride are beneficial. Inhalation of steam promotes expectoration and loosens the cough, inhalation of lime also has been recommended. When dyspnoea is very great the Cupri Sulphas is one of the best agents at our command. But to whatever plan of treatment we resort the grand object is to support the flagging vital powers this to be-



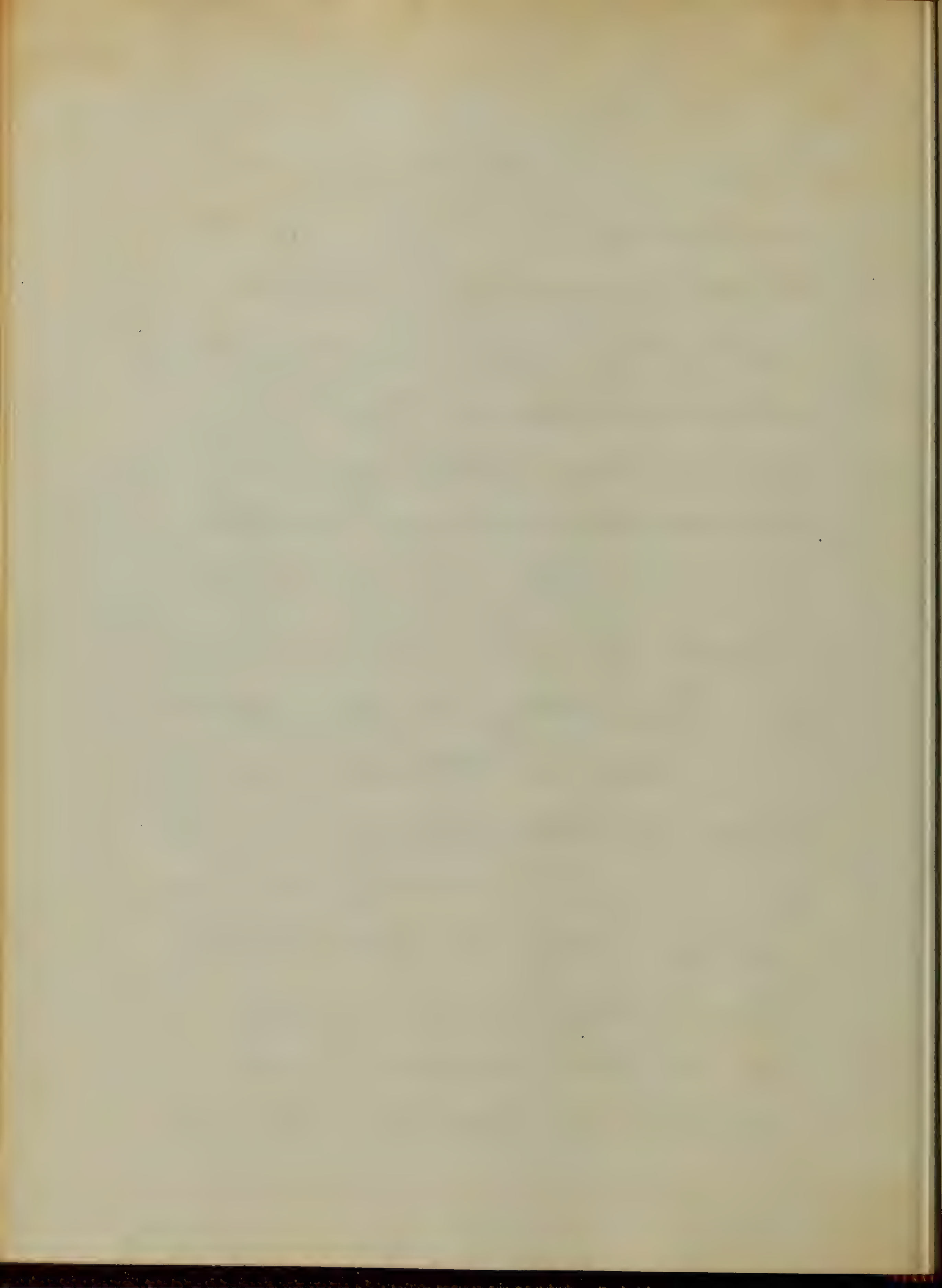
accomplished by beef tea, [illegible] whey and fresh air, until the detachment of the membrane,

Are local applications beneficial and if so of what character? Poultices, cold, and irritants, all have their advocates, but cold says Smith [illegible] are preferable, except in the secondary croup where warm fomentations are often more effectual.

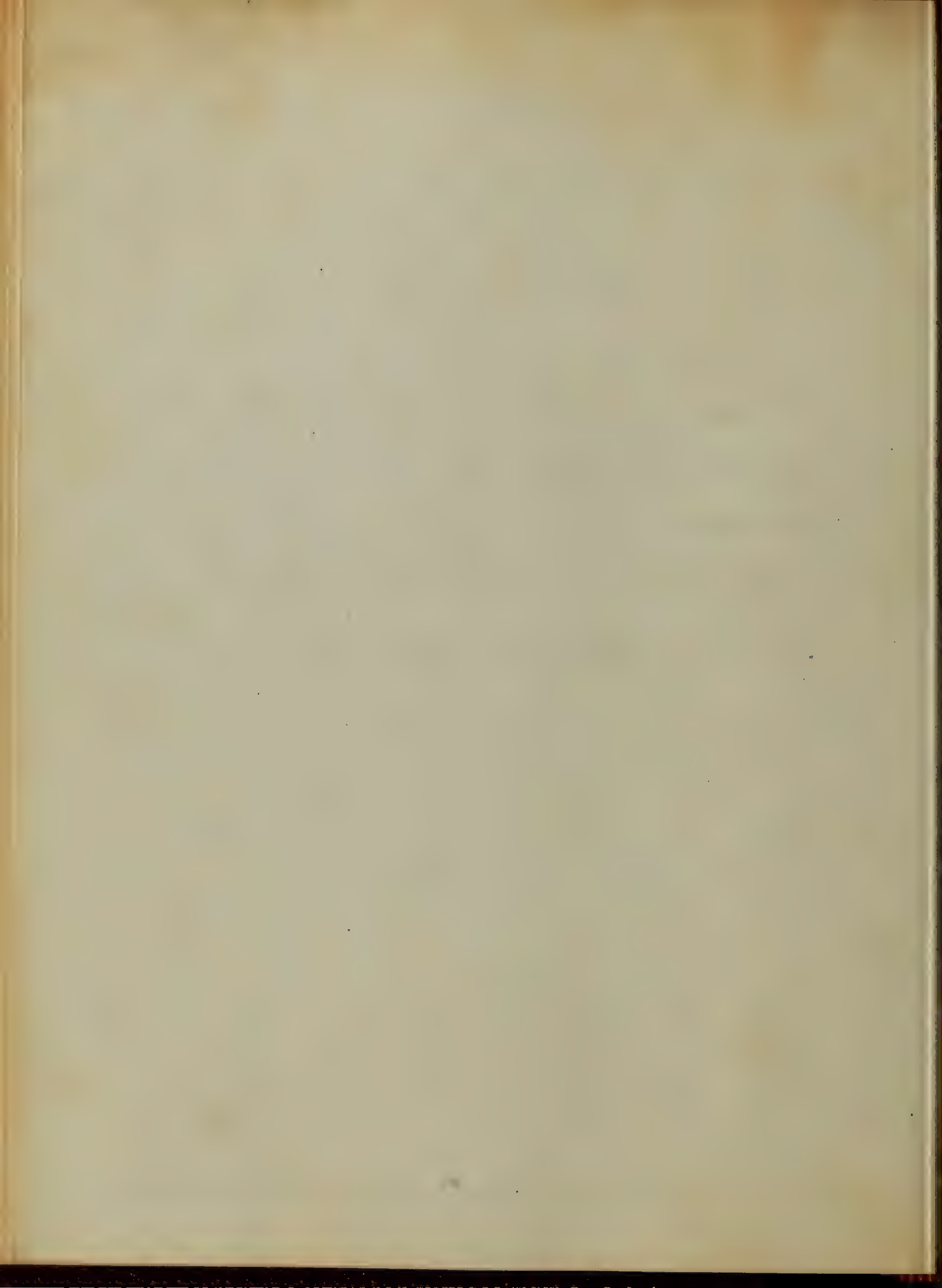
Topical applications to the fauces, and larynx, consisting of solutions of Argenti Nit, Carbolic acid, by the atomizer are beneficial.



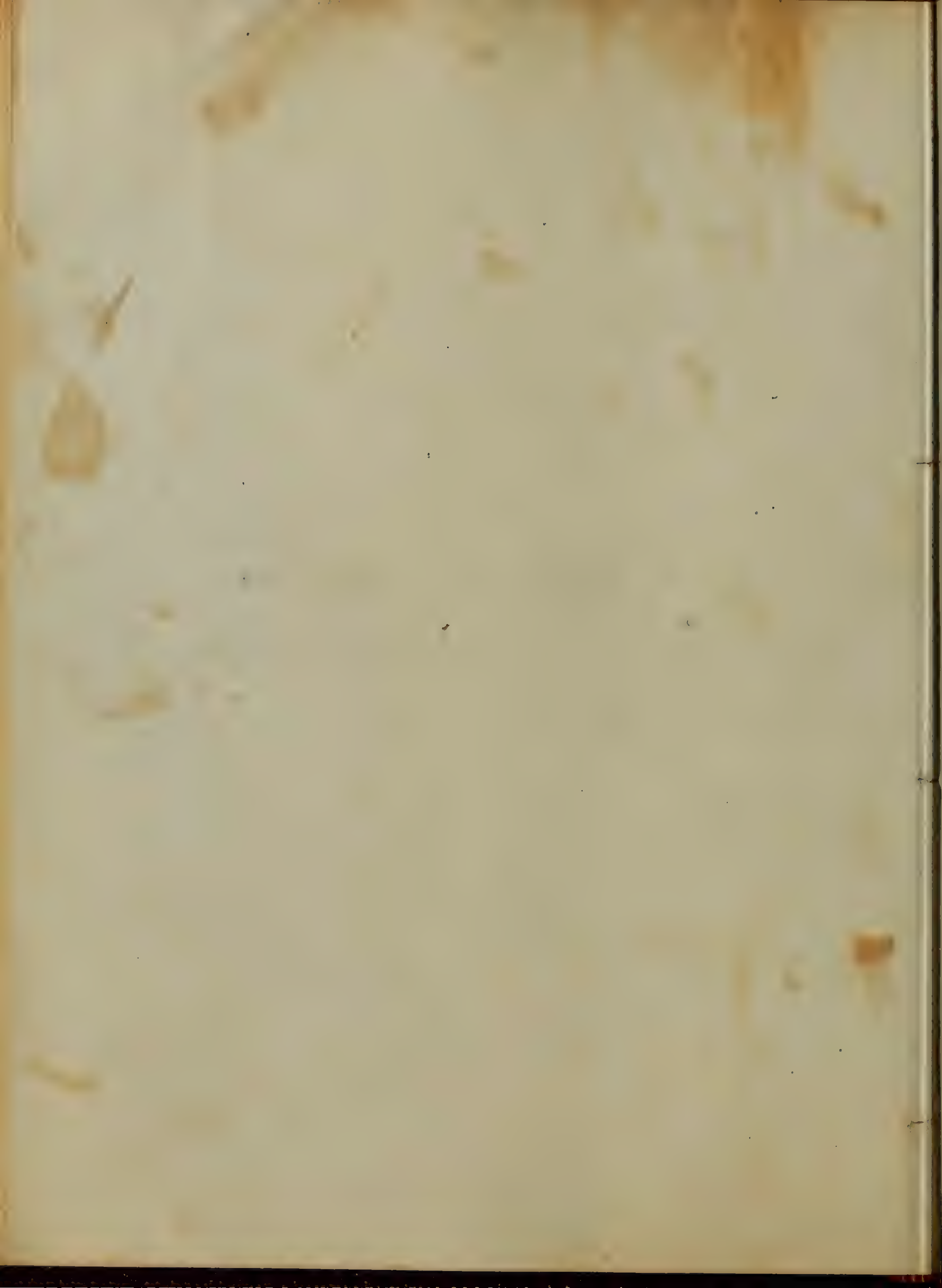
If after the faithful and
judicious [illegible] of all
these means, and yet our
efforts prove unavailing;
does modern science
afford any other agent
by which we can instil
yet one lingering hope
into the mind of the suffer
er? Fortunately for the afflict
ed it does, in the perform
ance of Tracheotomy. Can
and ought we to avail our
selves of this a last resort,
or are we to quietly gaze
upon the tortured one
striving to inhale the life



giving principle,[2] The majority
of writers say not, and not-
withstanding its fatality,
especially in those under
three years of age, yet he
must indeed be cruel, who
without any effort allows
the grim monster death
to cut down its victims.



Married [illegible]
[illegible] Mc [illegible]
[illegible]
[illegible]
[illegible]



[illegible]

[illegible]

[illegible]

It [illegible]

[illegible] intestine [illegible]

important [illegible]

[illegible] with [illegible]

[illegible] the small

Intestine and the Mesenteric

Glands. The first change

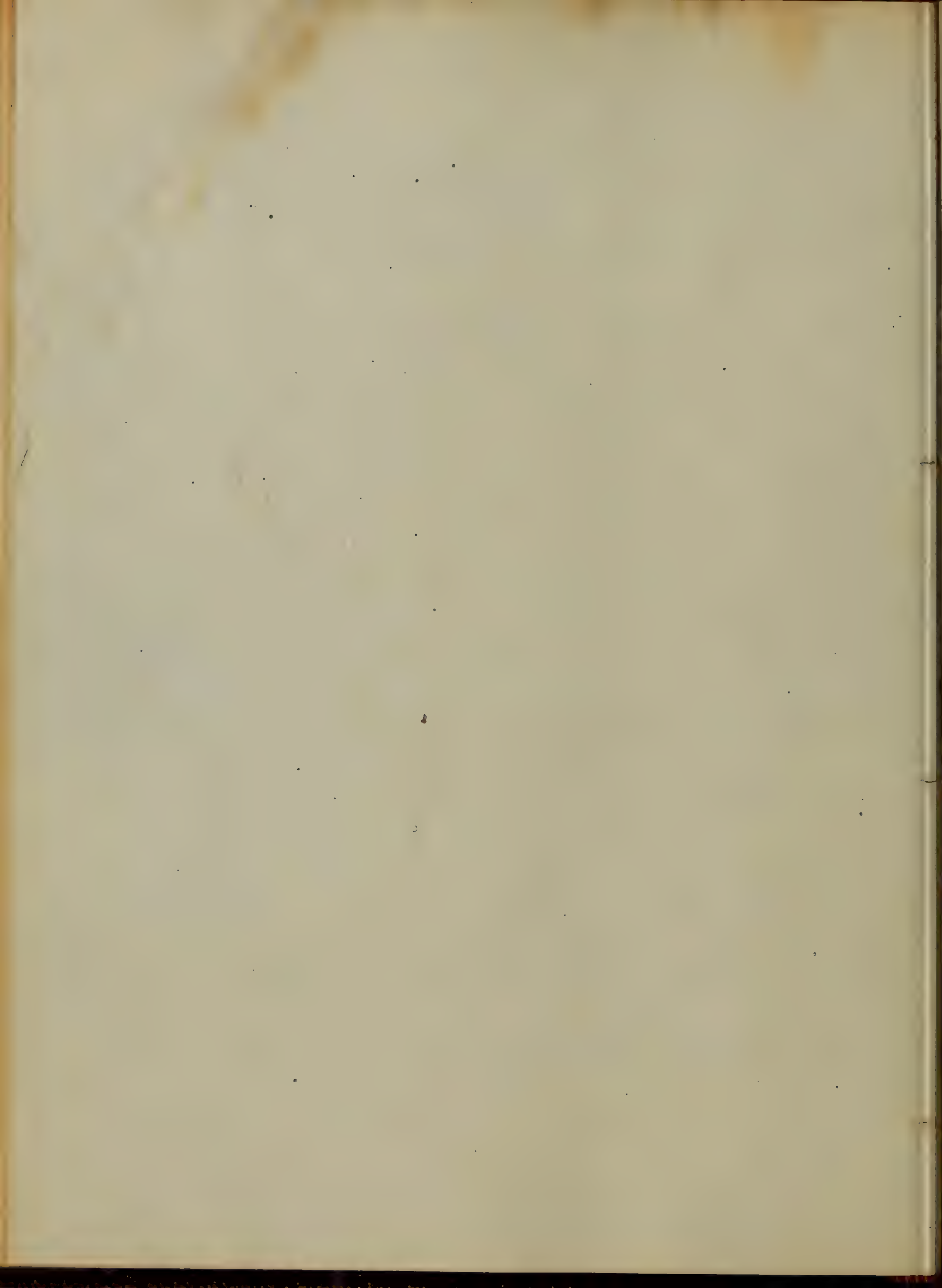
occurring in the patches of Peyer

and Solitary glands is enlarge-

ment [illegible]

in the [illegible]

the enlargement is considerable



[illegible] [illegible] [illegible] [illegible]

[illegible] [illegible] [illegible] [illegible]

above the adjacent mucous

surface. The enlargement is

chiefly due to proliferation of

the cellular elements within

the closed sacs which form

the [illegible] [illegible] [illegible] [illegible]

The mucous [illegible] [illegible]

the affected patches is [illegible]

[illegible] or [illegible] [illegible] [illegible]

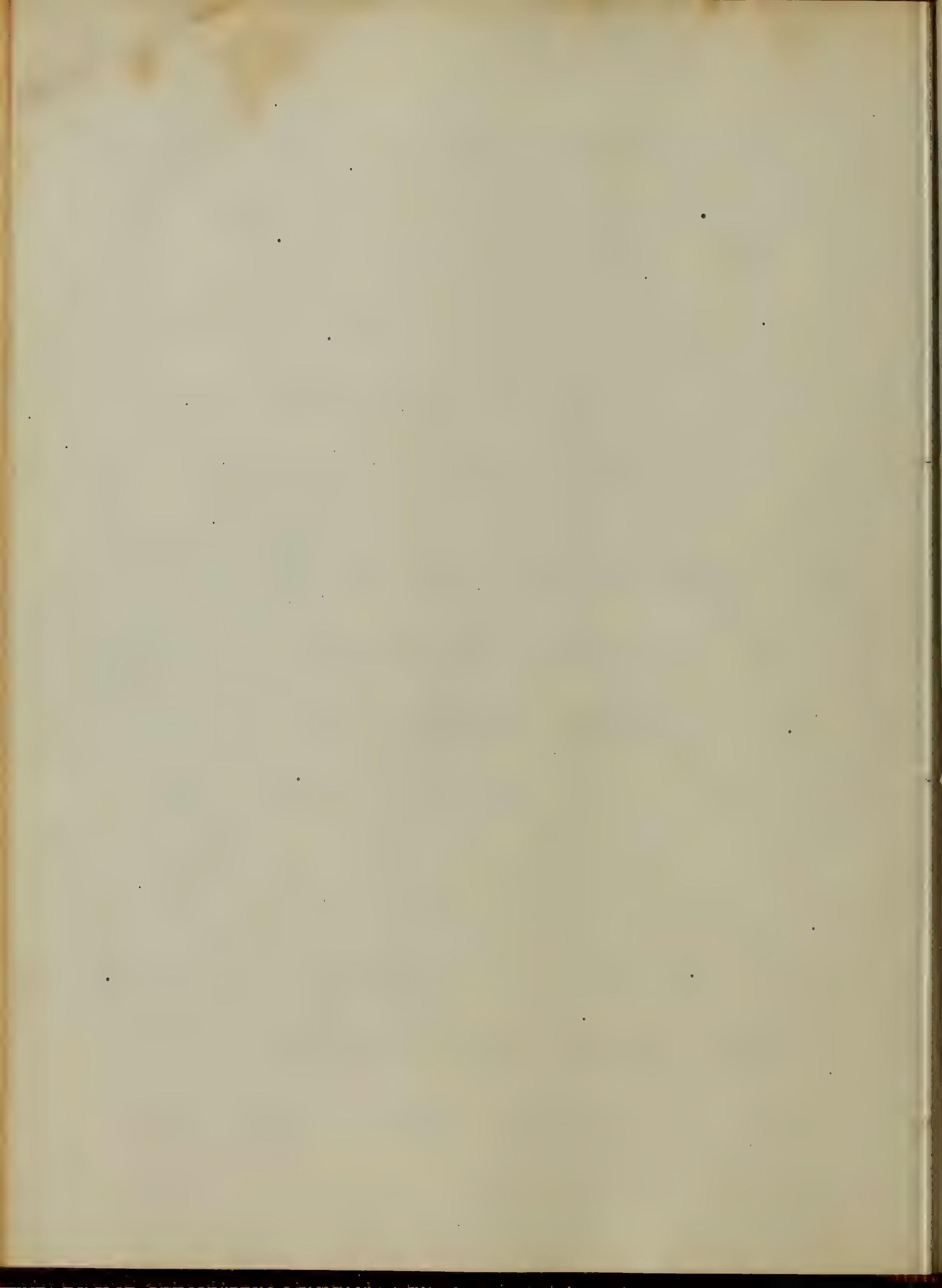
corresponding portions of the

peritoneum are much [illegible]

the [illegible] are usually [illegible]

rated to the touch sometimes

[illegible] and at other times



[illegible]

[illegible]

[illegible] in [illegible]

[illegible]

[illegible]

[illegible] The glands near the

caecum are affected first.

sloughing of the mucous mem-

brane occurs in the majority

of cases after the sloughing is

completed the Peyer's and

solitary glands ulcerate a

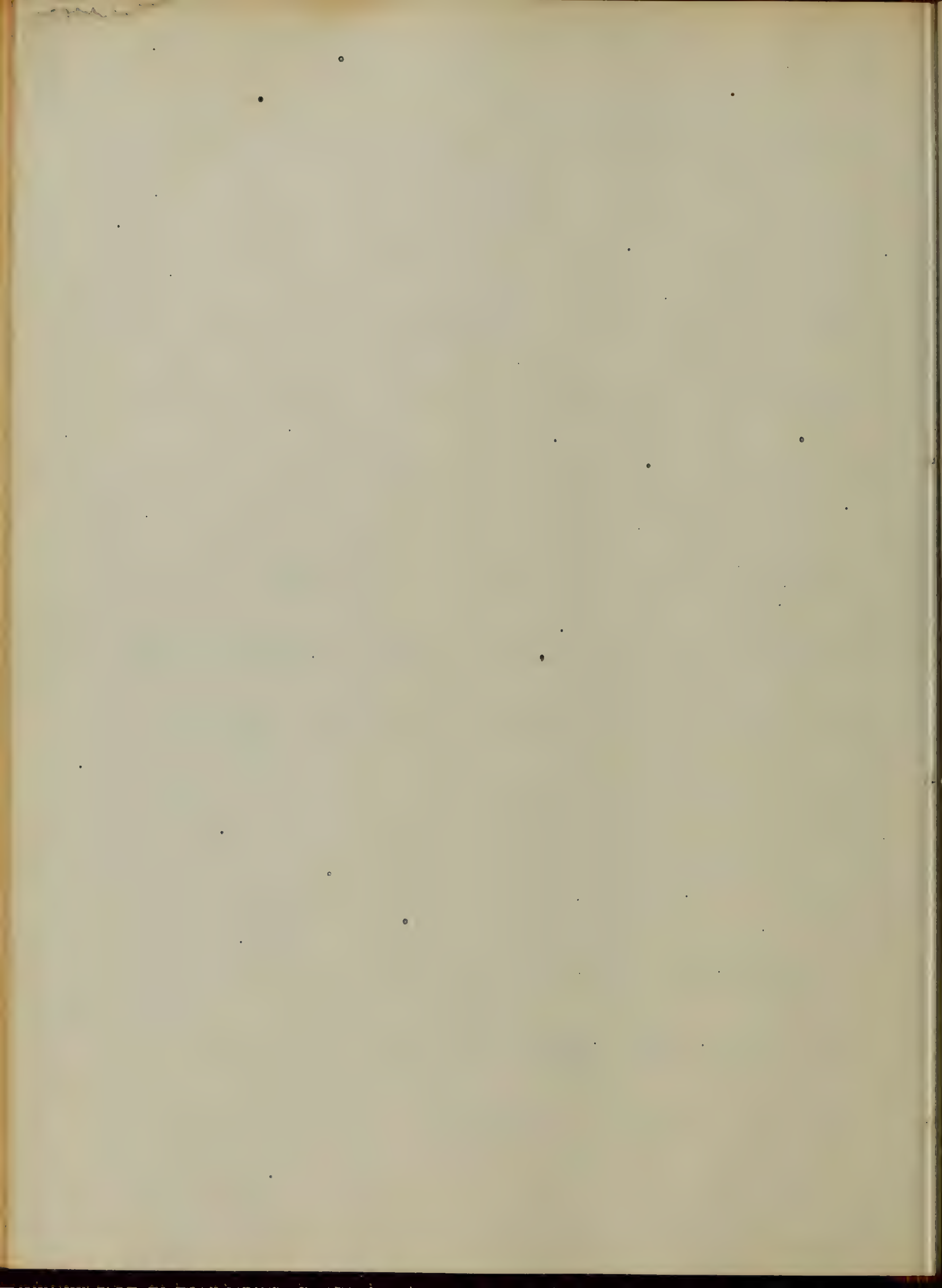
thin serous [illegible] membrane is

formed at the bottom of the

ulcers; the spleen is more or

less enlarged and softened; liver is

congested.



[illegible]

[illegible]

[illegible] it is [illegible]

gradually. [illegible]

stage [illegible]

[illegible]

[illegible]

[illegible]

early period of the disease [illegible]

more or less flushed [illegible]

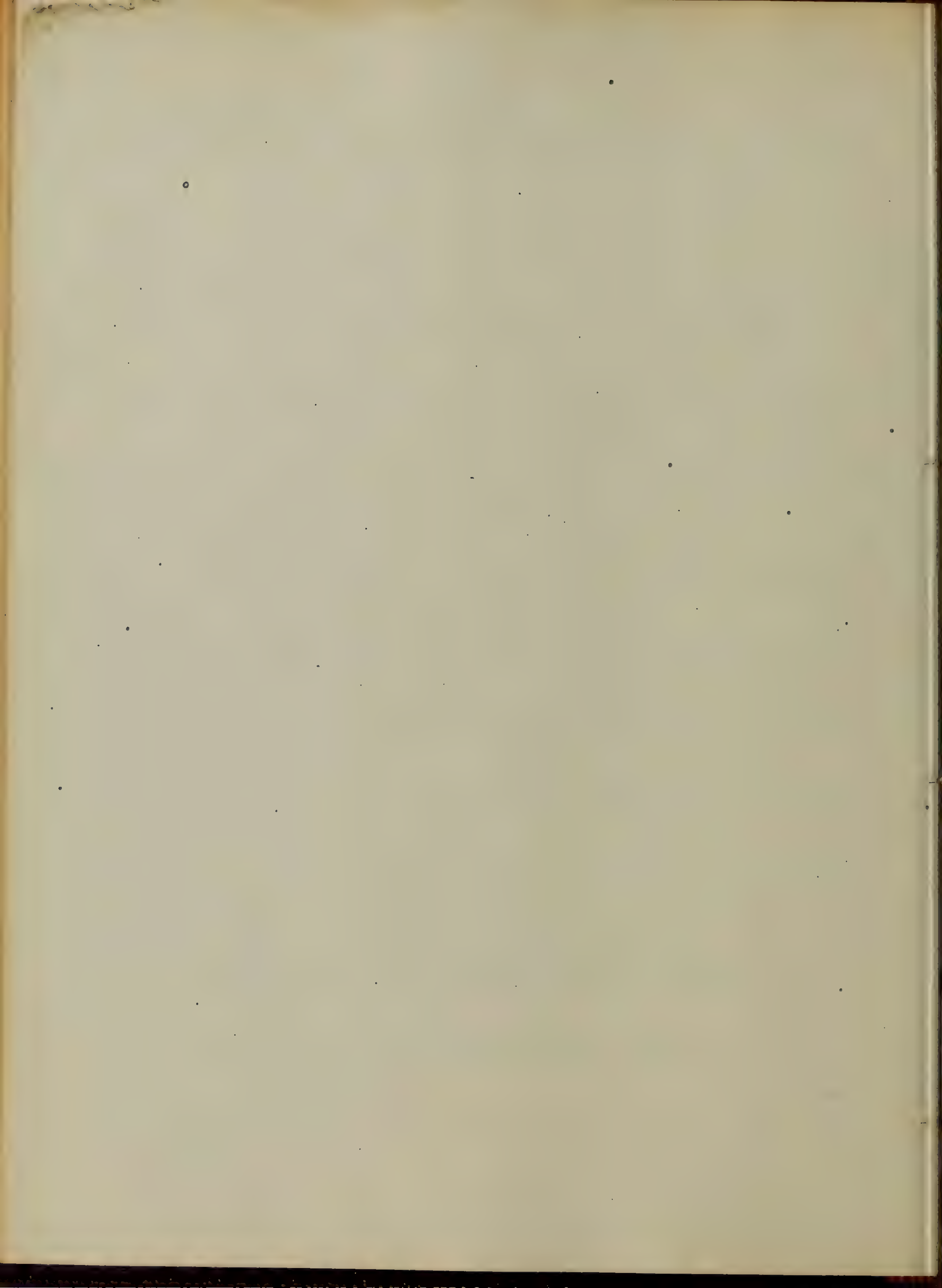
[illegible]

[illegible] expression the surface

presents a slight or moderate

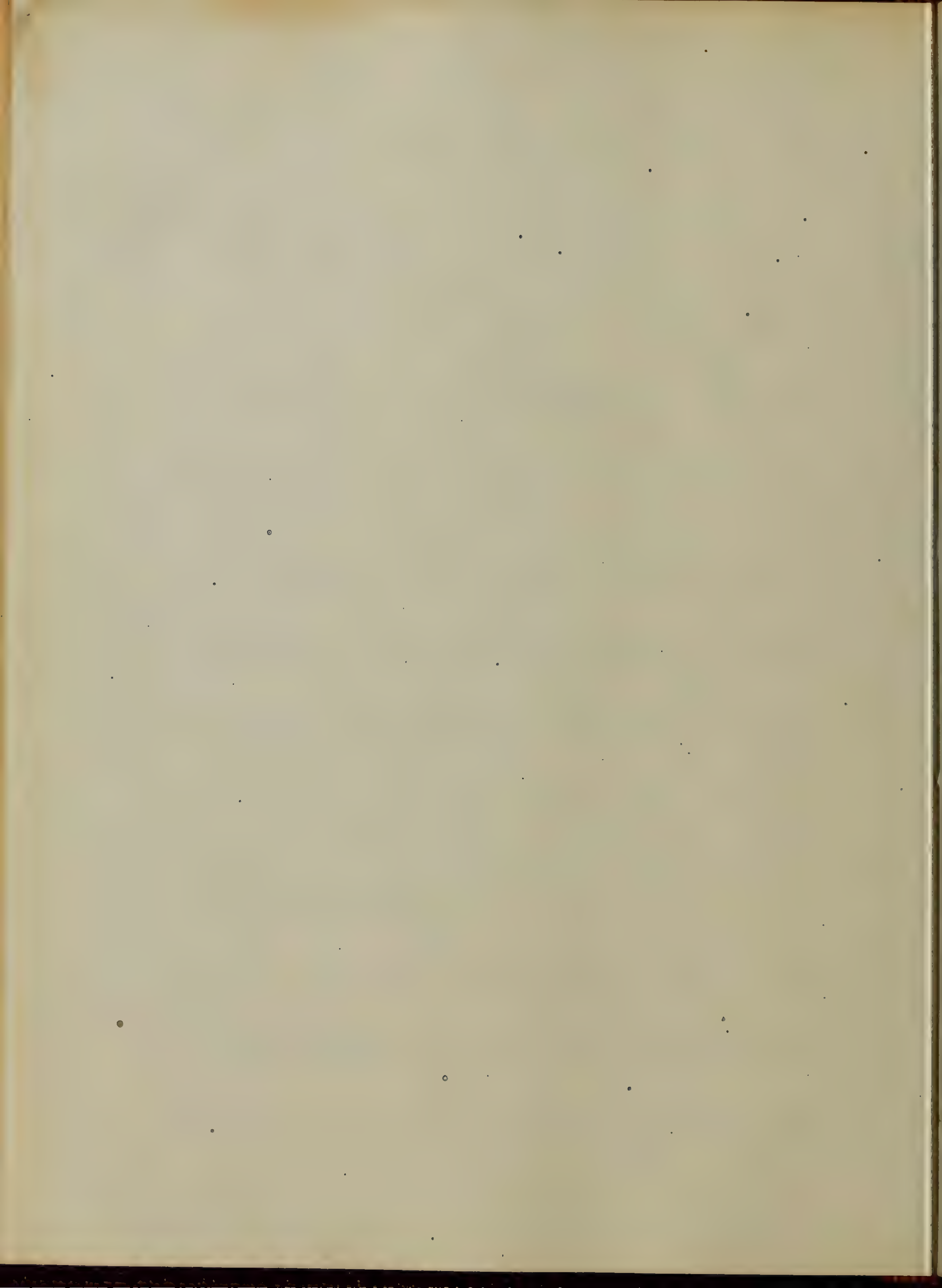
congestion the redness disappears

on pressure but returns.

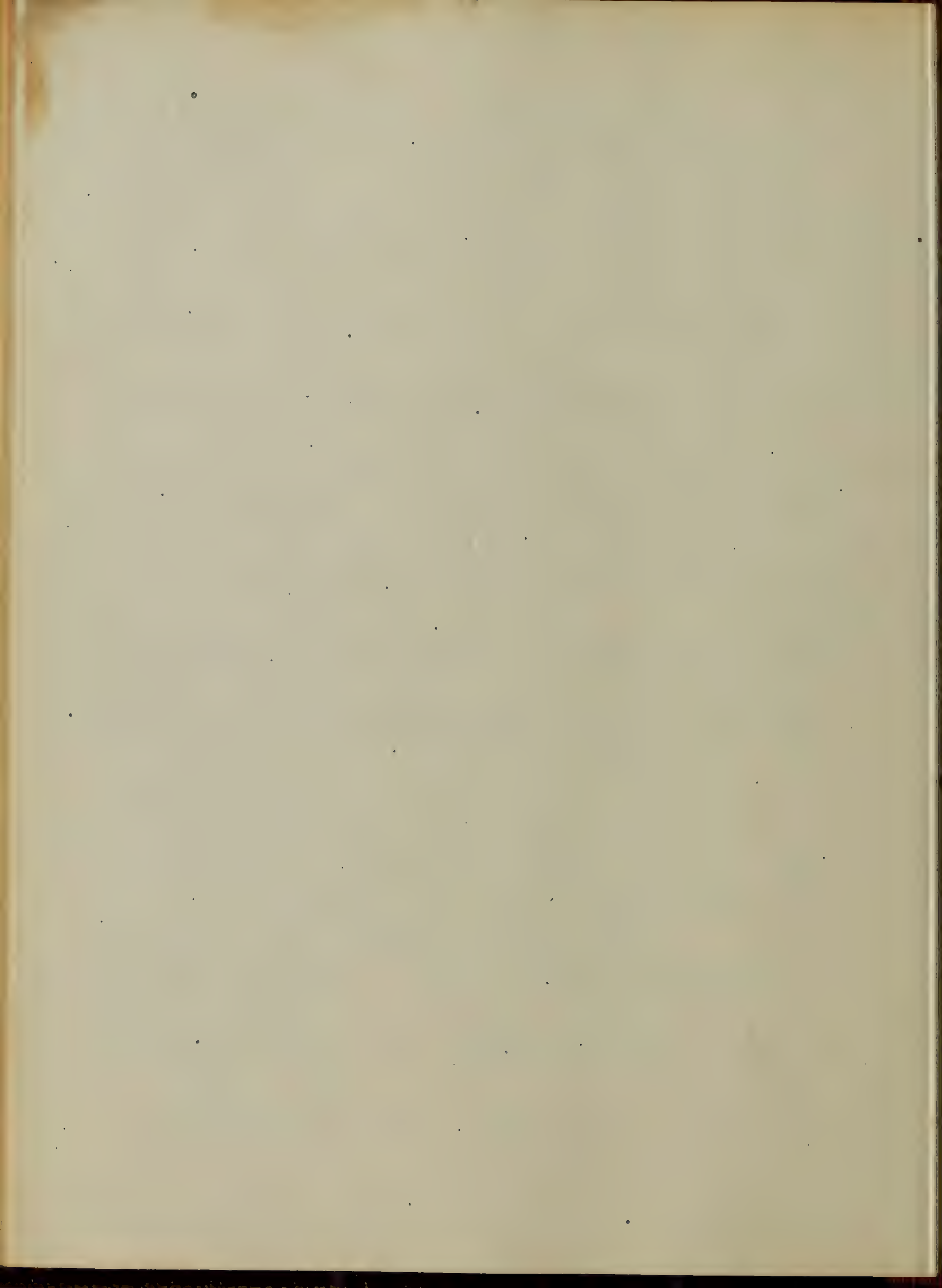


[illegible]
[illegible]
[illegible]
[illegible]

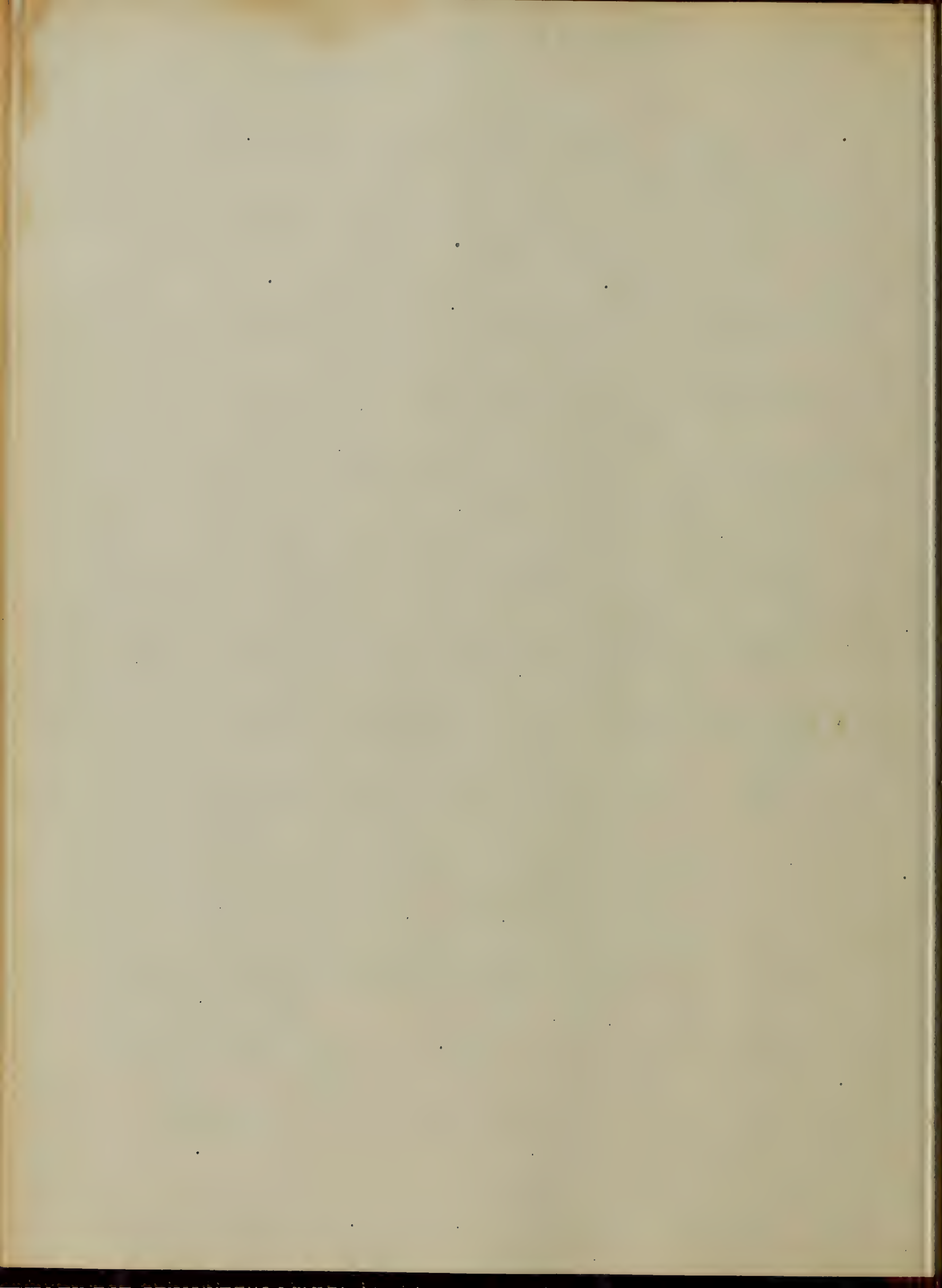
[illegible] generally [illegible]
[illegible] appearance may
be furred or frosted. It
is often covered with a
coating more or [illegible]
it may be whitish [illegible]
brownish or [illegible]
The surface of the tongue
is sometimes [illegible]
ed, or glazed and dry
[illegible]
of the tongue is sometimes



[illegible] of [illegible]
sordes on the lips remaining
from the gums. Diarrhoea or
looseness of the bowels exists
in the great majority of cases
and hemorrhage from the bow-
els occurs. Other abdominal
symptoms are meteorism or
tympanites, tenderness or
pain on pressure and gurg-
ling in the right iliac
region, and dullness on
percussion from the presence
of enlarged [illegible] frequently
there is [illegible]
[illegible] sometimes [illegible]



[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
occurs [illegible] [illegible] [illegible]
or during convalescence.
The perforation gives rise to
peritonitis which is generally
developed abruptly.
Of the symptoms referable
to skin the most important
is the characteristic eruption.
The eruption consists of isola-
ted papules generally [illegible]
the trunk of a rose or pink
color.



[illegible]

[illegible]

[illegible]

[illegible]

[illegible] and [illegible] the

points in the clinical history

which are distinctive of [illegible]

[illegible] are as follows the grad-

ual development the [illegible]

of marked remissions [illegible]

abdominal symptoms [illegible]

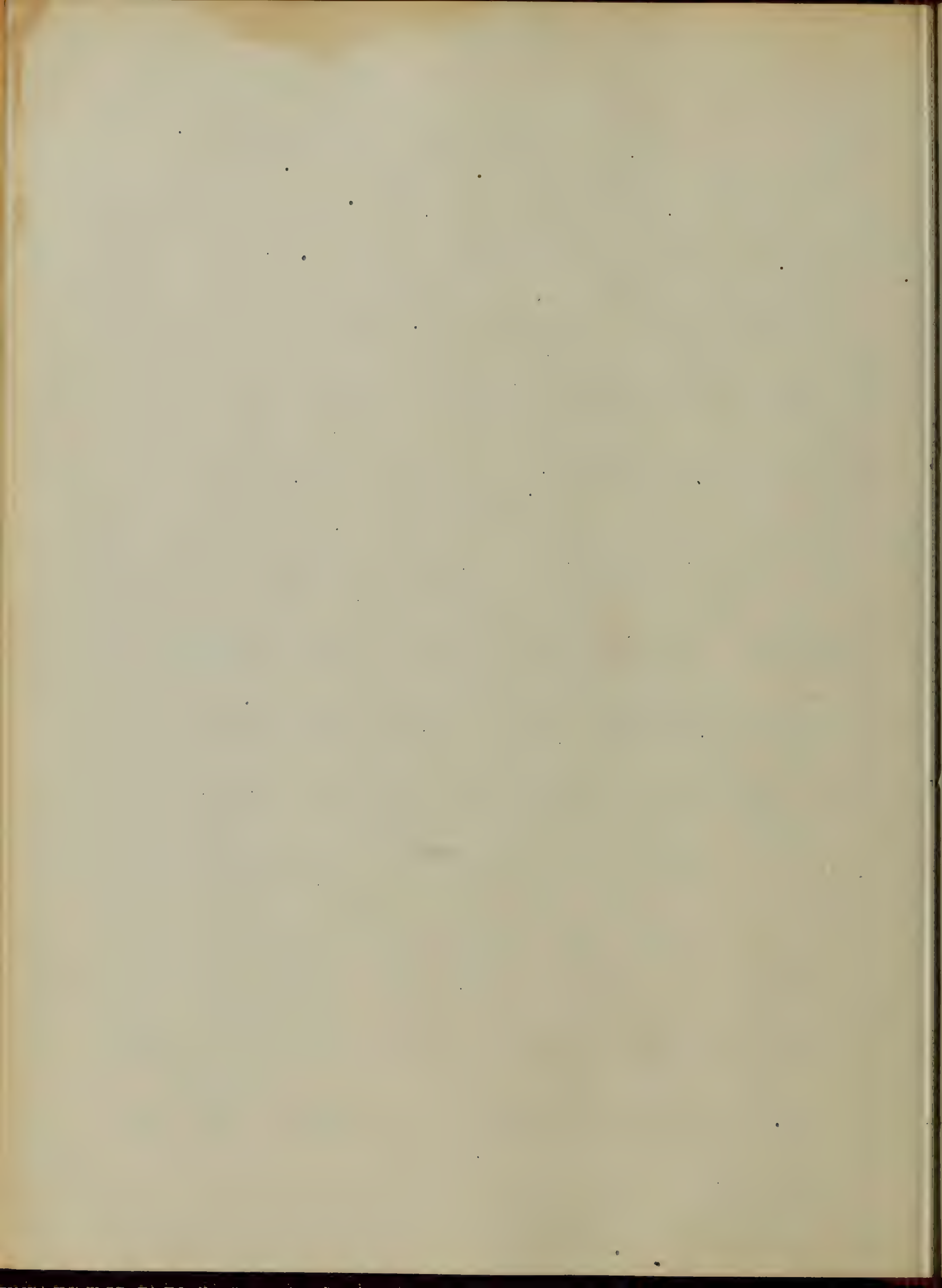
head [illegible] [illegible]

[illegible] tenderness in the

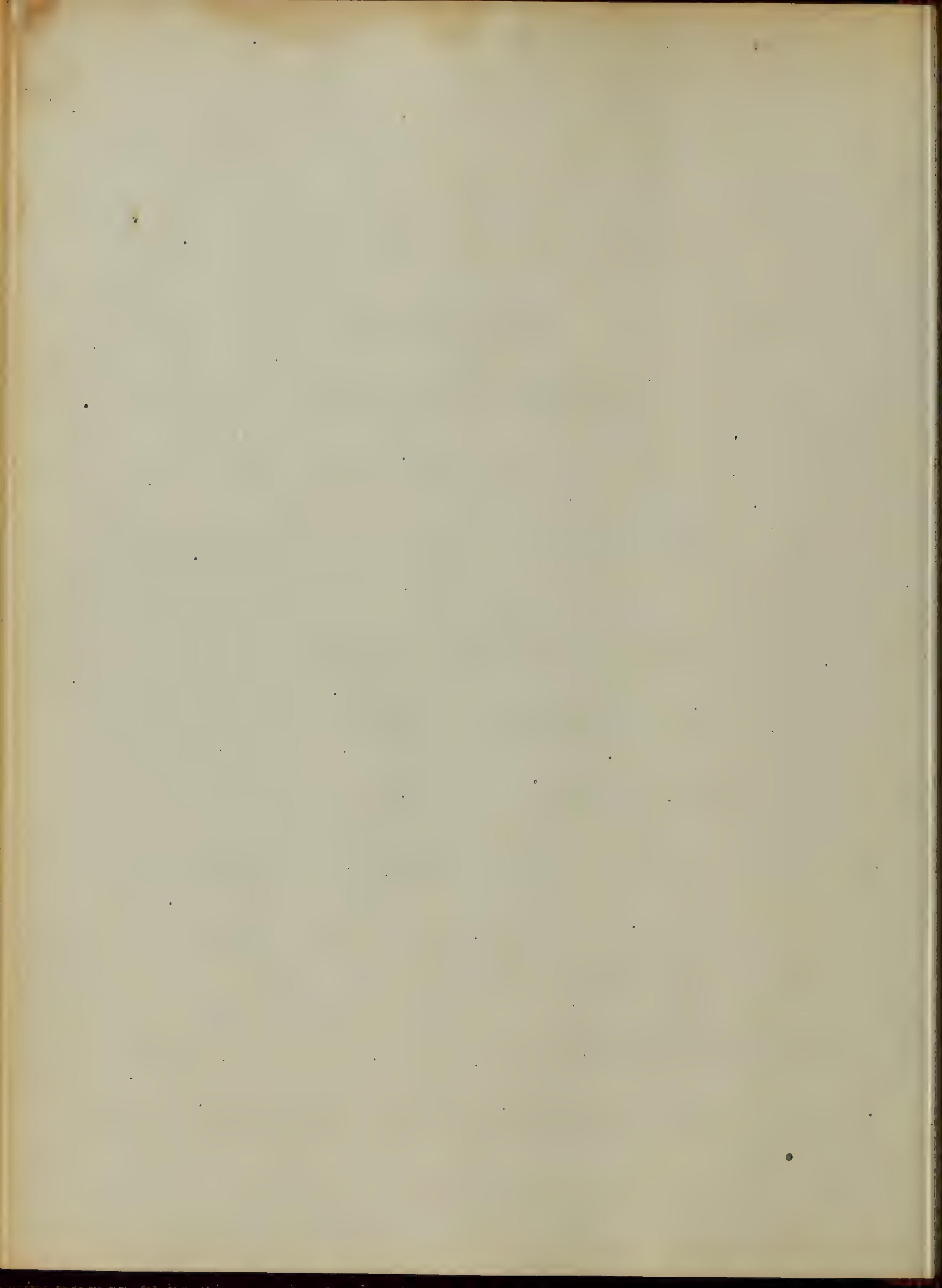
[illegible] region and gurgling

occurance of Epistaxis and

the characteristic eruption, in [illegible]



[illegible]
[illegible]
[illegible]
this disease is characterized by
a progressive increase [illegible]
until for the first time in some
days it may reach to 103° during
the second week. The local
affections which Typhoid
fever is liable to be
confounded with are
Bronchitis Pleuritis Pneumonia
or acute Tuberculosis Enter-
itis Acute Meningitis as
distinguished from this disease
is characterized by intense [illegible]



epithelium [illegible]

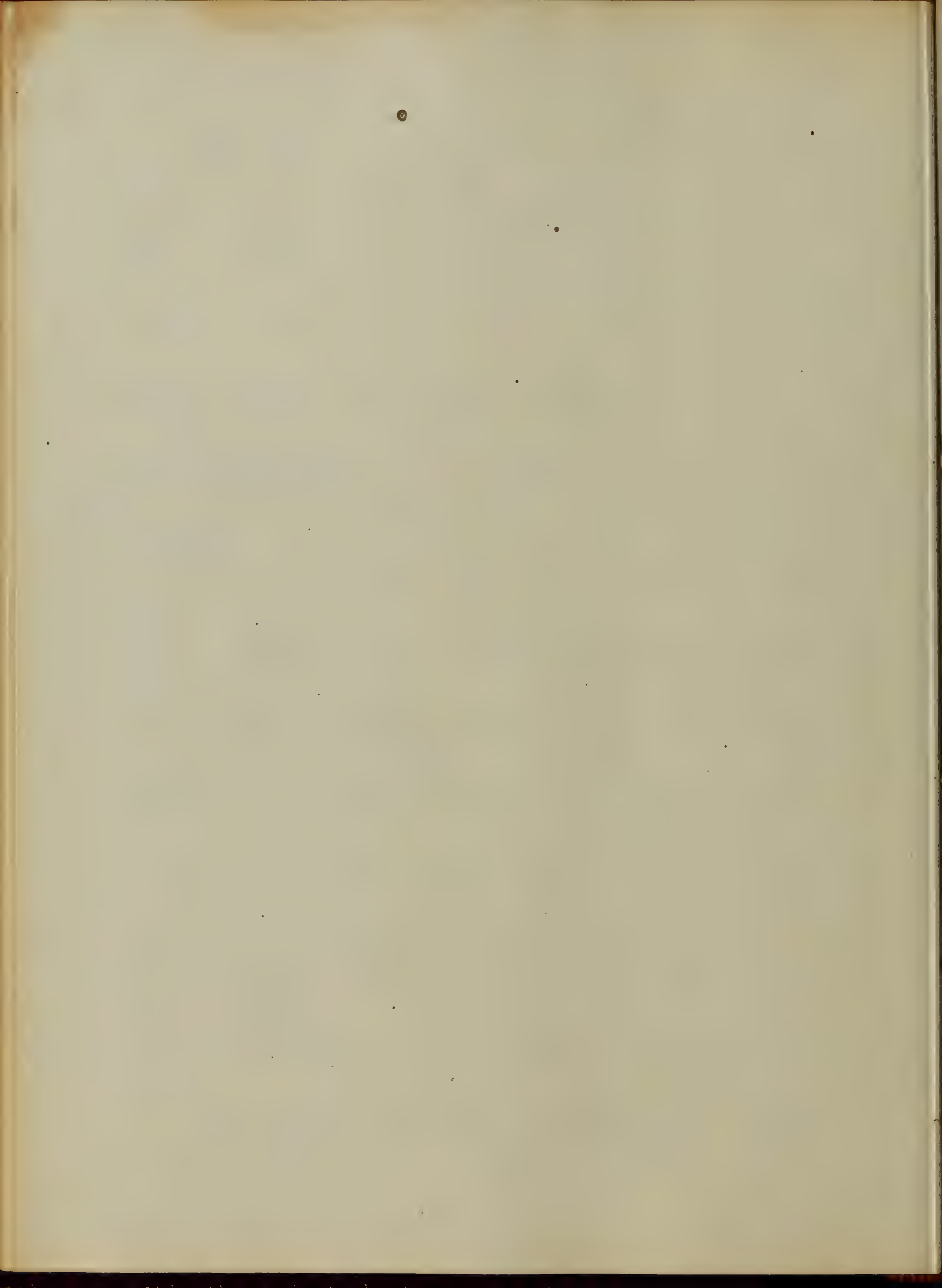
[illegible]

by vomiting [illegible]

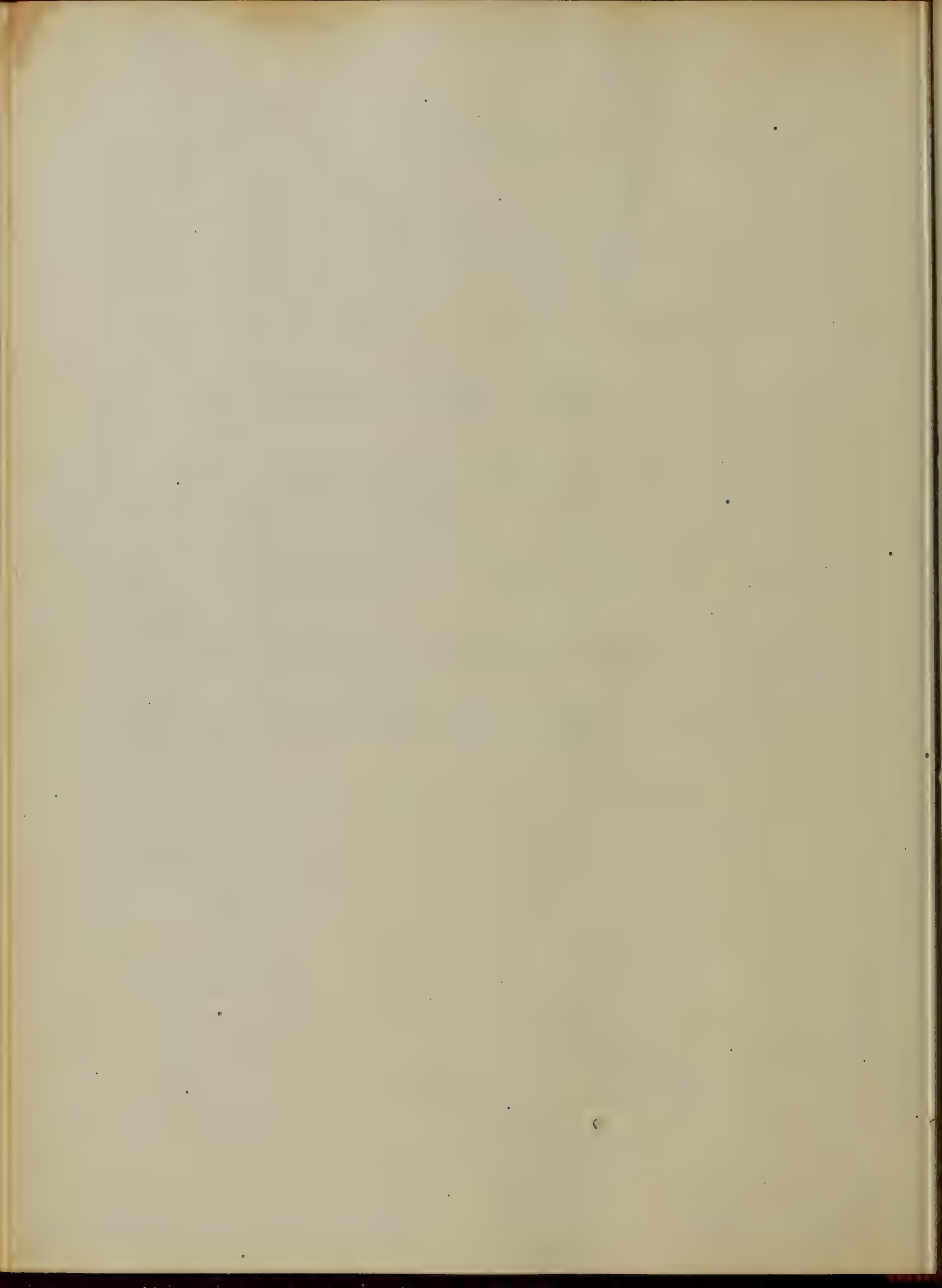
[illegible].

The existence of Pneumonia is shown by the physical signs. It is to be distinguished from this by the abdominal symptoms and eruption.

It is known from Tuberculosis by the notable prominence of the Respiration and prominence of cough in some cases hemorrhage from the lungs. [illegible] is distinguished from Typhus by the



[illegible]
[illegible]
abdominal [illegible]
as [illegible]
[illegible]
dusky or dingy [illegible]
[illegible]
rose colored the redness [illegible]
[illegible]
eruption in [illegible] as it is
in [illegible]



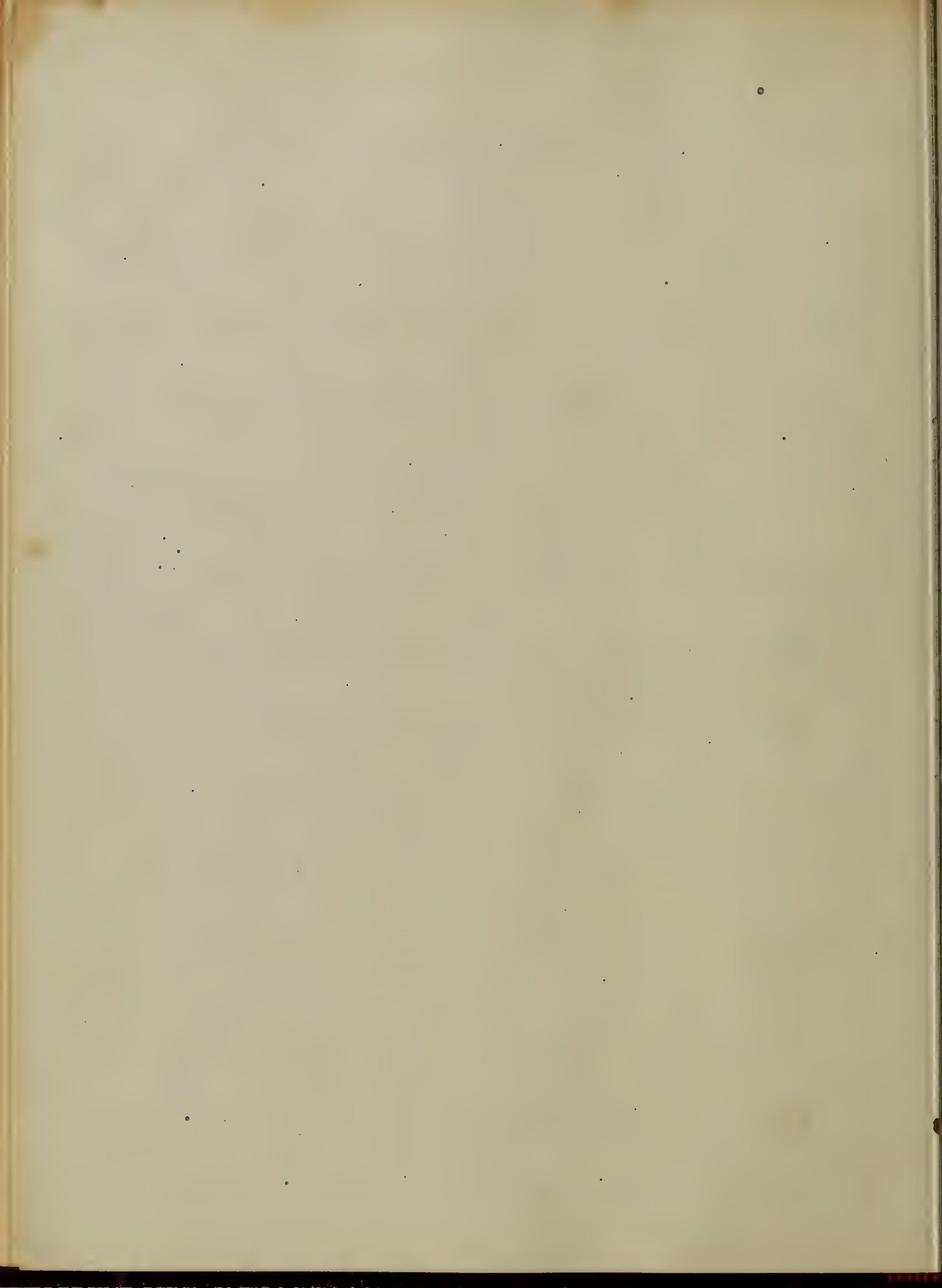
[illegible]

[illegible]

[illegible] is [illegible]

[illegible]

The [illegible] mortality is one in twenty. Among the unfavorable symptoms constant [illegible] Coma. [illegible] breathing profuse diarrhea or hemorrhage from the bowels = the mildest cases can not be looked on as [illegible] from danger.



[illegible]ment

this would be [illegible]

we believe it is generally

admitted that the known

resources of Therapeutics do

not [illegible] a [illegible] means

for the arrest of this disease

nor even for shortening the

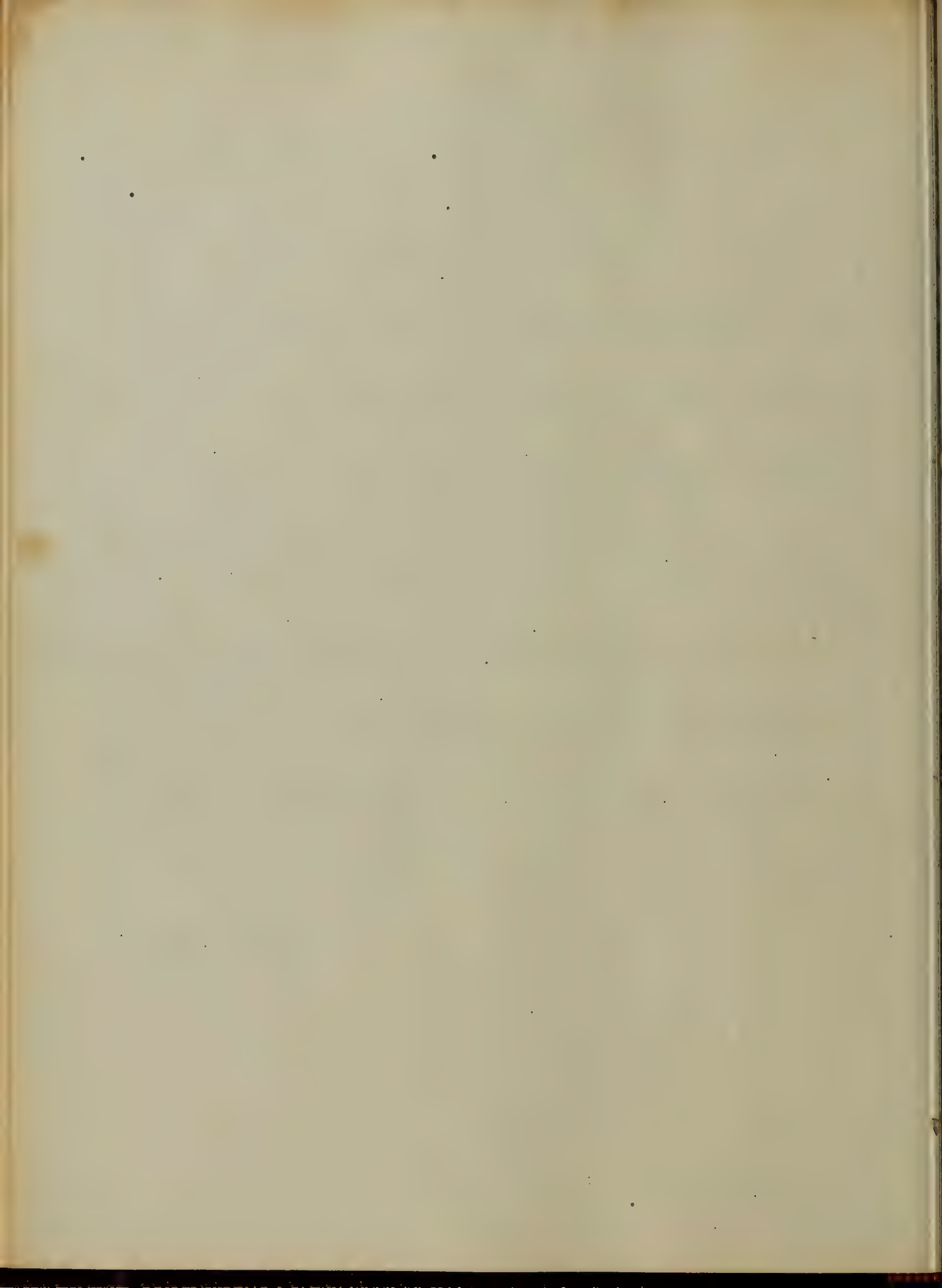
duration of its febrile course.

If the fever runs high cold

sponging is a very good means

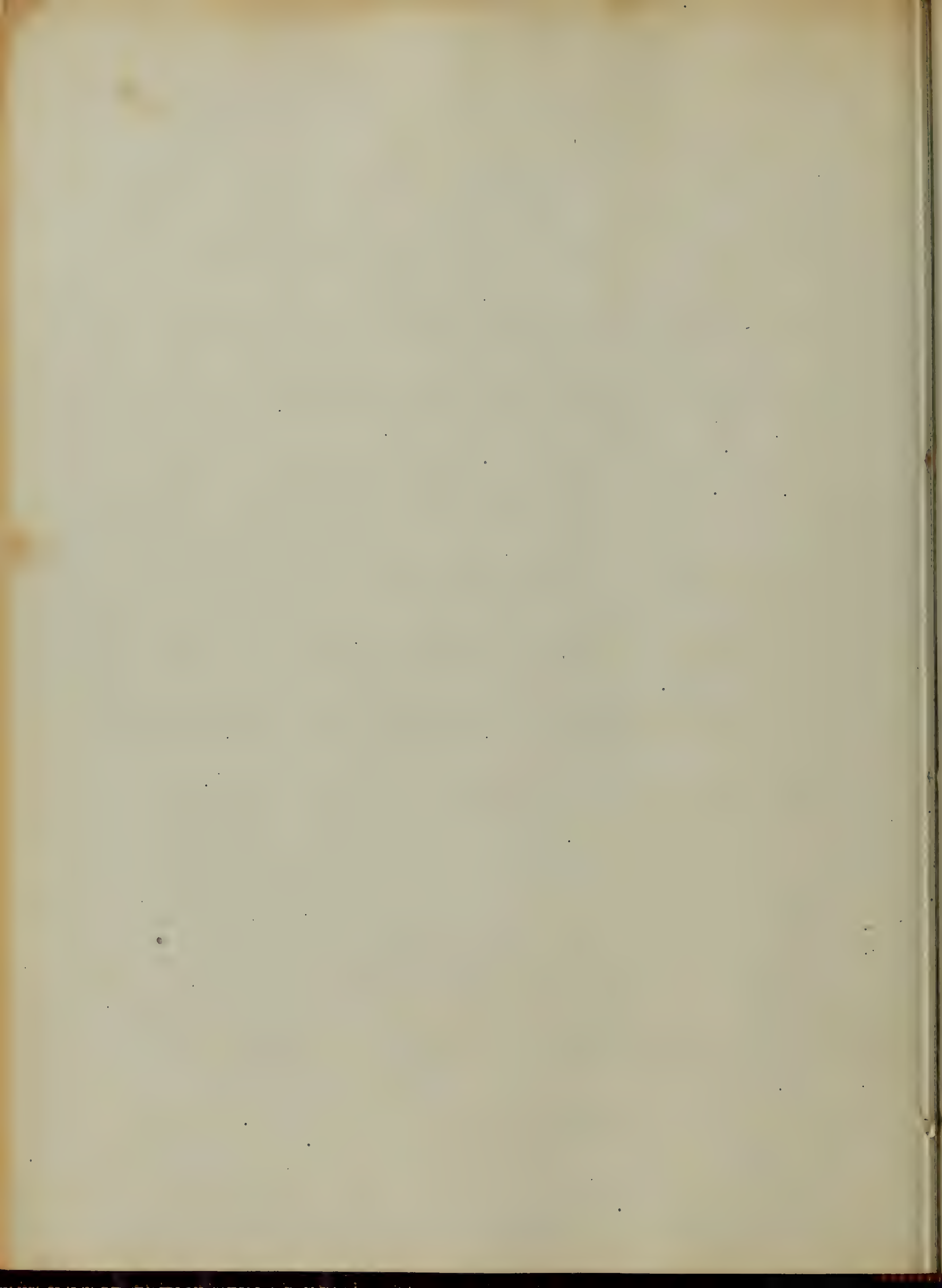
of reducing the temperature

of the surface, if the treatment



[illegible]

[illegible] aims palliative measures [illegible] symptom is [illegible] spirits and water [illegible] commence distilled vinegar if more [illegible] measures [illegible] required cold douche [illegible] may be [illegible] distance of the [illegible] is declared the hair should be closely cut. Wakefulness is a symptom [illegible] to procure such



[illegible]

immediate remedy but as

a means of [illegible]

symptoms. for this [illegible]

will prove beneficial [illegible]

[illegible] should [illegible]

in some form [illegible]

employed and the [illegible]

are indicated if these fail

the combination of [illegible]

in small doses with chinin

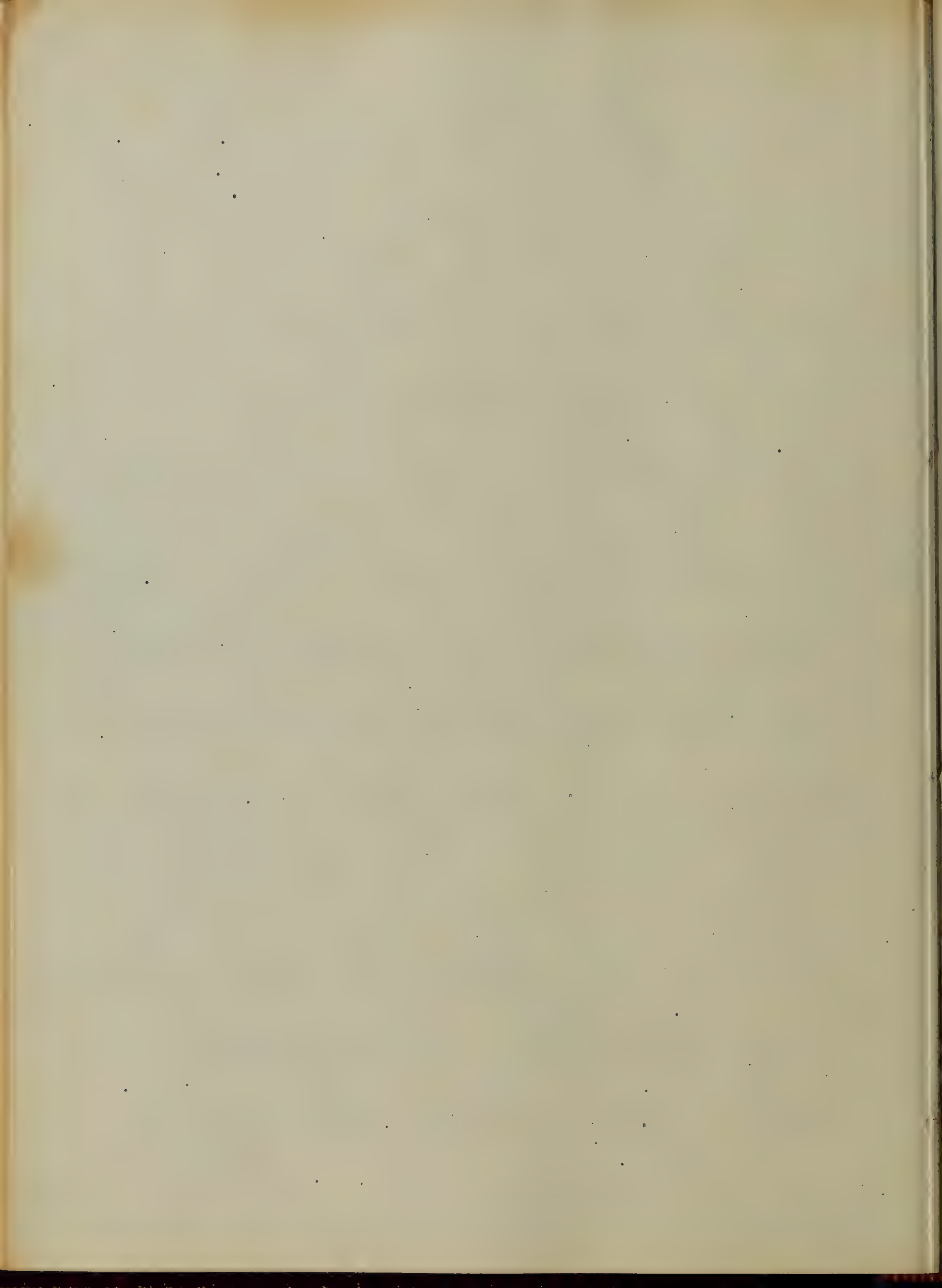
is beneficial the bromides

in some cases have a [illegible]

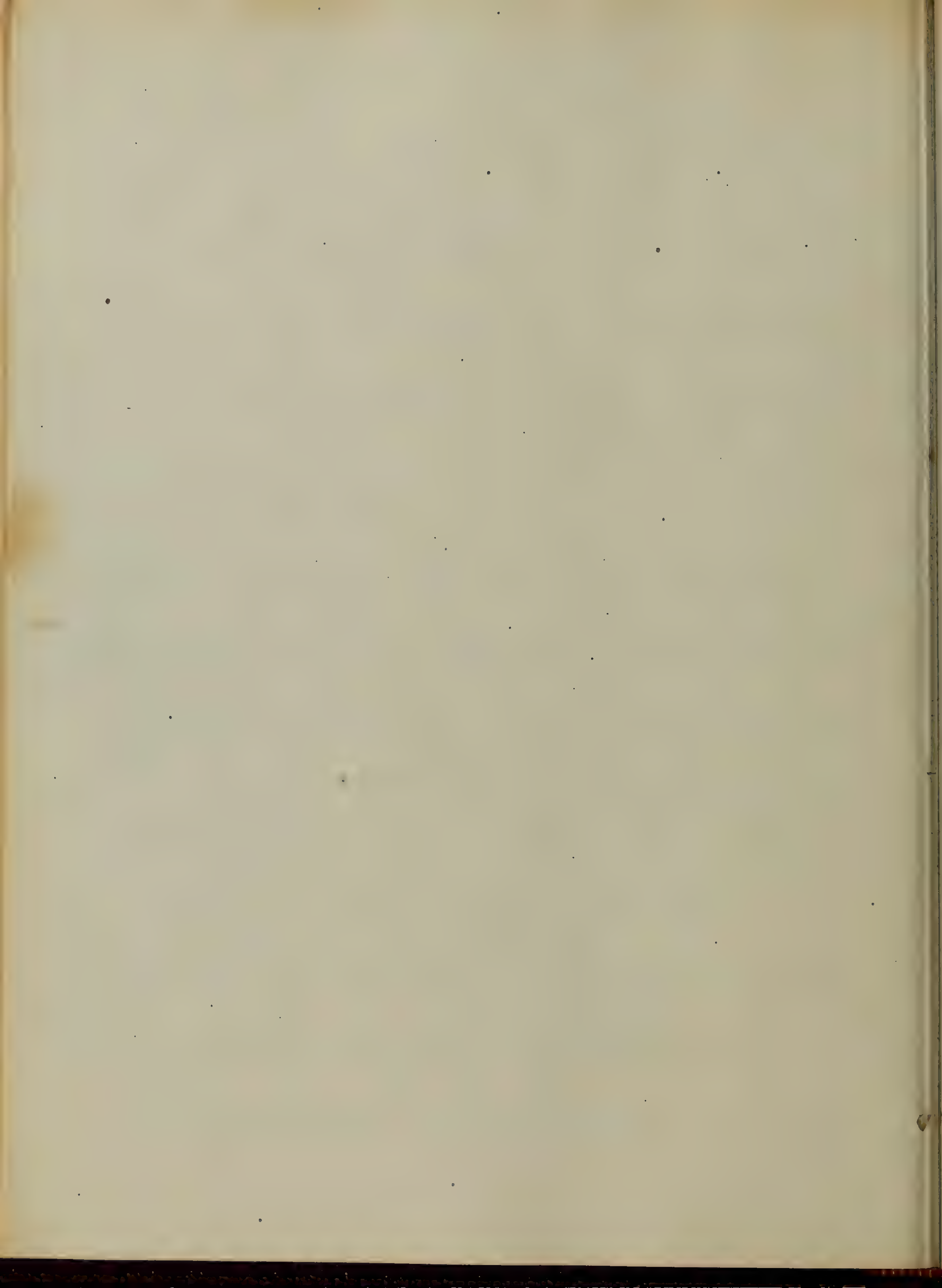
[illegible] effect the treatment

for [illegible] is generally

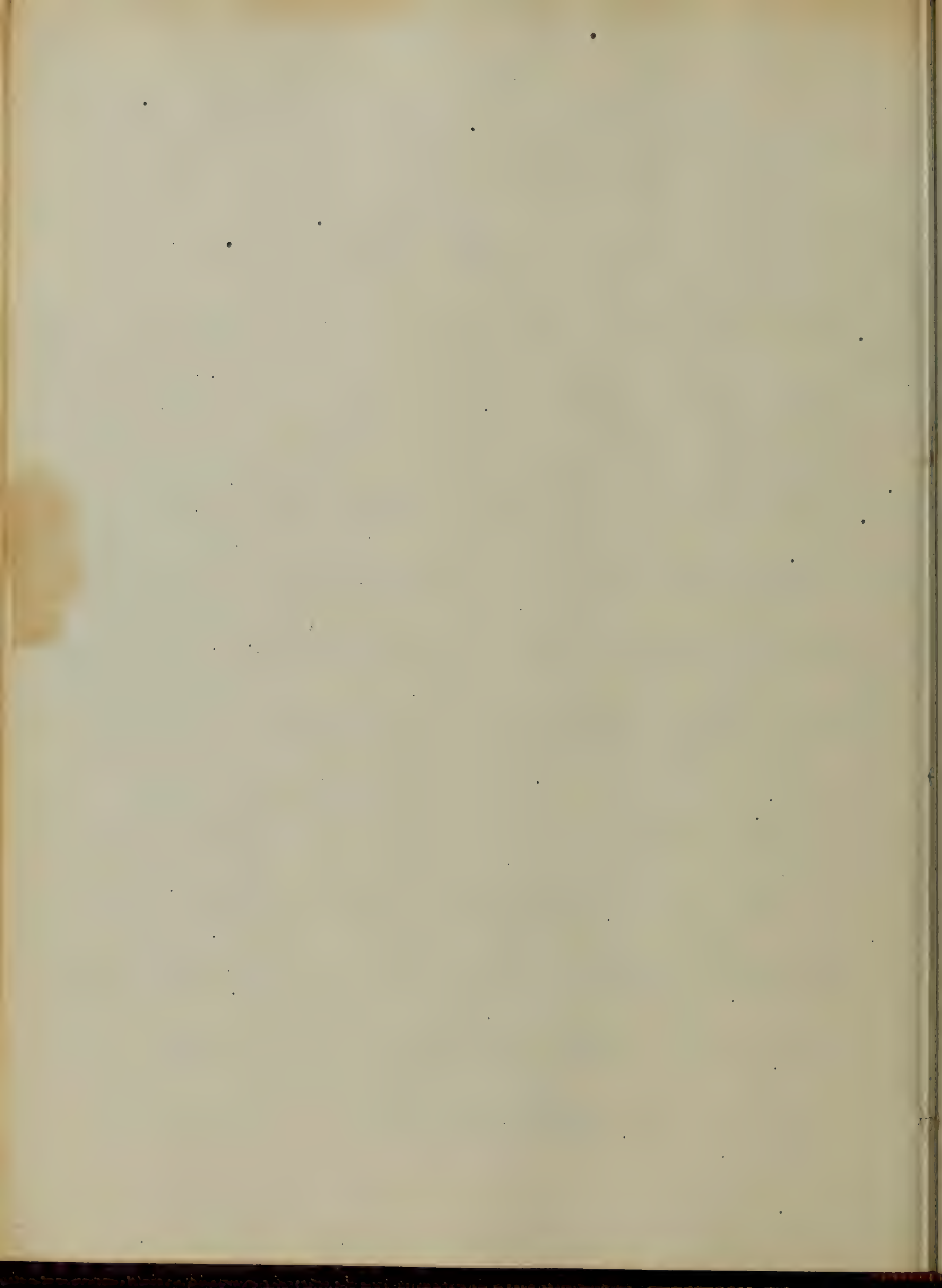
[illegible] for [illegible]



[illegible] always remains [illegible]
[illegible] obtained. For this, fluids
and stimulants should be
given by the mouth or rectum.
As a general thing cathartics
or even laxatives are not re-
quired for constipation; for
this in the first stage of the
disease, we think that a laxative
dose of castor oil or citrate of
Magnesia is advisable to clear
out the Primae Viae, evacu-
ations may be delayed for 3
or 4 days or even longer with-
out injury if there is no evidence
of discomfort and the [illegible]

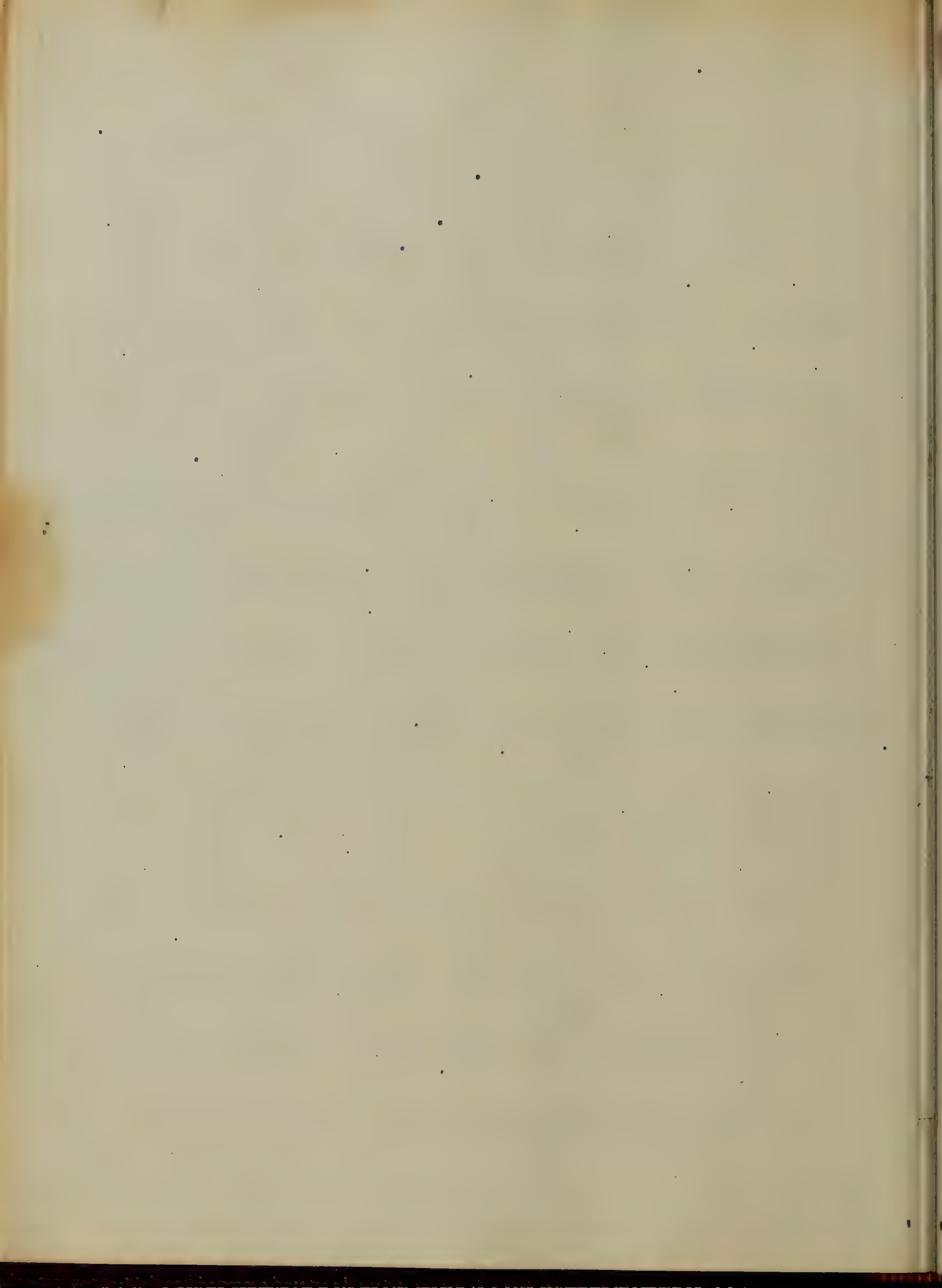


[illegible]
[illegible]
[illegible] remedies [illegible]
should enter into it [illegible]
and a saline laxative should be
given. When perforation of the
intestine occurs followed by
Peritonitis and intestinal [illegible]
[illegible] we should [illegible]
[illegible] and measures [illegible]
[illegible] the intestinal [illegible]
[illegible] involves some [illegible]
[illegible] for astringent remedies [illegible]
[illegible]
[illegible]
[illegible] lead and sulphate



[illegible] will [illegible] may be [illegible] patient must be kept [illegible] and quiet. Complications or [illegible] should not be treated with local or general bloodletting [illegible] as well as other complications [illegible] indicate operative measures. Epistaxis is sometimes [illegible] so as to require [illegible] or even plugging the anterior or posterior nares.

[illegible] and [illegible] Bleeding is one of the most important part of the treatment of [illegible] [illegible] indicated [illegible]



[illegible]

[illegible]-

ation [illegible] by the

position of the patient and giv-

ing cold water acidulated

with lemon or orange juice or

some other vegetable acid. Of

tonic remedies the most efficient

and convenient of administra-

tion is quinine, stimulants

and fish in moderation.

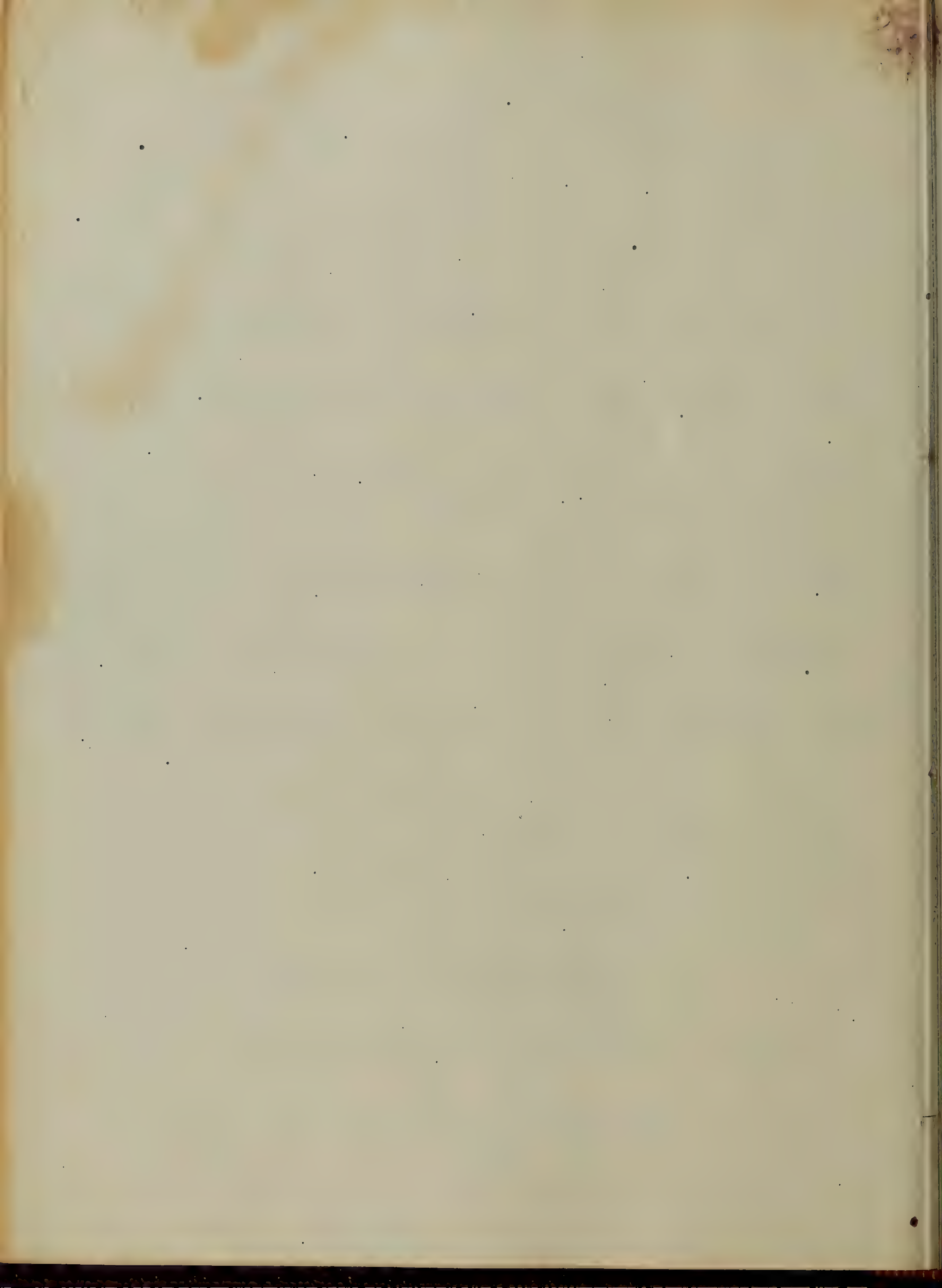
The patient should take as

much nutritious food as

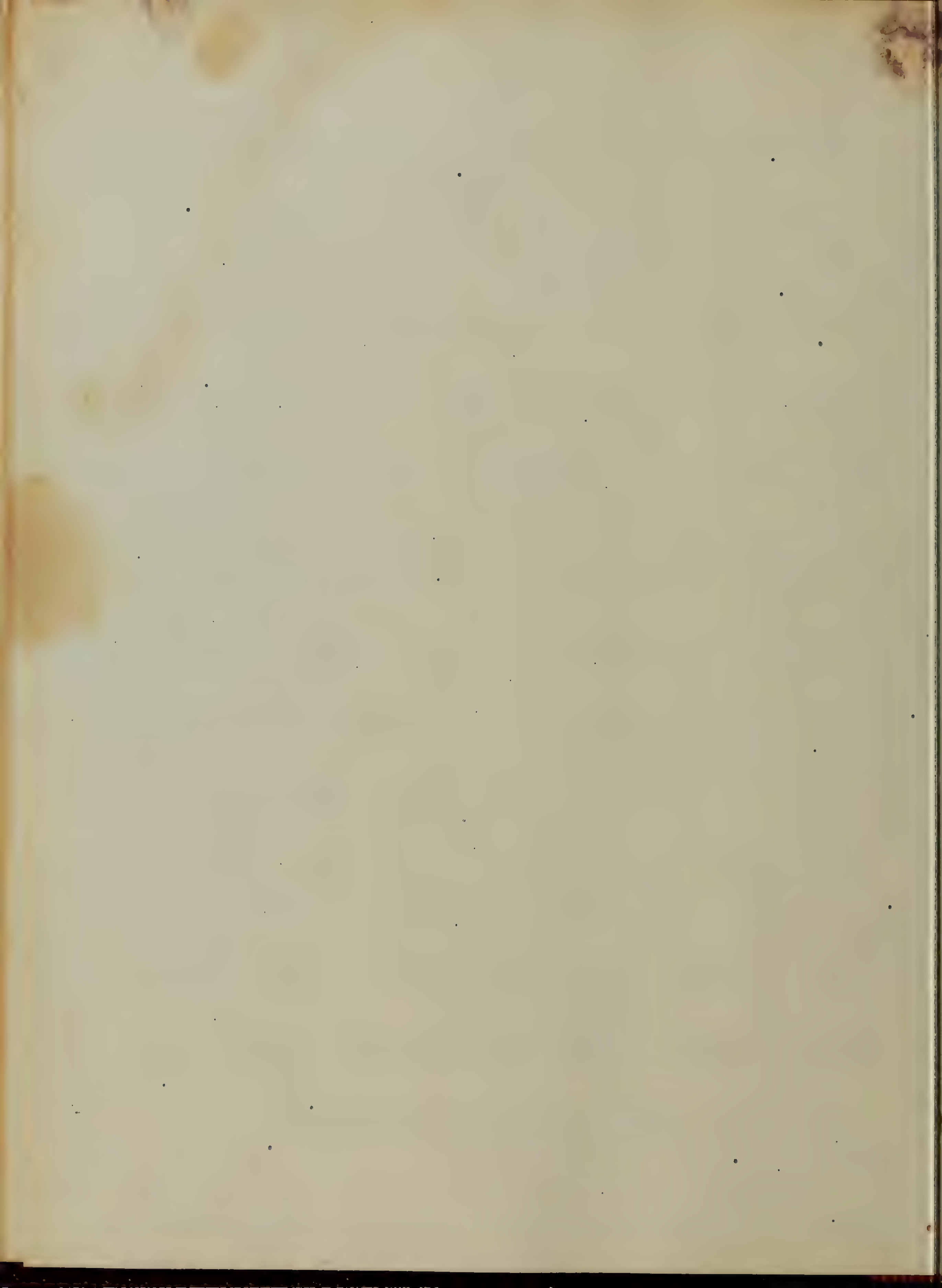
can be digested and assim-

ilated. The diet should be

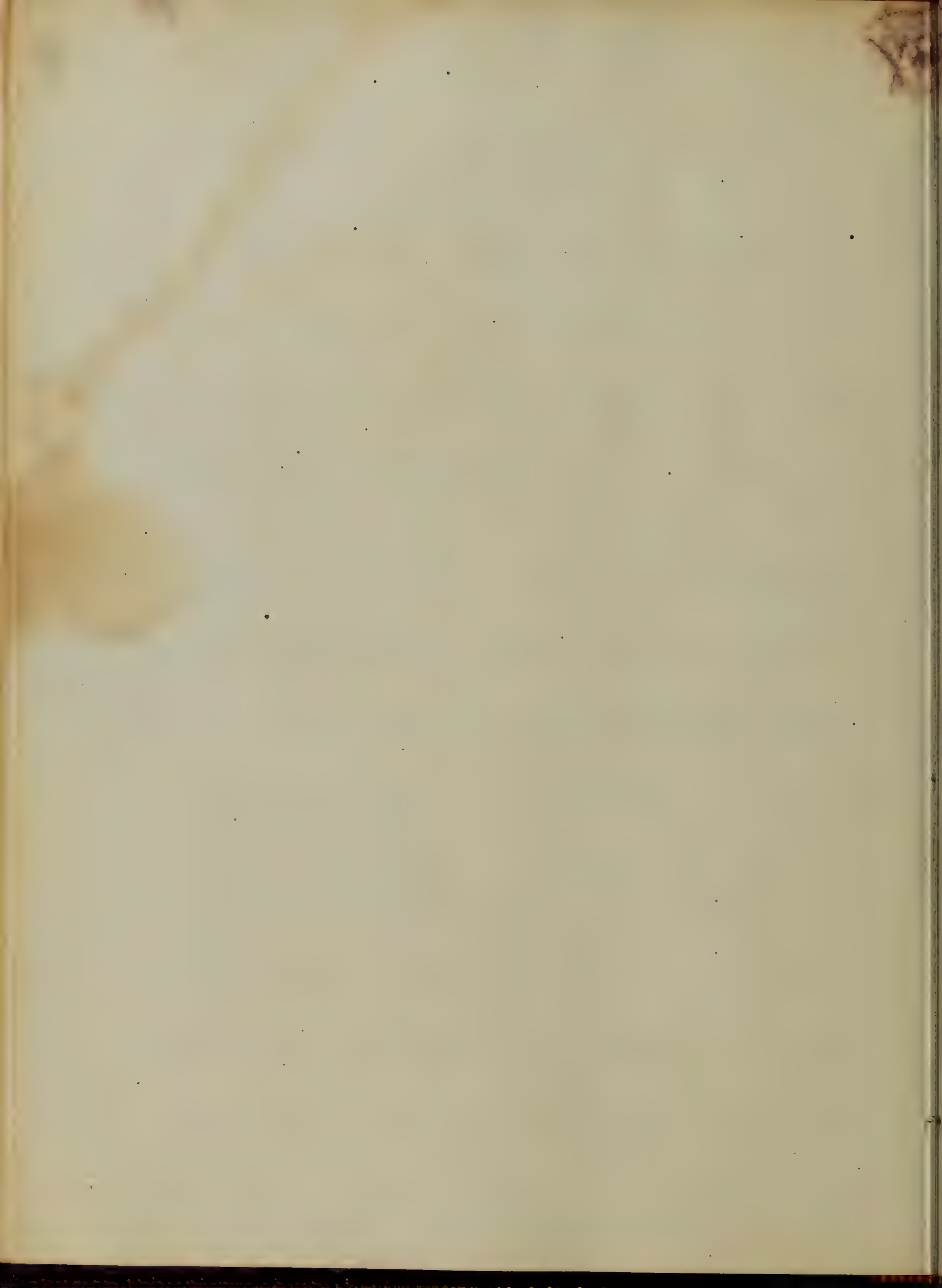
in a liquid form.



and embracing the [illegible]
variety of [illegible] changes.
[illegible] [illegible] [illegible] [illegible]
with the addition of some
farinaceous forms of food
fulfill the requirements. The
amount of food given at
a time must vary according
to circumstances the object
being to give as much [illegible]
can be readily digested. Of
the different articles of food
first named milk is [illegible]
the most valuable; in it we
have all the alimentary princi-
ples required for nutrition.



[illegible] substitution [illegible]
[illegible]
to the circulation. Feebleness of
the circulation as denoted by
the pulse and the heart sounds
calls for the use of stimulants
and they are to be given as
regards quantity in proportion
to the degree of feebleness of
the circulation and according
to their effect. Various remedies
[illegible] stimulants should
[illegible] be [illegible]
[illegible] should be [illegible]
as soon as [illegible]
[illegible]. The patient should



[illegible]

[illegible]

[illegible]

[illegible]

[illegible] in [illegible] [illegible]

[illegible]

early in the stage of [illegible]

cence and as soon as [illegible]

strength of the patient will

permit they may walk out

of doors. Ease with respect to

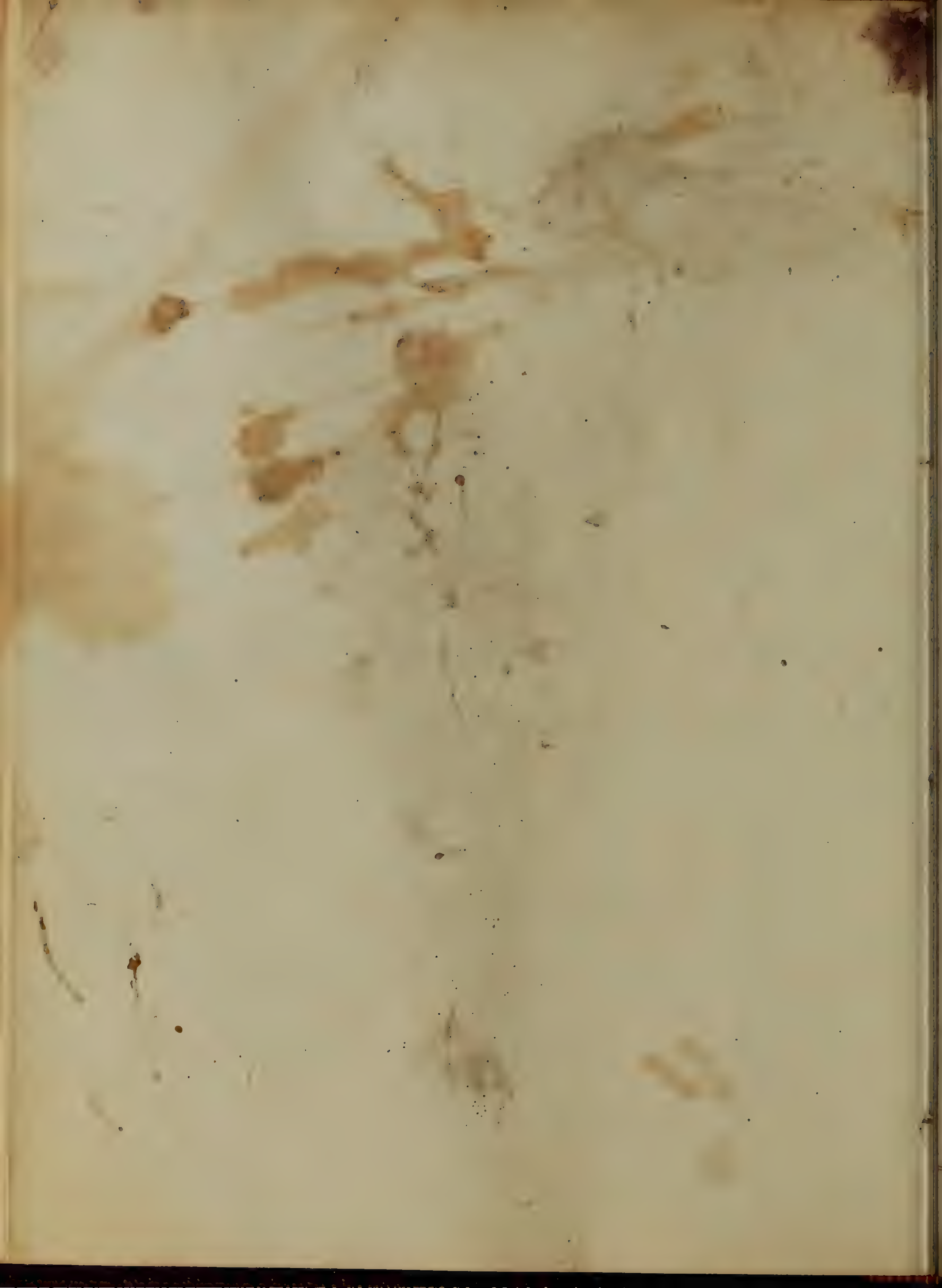
much muscular exertion is

important in convalescence in

consequence of a liability to

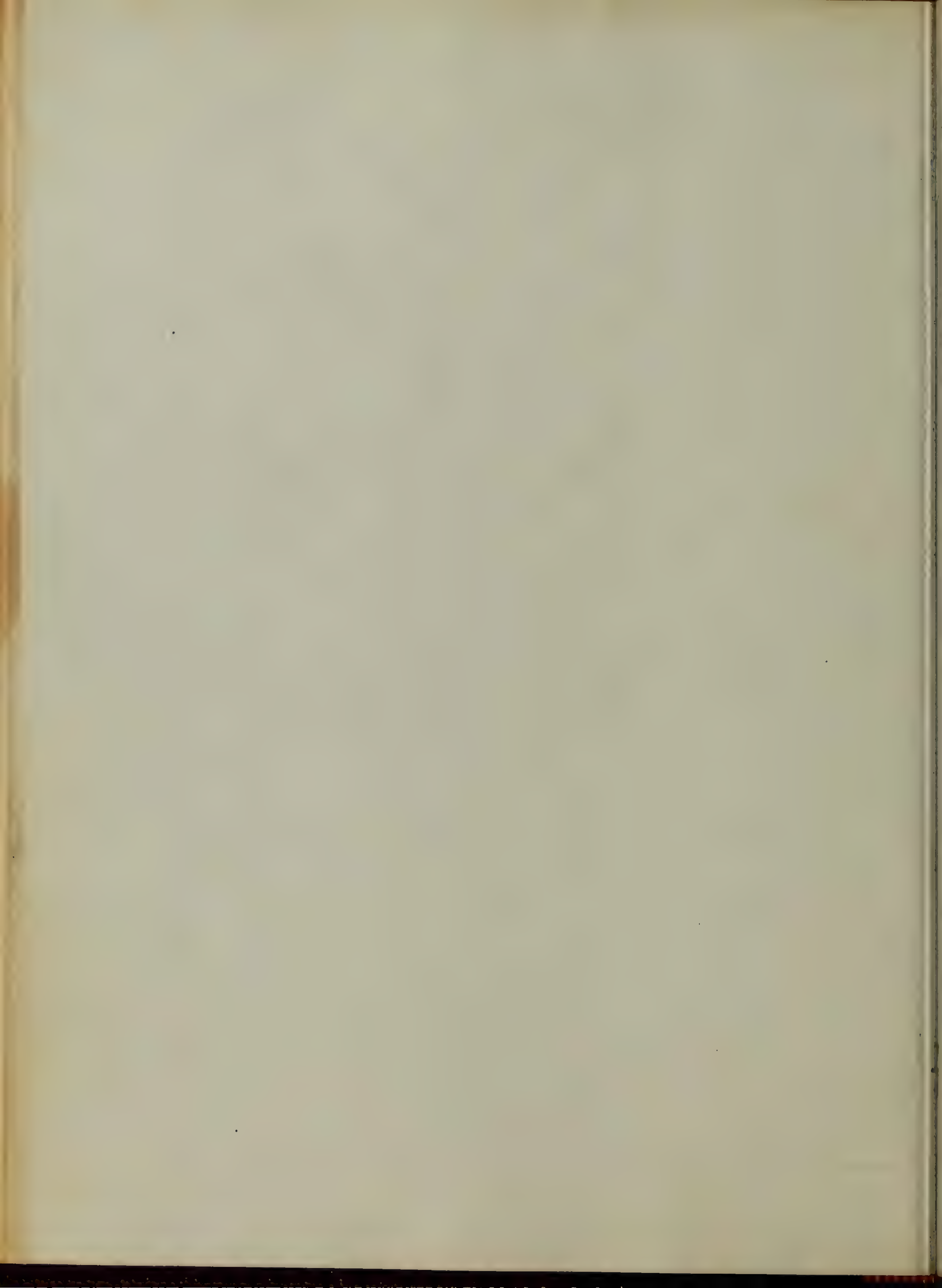
perforation [illegible] [illegible]

[illegible]

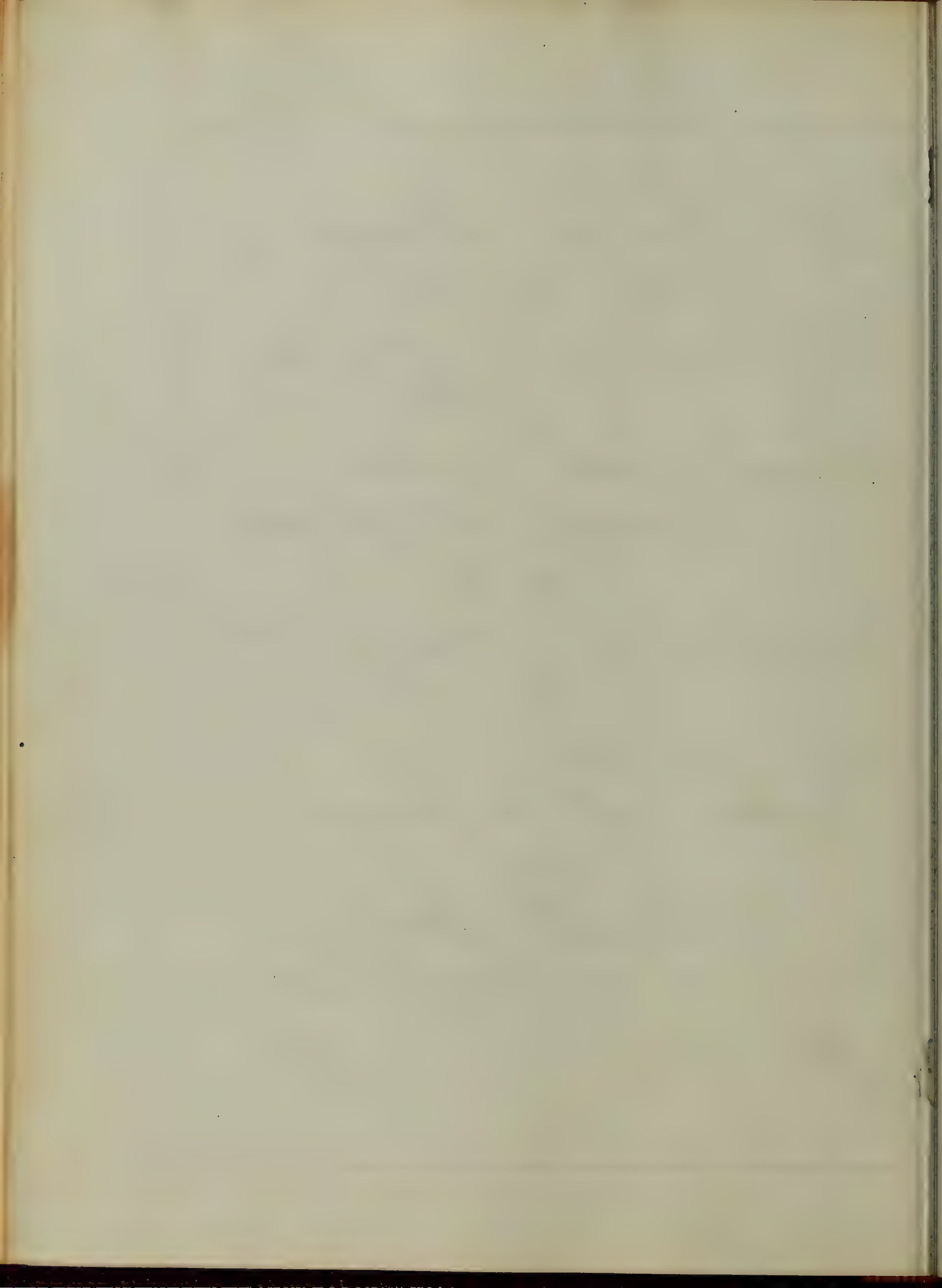


1875.

The
Clinical history of
Six cases
Reported by
Charles Abert. Jr.

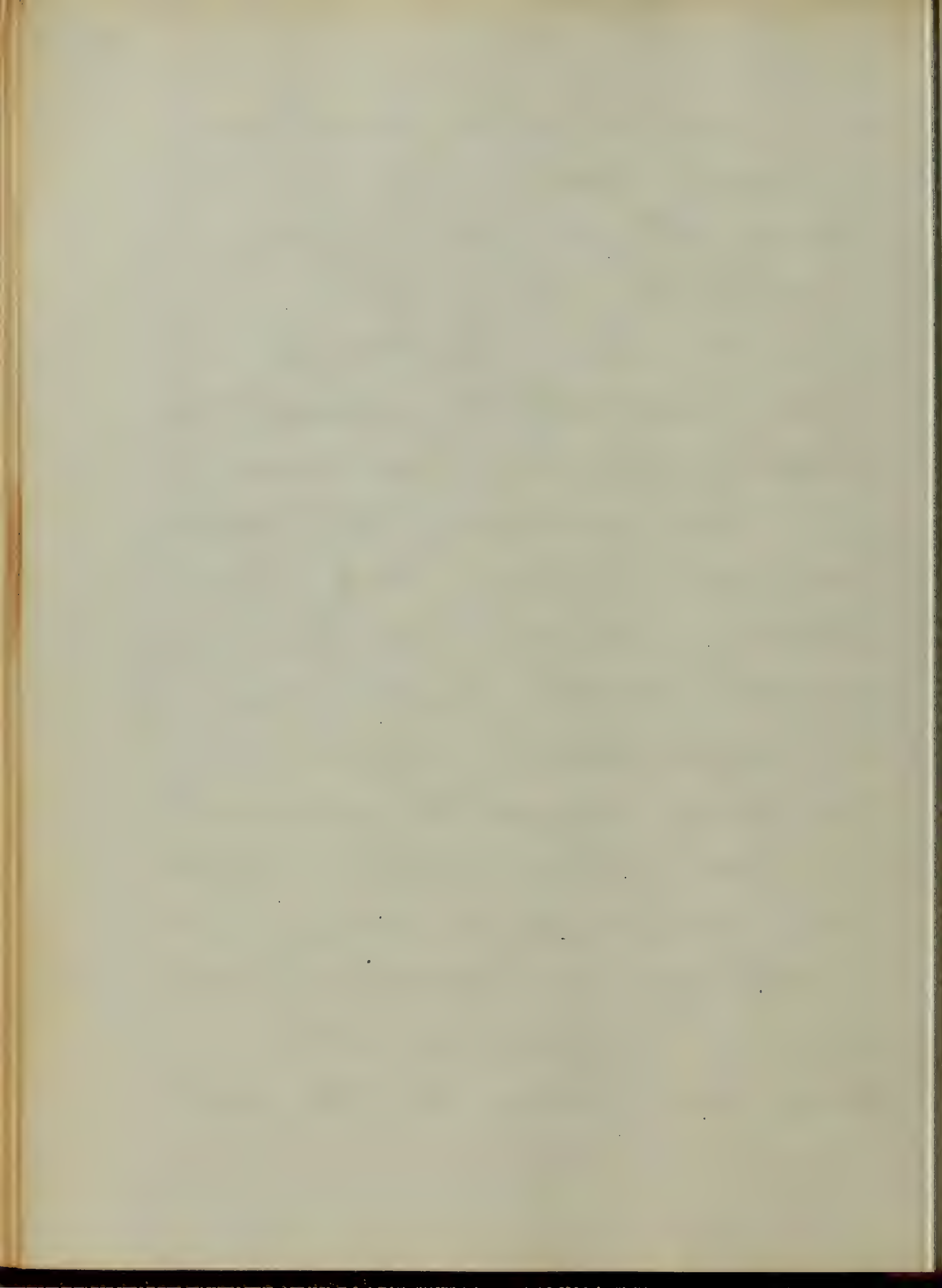


The Clinical history of
Six Cases,
Submitted to the Examinati[on]
of the
Provost Regents, and
Faculty of Physic.
of the
University of Maryland.
For
The degree of
Doctor, of Medicine,
by
Charles Abert Jr.
of Maryland
Jan. 1875.



Case No. 1.

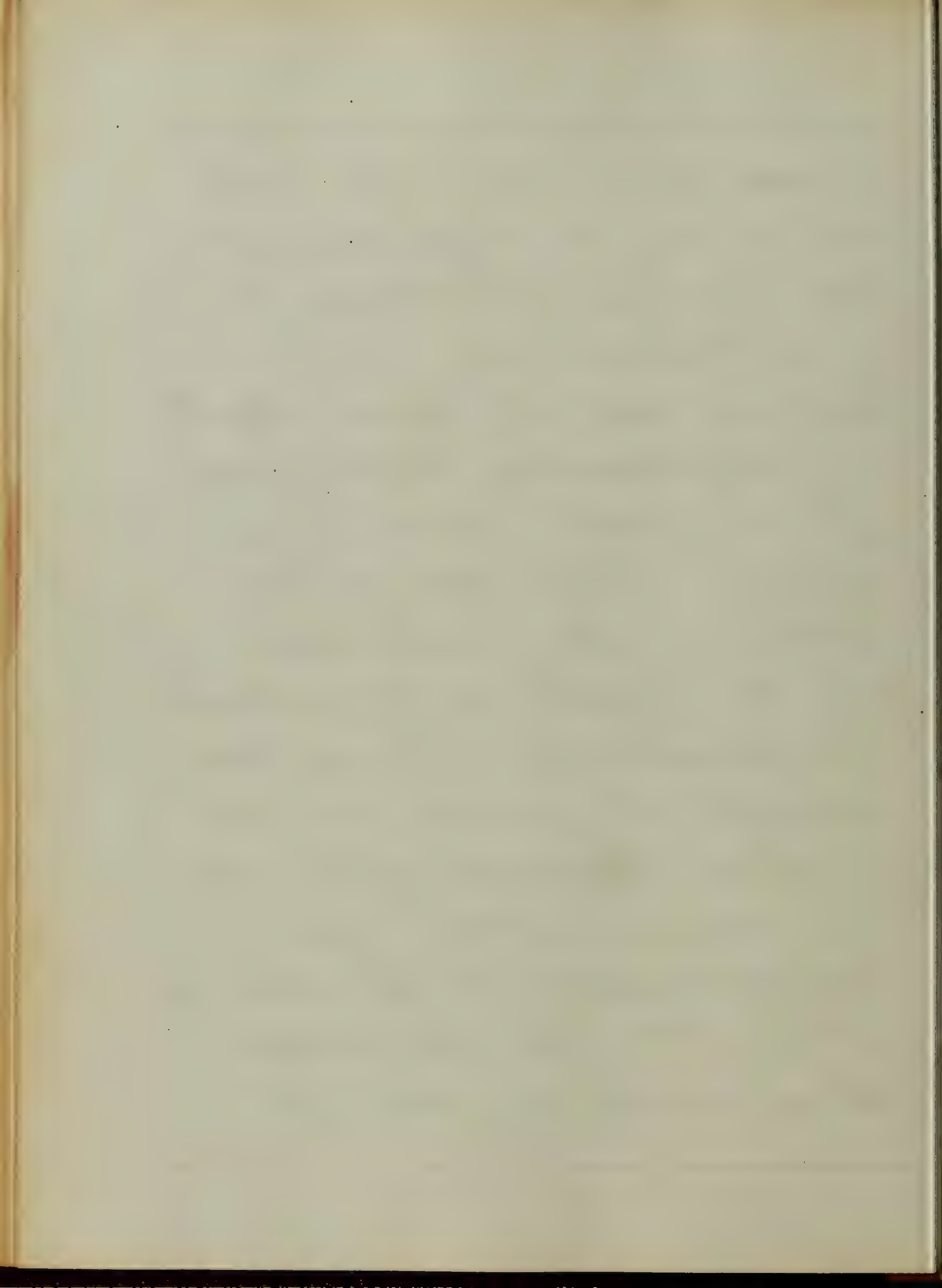
Henry Myer. age 37 yrs.
Occupation labourer.
Resides in Baltimore.
Was admitted August 19th 74
History of his case prior to
his entering the Hospital
was as follows. Had been
feeling badly for two
weeks, with pain in
the supra-orbital region.
On Friday August the fourteenth
he was taken with a chill
and since then they have
continued to reappear every
day. August the 19th.
Symptoms. Pains in the back



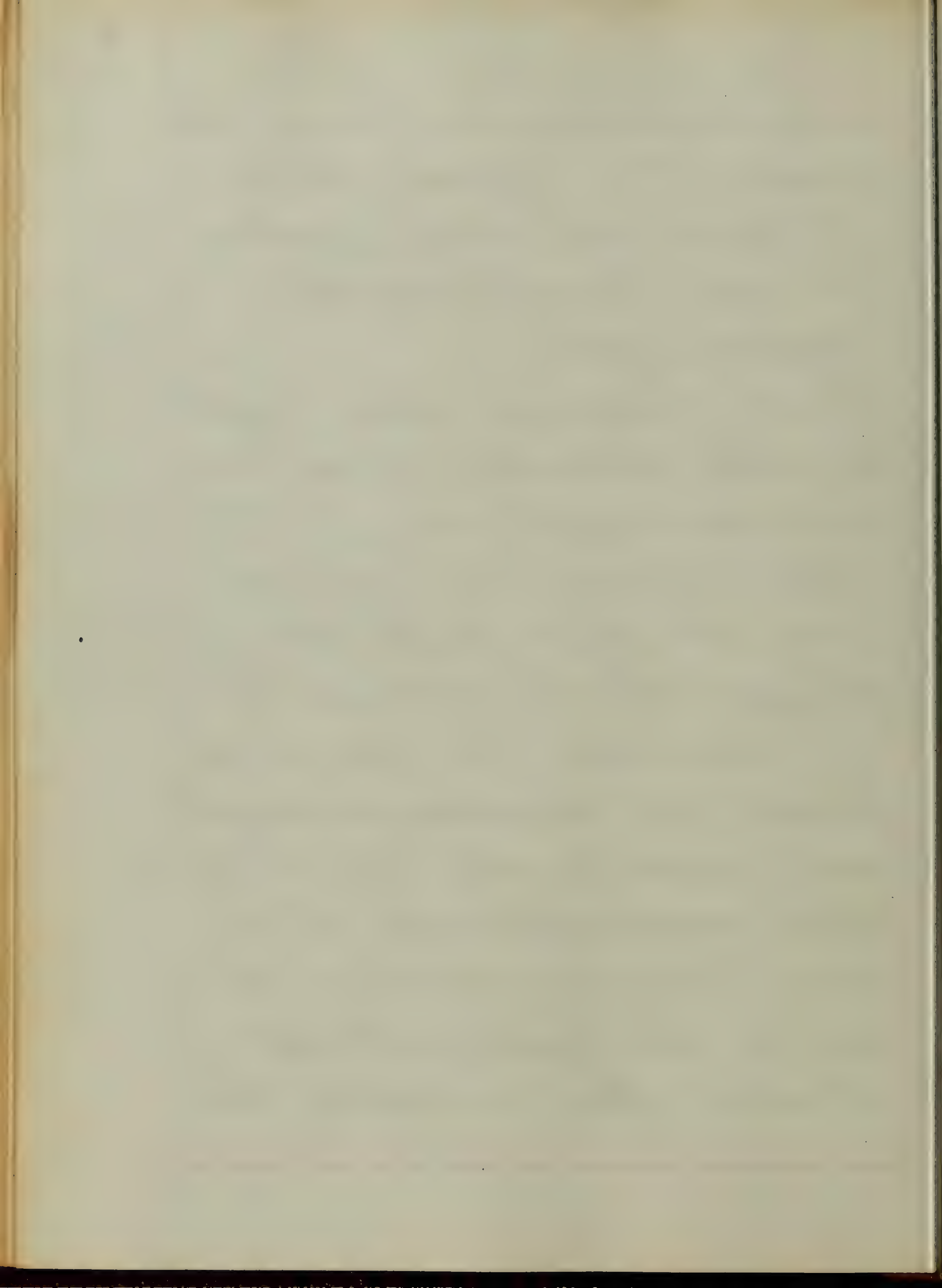
headache and fever the pulse 95 per. minute and temperature 99°. Diagnosis, Quotidian form of Malarial fever.

Treatment and its effects. Aug: 19th

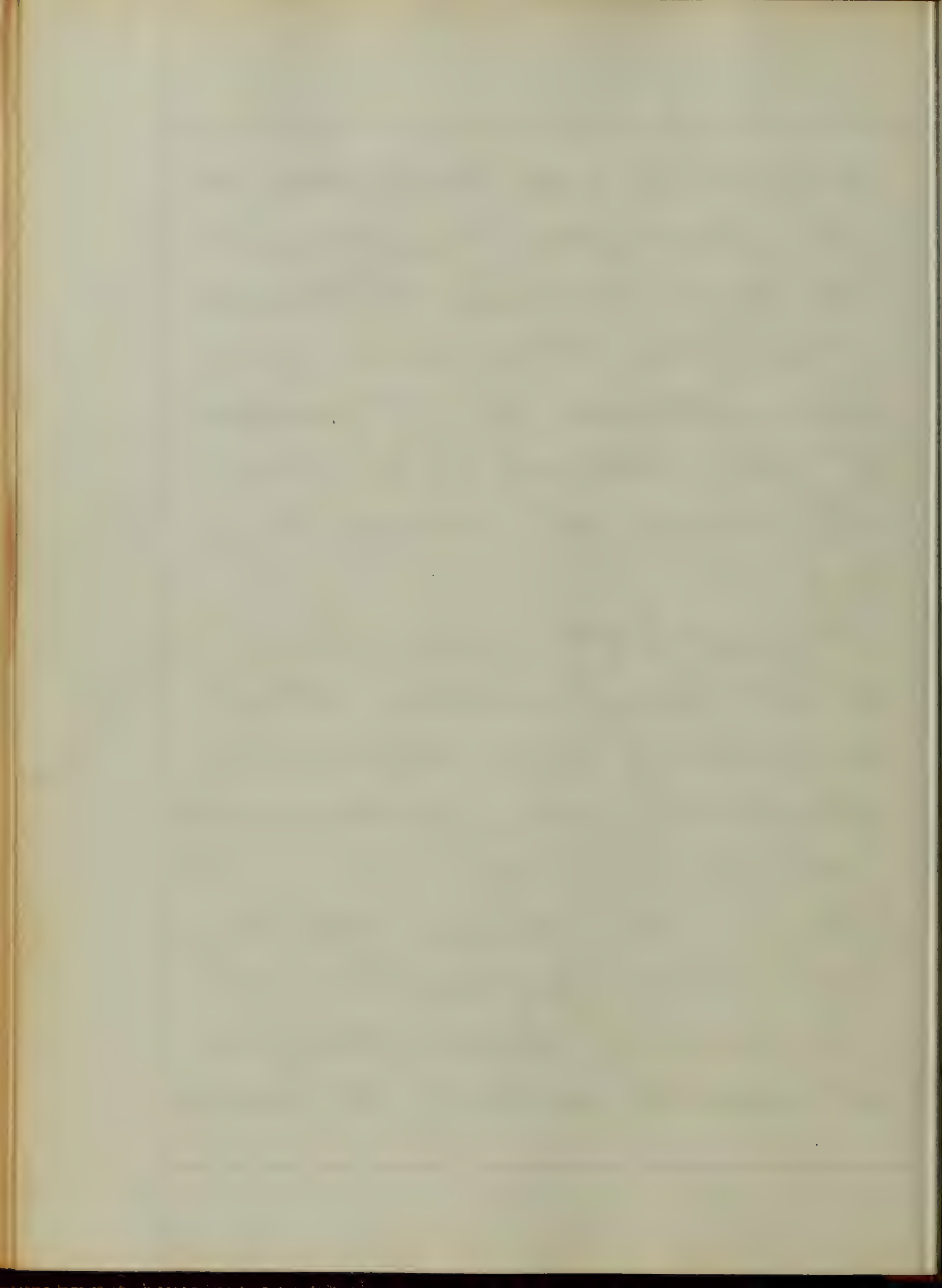
Cinchonidia Sulphas gr. v. To be taken three times a day. After taking two doses of the Cinchonidia (by the mouth) a Hypodermic preparation of Quinia was resorted to, known as the Tri-basic Phosphite of Quiniae Two minims were given hypodermically, on the Evening of the 19th. The temperature then being 102° pulse 100



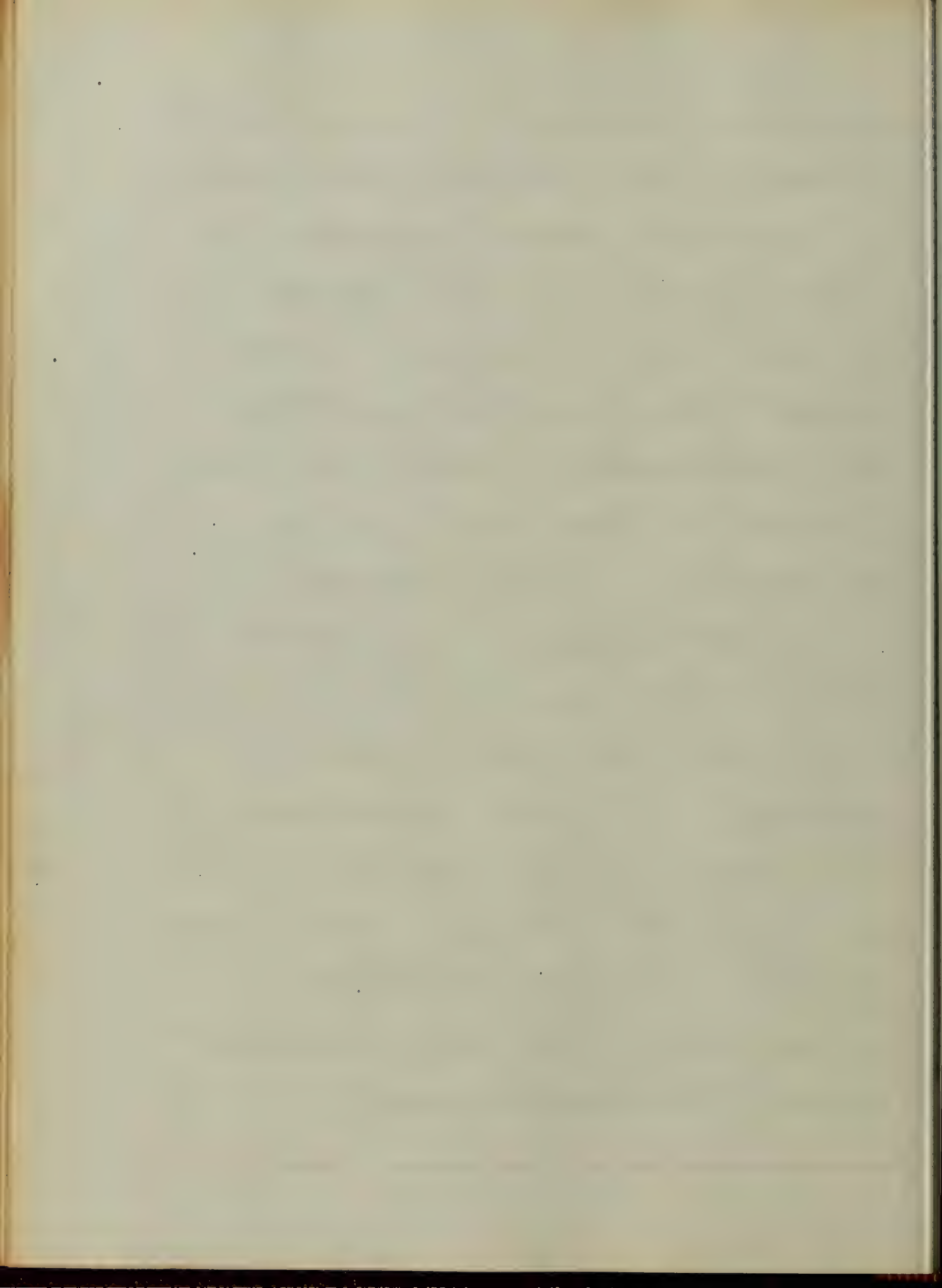
August 20th Appears better this morning, pulse 75 and temperature 98° bowels regular.
Three minims were injected this morning and this afternoon six more.
The temperature this afternoon was 100° and pulse 95
August 21st Complains of soreness in the arm where the hypodermic injections were made. The chills have ~~not~~ reappeared but once. Yesterday evening he said "he had a slight shake" This morning the



pulse is 65 and tempirature 97°.5
The prescription was changed
back to Cinchonidia Sulphas grs v.
To be taken three times aday.
This afternoon the temperature
of our patient is 98° and
his pulse 66, bowels regu-
lar.
August 22nd The pulse
and temperature this
morning are normal.
Dr. Worthington pronounced
him cured.
As to the local effects
of this preparation of
[illegible]inia I have thought
it worth while to notice

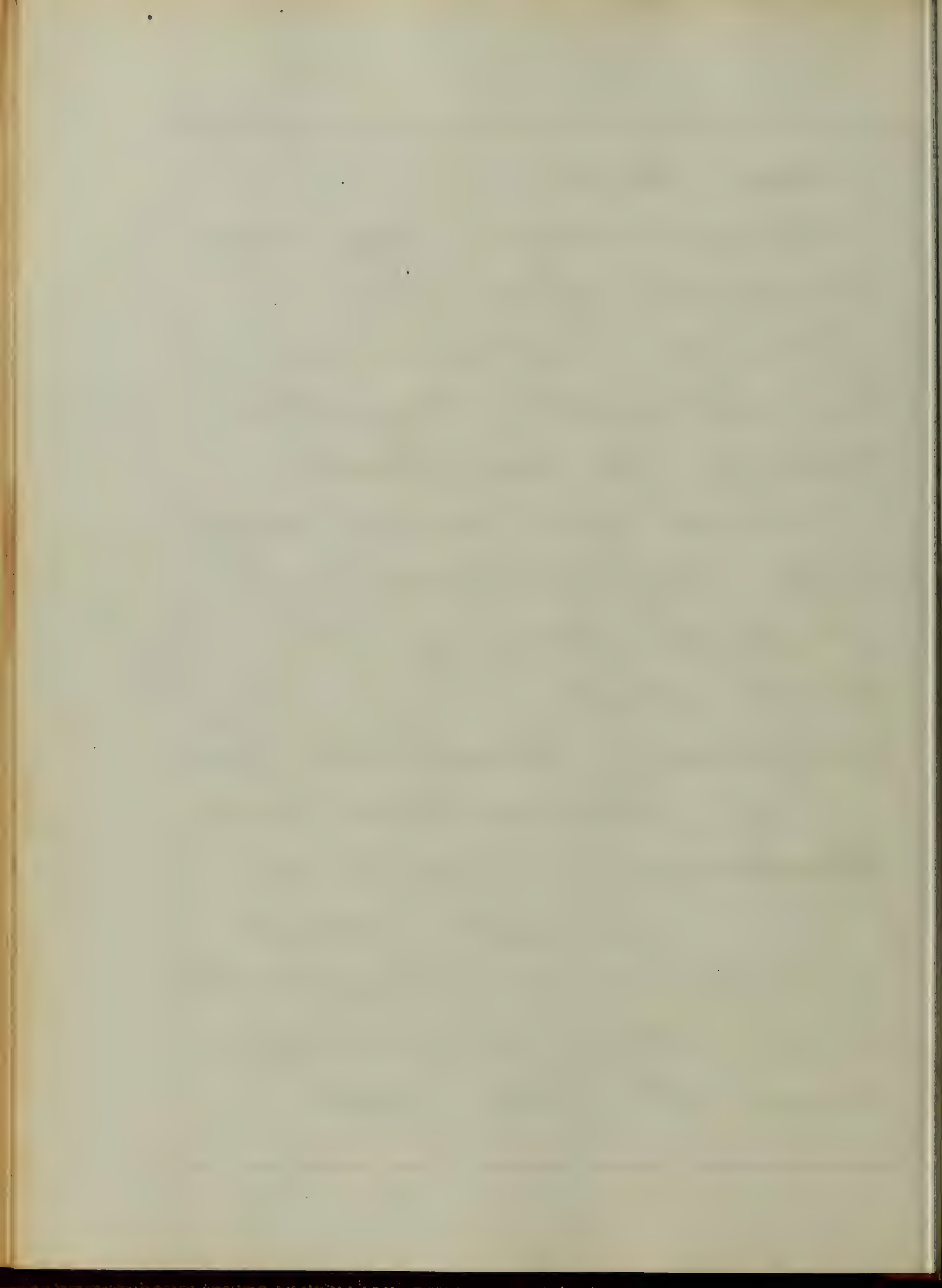


First. That when the substance was injected it gave great pain and when six minims were used the patient suffered so intensely that he was forced to cry out. And Secondly, phlegmonous Erysipelas affected the arm in which the hypodermic had been used. It is needless to say that after such a result from this use of the Tribasic phosphate of Quinia, Its employment was discontinued

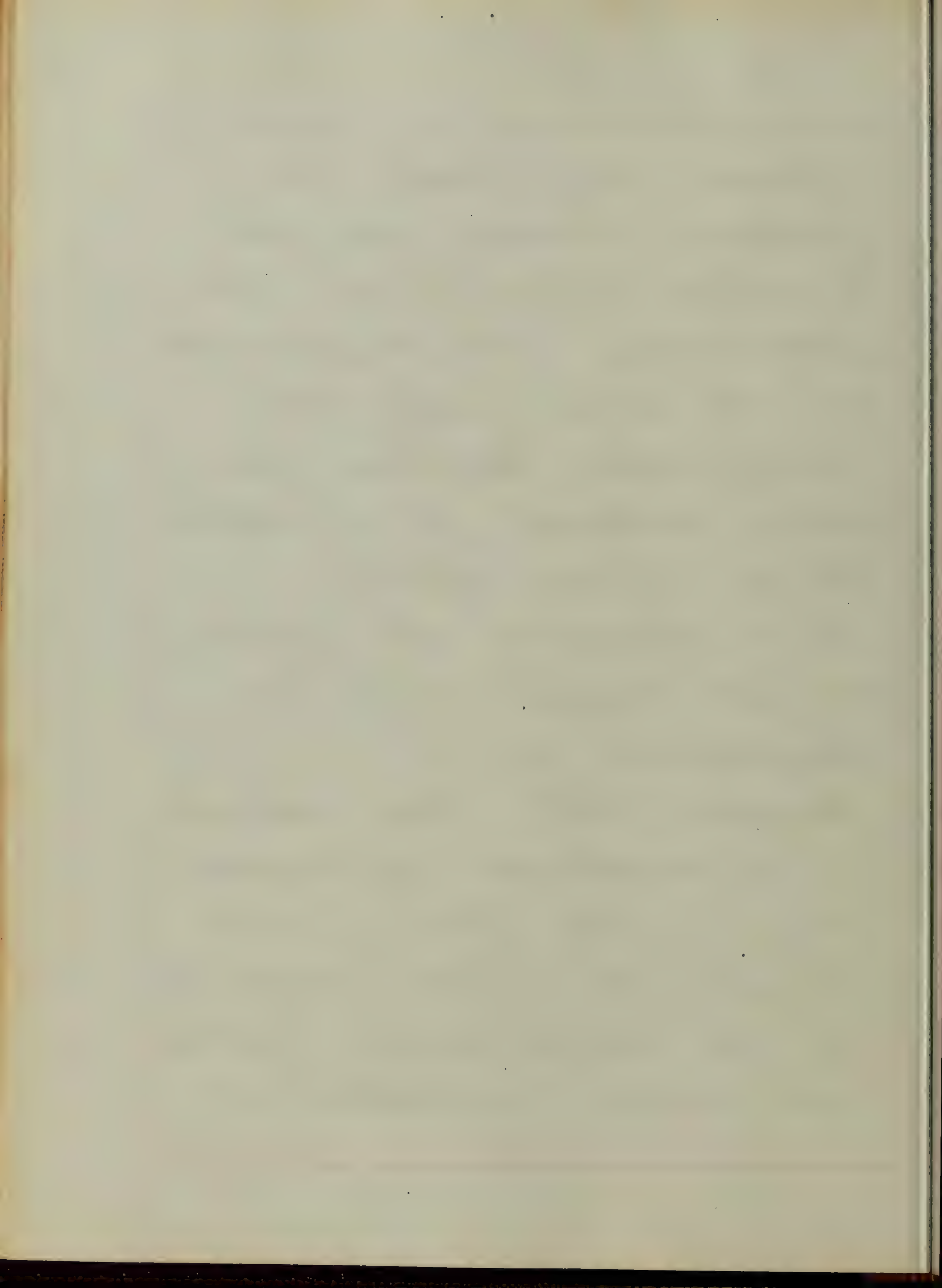


Case No. 2.

Thomas F. Martyn. age 20 yrs.
Occupation Seaman
Born in Baltimore
Was admitted August 15th
History He has been
sick for nine days
with Intermittent fever.
a Chill coming on
every day.
Diagnosis, Quotidian form
of Intermittent fever.
Treatment, August 15th
He was ordered,
two Compound Cathartic Pills
To be taken at bed-time.
August 16th The pills



opened the bowels. the
patient having to go
to stool three time this
morning. His temperature
is 102°. and pulse 100.
Cinchonidiae Sulphas grs.v
were ordered to be taken
three times daily.
This evening the pulse
80 per. minute and his
temperature 99°.5.
August 17th Our patient
Complains of nausea
and after taking his
breakfast this morning
of tea, bread and butter,
he soon vomited it.



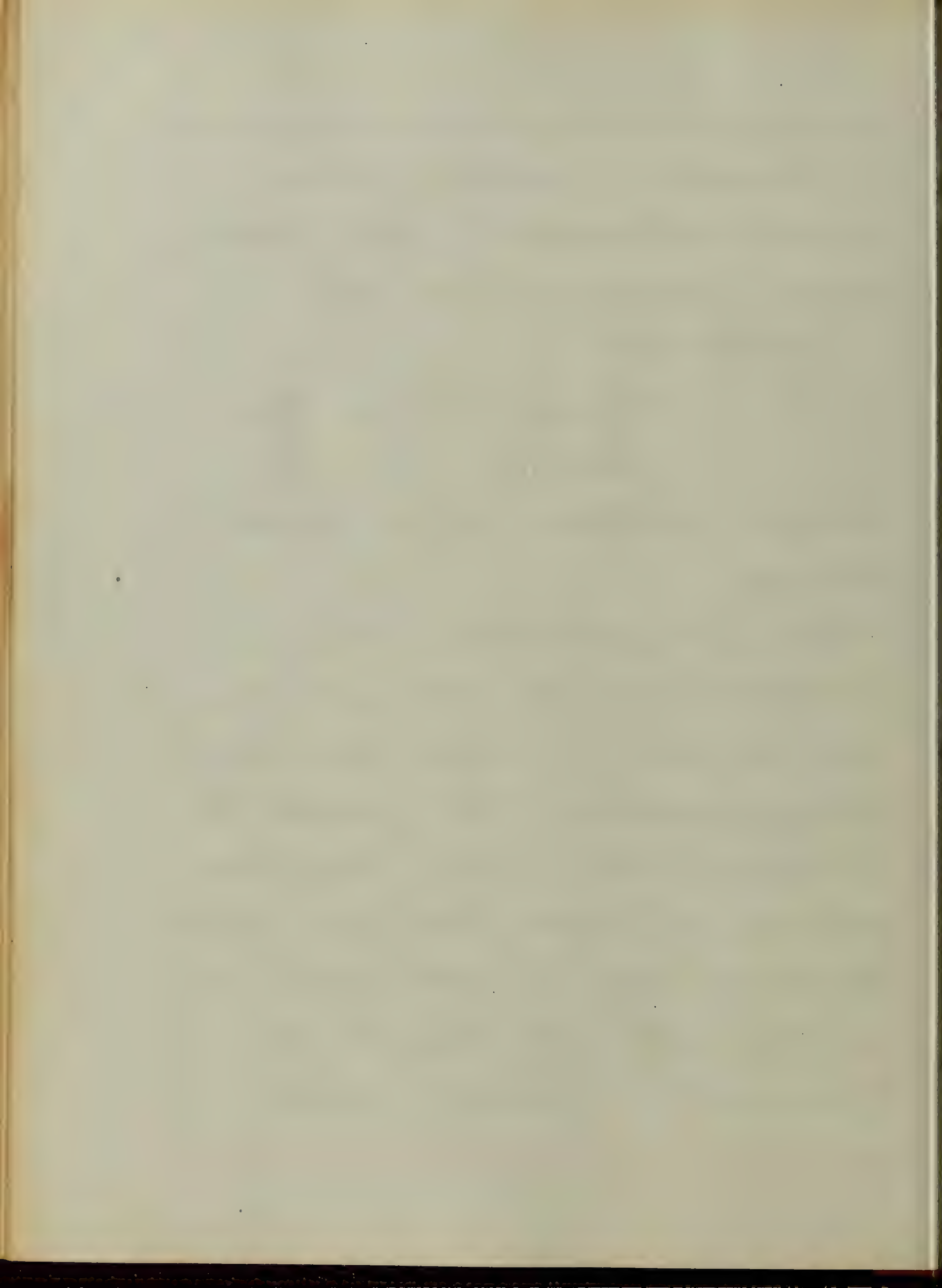
To prevent nausia and sick stomache, the following prescription was ordered

℞. Aquae Calcis ℥ß.
Lac ℥ij

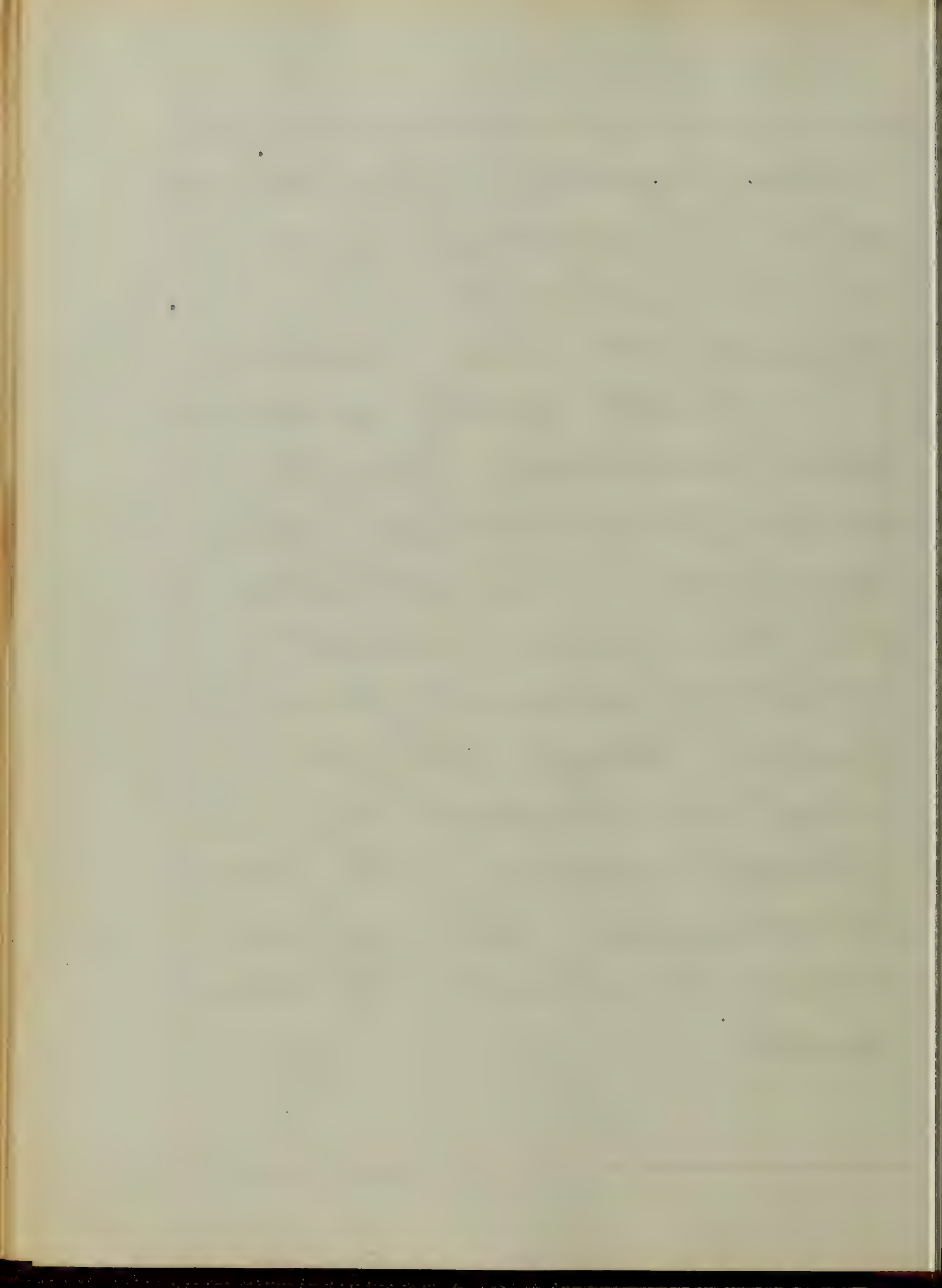
To be taken befor each meal.

His temperature this morning is 102° and pulse 80. This evening temperature 98° pulse 72.

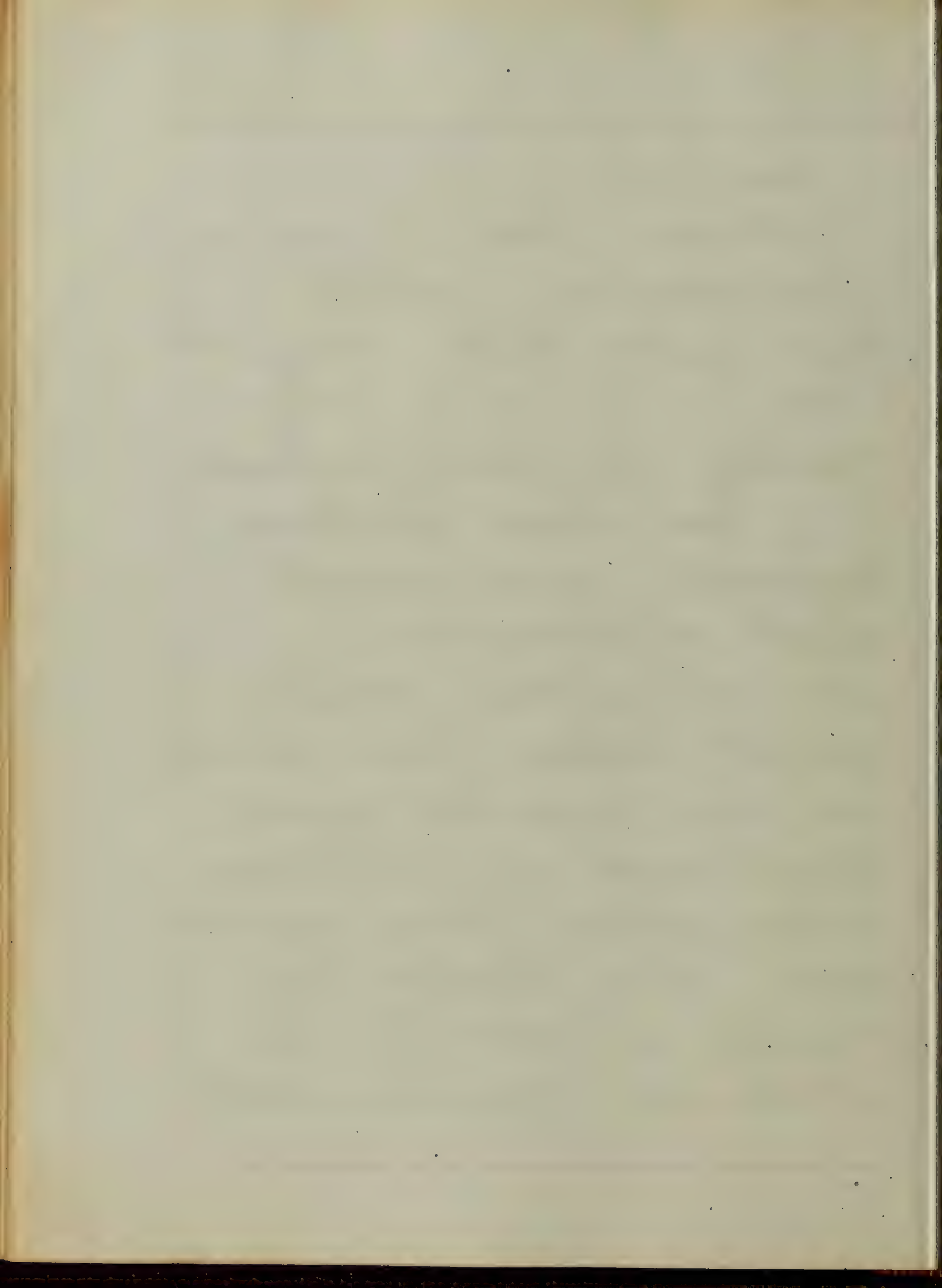
August 18th The temperature of our patient this morning is 100° with a pulse of 80 beats per minute, bowels are



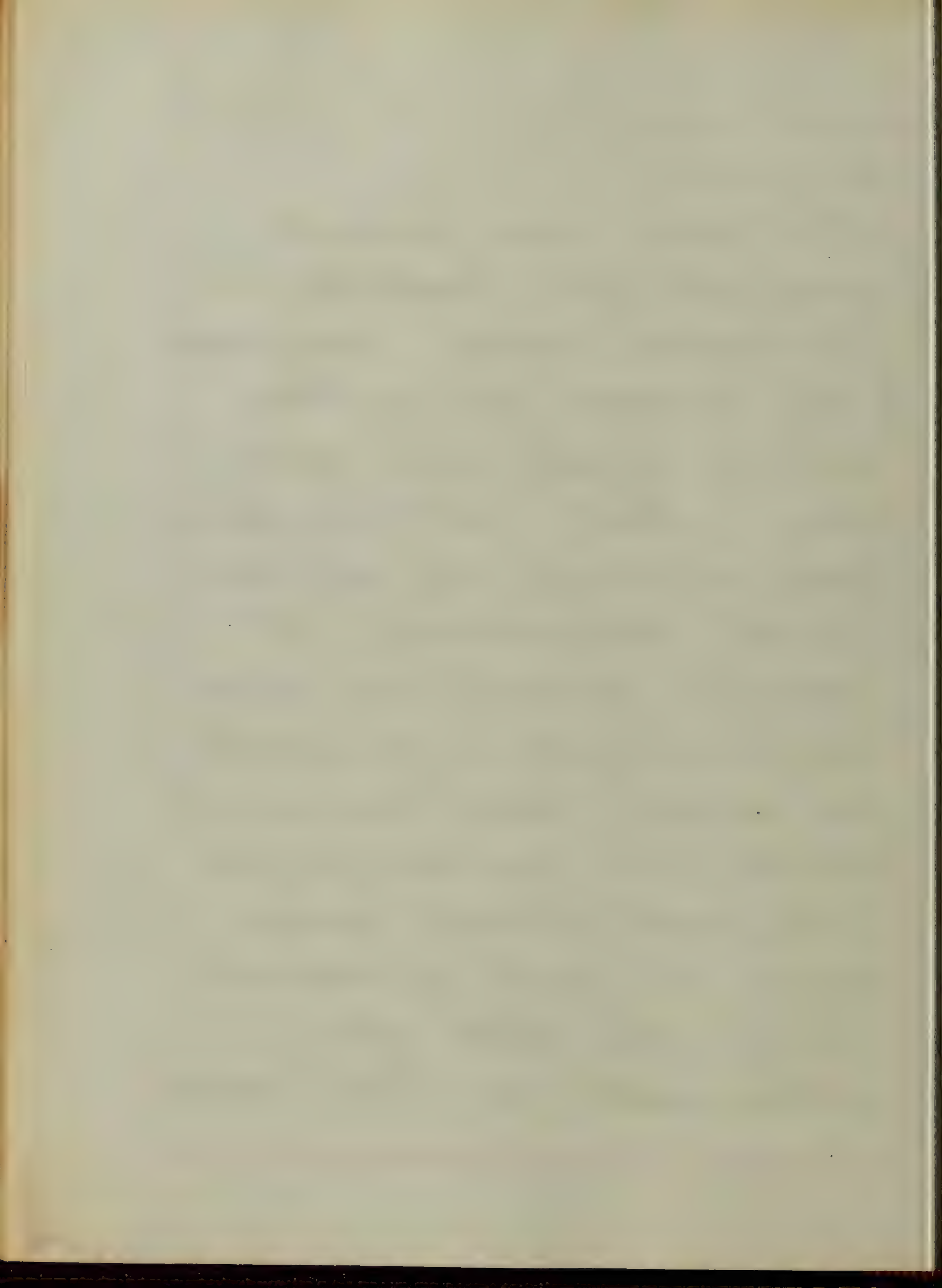
now regular. This evening his temperature is 98° and pulse 75.
August 19th Our patient looks quite smiling this morning, pulse and temperature are normal. Cinchonidia in five grain doses were continued for several days longer, and on August the twenty second he was discharged. All appearances of Chills having ceased.



Case No. 3.
William Poole age 34 yrs.
Occupation Sailor.
Was admitted, May 23rd 1874.
History of his sickness.
Has been feeling unwell ever since last September.
His symptoms, when first taken, were pains in the lumbar region, suppression of the urine, and when these symptoms had lasted for nearly a month, his abdomen commenced

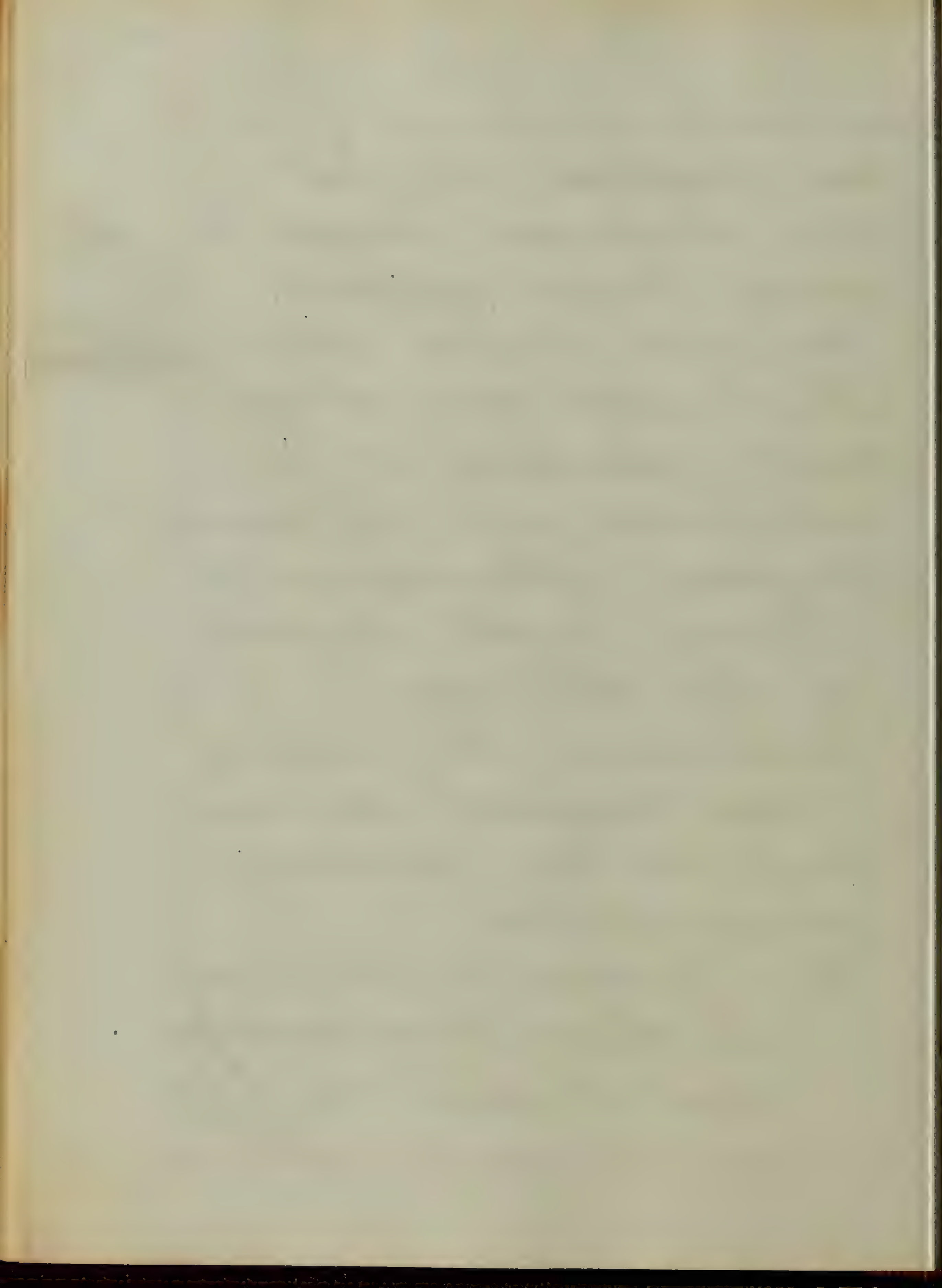


to swell.
The day our patient
entered the Hospital. the
symptoms were very near-
ly, the same. as given
above with. one excep-
tion. That as the urine
was scanty, it is now
quite abundant. Its
specific gravity is, 1.010. and
suspecting kidney trouble
the urine was examined
under the microscope. for
tube casts. which were
seen in quite a number.
Then the test for
albumean in the urine



was employed. so that the diagnosis might be made more apparent. This test proved that there was an abnormal quantity of Albumen in the urine.
Diagnosis; Albumunuria, or Chronic Bright's disease of the kidneys.
Treatment:. On entering the Hospital he was put on the following prescription.

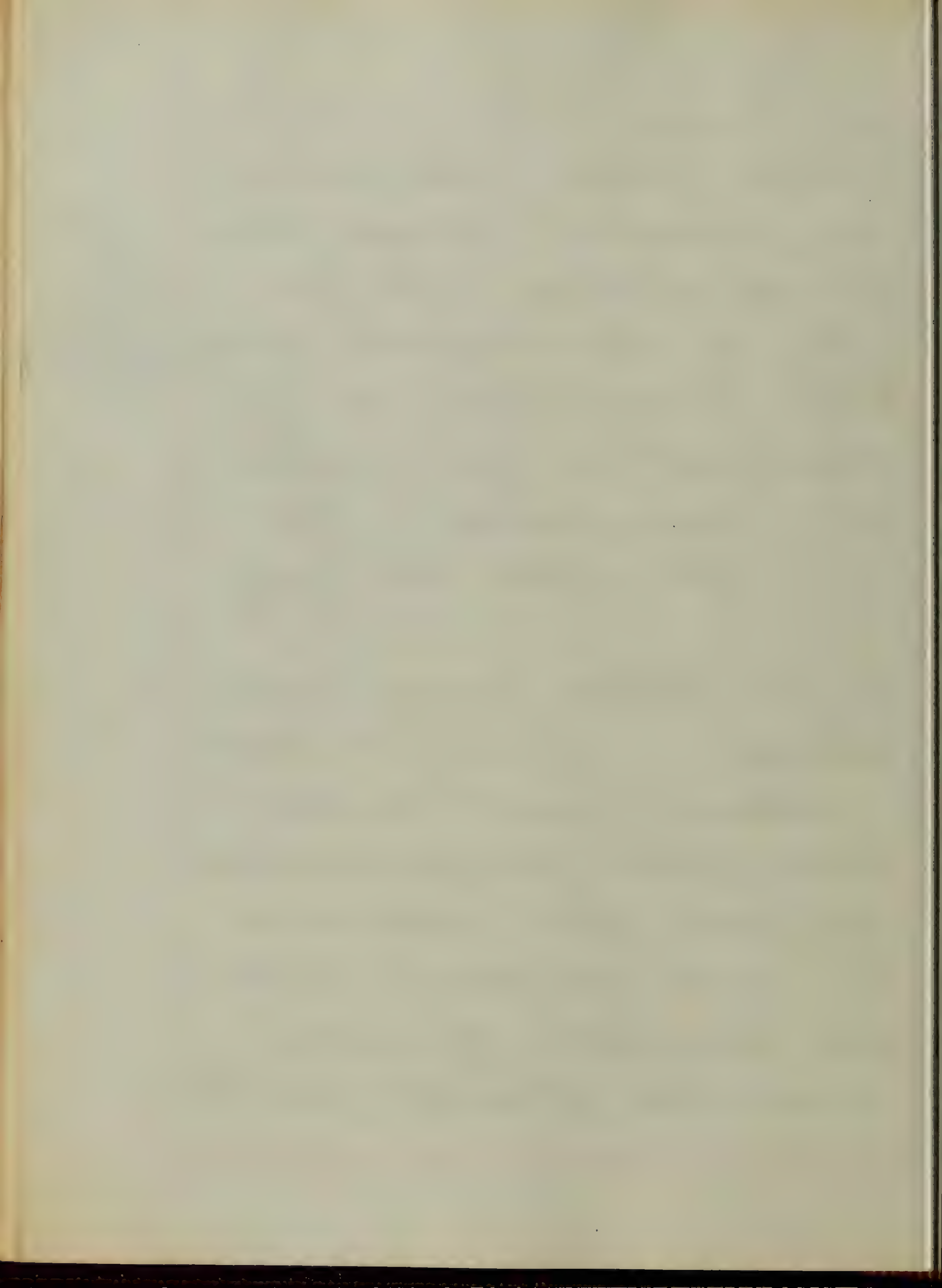
℞ Cinchonidiae Sulph: grs.iss
Tinctura Ferri. Muriat: gtt.xv
Syr: Simplic ad. Q.S. ft: ℥i; m



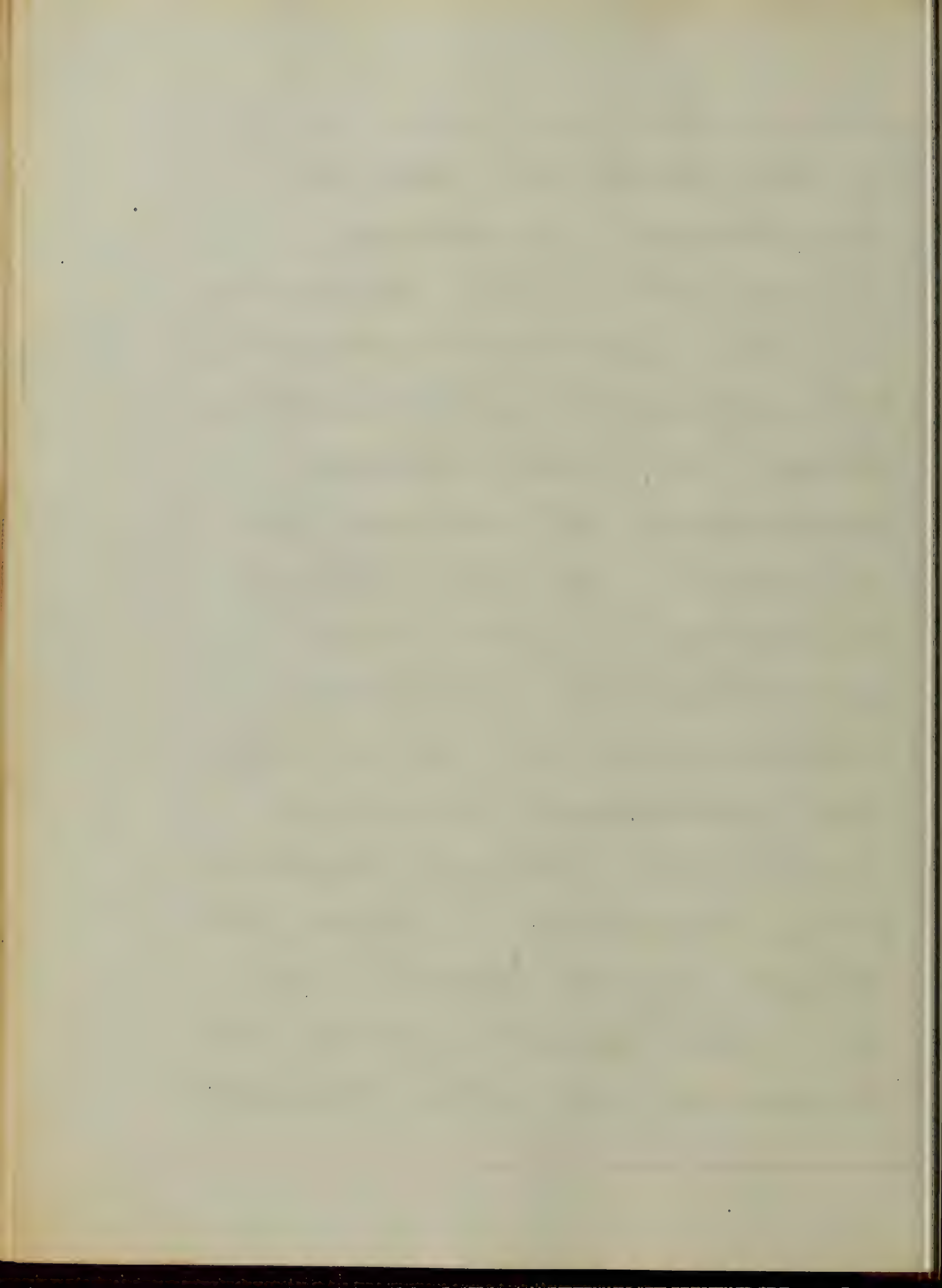
This tonic was taken in drachms doses, three times a day up to May the twentyeighth, then the treatment was changed to the following

℞ Inf: Digitali ℥ss.
Spt: Æther: Nit: ʒiss M

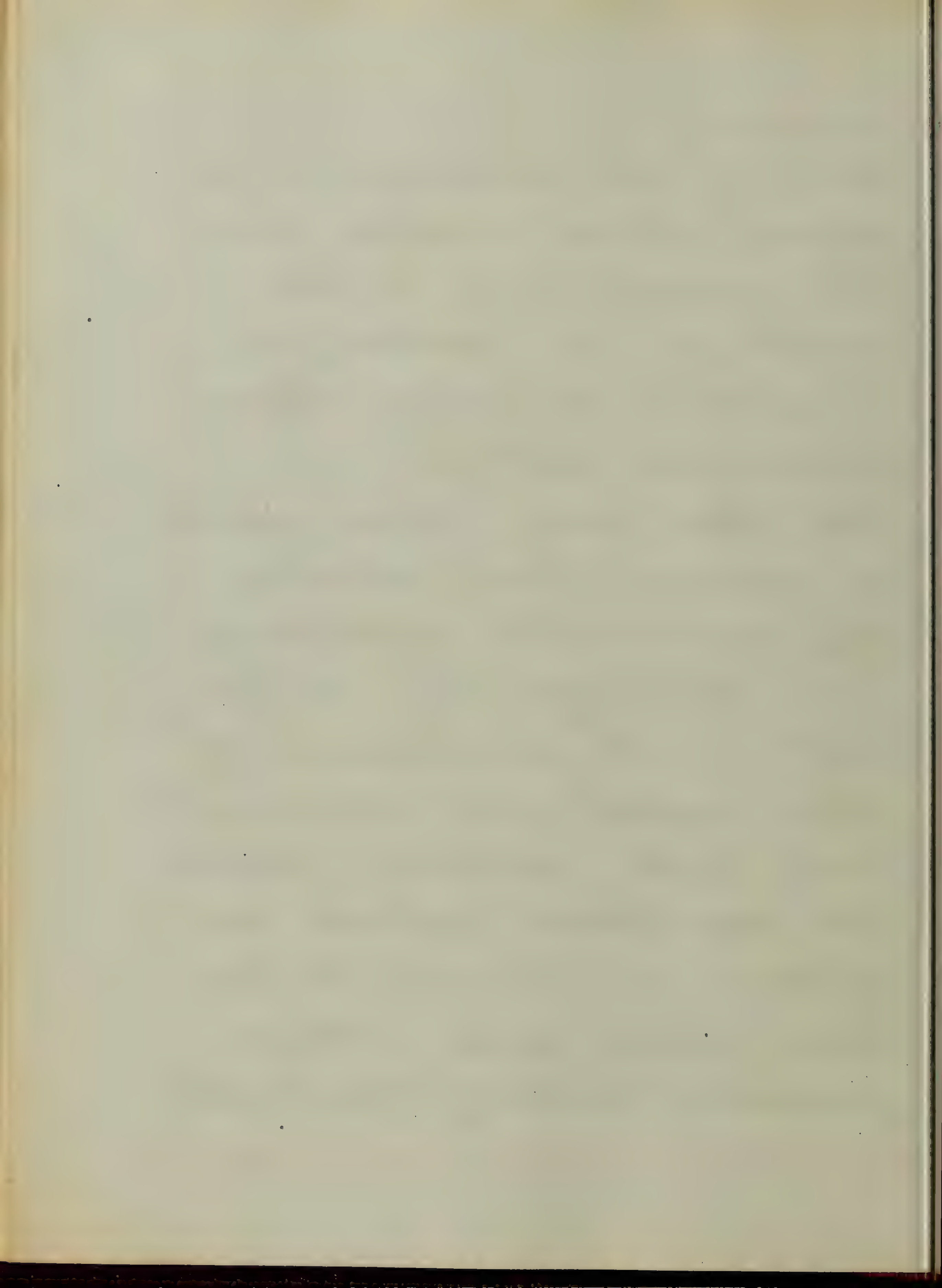
To be taken every eight hours. June 1st Our patient has made but little improvement, infact the abdomen is more extended with the dropsical effusion, and the specific gravity



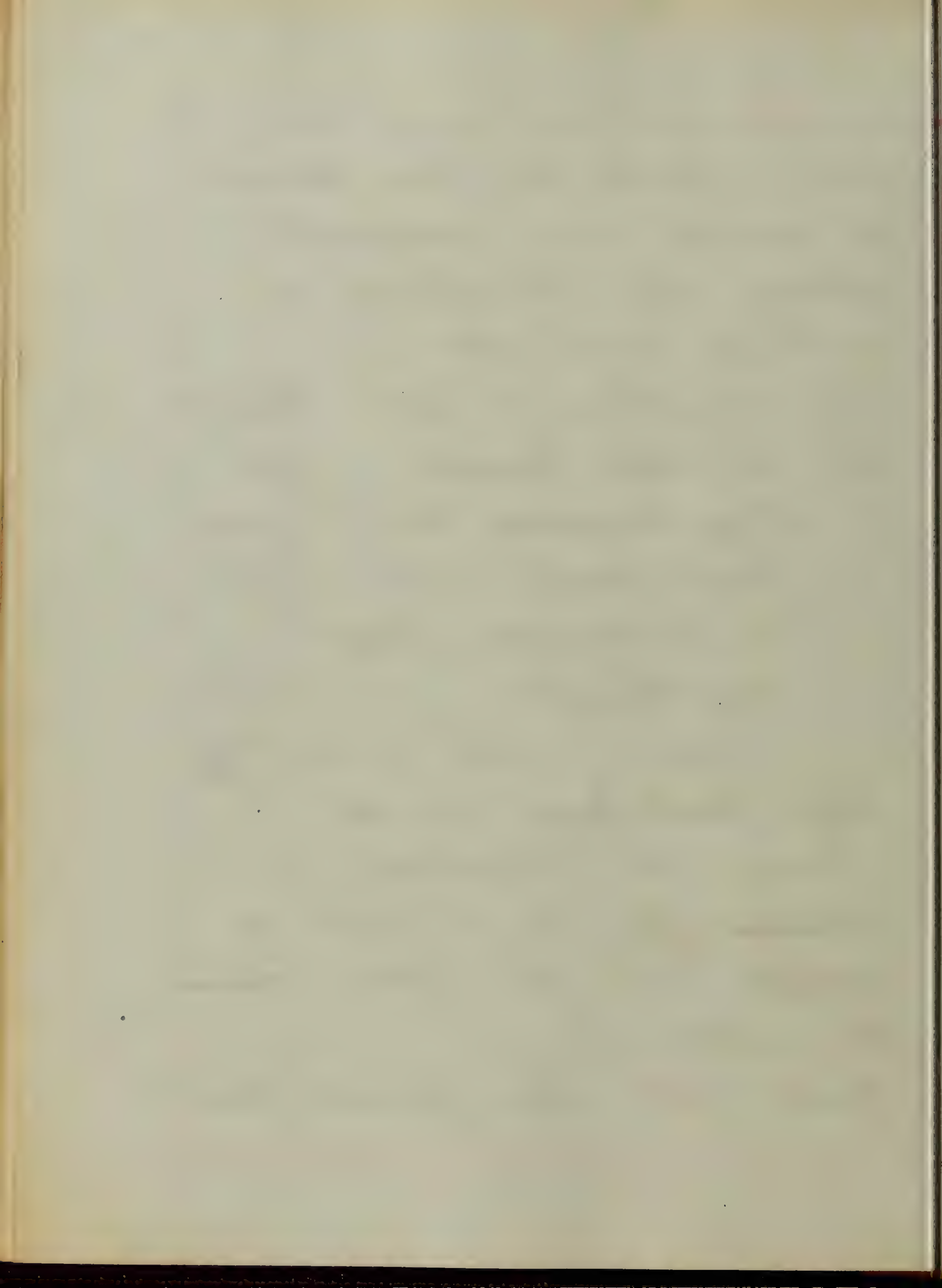
of his urine is 1.006. The treatment continued.
June 2nd This morning the patient complains of difficulty in breathing, and it was deemed necessary to remove the fluid. A four-tailed bandage was put around the patient's abdomen, so as to keep up continual pressure, while the fluid was being evacuated, then the large sized needle of an aspirator, was introduced in the median



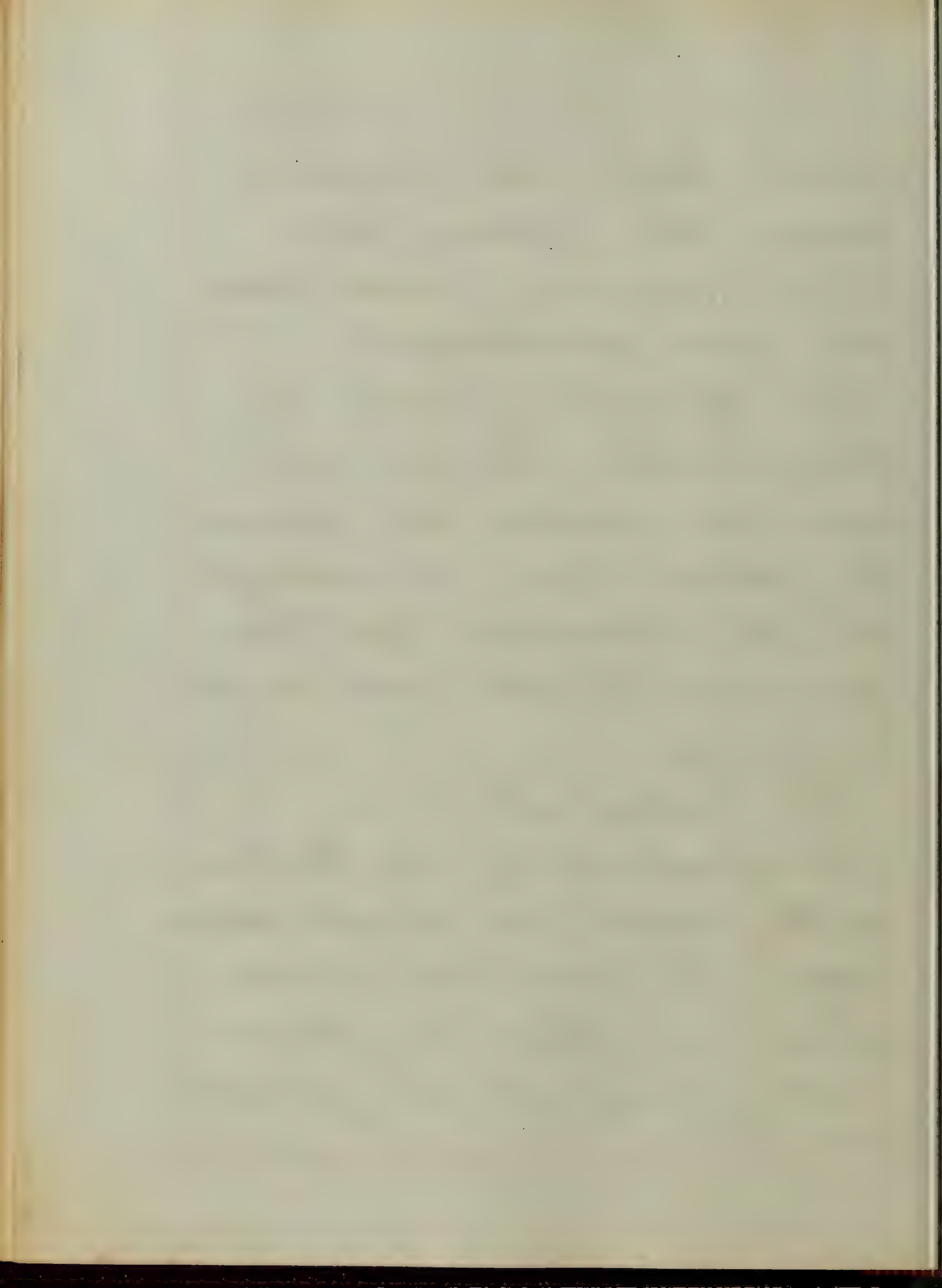
line of the abdomen and about three inches below the umbilicus to the depth of two inches. (the patient of course lying upon his back).
In this way three gallons of serum were drawn off and after tightening the bandage the orifice left by the withdrawal of the needle was covered over with adhesive plaster. He was then ordered one grain of Opium. to produce sleep and reduce peristaltic action of the intes-



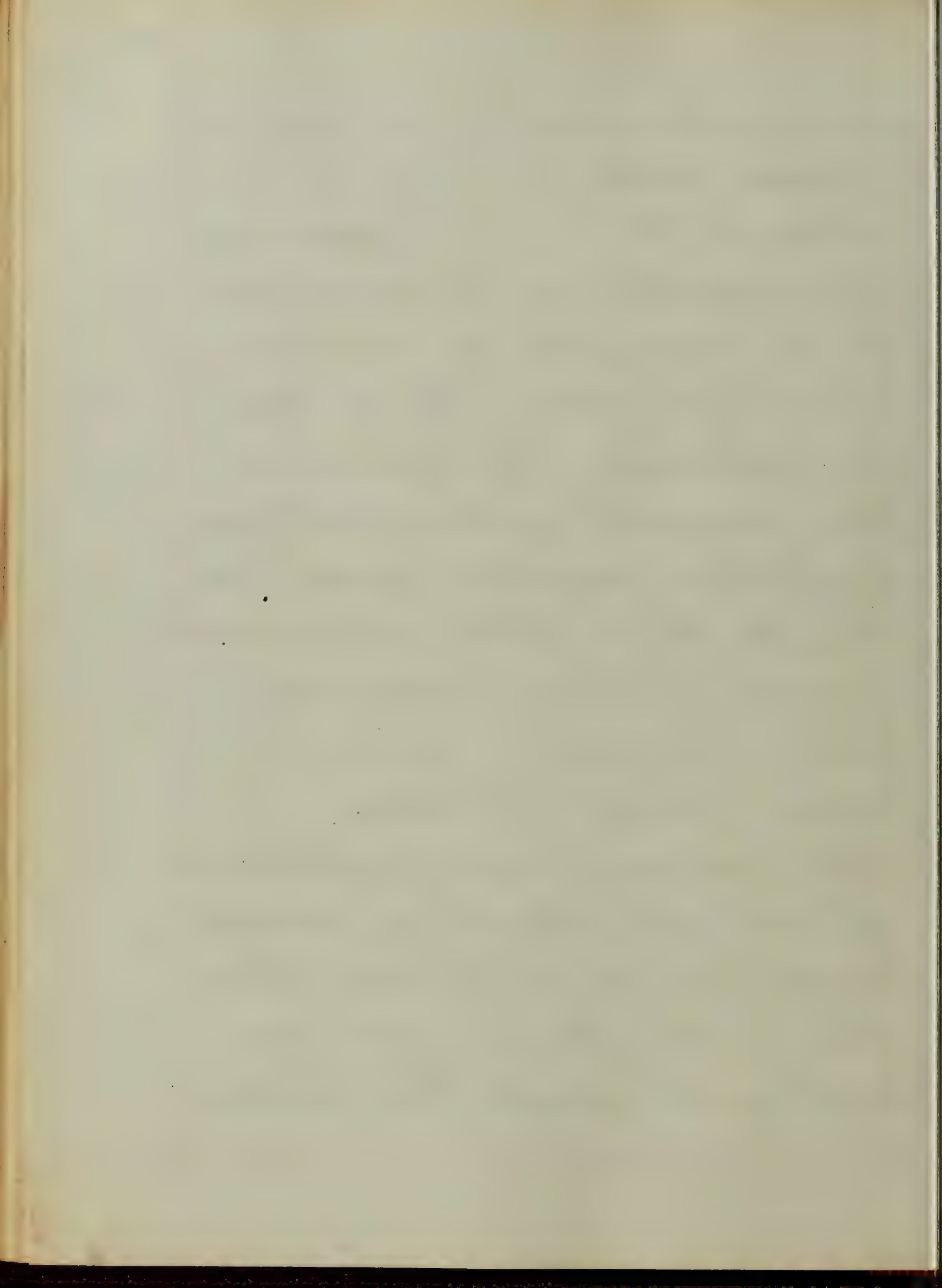
times. June 3rd. Our patient is much more comfortable today, his breathing is not so difficult.
The treatment was changed
℞ Tr. Ferri Muriat: ℥ij.
Liq: Ammonia Acet: ℥iiiss.
Acid: Acetic: Dilut: ℥ss.
Tr. Cardamom Comp:
Syr. Simplic. — āā ℥i
Aqua ad. Q.S. Ft ℥viij M
Sig: Coch: Mag: Ter di.
And the bitartrate of Potassa ℥ss. to a pint of water, to be taken during the day.
July 18th. The fluid has



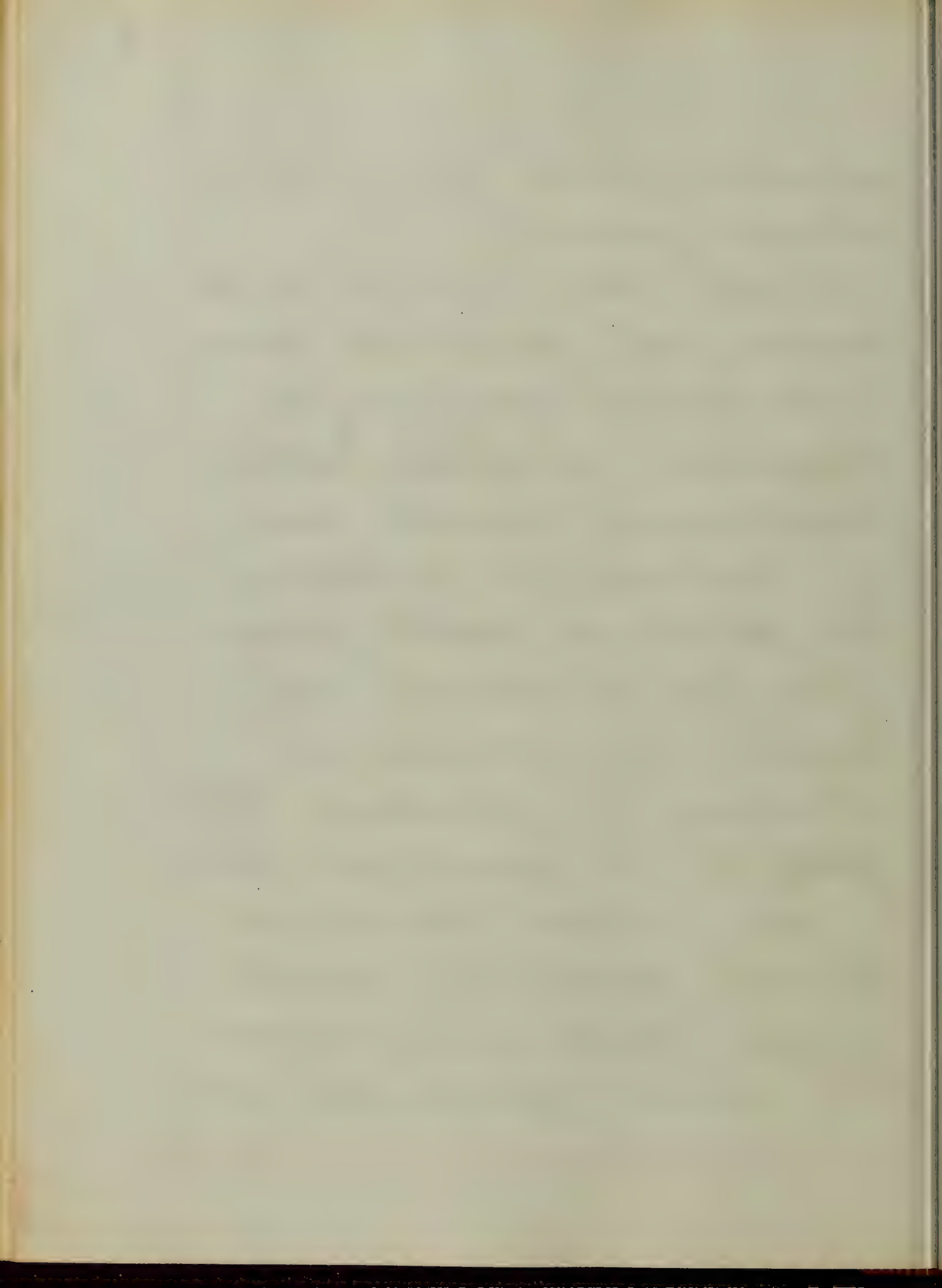
been kept in obeyance since the tapping with these remedies, and today he was discharged.
The Specific gravity of this man's Urine never reached above 1.010 during the whole time he stayed in the Hospital; yet his general health was much improved.
G. B. Wood M.D.
In speaking of the Spec: Grav: of the urine, in Brights disease says "It has been diminished in this Complaint to 1.003 though it is generally above this."



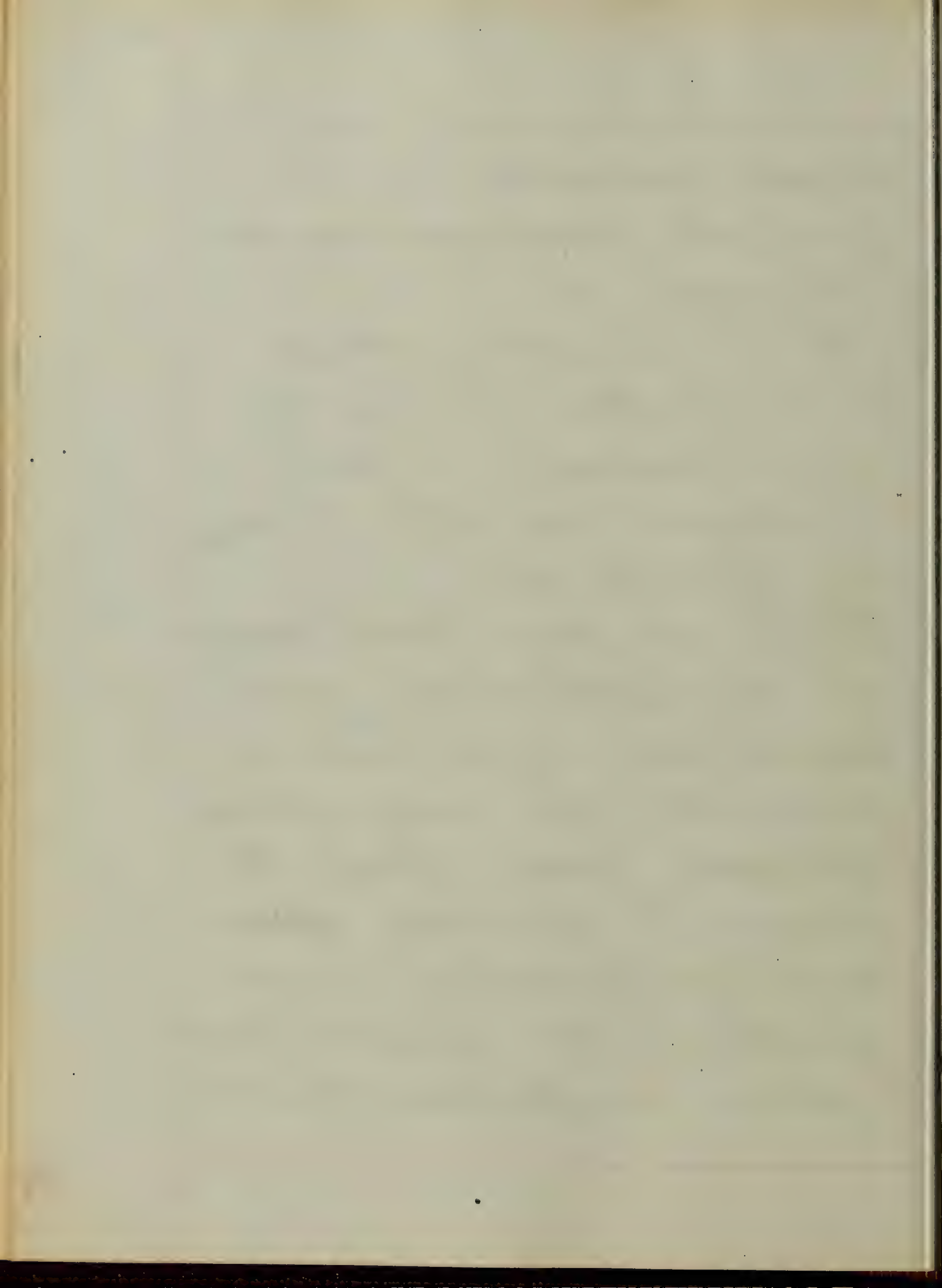
Case No. 4.
Bed 81, W - - - age, 43 yrs.
Occupation, a Stone Cutter
and resides in Baltimore.
History: Has been complaining of pains in
the small of the back for
eighteen months, and has
had but little treatment
prior to his entering
the Hospital, which
was June 19th 1874.
The urine was examined
first its Spc. Grav. which
was found to be 1,035. then
the test for sugar was
employed. and the urine



showed that it contained
a large quantity.
Besides these changes in the
urine, its quantity was
increased very much.
Diagnosis, Diabetes Mellitus,
Treatment; Creasote was
ordered, to be taken,
two drops in water, every
four hours. and at
night one grain of
Opium, to produce sleep.
July 10th I examined the
urine today found its
specific gravity 1,035. and
sugar still abundant.
The lower extremities are



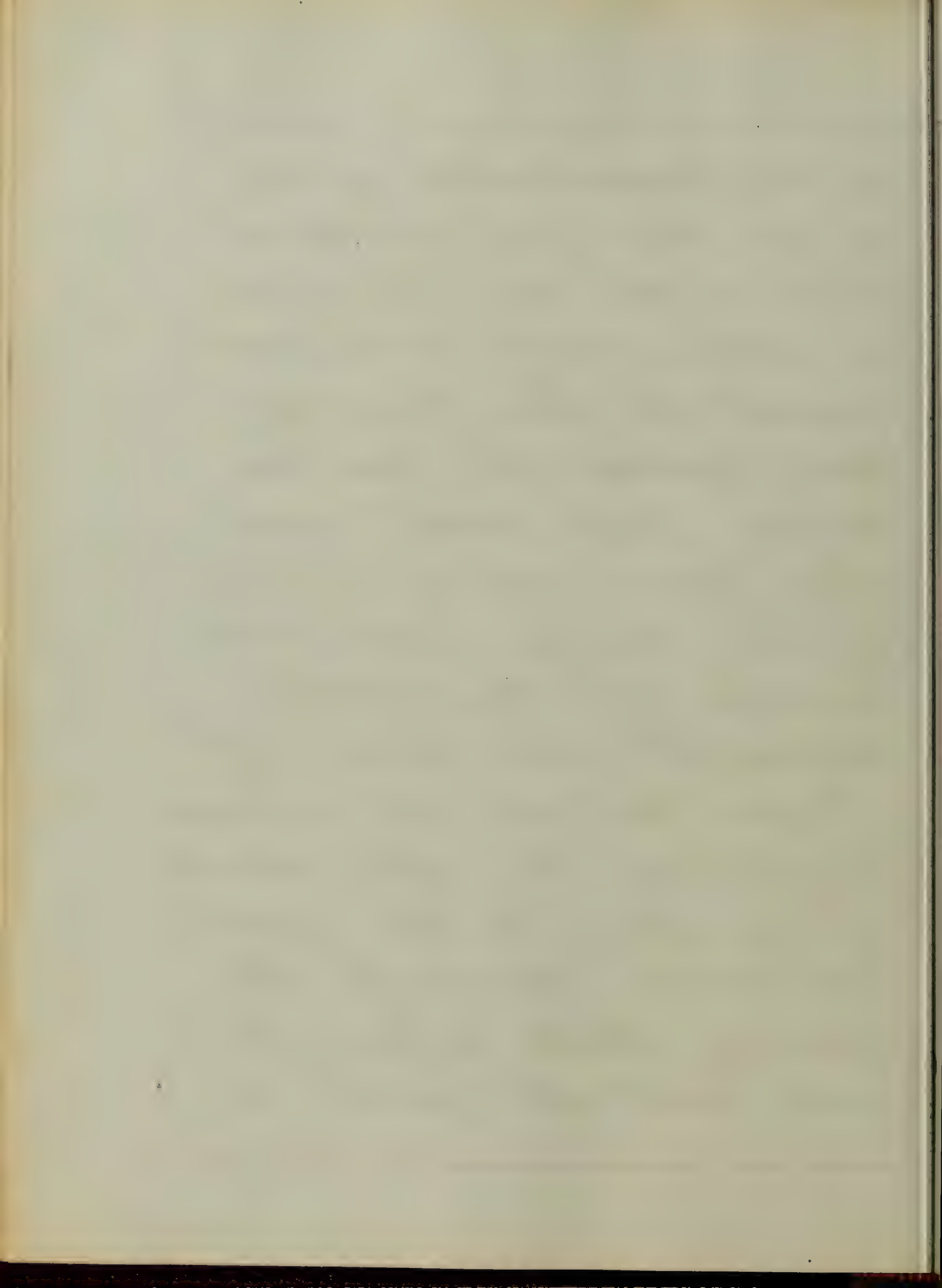
slightly oedematous.
July 16th treatment slightly
changed to
℞ Creasoti gtts xx
Tr. Opii ℥iij
Acaciae ℥iv
Aqua ad Q.S. Ft ℥viij M
Sig. ℥ss. Ter die.
There is very little change
in the symptoms from
day-to-day and up to
July 22nd the only change
noticeable, was that the
desire to urinate ~~was~~ was
not so marked, and
further, the urine had
fallen in spec. grav. to 1.032.



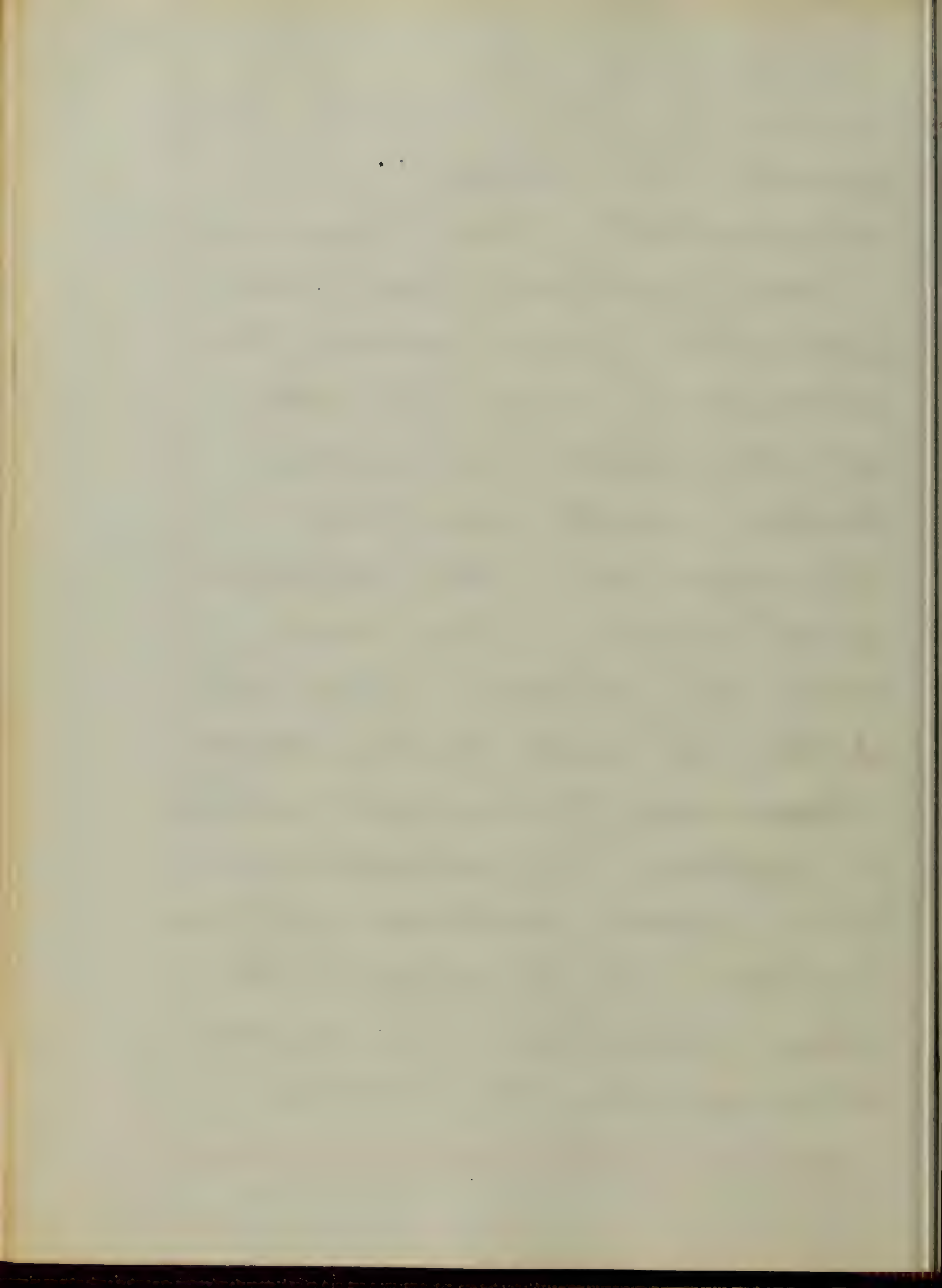
July 28th This morning I
find my patient suf-
fering with an attack of
diarrhoea. He was ordered
to stop the Creasote and take,
R. Pulv: Opii grss.
" Kino grs. V.
Sig. Omni: Inhora.
The evacuations continued
watery for one day, and
were not intirely controll
ed until the medicine
had been given three
days. August 1st The
Creasote and opium
prescription, was renewed.
August 3rd I made

another examination of the urine, and find its Spc. Grav. still at 1.032, but the sugar is some what less, compared to the previous examinations that have been made. Tube casts were also seen when a drop of the urine was put under the microscope.

August 6th The thirst of our patient is increasing and he often drinks from four to six quarts of water during the day. Water appears to have lost its power to



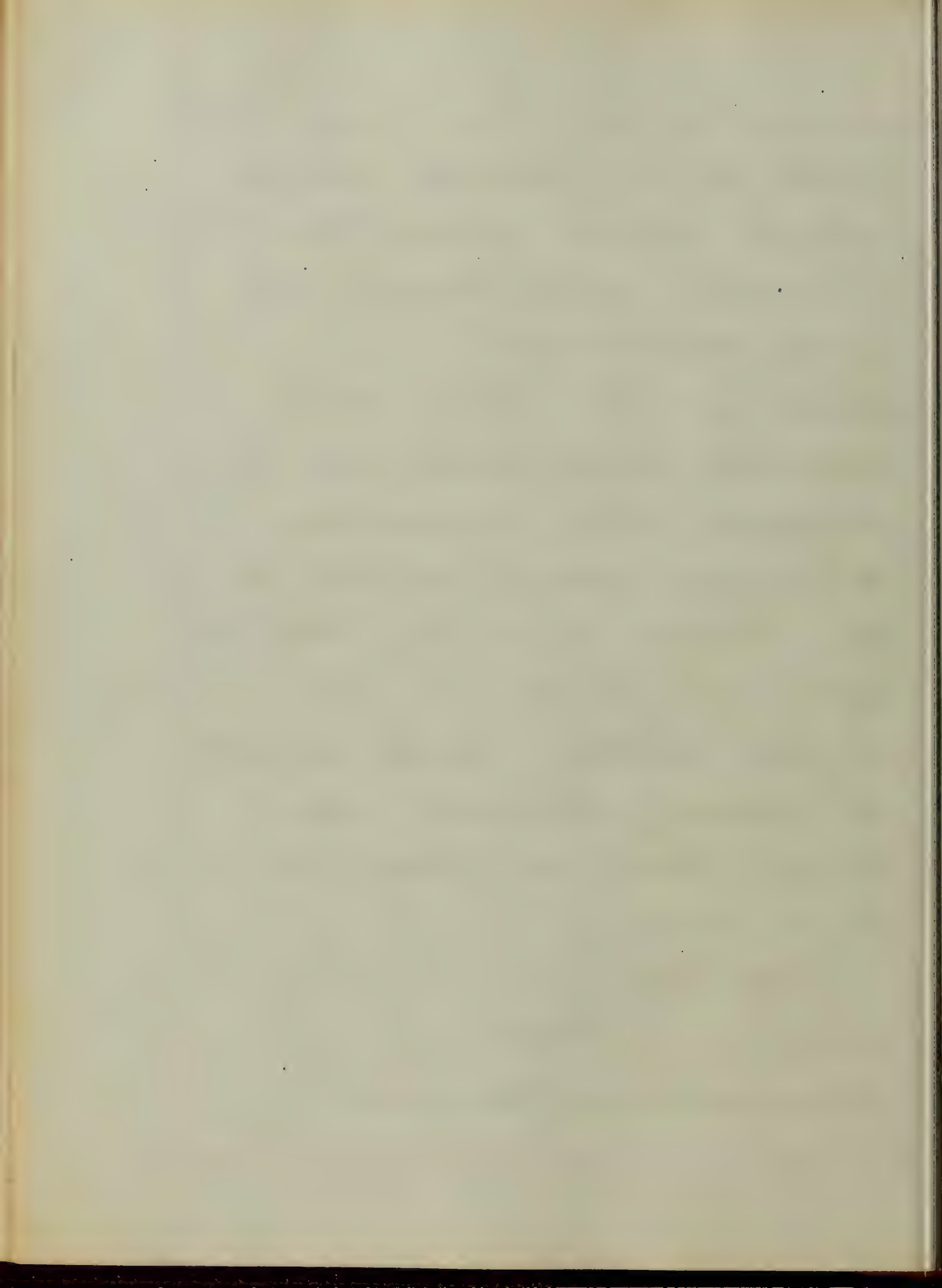
quench his thirst.
August 10th This morning our patient has considerable pain about the abdomen and tonight at 11 o'clock he was taken with severe cramps in the stomach and legs. The pain was so sharp, that at 12 P.M. he was given seven minims of Magondie's Solution of Morphia Hy-podermically which soon relieved him of these pains. Up to August 29th there has been no decided change in the urine.



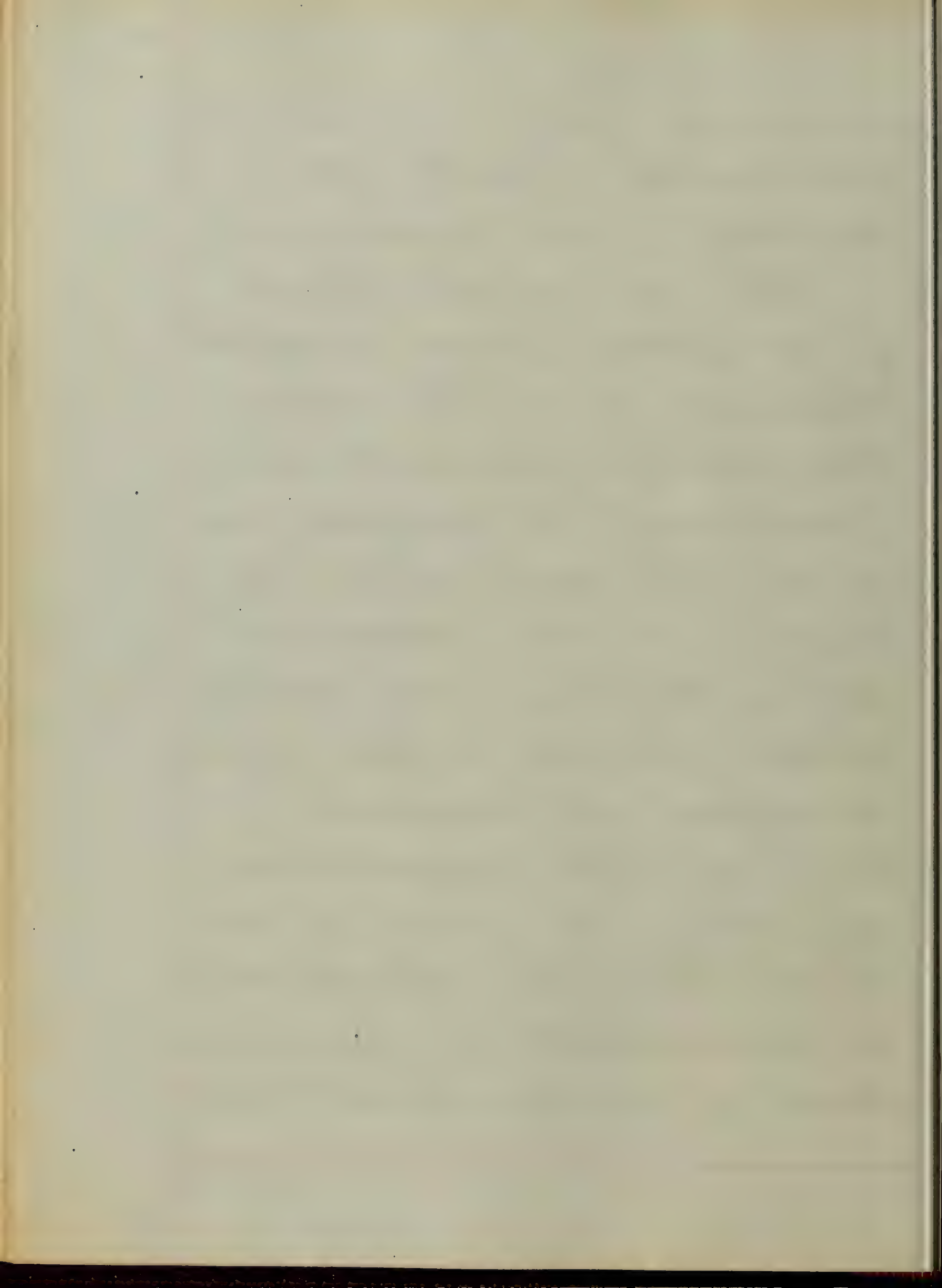
still, he is gaining some flesh. And about the middle of September he was discharged.
During the time he received treatment in the Hospital, his symtoms changed very slowly for the better. Yet the day he left, he said, "he felt much better" and in fact he really looked so. His thirst not as great as it had been.

Case, No. 5.

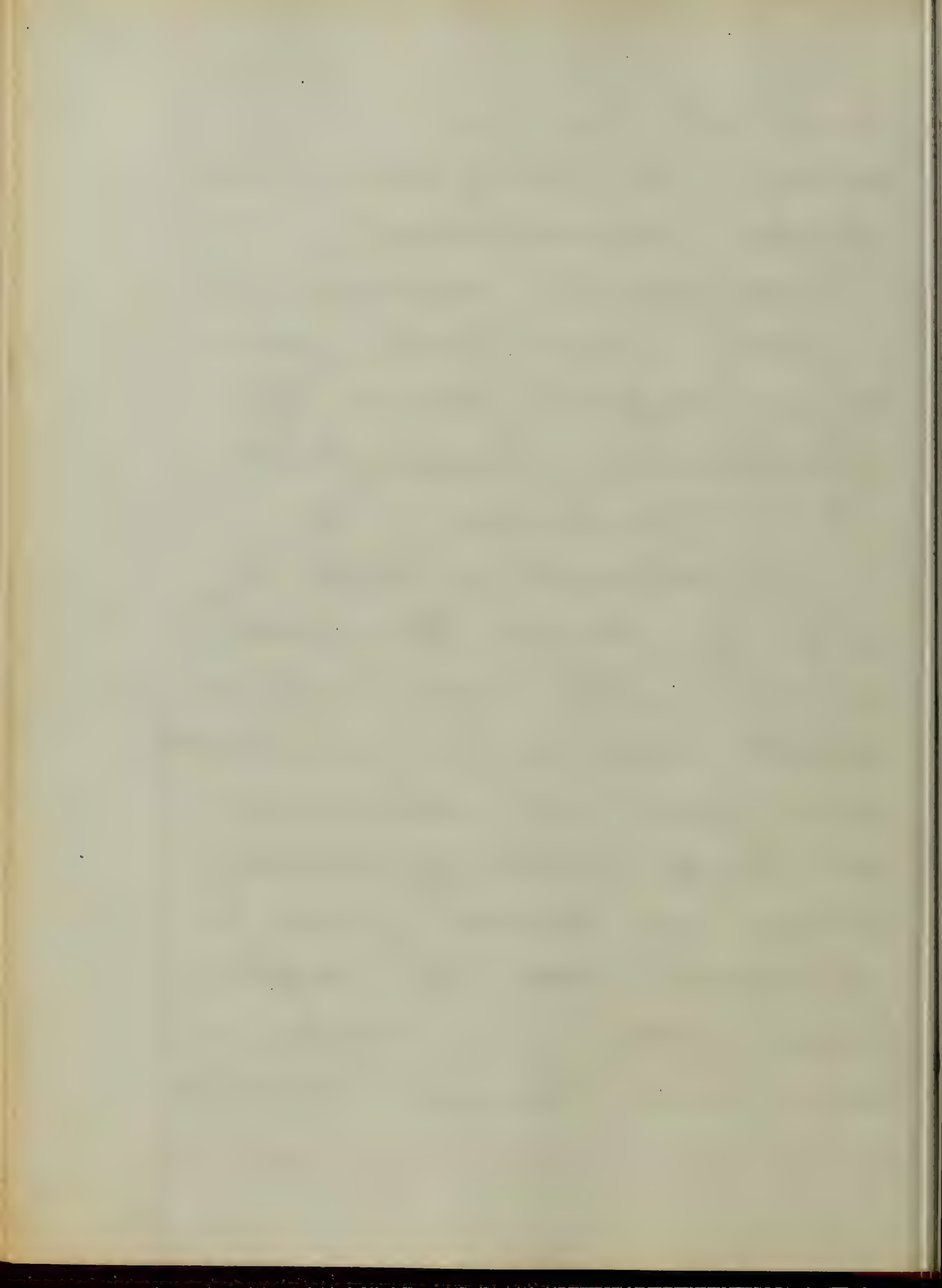
Chas. W. Smith.
Occupation Seaman,



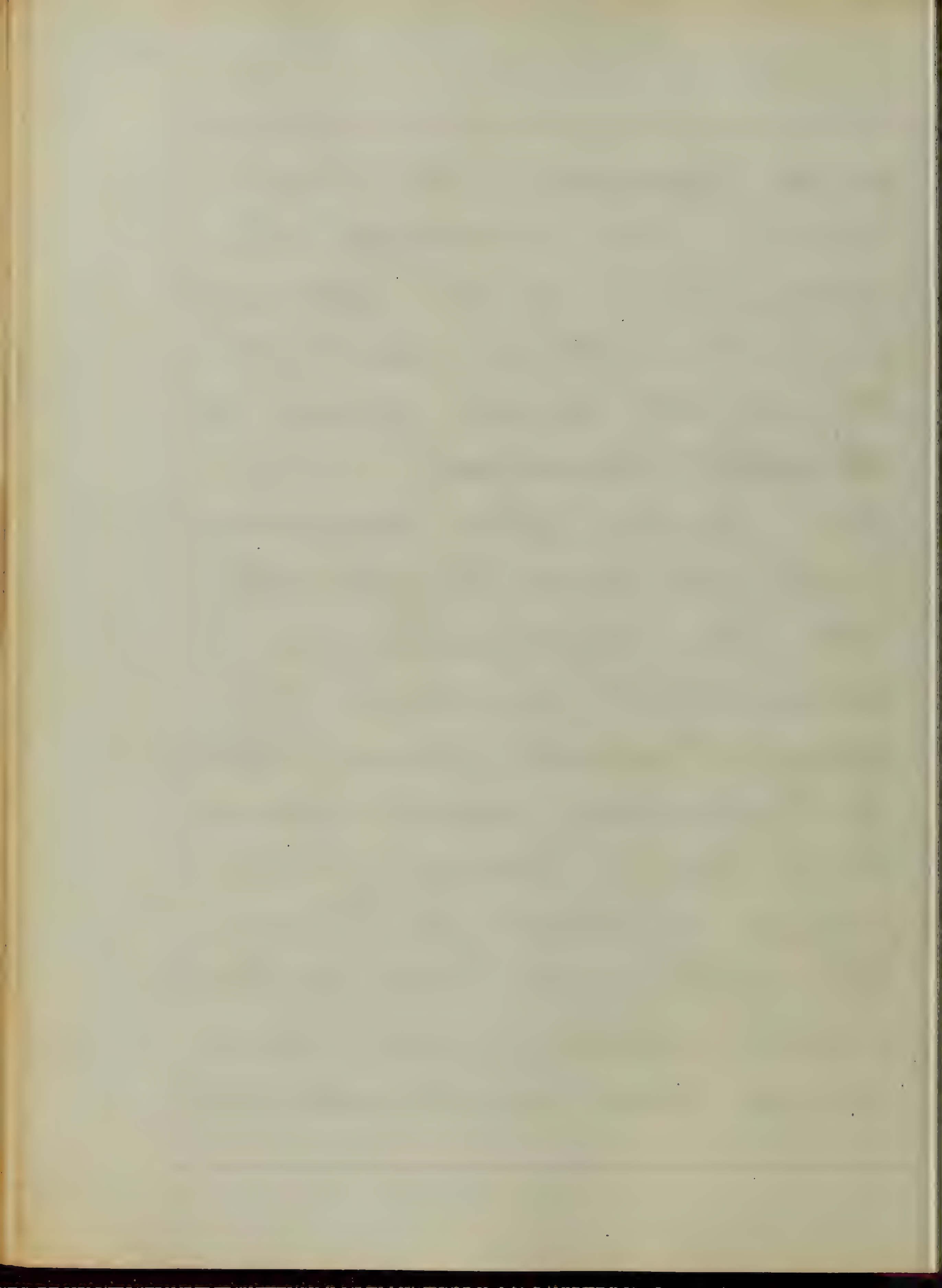
admitted Dec. 1st 1874
History. has been sick
for one week, when
first taken, had a slight
bleeding from the nose.
Symptoms present on
Entering the Hospital, were,
high fever, temperature 106°
and pulse 100. Abdomen
tympanitic, and rose colored
spots over its surface which
disappear on pressure.
there is also pneumonia
affecting the base of each
lower lobe. The sputa also
is characteristic of pneumonia
being of a somewhat rusty



colour. The diagnosis was Typho-pneumonia.
Treatment. ordered to take Dover's Powder, grs x every night. and the following prescription.
℞ Syr. Scillae ℥ij
Cinchonidiae Sulph: ℈ij M
Sig: ʒij every three hours.
Dec: 2nd The rose coloured spots upon the abdomen are not so abundant as they were yesterday. there is more pain on pressure over the right iliac fossa, the tongue is dry and the lips cracked

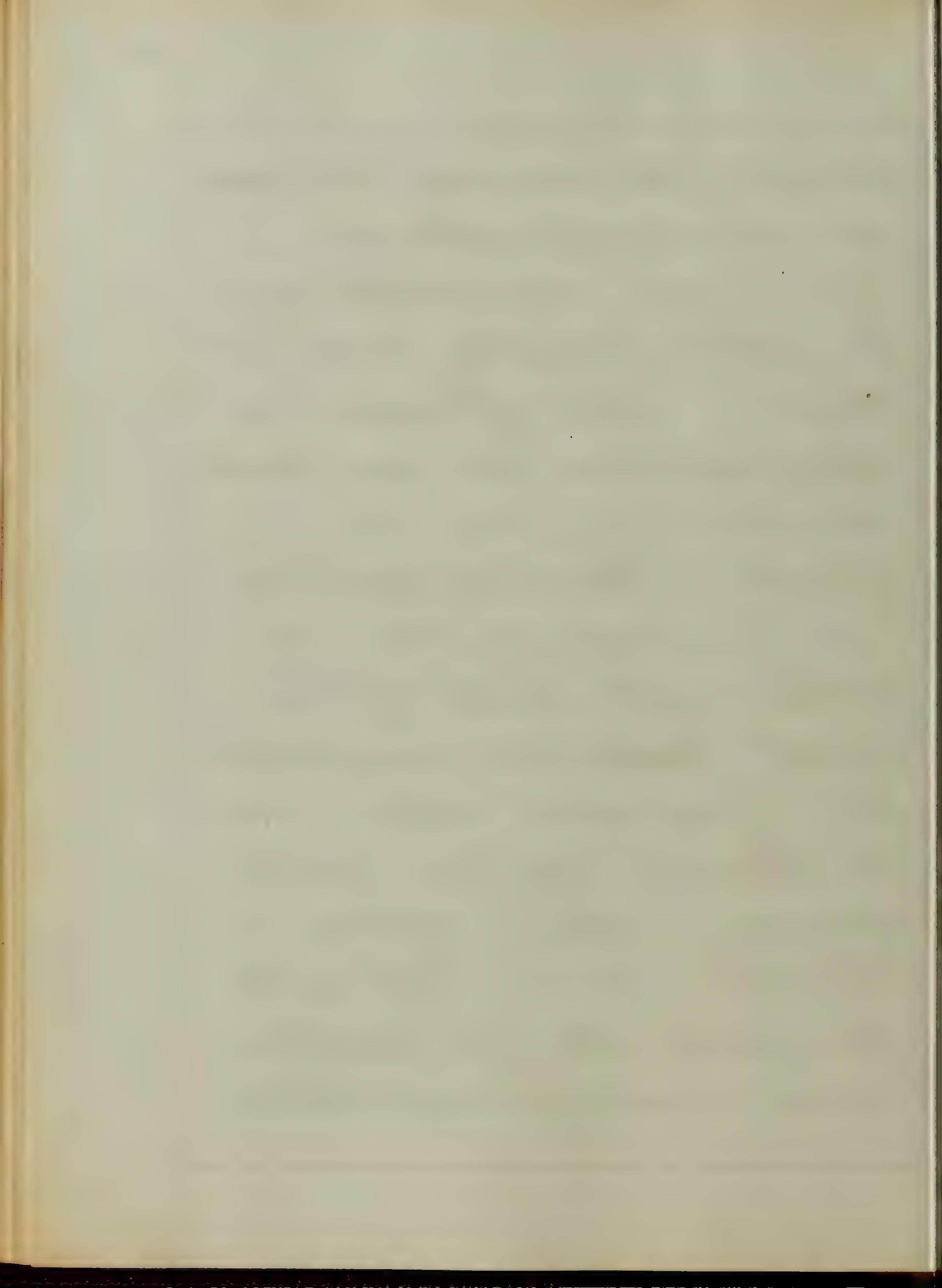


and fissured, the pneu-
monia has involved the
entire lung of the left side,
and the upper part of
the right lung appears to
be still normal.
The pulse this morning
was 100, and temperature
104°, the respiration is
somewhat hurried. The
Syrup of Squills, and Sulphate
of Cinchonidia were ordered
to be taken every four
hours, instead of three.
This afternoon our patient
seems drowsy, his pulse
is 100 and temperature 105°.

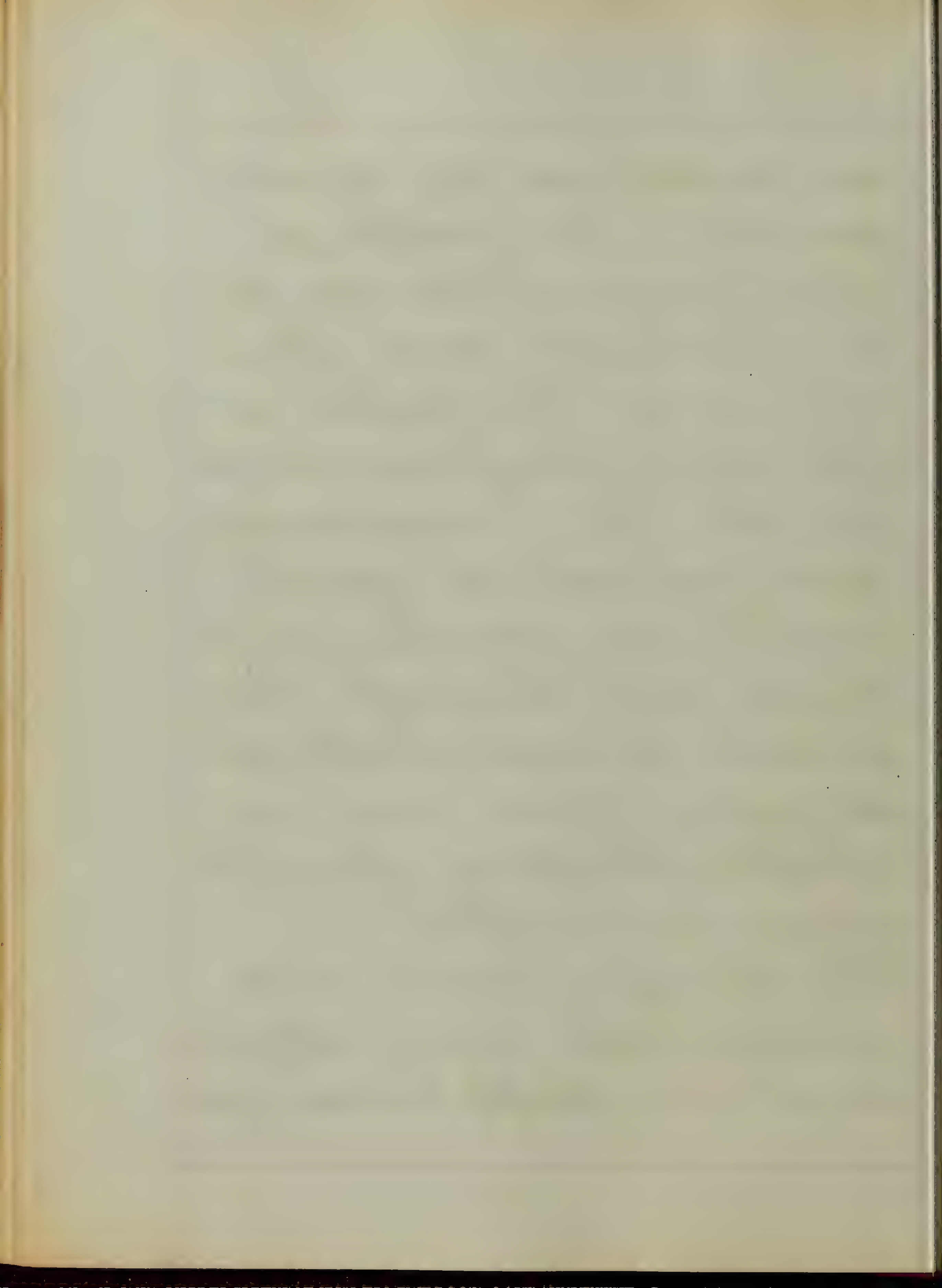


Dec: 3rd. This morning his pulse 100, and temperature 106°. Bowels are constipated; says "he slept tolerably well last night;" this afternoon his temperature 105° and pulse 102 beats per minute.

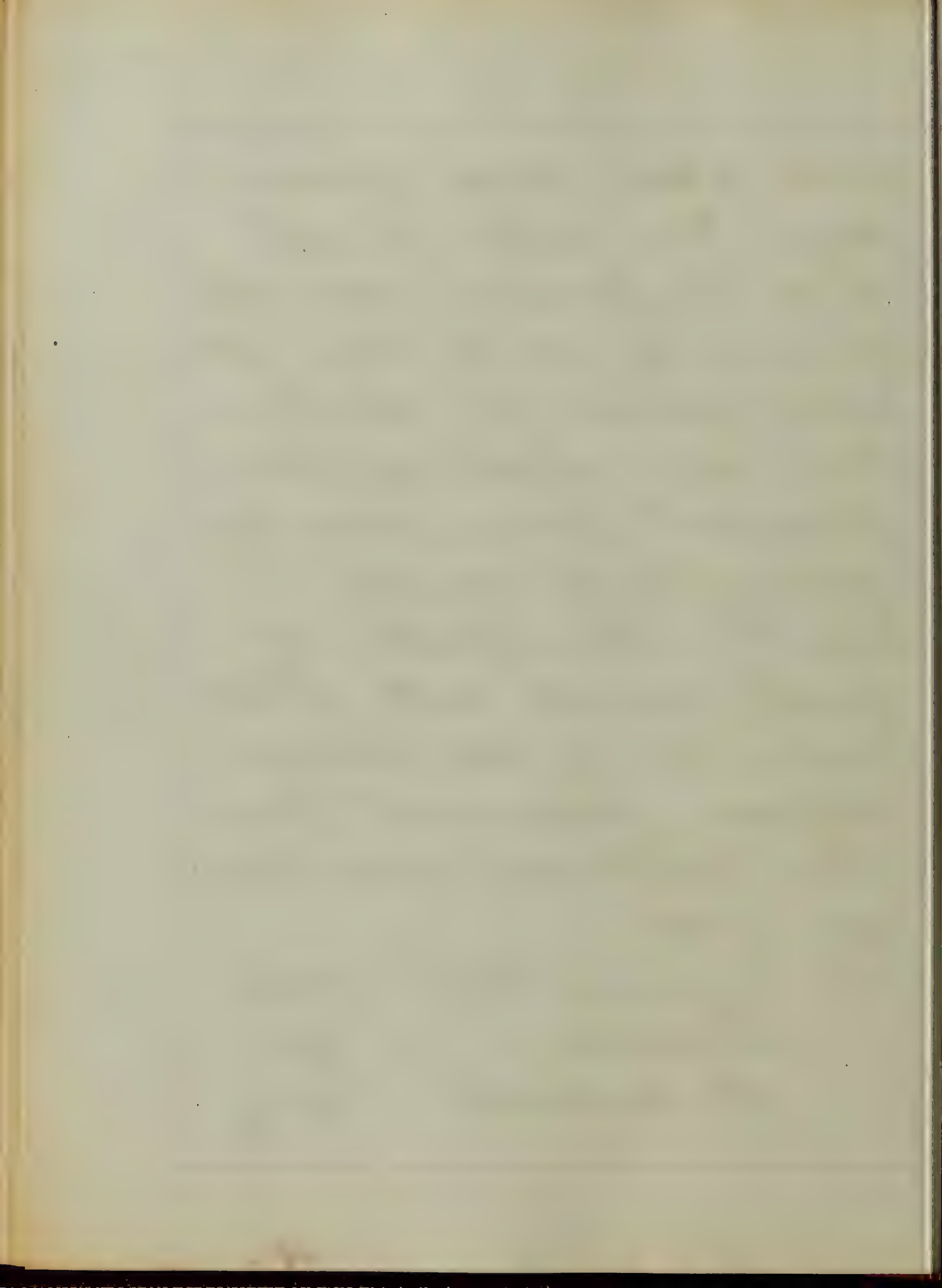
Dec. 4th. There is dullness on percussing over the entire right side of the chest, and on ausculta- tion crepitant râles can be heard together with sonorous rhonchi, under the clavical, on the left side, dullness on percussion; and subcrepitant râles



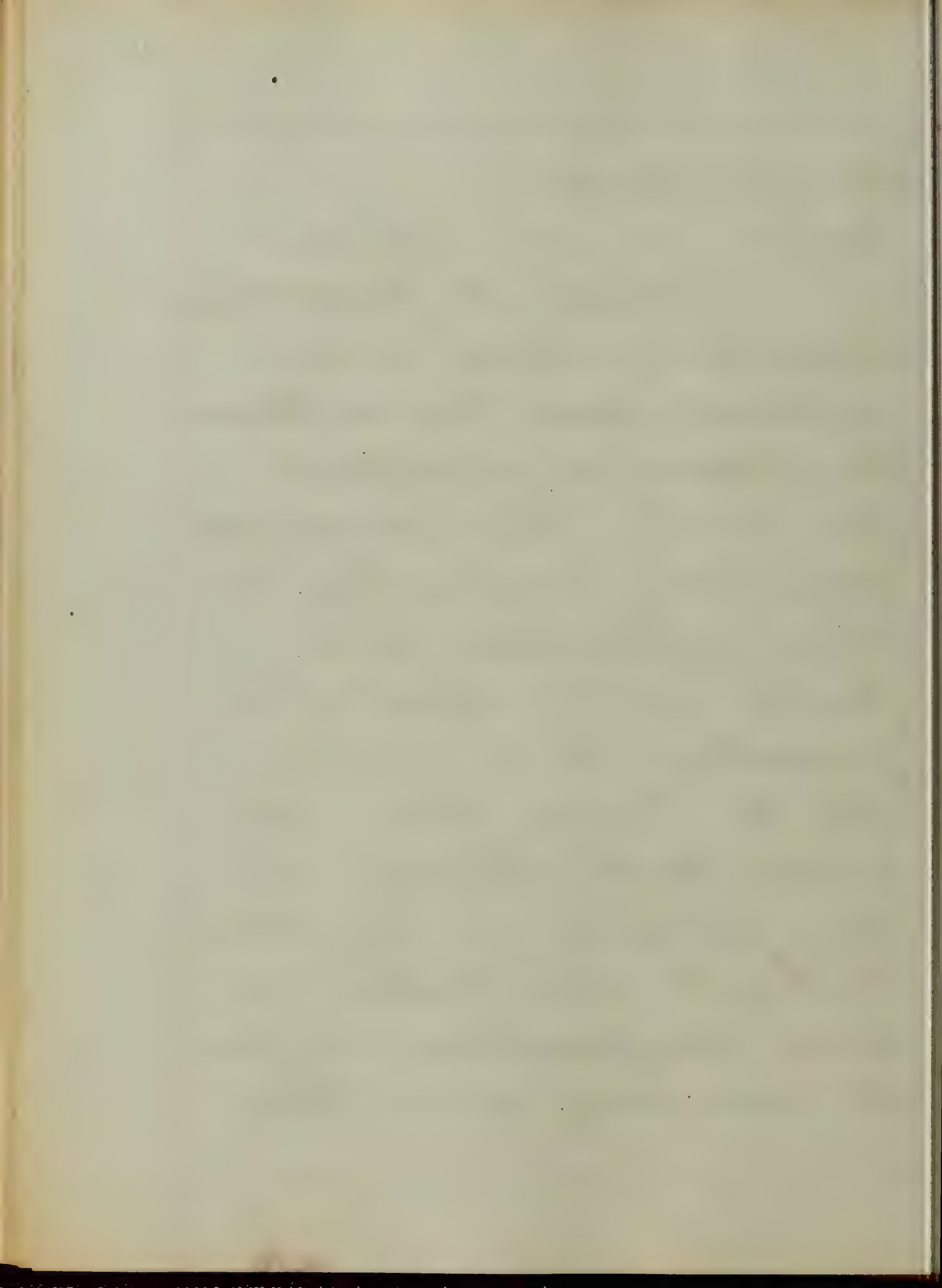
are heard in the upper bronchi. The pulse 102, and temperature 104° in the morning, and this afternoon his pulse is 100, and temperature 105.5°
Dec. 5th. This morning our patient is quite weak: he complains of pain all through his limbs. Bowels still constipated, there was a slight bleeding from the nose, last night.
The Syrup of Squills and Cinchonidia, were stopped and the Sulph: Quinia grsiij



to be taken three times a-
day. His pulse is 104,
and temperature 105.5°, this
morning, and this after-
noon, pulse 106, tempera
ture 106°. Diet up to the
present time, has been
principally milk.
Dec. 6th The Sputa is
freely mixed with blood.
Very little of the lungs
appear permeable to air.
The treatment was Chang-
ed today.
℞ Quinia Sulph: grs viij
Glycerine ℥i
Ol: Terebinth: ℥i M

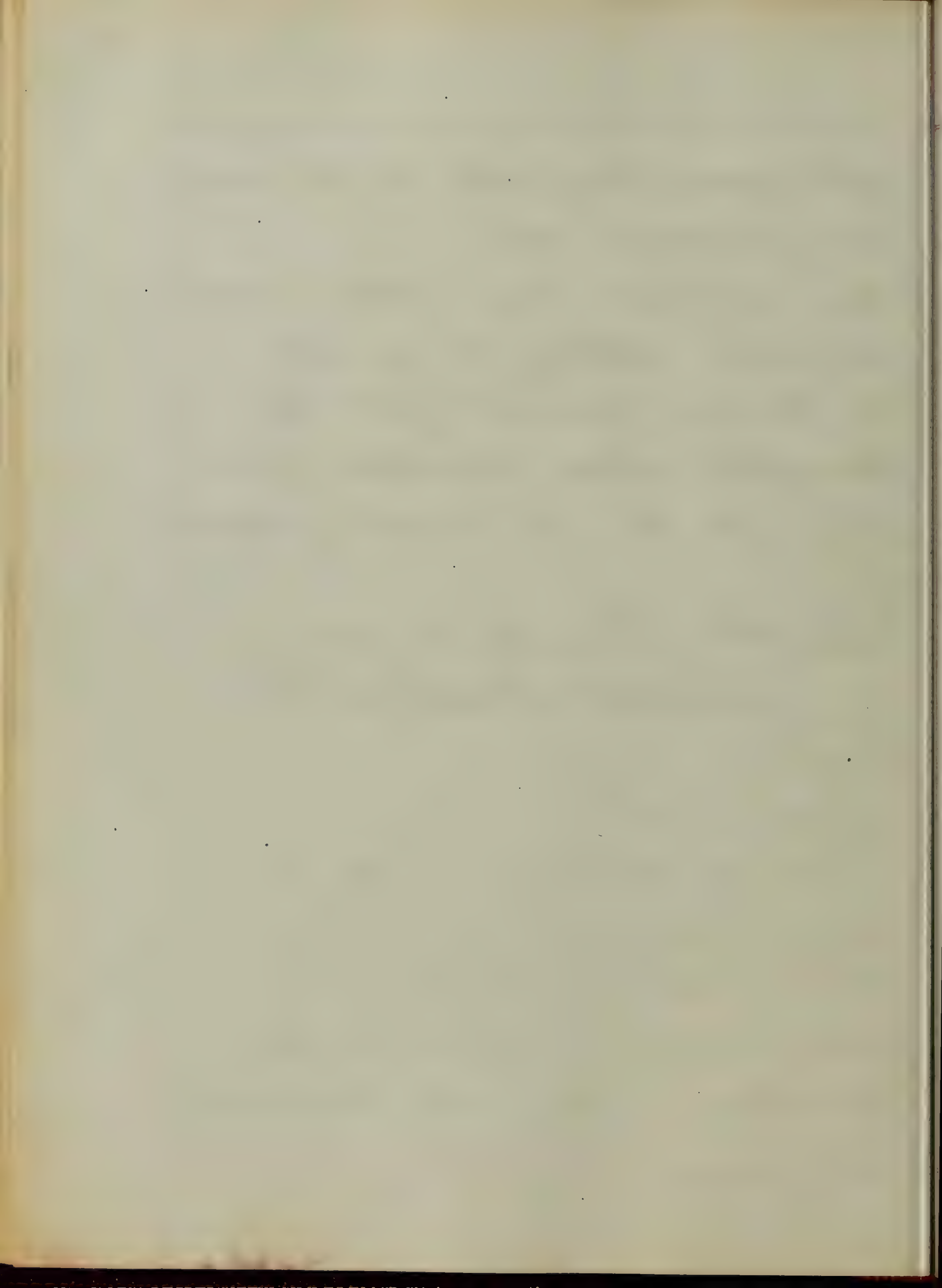


Sig: ℨi Ter die.
and as an aperient
Calomel et Ipecac āā gr. iij
Terpentine stupes were
applied over the abdomen
as counter-irritants.
The pulse this morning
was 108, temperature 106°.
this afternoon his
pulse is 115, and tem-
perature 106°.
Dec. 7th Today there is
a marked change in
our patient, for the worse
I think, his pulse 120,
and temperature 107°, in
the morning, and this

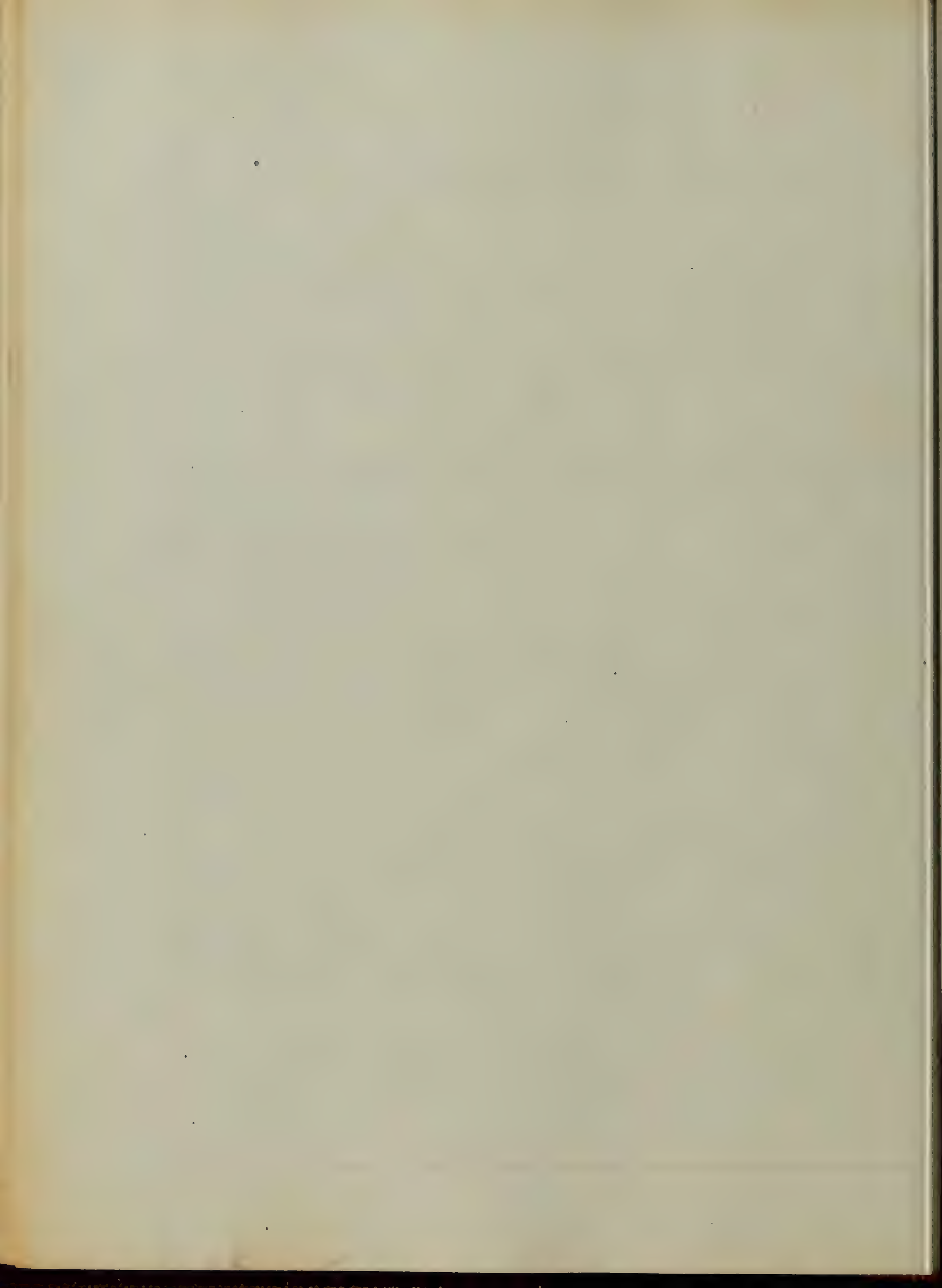


afternoon his pulse is 122, and temperature 106.5°.
Our patient has taken milk punch today every two or three hours, yet no benefit has resulted from it. and he is sinking rapidly.
Dec. 8th This morning our patient breathed his last.

Case No. 6th
Henry Spinner age 1[illegible]
Admitted June 3rd [illegible]
Occupation Labourer.
Resides in Baltimore
History - Had an eruption



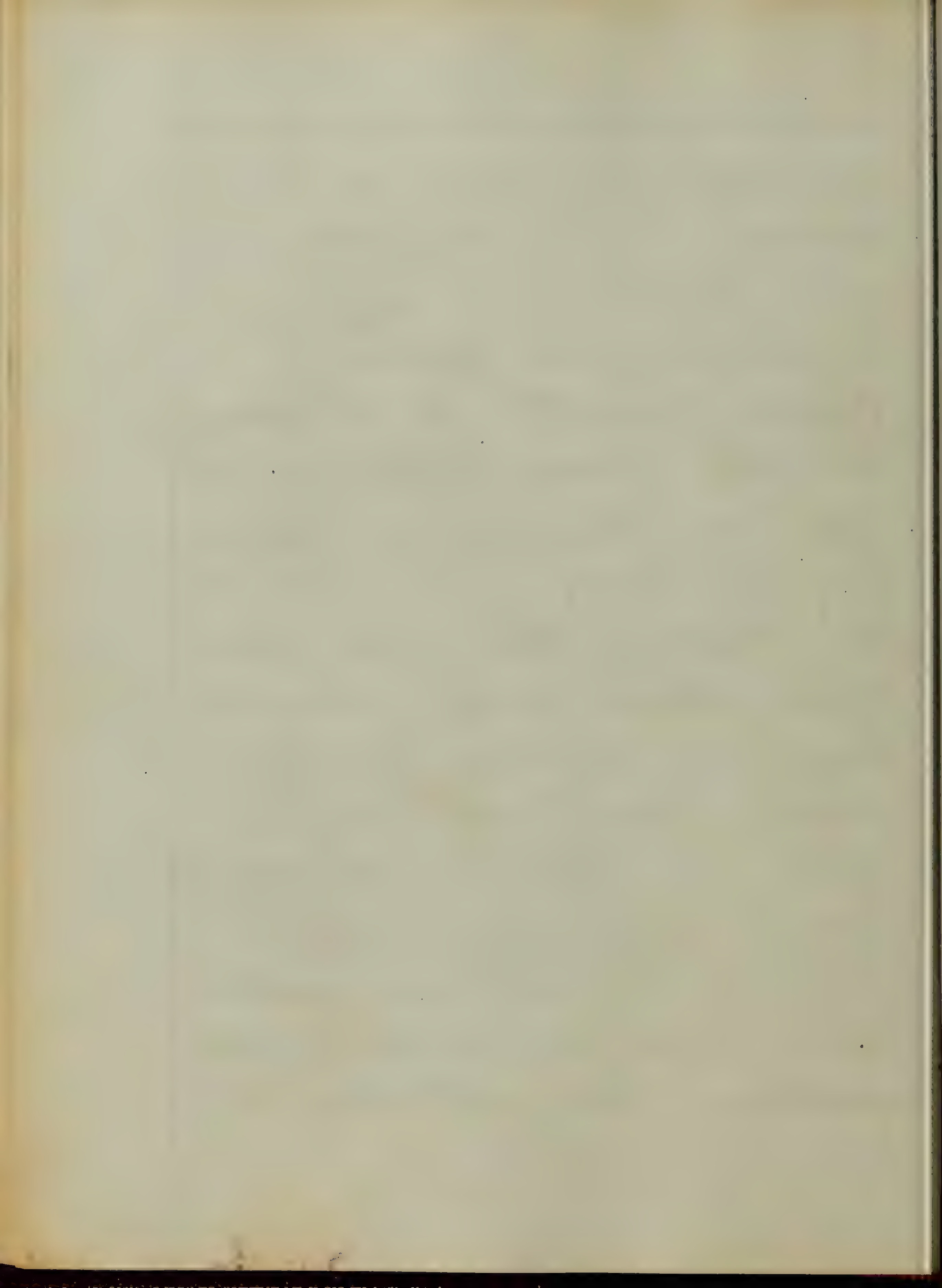
upon the buttocks and prepuce which first made its appearance about four weeks prior to his entering the Hospital.
This eruption commenced upon the prepuce and its cause was traced to the young man's having had impure intercourse with a woman.
There was considerable itching about the parts affected; and (as the young fellow appeared a little afraid of the side of water) together with the



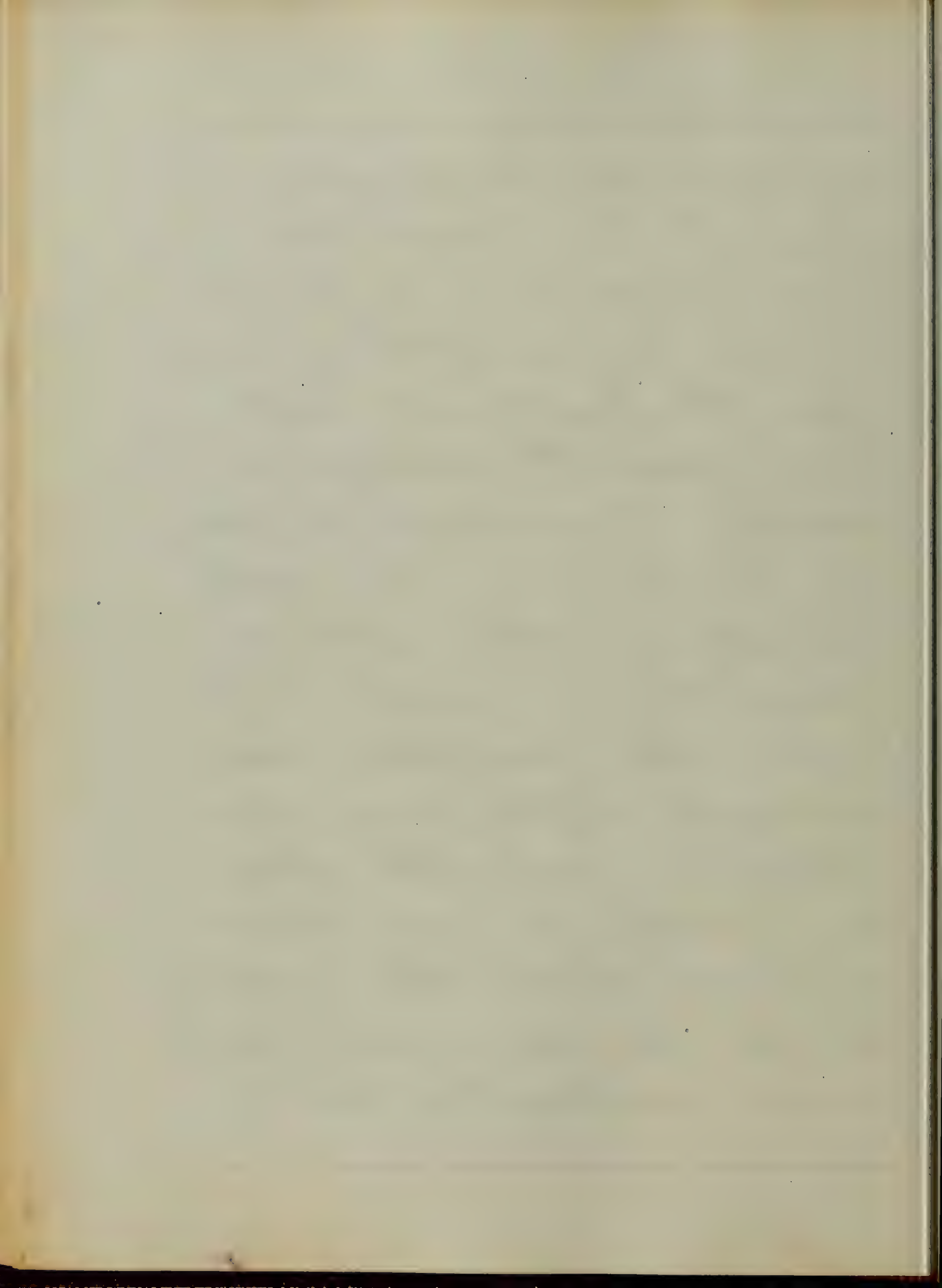
vesicular appearance of the disease. The diagnosis was Herpes.

Treatment and Effects.

From June 3rd up to June 5 he took Cinchonidia, Sulph: grains. Tinct: Ferri, Muriat: gtts xv, and enough water added, to make one drachm: this was taken three times a day. Then on June 5th Calomel grs. xv. were taken at bed-time. June 6th Sulphate of Magnesia ℥i taken before breakfast. During the day our patient had three or four watery evacuations. This afternoon the



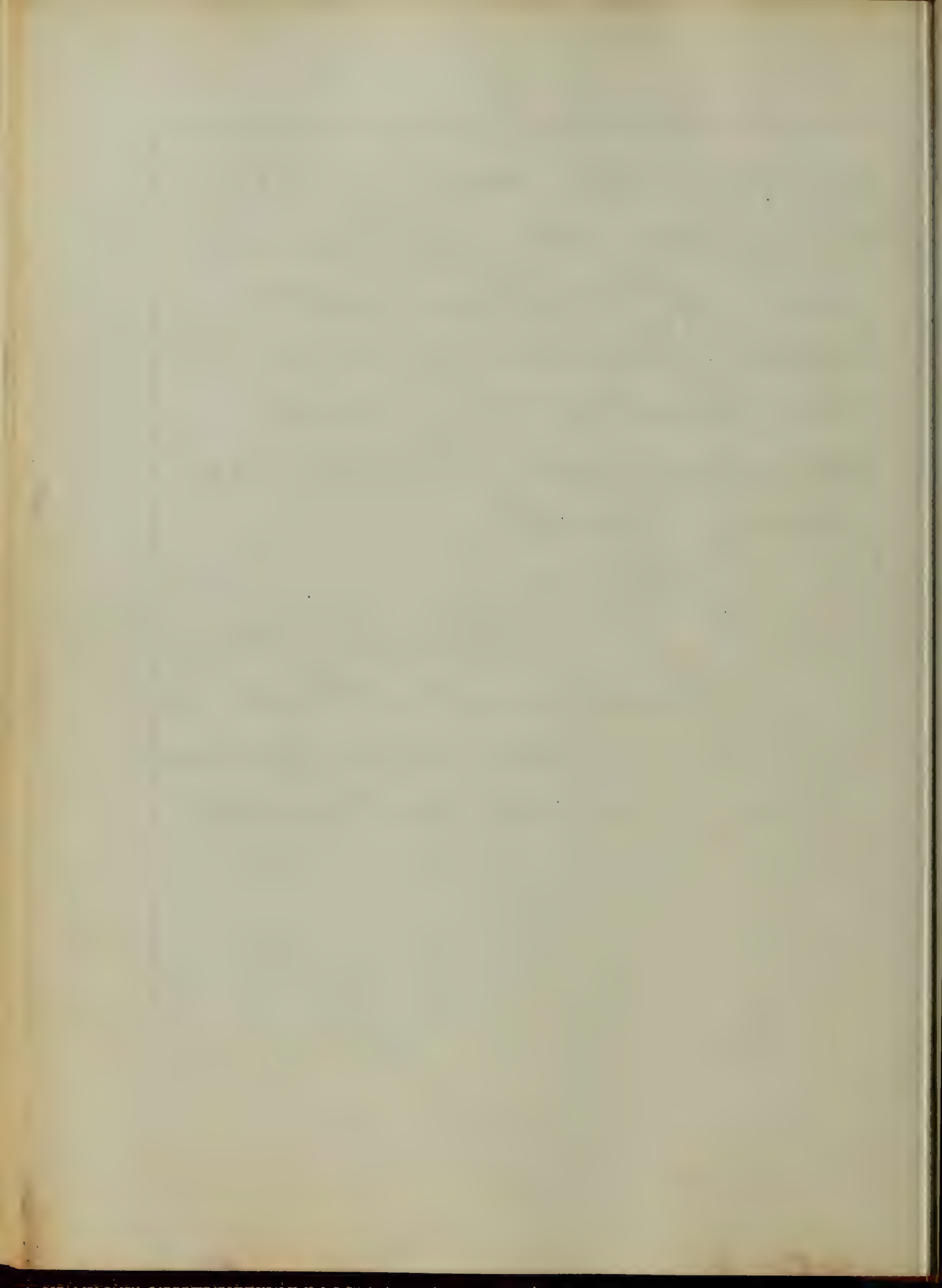
eruption is disappearing.
June 7th The "House Tonic"
was ordered to be repeated
in the same dose (ʒi t.i.d.).
June 8th Treatment contin-
ued. June 9th Ordered a
wash. Bicarbonate of Soda
ʒij water ℥iv. to apply
locally, to allay itching.
June 10th The wash contin-
ued. The eruption has
entirely left the penis, and
there is very little upon
the buttocks, it was also
noticed that the orifice
of the prepuce was some-
what contracted in



the patient was unable
to expose the glans penis.
June 11th Circumcision
was performed, and in
two weeks he was
discharged being per-
fectly well.

Finis.

Charles Abert.
Resident Student
of the Baltimore Infirmary
from March 1st 1874 to 1875.



Amputations

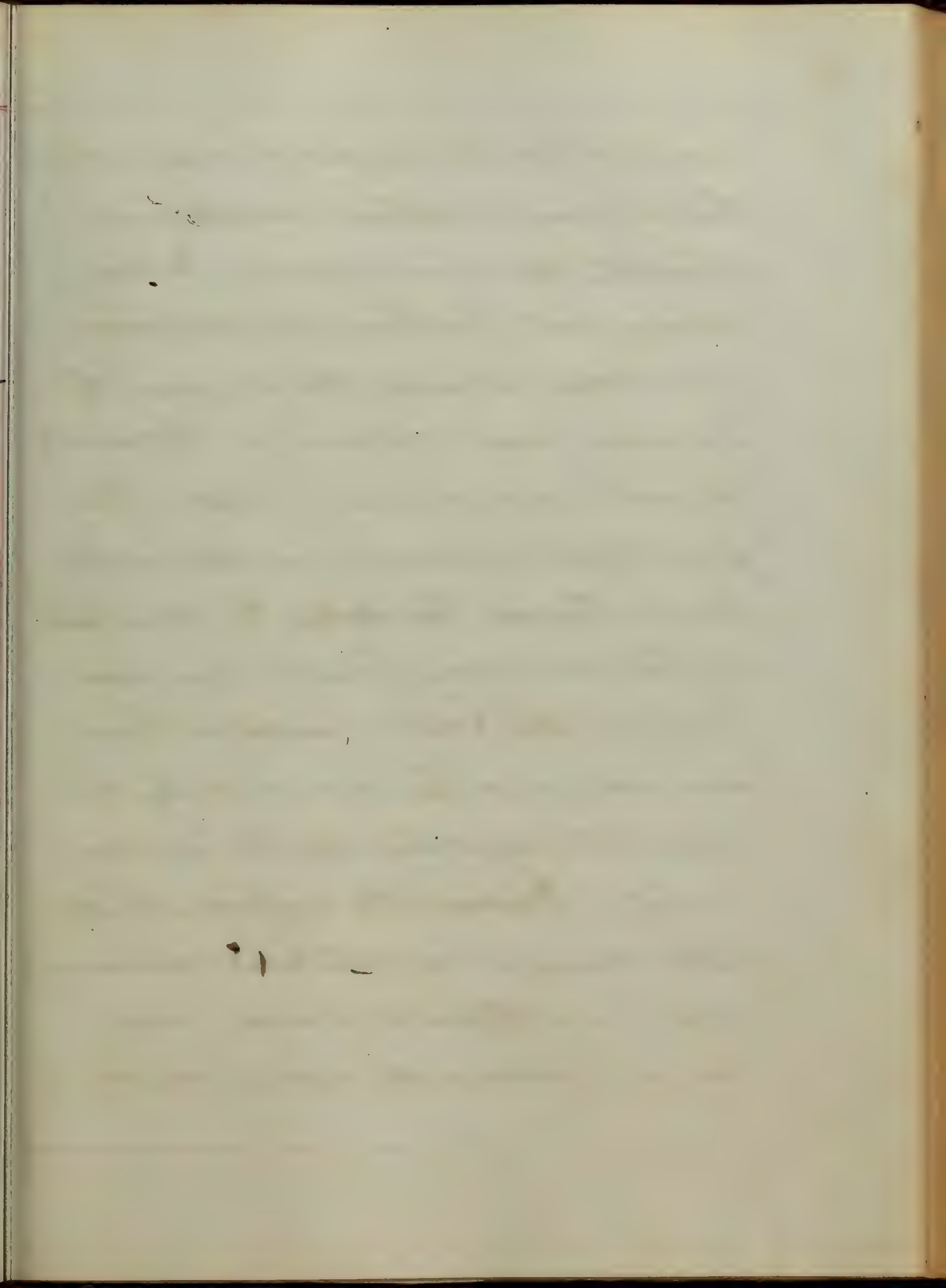
By

Edward Anderson.

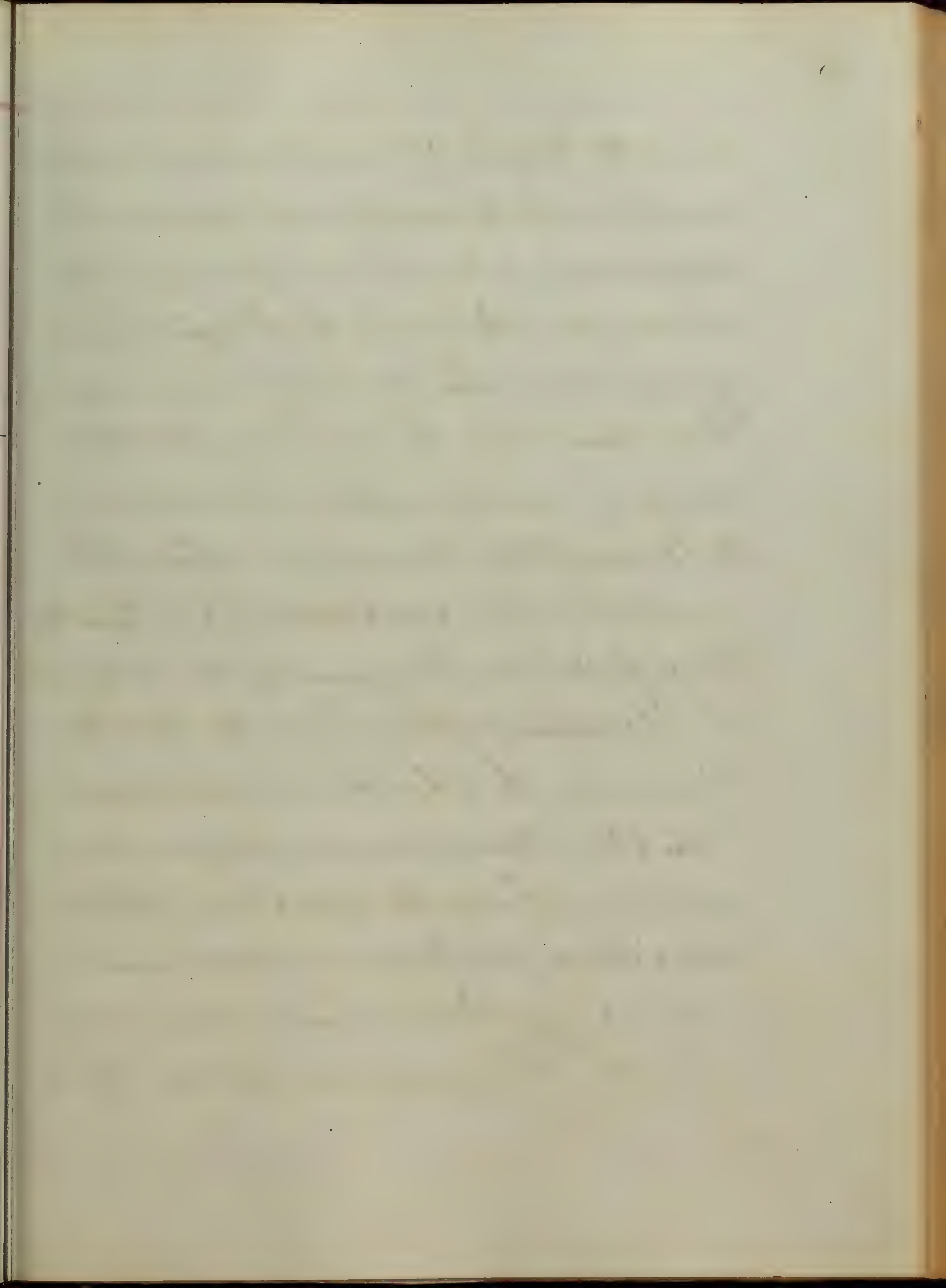
1875

The extremities are subject to many disorders which require amputation, but a spreading gangrene of traumatic origin has been always esteemed one of the most pressing motives; and, indeed, among the ancients, to all appearances, the only one. It is, therefore, customary with surgeons to consider the nature of the gangrene before operating, as a knowledge of its character is necessary to determine when the operation should be performed. A gangrene of idiopathic origin demands amputation as imperatively as one of traumatic origin, but in the

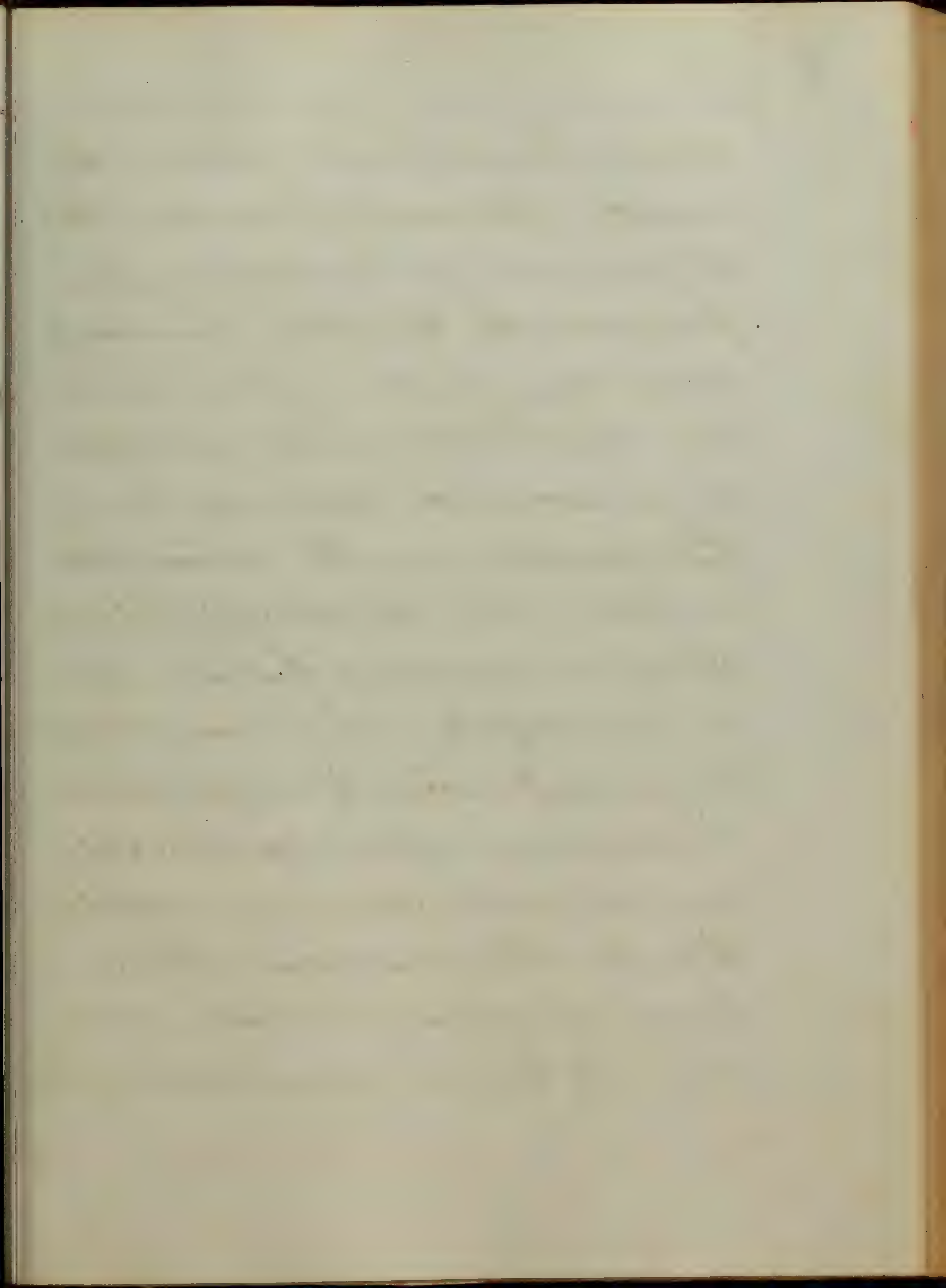
former case the Operation should be delayed until the gangrene has ceased spreading, and a line of demarcation has been set up, in the latter case the Operation must be performed at once.
Another class of cases where amputation is absolutely necessary is when all the soft parts are de-stroyed, or the blood vessels supplying the limbs have ceased to perform their functions, as where in the leg the femoral artery and vein are severed. The same necessity arises when the sciatic nerve is ruptured.
The foregoing are the only cases where



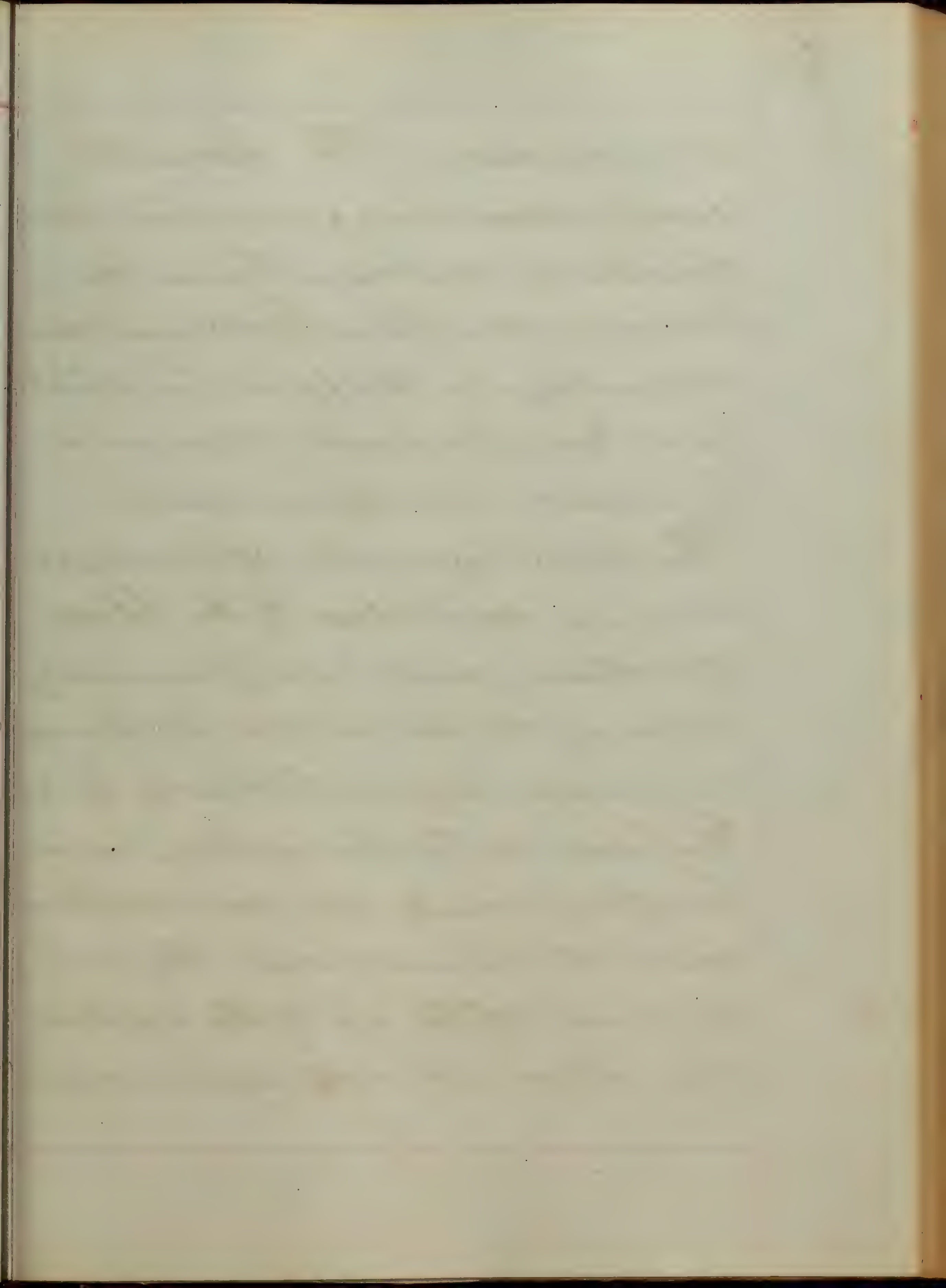
amputation is certainly required; there may be other conditions where the operation would be necessary, but for these no certain rules can be laid down, and the surgeon must determine the necessity in each individual case. His first object, however, in all such cases should be ~~sales~~ to ascertain if there are any possible means by which the limb could be preserved, and he should only resort to amputation as the last necessity. Indeed, the highest skill of the surgeon is exhibited in saving limbs in difficult cases, and not in successful amputations,



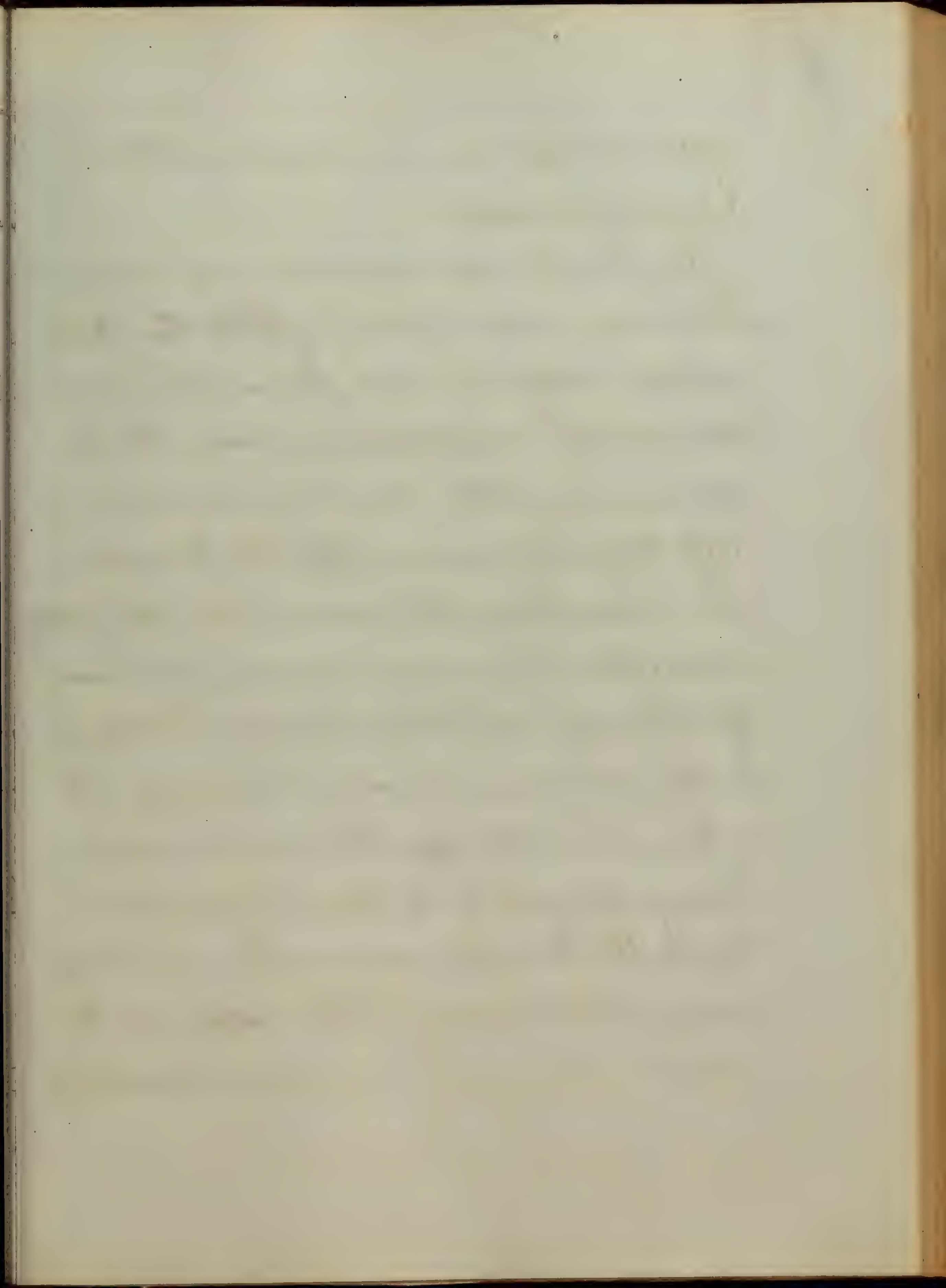
for by the light of modern science and with the improved modern appliances almost any surgeon of moderate skill in his profession can perform this operation successfully. There are very few branches of surgery more improved since the times of the Ancients than the method of amputating a limb. Then patients frequently died under the operation, either from the loss of blood or the shock occasioned by ~~the~~ it. How much surgeons were deterred from the operation by these accidents, we have a curious incident in the writings of an ancient author. Who refused to cut off a



man's hand purely on that account. He says, however, that the patient, in his despair, performed the operation himself and recovered. It is no wonder, then, that we meet with so few ~~accounts~~ descriptions of this operation in the ~~other~~ old writers, when the issue of it was often so suddenly fatal; nor is it singular that men should have submitted to amputation for gangrene, which so evidently destroys as it advances, rather than for other disorders whose progress is less marked, and generally leaves some hope, however,



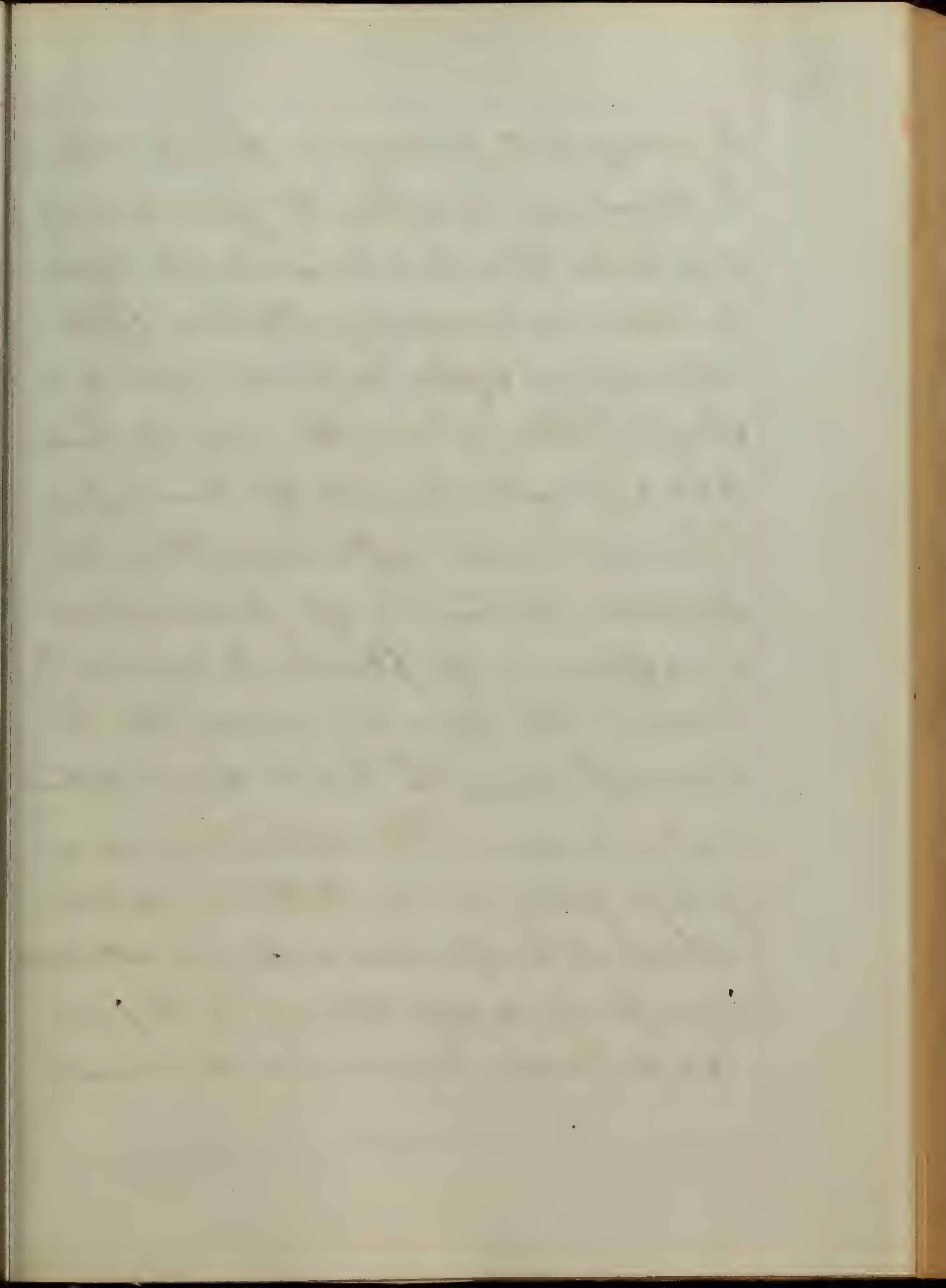
ill founded. The Ancients, and, indeed, surgeons until comparatively modern times, labored under three principal disadvantages in Amputation, which have been gradually removed by successive improvements.
They were ignorant of the double incision, and also of the flap Operation, and had no means of covering the bone so that it always protruded beyond the fleshy parts; They had no tourniquet; and, therefore, could not so well command the hemorrhage. They were ignorant of the use of the ligature from which we reap such eminent



advantage in occluding the
blood vessels.
The first inconvenience which
we I have mentioned, that the an
cients experienced from their
mode of amputation and their
ignorance of the double incision,
was the protrusion of the bone,
for making the incision directly
down to the bone at once, instead
of through the skin and fat down
to the fascia, and drawing the
skin further up, the retraction
being aided by a few touches
with the knife; and then a knife
being put close to the edge of the
retracted skin, and ~~dividing~~

with a rather circular sweep of it, dividing every thing clean down to the bone, before sawing it off, the muscles and skin afterwards withdrew; leaving a large por-tion of the bone either naked or so little covered, that it always perished, and made an exfoliation necessary. This exfoliation was often a painful and tedious work, and frequently by long preventing the cure, reduced the wound at last to an habitual ulcer, or if the wound did heal, the cicatrix proved so large, and the stump so pointed that it was liable to ulcerate again.

This result is completely obviated
by the double incision full de-
scribed, or by the flap operation
which was discovered about
the year 1679, but was then
universally disapproved of, and
shortly afterwards abandoned,
and was not again practised
until about the beginning of the
present century, when its use
was revived, and about fifty
years later it became the favor-
-ite mode of operating, because
it was claimed by surgeons that
it could be performed with
much more facility than the cir-
-cular operation, and enabled



the surgeon to select a flap where he pleased, so when the flesh on one side of a limb ~~is~~ was destroyed by disease or injury, the end of the stump might be covered with a flap taken from the sound side, and a greater length of limb pre-served, and afforded, too, a greater certainty of preserving a sufficiency of flesh to cover the bone. This operation consists in transfixing the limb and cutting outwards. This operation is a-gain giving way to the circular, which is preferable to it, in all cases, except in amputations of the foot and hand, because in the circular

mode the arteries are cut at right angles and are more easily taken up and the ligatures more certainly and perfectly applied than in the flap mode where they are cut obliquely: besides the circular operation is more easily performed

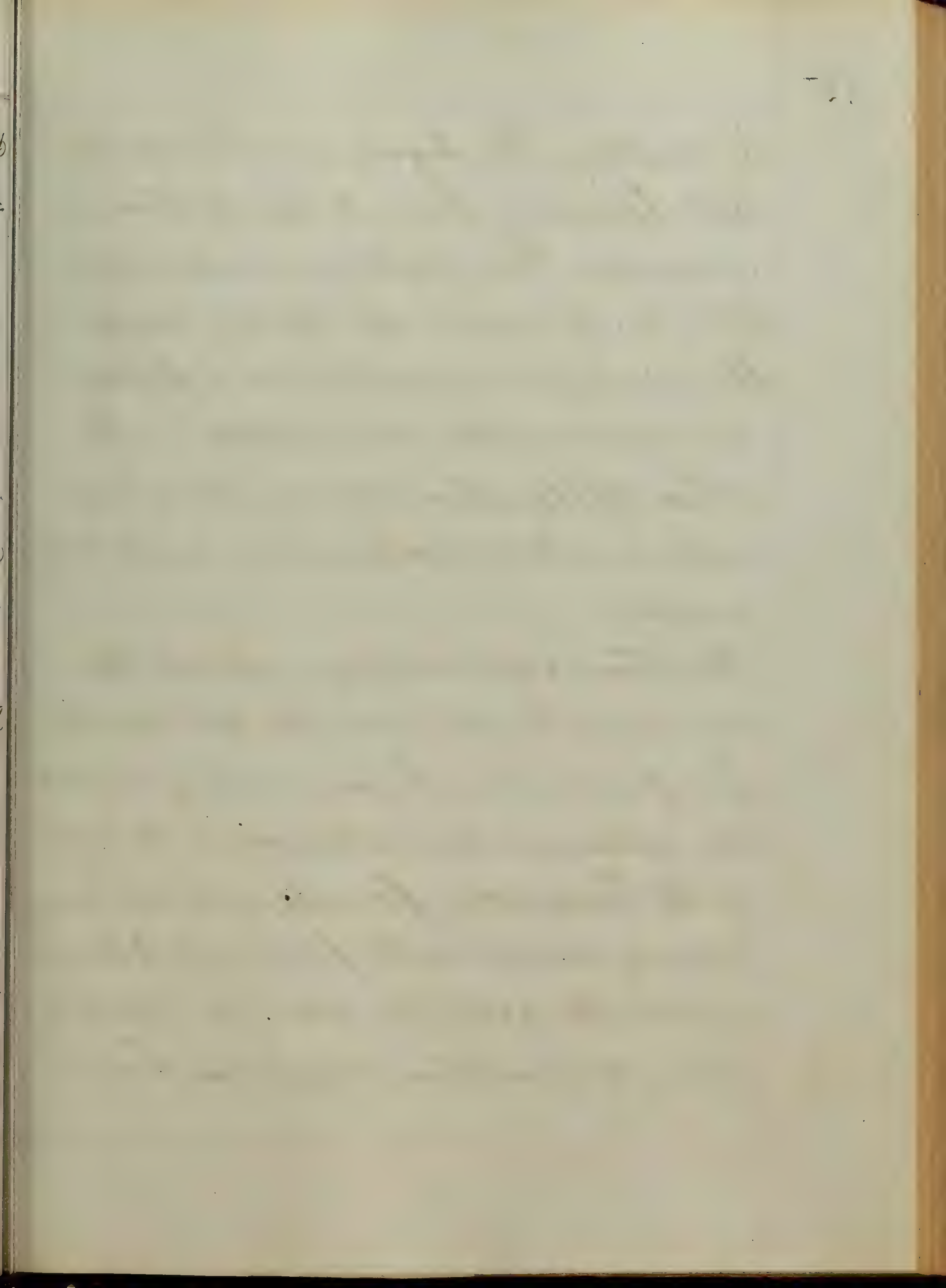
The second inconvenience which we have mentioned that the old surgeons labored under, was the want of a tourniquet with which to control the hemorrhage, and prevent from bleeding. and for which they had no substitute; for although they employed the bandage to prevent the flow of blood. Yet having to so com

pletely to loosen ~~the bandage~~ it to discover the orifice of the vessels ~~that~~ the patient often bled to death before it could be again tightened. This is now completely obviated by the use of the tourniquet, which was discovered by Morellus between the years 1670 & 1680, and is a very simple device consisting of a pad to compress the artery, a strong band which is buckled around the limb, and a bridge like contrivance over which the band passes, with a screw, by turning which the bridge is raised and the band tightened.

The third great inconvenience which the ancients suffered, as we have before stated, was the want of a knowledge of the use of the ligature, which was first used by Ambroze Parey, and is simply a cord drawn around the end of the artery so as to permanently prevent hemorrhage. In place of this simple means they used actual Cautery; a most barbarous and often ineffectual practice. Some used arsenic and corrosive sublimate for staunching the blood. The dreadful effects of the second may be guessed. Among many instances of its

pernicious effects, there is an ac-
count of nineteen men, who, one
only excepted, died after am-
-putation, and, as it was sup-
-posed, chiefly from the poison-
-ous quantity of the sublimate used
to stop the flow of blood. So
great was their apprehension of
hemorrhage of ~~hemorrhage~~
that some of them left a few in-
-ches of gangrenous matter in
order to leave the blood vessels
plugged. For this statement
we have the authority of reliable
authors. It hardly seems credible
to us of the present day who are
taught so little to regard hem-

-orrhage that such a practice would have prevailed among professed surgeons.
The ancient practice as we have before stated left the bone exposed, and forbade the approximation of the soft parts, but we of the present generation, leaving the stump in the form of a hollow cone, approximate the lips of the wound with a few strips of plaster, with or without sutures, bringing the edges together in a straight line, which may be either perpendicular or horizontal, the latter being the better plan. When sutures are used, silver wire is the best material



to employ. The ligature should be left hanging from the lips of the wound. The patient should then be placed in bed, and the stump supported on a pillow covered with oil cloth. No other application is necessary ex-cept a cloth saturated with cold water.

Another advantage which the moderns have over the ancients for preventing hemorrhage until the arteries are closed, is the use of the bull-dog forceps, which com-pletely controls the flow of blood until the arteries can be ligated. After amputation erysipelas for-

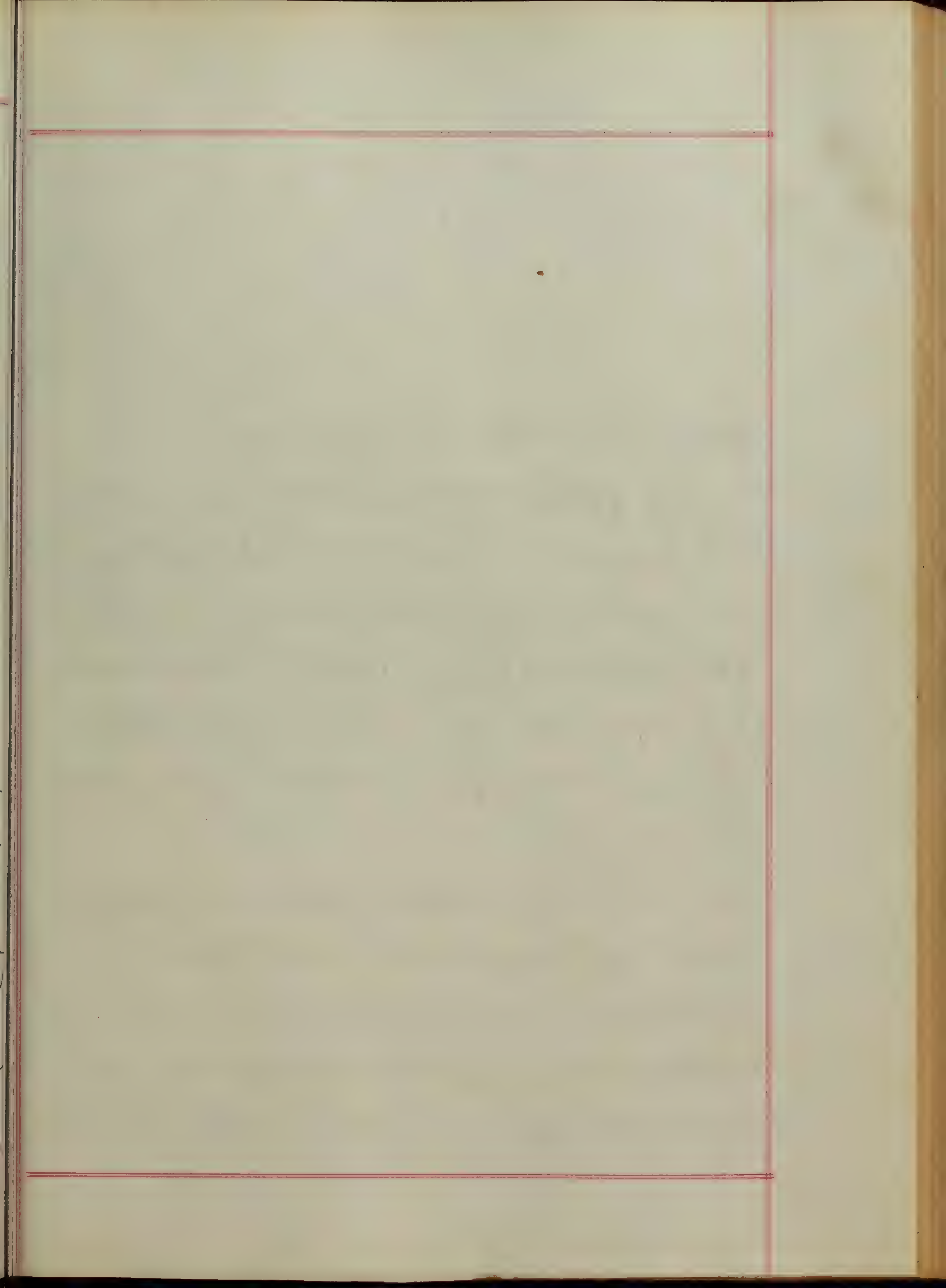
-quently supervened, especially in hospital practice, and was the great dread of surgeons; but since the introduction of Carbolic acid into practice, this dread has been dissipated -

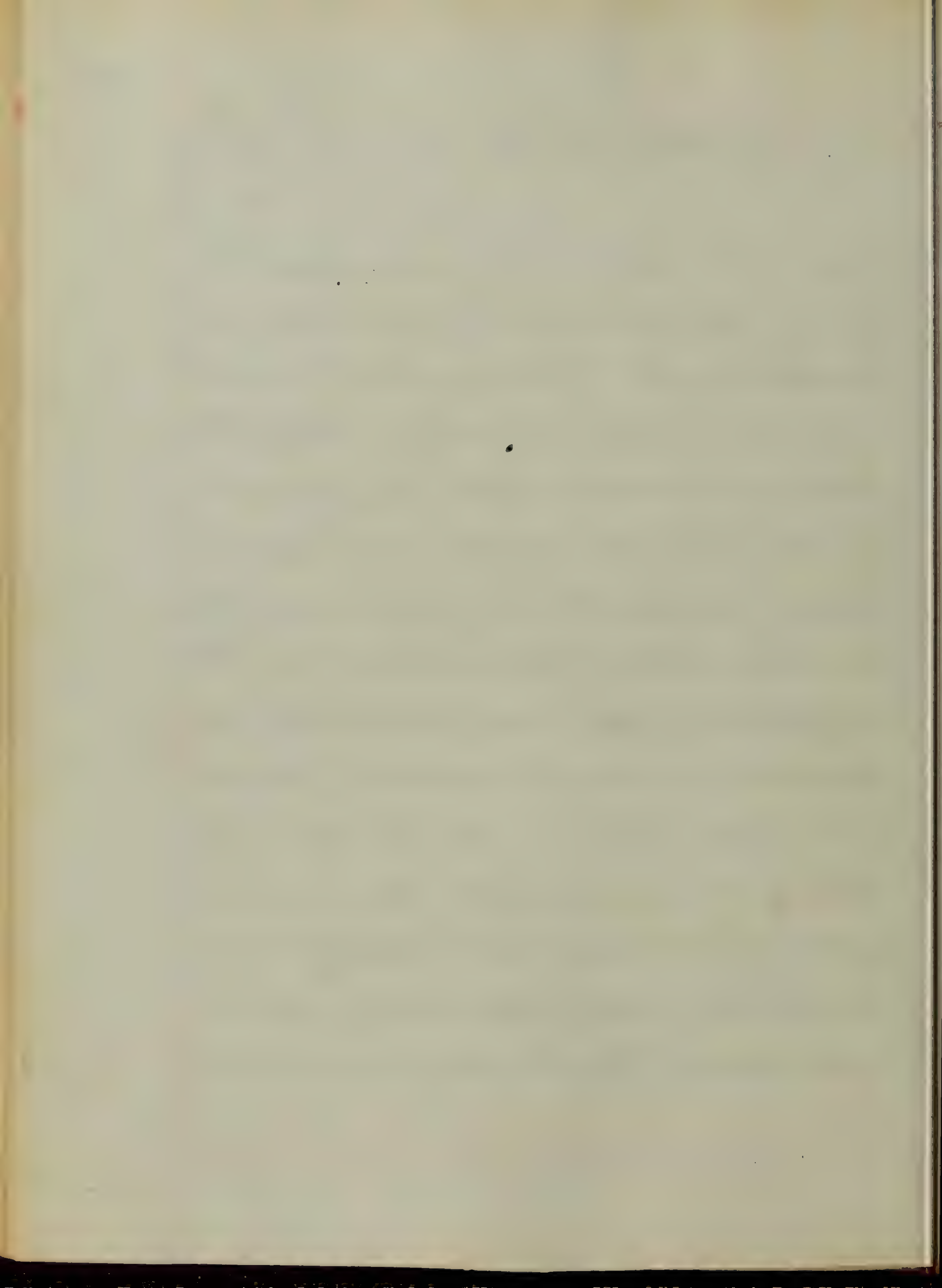
One of the latest and most important discoveries in surgical practice is that of anaesthetics, — Chloroform and Ether, under the influence of which the patient is insensible and motionless, enabling the surgeon to operate as easily and painlessly as upon a dead subject.

Of what inestimable value these anaesthetic agents would

have been in the days of the searing iron!

In ancient practice a large proportion of patients, as we have before stated, died ~~under~~ from the effect of amputation; and, in the instance where corrosive sublimate was used eighteen out of nineteen; in contrast with this, in modern practice, where skilful surgeons are employed, death seldom or never results. Out of the very many amputations that have occurred in the hospital of the Maryland University during the last and present term, not one has proved un-





-successful. This is of itself a sufficient commentary on the present state of the science and the skill and acquirements of the professors at that institution.

The science of surgery has advanced as much in other departments as in that especially under consideration, and is still advancing to the cure of many of the ills which flesh is heir to and the great gain of suffering humanity.

An
Inaugural Dissertation
on

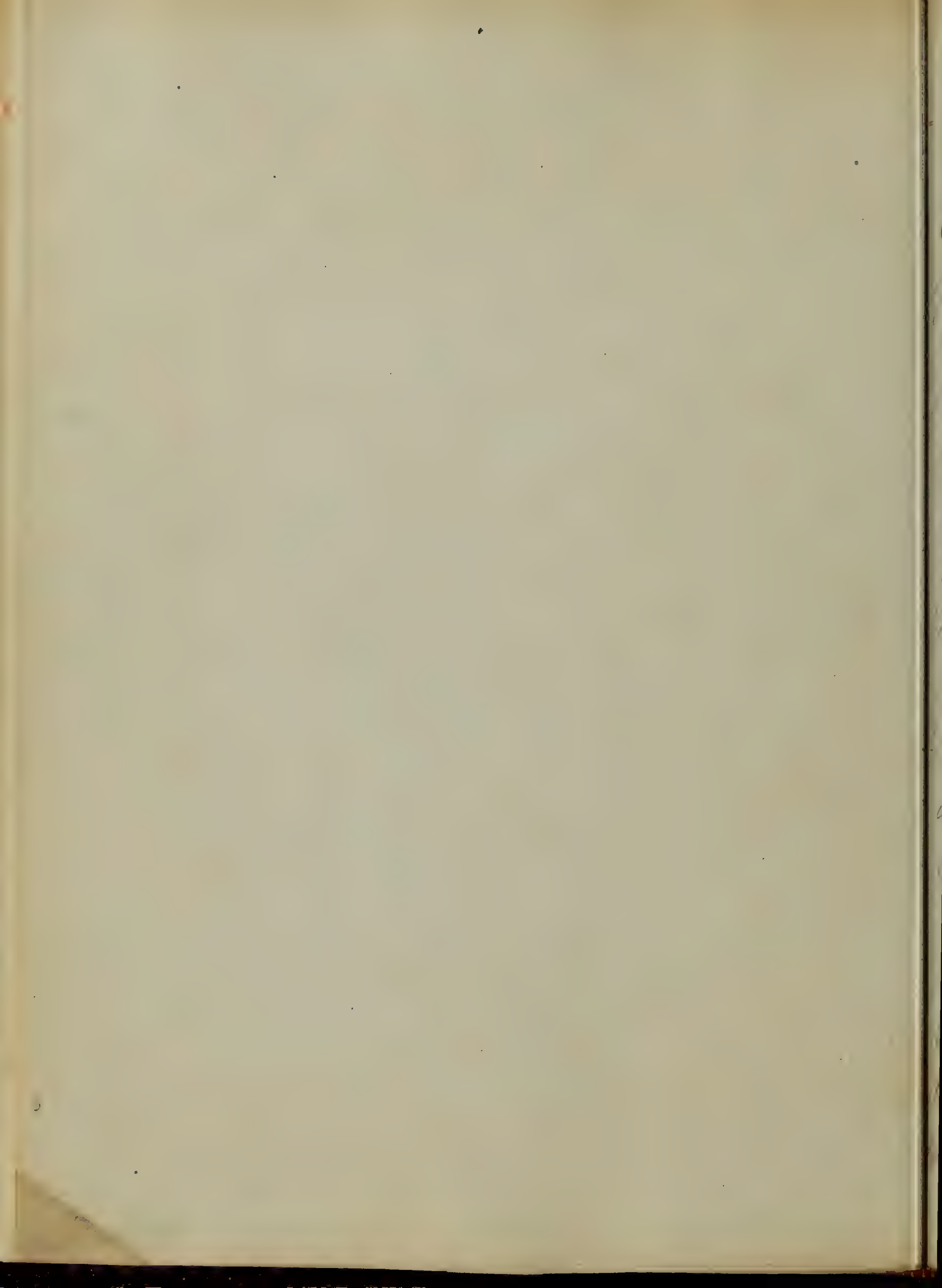
"Phthisis Pulmonalis,"

submitted to the
Provost, Regents & Faculty of Physic
of the
University of Maryland,
for the degree of
"Doctor of Medicine"
by

Joseph [illegible] [illegible]

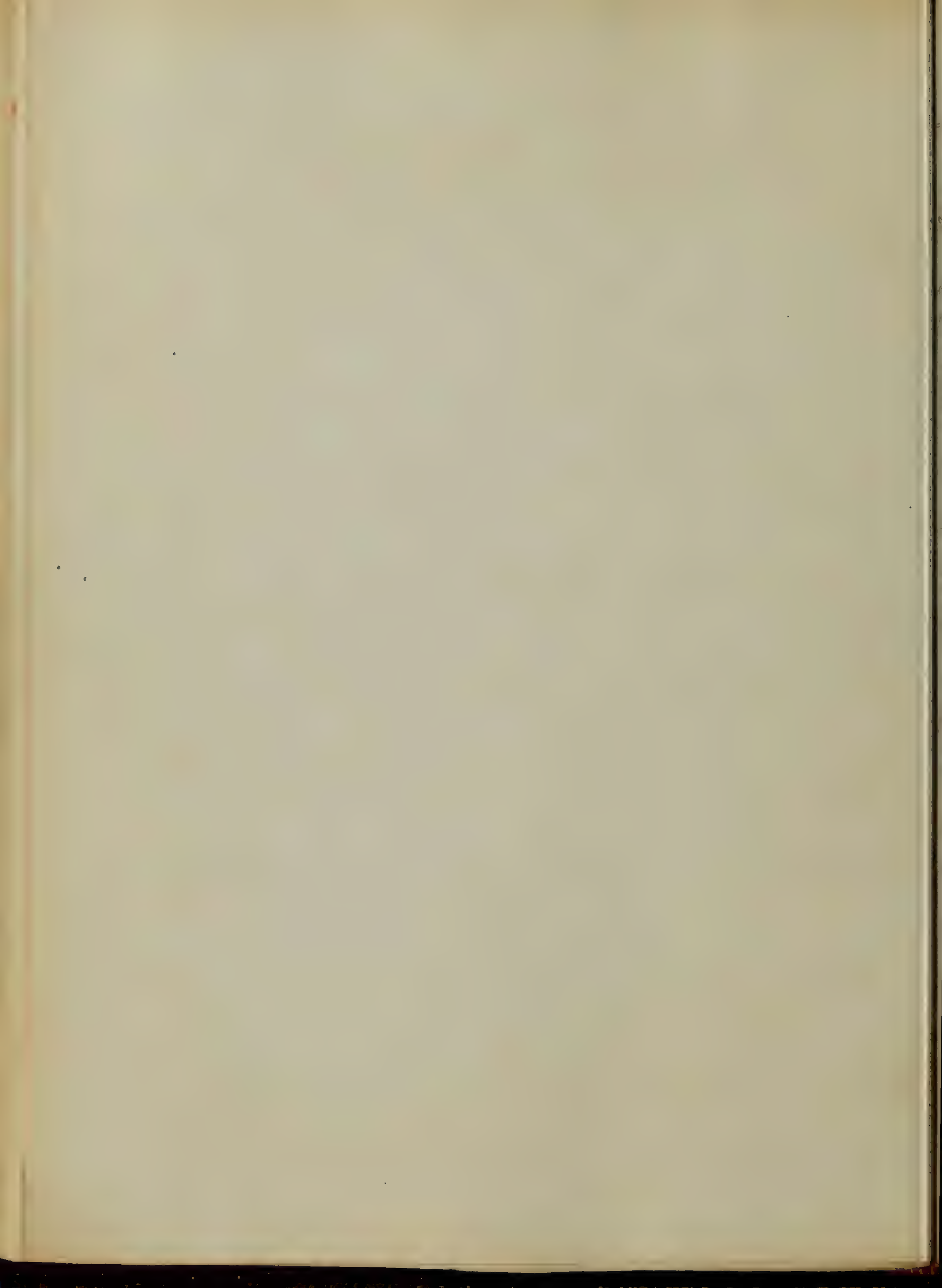
1875

Baltimore — Maryland.

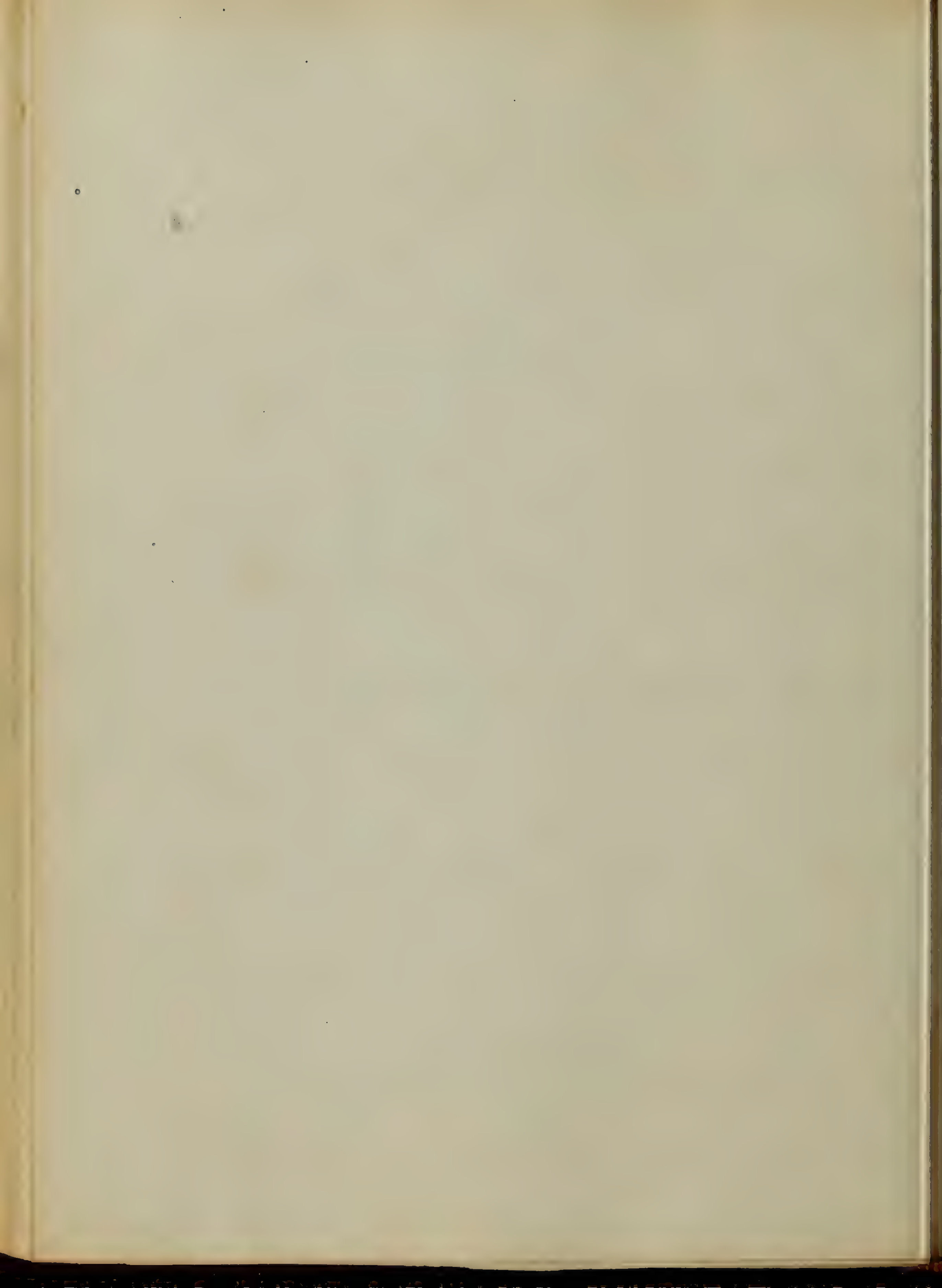


"Pulmonary Tuberculosis."

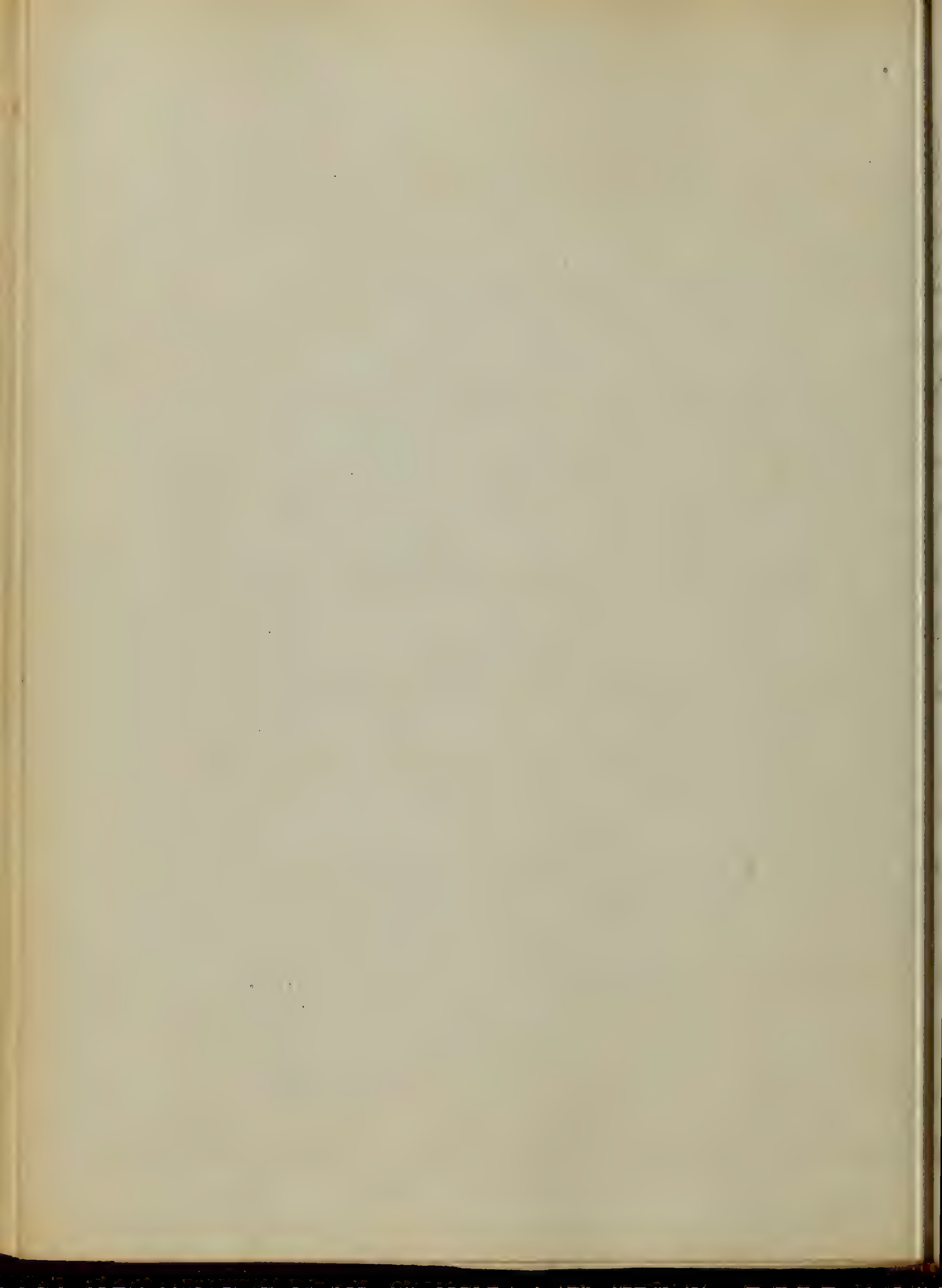
Eminent clinicists and pathologists of our own day, have so advanced the Art and Practice of Medicine, and extended its already vast domain, that the skill possessed by the ancients, as Hippocrates, then called "the Father of Physic," "Galen", and even, at a later date of "Sydenham", has been depreciated, and almost entirely laid aside. The disease we have selected for a clear understanding, is one that pathologists of the present day are in contention, resulting in the production of many theories, both as to its pathological status, and also as to its curative treatment, which



is scarcely less defined.
Pulmonary Tuberculosis is marked by a deposit in the lung tissue, of a yellow, or gray tubercle, attended with waste, and emaciation of the human frame, from which we might infer, was the result of a want of assimilation.
This disease is found in all quarters of the globe, among all ages and conditions of men, thereby occasioning a larger proportion of deaths, exclusive of those which prevail epidemically, or endemically, than any other disease affecting the human race.
It is estimated that, three millions, out of the nine hundred and sixty eight



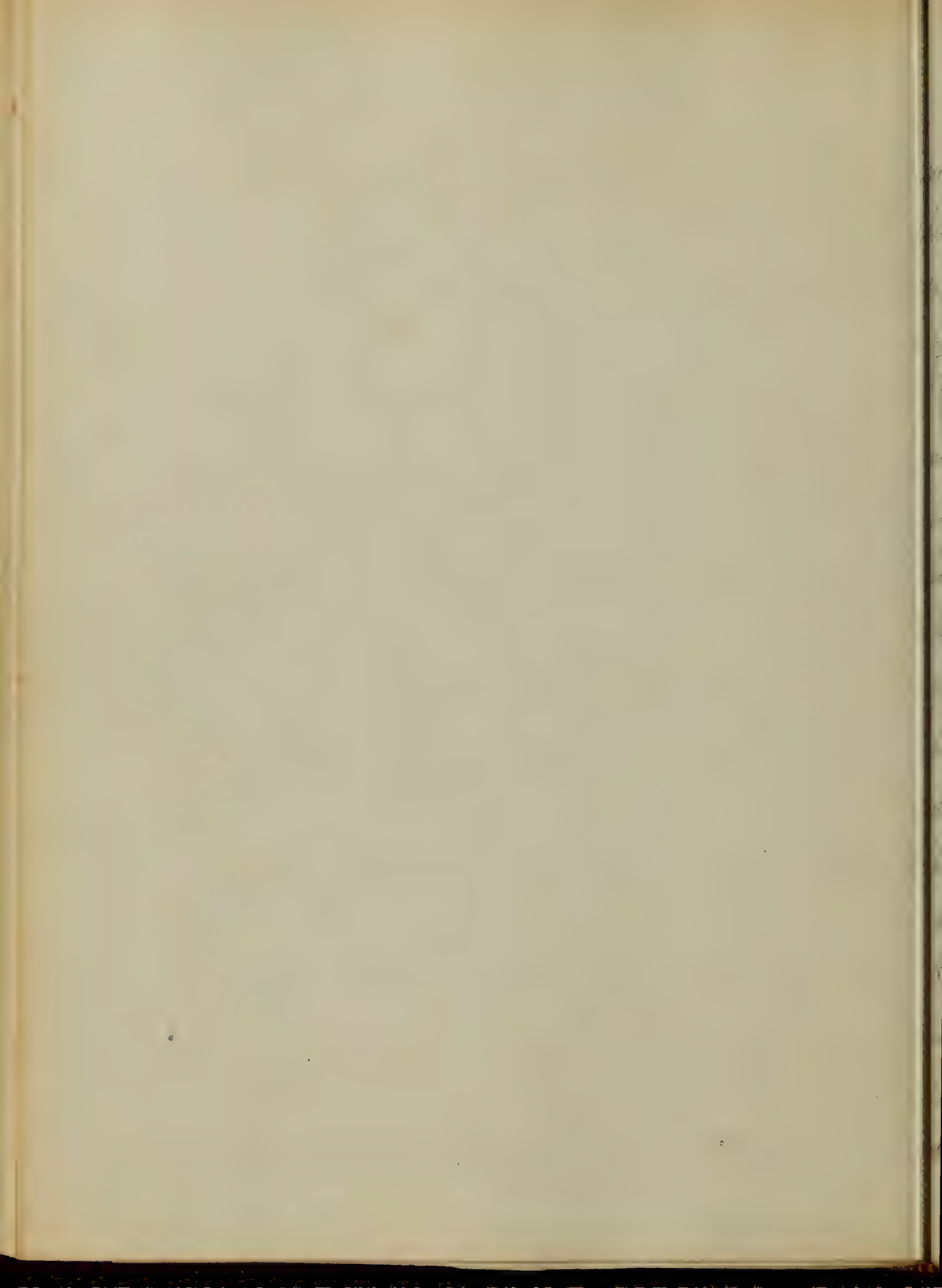
millions, inhabiting the earth, die of this disease each year. Dr Flint recognizing the great confusion in the minds of the Medical fraternity, as regards the nomenclature of our theme, endeavors to give in his book, an explanation for the terms used. To whom we are indebted as a guide in our explorations of this vast and important subject;- also for some views to Dr Horace Dobell; and to our own worthy Professors. According to recent meetings of the Medical Profession "Phthisis Pulmonalis" has been subjected to further changes, and we believe universally agreed upon, viz., "Acute and Chronic" Pneumonic Phthisis, and both stages of Tuberculosa Phthisis



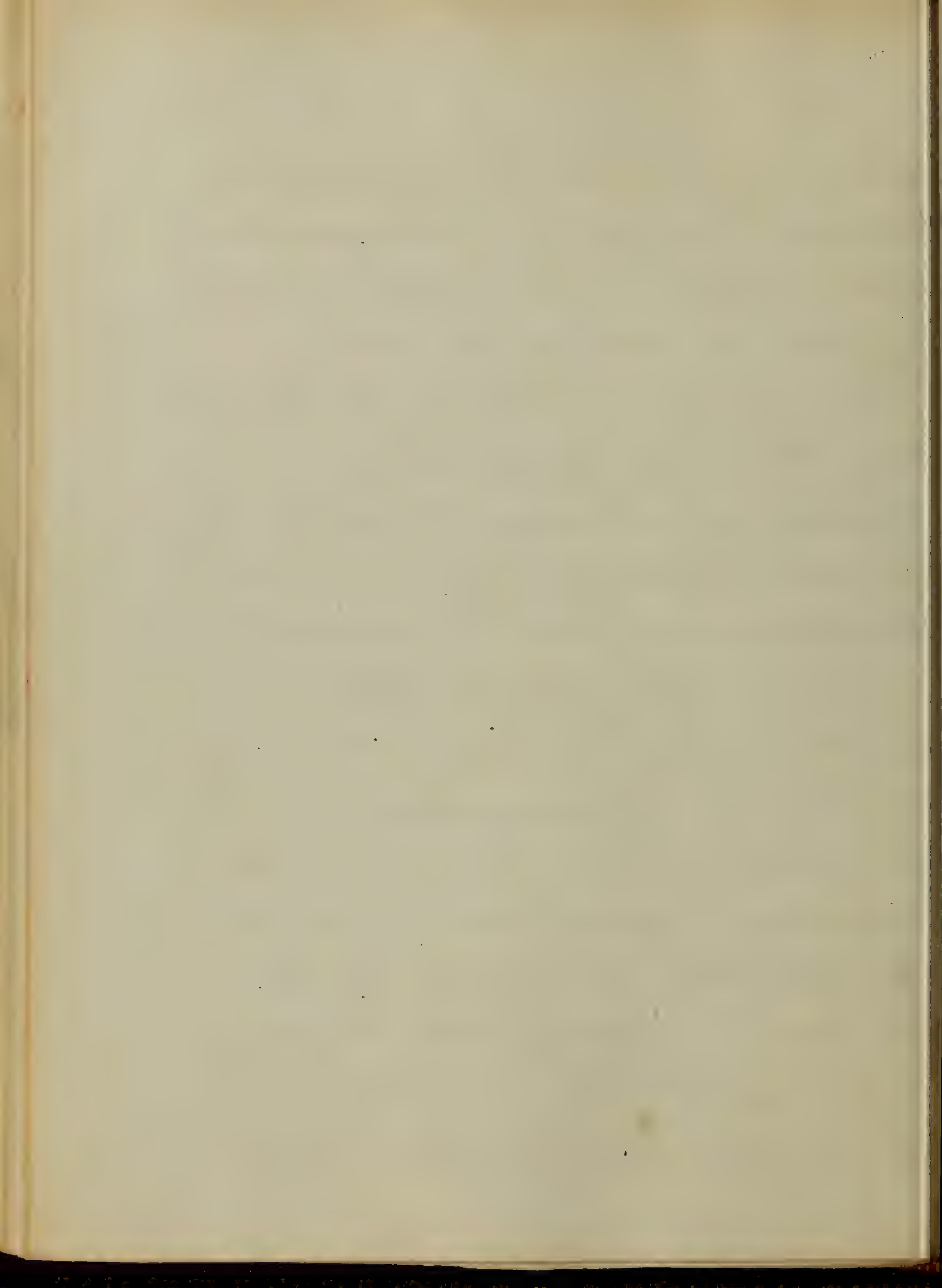
Dr Flint says, "The first stage occupies the time during which the tuberculous products accumulate, and soften, up to the evacuation in a liquified state. Second stage - from the time the cavities are formed, to the termination of the affection." We often find upon post mortem examinations, the lung having undergone the different stages of development.

"Anatomical Characters"-

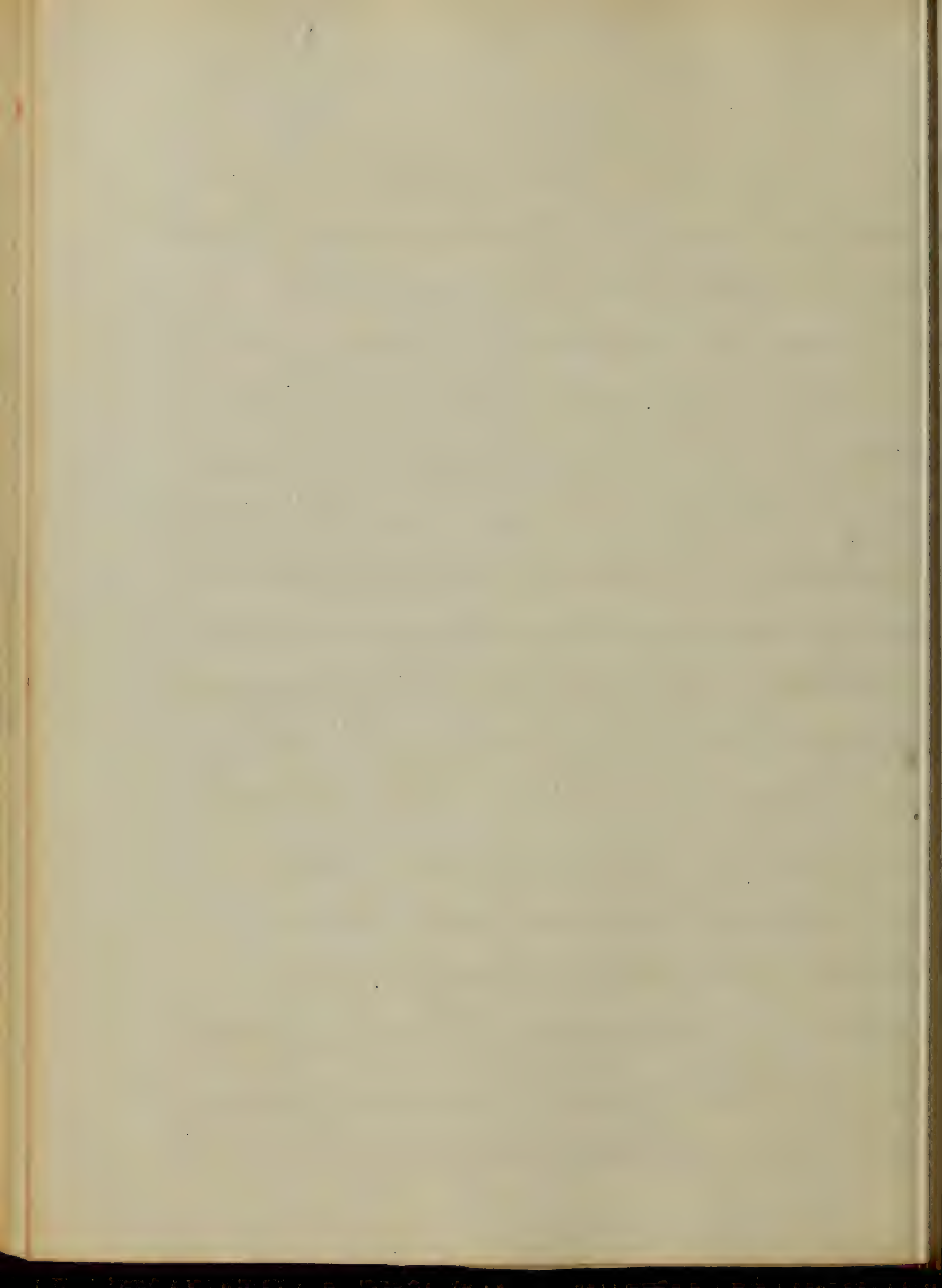
From our small, though valuable experience in the Infirmary, it has fallen to us, to examine at leisure, the lungs of patients who have died of Phthisis. We notice small bodies, of about the size of a hemp seed, while others are smaller, spherical,



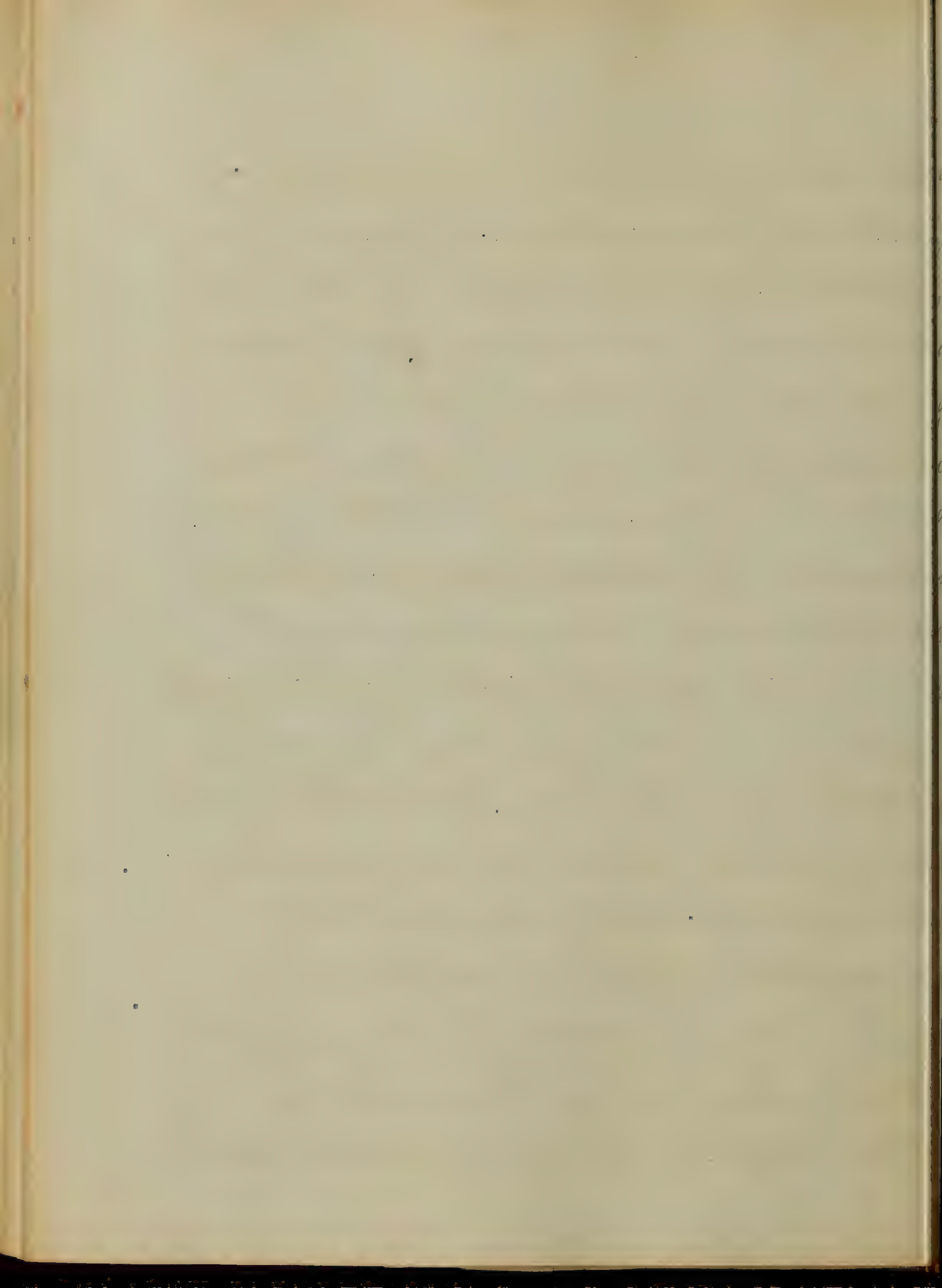
and of a grayish color, of medium hardness, according to microscopical examination, they are said to consist of free nuclei, and cells.
Robin regards them as cytoblastions, and due to a hypergenesis of normal anatomical elements. Whilst Virchow, the great German pathologist, considers this tuberculous product a morbid growth, or a neoplasm due to a proliferation of the connective tissue cells. In our examinations we noticed the yellow tubercle, once considered, and we believe now to be, the true tubercle, being only the gray in another stage of developement.
In this stage there is an exudation into the air cells, and pulmonary alveoli,



of a yellowish liquid, and may be easily broken by the fingers. Still further says Virchow, we find nuclei, or fragments of epithelium, which have undergone a granular and fatty change; round, extremely small, consisting of albuminous matter, crystals of cholesterine and some earthy salts. This yellowish exudation has been regarded by some Histologists as pneumonia, in some of its forms, as interstitial Pneumonia; but here the morbid growth remains without softening, and not leading directly to structural damage of the pulmonary substance of the lung, except from atrophy resulting from the pressure of the adventitious tissue; or a lobar



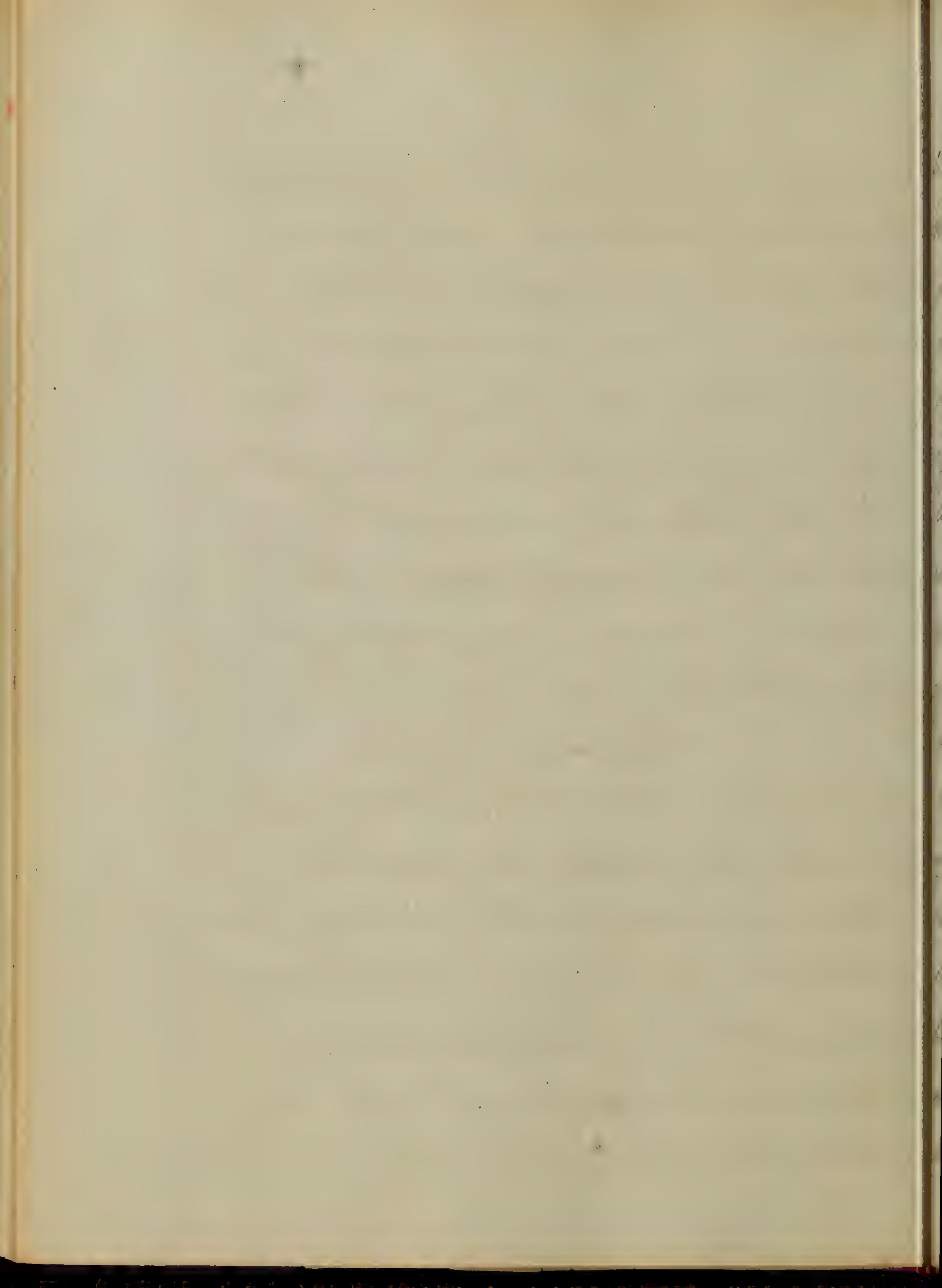
Pneumonitis, the exudation here, is absorbed completely, and many times with rapidity, the structure of the lungs remaining intact, and here, abscesses are very rare. We mark where circumscribed pleuritis had taken place, - emphysema in the neighborhood of tuberculous collections, also pulmonary collapse of some of the lobules, and interstitial pneumonitis are incidental before softening has commenced. Finally we should distinguish these morbid growths from cancerous granulations, coagulable lymph in a granular form, due probably to a disorganization or breaking up of blood clots, when there has been pulmonary extravasation,



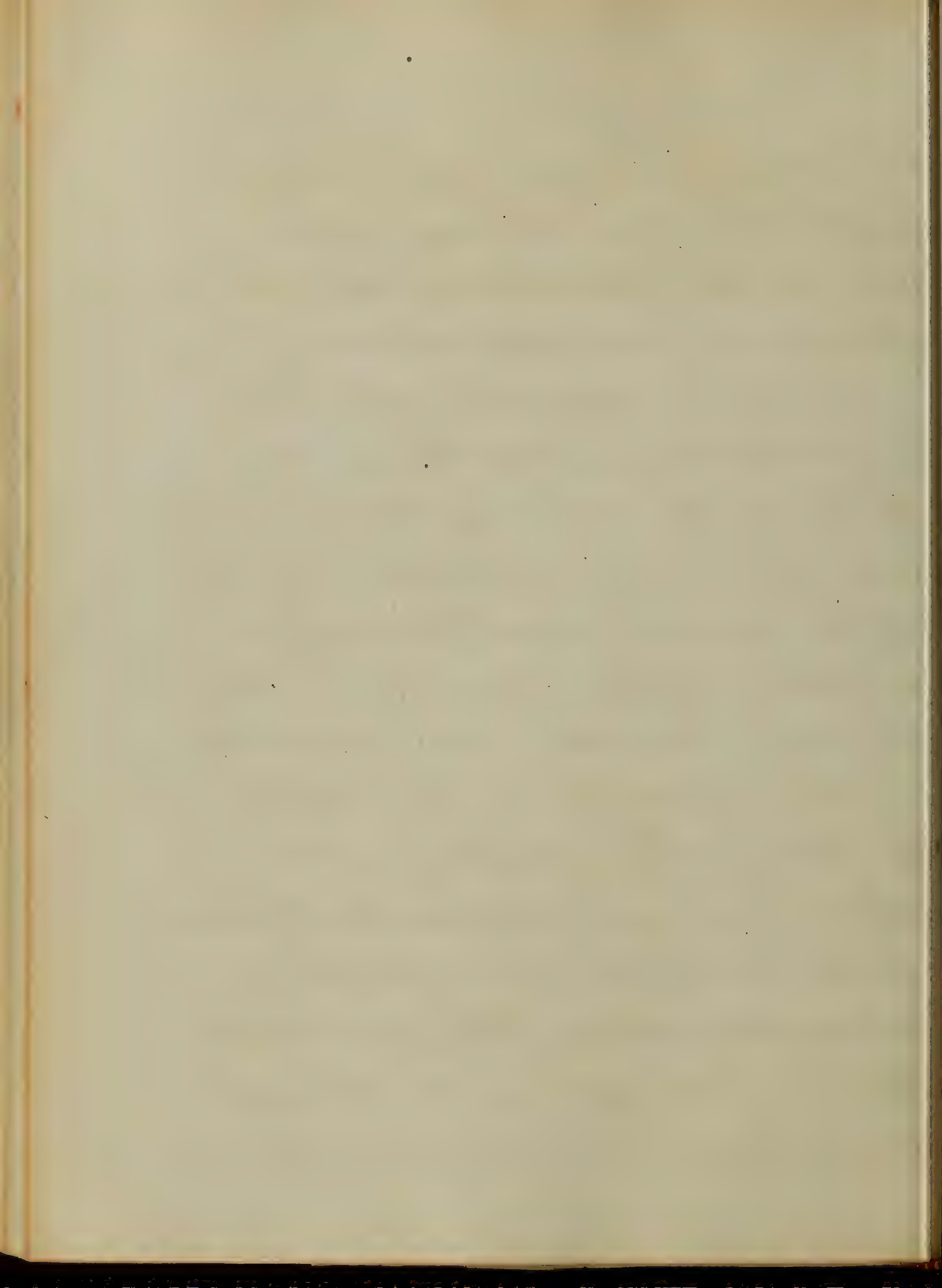
or deposits produced by emboli, from the liver or veins. Syphilitic tubercle,- here mark, the previous history, and notice, whether any granulations are deposited, in the lungs, and have, undergone softening. and also from "Glanders", which however is a rare disease. The varieties of pneumonia, are by far, the most often met with in examinations.

-Clinical History.-

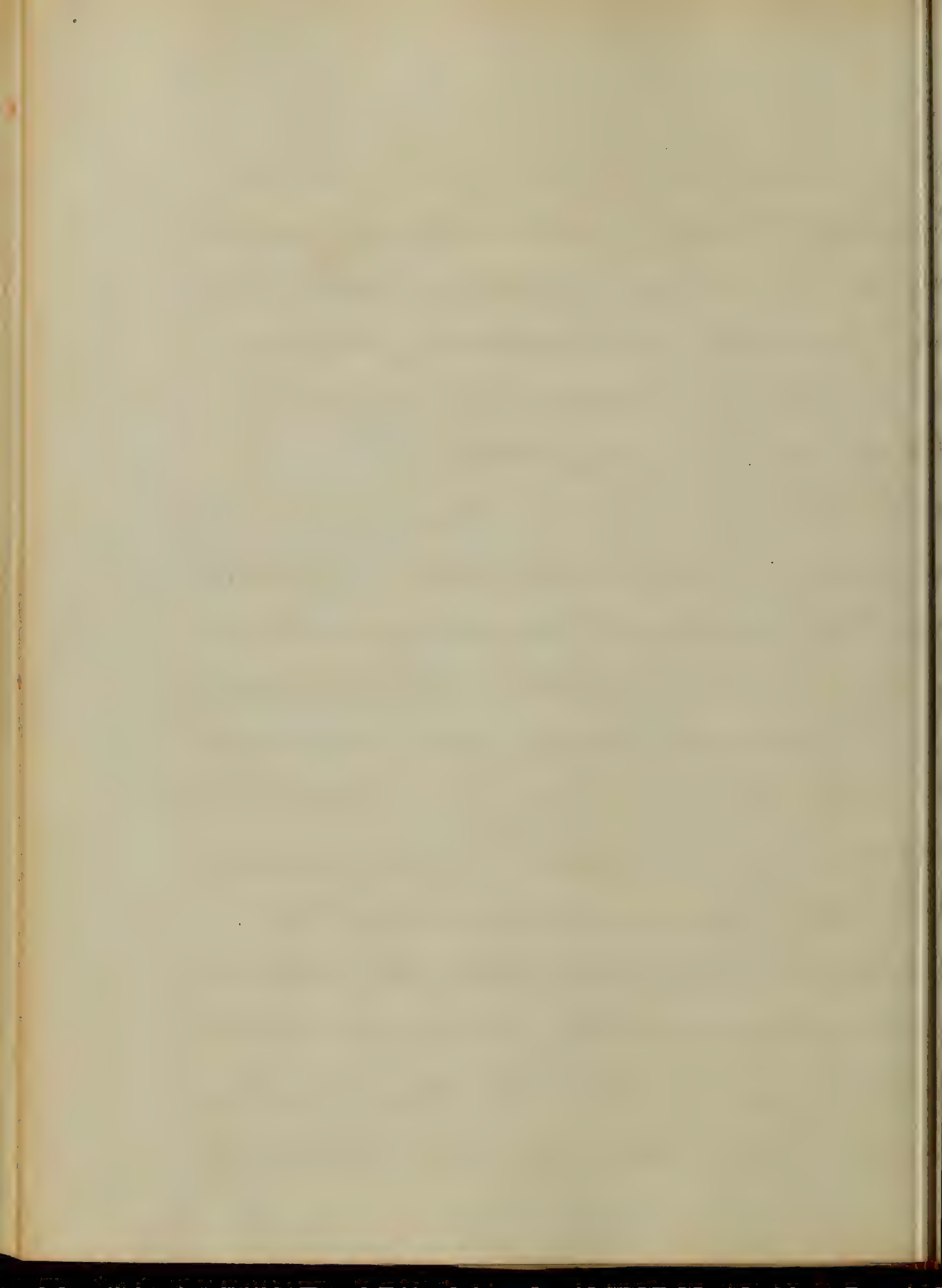
The patients, that seek for Medical aid, in, this disease, are generally found to be advanced in, the first stage, having passed through all, the premonitory symptoms, with little pain, or inconvenience. The slight pains are referred to Rheumatism, or Neuralgia, from some



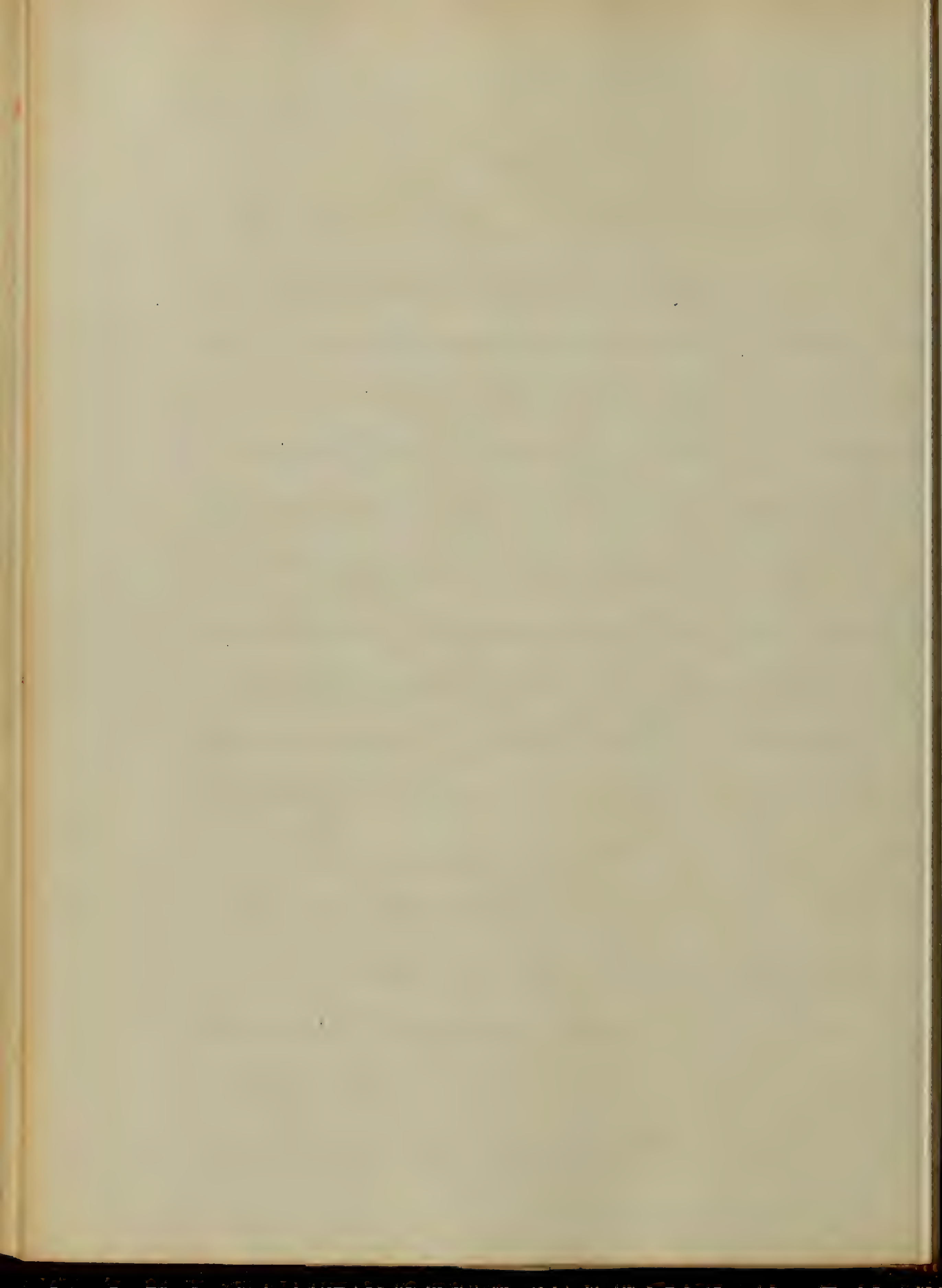
slight exposure, and if living in a malarial region, the heat and perhaps, the rigors, attendant, upon this disease, are treated as some form of fever. In approaching the bed of the prostrate, we are struck with his bright countenance, beaming with hope, out of those sunken eyes, which too well reveal the insidious affection within. It is the mind bright and active, always upholding to itself, and others, the bright side of their feelings; to this, and to their buoyancy of spirit is the physician liable to be, thrown off his guard, so he should question others, and use his own observations. The patients are emaciated, and wasted away,-



we hear complaints of general weakness,
and shortness of breath, in simple exertions;
patients complain of daily exacerbations
of fever, and profuse sweating, weakening
very much, their vital energies,
and leading to prostration.
Diarrhoea is more or less marked,
it may be due to indigestion, or, tubercles
in, the intestinal canal, this however
is a secondary affection, due to ulceration
of Peyers, and solitary glands, similar
to Typhoid fever, but different anatomically.
A more or less persistent Cough, is almost
a pathognomonic symptom, of the
disease, for expectorating, the tuberculous
collections, and bronchial secretions.
We are generally told that blood had been
spit up, and, the sputa we examine, may

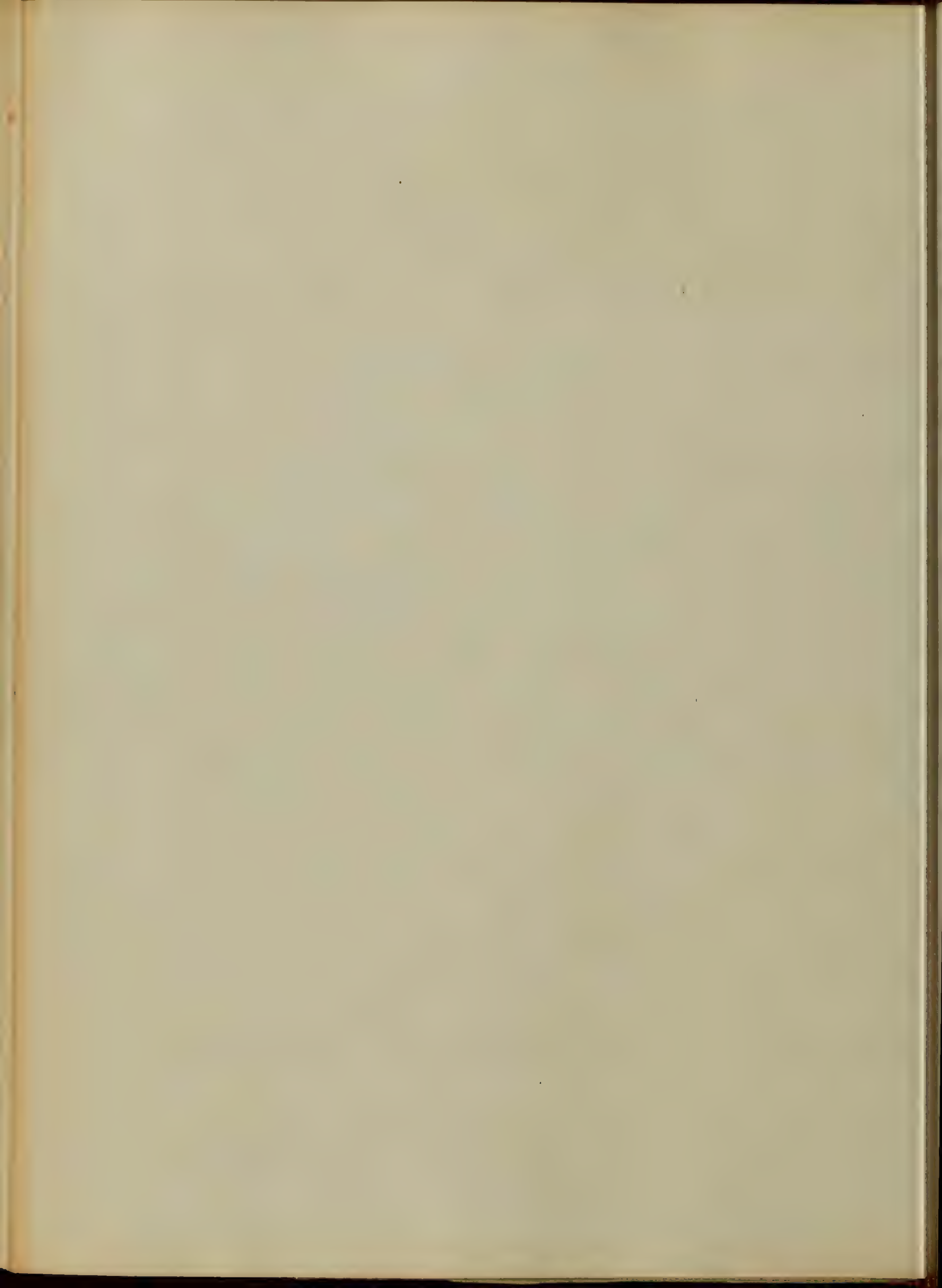


be tinged with blood.
The Sputa is often muco-purulent, resembling pus when it runs together in a homogeneous mass, or we find the nummular sputa, by far the most common, with edges ragged, containing little particles like boiled rice, and probably a little pus intermingled. Resorting to the microscope, we should find pus globules, Epithelium, fatty granules, blood disks, occasionally yellow elastic fibres, and sometimes vegetable sporules or spores. Their breath is fœtid, due it is supposed to sloughing of small masses of pulmonary structure, within the cavities. Hoarseness should direct our attention to the throat, and ascertain the cause.

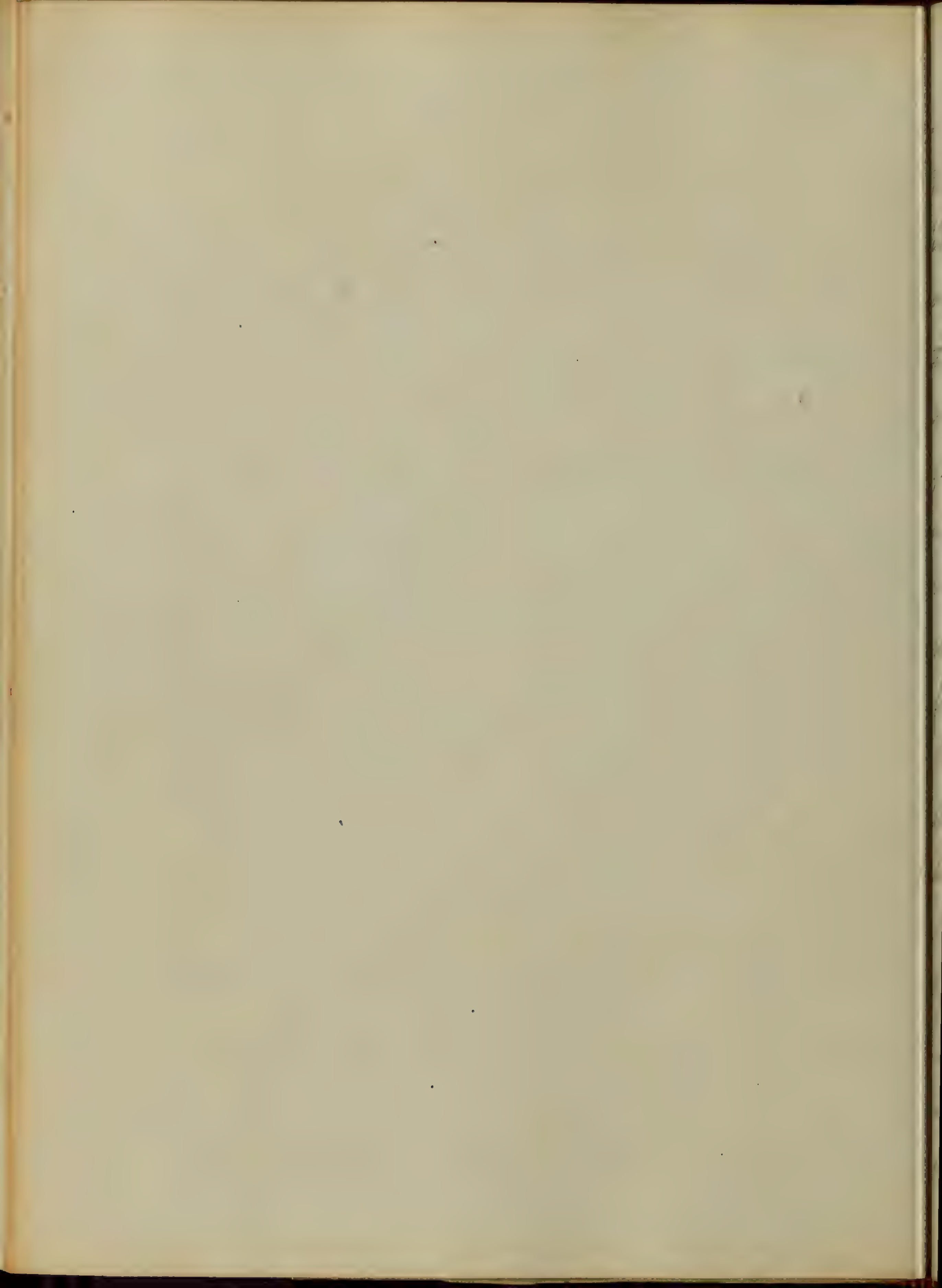


Causation.

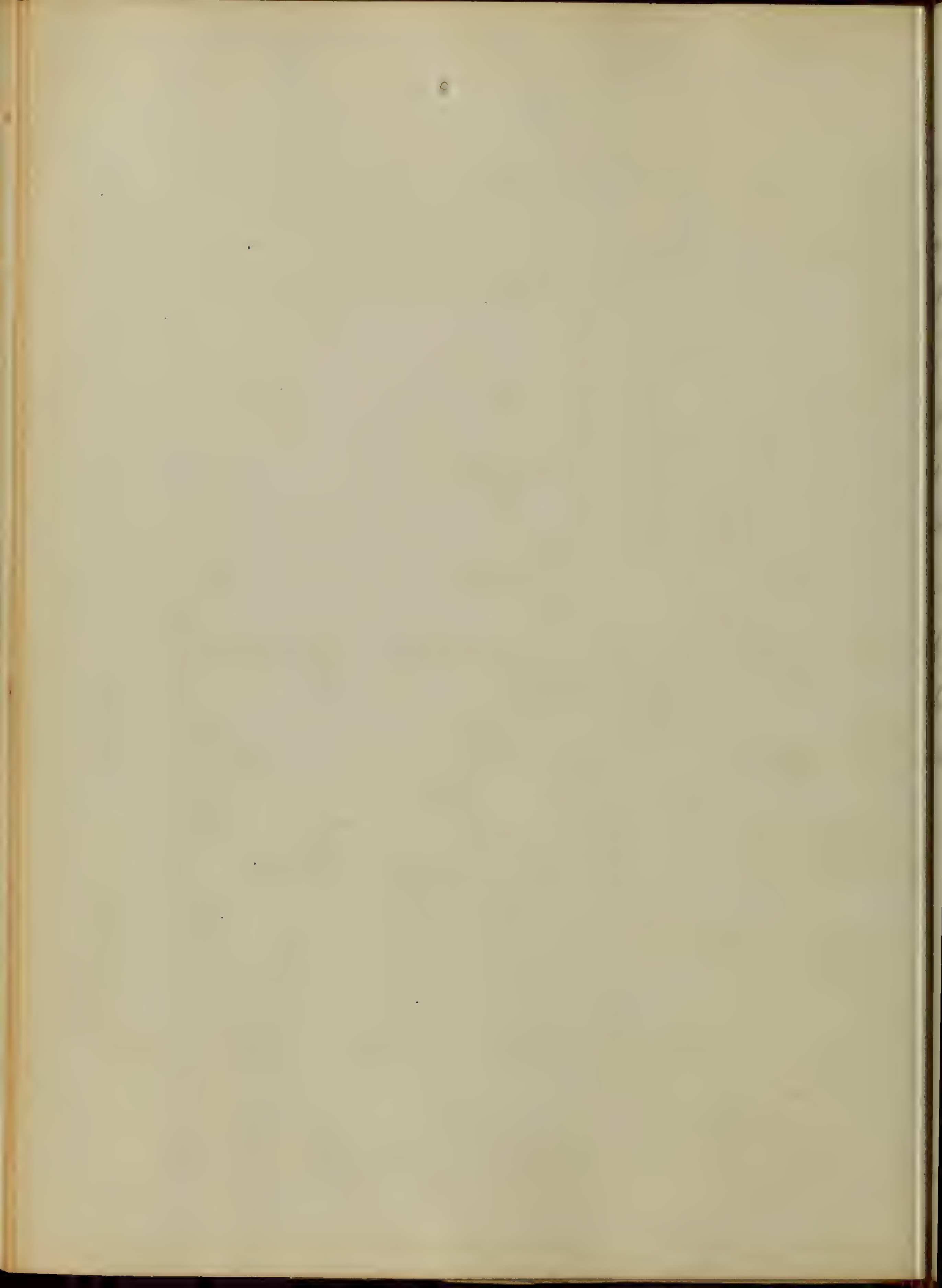
Pulmonary tuberculosis is altogether a diathesis, whether innate or acquired, upon this which our information is limited. We may have local causes acting upon the lung itself, but here we are on disputed ground, or they may exert in some pre-existing diathesis; we find it often following some pulmonary affection. Niemeyer and others, consider that it is dependant almost entirely upon "Bronchitis", as he called it "Chronic Catarrhal Pneumonia", while Flint on the other hand, says he has often seen cases without, and rarely with, bronchial catarrh, preceding its development, and his researches



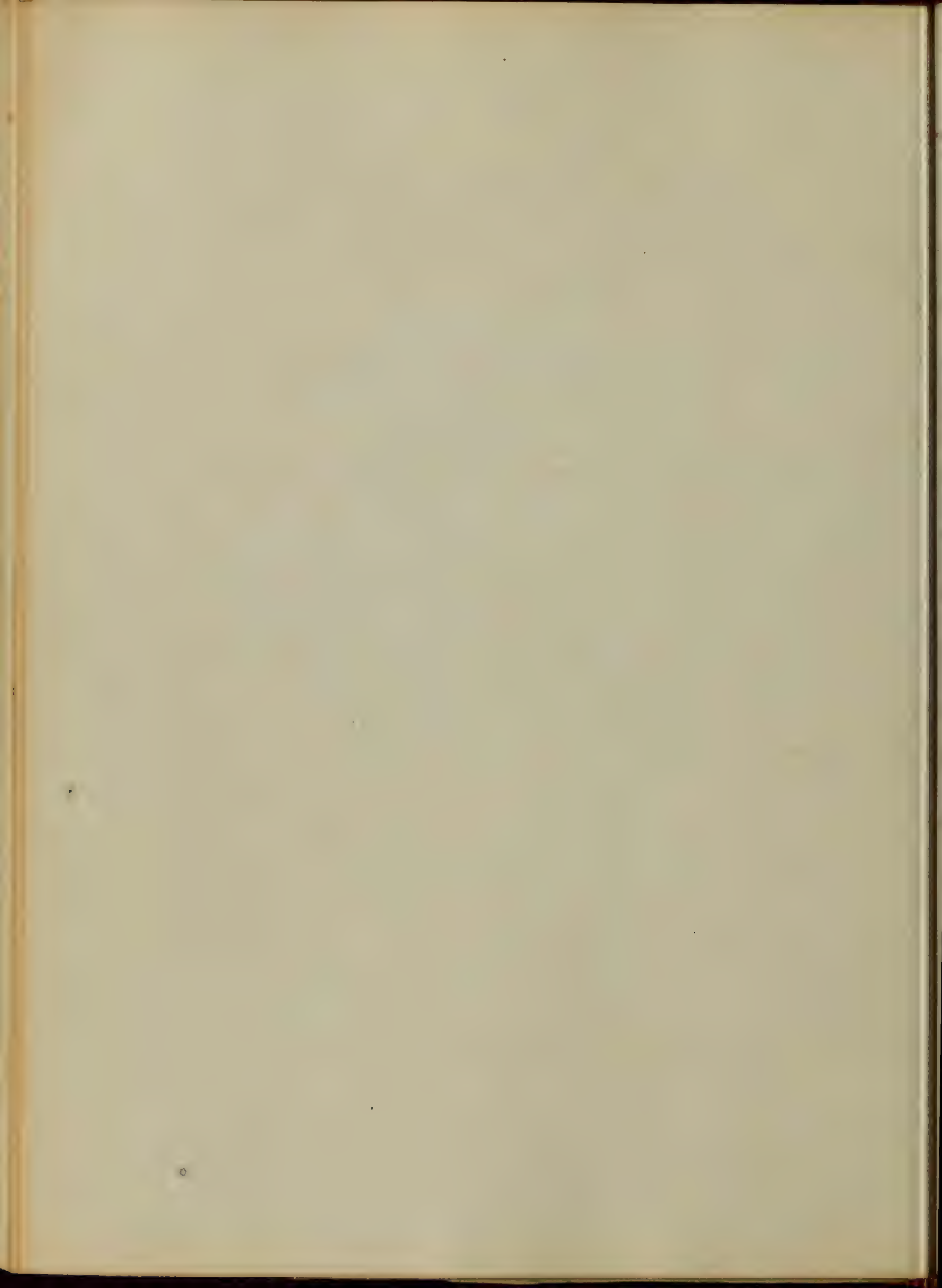
were borne out by Louis' figures.
Some assert, inhalations of irritating substances, as stone dust, or fine particles of metal, will give rise to this disease, or chronic interstitial pneumonia, which is hard to diagnose from tuberculosis.
The conformation of the chest, also tiring, which we would rather consider conservative, than otherwise.
Climate exerts a marked influence where it is of uniform temperature, and is found at various heights from the level of the sea. there is preservative influence. In Iceland and in the Alpine regions, 5000 ft. and better, above the level of the sea, Consumption is rare! Ventilation is another cause.



Pregnancy is said, to antagonize the tuberculous cachexia, and marriage advised, but facts do not support this, theory. The most efficient causes are congenital, or inherited, we generally derive the fact from those in our hospitals, and, seen to be noted in private practice, that other members of the family have suffered from lung troubles. The causes seem to act most energetically between the ages of twenty and thirty, in producing this disease, though as before stated, it may be found at all ages. Pulmonary Emphysema, measles tends to tuberculosis, but measles and Typhoid Fever, leave the system in a condition for their development.



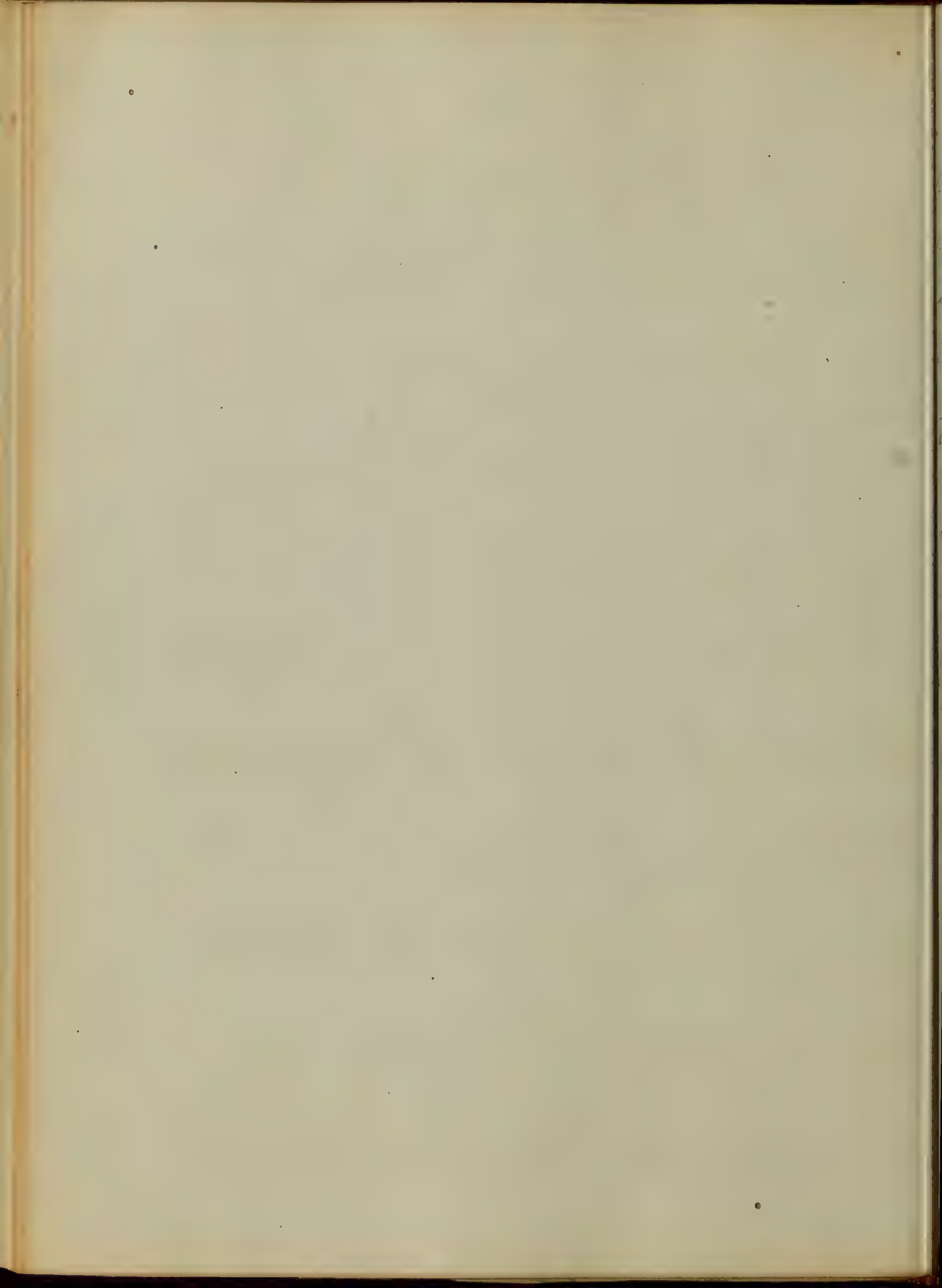
anaemic cases, contrary to which we might expect, are not prone to this disease, says Flint.-
Those with scrofulous swelling of the glands, and cicatrices, rarely become tuberculous, the same of chronic pharyngitis. Finally inoculations attempted in the hands of M. Villemin of France have succeeded. Its contagiousness is disputed.



Diagnosis.-

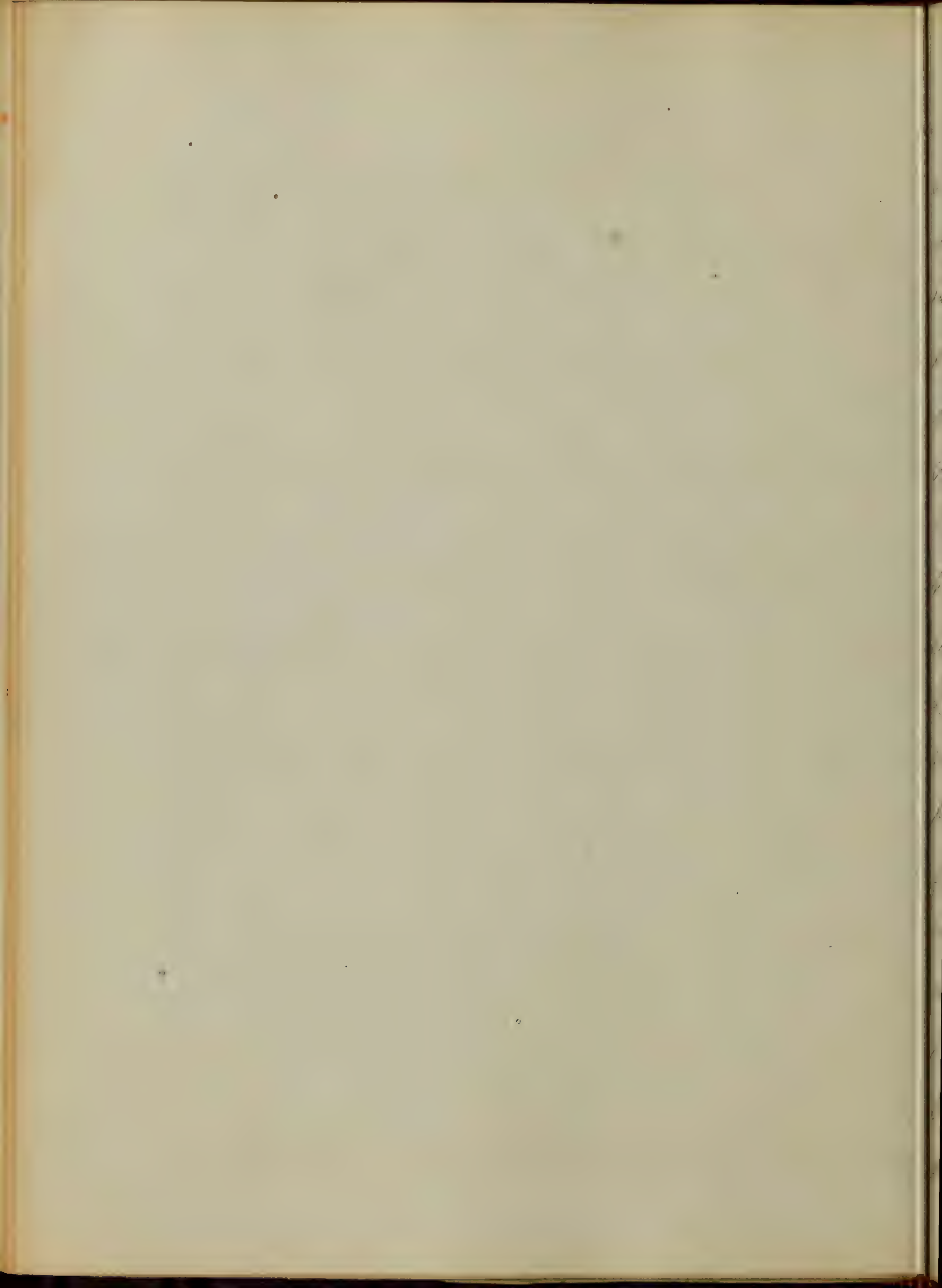
The art of a physician, his [illegible]
erudition and his observations
are, often called into play, in
classifying, and differentiating
diseases, though very difficult, yet
in time we may train ourselves, to be
able, to identify the early sparks of any
disease, and the signs peculiar to each
individual case. In diagnosing this
disease, we must consider, the symptoms
enumerated under the head of clinical
history and with great dependance
upon physical signs. In children
it is more difficult.

Upon inspection of the patient, we
notice a depression, at the top of the lung.
When, the patient takes a full breath,

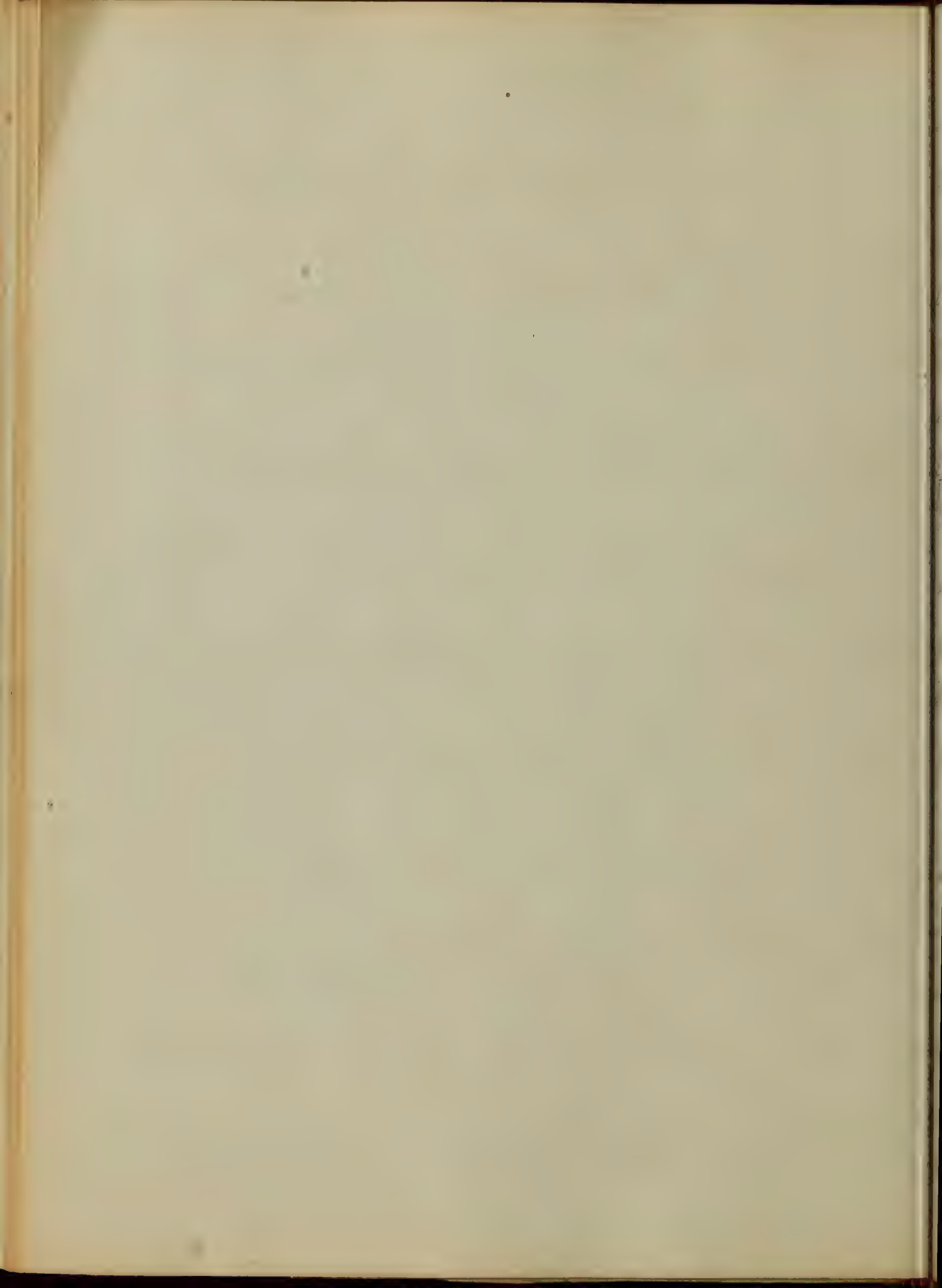


we find the lung does not expand, to so great a volume as the healthy side, likely, due to pleuritic adhesions. By percussion, we elicit dullness, or flatness, over the affected side: but if the lung is still solid before the stage of softening then we have a tympanitic resonance; and if we find this over a circumscribed place, and accompanied with a cracked metal, or amphoric resonance, then we should consider, that we have to deal with a cavity.

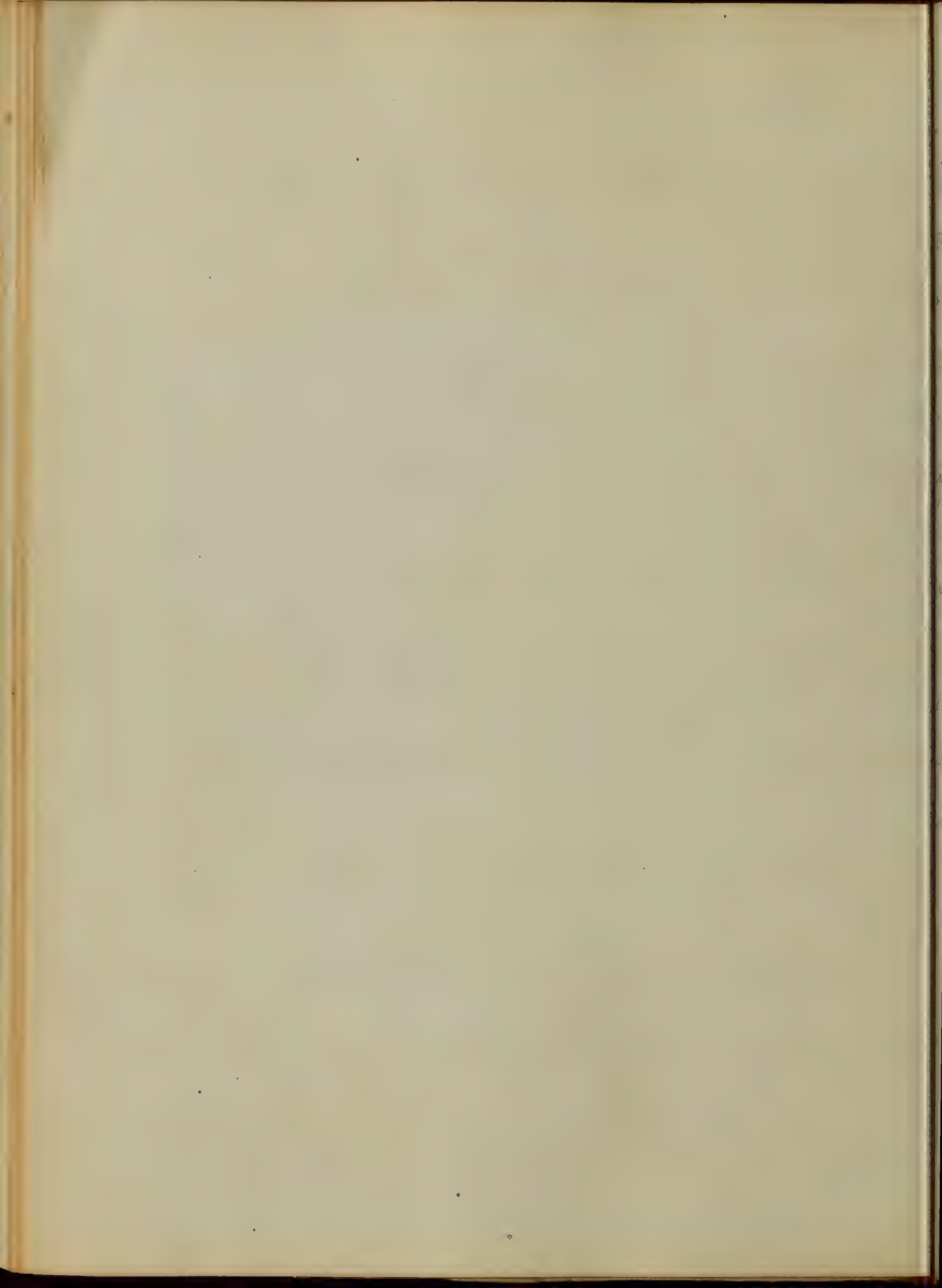
Upon Auscultation, we invariably find the expiratory murmur increased, due, to an impairment of the elasticity of the lungs, the breathing is harsh, while bronchial respiration



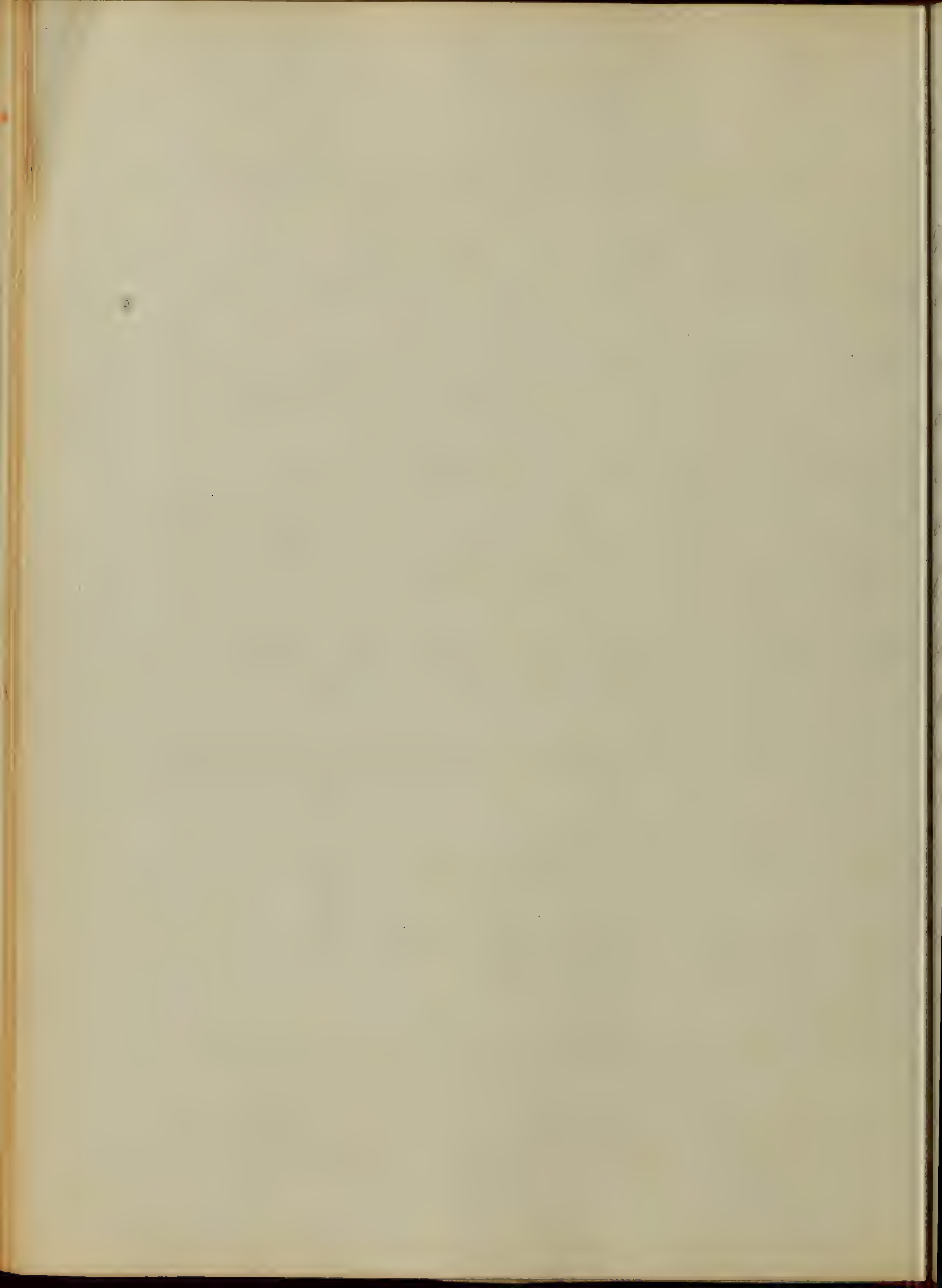
and bronchophony, will be heard as, the disease advances; and, it is often in, these stages, that patients seek medical aid. The, tubercles increasing, compress, the lung, causing depressions to be more marked, with larger crepitations, while, the healthy lung will take on active respiration, - puerile breathing -. Later, the, tubercles soften, and are evacuated, through, the neighboring bronchi, and, thus new cavities are formed. If we auscult the chest, we will hear at this stage, a gurgling, or humid crackle, caused by the bubbling of air, in the cavity; we should set aside however, gurgling due to a dilated bronchi, with chronic, inflammation.



when, the cavities are void of liquid, we have cavernous respiration, if large, then amphoric, and pectoriloquy. The morbid signs are more marked at the top of the left lung, than the right. If noticed at the base, look for Pneumonia. Some differential points, from other maladies, are worthy of consideration.
Chills, not referrable to malarial poison,- Stitch like pains, from, intercostal Neuralgia accelerated breathing - chronic peritonitis, not traumatic. Buoyancy of mind, as contrasted with despondency. - between chronic bronchitis, and tuberculosis, former rare except, in aged persons, and, those affected with heart-disease, and especially, those suffering with asthma, or emphysema of the lung.

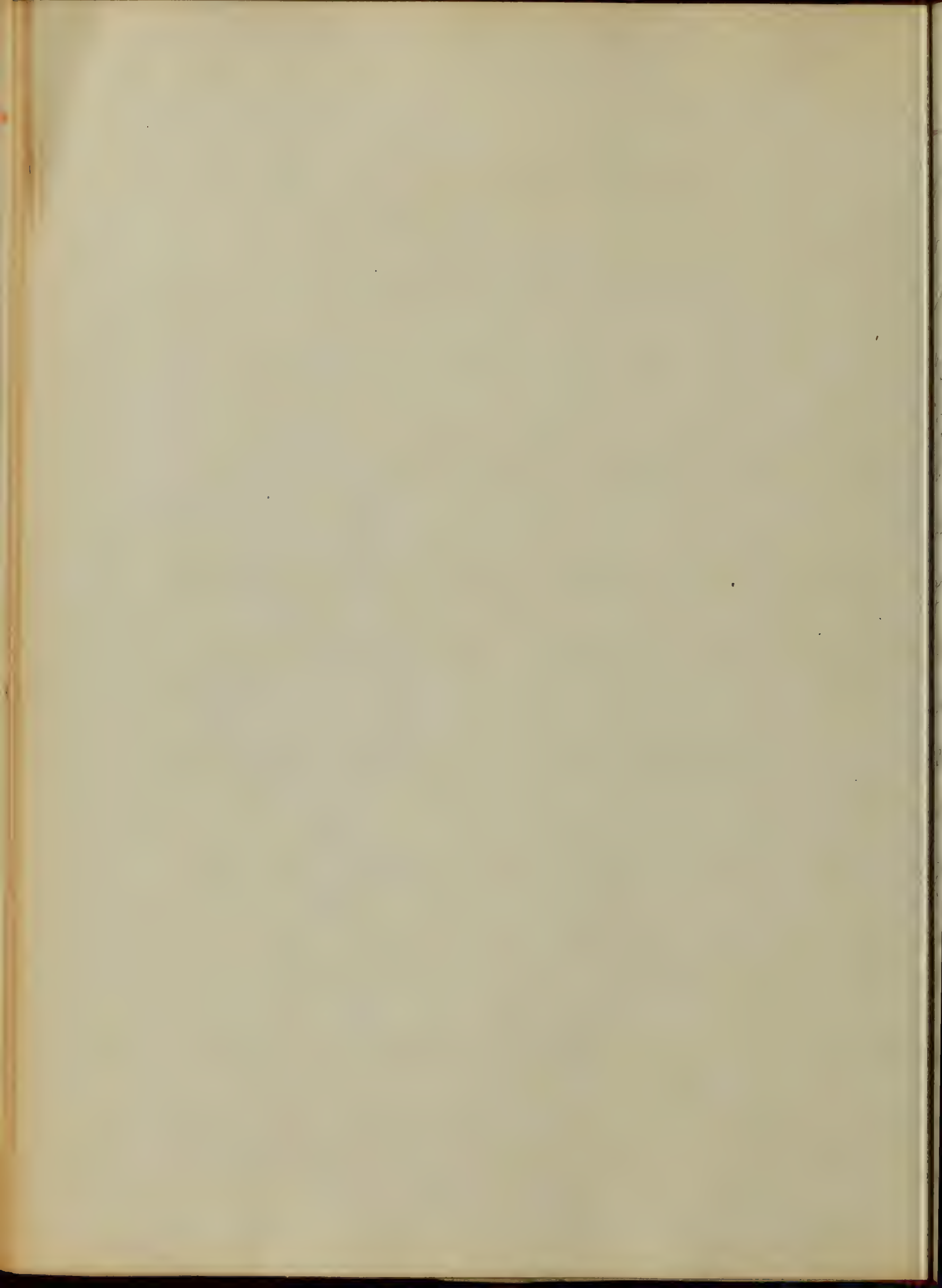


Which affections, are rare in tuberculosis, and different from pneumonia.
The latter disease is more rapid, in its developement, with fine, crepitant râles, with its own characteristic sputa, and also, the lower, and middle lobes, being generally affected.
Suppression of the menses may occur, but this may be due to other causes.
A tuberculous patient may have a transient circumscribed pneumonitis, in such a case, the practitioner should make several examinations at variable periods, to see if it does not subside.
Protracted diarrhaea, or frequent attacks of diarrhaea, not controlled readily by medicine, occur in tubercular cases.

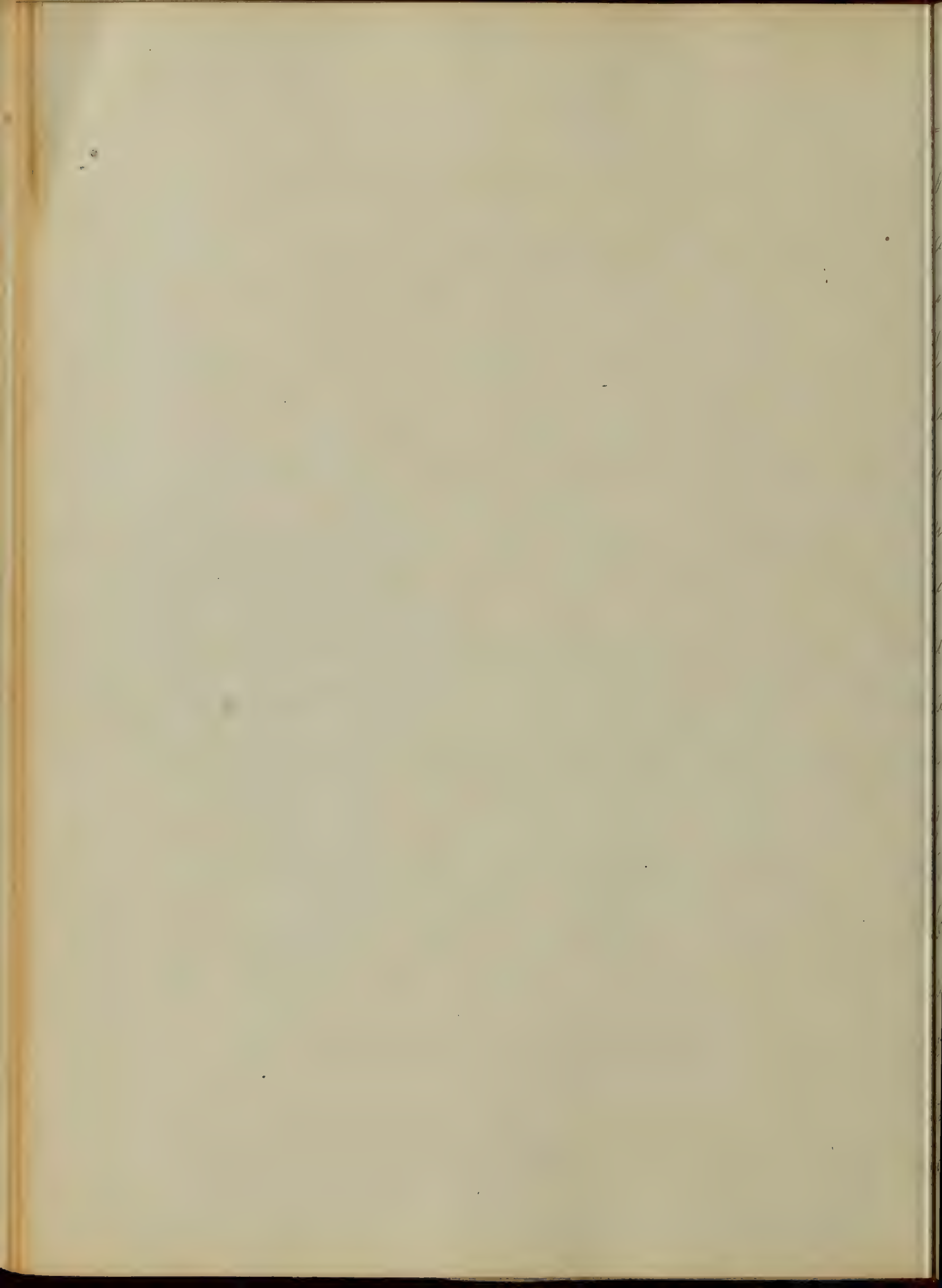


Prognosis.-

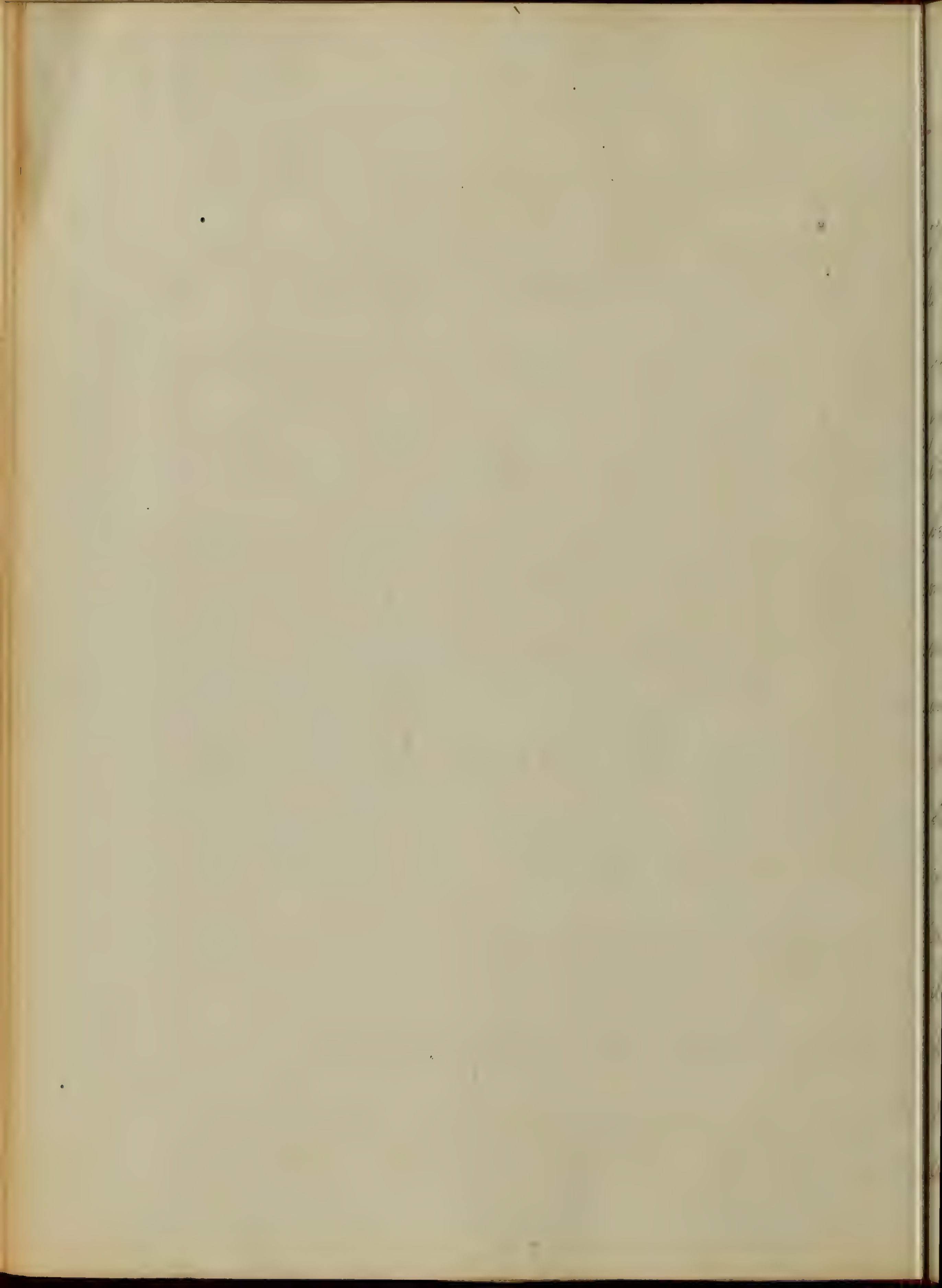
We can only bespeak for this disease, an unfavorable issue, in a large majority of cases; however, owing to the diligent researches of able practitioners of the present day, and thanks to, their scientific and pathological investigations revealed to the world, and to the medical profession generally, for the mortality is considerably less, than previous years. The disease results favorably in a few cases by absorption of the deposit, in part, while the mineral elements, remaining as calculi behind, may lie dormant, or be expectorated. Cavities may cicatrize or may remain for an indefinite



period, no arrest taking place for variable periods, periods, and then breaking out afresh, in the formation of new tubercles. Flint reports arrest of the disease in several of his cases, without any medicine, but when the disease is extensive, then the prospect of recovery is gloomy. So also the cough, the general symptoms - expectoration, its character, and that of the pulse, - chills, sweating at night, and great debility, and our authority informs us, Haemoptysis is often a favorable symptom. The condition of the appetite and digestive organs should be considered. According to Dr DOBELL, whose views in part are well grounded, considers a case more favorable, when fat can be

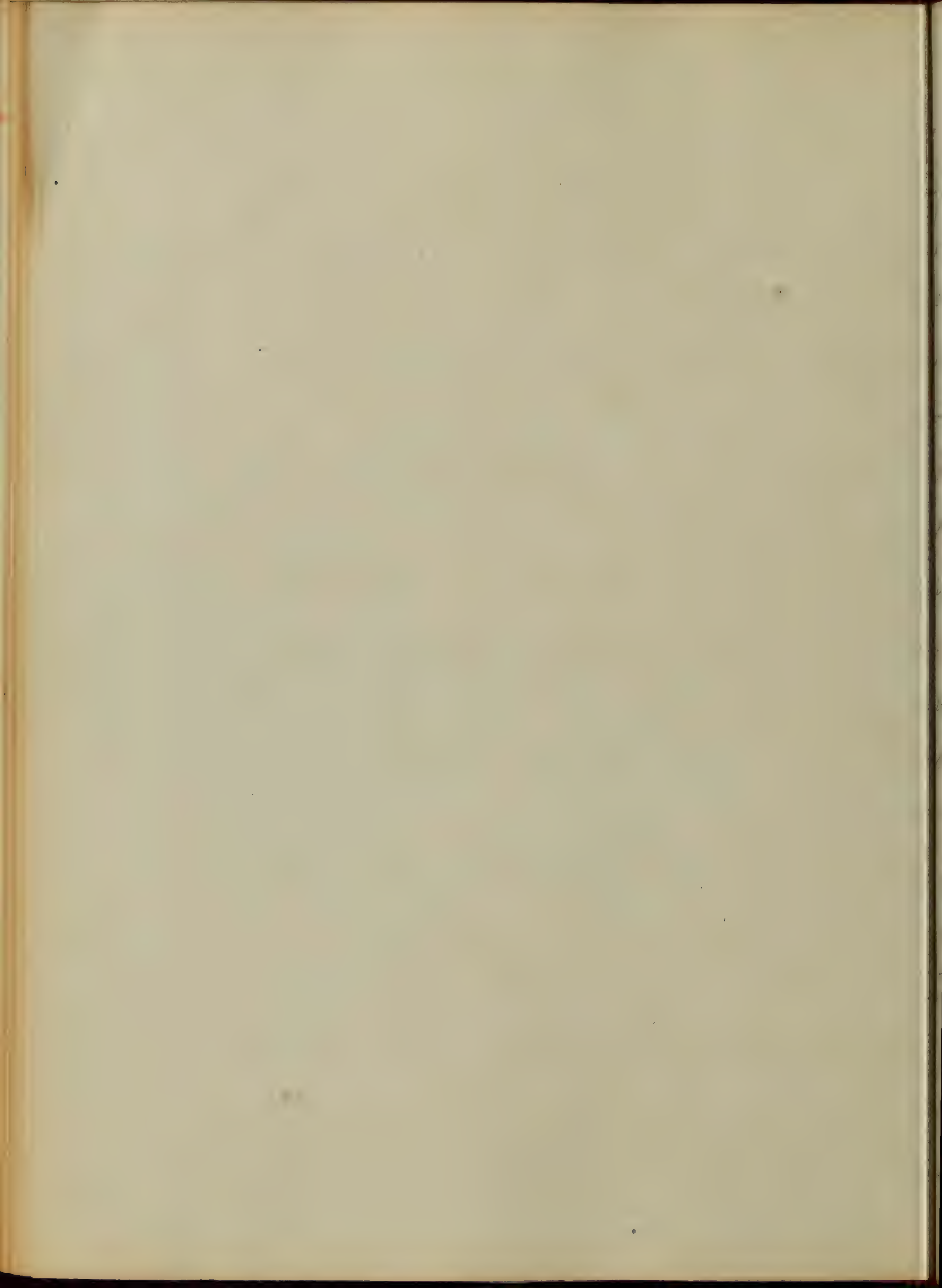


taken, and judiciously assimilated,
and the patient is under favorable
hygienic conditions. Again diarrhoea
is gloomy, and when weight is grad-
ually lost, and accompanied by
gradual emaciation, then an
unfavorable progress of the disease
is self evident. Perineal fistula
is regarded favorable. Energy of character,
and a determined will, are important in
withstanding this disease. The patients
generally die by asthenia, rarely by apnoea.
Various complications may usher on death.
Pneumo-Hydrothorax may be developed, or
acute peritonitis set in, and prove
rapidly fatal, from perforation of
the intestine, or Meningitis may supervene.
or protracted diarrhoea, proving very serious.

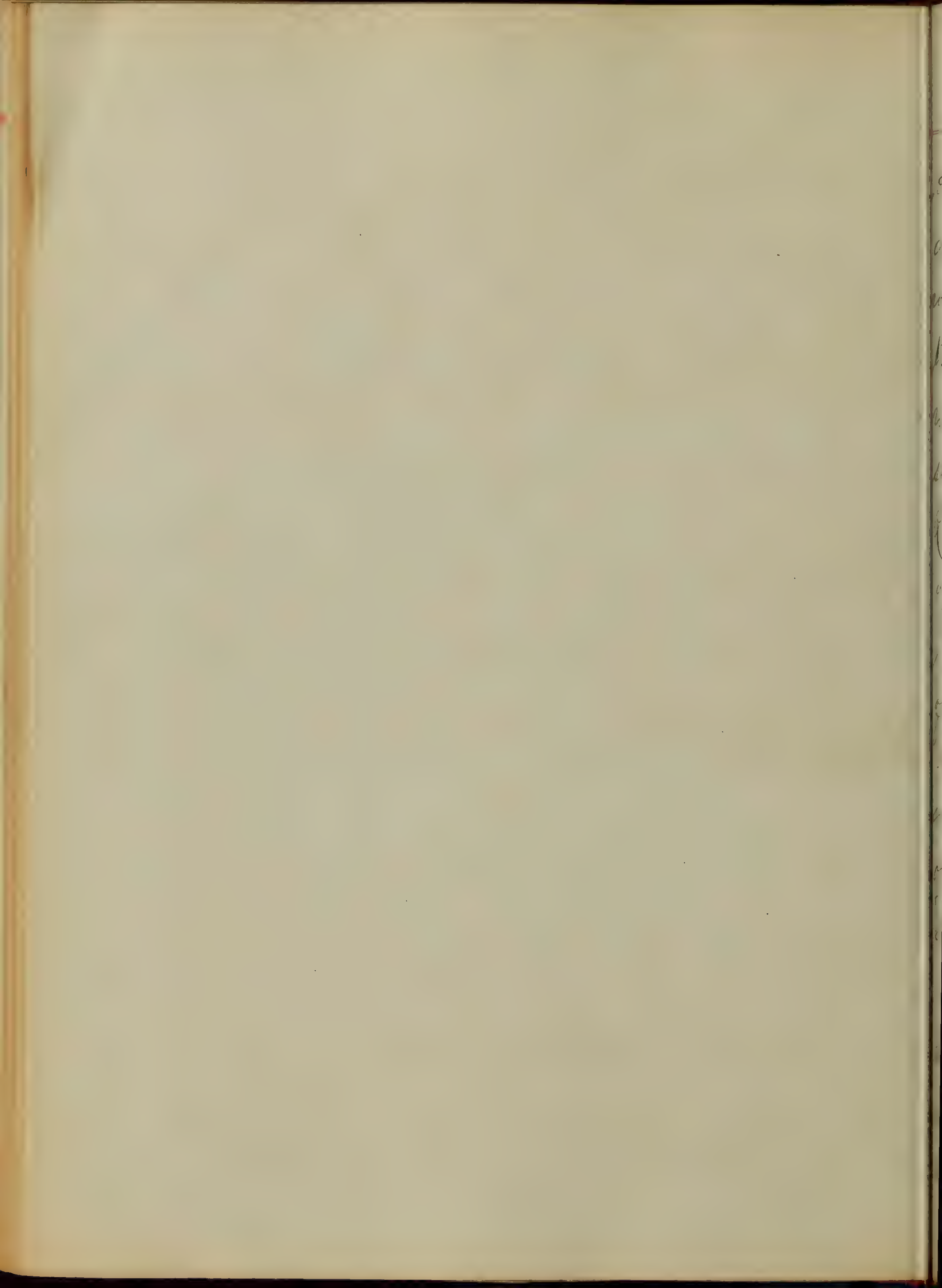


Treatment.-

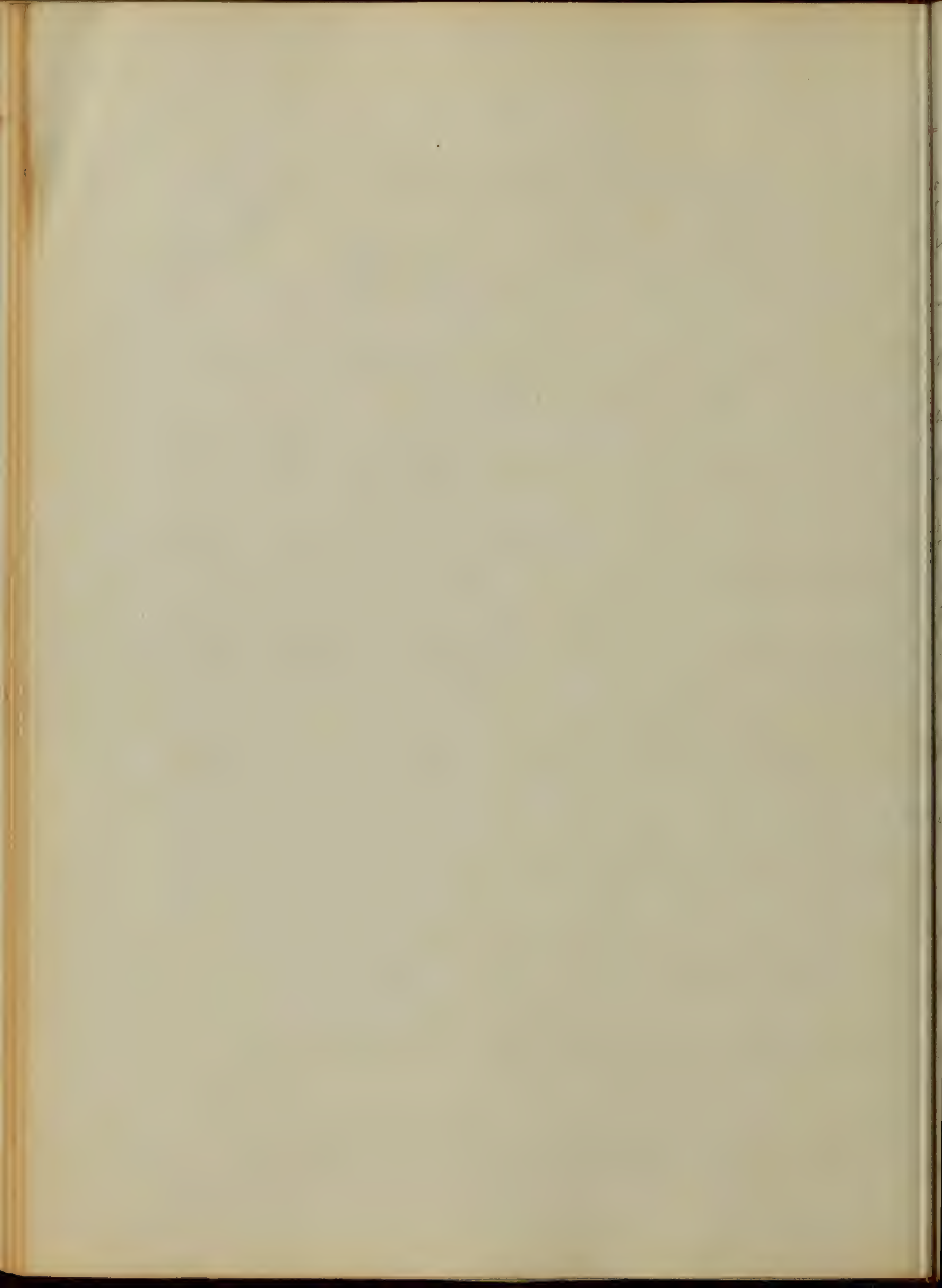
What is to be done for the patient? to answer this question, indirectly, is, the limit of our knowledge upon a curative treatment.
All depressing influences must be removed; the stomach, intestines, or it may be, the liver, and kidneys, must be relieved of their burden, and stimulated to healthy action; the same for the whole animal structure, and its organs.
Exercise, and plenty of out door life, as can be borne with comfort, ascending elevated regions, or hunting upon the prairies of the west, or in the cold, clear, windless air of Minnesota, or cruising on board a vessel, for a few years,



upon, the Mediterranean sea, or
in a different climate, as the
case may require. Where hygienic
influences are required, or a change in
occupation is deemed necessary, then
the physician is obligated, for the
benefit of humanity, to demand them,
and see that they are carried out,
and then we would see our patients
improving, and rendering them
better able to earn for those
who are dependent upon them, for
subsistence, though the sacrifices
for a time, may be very great.
To remove the poor man, or woman,
from the workshop, or cellar, or the
rich, and intelligent, from law courts,
schools, libraries, museums, and other

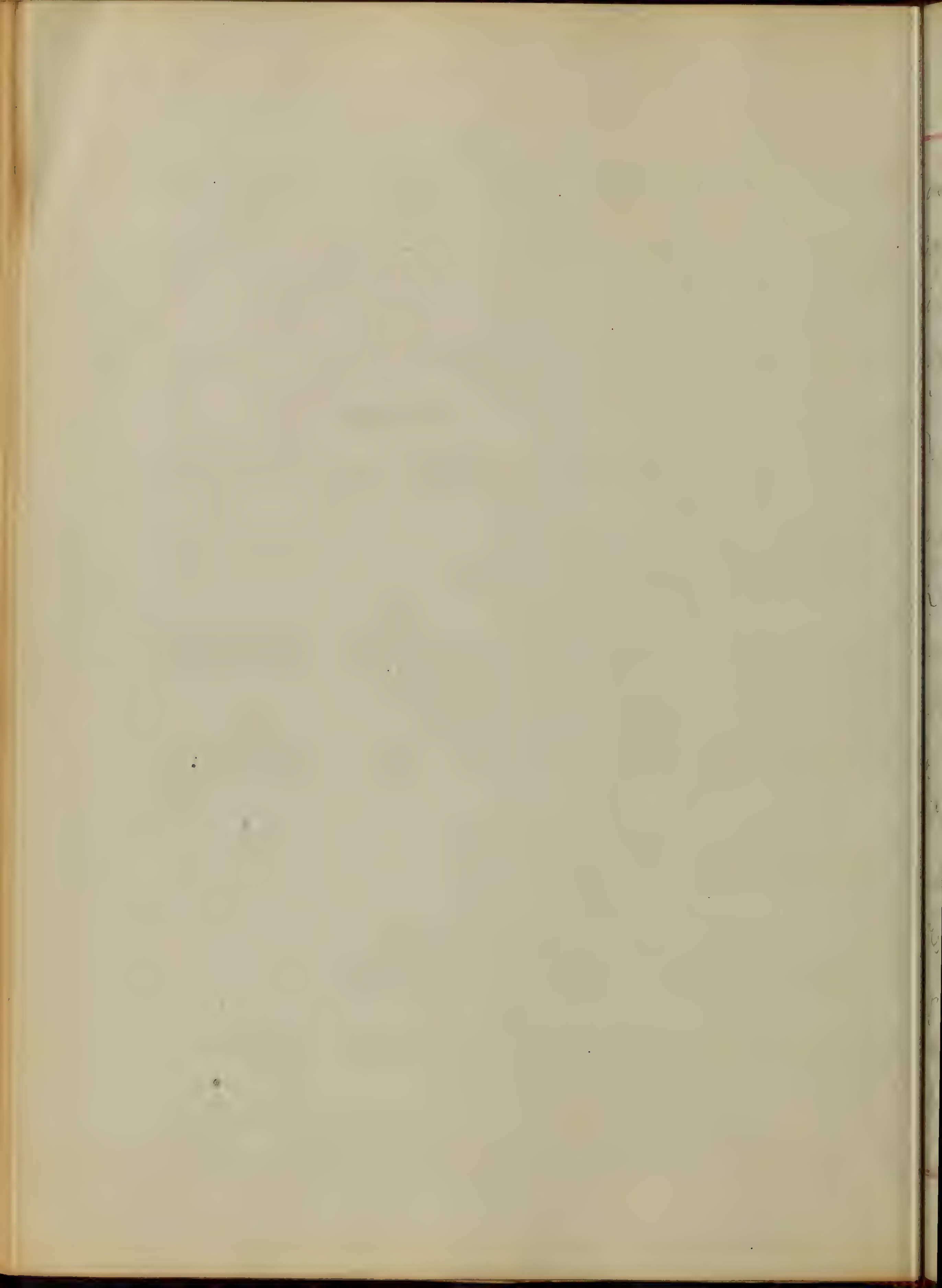


engrossing, sedentary occupations, are the serious difficulties, and obstacles, which lie in the Doctors path, in treating a case. Uniform cold climate, was considered valuable, but we should consider, the collateral, or Rheumatic affections, independant of the consumptive diathesis, thus, to the common Catarrhal complaints of patients, a moist, cool air may be, injurious, while a dry stimulating warm air may be necessary for the removal of others, so you see a climate may seem, and does palliate, or cure, one, and kill another, suffering with this affection! To sum up the climate treatment, - a warm bracing air, which would render a weak person, less conscious

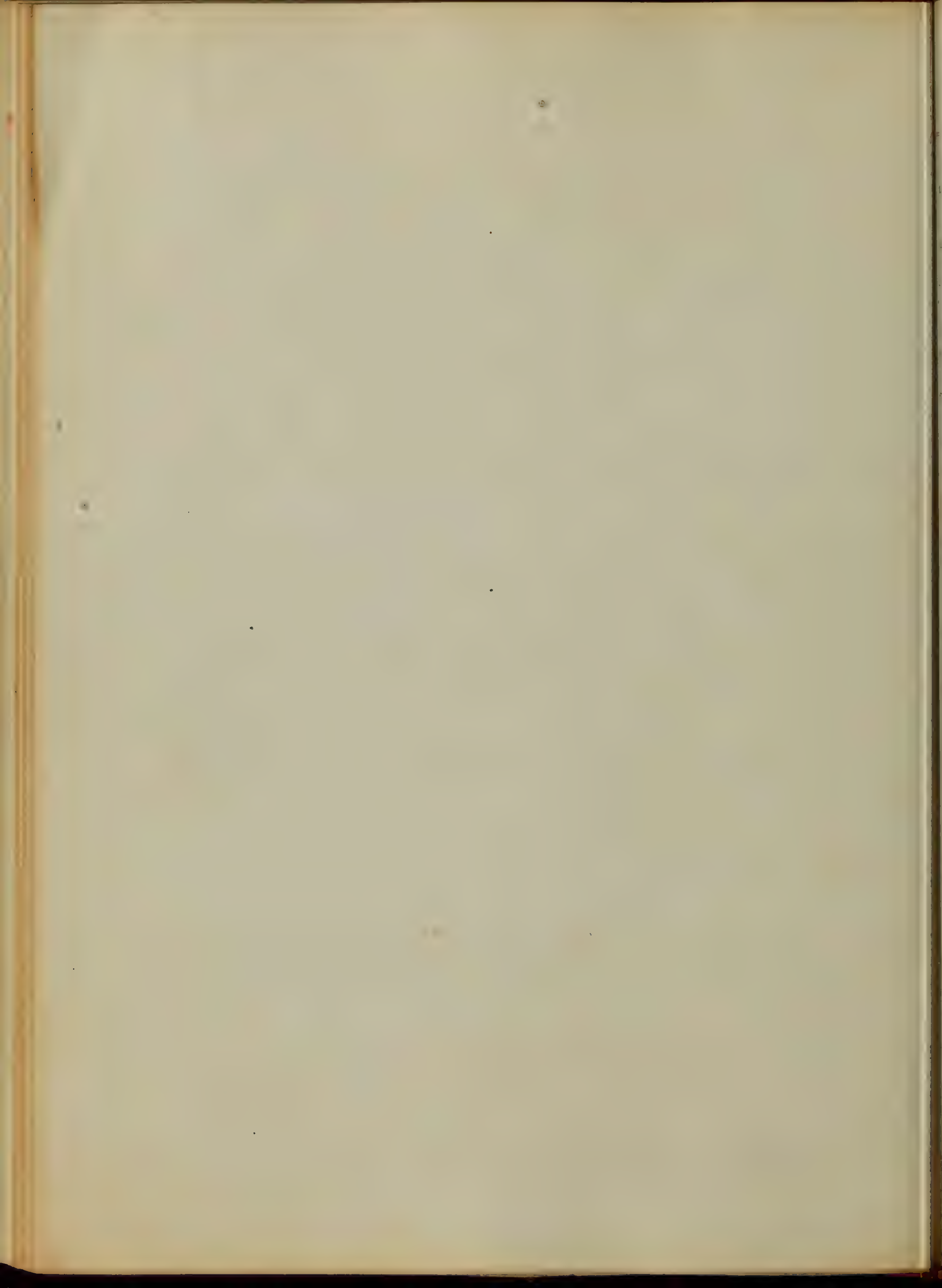


of their weakness, and that an equable climate, may, improve, the digestion, and, the appetite, by allowing, them more out of door exercise, and will not render, the system liable to Catarrhal affections of the air passages, - of chills of the general surface, and of local affections, or any of, the collateral affections as before stated. Portions of Florida - California, and Minnesota, in this country, are highly spoken of, and recommended by the Medical profession.

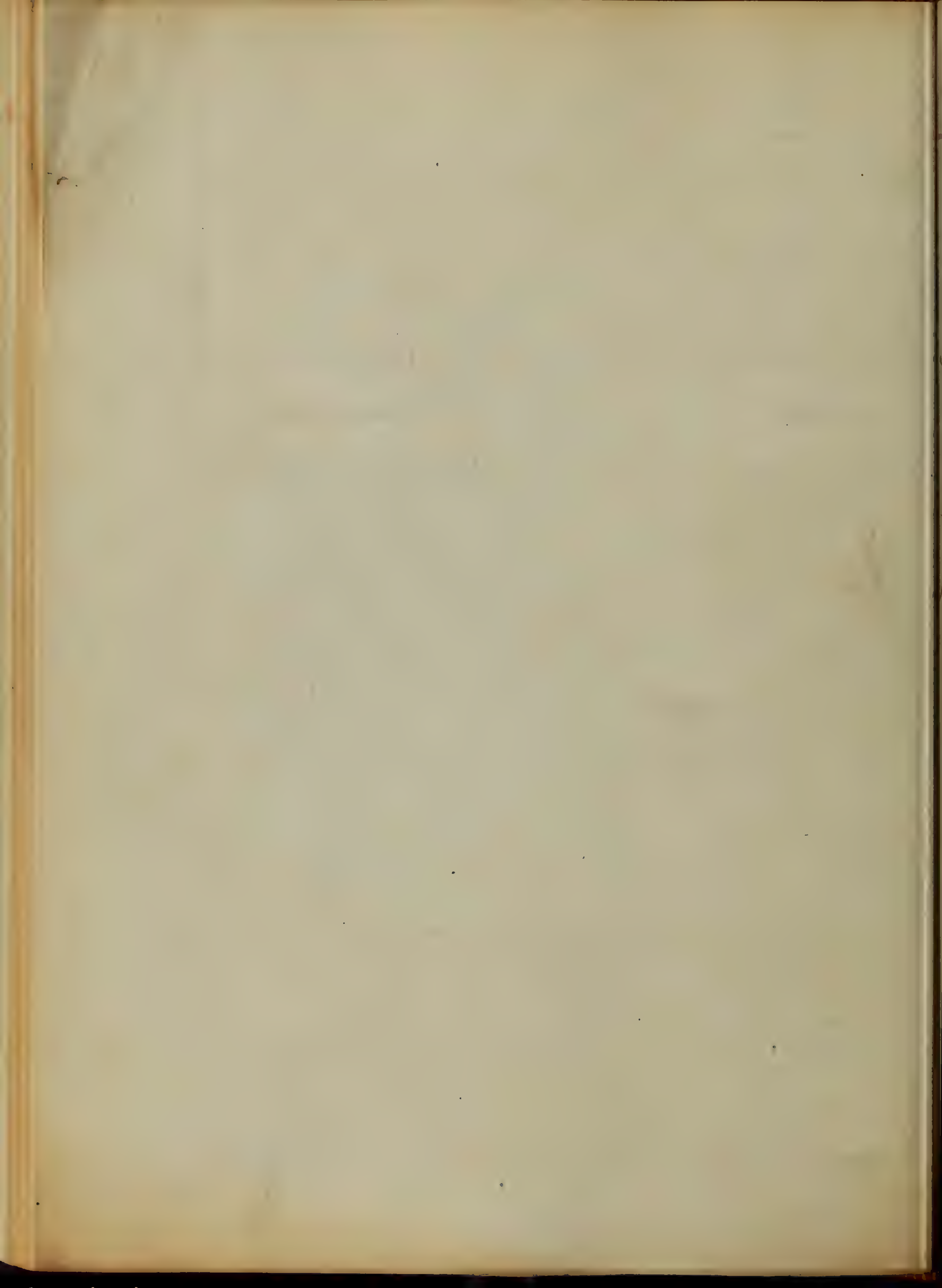
Now for Drugs - Many remedies have been tried, but give little success except as adjuvants, to the, imperial Cod liver oil, in its various forms. Iron, says, Dr Dobell, should not be given,



as it increases the number of red corpuscles in the blood, and thereby increasing the oxidation of the tissues, where there is a deficiency of carbon.
This view as to the modus of iron, in Phthisis, is held of seriously, only in part, by most practitioners.
Quinine being a bitter tonic it increases the appetite, and promotes the digestion, of and increased amount of force producing materials.
We should avoid however exciting the circulation.
Cod liver oil, the plain kind, shipped from Newfoundland, as it is called, where the Cod fisheries are carried on to a great extent, may be given, or "Wilbors Cod liver oil and Lime" is much used.



some prefer "De Jongh's" preparation of oil, again, others desire, the Norwegian oil—"Eller" "Möllers", or Dr. [illegible], light brown "Jaques oil".
The above are various preparations of the Cod Liver, and for the treatment of this disease. The oil is given in teaspoonful or tablespoonful doses, for some time, unless contra indicated.
The Hypophosphites and Chlorate Potash, have had their advocates, but [illegible] range among the tonics. Arsenic is highly extolled by some French writers.
Soothing inhalations, or opium in some form will relieve the cough.
Stimulants may be used guardedly, when they do not excite the pulse or nervous system.
Treat complications as they arise. —



Respectfully Submitted

to the

Faculty of the University of Md.

School of Medicine

by

R. E. Yoe.

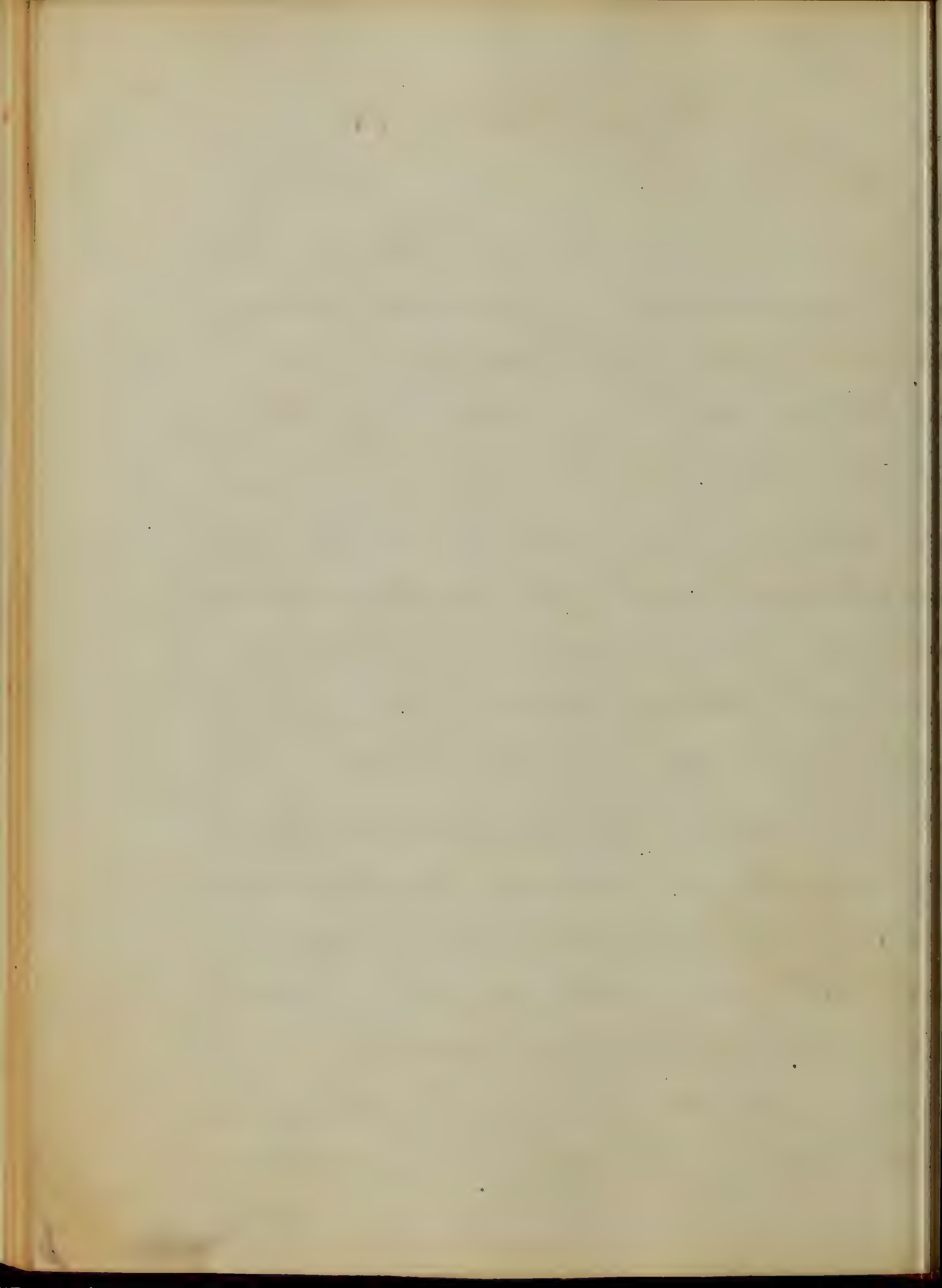
(Calvert Co Md)

Baltimore Feb. 12/75.

Diphtheria

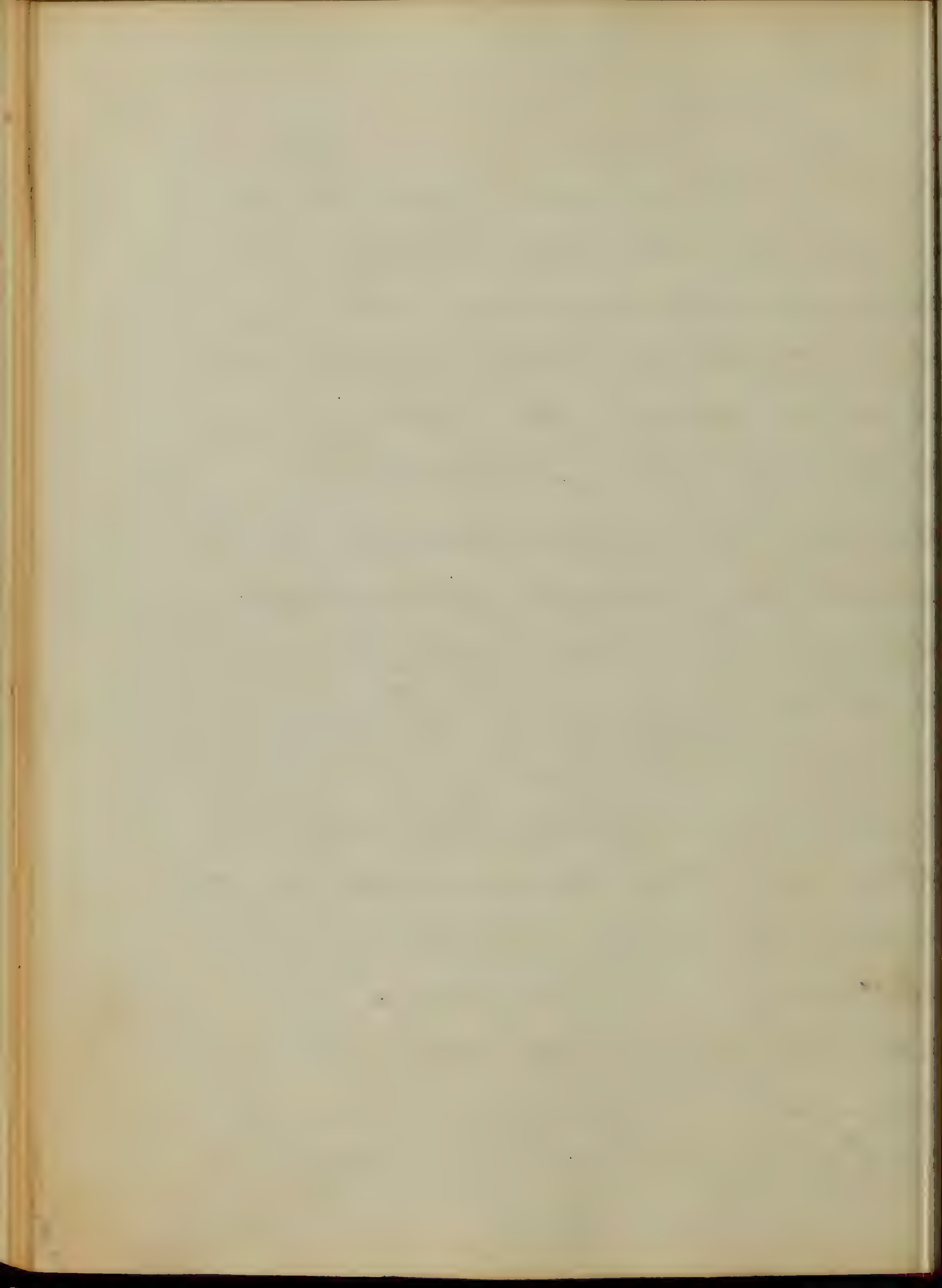
Gentlemen;

In accordance with the requirement of your Hon. Faculty I herewith beg leave to present my Thesis. Having had no opportunity of making any original investigation of disease, I must be necessarily largely indebted to others for my thoughts and theme. But not desiring to restrict myself to the dull task of compiling from Text Books I have endeavord to exhibit some little originality, by presenting a resumie of an Epidemic of Diphtheria as it appeared in my own County in 1862. For my materials I am indebted to a record of cases, kept at the time, by Dr. Jno. R. Quinan. This being a faithful Clinical Record



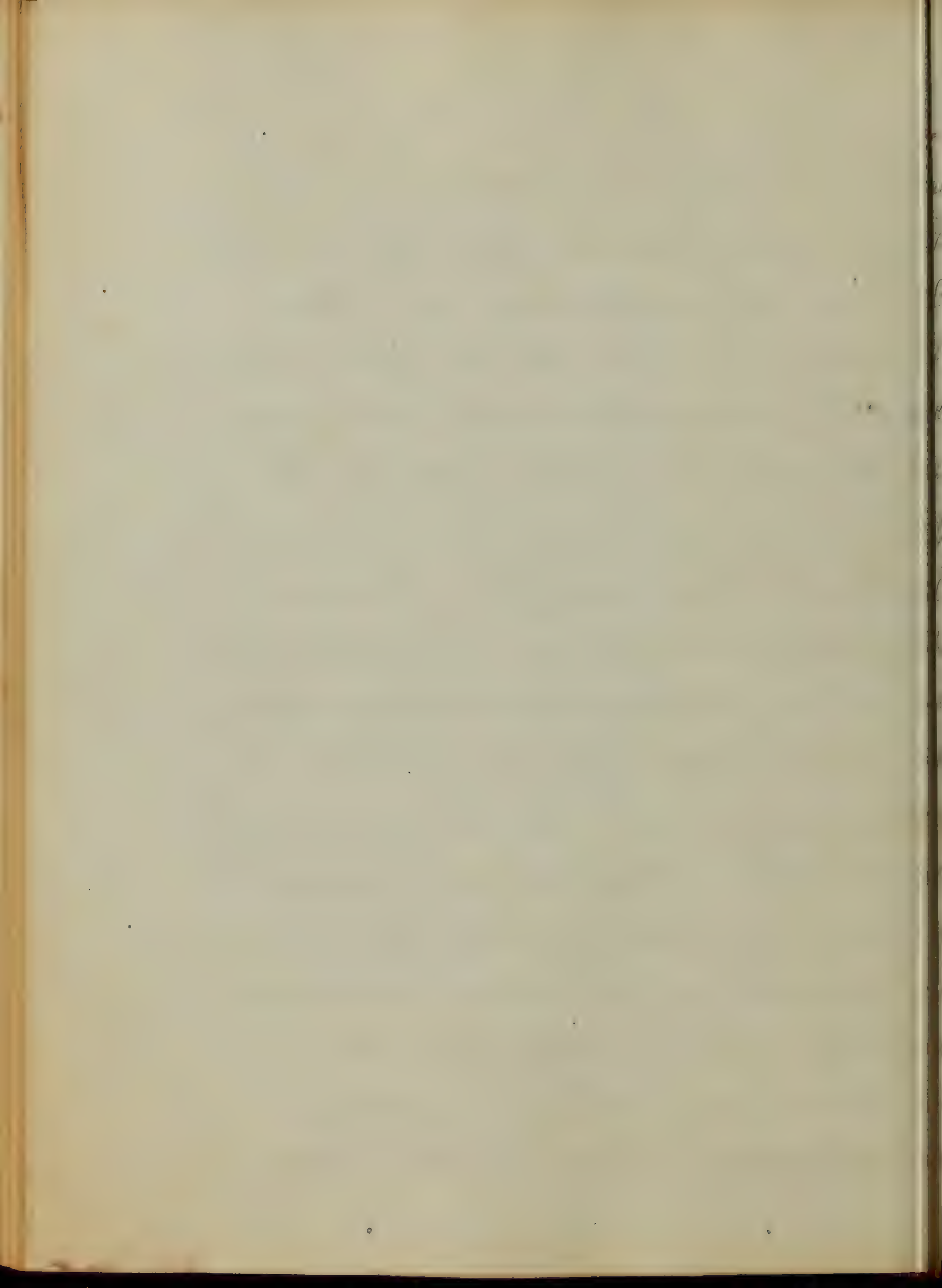
of the Epidemic as it appeared for the first time in that locality, tracing it from one individual to another, proving beyond a doubt that it was propagated by direct contact, (thereby throwing some light upon this mooted point in its pathology,) and at the same time noting carefully the effects of different treatment in checking the progress of the disease, by one whose zeal and skill in the profession entitle him to the highest rank, I cannot but think it will be more interesting and instructive, than hypothetical cases deduced from Text Books.

Notwithstanding the extensive re-search upon this subject, by the most able of the Profession in all ages,

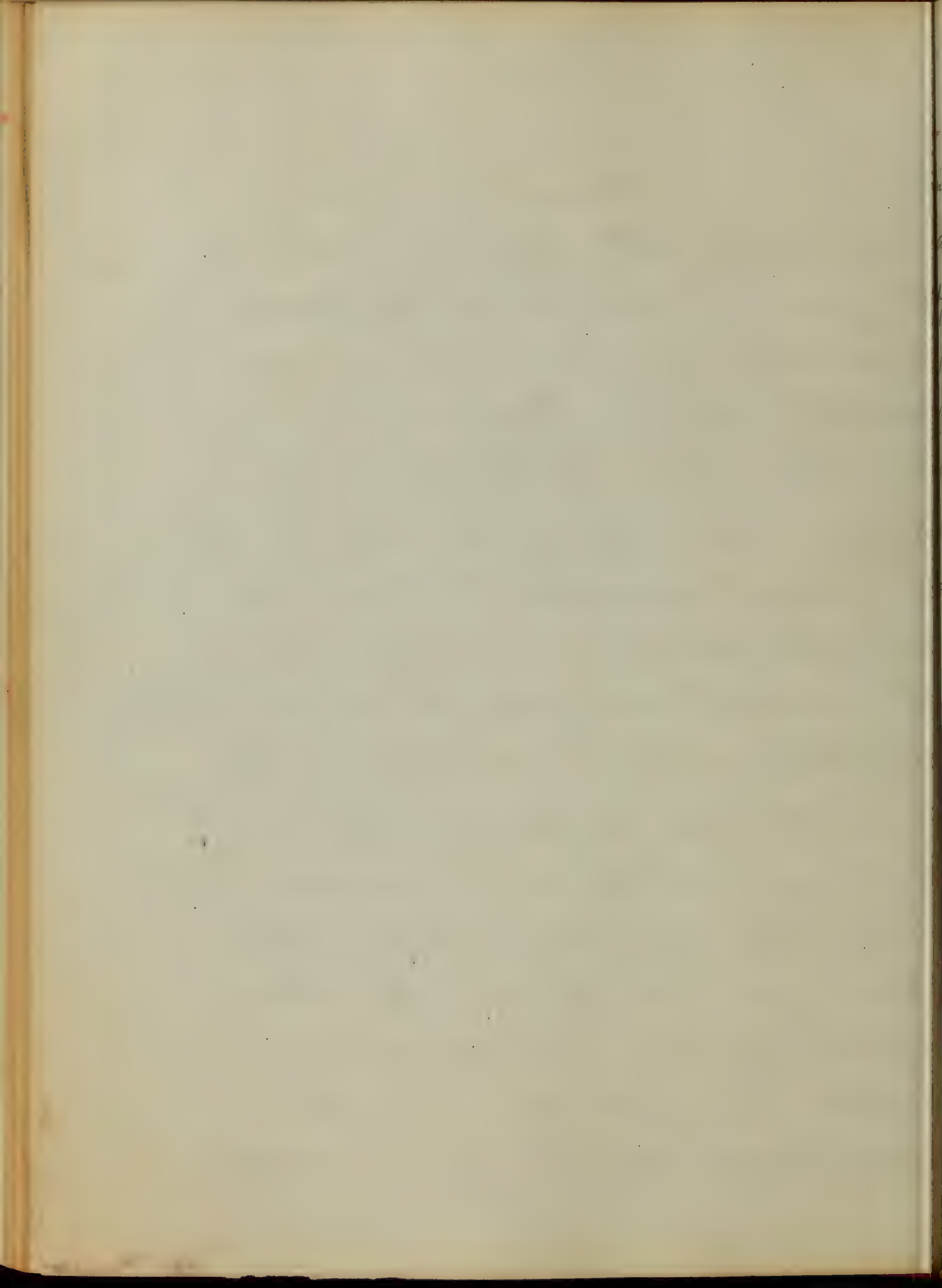


it is to be questioned, whether many important points referrible to the cause, origin, and mode of communication, are better understood at the present time, than they were by those who first grappled with their solution.

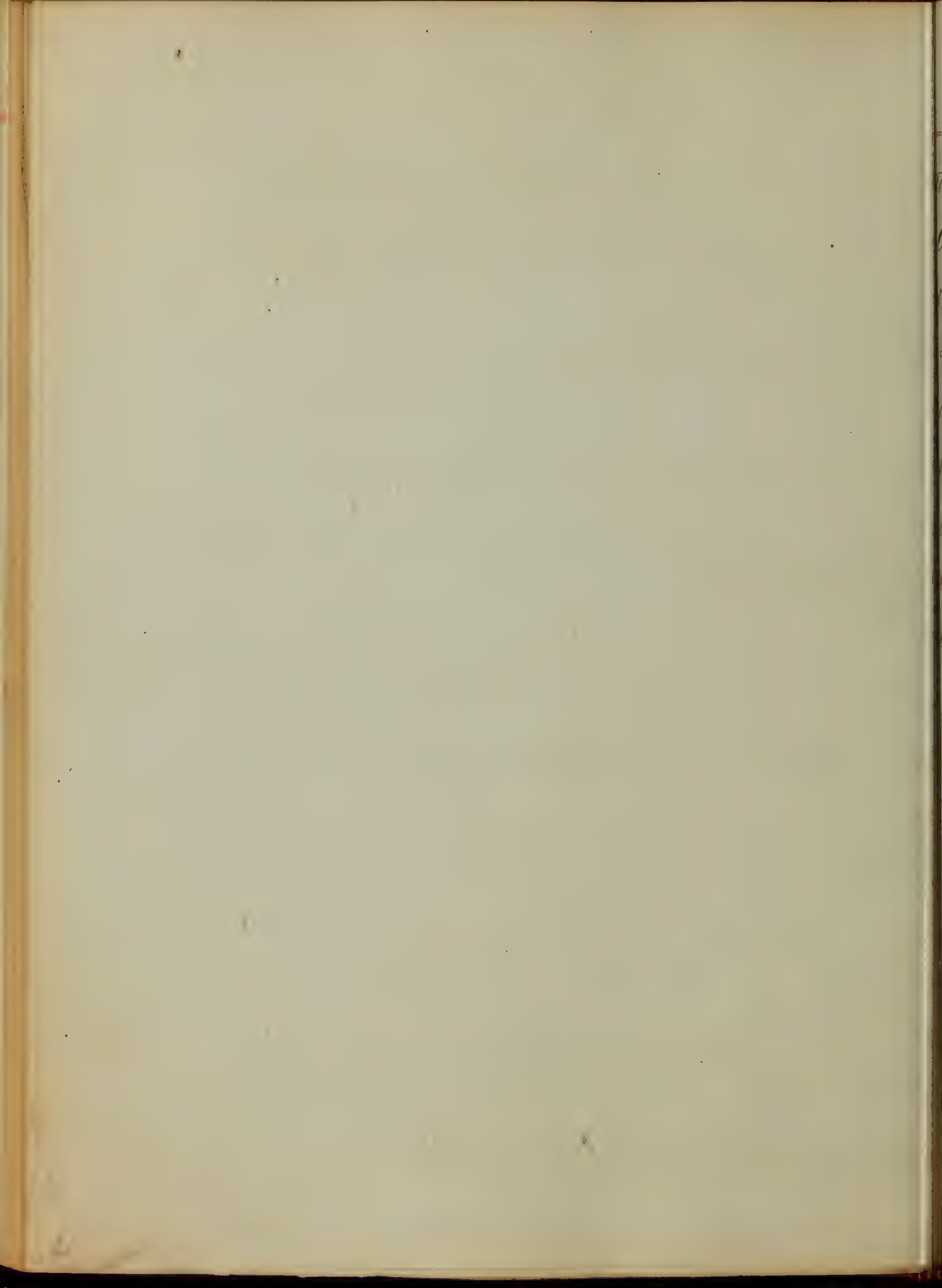
To the Physicians of the present age this is comparatively a new disease; to whom practically it was unknown until 1860, when it appeared in Philadelphia in an alarming and fatal form. But while we consider it a new disease to the present generation, we must not for a moment imagine that its existence dates from the year mentioned, for the researches of Greenhow, Slade, and others assure



[i]s that under the various names of Morbus Syriacus, Epidemic Angina, Angina Infantum vel Suffocativa, [i]t was well known and described by the [o]lder Physicians. From the same source we learn that it prevailed in Spain, Italy, Sicily, and other European Countries in the 16th and 17th Cen[t]uries; that it reappeared in the same local[i]ties about the middle of the last Century; [t]hat it then disappeared till towards the [c]lose of the first quarter of the present [C]entury; and that in the last few [y]ears it has again spread in an Epi[d]emic form over Europe, North America, [a]nd Australia. Thus for 18 centuries [h]as this fatal Pestilence been tracked, [u]nder all the disguising and modifying

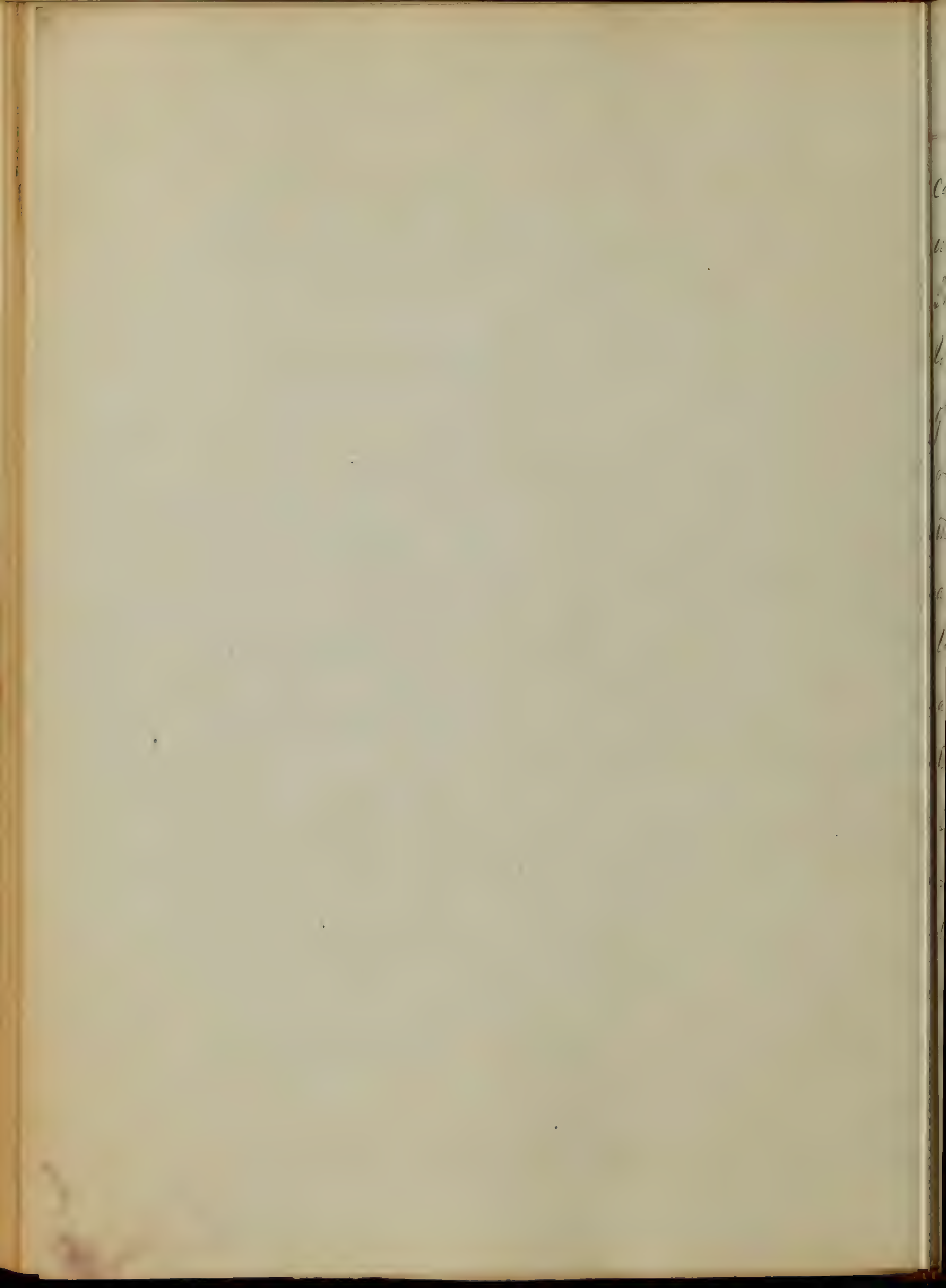


influence of Race, Locality and Season,
and identified, (amid all its phases,)
by its possession of one and the same
pathological feature viz: the formation
of a false membrane;) with the epi-
demics of our day, to which, in 1821,
Bretoneau of France gave the name
Diphtherite.
The first description of this formidable
disease published in this Country was by
Dr. Bard in 1771, based upon an Epidem-
ic which appeared at that time, and
the views advanced by him have been
universally received, even to the present
day. (Meigs) Bretoneau, who wrote
largely upon this Disease, attached
little importance to the constitutional
symptoms and upheld the view

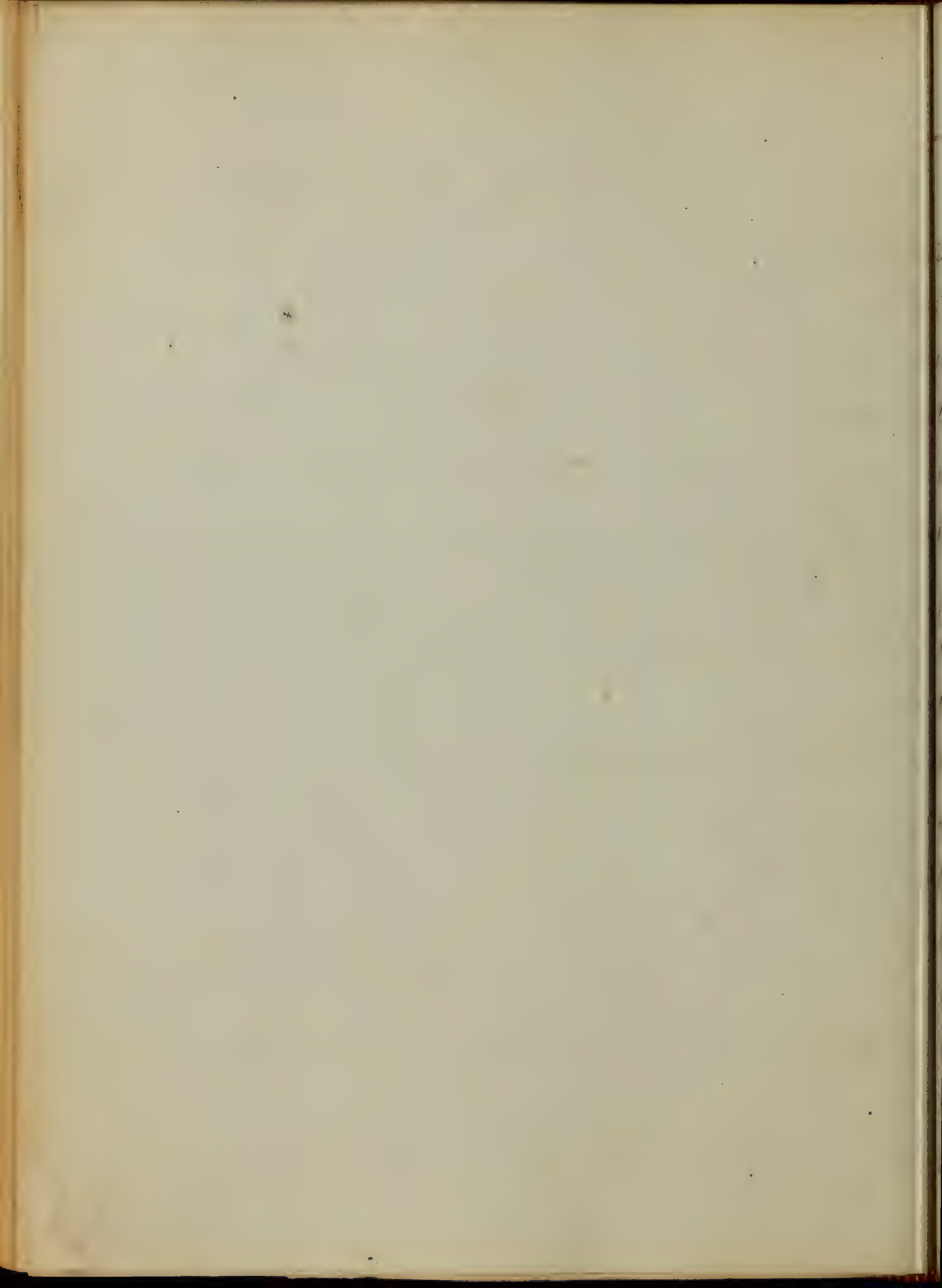


that it was essentially a local affection. Autopsies, however, have long ago exploded the fallacy of that statement. Greenhow, in his valuable treatise on Diphtheria, emphatically says that the first symptom of the disease is Fever, and that of an asthenic type. If it be altogether local in its character, how shall we account for its propagation by contagion and epidemic influence.

Autopsies made in St. Thomas' Hospital as recorded by Greenhow, show that the blood has undergone change as regards color and consistency; the Kidneys were large, and intensely congested; the heart in many cases was found contracted, and its



cavities occupied by fibrinous clots, undoubtedly of ante-mortem origin. It would be exceedingly interesting to trace this disease from the days of Hippocrates and Aretaeus, who recognized and described it under the title of Ulcus Syriacum, through all its various phases, at different times and places until its appearance here, and contrast the views of the past with those of the present; such, however, is not my intention. I only desire, as I have already stated, to give a description of the Epidemic as it first appeared in Calvert in 1862, with an analysis of the cases and such remarks as to treatment as my information furnishes.

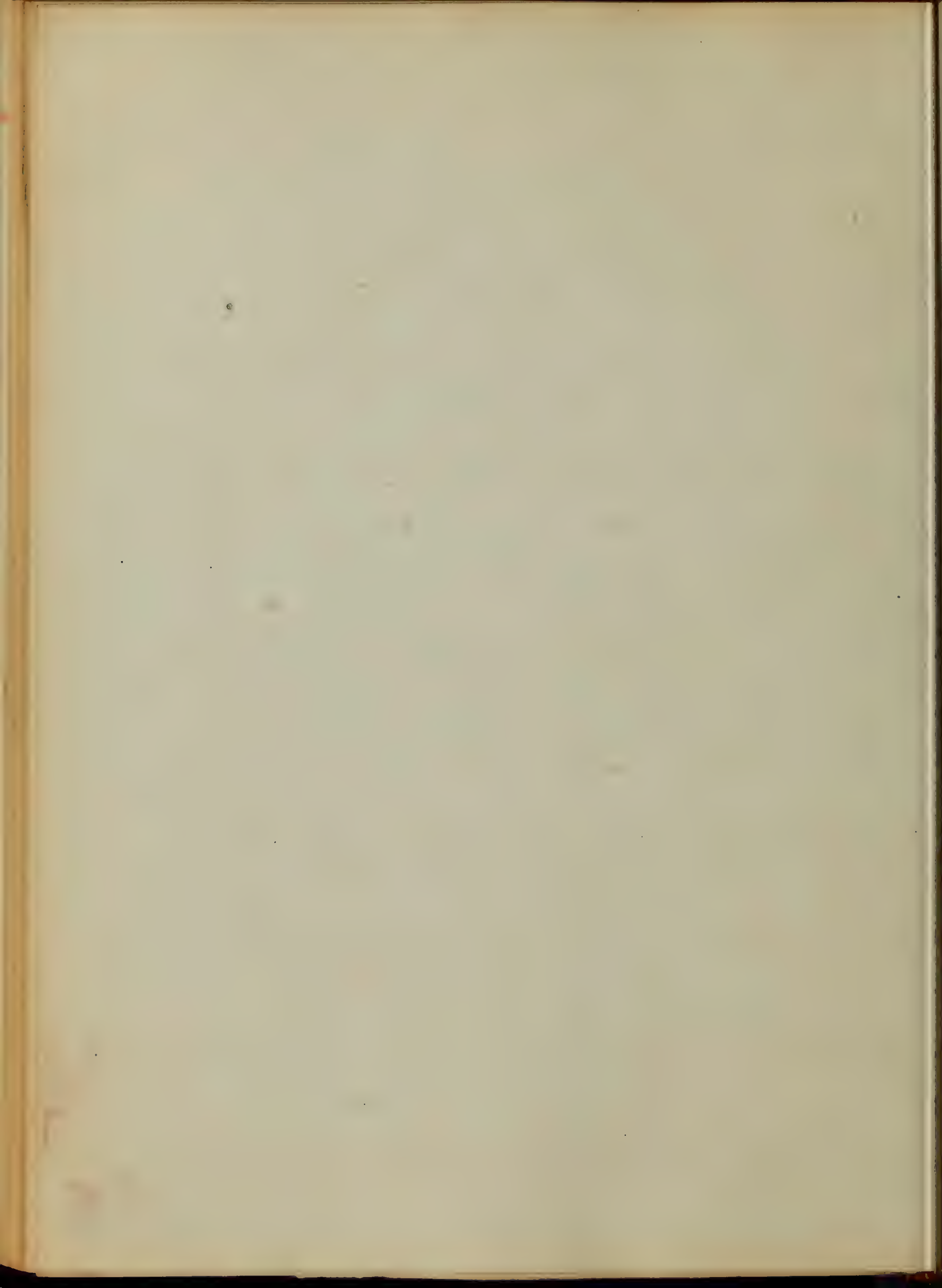


Symptoms.

Febrile Symptoms – In 28 cases, or 56 per cent the constitutional disturbance was slight, in all it bore no relation to the gravity of the attack; in 22 it was more marked, and ushered in by the languor, and malaise that usually precede a febrile attack.

Chills. – This symptom marked the formal access of but 3 cases, tho' exacerbations of the fever were not unfrequent in the first few days of the more decided cases; and always occurred when there was any increased swelling of the neck externally.

Skin: – The heat of skin, even in those presenting most febrile excitement, was very moderate, never

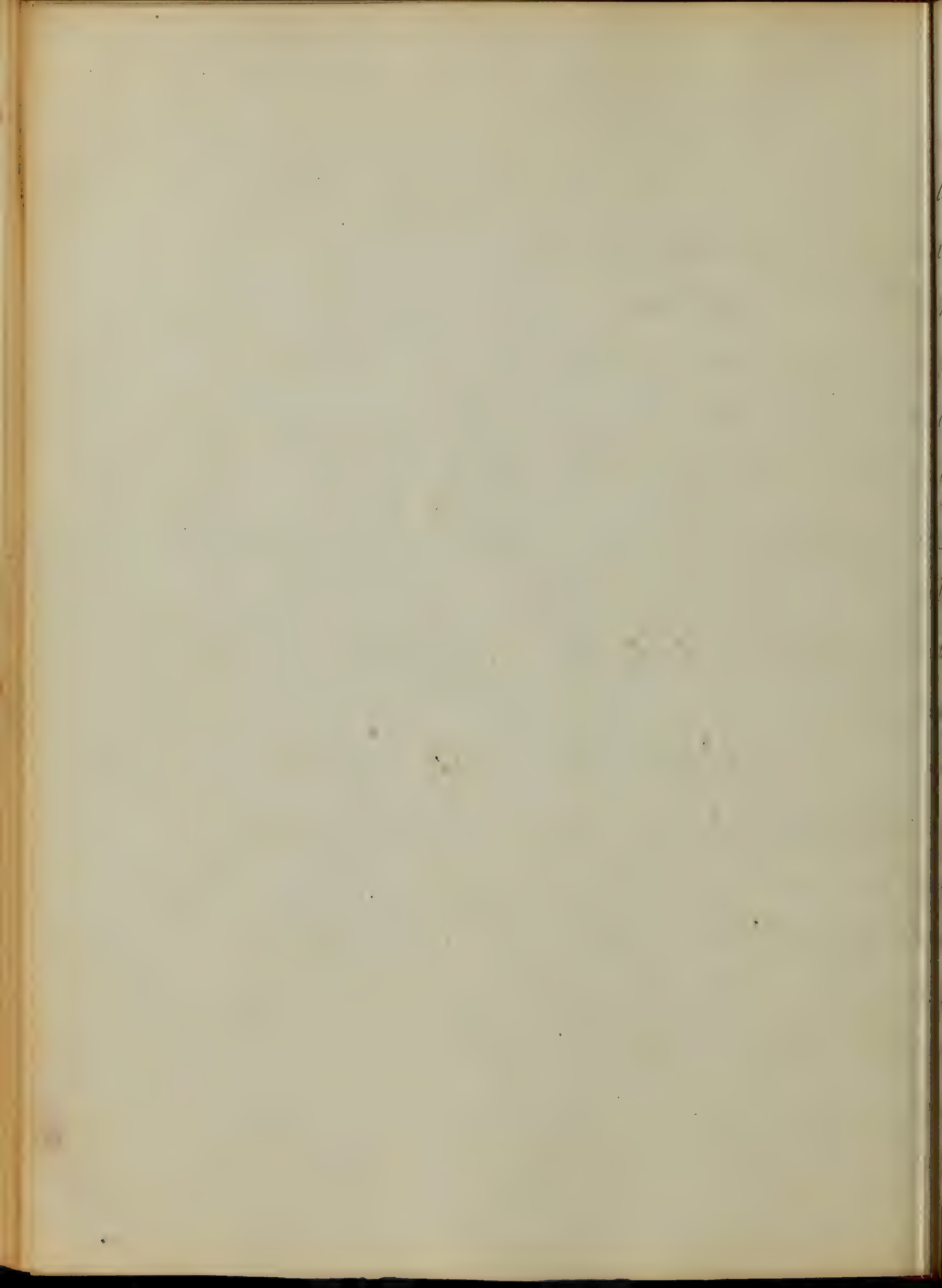


attaining the pungency of Scarlatina; and in all cases, dry.

Pulse.— The circulation in the milder cases was but little accelerated, in the severe, it ranged from 100–140 — but in all, it was feeble, soft, and fluctuating and often continued so for two weeks after all other evidence of the disease had subsided. In 3 cases, for 3 months after.

Thoracic Symptoms.

Respiration. The breathing was of course accelerated, pari passu, with the pulse, but otherwise unaffected, except when complicated with Laryngitis, when it presented the brassy inspiration, but never the anxious face, and agonizing 'besoin de respir,' as the French

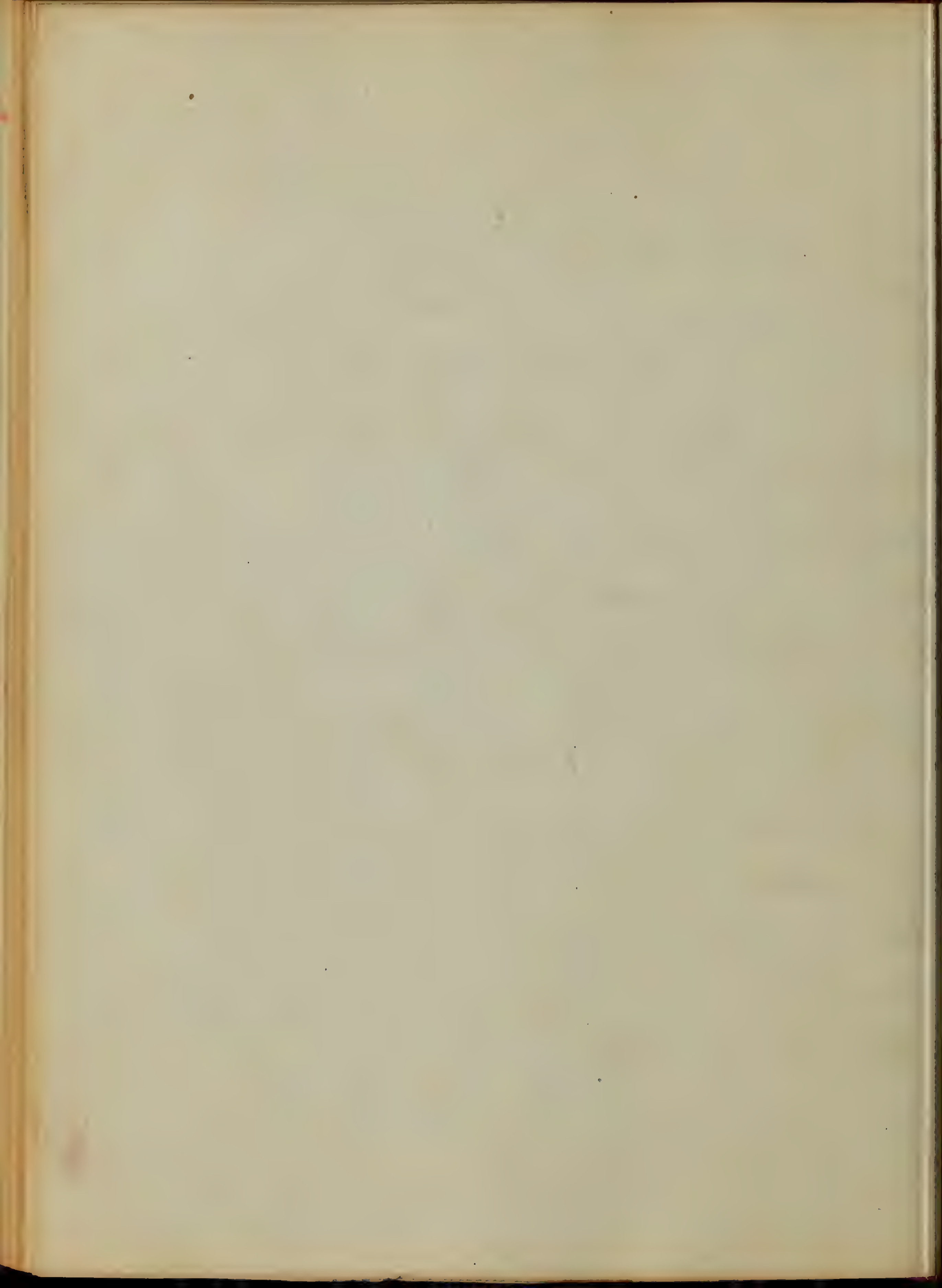


term it, — the struggle for breath, of true idiopathic Croup.

Physiognomy. — In this there was nothing noticeable except the languor and apathy that belong to all febrile affections of equal intensity.

Mind. — It was a remarkable fact, that neither, delirium, coma, or the least confusion of intellect, existed in a single case. The mental faculties remained clear to the last instant of life; the little sufferer often passing from Earth to Heaven, with its eyes still beaming with intelligence, or with perhaps a half-uttered reply on its lips.

Tongue. — This organ was but slightly coated in mild cases — in the more severe covered with a dirty-brown fur, which



frequently cleaned off in the progress of the disease, leaving it clean and red.

Appetite. This was but little impaired, only one or two cases showing any aversion to food.

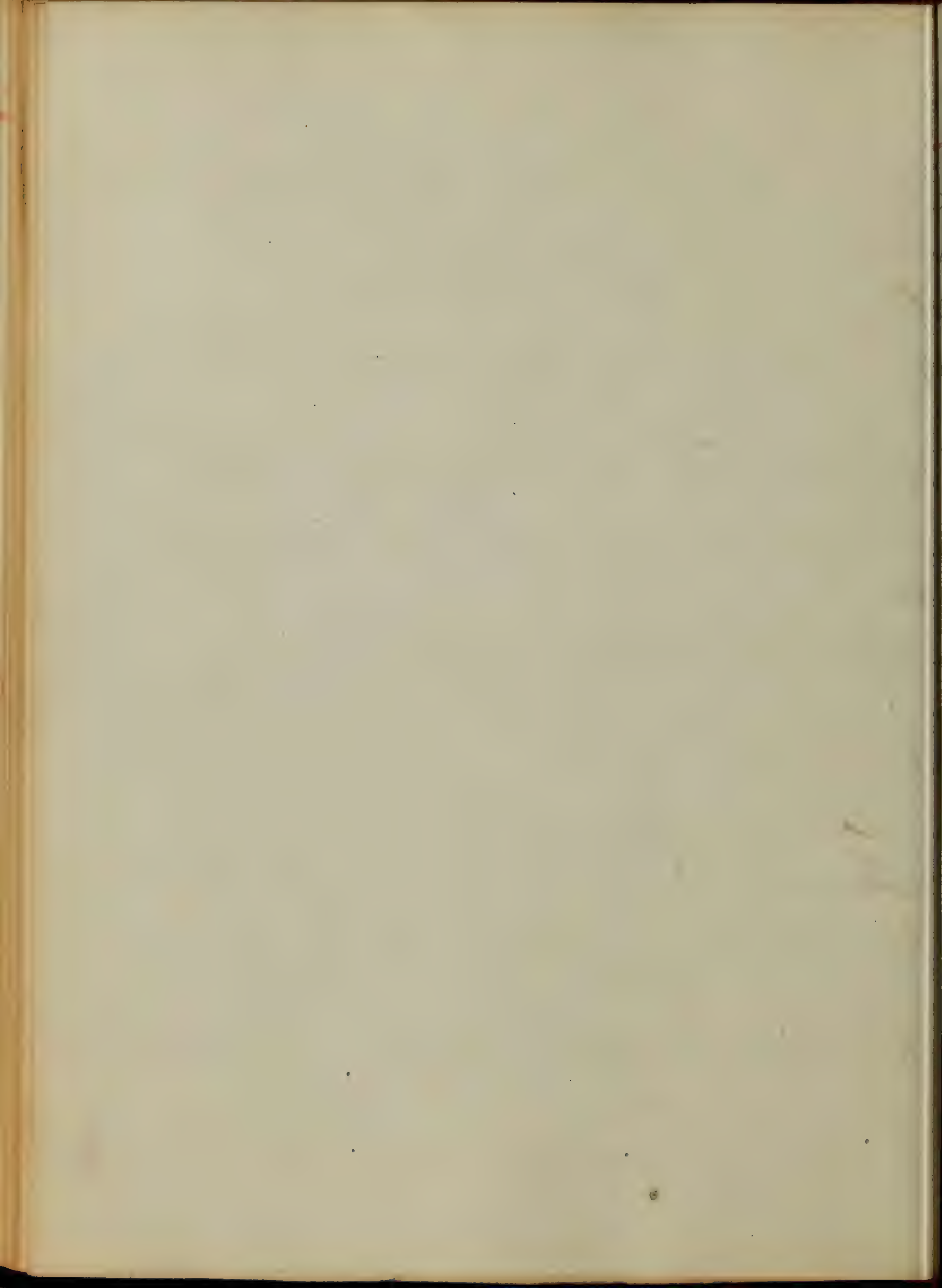
Deglutition - Was easy in the majority, and never so painful as in ordinary angina.

Nausea was absent in all the cases.

Bowels - Natural, responding readily to medicines.

Throat Symptoms.

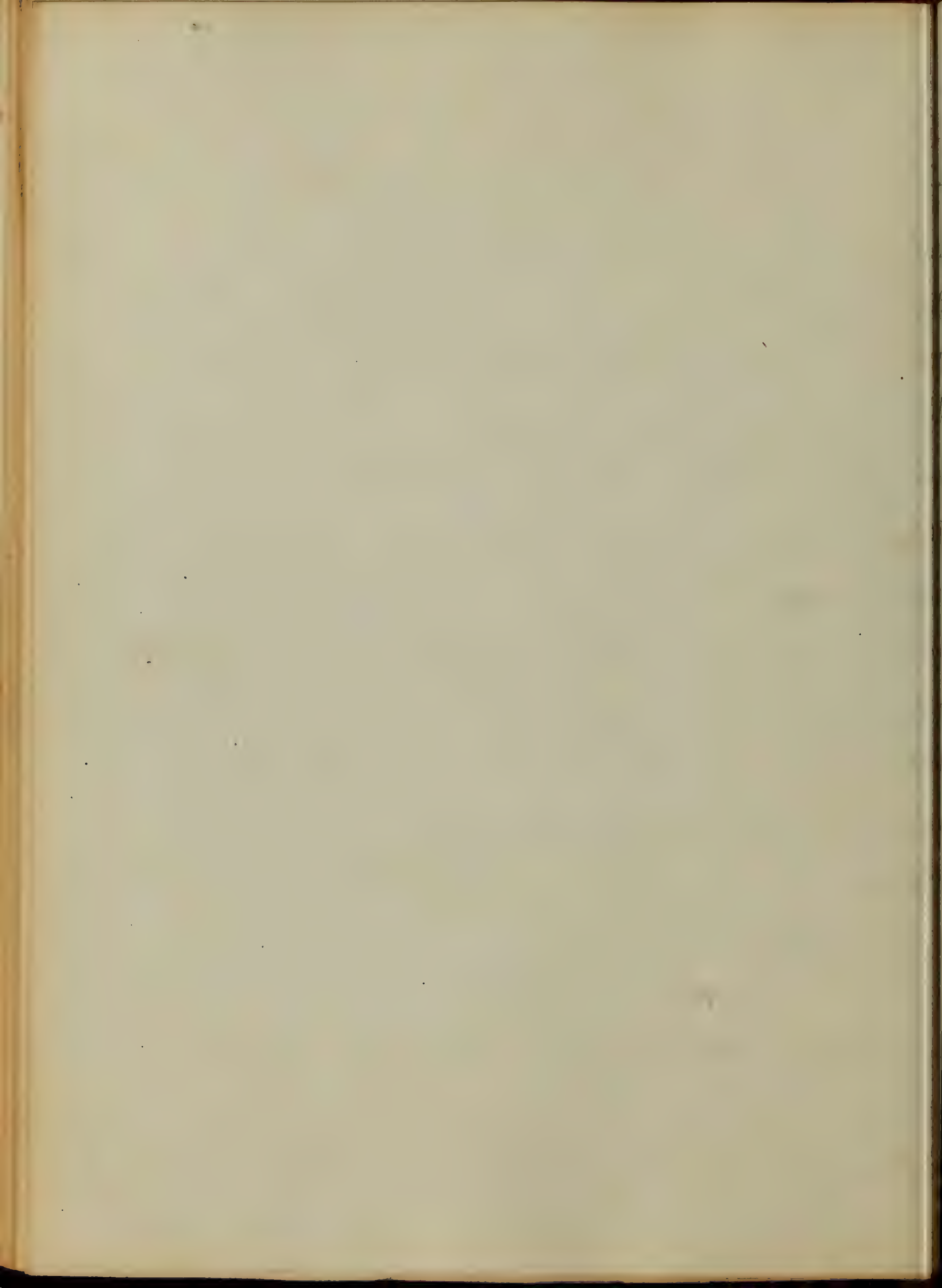
Tonsils. These were inflamed and tumefied in all early in the disease. It was but seldom, however, that both Tonsils were to be found equally affected at the same time; on the contrary, it was not rare to see one -



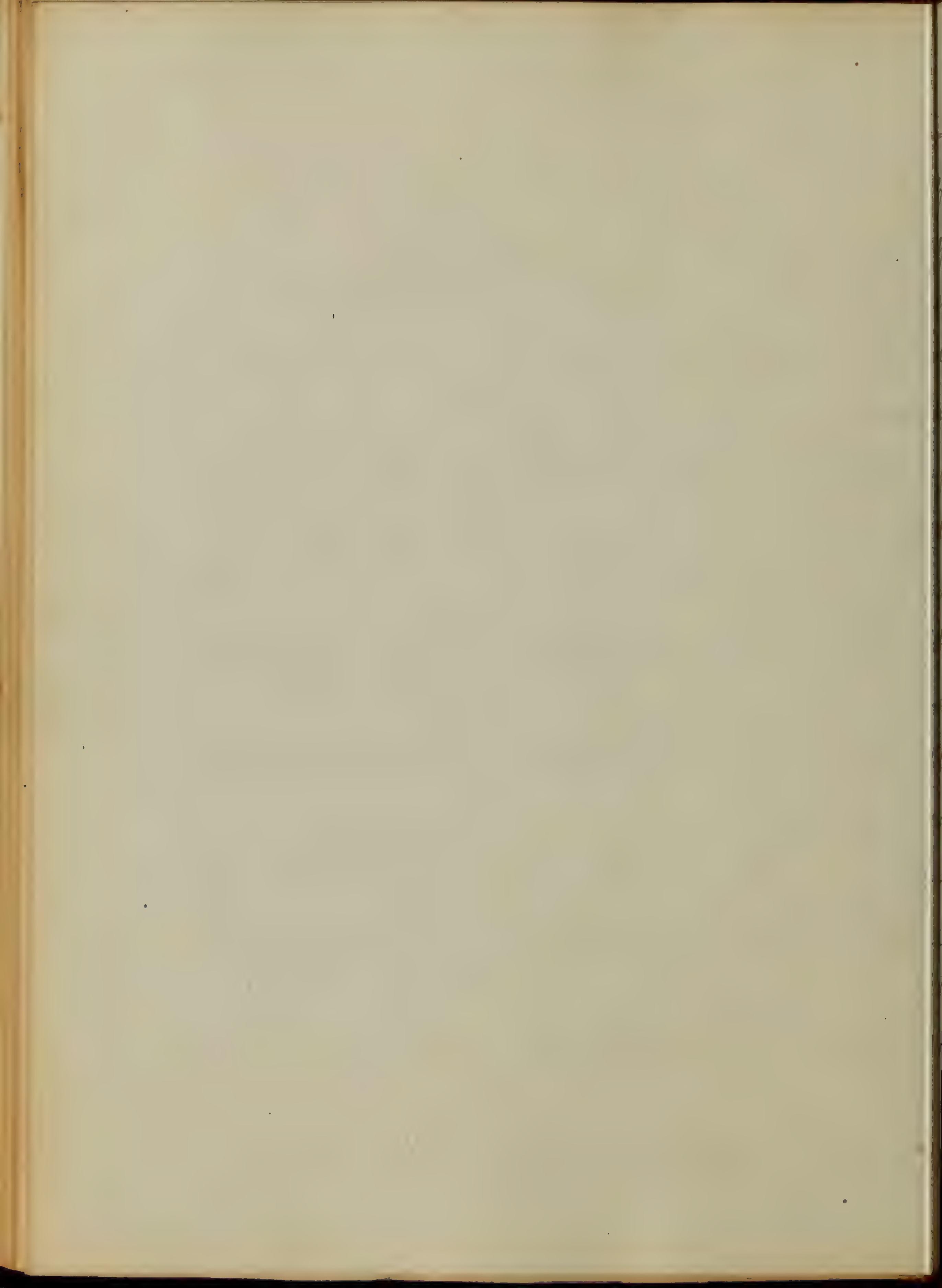
Tonsil entirely recover from the disease before the other was attacked, and, strange to say - in the majority of such cases it was the left Tonsil which was first seized. No suppuration or ulceration of these organs occurred. The Velum Palati and Uvula were always attacked consecutively to the Tonsils - and exhibited the same degree of inflammation; the color in the mild cases being a bright scarlet, in the grave, an erysipelatous hue, deepening to a still darker shade along the free margin of the soft palate.

Exudation -

Date of Appearance. This so far as could be judged with accuracy was for the majority of cases from 24-

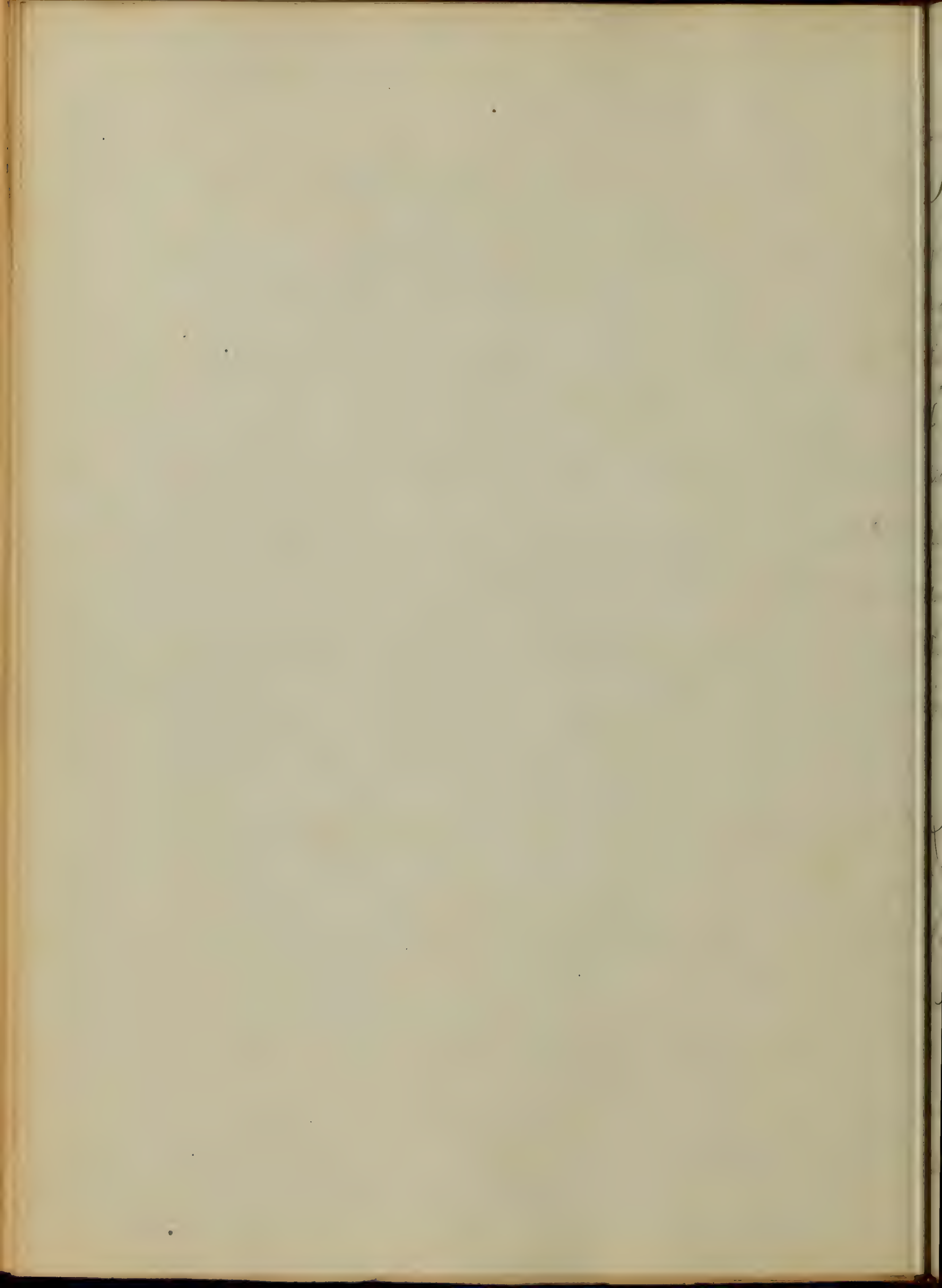


72 hours; in the grave cases, as early as
12 hours from the initial fever.
Extent and Seat. In all that re-
covered, the exudation was limited
to circumscribed patches, varying
in size from the surface of a split pea, to
that of a five cent piece, and seated gen-
erally, on the Tonsils, sometimes, on the
palate, more rarely on the posterior wall
of the Pharynx. In all the fatal cases-
but one - the exudation was diffused in
one continuous sheet over the entire
Fauces, Tonsils, Uvula, soft Palate, roof
of the mouth, and Pharynx, giving the
parts the appearance of being lined
with semi-transparent horn or isin-
glass
Color and Consistence. When first



-pnded, it gave the surface it covered the appearance of having been painted with a thin coat of soft glue; but by the additions of successive layers, it assumed an opaque, dirty white, or ash-color, from one to three lines thick, and of the consistence and elasticity of wet kid. It adhered to the mucous membrane on which it was poured out, with great tenacity, and when removed, left the surface beneath, like one recently denuded of its cuticle by a blister - raw and bloody.

Fetor. - This was strongly marked in three fatal cases only, and was evidently due to sloughing of the false membrane, and the decomposition of the blood that bathed them.



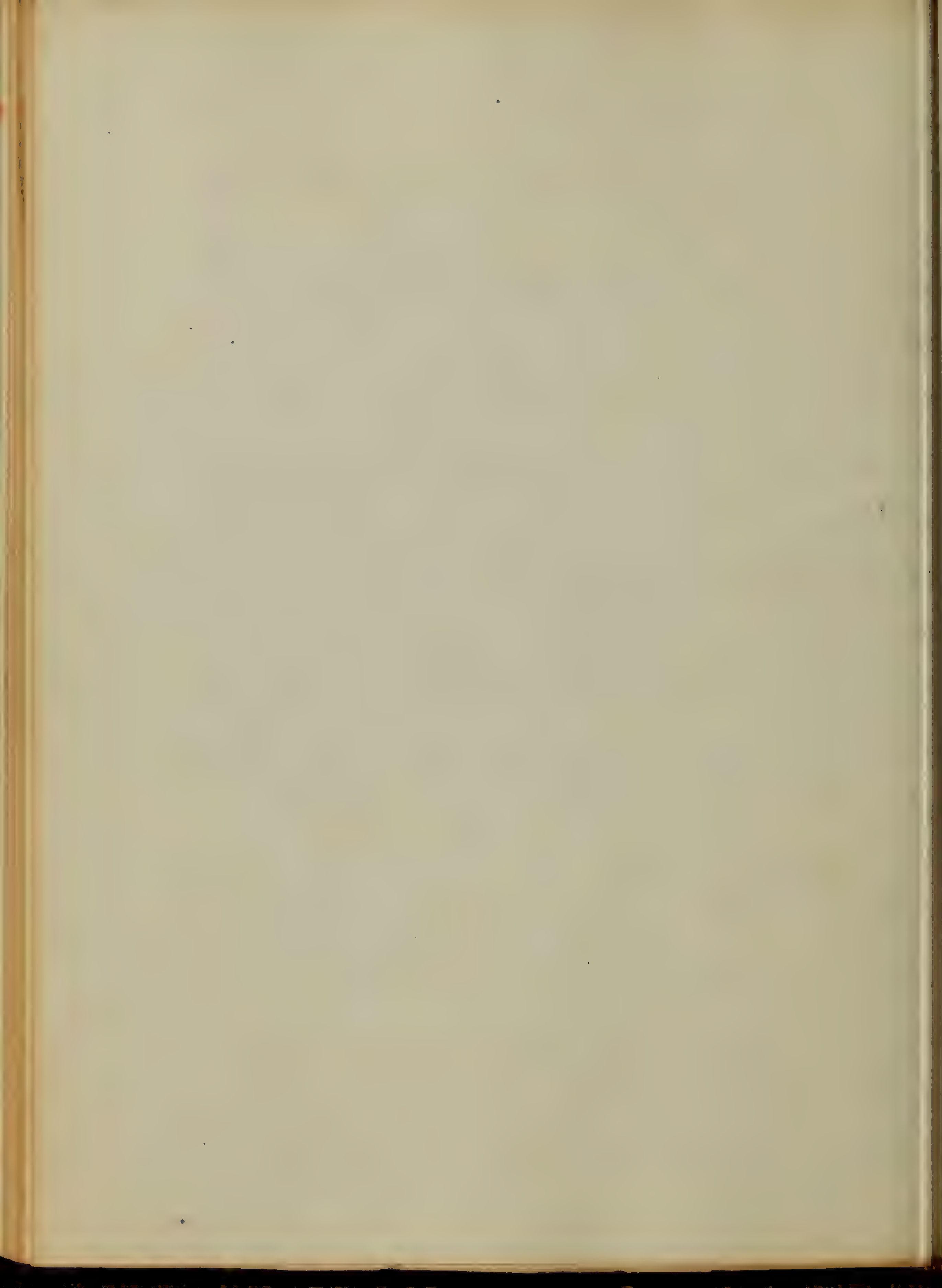
Hemorrhage - occurred in three of the fatal cases, commencing with the sloughing of the membranes, and persisting till death.

External Cervical Swelling - This seemed to be due to infiltration of the cellular tissue, rather than glandular enlargement; and its extent, measured the severity of the case; all having it prominently, died.

Causes -

Locality - The 1st case occurred at F.; the remainder within a radius of three miles.

Season. In July occurred one case; in Aug. 2; - Sept. 17; - Oct. 21; Nov. 6; and Dec. 3 - Of fatal cases 6 died in Sept. in July.



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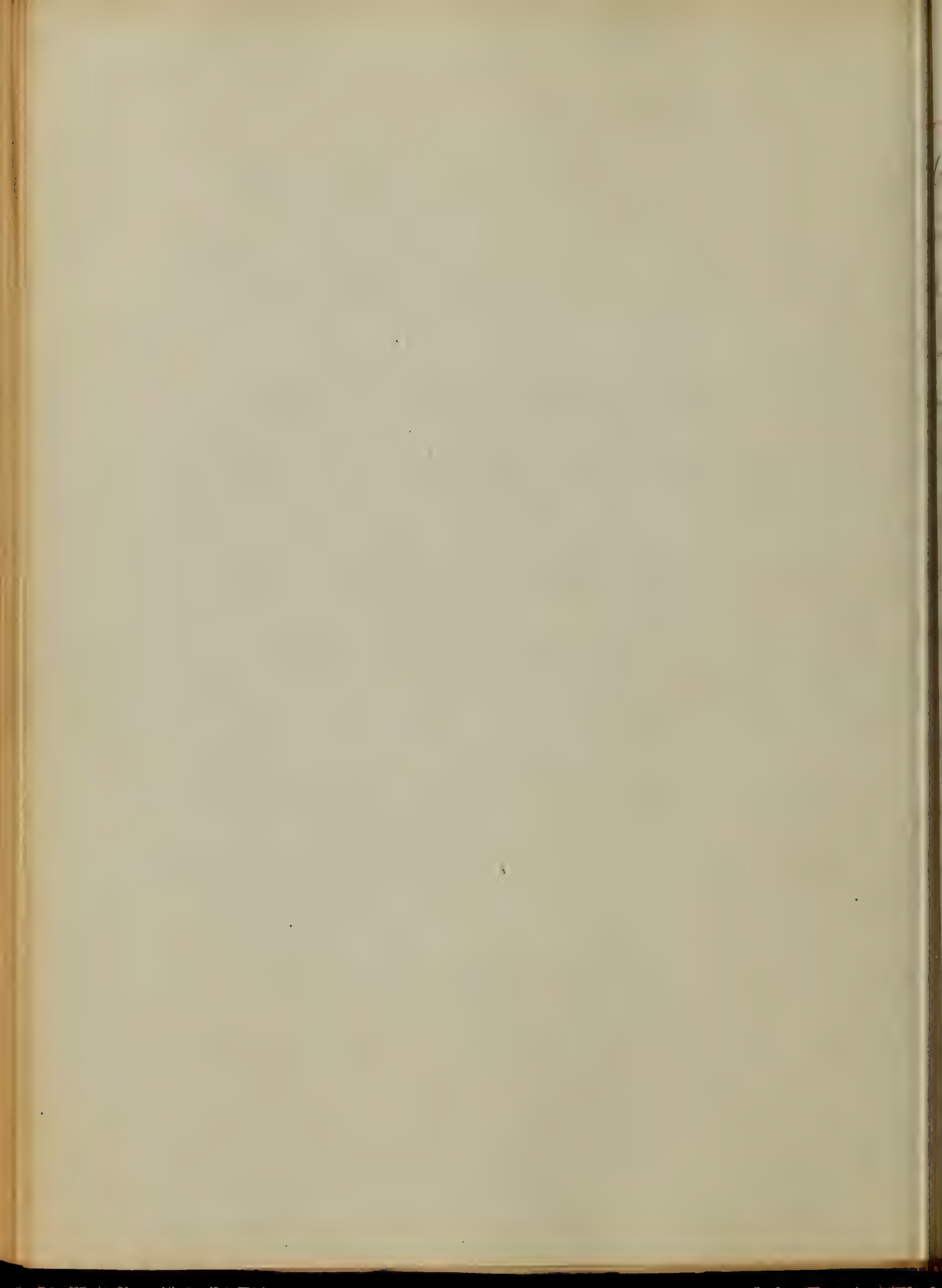
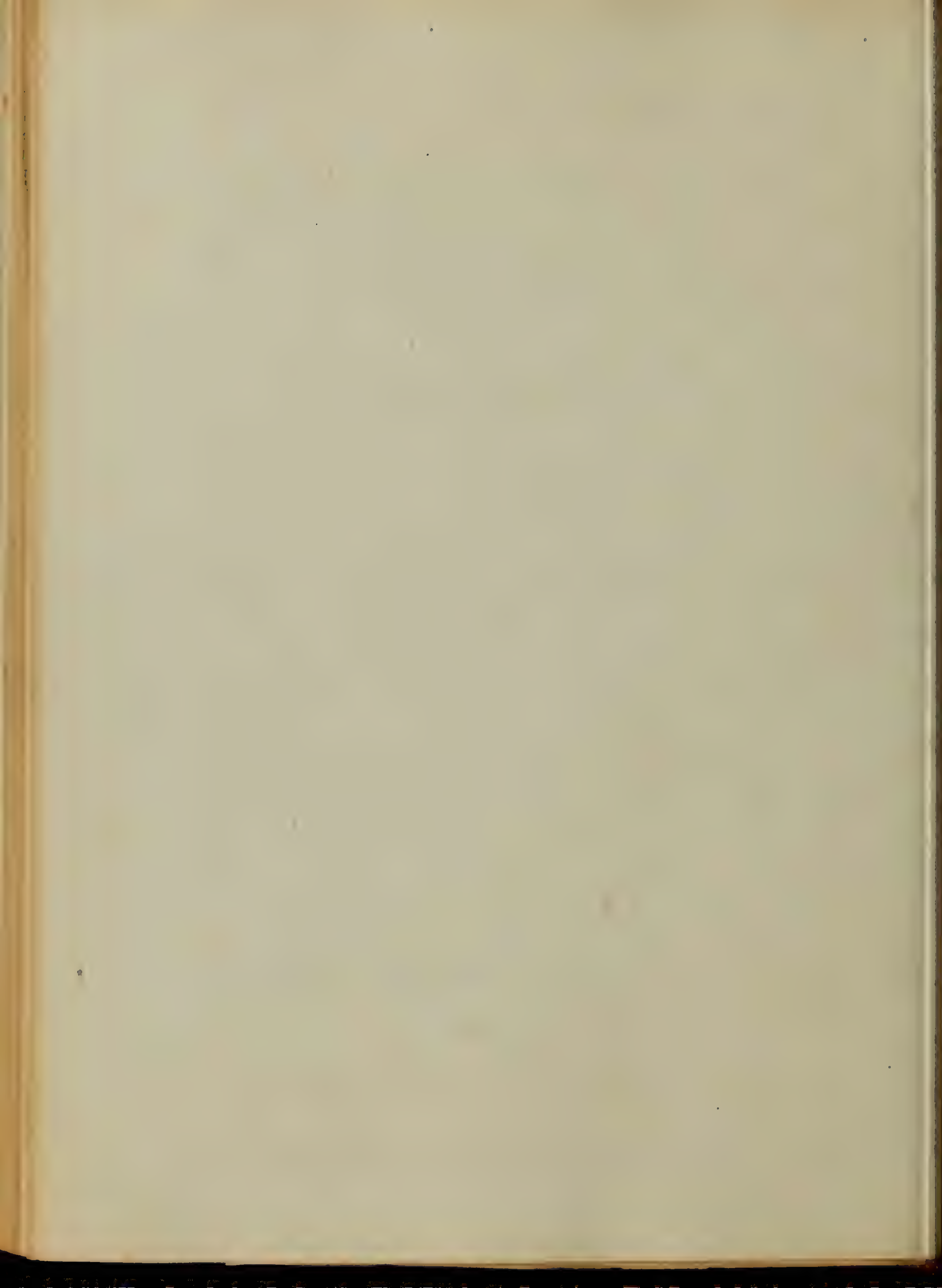


Age. The minimum was one year; maximum, 38; average of all attacked 's years; of fatal cases 9 years.
Sex - 11, or 22 per cent of those attacked, were females, of whom 5 died.
Race - 21, or 42 per cent were Blacks.
Relapse - occurred in but one case.
Duration - The average in favorable cases was two weeks - tho' in a few that recovered, convalescence was not established in less than three months. The average duration of fatal cases was 7 days.

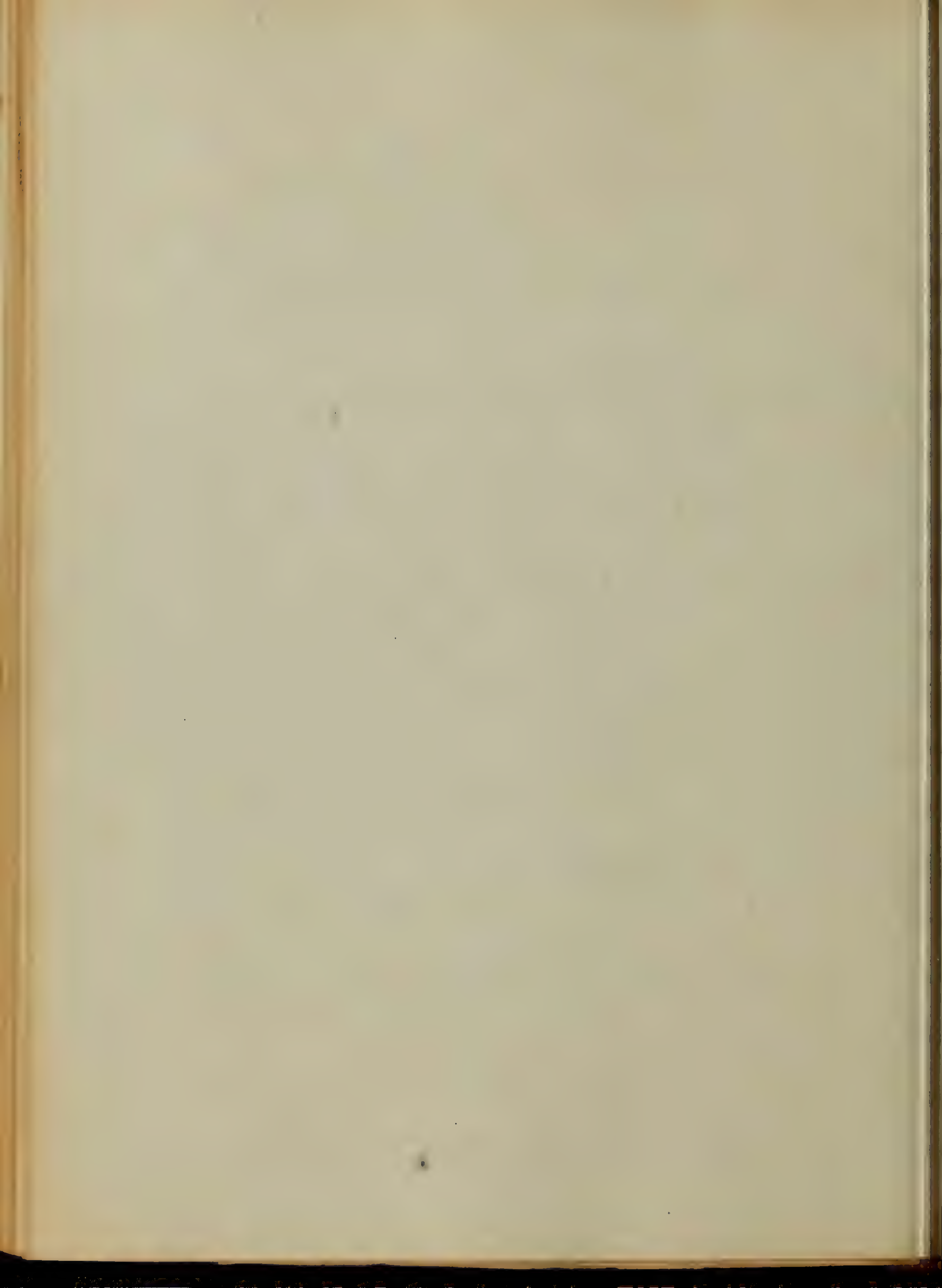
Sequelae - General muscular Paralysis, occurred in a child of three years, in which the exudation and constitutional disturbance otherwise was very slight. Functional derangement



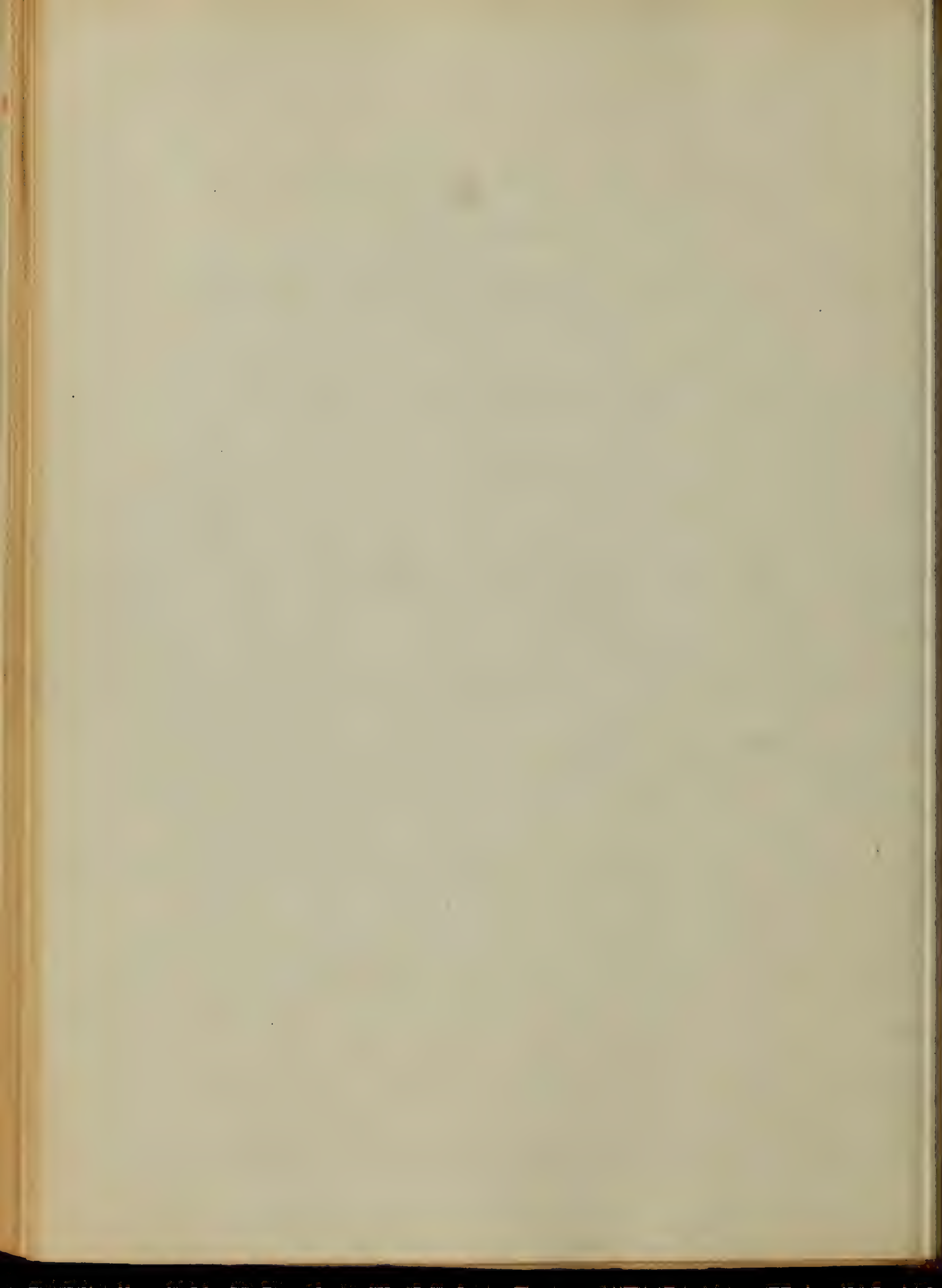
of vision, in two cases; and partial paralysis of the muscles of deglutition, with alteration of the voice, in one; all these finally recovered.

Mortality. Of the whole number 7, or 14 per cent, died – all of whom were whites. The mode of death was in three cases by asthenia; in two by strangulation, from the mechanical occlusion of the glottis by loose membrane and effused blood; and in two, by both asthenia, and asphyxia, combined, owing to the extension of the exudation to the glottis.

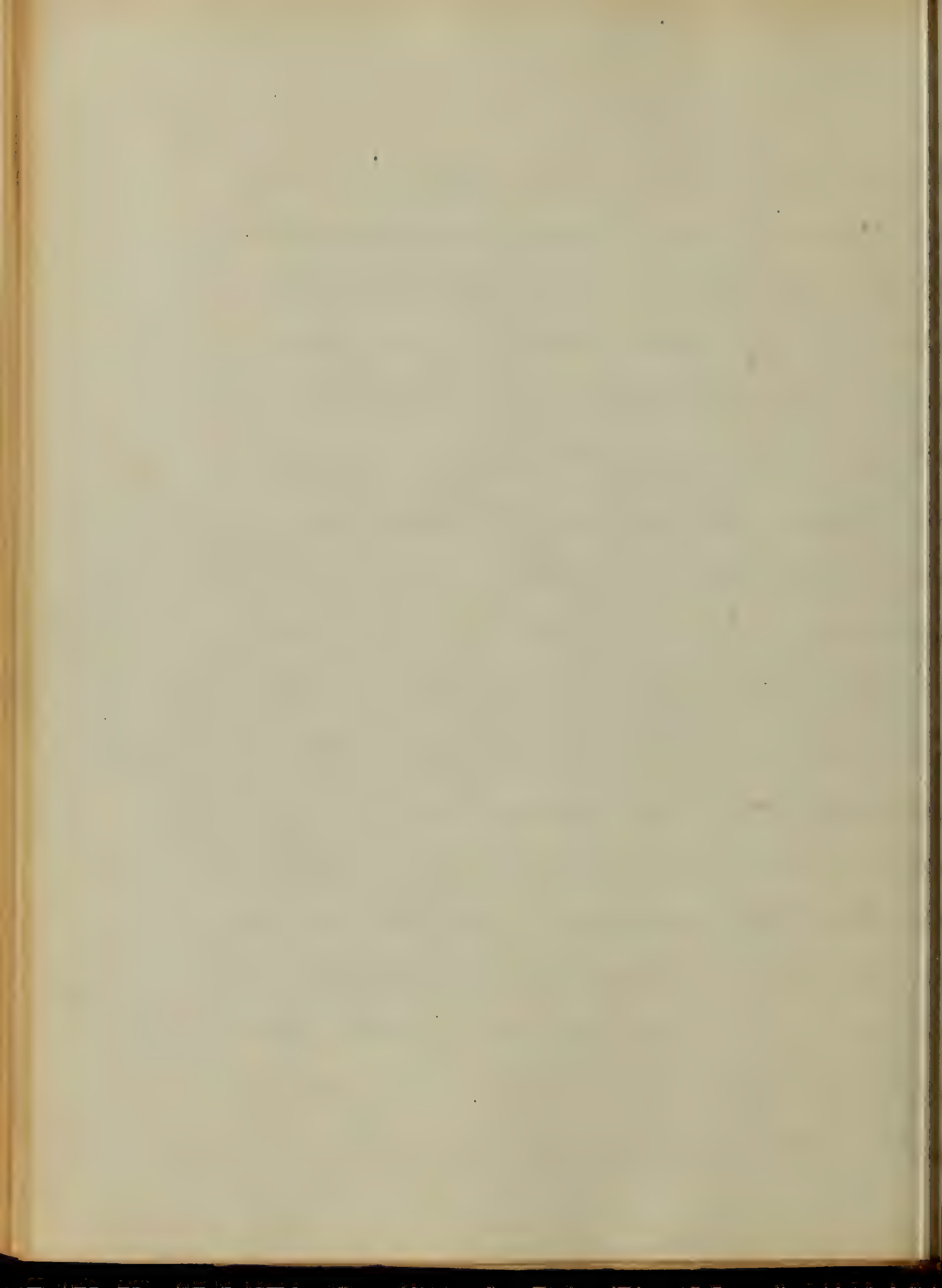
Is it contagious? Notes made at the time furnish an affirmative answer. They show that it is communicable both indirectly – by an infected atmosphere and directly, from contact with the



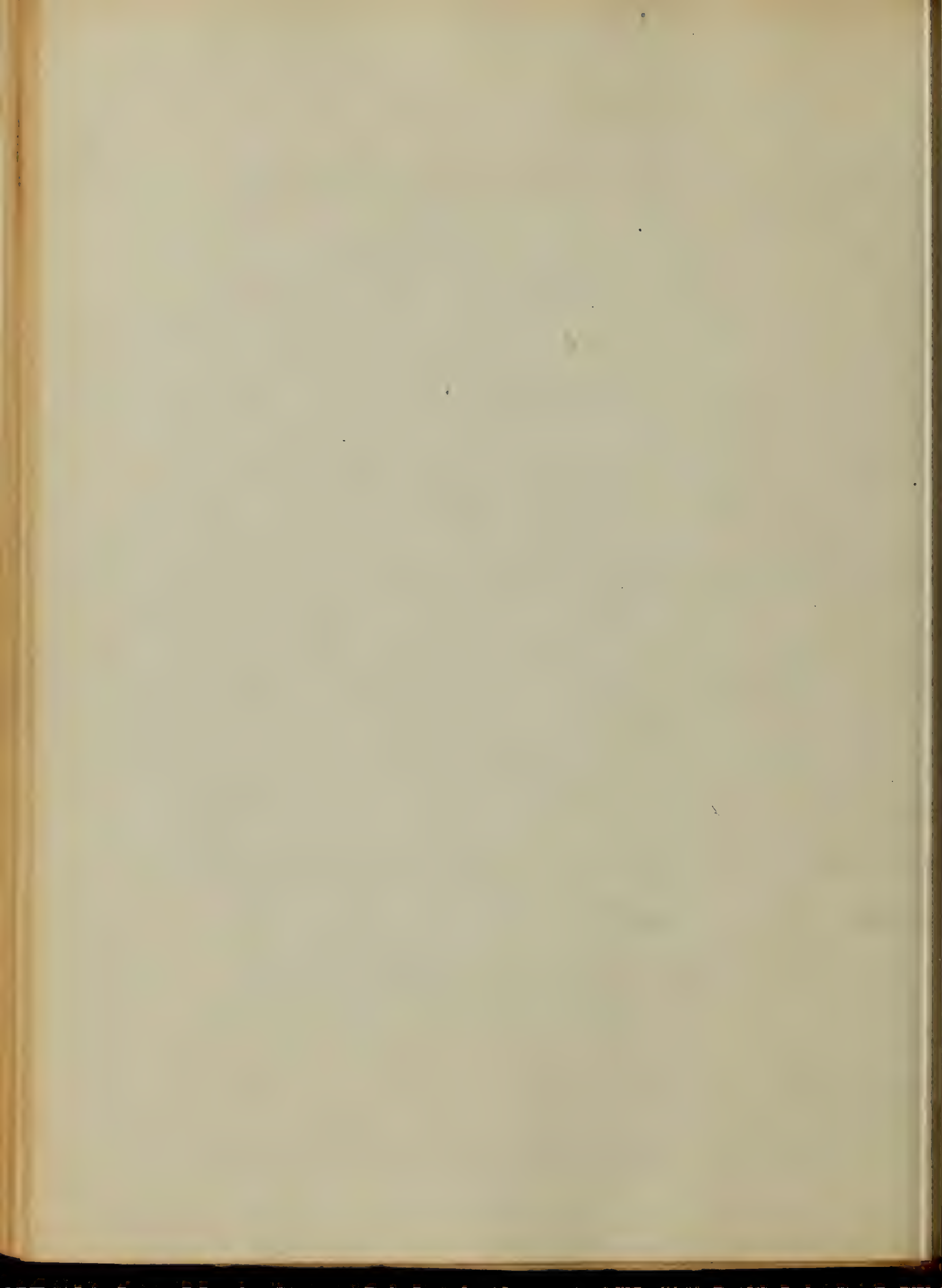
excretions of the sick. For instance a child
residing at P. F., and still suffering from
the disease visited a relative 7 miles distant.
The visitor sleeps with one of the relation's
children, & this child three days after is
attacked with the disease and dies,
thus occurred the first case in my neigh-
borhood. Again, a Lady in full health
visits a child sick with Diphtheria 10 miles
off; returns home and in a week is herself
attacked. All the early cases were thus trace-
able from house to house, and the members
of each were attacked in the order of their
exposure to those affected.
In proof of its inoculability, Dr Quinan
cites this singular instance as occurring in his own family. He says,
finding himself unable to syringe the
nares from without, effectually, he determined



to inject them from the posterior nares, and for this purpose adjusted a catheter to the nozzle of a syringe. To test its application he tried the instrument on his Eldest Son, who was perfectly well at the time, In withdrawing the instrument from his throat, the point of the catheter scratched the palate slightly. The morning of the following day, the boy complained of sore throat and upon examining it found a distinctly formed Diphtheritic deposit on the scratched palate - the false membrane hanging down in a loose thread a quarter of an inch long; the part was then freely cauterized and he had no other evidence of the infection. - Is it identical with Scarlatina? The evidence furnishes a negative answer. While there are some points of resemblance



lending some color to the idea that they may both be owing to some modification of the same specific cause - a resemblance to be found in the admitted fact that both are Blood-Diseases, with a tendency to localize themselves on the mucous membrane of the throat, yet I think no one at all familiar with the two diseases will fail to admit their essential difference. Many of the cases occurred in those who had previously been attacked with Scarlatina; & it is impossible to suppose that these were all second attacks of the latter disease which is of very rare occurrence. Again - two of the cases (my own Brother & Sister) three days after the Diphtheritic exudation was completely formed, were attacked with Scarlatina,

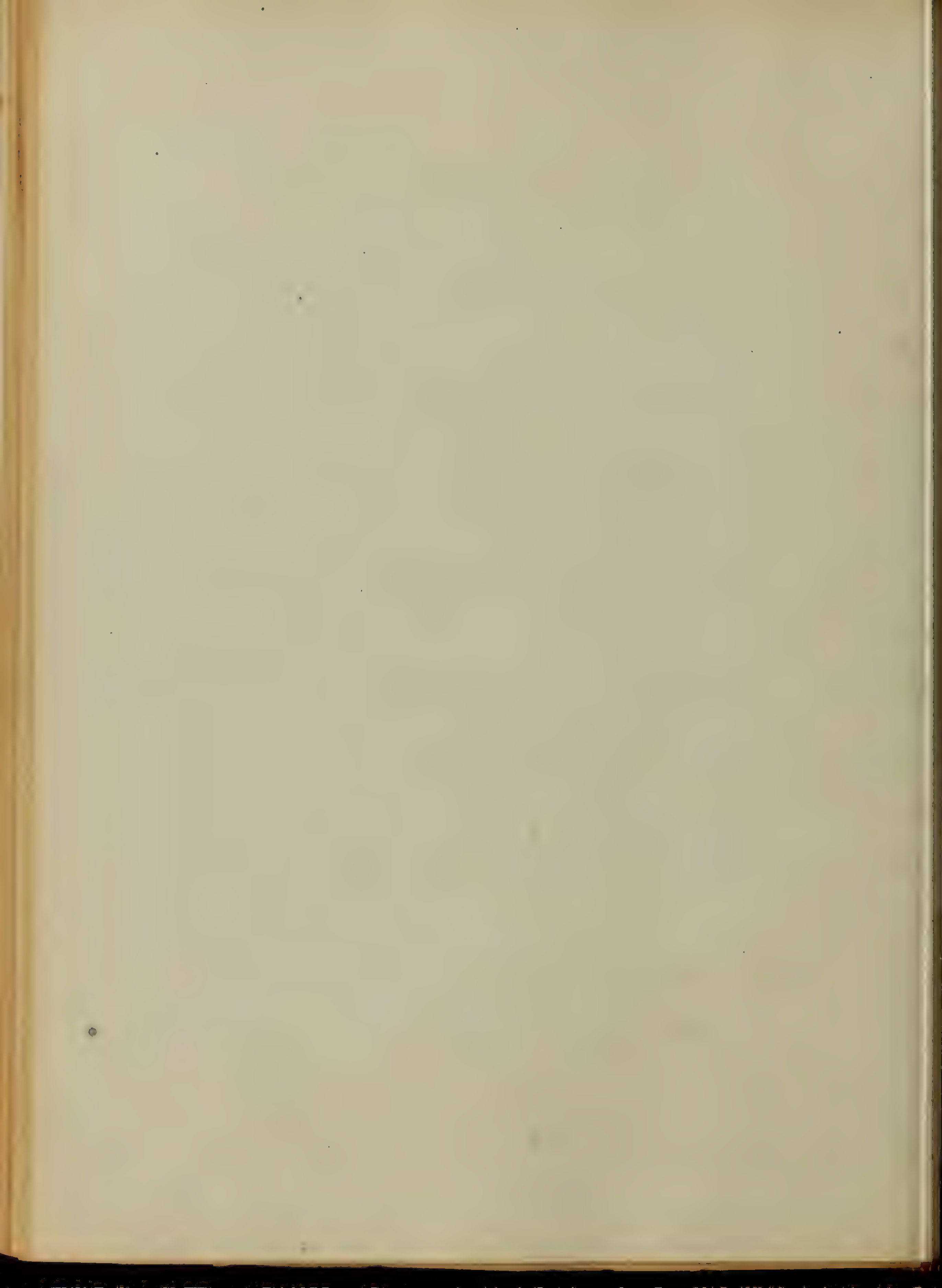


upon the occurrence of which, the Diphtheritic patches in the throat, rapidly resolved and disappeared. The Scarlet Fever pursued its course, but when it subsided, the false membranes of Diphtheria again appeared in the throat and the disease resumed its sway. To me these cases are conclusive of the non-identity of the two diseases.

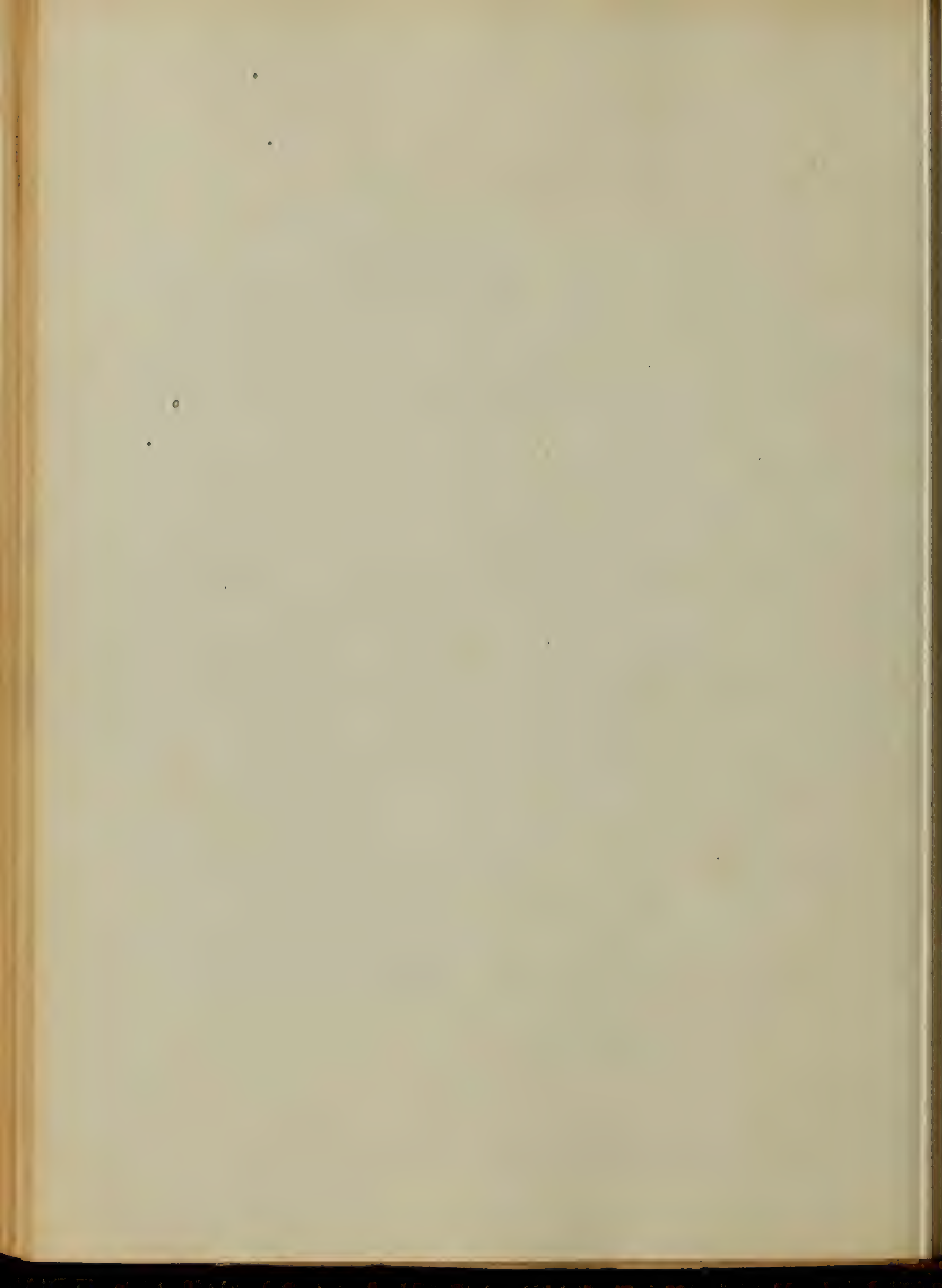
Albuminuria — In all the cases in which the condition of the urine was examined, it was found to be more or less albuminous - in one fatal case excessively so.

Diagnosis.

It was only during the forming stage and before the exudation made its appearance that the diagnosis offered



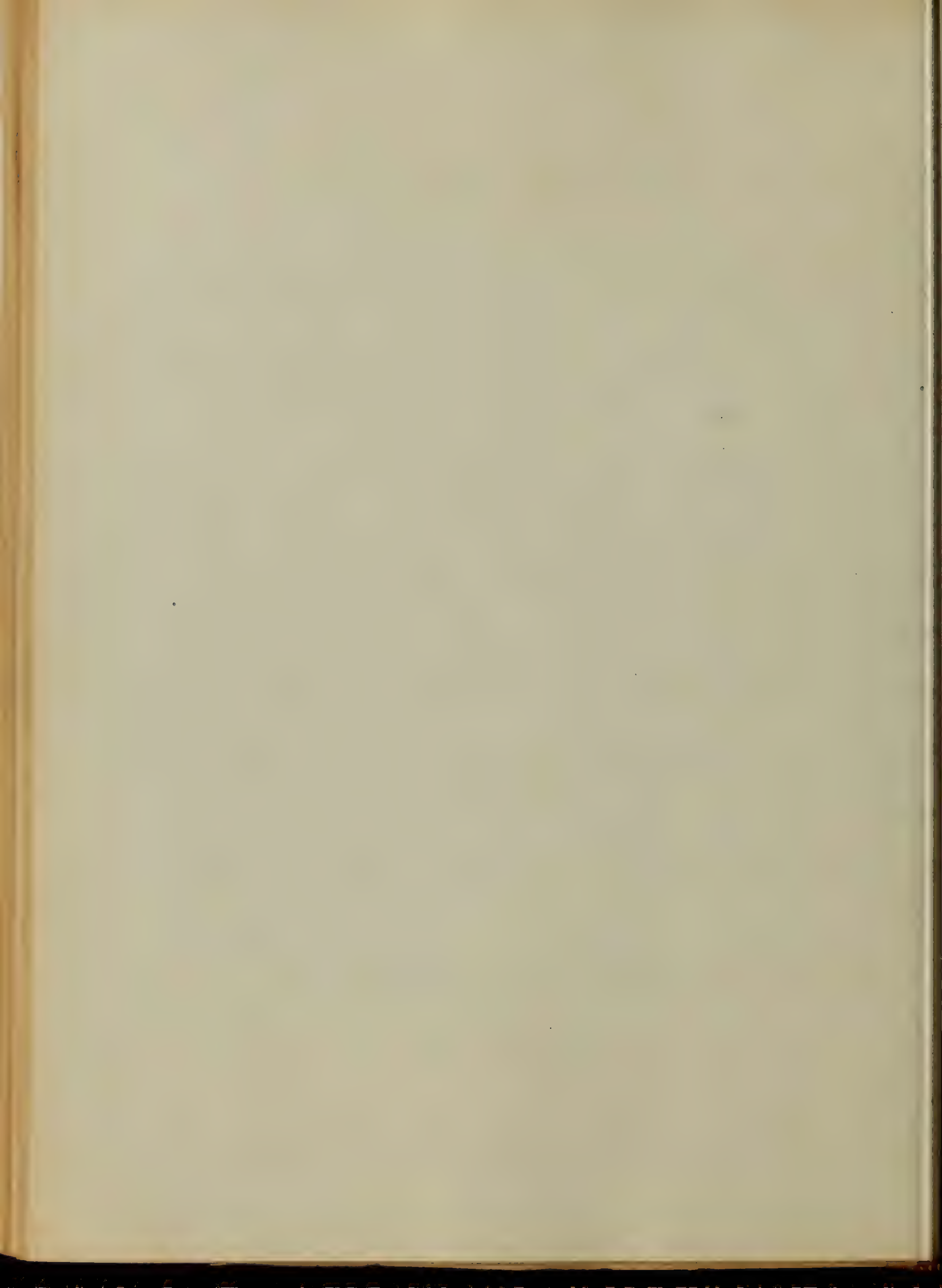
any difficulty. But whenever I (Dr Quinan) found the throat slightly swollen externally, with unequal swelling of the Tonsils, I looked upon the case as Diphtheria, & was seldom deceived. From True Croup, the Laryngeal form was readily distinguished, by the history of the case, the croupal symptoms being consecutive to those of the fauces. From Scarlatina it was distinguished by the absence of Rash, and still more, the freedom from all brain-symptoms. The Dr. cites a case as occurring in his own family, which better illustrates the course of this terrible scourge, & its fatal tendencies under the best directed treatment than any thing I have heretofore seen.
His youngest Daughter, aet. 12 years



Saturday Sept. 27th, for the 1st time exhibits languor, malaise, impaired appetite, flushed face, and accelerated pulse - Says "she feels badly but her throat is not sore", has no apparent difficulty in swallowing. Inspection of the fauces reveals slight inflammation of the soft palate and tumefaction of the Tonsils.

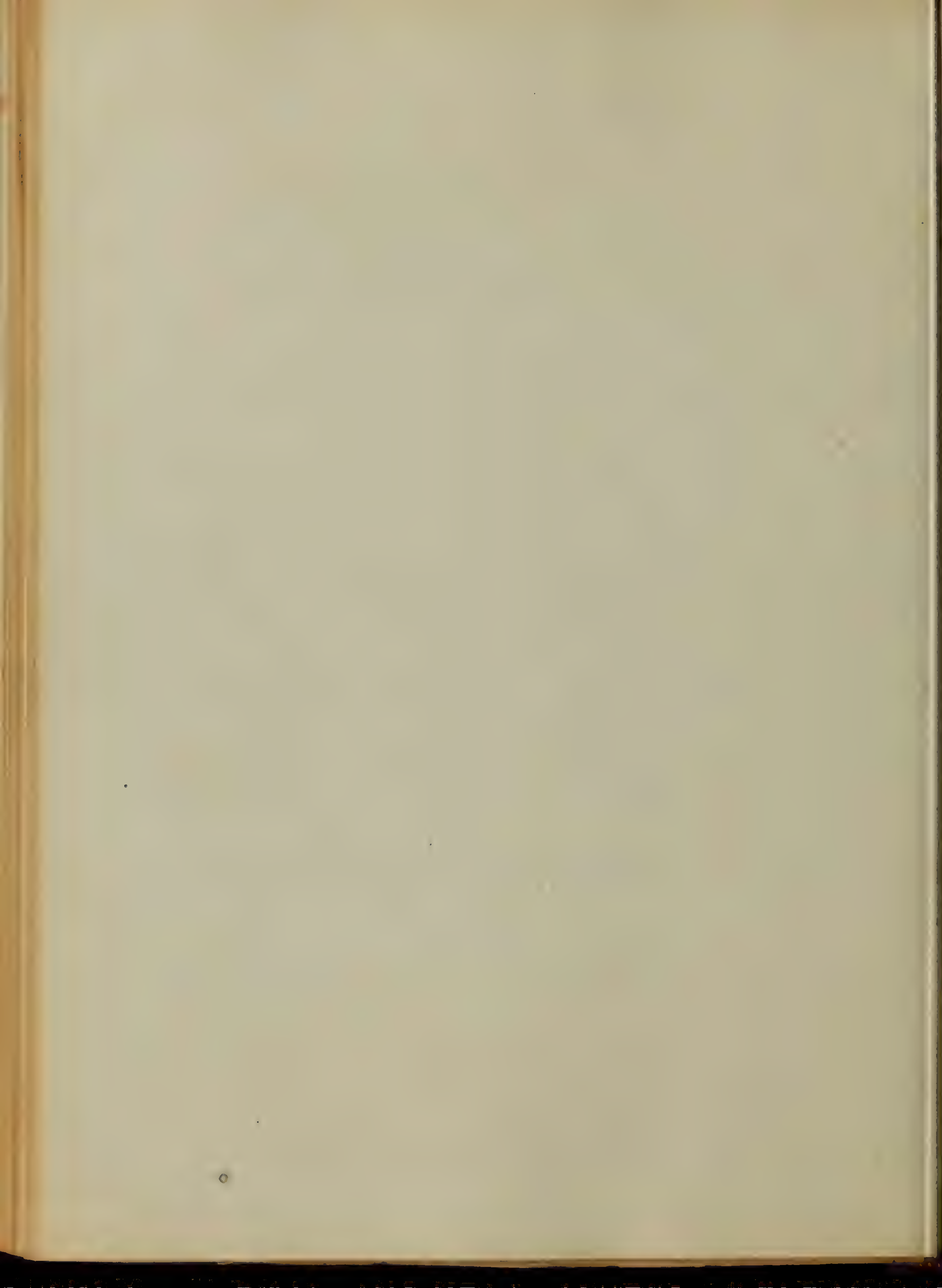
Sept. 28th. Considerable febrile excitement, skin hot and dry, pulse 120 but soft. Inflammation of the fauces of a claret color deepest along the free margin of the soft palate, left Tonsil more tumid, but looking paler than yesterday, owing perhaps to its being coated with a thin semi-transparent gluey deposit. deglutition still easy, mind clear.

29th. General symptoms the same;



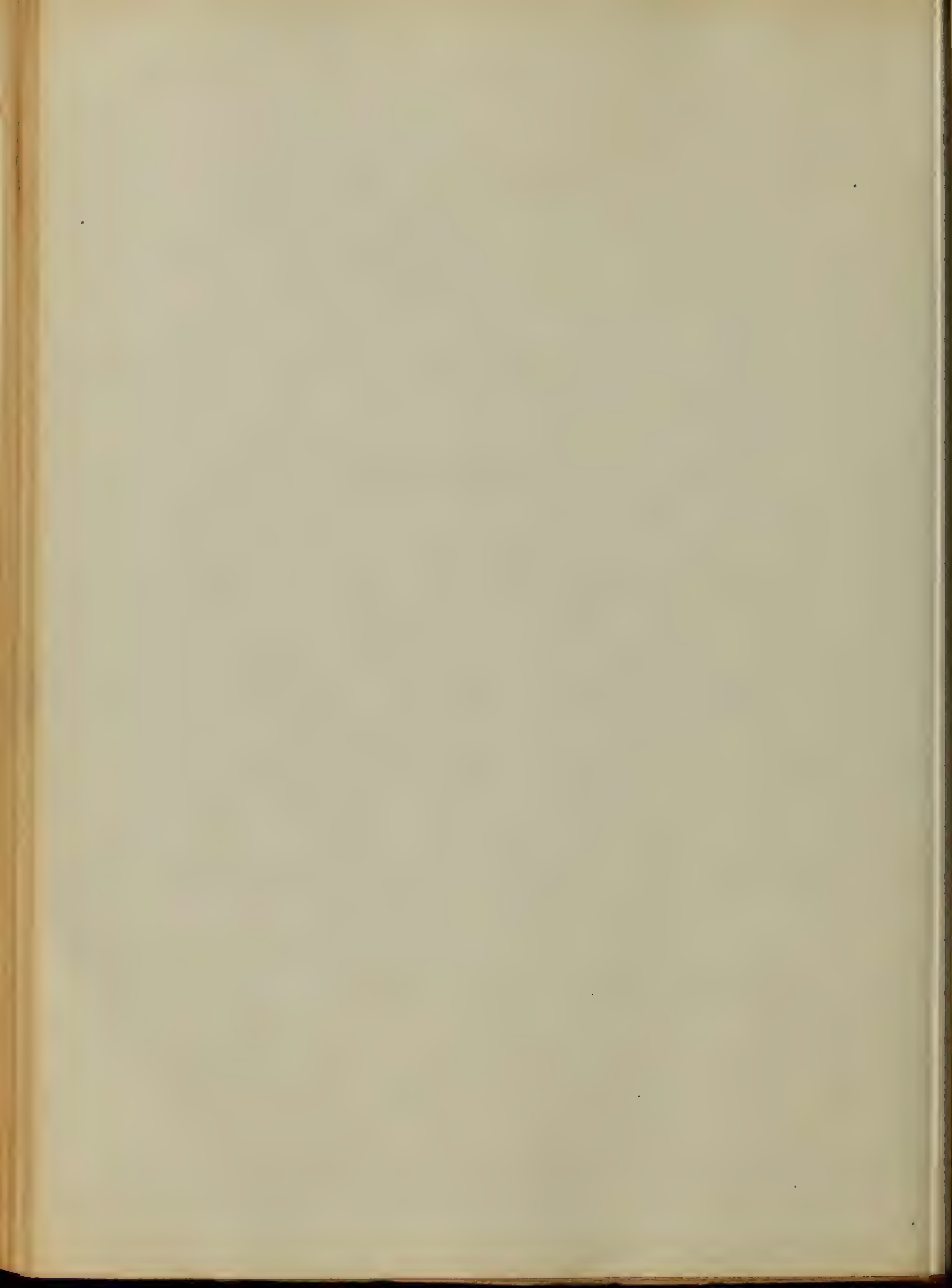
cellular tissue of the left side of the neck externally swollen, left Tonsil more tumid, and covered for the space of a 3 cent piece with an opaque, dirty-yellow deposit. — 30th. Pyrexia abated, pulse 100, mind clear, some dysphagia, voice husky, tumefaction of neck externally, greatly increased extending from the chin and angle of the jaw to the clavicle, the swelling is hard and resisting but not painful to pressure; fauces internally inflamed, exudation completely covers left Tonsil, & is extending to the right Tonsil & Uvula.

Oct. 1st. Symptoms same, save the recurrence of an exacerbation of fever about 10 O'clock - coinciding with tumefaction of the right side of neck.



exudation on the left Tonsil is black, dense, that on the right Tonsil, soft-palate & uvula, is still of soft consistence and dirty-yellow hue. dysphagia greater, mind unaffected.

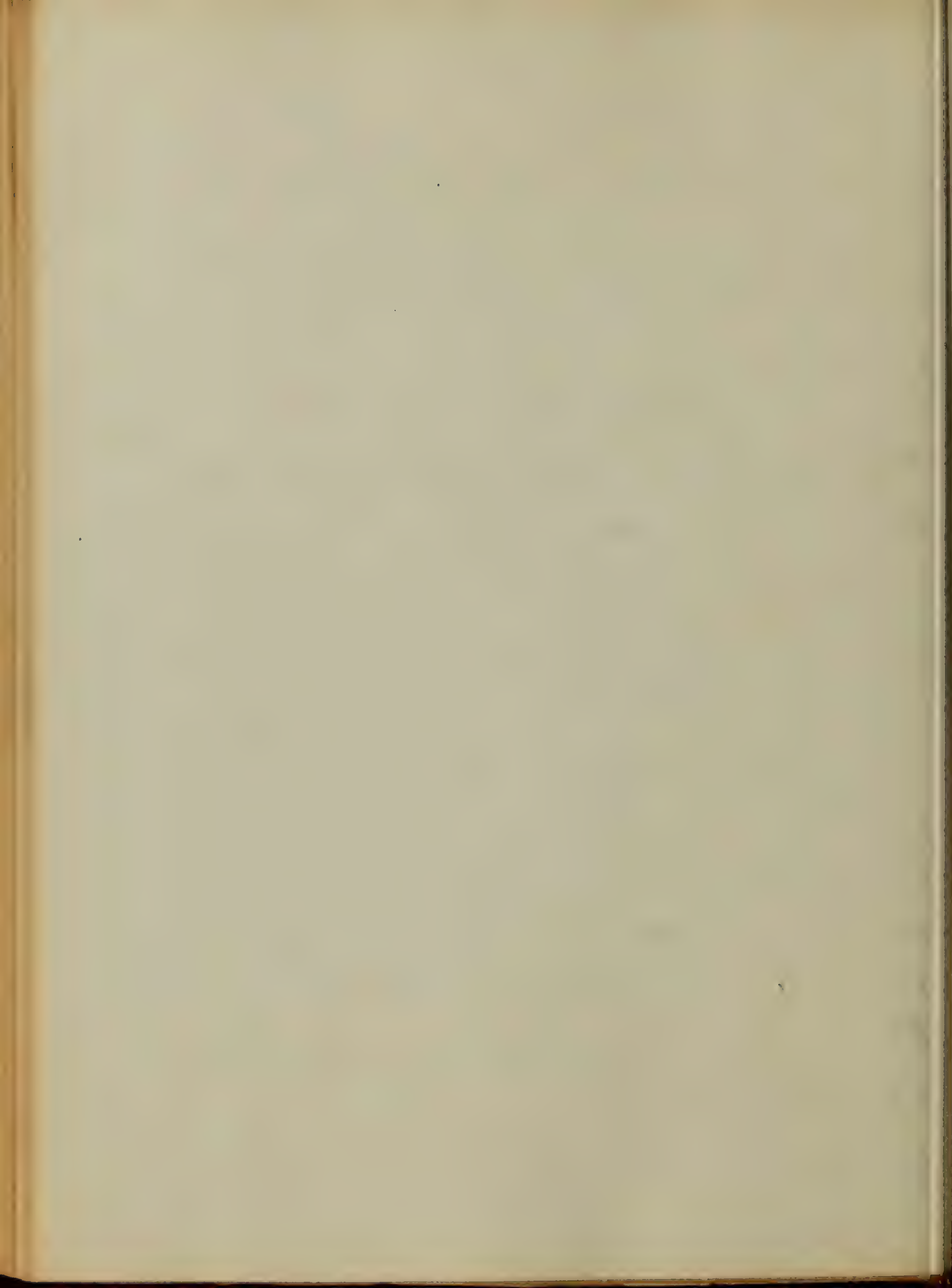
Oct. 2nd. Pulse 130 soft and feeble, deglutition very difficult and painful, fluids when she attempts to drink, regurgitate through the nares, right side of neck more swollen, left side unabated, exudation on left Tonsil sloughing, and expelled in shreds mixed with dark bloody excretion, breath fetid, complains of dysuria and gastric pain. Oct. 3d. Pulse 140, face pale and for the first time looks anxious, these symptoms continued until early the following morning while attempting to clear her



throat of the loose shreds which had there collected, the air passages were entirely closed and she died of strangulation.

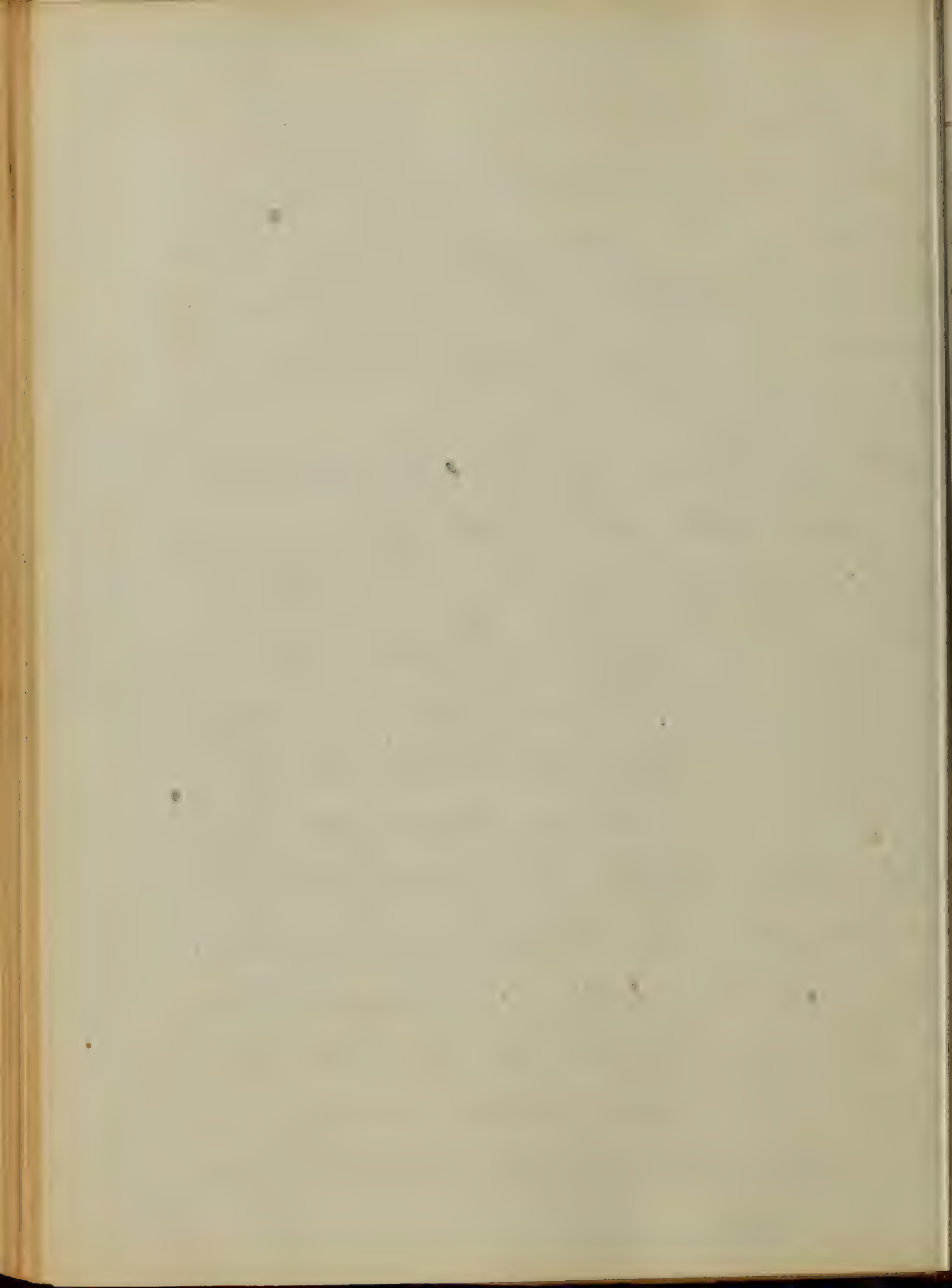
Treatment.

As soon as the Diphthenitic exudation was seen, the parts were touched with a strong solution of Nitrate of Silver; at the same time the system was strengthened as much as possible by the internal administration of Muriated Tincture of Iron, and concentrated liquid food, in order that it might the better combat the inroads of the diphtheritic virus. Chlorate of Potash being freely administered both internally & also as a gargle.

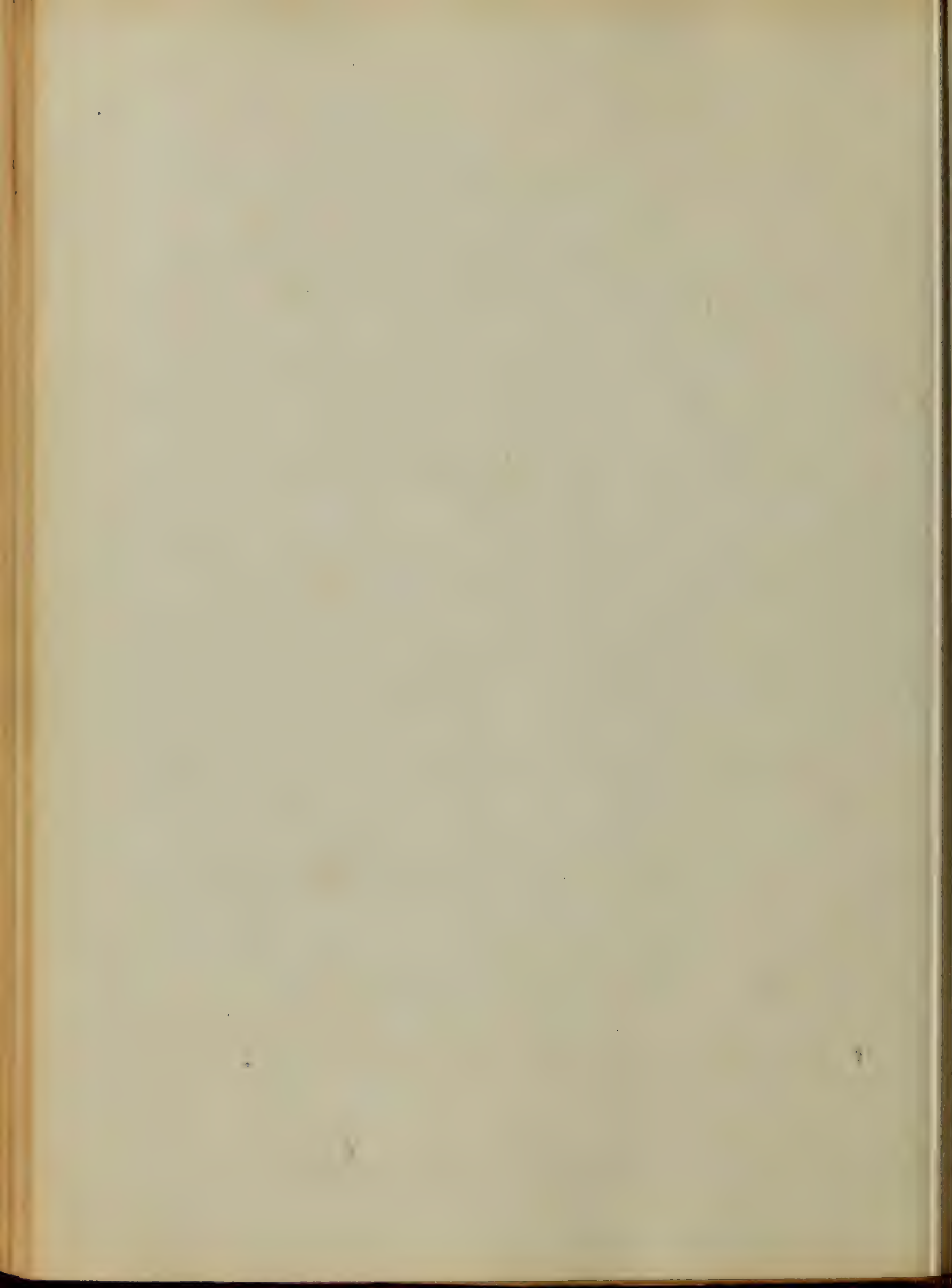


This line of treatment in a majority of cases proved successful. The symptoms of Diphtheria are prominent and require separate and distinct treatment

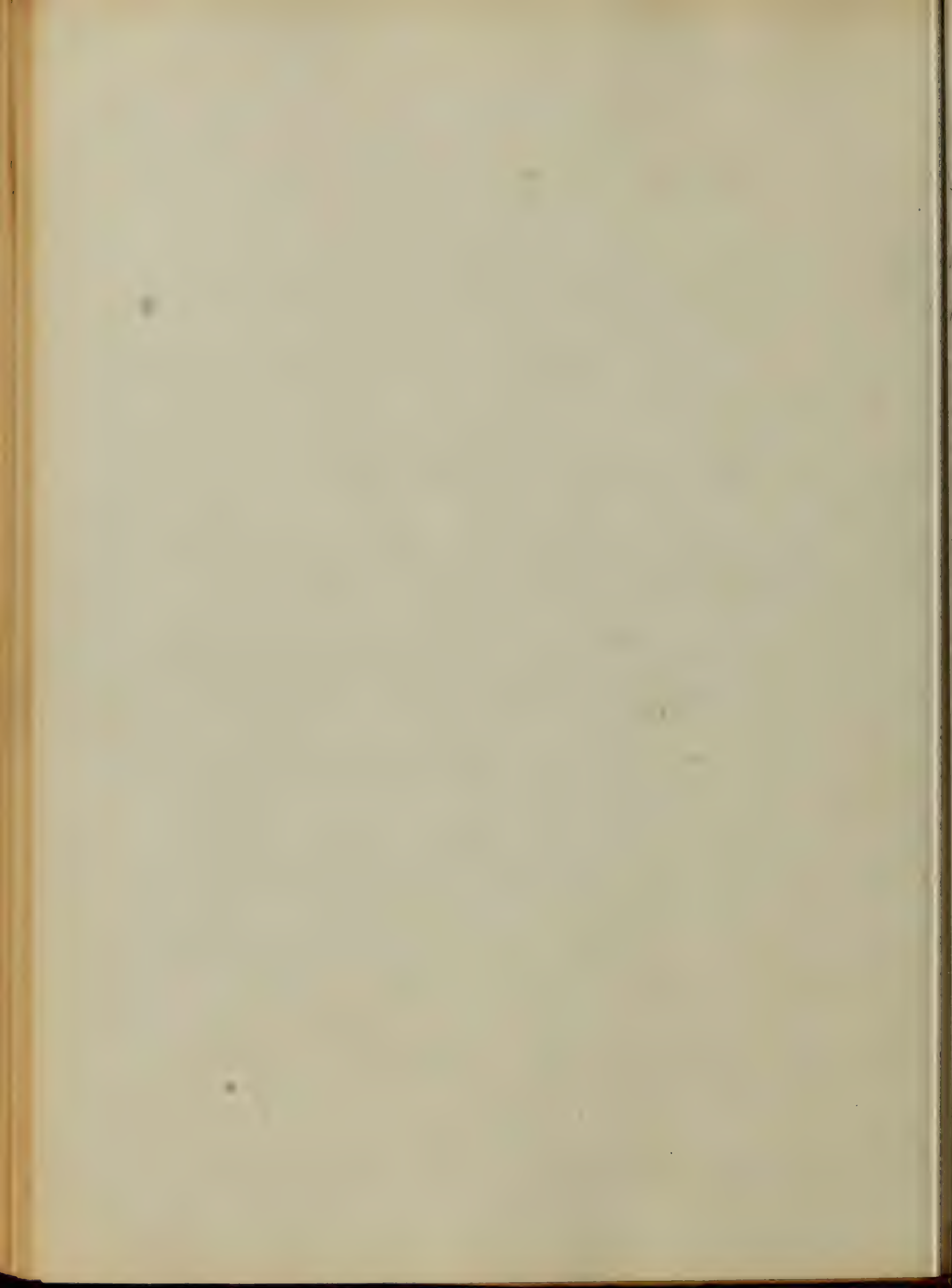
The first symptom that meets the eye of the attendant is the flushed face and rapid pulse – known as Fever. This requires special treatment, such as the free administration of refrigerants and diaphoretics; the nervous system must be quieted and the situation of the patient made as comfortable as possible. Next we find a grayish-white exudation cropping out upon the Tonsils, Soft Palate, and Pharynx in little rounded patches not larger than a pin's point, these small points



rapidly becoming larger, soon cover the Pharynx, Tonsils and not unfrequently invading the Larynx and Nares. This condition demands bold and persistent treatment; the parts thus affected must be thoroughly brushed with strong cauterizing agents, hoping by this means to stay the progress of the exudation, destroy its vitality, produce contraction of its substance, and exfoliation from its bed. The remedies recommended for this purpose are - Nitrate of Silver, Muriatic Acid, Tr. of the Chloride of Iron, and the Subsulphate of Iron. ([illegible])
Prof. Howard in his able Lecture on Diphtheria recommended very highly the following -
Liquor Ferri Subsulphatis; Glycerinae



āā ℥ij, Acidum Carbolicum grs.v.
aqua q.s. ft. ℥vj M.
In verification of the efficacy of this treat-
ment, I had an opportunity of examining
a Diphtheritic membrane expelled
from the throat of one of Dr. Kloman's
patients a few days ago; the membrane
measured at least 2½ inches in length
and 1½ in width, preserving accurately
the form of the Pharynx and Tonsils; it was firm,
dense, and elastic; under the microscope
it exhibited many corpuscles with
excess of fibrin. On this patient was
used the pure Liquor Ferri Subsulpha-
tis, with the following results:—
The exudation soon lost its vitality
and tendency to extend further; con-
tracted rapidly upon itself, and was

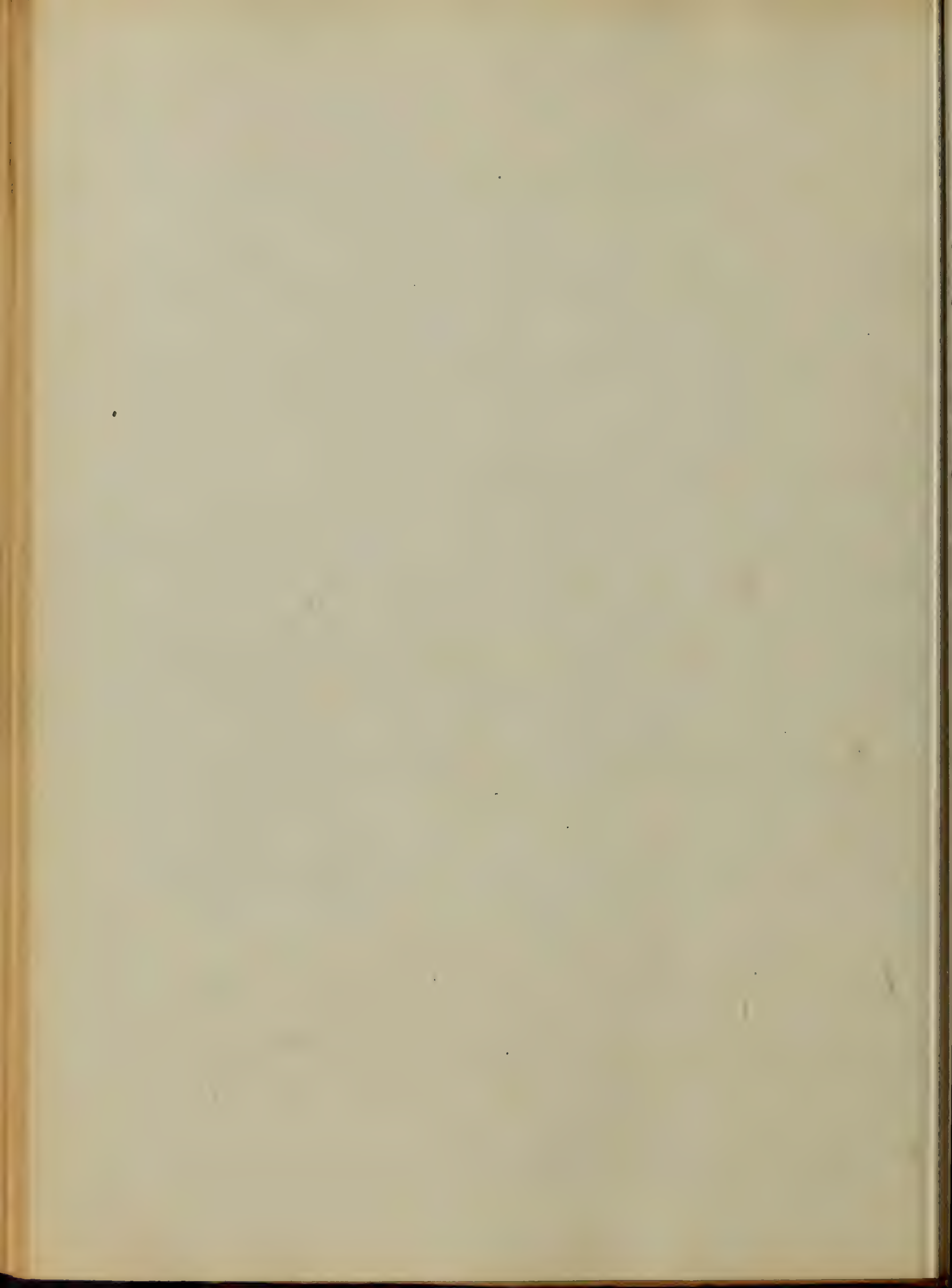


soon expelled; no hemorrhage whatever followed its expulsion; the underlying surface presented the appearance of scar tissue, having been stripped of its epithelium and mucous membrane. - There was no tendency to reformation.

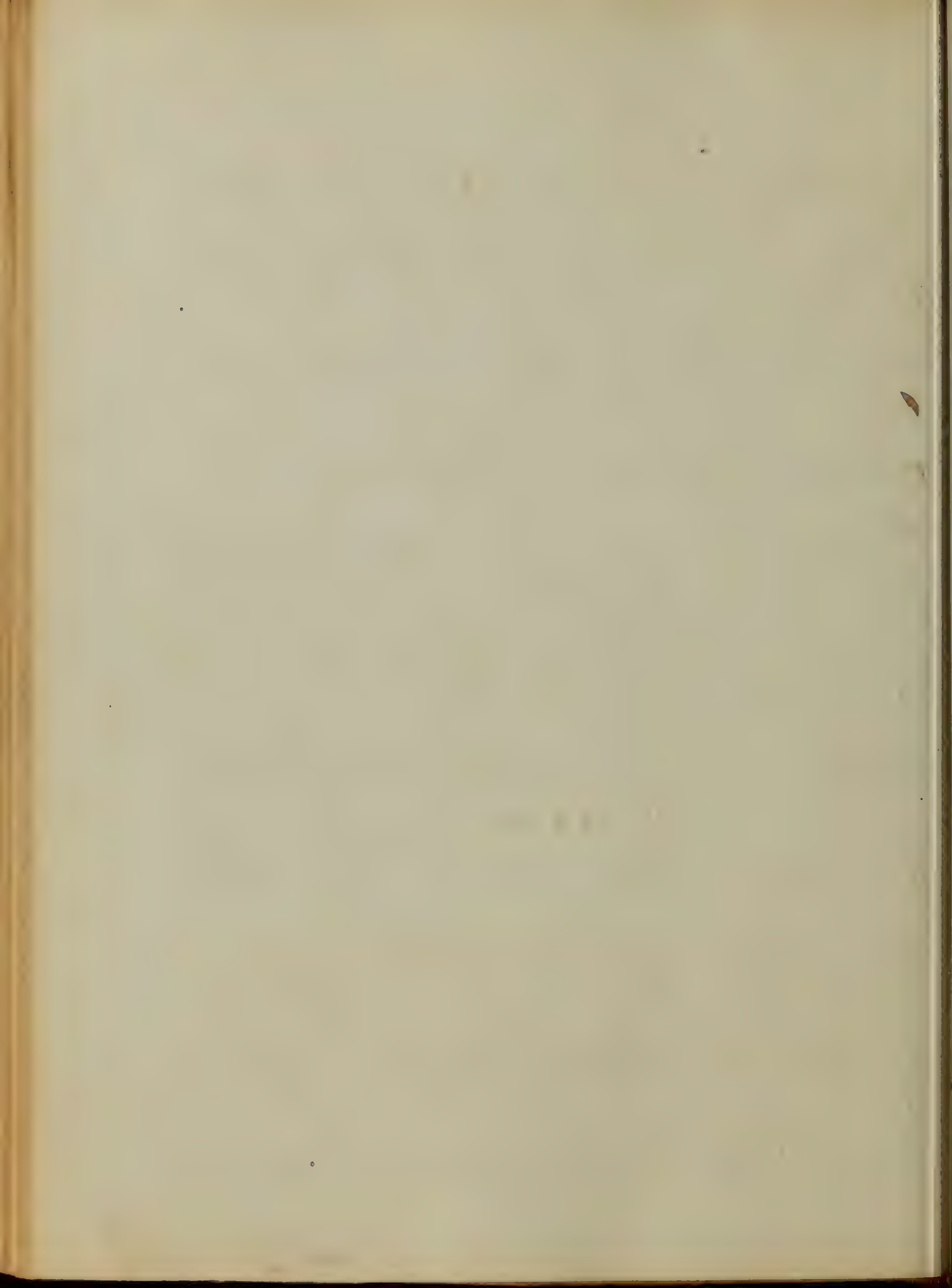
Is it safe to use Mercury in Diphtheria?

All writers on this subject agree in saying that it is not only useless, but a dangerous remedy. I, however, beg leave to differ with them, because I know that in many cases it is not only safe but a most valuable remedy, therefore I do not accept their dogmas.

West, of London, and Meigs and Pepper in their works on the Diseases of Children recognize no difference between True Croup and Diphtheria, contending

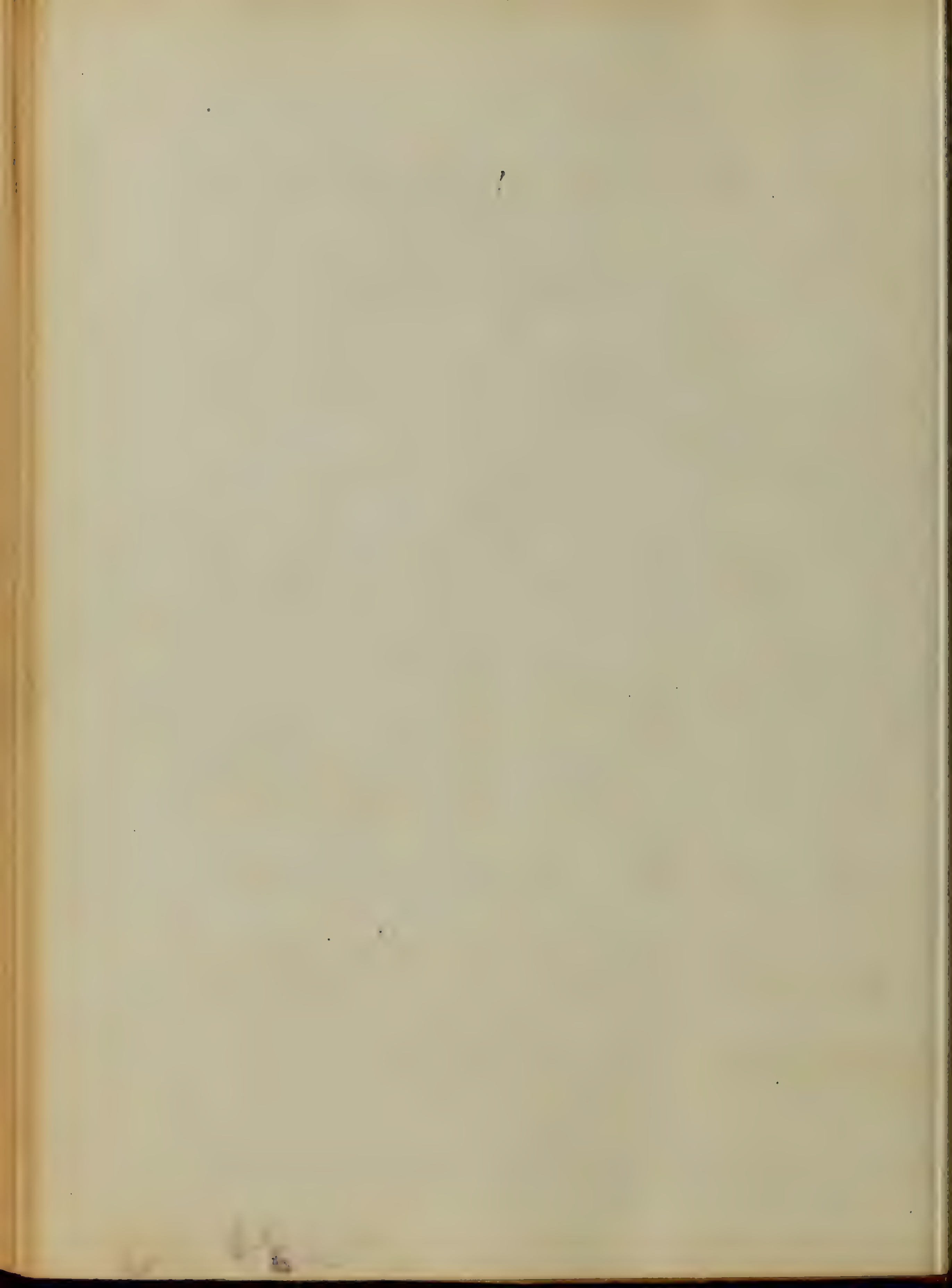


that they are one and the same disease, differing only in grade — but mark the difference in the treatment.
In True Croup, they advise the use of Calomel, while in Diphtheria, they contend, it is contra-indicated.
Again, they acknowledge the exudation to be highly fibrinous, if this be so, (and the microscope certainly substantiates the fact) and if Mercury is a destroyer of fibrin, as it is universally acknowledged to be, why then should it not be used in a disease where the fibrin is in excess and deposited in such quantities as not only to threaten, but often to destroy life, by occluding the air passages and cutting off respiration? Or, why should it be indicated



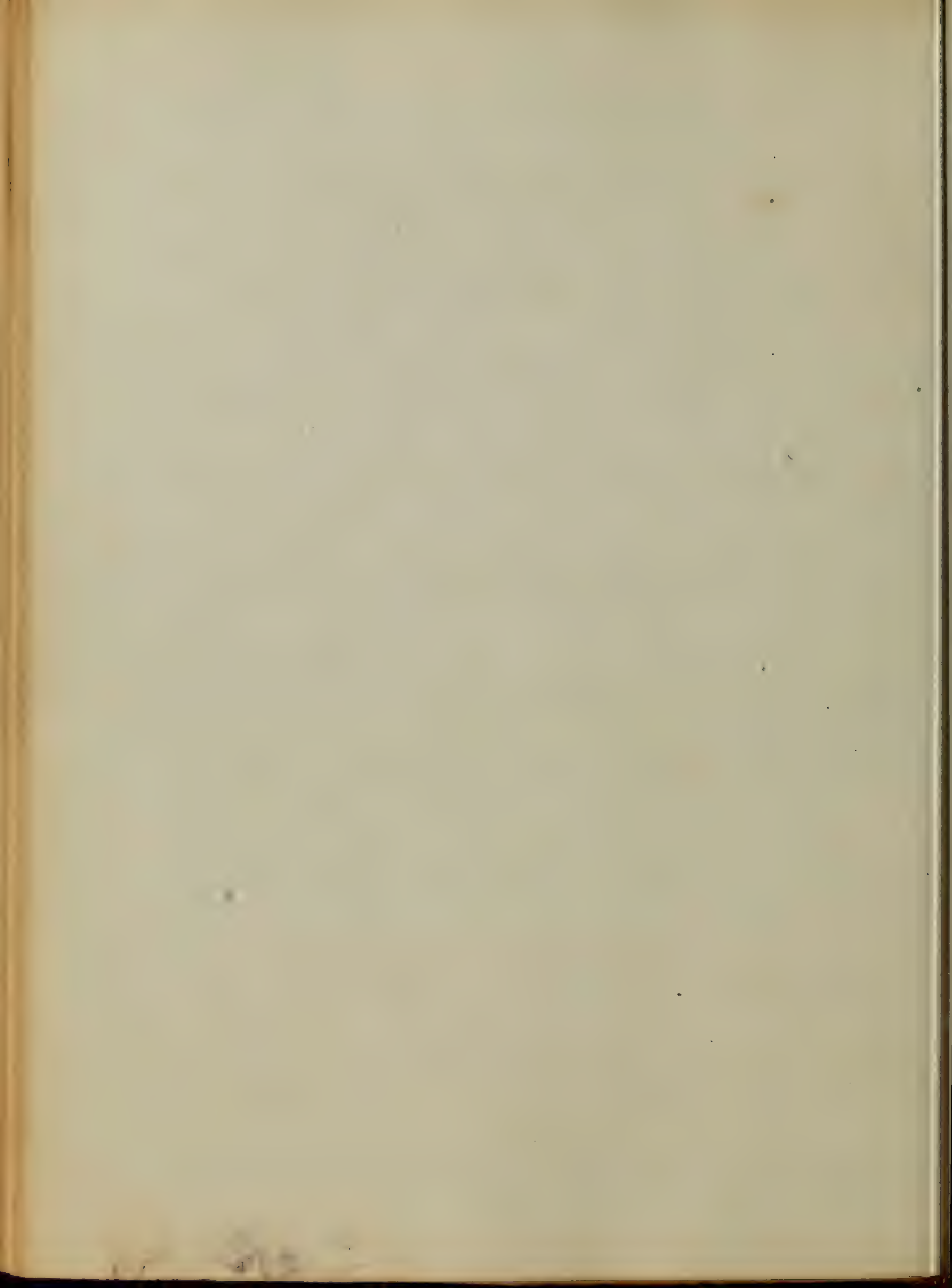
in True Croup and Contra-indicated in Diphtheria when they are similar diseases? I feel a delicacy in attempting to uphold the use of a drug, so loudly decryed by men whom I acknowledge to be my superiors, yet I do it from a conscientious motive, backed by practical observation. I will here cite a case from memory illustrative of its beneficial effects.

One of my acquaintances was taken sick with Diphtheria, Dr Quinan was the attending physician, he at once recognized the disease and adopted the treatment generally employed, but without success. The Exudation was thrown out in greater quantities & invaded the Pharynx, Larynx, Fauces, and

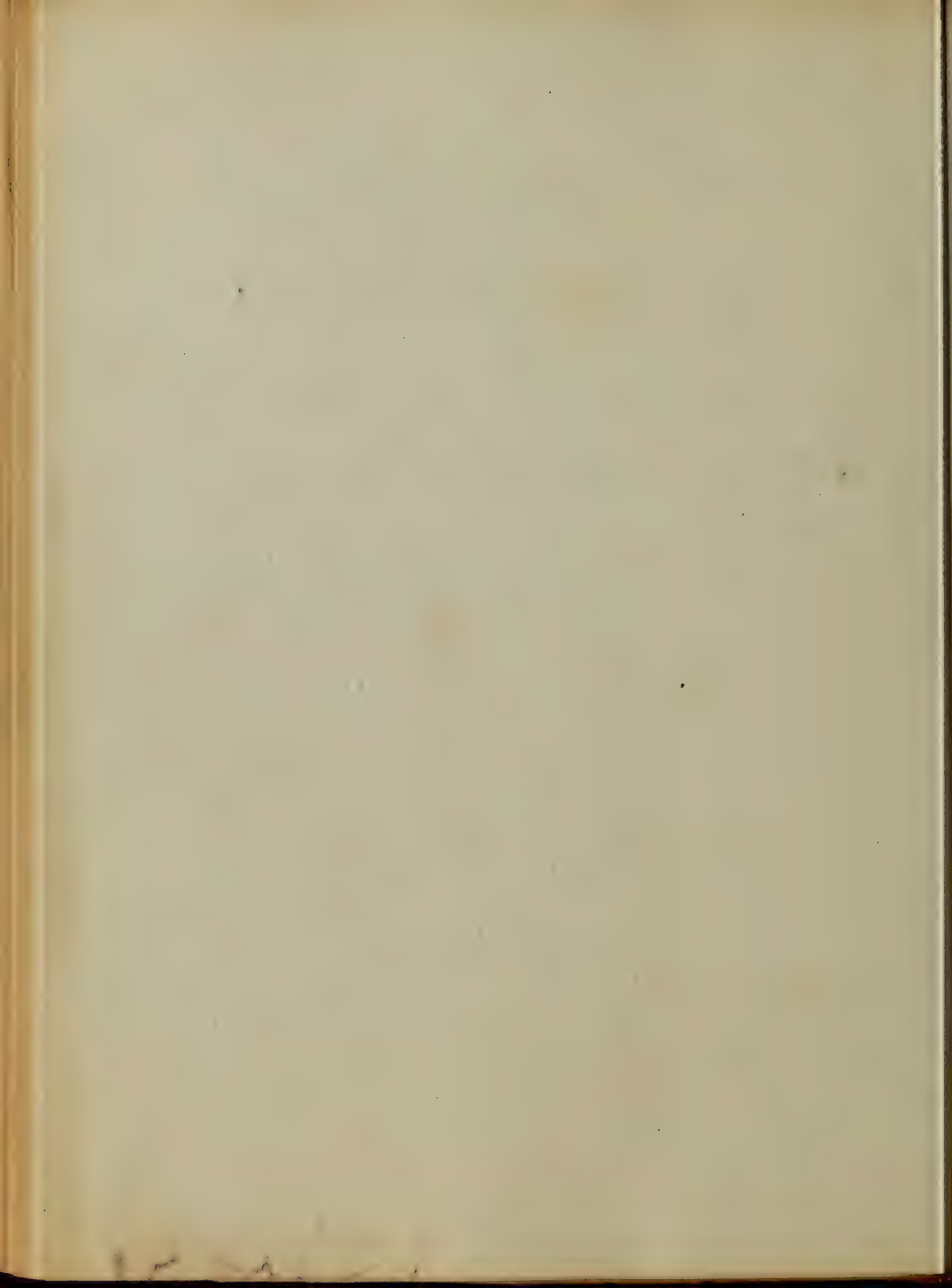


Nares; the fever ran high; in short, all the symptoms continued to augment in severity; all remedies heretofore given proved futile, Mercury was then administered as a "dernier resort," & given in broken doses every 2 hours; no sooner had the system been brought under its influence, than the exudation ceased to extend and convalescence began.

While this local affection, which is really horrible in itself, demands prompt & constant attention, yet the general system must not be overlooked, but sustained in every possible manner by the administration of tonics, stimulants, and food in a concentrated form. To affect this end, Prof. Howard recommends the free use of Quinine



and the Muriated Tr. of Iron.
The sequelae attendant upon the
disease must be treated on general
principles.
Prophylaxis — a gargle of Chloride
of Sodium and water to be used
ter die —



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On [illegible]

Presented

to the

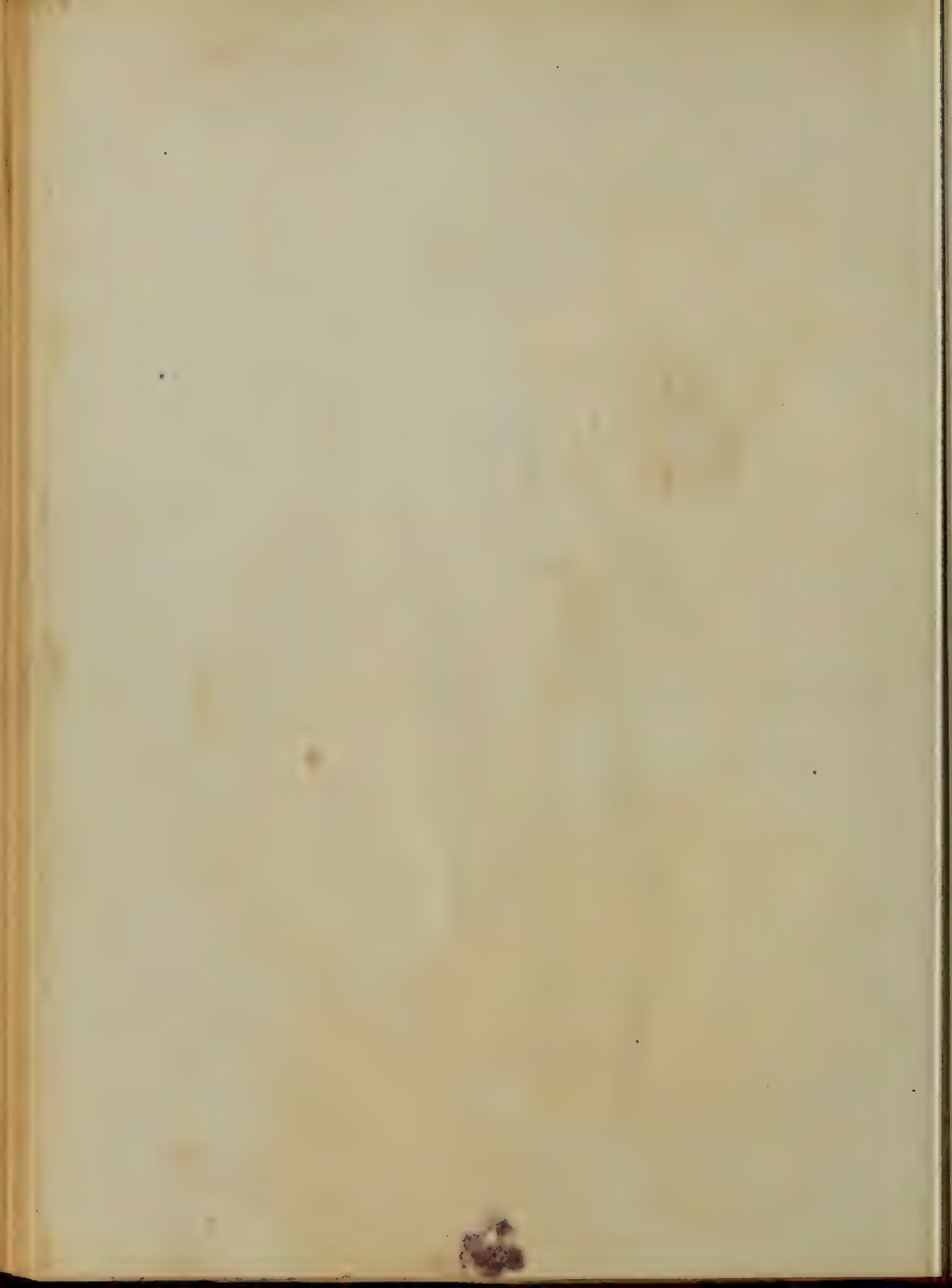
Medical Faculty of the

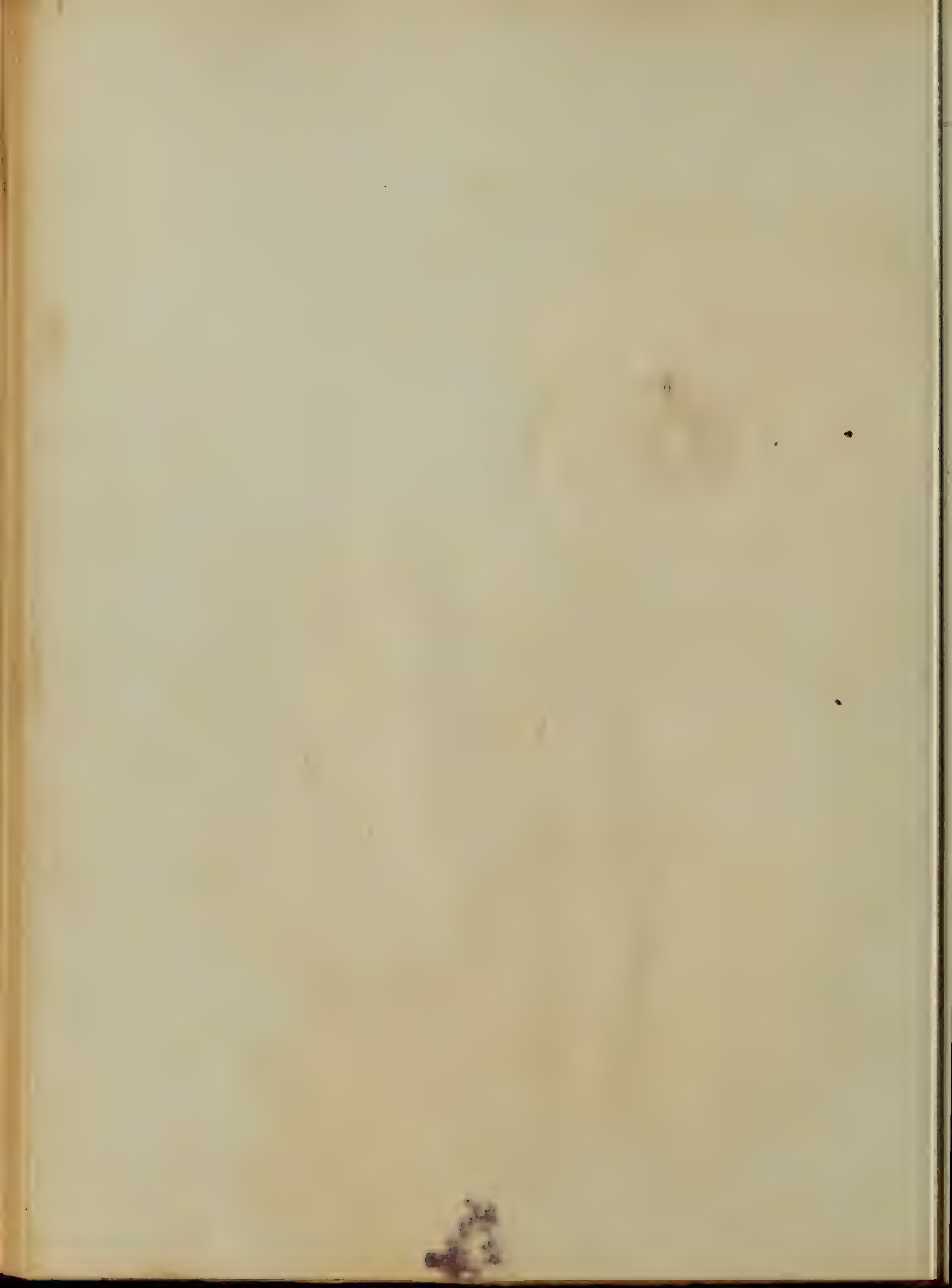
University of Maryland

By

C. L. Alexander of Georgia.

Session of 187[illegible]-7[illegible].





[illegible]

of Black [illegible], [illegible]

[illegible]

[illegible],

yms, first attracted attention as a distinct disease, in the United States about the year 180[illegible]. Prior to this period, no mention of it, as a distinct and separate disease,

[illegible] author. [illegible]

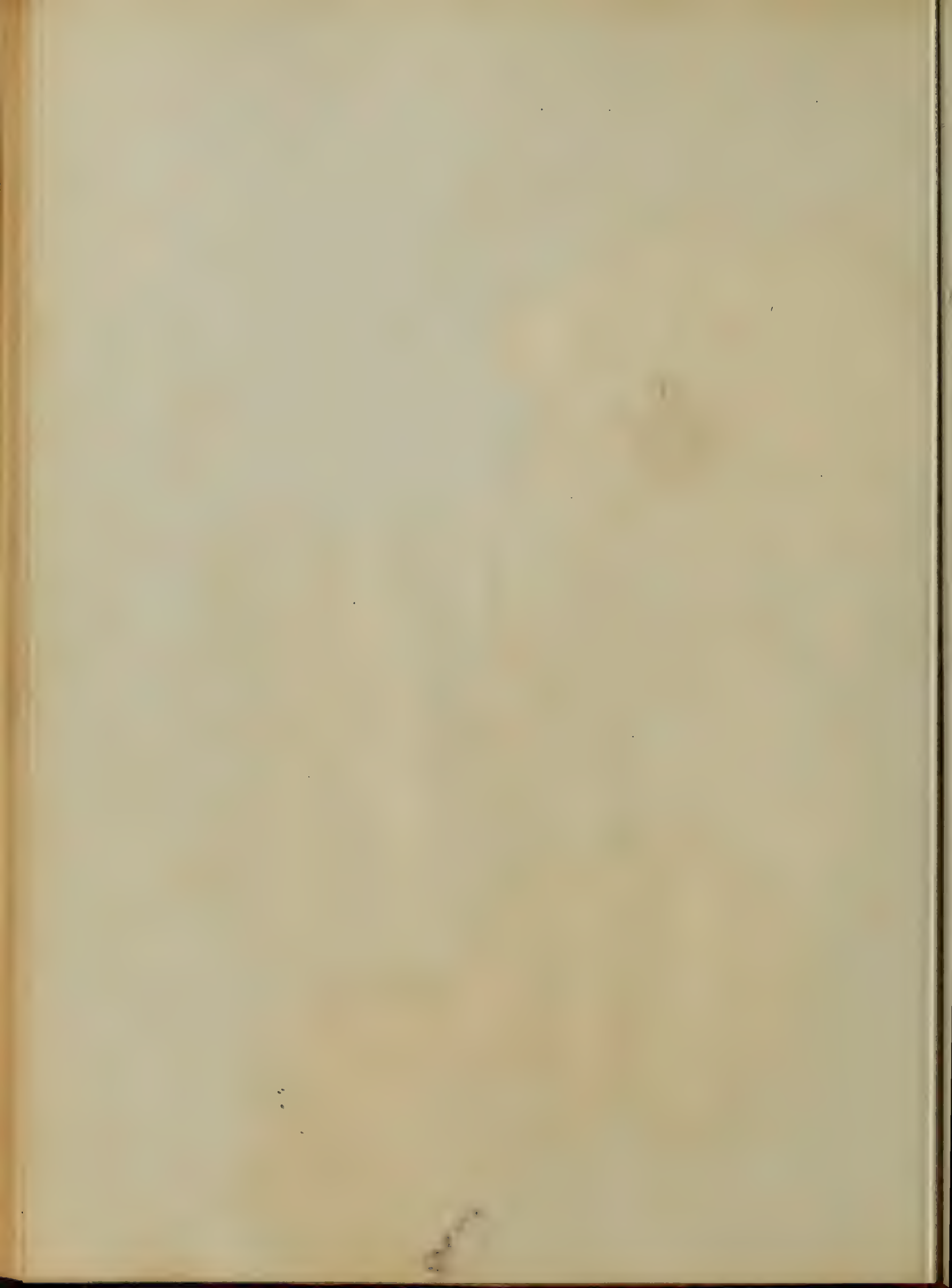
[illegible]

[illegible] of the human [illegible]

[illegible]

[illegible] disease, and [illegible]

[illegible]



[illegible]

[illegible]

[illegible] to establish its ex-
istence in some of the Malarious
regions beyond the Atlantic for
many years. He is satisfied,
[illegible]

[illegible]

[illegible]

[illegible]

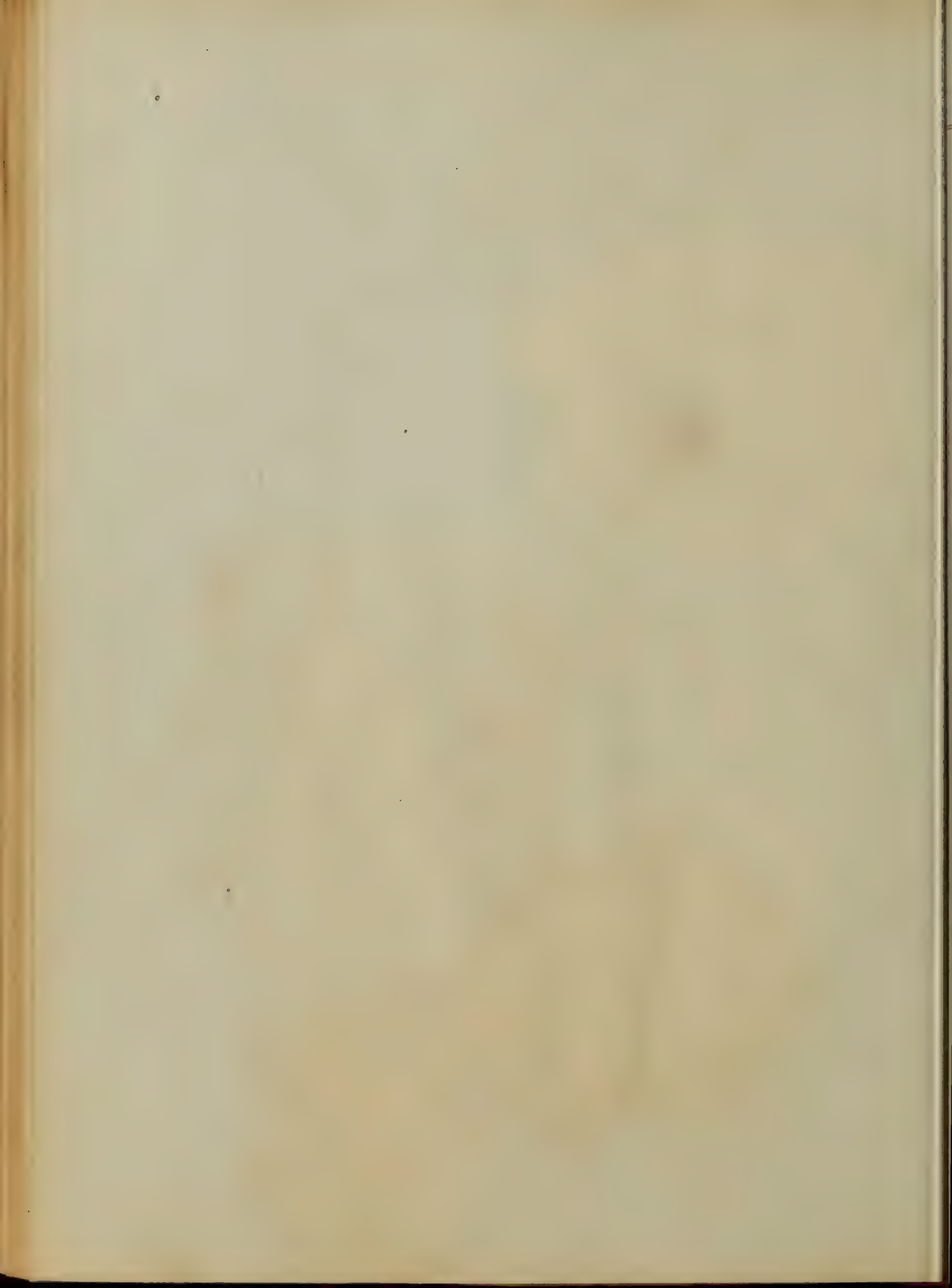
[illegible]

[illegible]

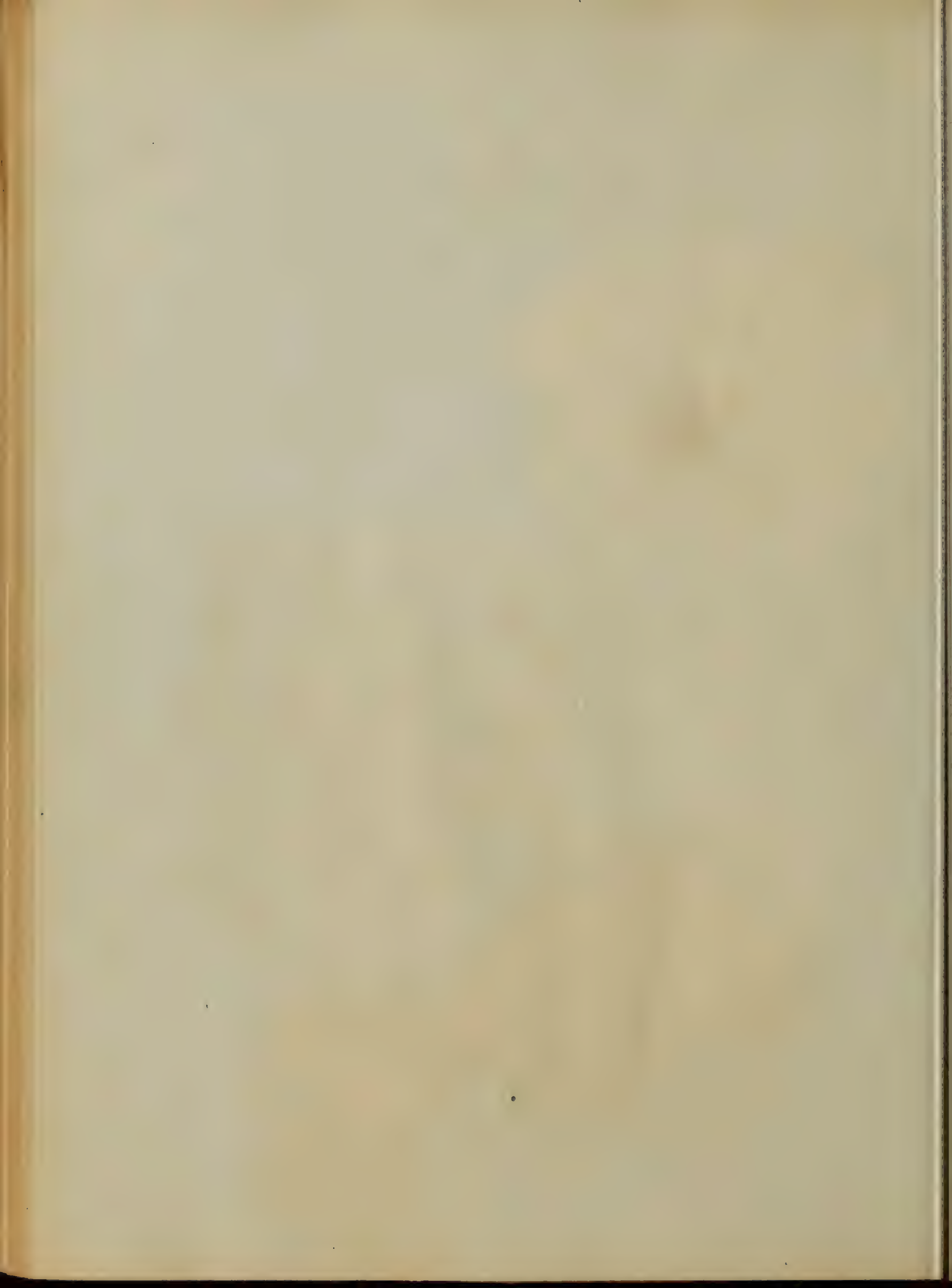
[illegible]

[illegible] Malarial diseases.

[illegible]
presenting in other Malarial
diseases present in this:



It attacks, preferably, those who have
[illegible] health [illegible] instances [illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
usual burning heat — the patient
at the same time wishing to be warm-
ly covered. Sometimes the
[illegible]
[illegible]
[illegible]
with the chill, or very soon after,
[illegible]
[illegible]
ting of the ordinary contents



[illegible]

[illegible]

ounded. [illegible]

vomiting generally continue through-

out the attack; [illegible]

the diarrhoea will continue for

several days after convalescence is

established. Restlessness and

[illegible]

[illegible]

[illegible]

[illegible]

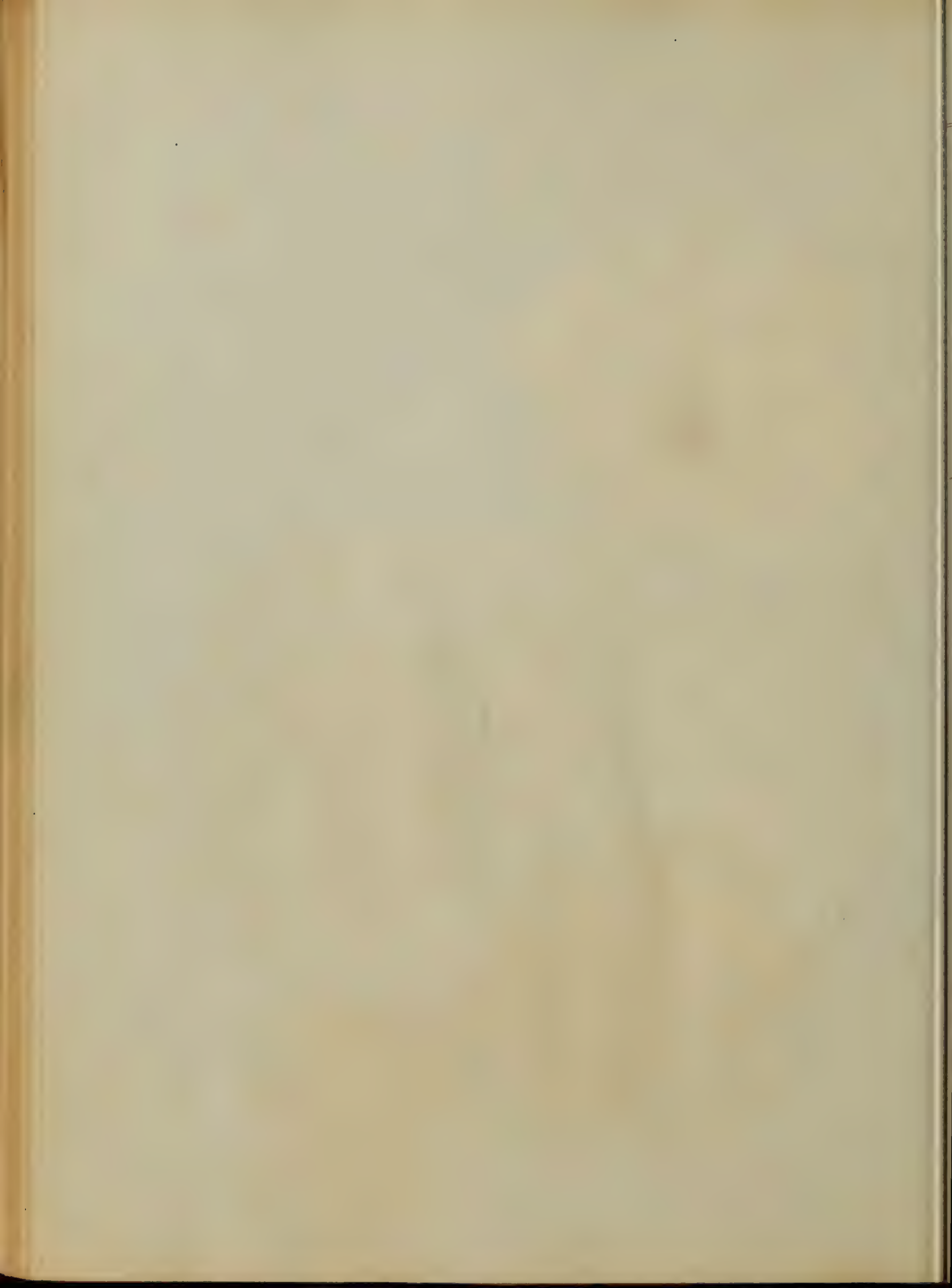
[illegible]

[illegible]

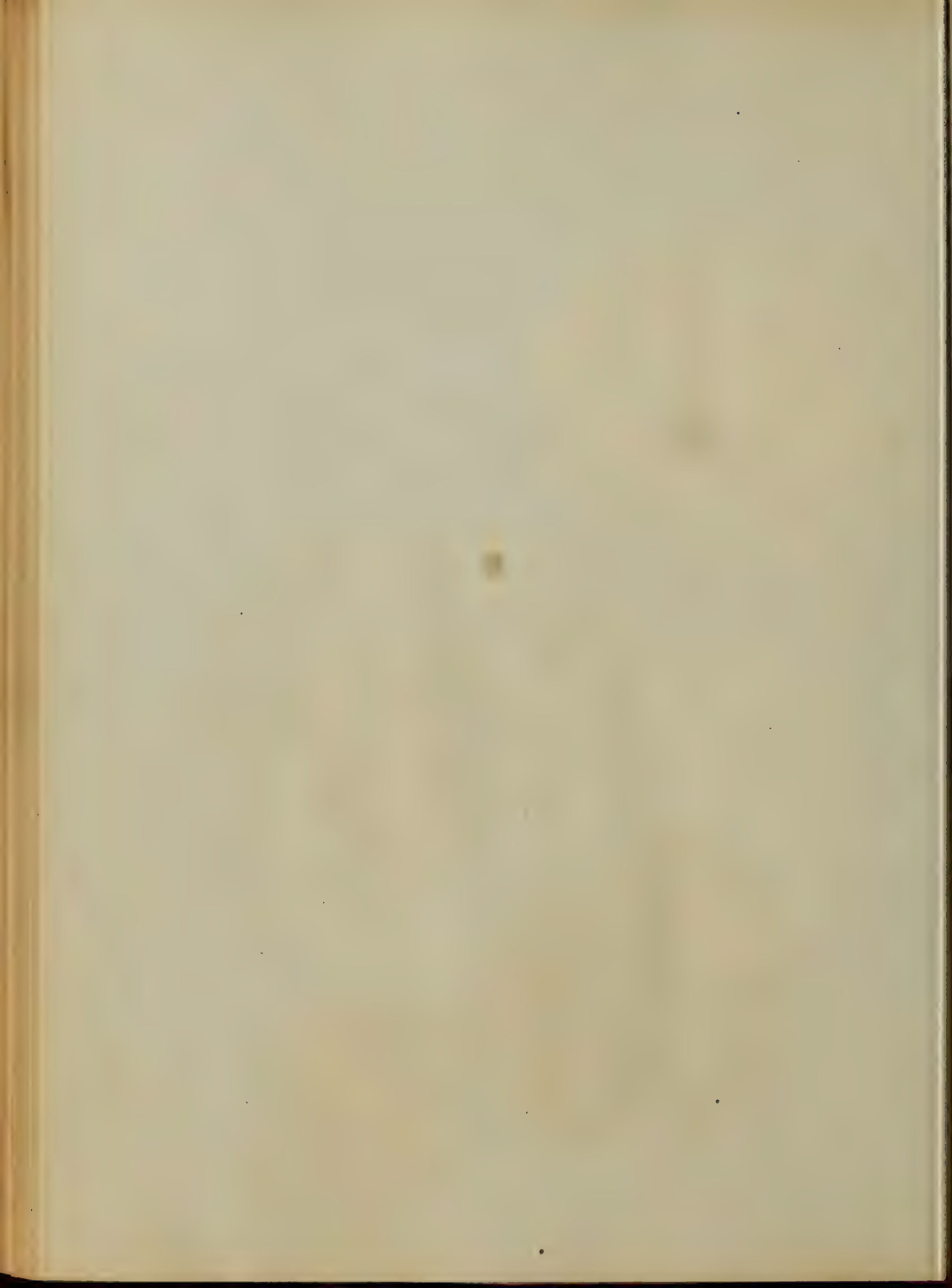
body assumes a bronzed yellow

hue, and Jaundice is establish-

ed. The fever which succeeds



the chill is not often severe,
and slight, the pulse is seldom
rarely reaching one hundred
(per minute) except in cases where
[illegible]
-ing. The respirations range from
[illegible]
-utes. The thirst is great and
incontrollable. Within from
to three times, generally, after the
chill, a bloody discharge occurs
from the kidneys. It was this
symptom, so invariably present
[illegible]
upon this disease the name hema-
[illegible]
-tion [illegible] hemorrhage from the



[illegible]

[illegible] ely. [illegible]

[illegible]nations.

[illegible]

does not proceed from [illegible];

does not differ materially from

its condition in remittent fever;

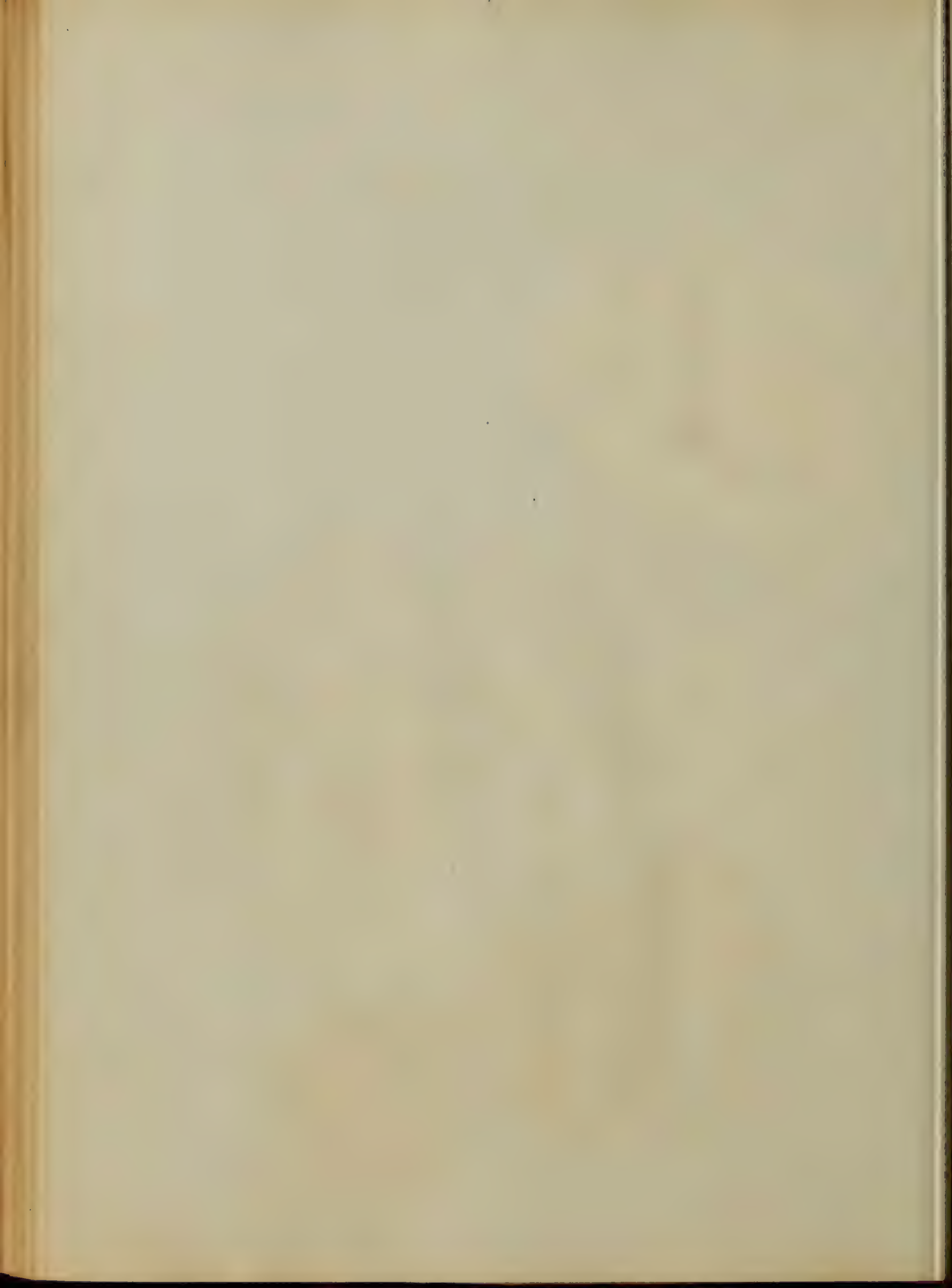
[illegible]

black; and this [illegible]

[illegible]

[illegible] The [illegible]

[illegible] results.



[illegible]

[illegible]

[illegible]

[illegible]

[illegible] prolonged action of

malarial poison on the [illegible]

[illegible]

[illegible]

the surface, showing extreme

depravation of the blood.

The appearance of the tongue ~~and~~

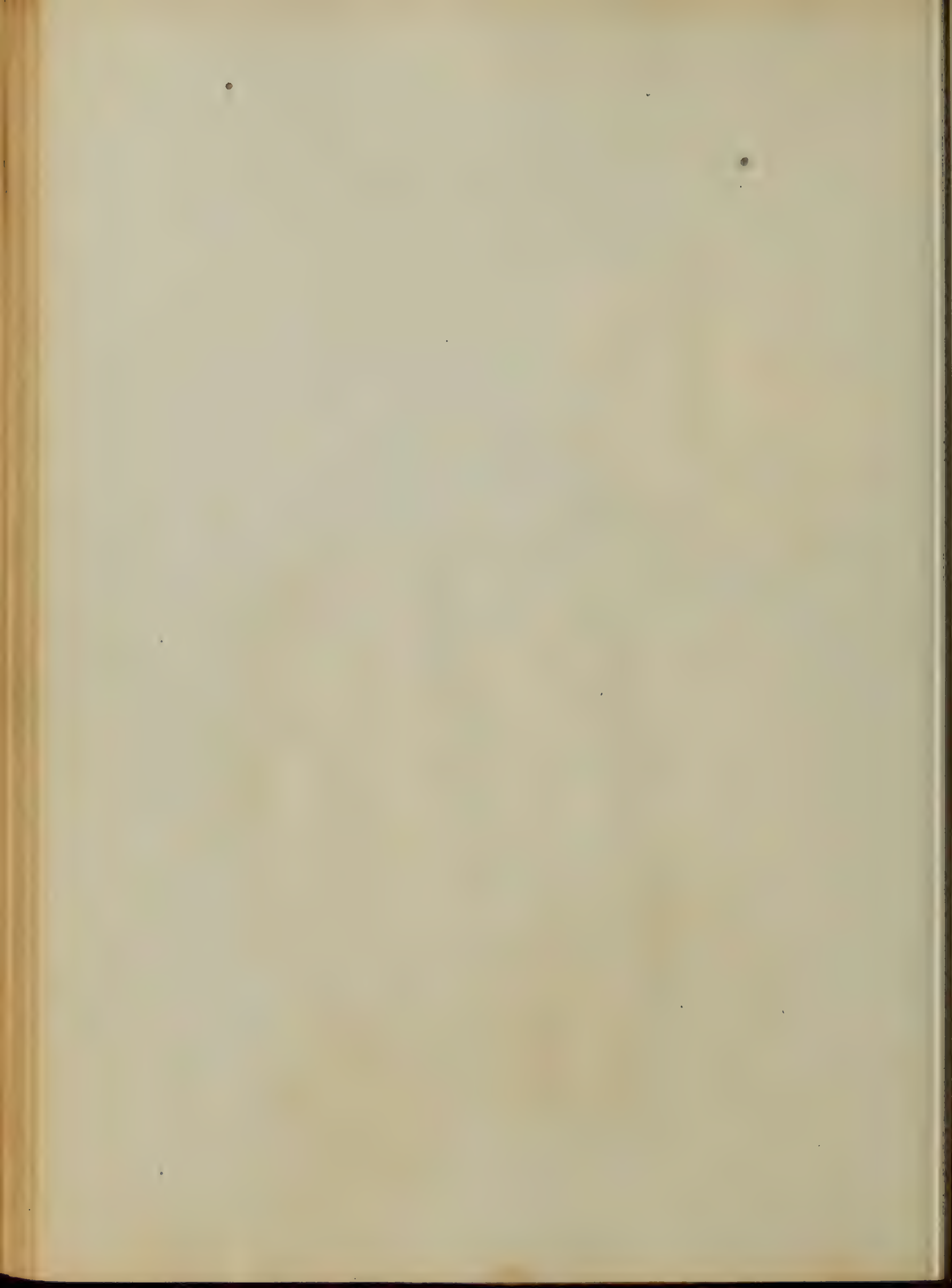
[illegible] condition of [illegible]

[illegible]

[illegible]

[illegible]

[illegible] stippled. In none but the



[illegible]

[illegible]

[illegible]

[illegible] during [illegible]

[illegible]ion; and in all cases

[illegible] remission takes

Paroxysms always recur [illegible]

ten or twelve hours.

The duratio[illegible]

[illegible]

[illegible]

early and proper treatment in

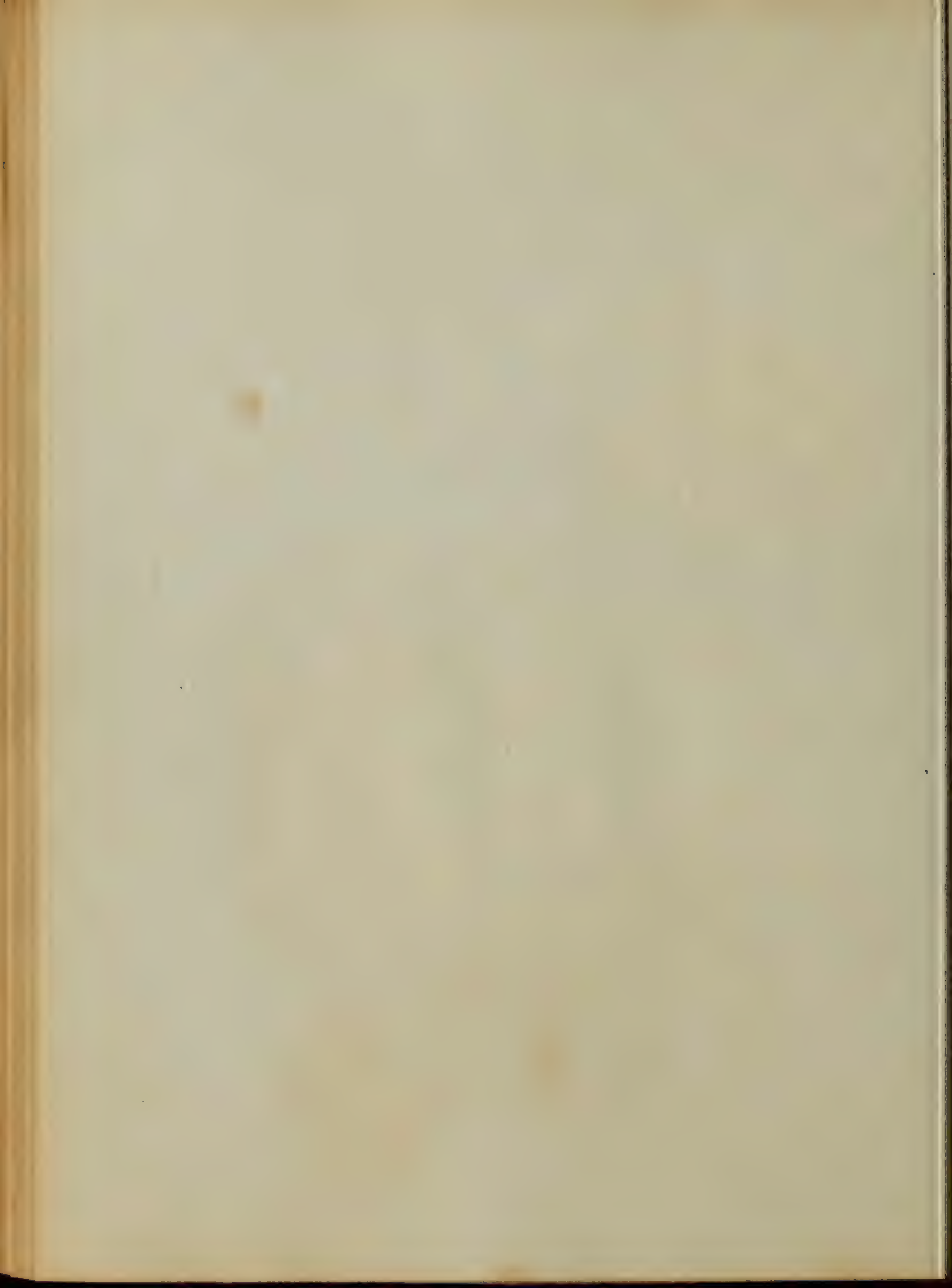
[illegible]uted convalescence may be

[illegible]

[illegible] six days. A favourable termi-

nation is preceded by cessation of

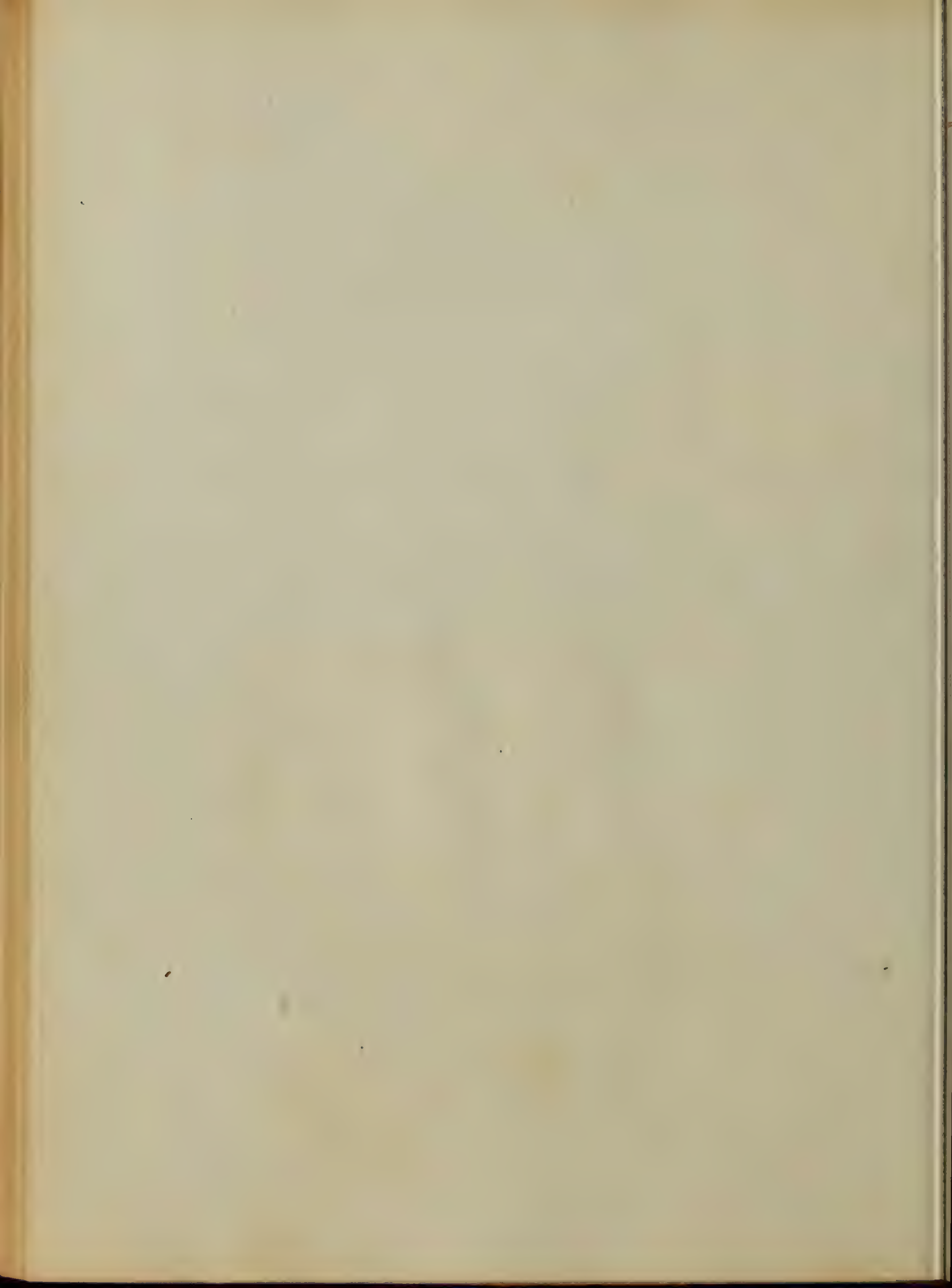
the haemorrhage, nausea and vomiting



[illegible]

terrible nausea and vomiting;
extreme prostration, rapid exhaus-
tion and collapse. Sometimes
death is preceded by all the symp-
[illegible]

Pathology— This disease does not
differ in detail from the condi-
tion of remittent fever. The
morbid appearances observable after
[illegible]
pathologists are not yet agreed



[illegible] system. [illegible]

[illegible]

would [illegible] the [illegible]

[illegible]

accounts [illegible] first impressions.

[illegible] this theory is far from being

established; and there are many

facts [illegible] tend [illegible] for

the primary marked impression upon

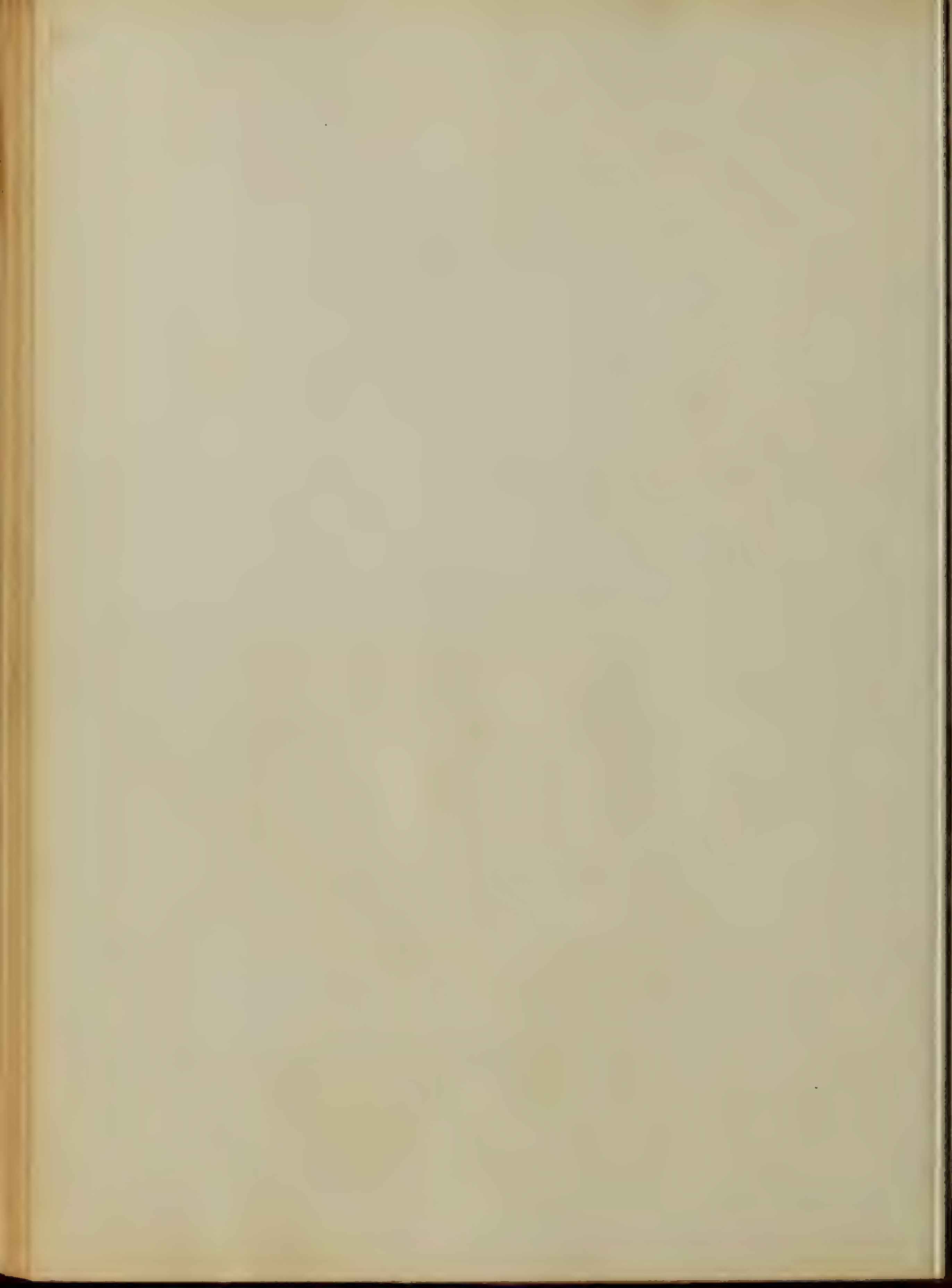
the nervous system, but, touching the

effect of [illegible] upon the [illegible],

[illegible] agreed. [illegible]

[illegible]

[illegible]



[illegible]

continues – the [illegible] [illegible],

[illegible]

ough the previous [illegible], [illegible]

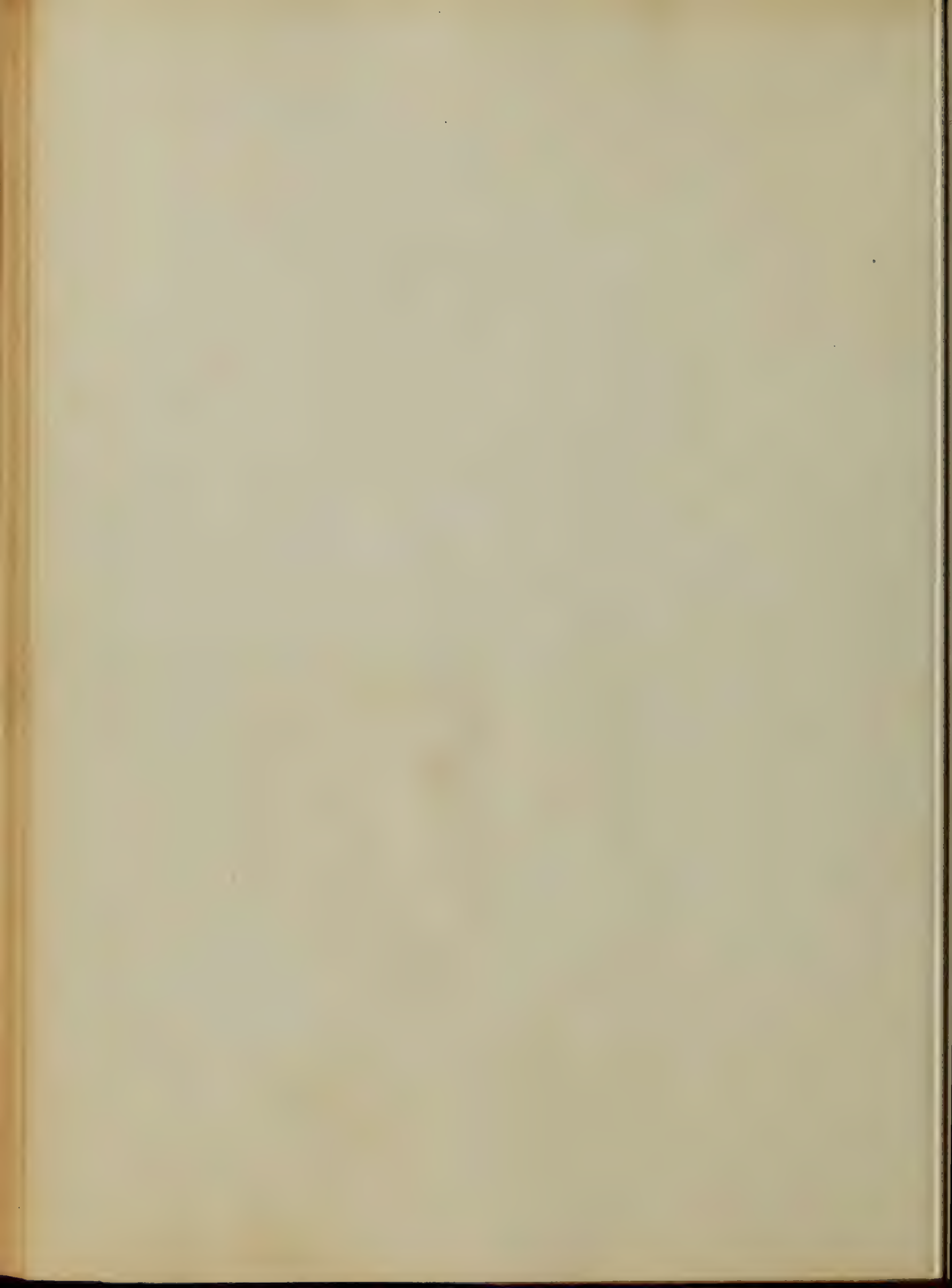
[illegible]

of Providence it is impossible

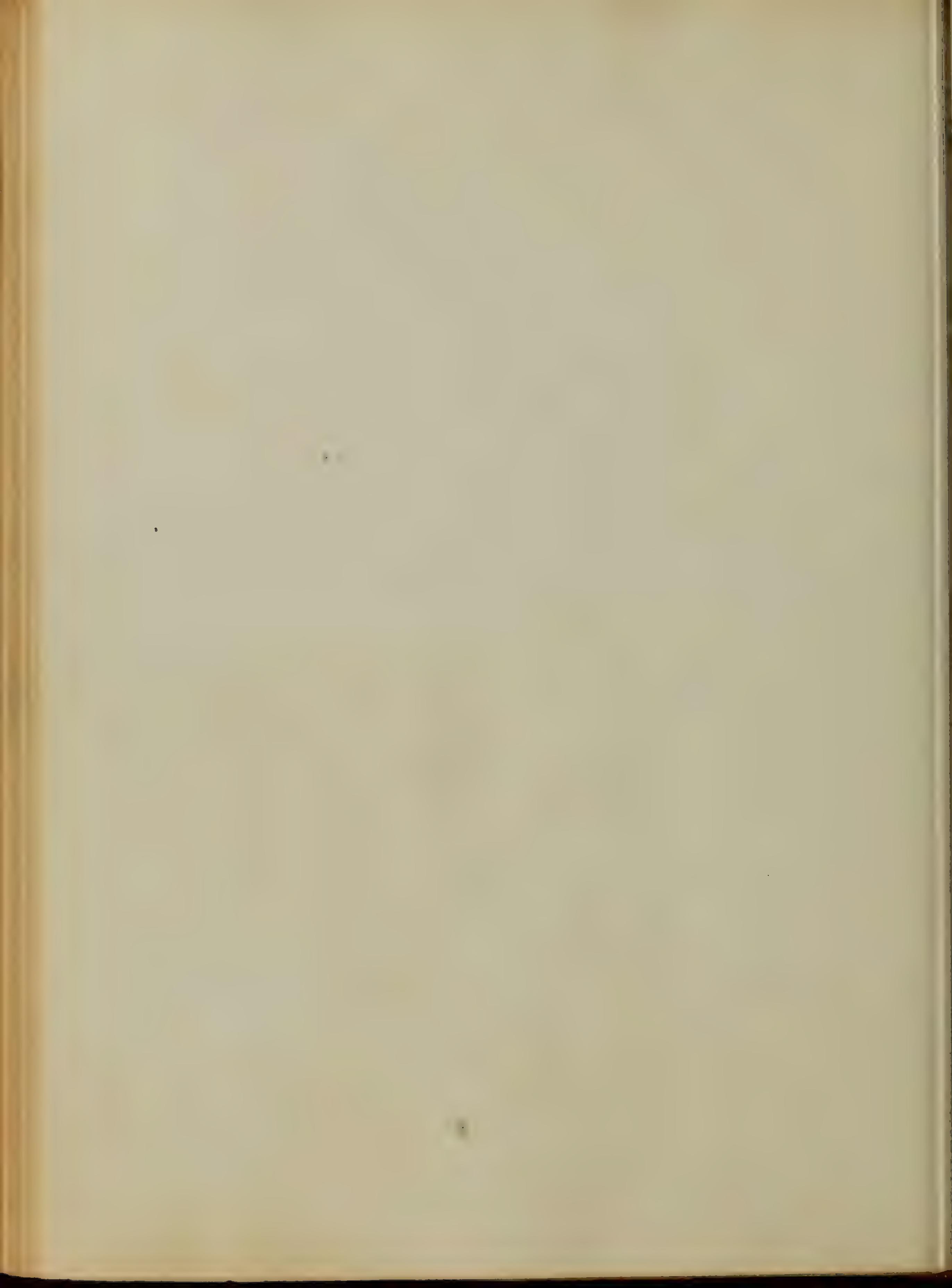
[illegible]

[illegible] continues, [illegible]

[illegible]



[illegible]
[illegible]
the occurrence of haemorrhage, and [illegible]. [illegible] and Urosacin are results of the [illegible]gration of the [illegible] [illegible]. [illegible] rapid and excessive disintegration of these globules. Hence it follows [illegible] [illegible] [illegible]
[illegible] from which biliverdin and [Uro]sacin are formed. And unless there is a correspond[ing in]crease in the depurating function of the Liver, there will be an



[illegible]

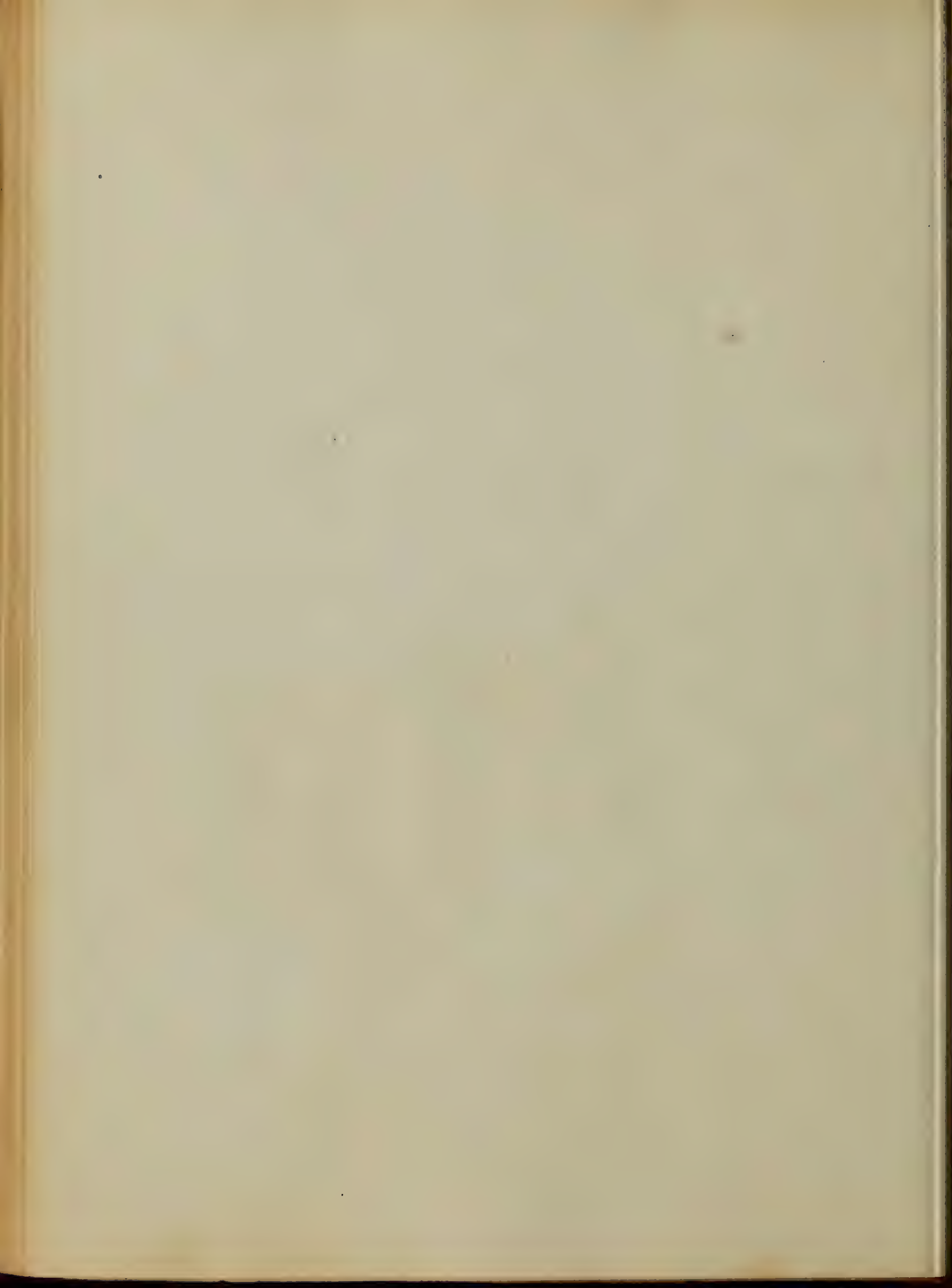
[illegible] of the bile [illegible]

[illegible]

[illegible]

[illegible] ter of the bile does not exist pre-
formed in the blood. But there
are many reasons for [illegible]
[illegible]
[illegible] from [illegible]
nia; from snake bite; from in-
tense mental emotion be expl-
ained?

The sighing respiration is, also, a con-
[illegible]
tion and death of the red globules,
For a man breathes by virtue of his

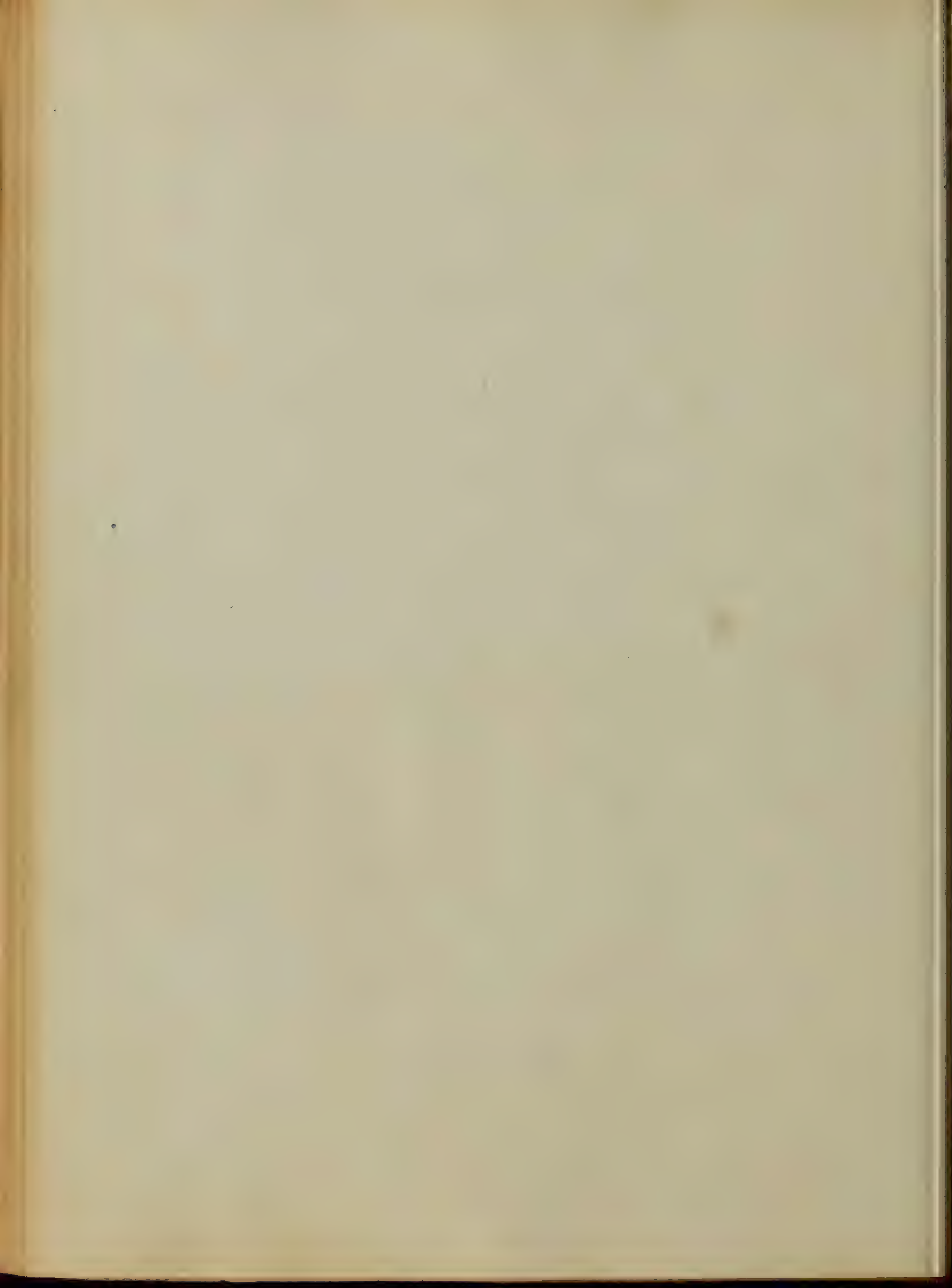


[illegible] symptoms.

The haematuria is probably [illegible] produced: The effete blood corpuscles not being duly eliminated by [illegible] the kidneys take on a vicarious action; and this compensatory action produces in them a state of congestion, which [illegible] haemorrhage. And this haemorrhagic tendency is, also, increased [illegible].

Causes.—Malaria is the exclusive cause of this grave disease. But it must [illegible] to produce this malady.

Diagnosis.— There is not, usually,



[illegible]

[illegible]

[illegible]

[illegible]

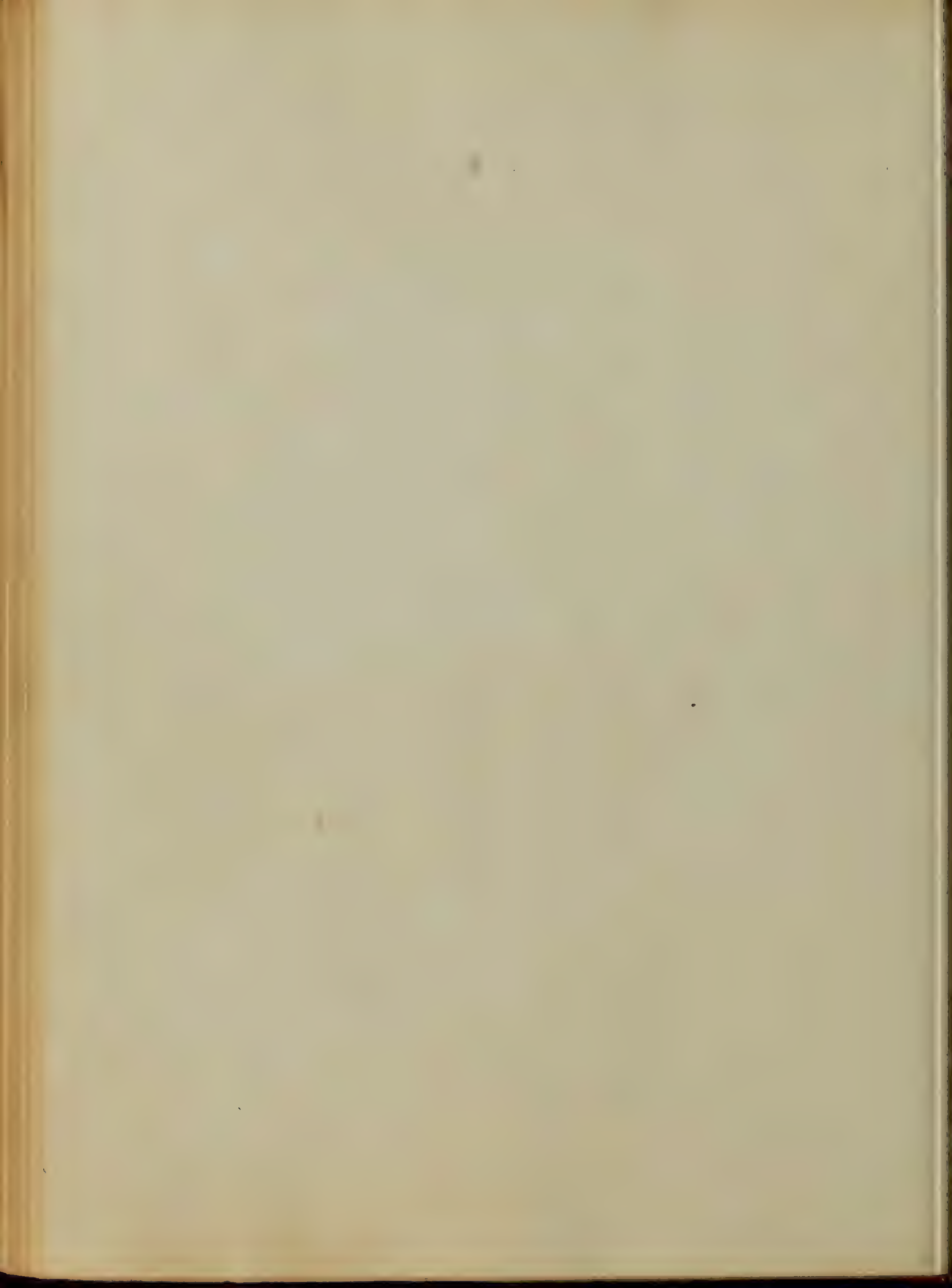
[illegible]

circumstances, under [illegible]

[illegible]

always lead to a correct diagnosis.

Prognosis—The prognosis, till recently, of this disease has been [illegible] [illegible] [illegible] first, ranged from [illegible] [illegible] increased knowledge of its [illegible] ogy and consequent improvement [illegible] treatment, [illegible] has greatly diminished.



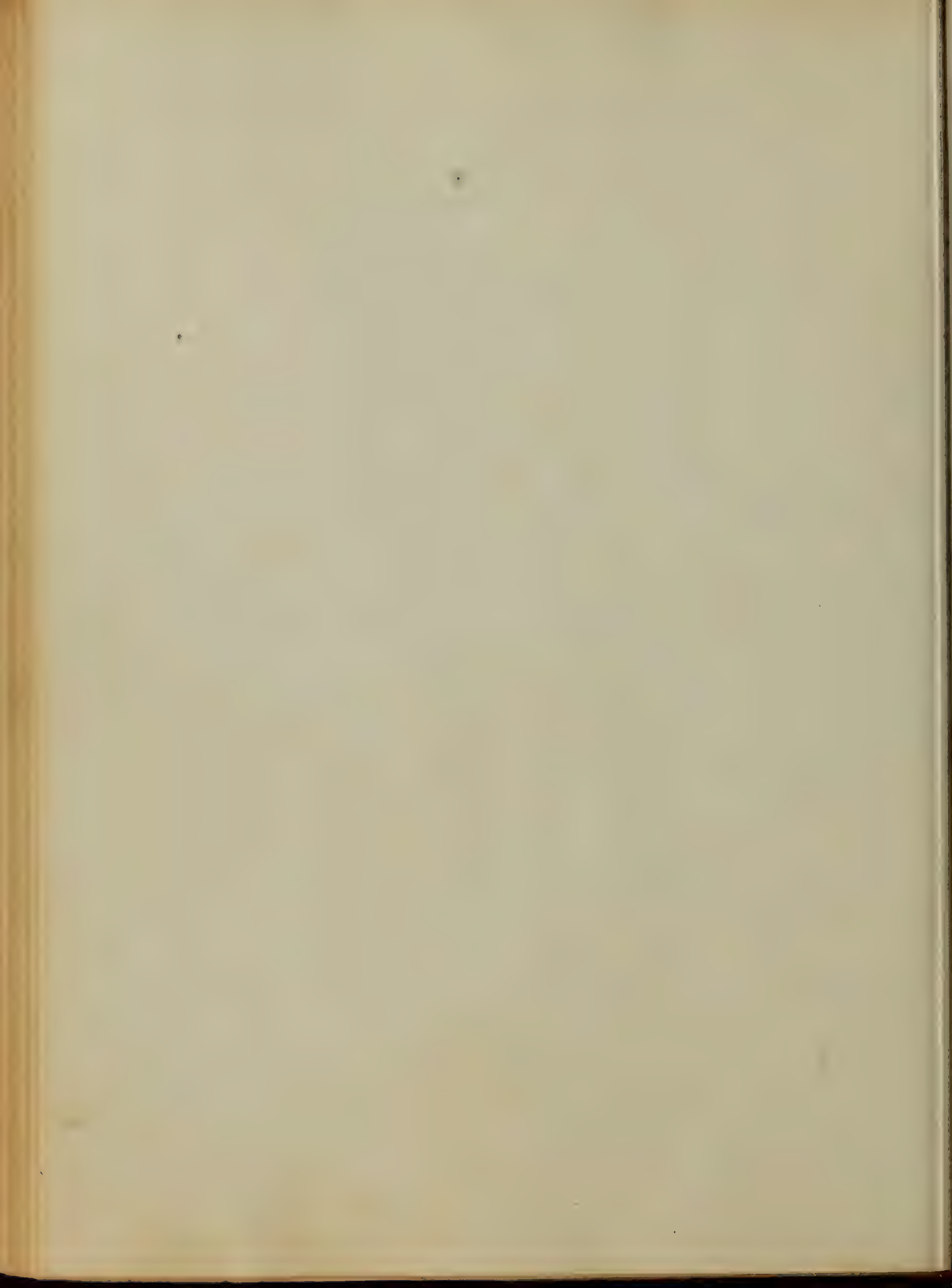
[illegible]

[illegible]ed, in those [illegible] and intemperate subjects, the prognosis is bad. Uraemic intoxication always, in- [illegible] [illegible], [illegible] [illegible] previously healthy, and of vigorous constitutions, the prognosis is con- sidered [illegible] [illegible].

[illegible] [illegible] [illegible] [illegible]

[illegible] [illegible] [illegible] [illegible]

[illegible]uiting; to check the haemorrhage; [illegible] [illegible] [illegible] [illegible] these are accomplished, to build up the general health; and thus prevent a relapse. Opium, [illegible] fulfilling the first indication, [illegible] [illegible] [illegible] [illegible].

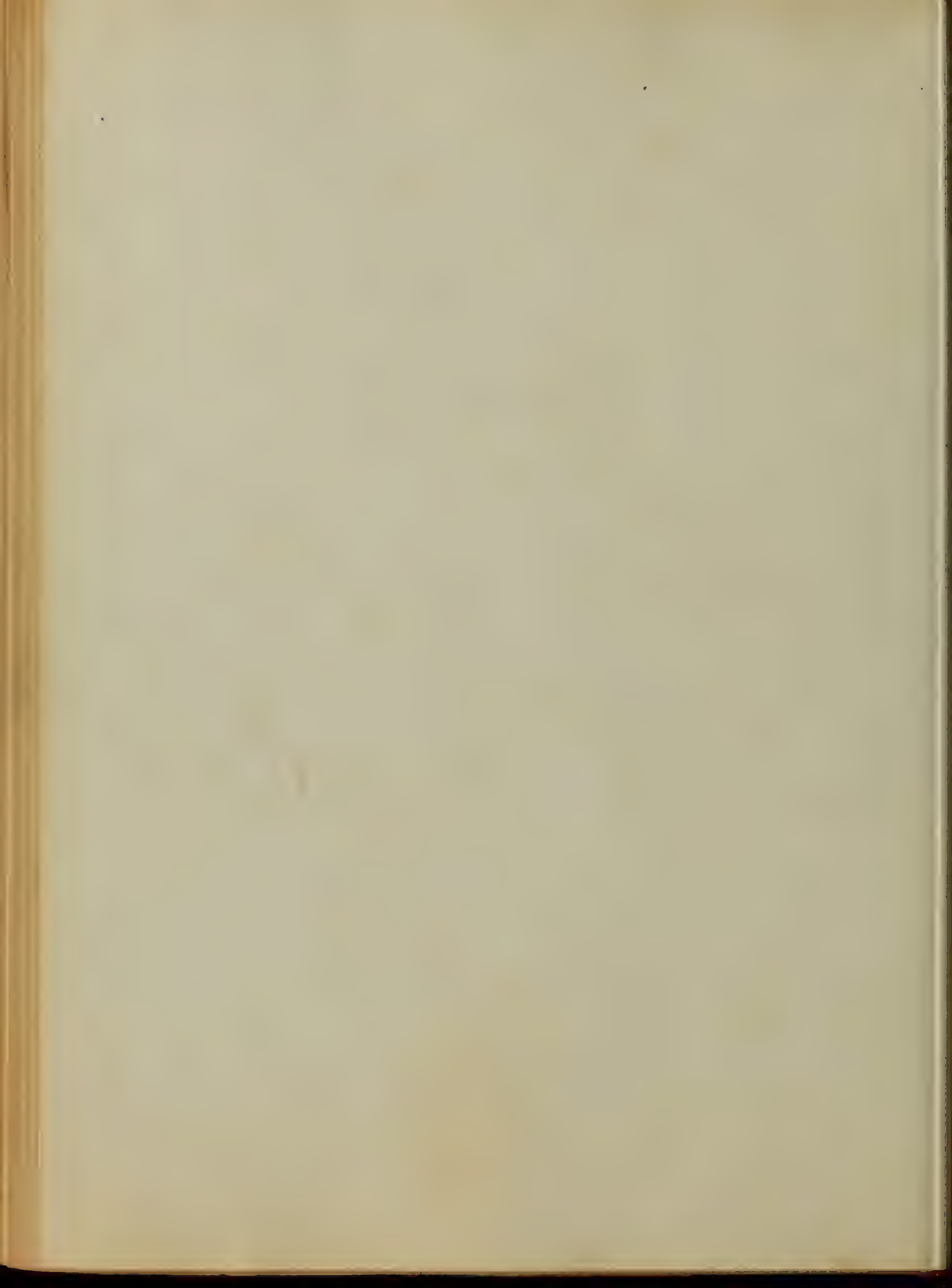


once; and its administration cannot prove nota. For the hemorrhage, one writer says, the oil of turpentine is the remedy to [illegible]. [illegible] certainly controlled by the quinine which is given to arrest the fever. Quinine is the grand remedy for this, as well as all other Malarial diseases.

[illegible] alla [illegible] as the fever is arrested.

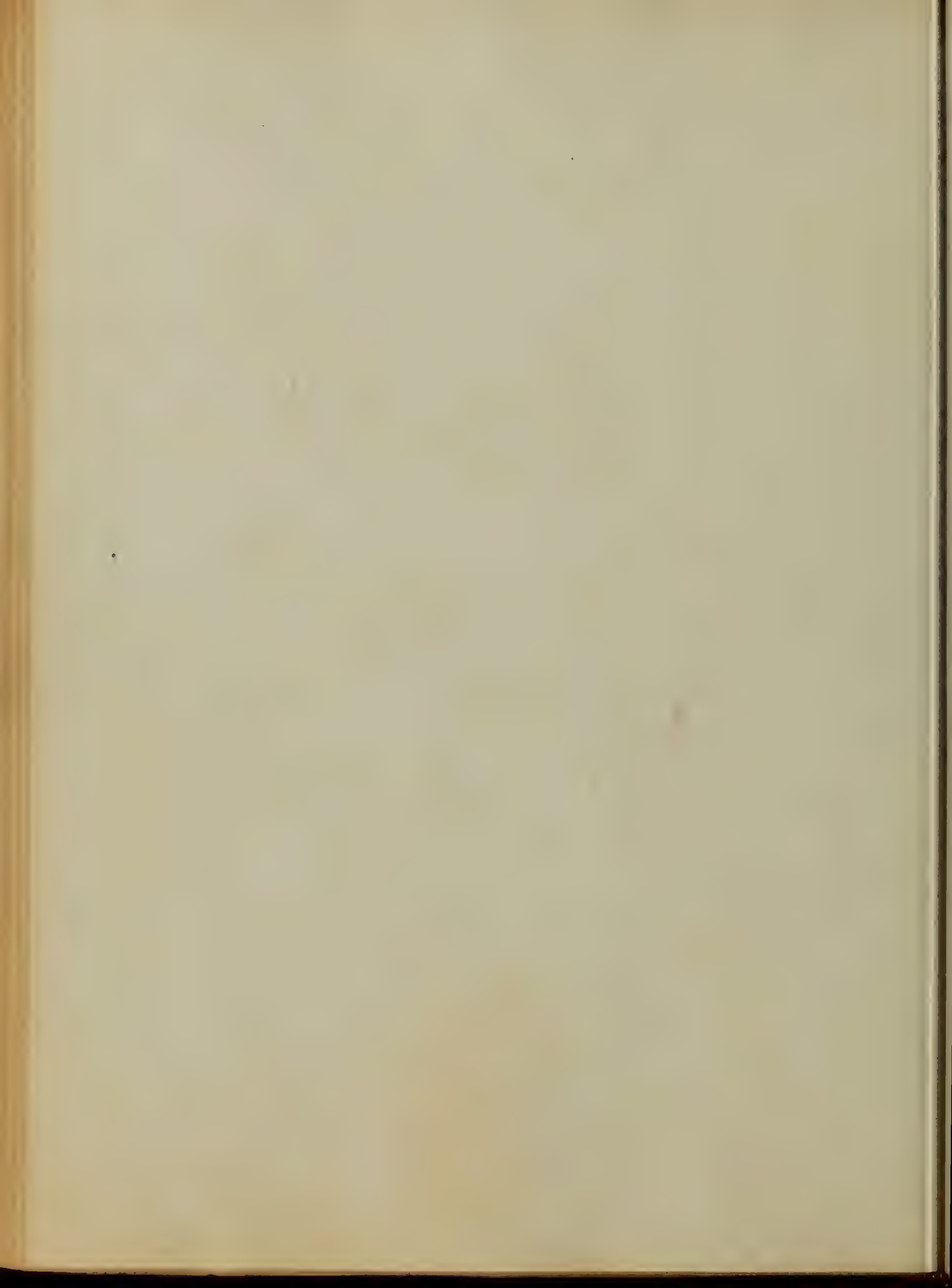
[illegible] of this [illegible], [illegible] in strong terms, the [illegible] treatment by quinine. He [illegible] to [illegible] [illegible] [illegible], [illegible] [illegible] [illegible] grains have been taken. This quantity is administered daily, until the fever is arrested. The same amount is given [illegible]

[illegible]



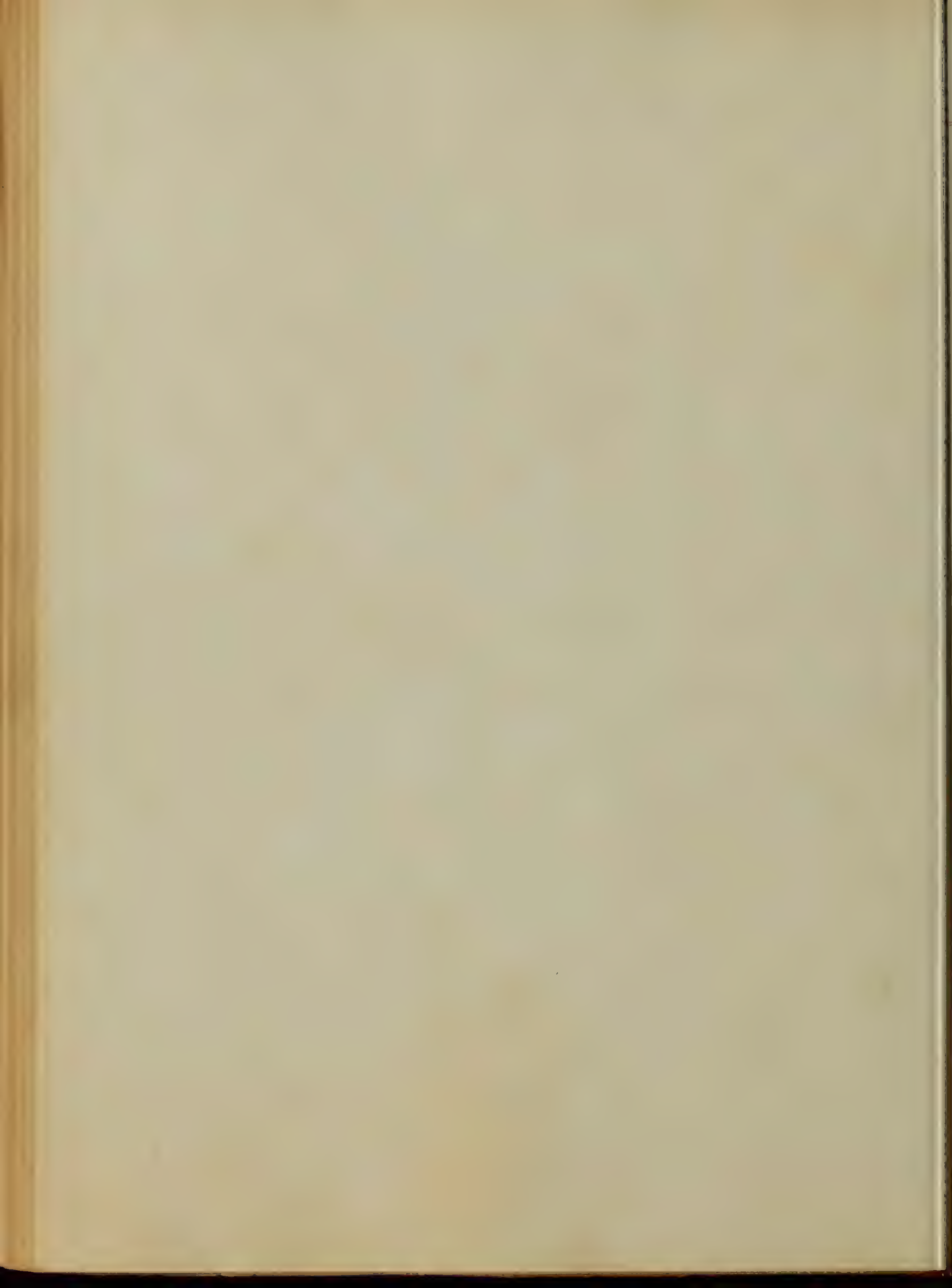
[illegible]

oyster soup, and similar articles.
[illegible]
nourishment as he can possibly
[illegible]
In almost every case, stimulants
are required. An ounce of good



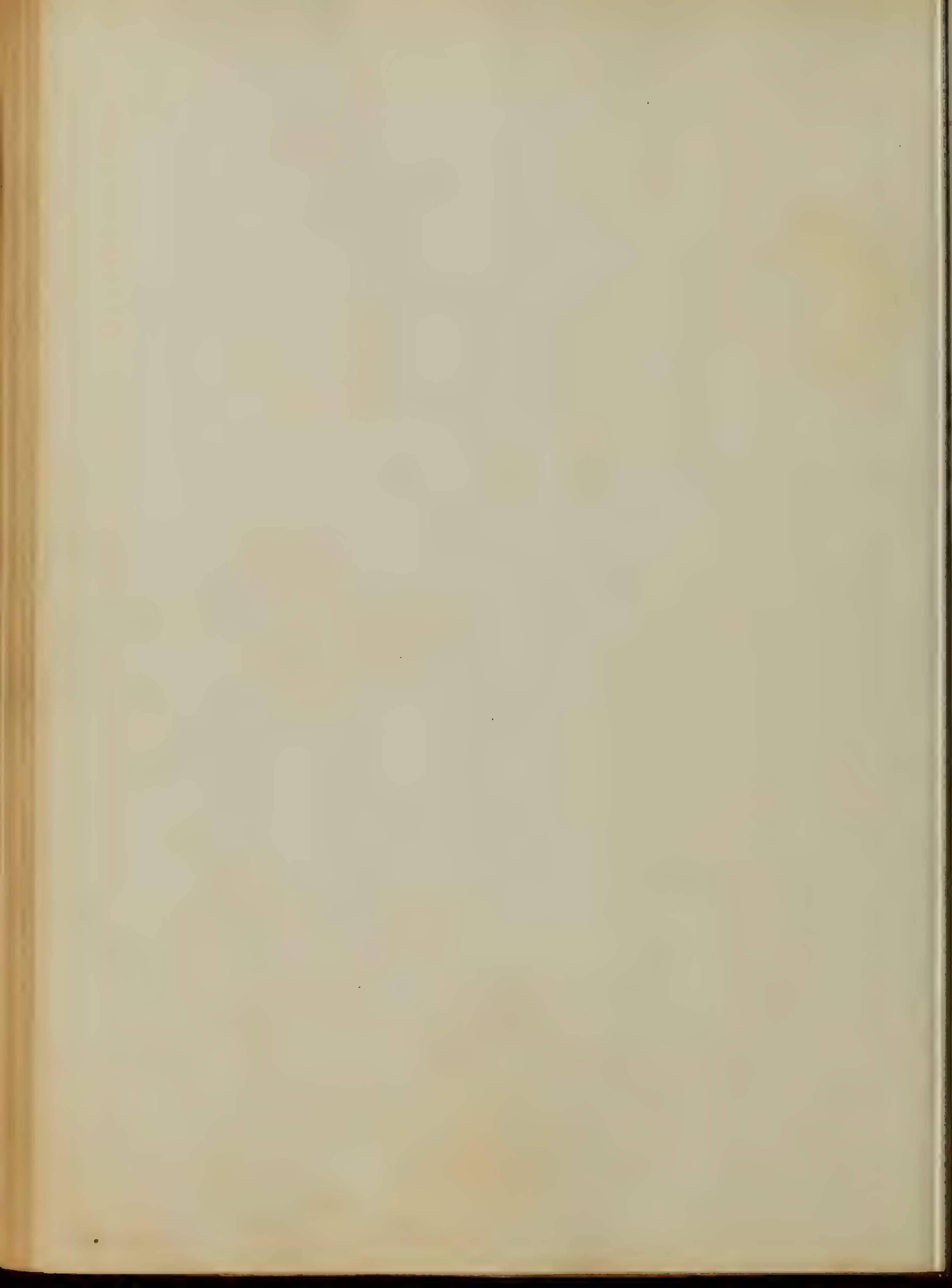
[illegible]

Rubefacients and sinapisms,
[applied to the epigastrium,] [illegible] —
[illegible]
controlling the nausea and vomiting. They may be, also, applied
over the regions of the kidneys,
with good effect, when there



[illegible]

sometimes manifests itself
in the course of this disease.
[illegible]
[illegible]
[illegible]
[illegible].
Dr. Norcom thinks that opium
[illegible]
the nausea and vomiting.
[illegible]
best remedy for the uraemic
[illegible].
[illegible]
[illegible]
Flint, Loomis, and [illegible].



[illegible]

[illegible]

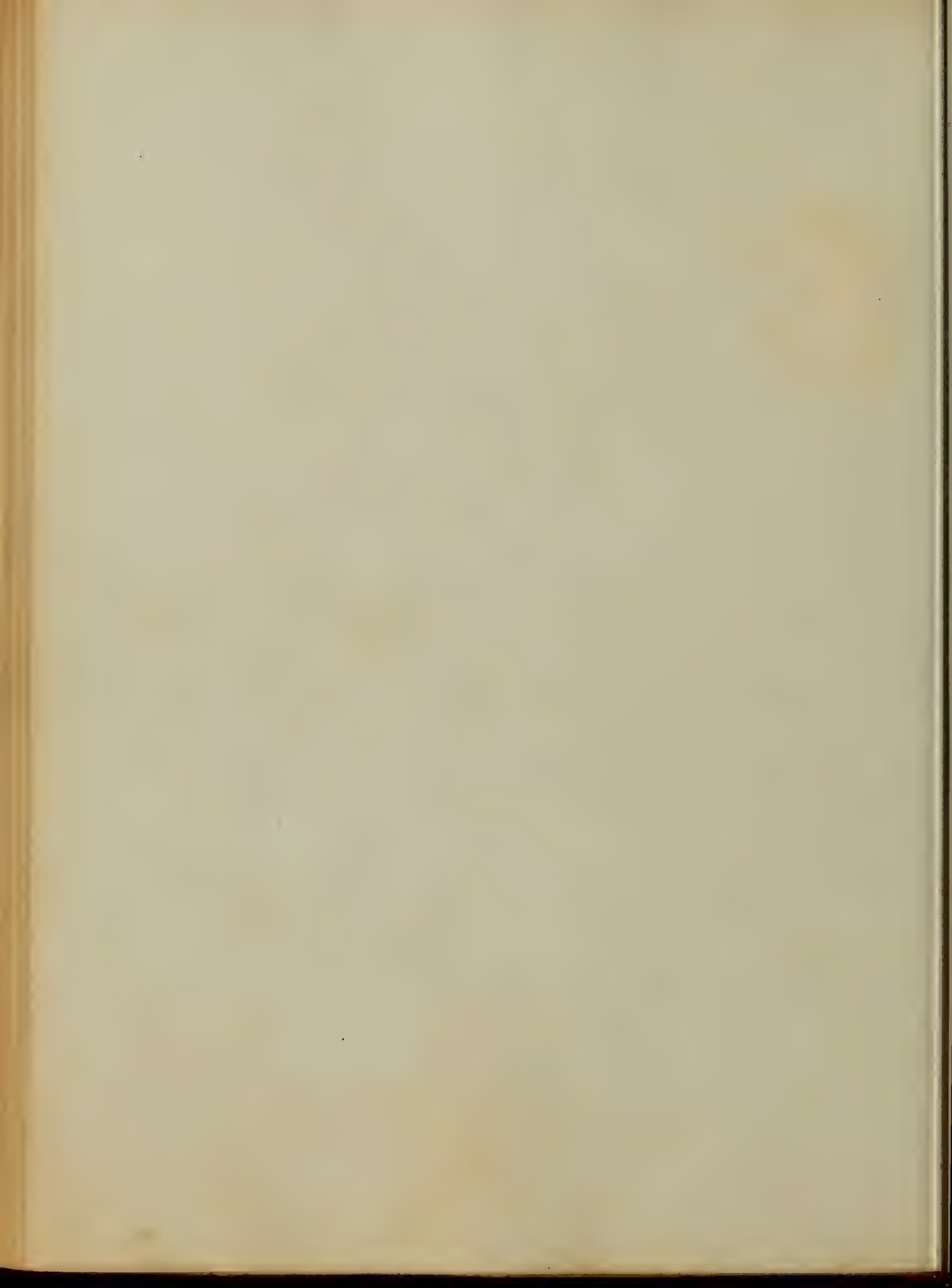
[illegible]

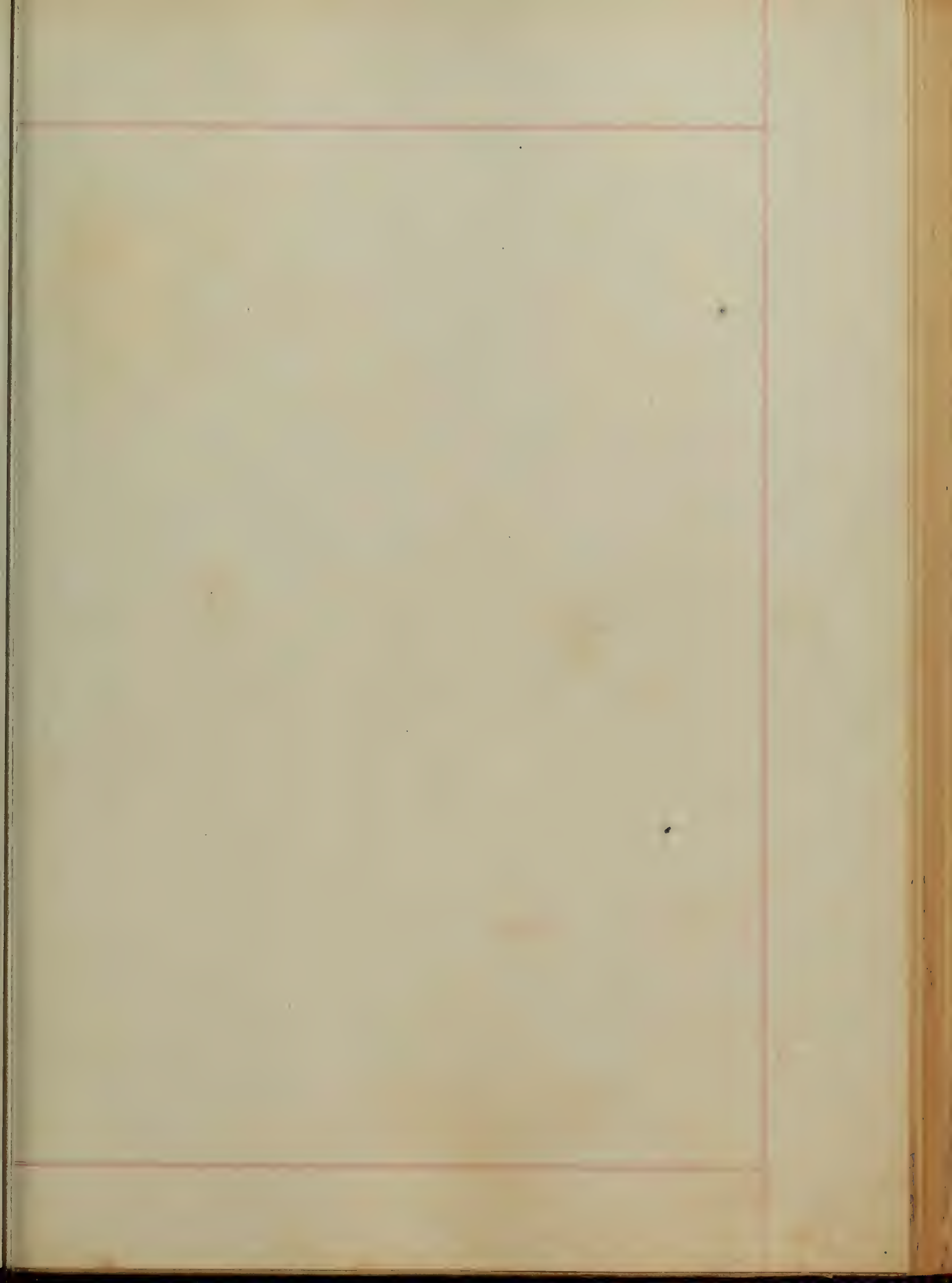
[illegible]

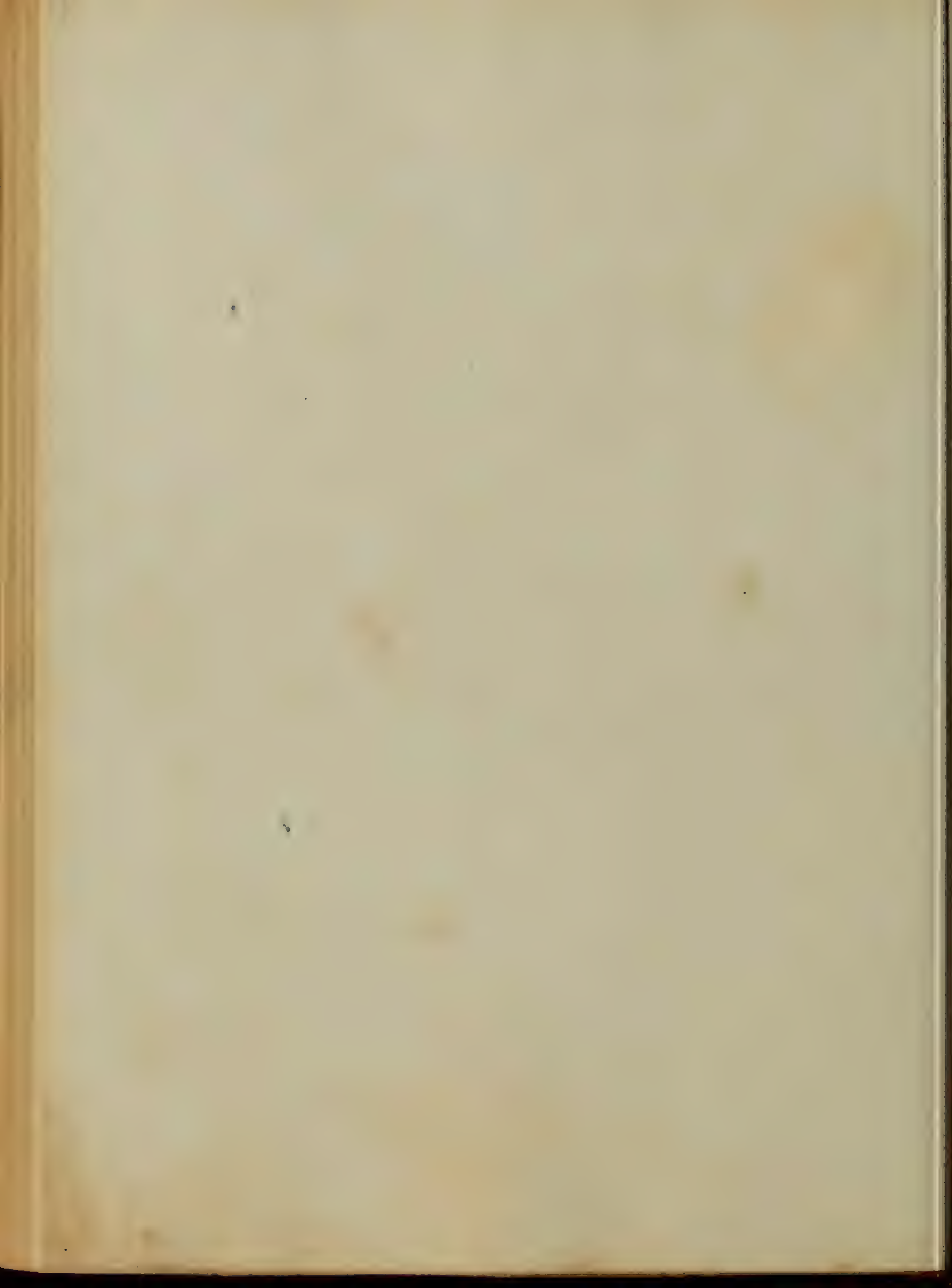
[illegible],

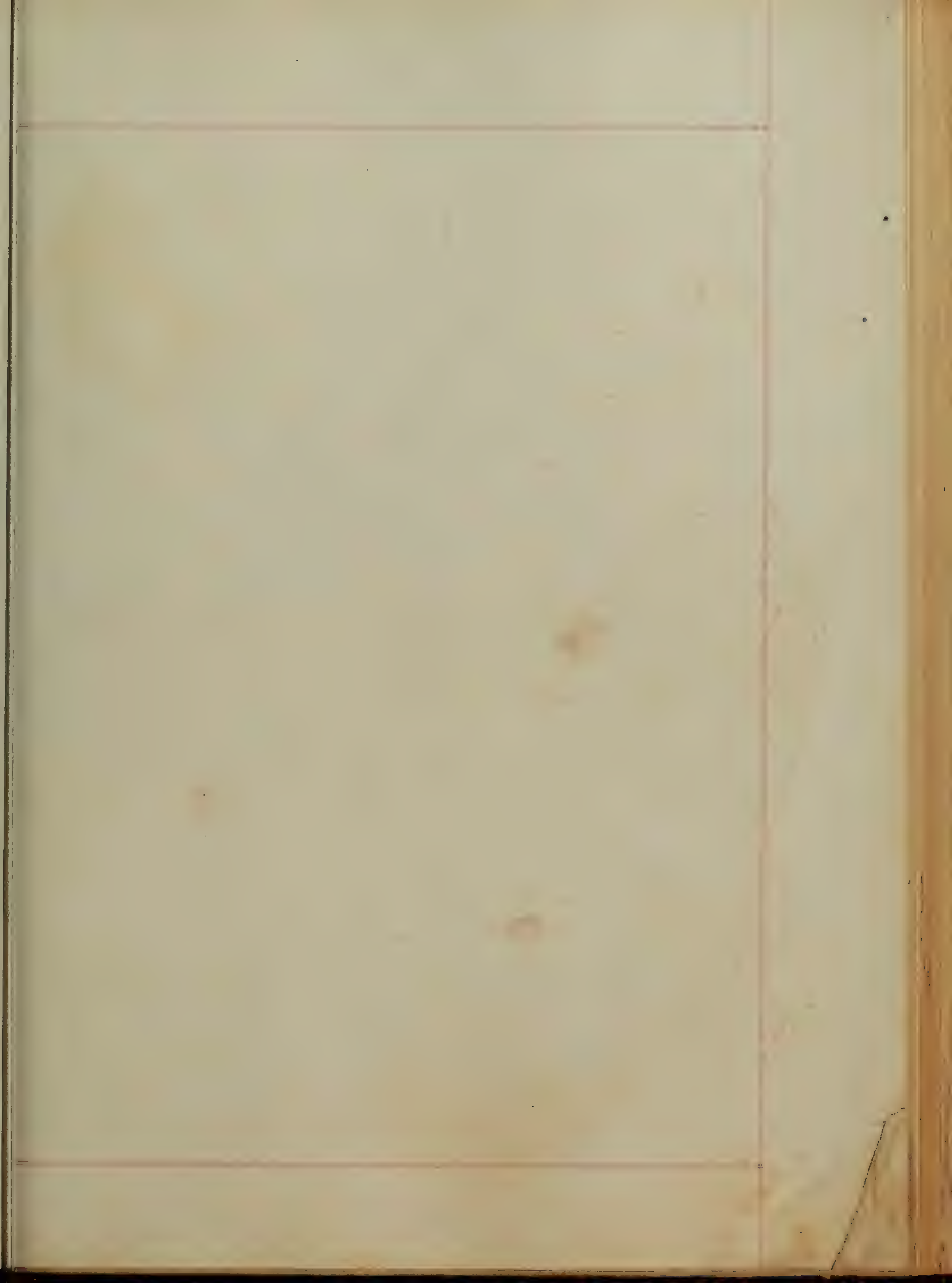
He says he [illegible], [illegible] out overdrugging the patient, get into him more than enough of the essentials to save him. The [illegible], [illegible], [illegible]. [illegible].

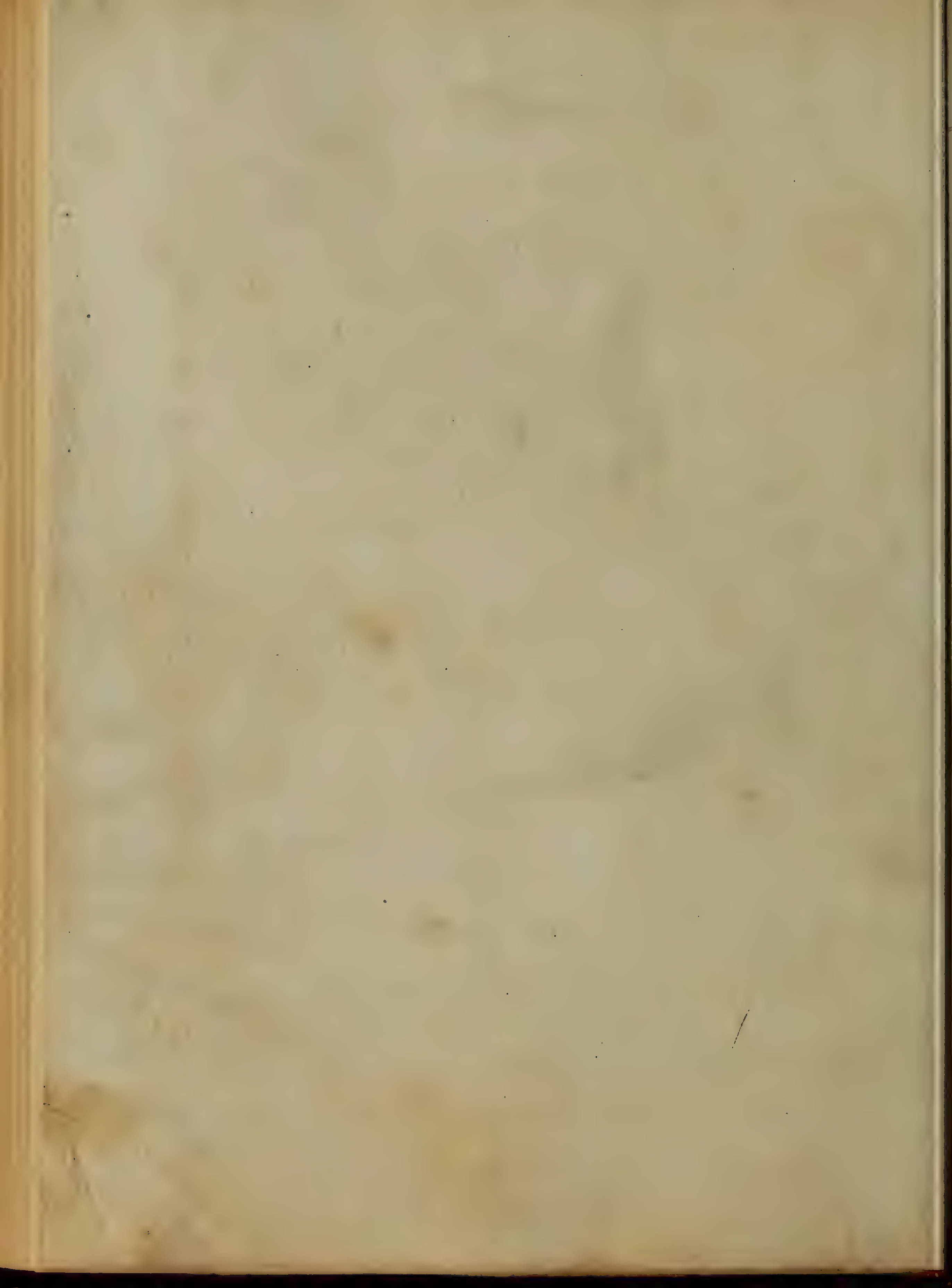
The patient should take, for at least a month of his own leave, has commenced Quinine, Strychnine, and Iron as a tonic.





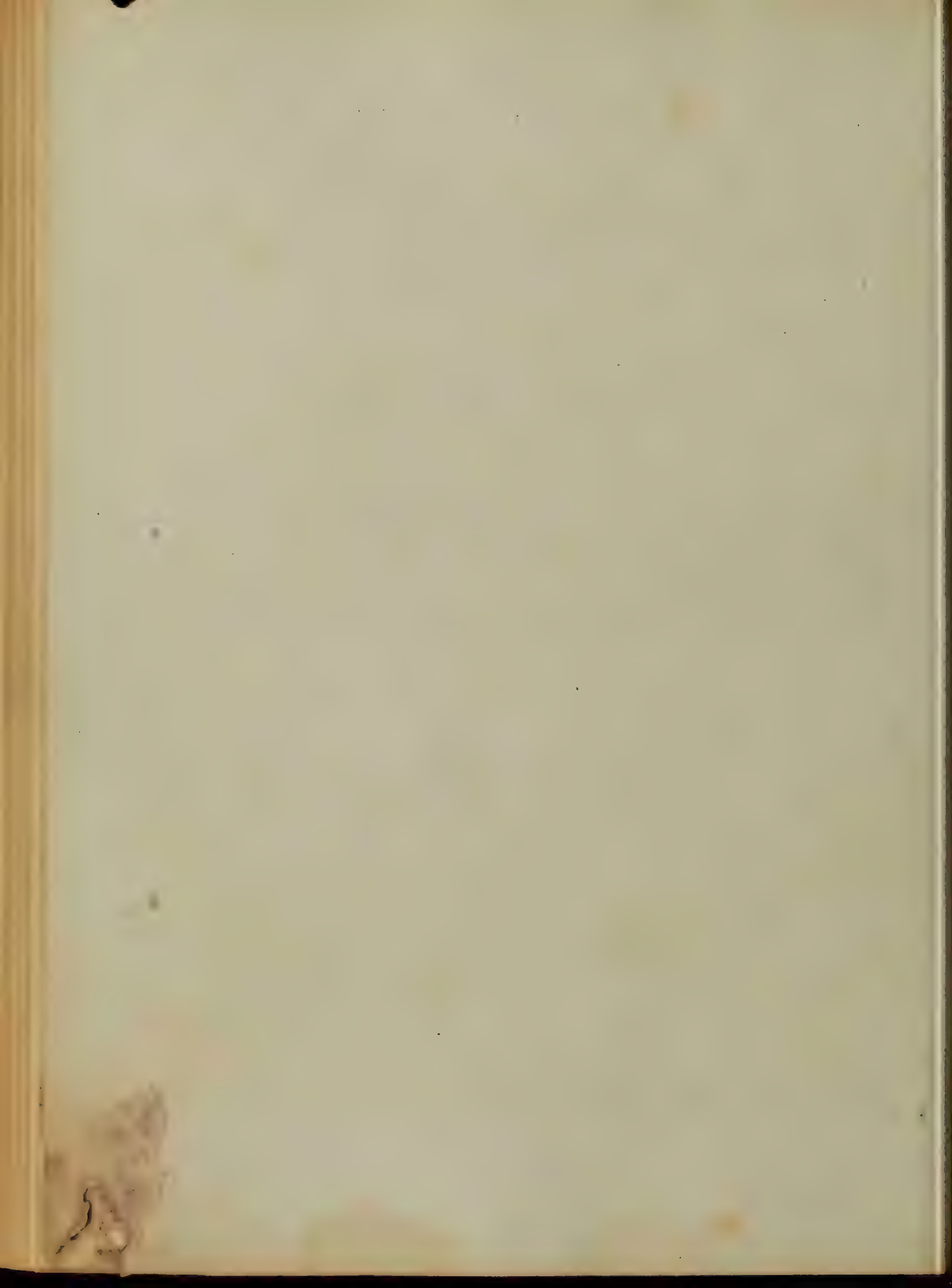






An
Inaugural Dissertation
On
Pneumonia
Respectfully Submitted for
Examination to the
Provost Regents and Faculty of
Physic of the
University of Maryland
for the
Degree of Doctor
of Medicine
By
E. Julis Trader
Fort Worth
Texas

January the 24, 1875

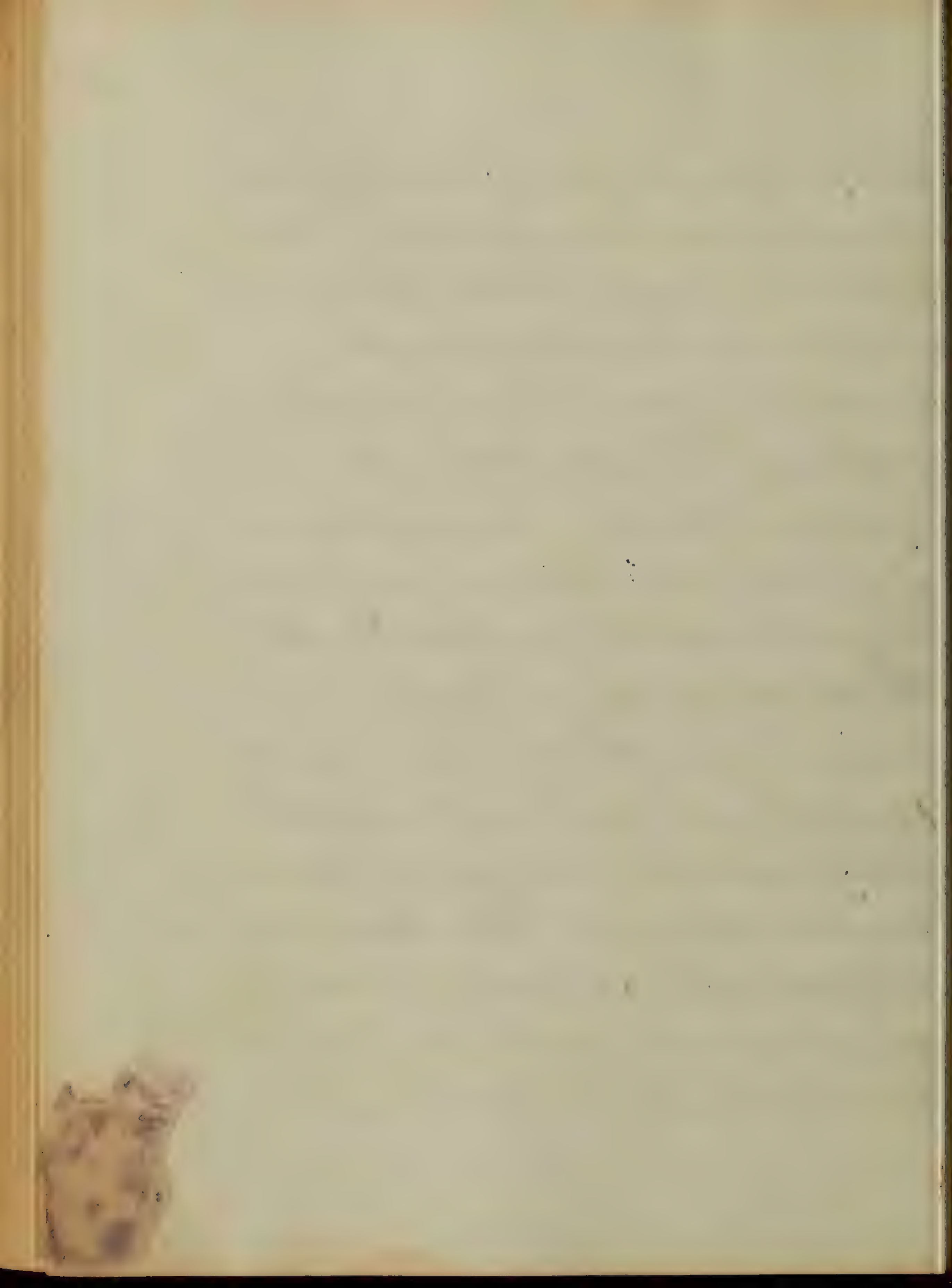


To the Professors of the University of Md.
It is with pleasure and respect I
submit the following. I claim nought
on the score of originality

I have
chosen for the subject of my thesis
one which is well understood and whose
nature and phenomena are agreed upon
by all Authors of Eminence

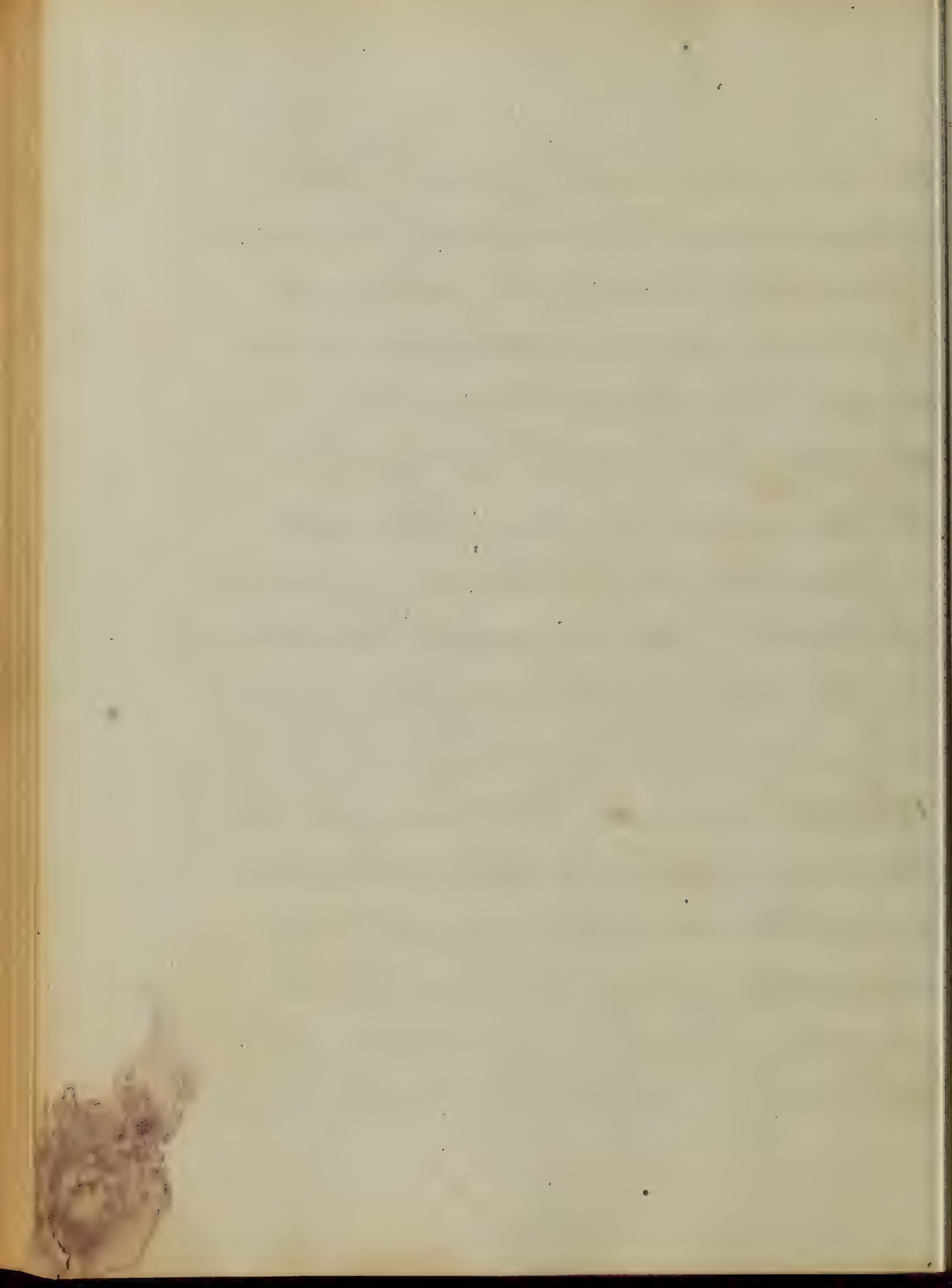
Acute Idiopathic
inflammation occurring in the lung of a healthy
adult is what I propose to treat
I make the distinction because there
are many circumstances which modify
materially the whole character of
phenomena and my intended essay
will not permit me to go minutely

in the different forms & complications.
Pneumonia is characterized by inflam
mation which affect the air cells. vesicles.
and terminal bronchial branches
constituting parenchyma or substance
of the lungs. These air cells. and terminal
bronchial branches have membranes
different from the mucus membrane
which line the larger. bronchial tubes
The. air cells. and terminal bronchial
branches: form. the lobules connected
together by. the areolar tissue con
stitutes the lobes in which the two
lungs. are. divided When. Pneumonia
is not developed. with other pulmonary
disease. it rarely affects an Entire
lobe. and this stage is called: Lobar

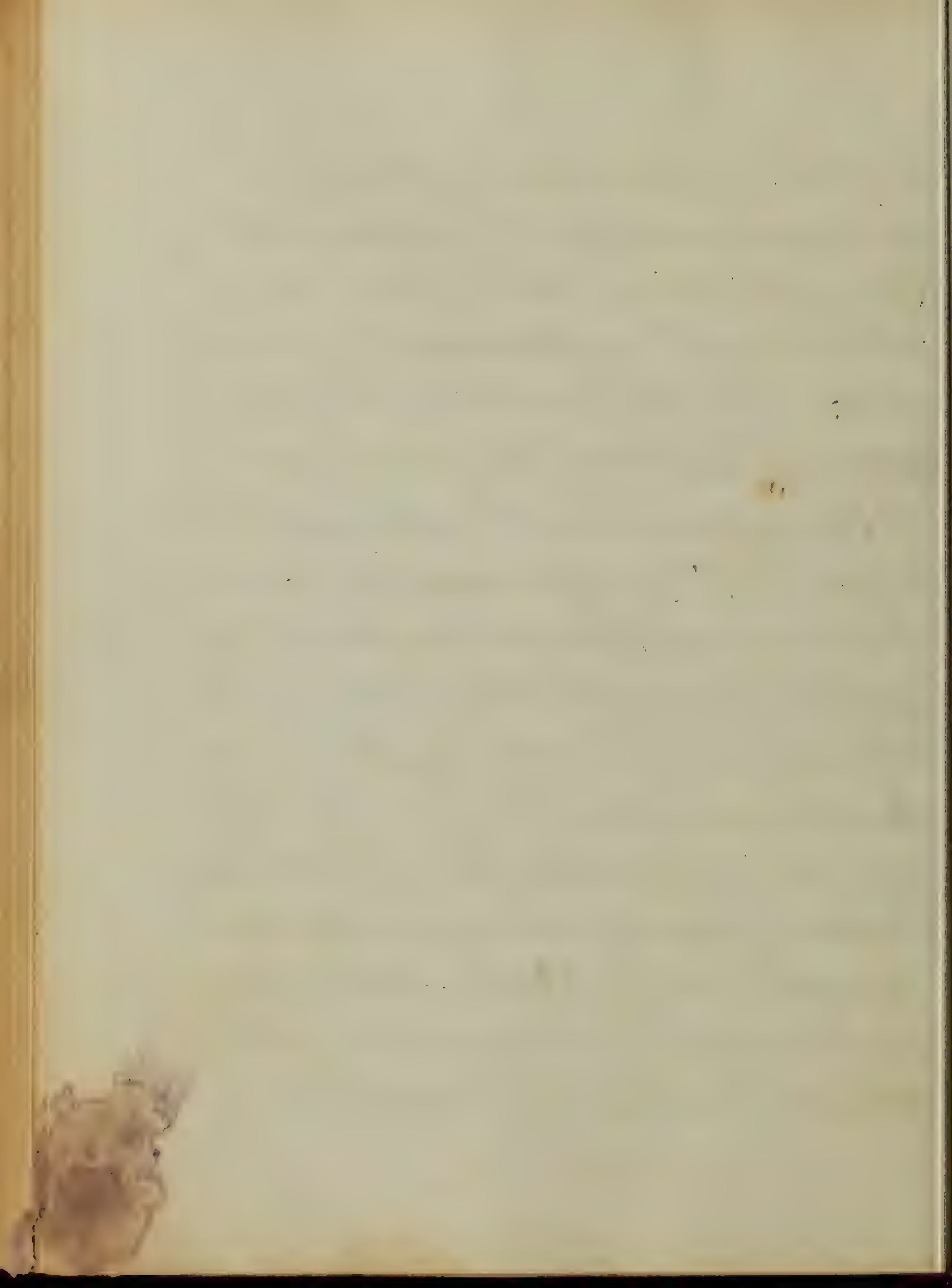


Pneumonia. When the inflammation
is limited to a part of a lobe. it is dis-
tinguish as circumscribed pneumonia
Acute Lobar Pneumonia is characterized
by an abnormal accumulation of blood
, active congestion and Engorgement
constituting the first stage of pneumonia
or the state of Engorgement of the
lungs. In this stage the lung is reddened
dense. but not consolidated, it
floats upon water and there is a
serous liquid exudes upon pressure
air penetrates its vesicles also
crepitates upon pressure this condition
last only for a short time and
passes in the second stage or State
of hepatization or consolidation

this is charactirized by a greater state of ingorgement and congestion, Exudation speedily followes and there is a liquid escapes from the blood, enters the air cells where it becomes coagulated the cells become extended by the fluid the air cells no longer contain air or floats on water the lung becomes solidified. If the progress of the disease be favorable the exuded fluid is soon removed by absorption After the removal of the Exudation the air cells return to there normal condition and their functional capacity is fully restored If the progress be not favorable the third stage or state of suppuration



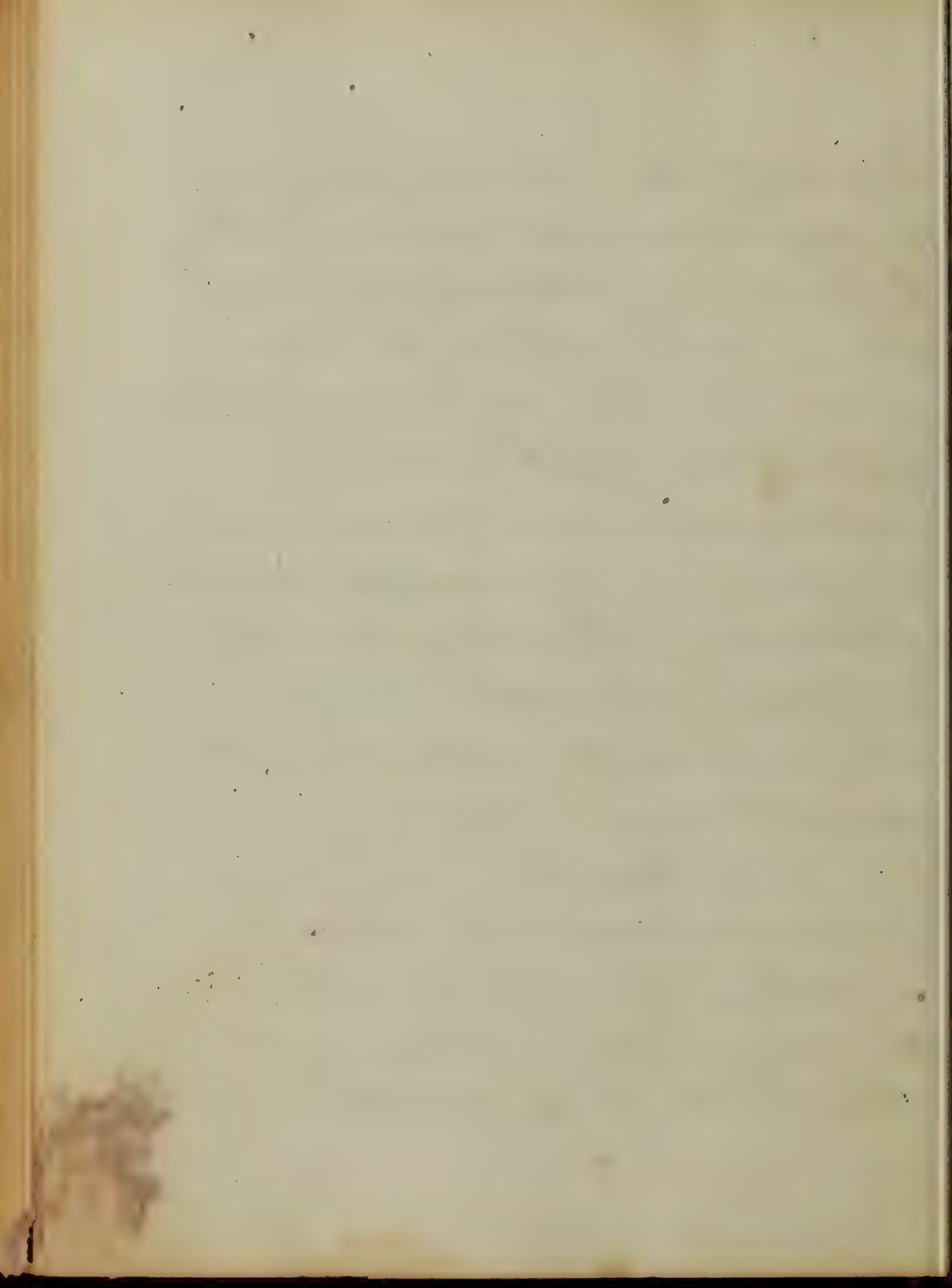
or that of purulent infiltration sets in, characterized by a greyish color of the lungs. absorption does not take place of the morbid product within the air cells and the lobes are infiltrated with fibrin & pus. If the suppuration be circumscribed it constitutes a pulmonary abscess Pneumonia attacks in the great majority of cases the lower lobe and the lower lobe on the right side This disease never or very rarely ever affects or attacks two or both lobes simultaneously when ever two lobes are attacked it is the seat of a new invasion It may attack one lobe and successively another lobe



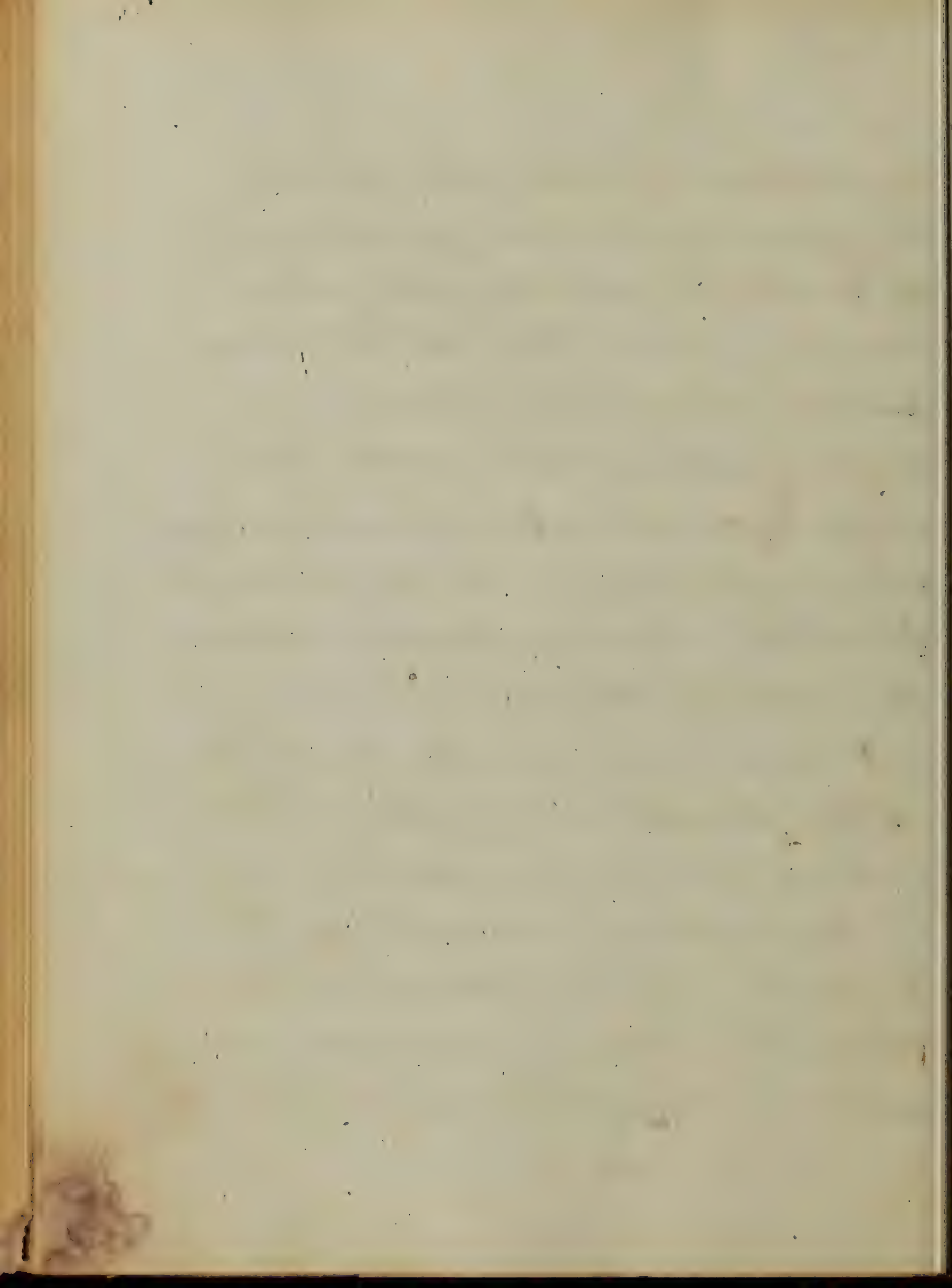
may be affected or there may be affected a single lobe on either side, and on entire lung may be affected and a lobe on the other side constituting double pneumonia When there is a distinct spot or lobule affected it is termed Lobular Pneumonia Abscesses are very common - it is usually the result of Bronchitis, Capillary Bronchitis is the name given to this variety of disease when pus is deposited in the minute bronchial tubes.

Symtoms

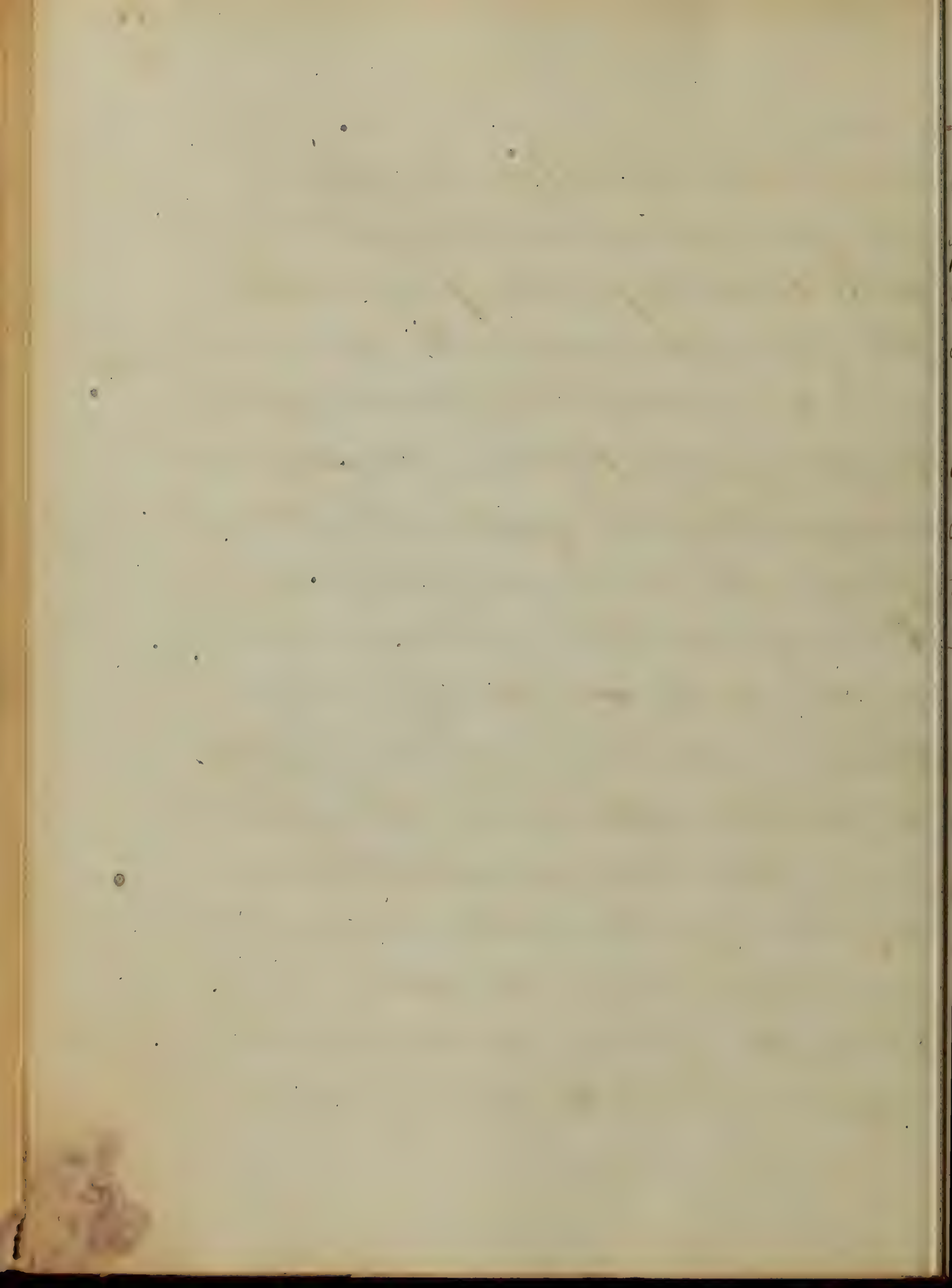
I shall give now a few of the most important signs and indications that may be presented in each stage. In the 1st stage or that of



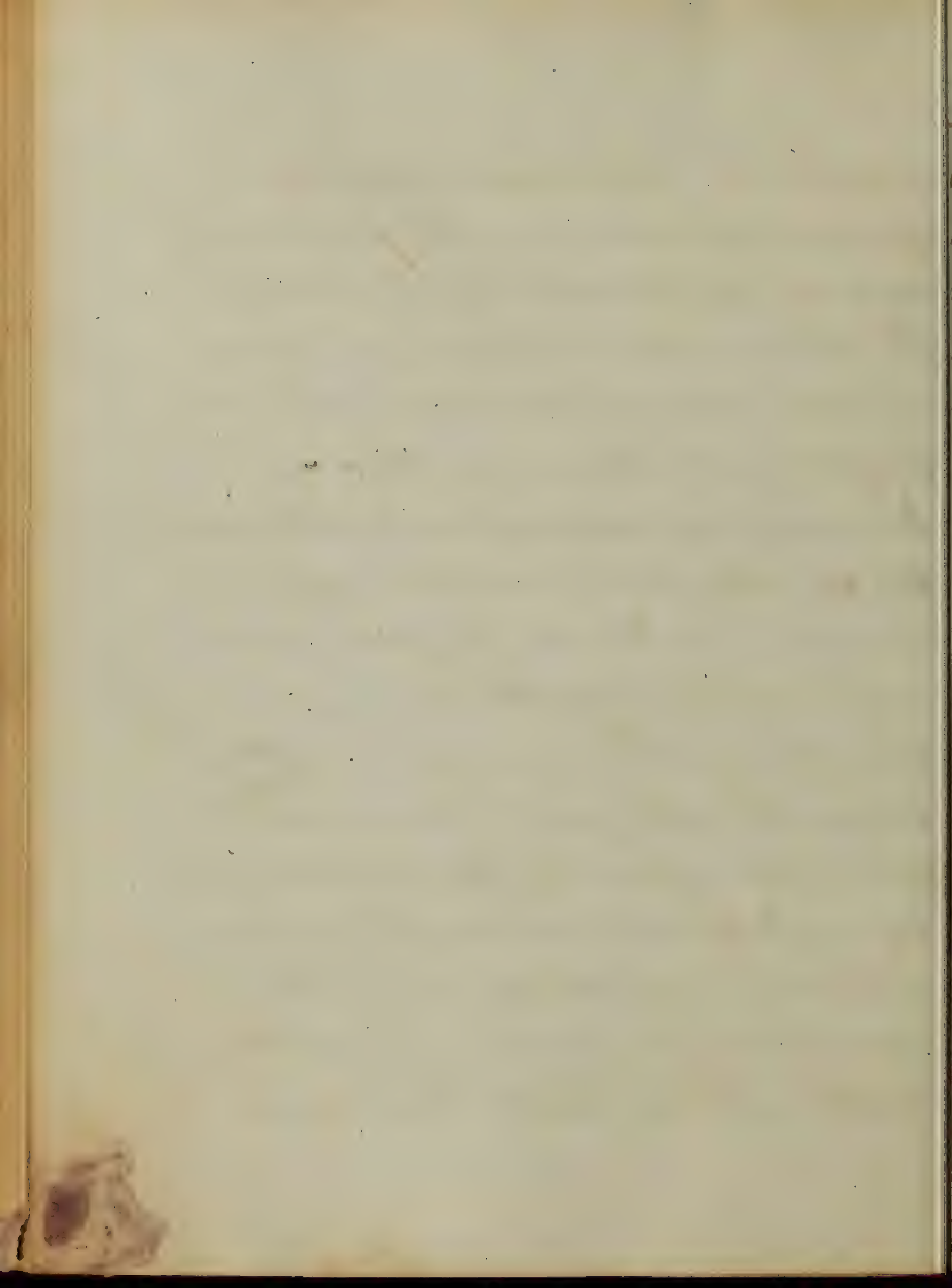
Engorgement or congestion duration being very short it soon passes into the 2ed. Stage or that of hepitization or consolidation. When the lobes have become solidified by an inflamatory Exudation it is said to be in the second stage or consalidation; duration last three or four days; the Stages vary. Resolution begins in some cases of con Solodation in twenty four hours. If the disease passes in the purulent Stage; death will be the result. If the disease be favorable it will be many days or weeks before the Lungs are restored to their natural condition. Pneumonia always commences with a well marked chill associated with



rigors coincidently or soon after followed
by pain which may be seated at or
close to the nipple, this pain is due to
the pluretic infusion, The thermometer
rises to an increased temperature of the
body, although coldness may be present,
being a Subjected Symtom Cough soon
follows after inoasion, with more or
less Expectoration which is viscid
and scanty and at certain Stages
assumes a character which is highly
distinctive of the disease, the Sputa
becomes Semitransparent, adhesive,
and has a red tint and is commonly
called Rusty Expectoration
When the blood is darked colored
it gives rise to the prune juice



expectoration Febrile movements are present at the invasion The pulse varies according to the intensity of the disease The thermometer in mild cases stands at 104°, when it goes beyond this it denotes great severity of the disease There may be a sudden increase of temperature this denotes that a new lobe may be in-vaded. In the 2nd stage the febrile movements and symptoms undergo some what change, The febrile movements are diminished, the pulse becomes weak and small especially if two lobes be affected owing to the obstruction of the pulmonary circulation, which diminishes the quantity of blood coming from the lungs by the right ventricle. Pain ceases

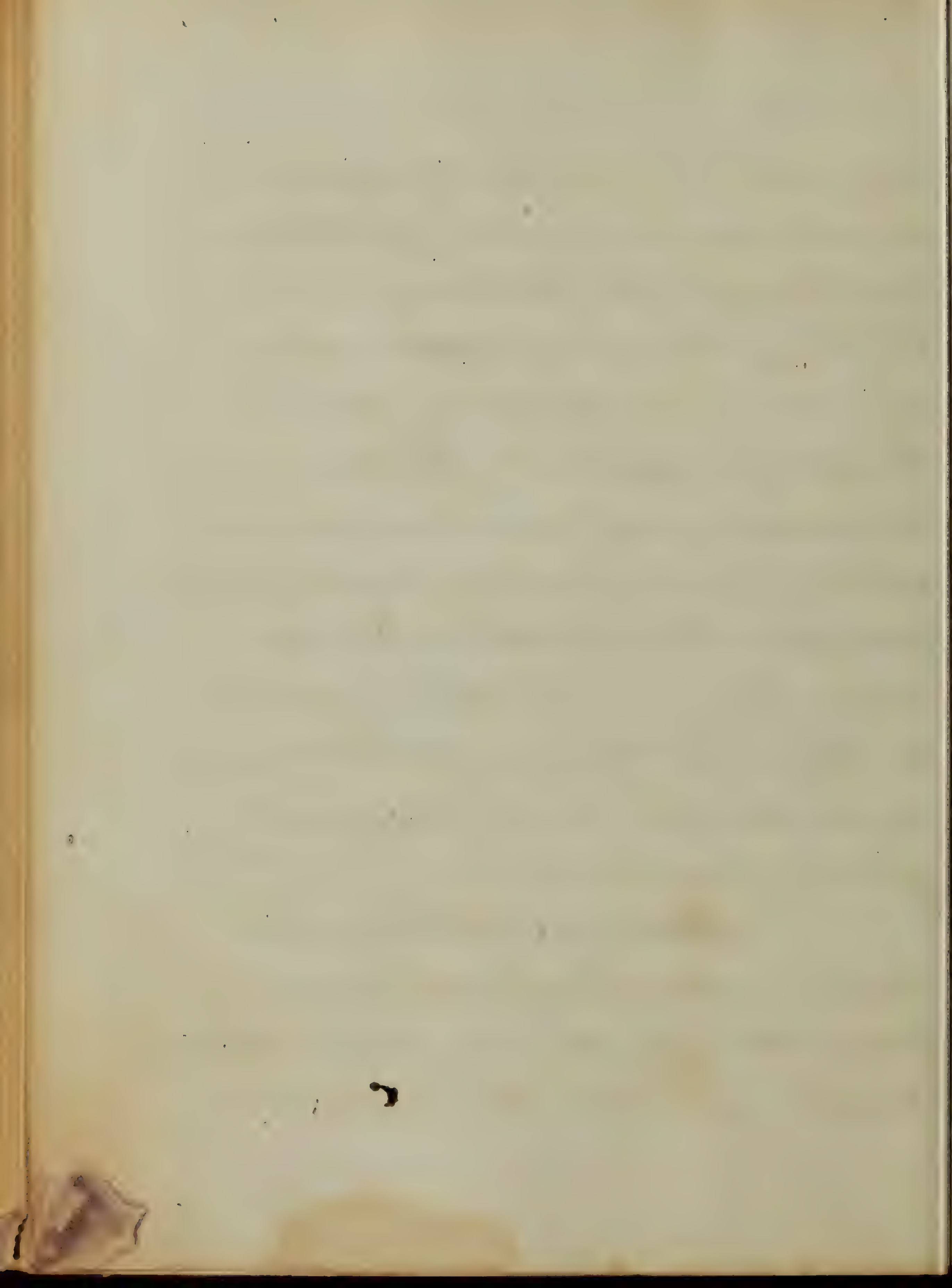


expectoration is more abundant it is now the expec-
toration of Bronchitis it is furnished by the mucus
membrane of the bronchial tubes When resolution
sets in resperation decreases the pulse becomes
much slower the cough and expectoration gradualy
lessen; finally disappears febrile movements
subsides; however if it enters the third stage
the disease generally persues an unfavorable
course resperation increases pulse becomes ac-
-celerated the patient grows weak and pale
and soon that cold and calm monster comes
on and claims its own; in spite of all; and
takes the suffer home Delirium very often oc-
curs in pneumonia; it may be mild
owing to febrile movements sometimes
it may be quite active and the patient becomes
restless it may be of a low muttering type

such as occur in typhoid fever, it is always accompanied when the uper lobe is affected There may be complicated with the disease symtoms characterized by a malaria poison, this complication is most important in regard to therapeutical application This disease may tend to interrupt the periodical paroxism and the latter may tend to obscure the symtoms of the pulmonary affections. There are certain prominent symtoms expressed as Typhoid Pneumonia the latter being the disease the former being only a primary complication

Pathological Character

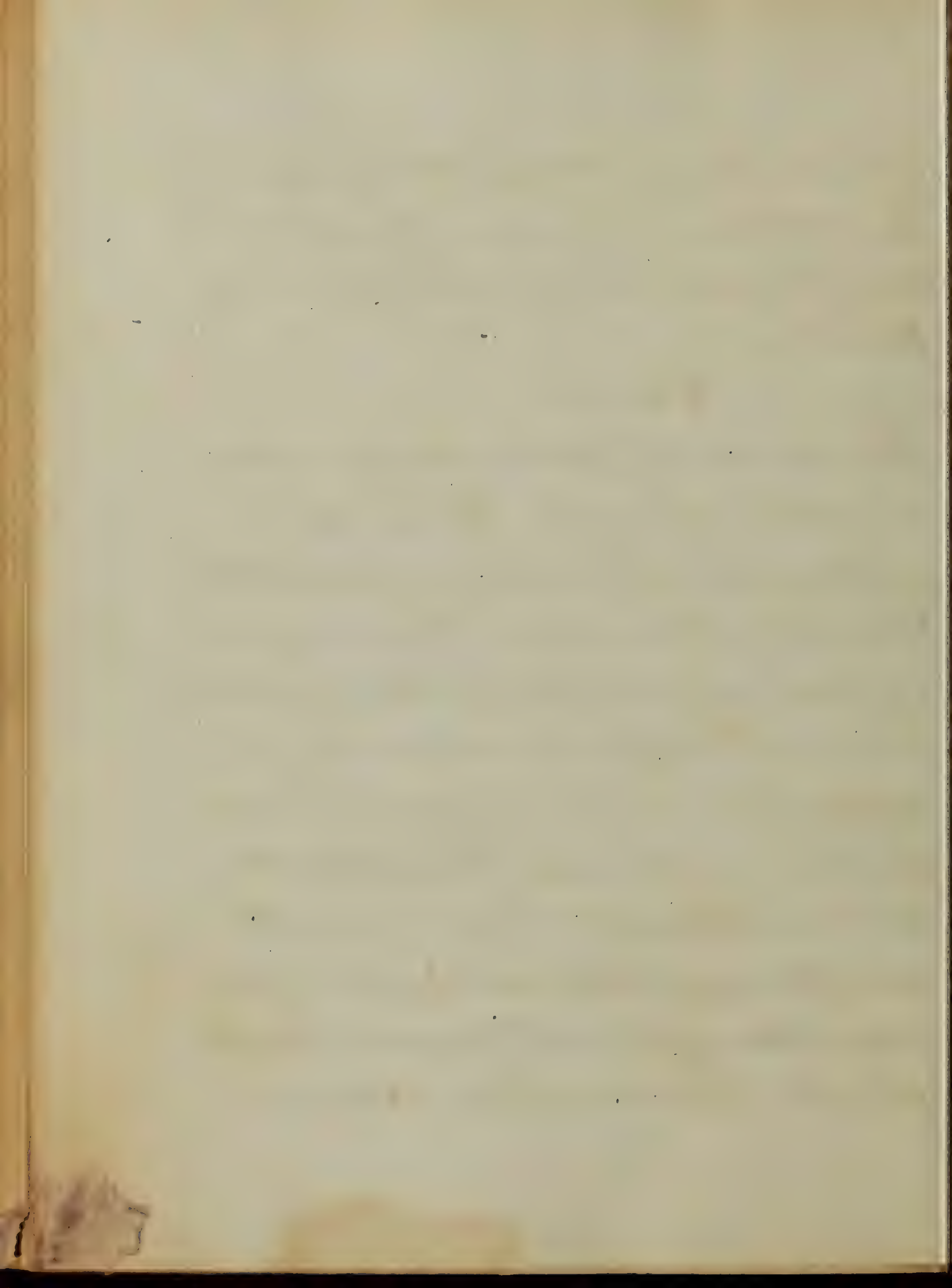
Pneumonia {Acute,} affects the mucus ~~tissue~~ of the lungs this tissue differs altogether from that which lines the bronchial tubes



both in anatomical composition and function
Exudation rises in Pneumonia from the blood
circulating in the branches of the pulmonary
Arteries,

Cause

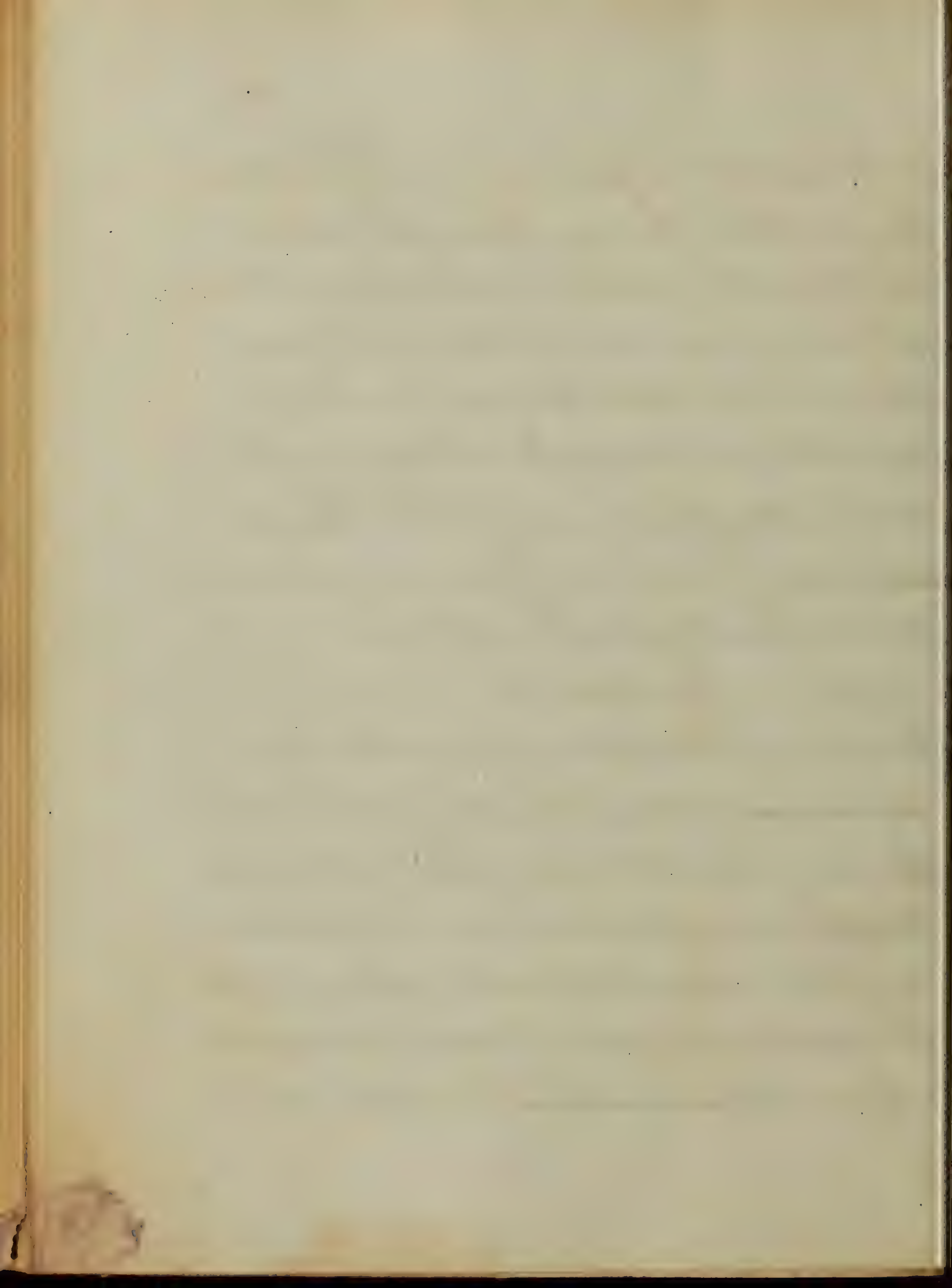
This is due (strictly speaking) to exposure; and
vicissitudes of weather There is no period
in life which may be exempted from a notable
proclivity of this disease There is no path
ological connection between these affections
Pneumonia and periodical fever So far
as causative influence pertaining to other
pulmonary diseases Bronchitis does
not tend to evenuate Pneumonia neither
does Plurisy, Typhus and Typhoid fever
may be among the most frequent comp
plication Pneumonia is more common



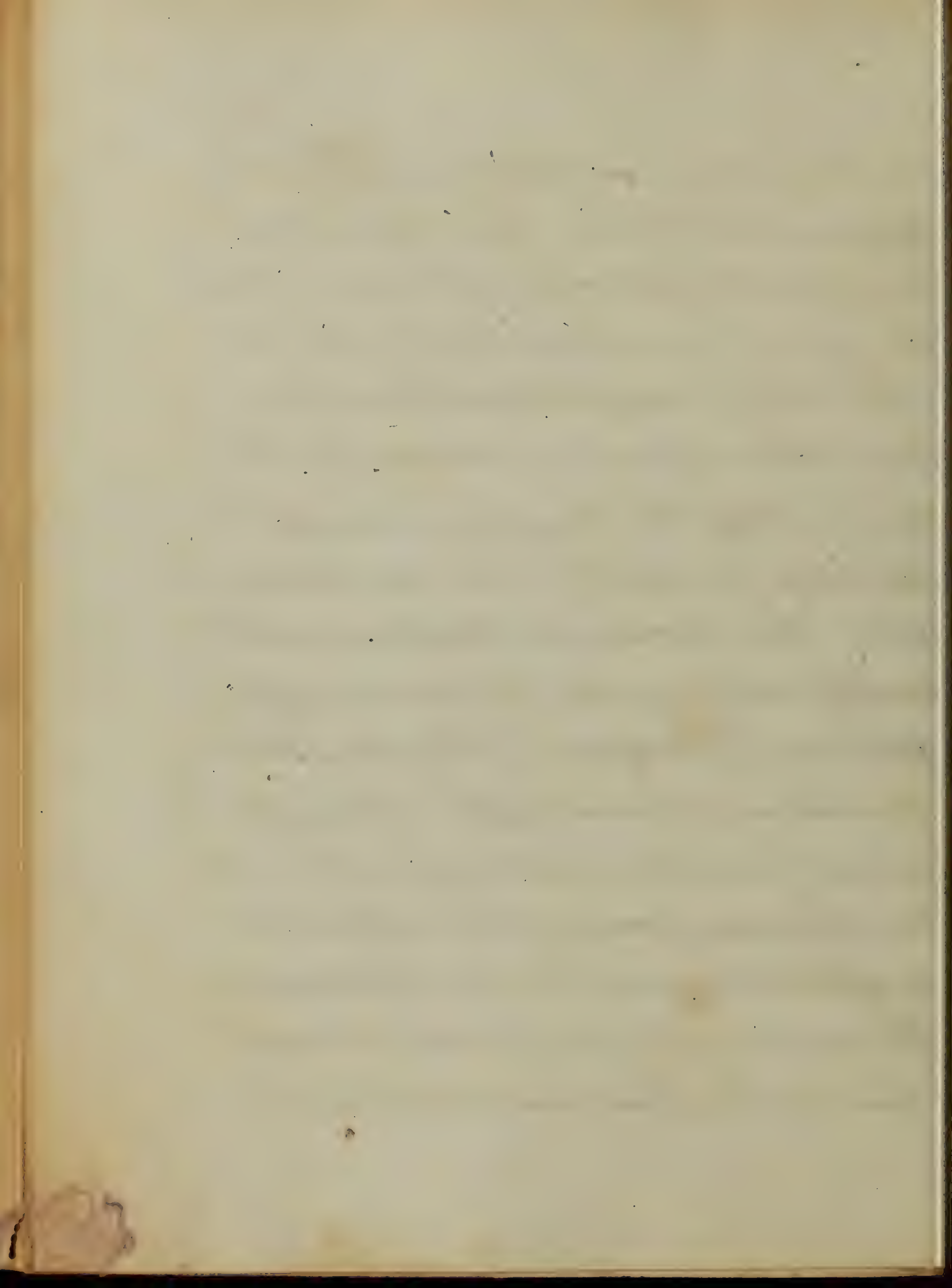
In the Southern States, it is emphatically the prevalent disease during the Winter months in these States and may be considered at times an Endemic It is more severe at the South than at the North where it has a tendency to attack more than one lobe and often proves fatal The internal cause and Source of Pneumonia we are not able to understand ; Flint

Diagnosis

There is Symptoms in Pneumonia at certain stages which are highly distinctive with the aid of Physical Signs The first signs of diagnosis is slight dulness on percussion and the crepitant rale especialy if there is a rusty Sputum it may be only absent on deep inspiration It resembles that



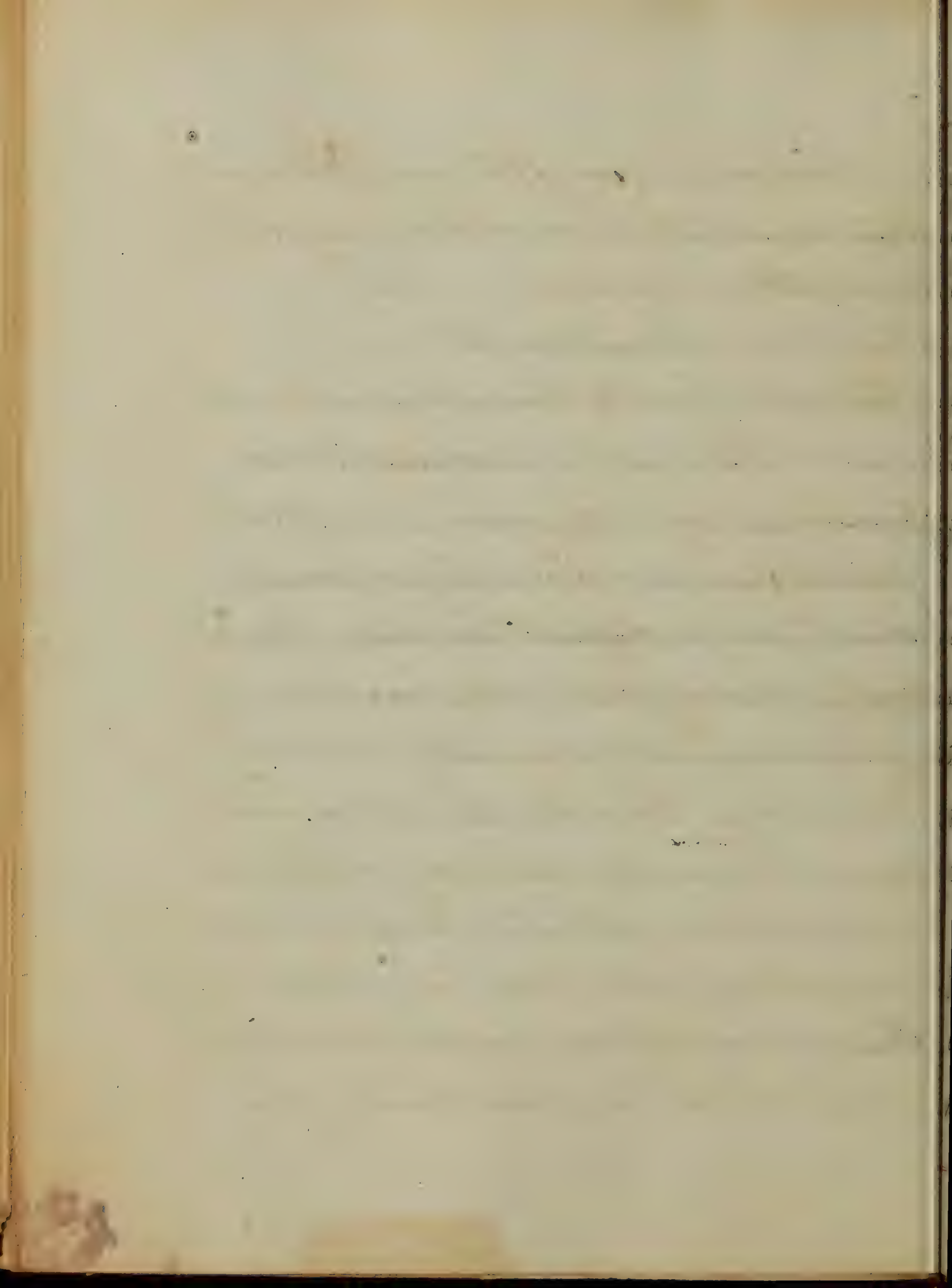
noise by rubbing a lock of hair between the fingers close to the Ear. This rale indicates Engorgement whilst it exist it denotes that the disease has not passed out of the first stage The Sub crepital is the moist rale heard both in Experation and Inspiration In the Sec. Stage the Diagnosis is rendered clear and easy by solidification and Subcrepitant rale Then the disease continues in the 3rd Stage dulness and flatness are still present {Prognosis} Prognosis in this disease will depend on the Extent of lung involved and its connections and complications It hardly ever proves fatal unless it is complicated or more than one lobe involved The unfavorable symtoms are febleness hurried respiration prunesjuice expectoration



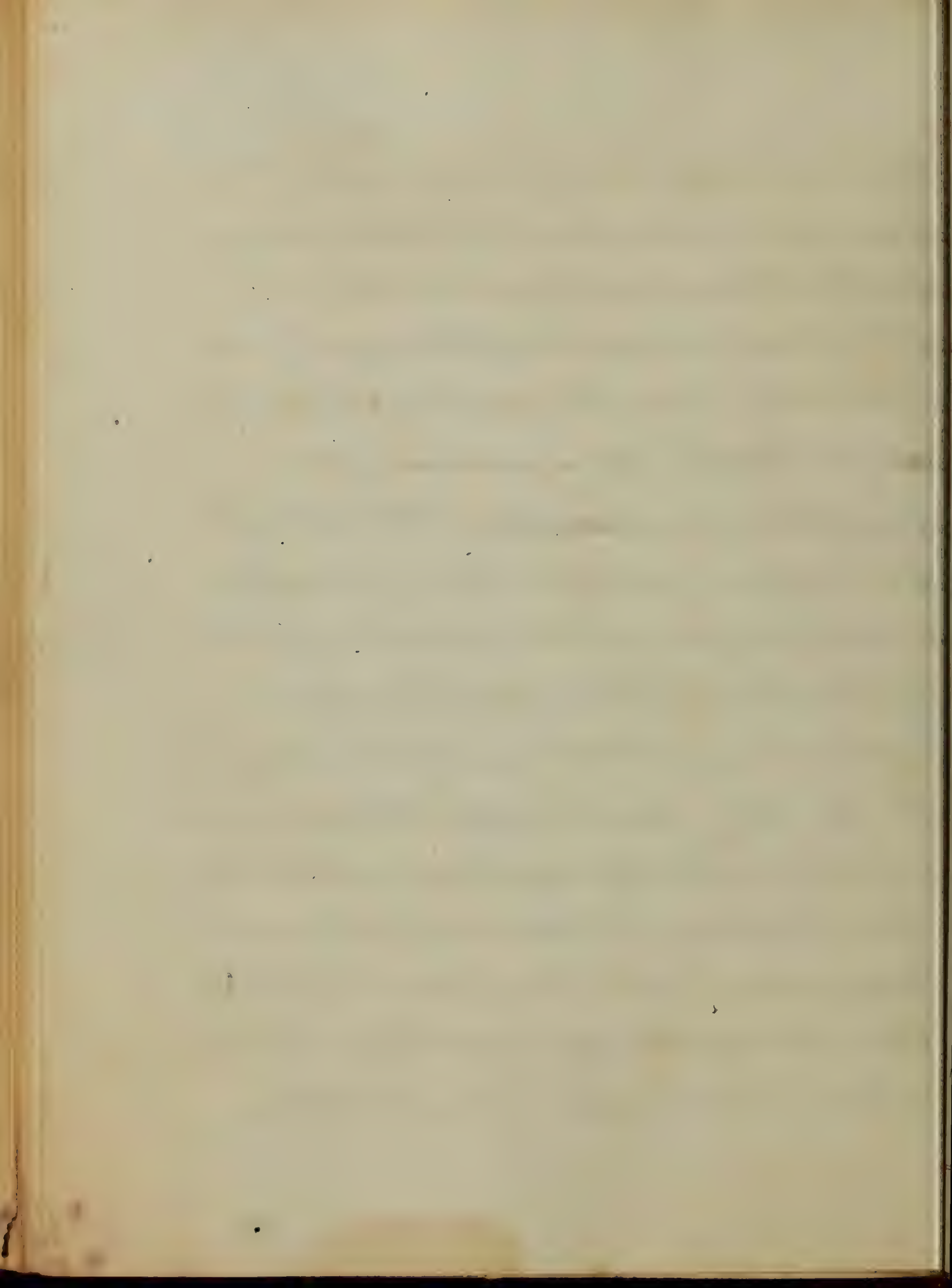
active and violent dilirium. The tendency to pass into the chronic form is slight There is no tendency to relapse

Treatment

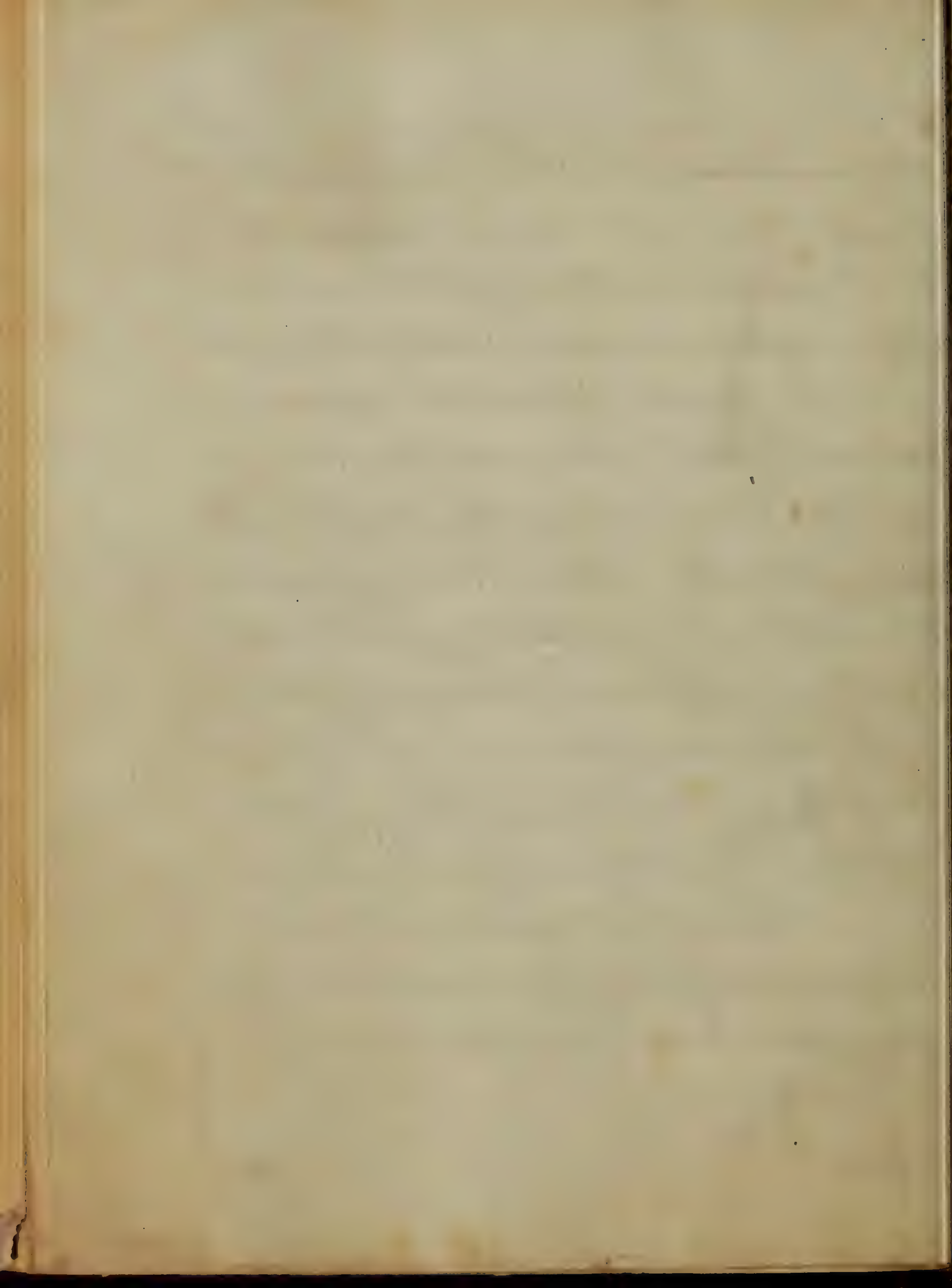
The first object of treatment in Pneumonia is to diminish the intensity of the disease to relieve symptoms and to place the system in a condition to tolerate the disease. Each stage of Pneumonia must have a different therapeutical (application) and indication and each stage is to be considered seperately and treated according. Bloodletting is admissible in some cases where there is high febrile movements as a palliative The condition of the patient should be always be investigated The most warrented circumstances in which it is to be imployed is a pulse denoting power.



of the hearts action and febrile movements It often relieves embarrassments of breathing immediately. Opium may be given in the first stage to relieve pain and to tranquilize the system Also aconite may be given as a sedative Blisters are injudicious warm fomentation may be applied to the seat of pain Opium given after a saline purgative at intervals often meets the indications of the 1st stage Treatment of the 2nd stage has reference to promoting resolution and supporting the system mercury and the antimonials are not look[whereas] for before cients nor do they have any tendency to diminish inflammation Iodine may be used as a Counter Irritant. Opium is a vanable agent in this stage It does no harm if it does no good It does not delay



the commencement or retard the progress of the disease Aconite Tarter Emetic Veratrum Viridi may be given in this stage for febrile movements Supporting measures must be adopted if there is failure of the vital powers such as tonics and stimulants and nutritive diet Drugs do harm when used injudicious as much so as they do good when used judiciously. Alimentation is an essential part of the supporting treatment. If the disease proceed to the suppurative stage supporting measures sometimes successfully can be employed. Having Embodied all the prominent points of Pneumonitis in my Thesis I will now bring it to a close and will respectfully submit it to you for your kind consideration



Thesis
on
Syphilis.
By
James Brown.
'75

Syphilis.

Introduction.

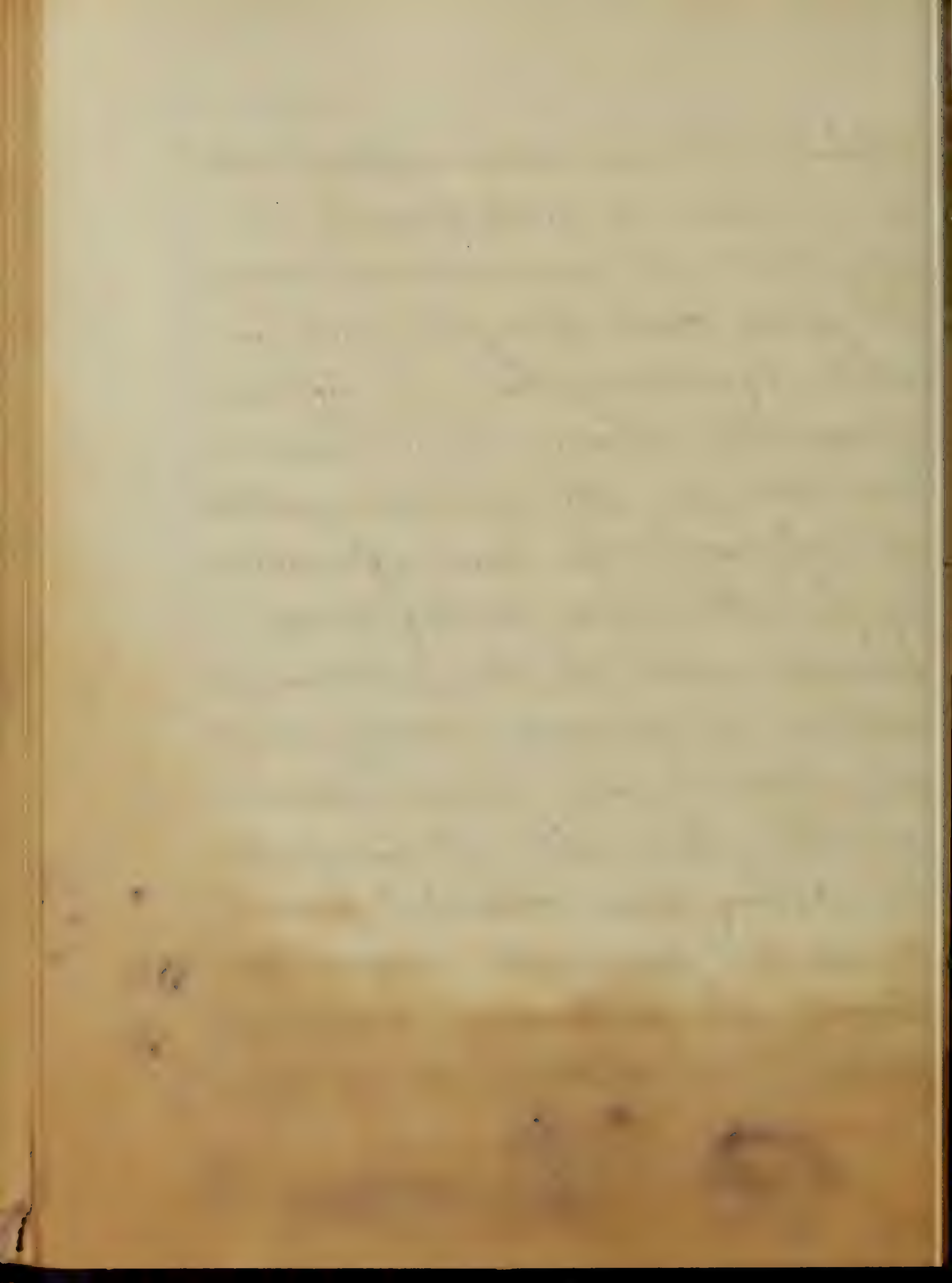
Syphilis belongs to the class of diseases termed infectious — which has the following characteristics:— 1. It possesses a morbid poison, which is capable of transmitting the disease from one individual to another. 2. The immunity which one attack generally affords against a second. 3. A period of "incubation" during which the virus remains latent in the system giving no evidence of its

existence. 4 The somewhat regular order in the evolution of the symptoms. We will now consider each of them in the order named above.

1st Syphilitic Virus.— The existence of this poison was once questioned, but experience has proved that it does exist beyond a doubt. It is true that our senses can not detect it, we only are made cognizant of its existence by its effects.

2d One attack affords immunity against a second.— Syphilis resembles other diseases which are both contagious and con-

stitutional in this respect, that a person is indisposed to contract it a second time It was once thought and is still by some, that it differed from the above mentioned maladies in the following that it observed the law of unicity; but Ricord & Diday have shown this to be untrue, for whilst a person having had a chancre may never have another, but still it is possible. Diday has collected twenty cases to prove the above. He draws the following conclusions from a consideration of this

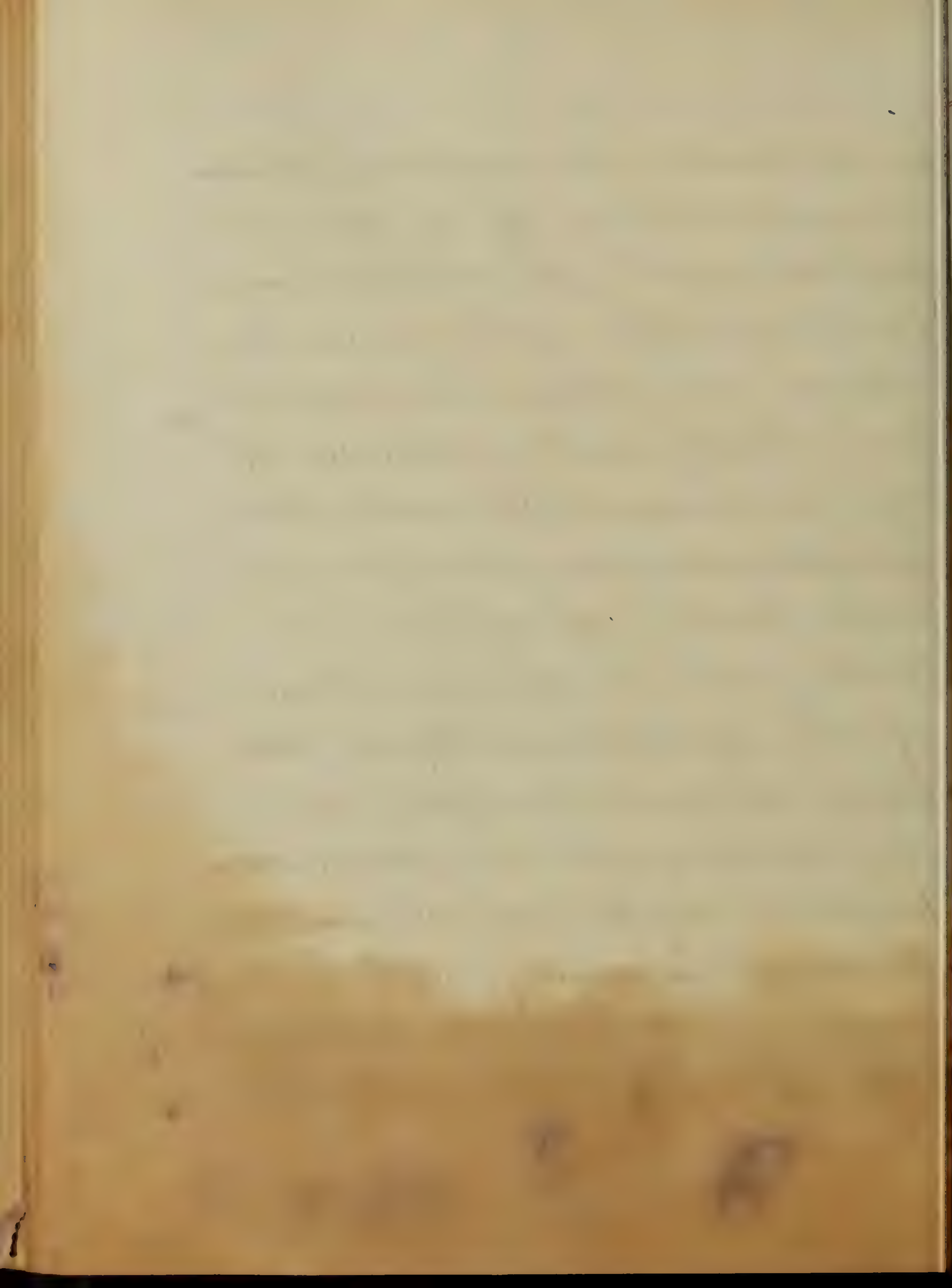


subject. 1st The reinfection of a man who has had syphilis proves that he was cured of it at the time of the second infection. 2d The possibility of the reinfection proves that syphilis can be radically cured. Finally in any case of reinfection of syphilis the surgeon should wait for general symptoms to make their appearance before giving mercury, as the production of a chancre is generally the only result, and specific treatment is not required.

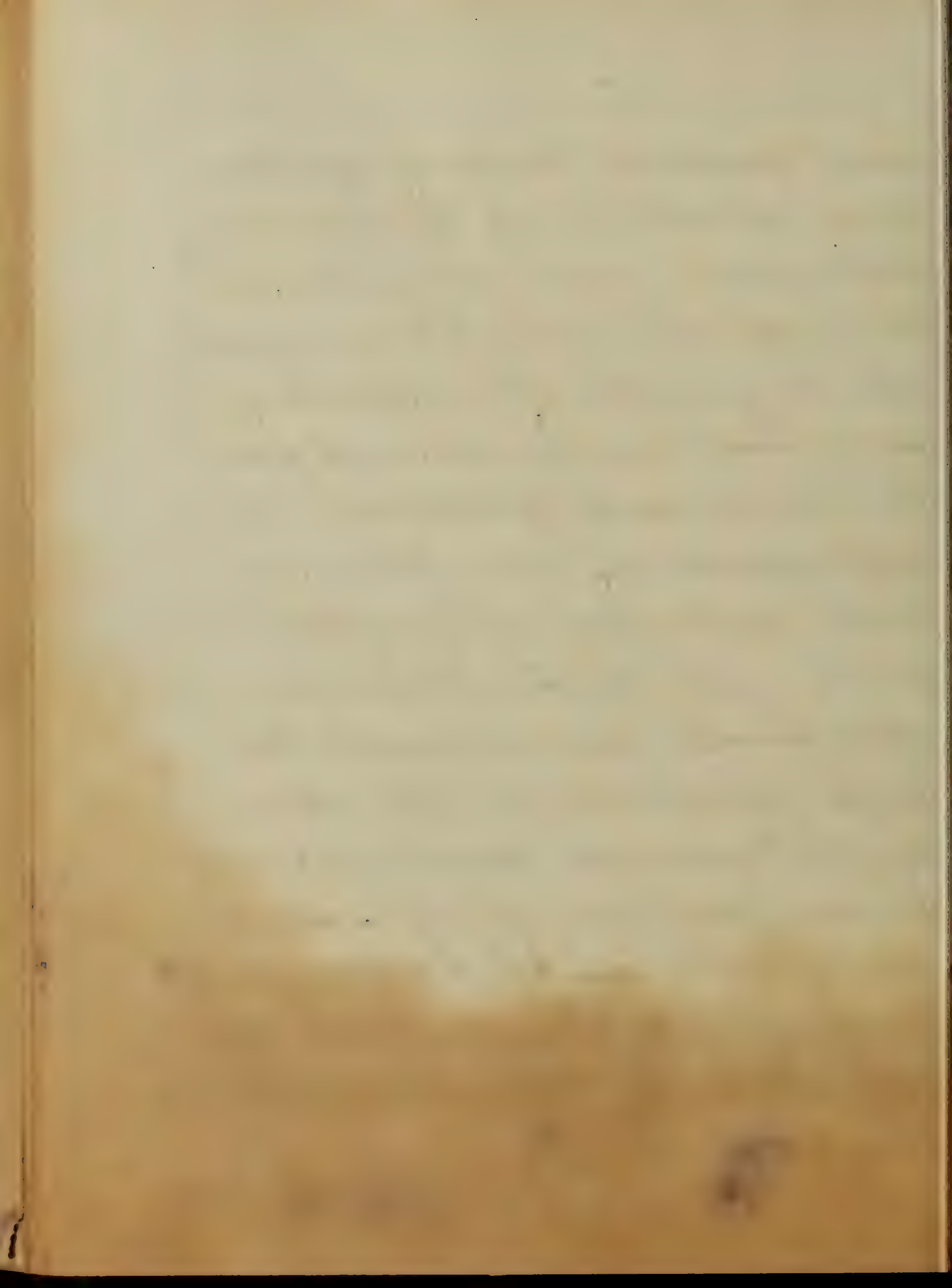
3d Syphilis [illegible] a period of incubation. — This is a term used

to designate the interval between the introduction of a morbid poison and its earliest manifestation. This will again be referred to when we come to treat of the initial lesion of syphilis (chancre). The constitutional manifestations are also preceded by a period of repose.

4th The order in the evolution of the symptoms — Upon this Hunter & Hemel founded their — classification; but has since been perfected by Ricord. It embraces "primary", "secondary", and "tertiary" symptoms. It has the advantage of being both natural

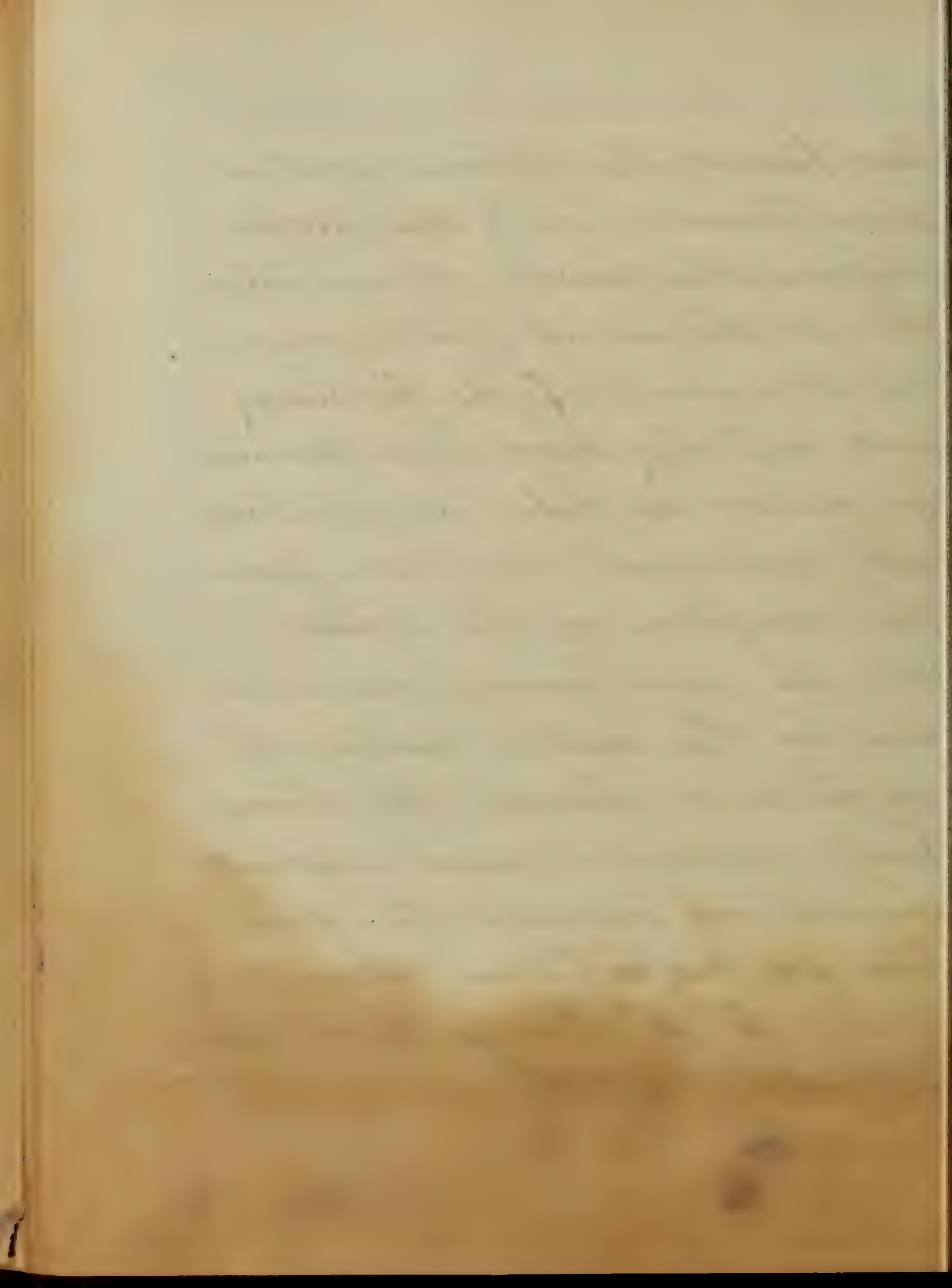


and practical. Primary symptoms should include the initial lesion, and the induration of the neighboring lymphatic ganglia. The secondary symptoms rarely occur before the third week following the appearance of the primary, and not generally after the sixth month. To secondary symptoms are referred certain affections of the skin, of the mucous membrane, certain affections of the iris, also of the lymphatic ganglia. Tertiary symptoms affect the subcutaneous, sub-mucous, cellu-

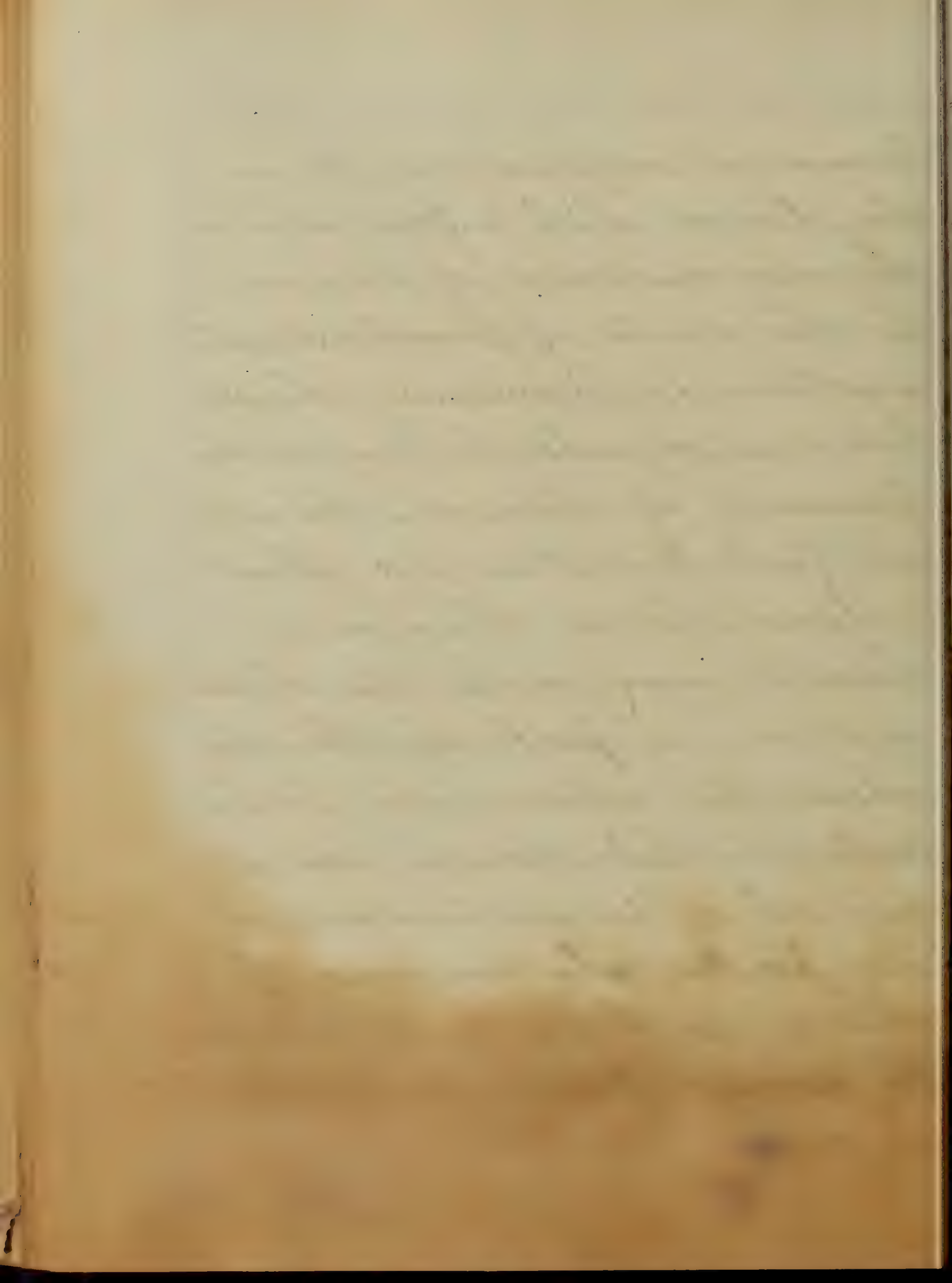


lar tissue, the fibrous and osseous tissues and the deeper organs. They rarely occur before the sixth month following the appearance of the primary sore, and they have been known to occur as late as the twentieth year and even later, from the reception of the virus.

Let us now turn our attention to the initial lesion of syphilis or "chancre". The terms "hard", "indurated", and "infecting chancre" are incorrect. The first two are superfluous, because a chancre is always hard and indurated. The latter is incorrect



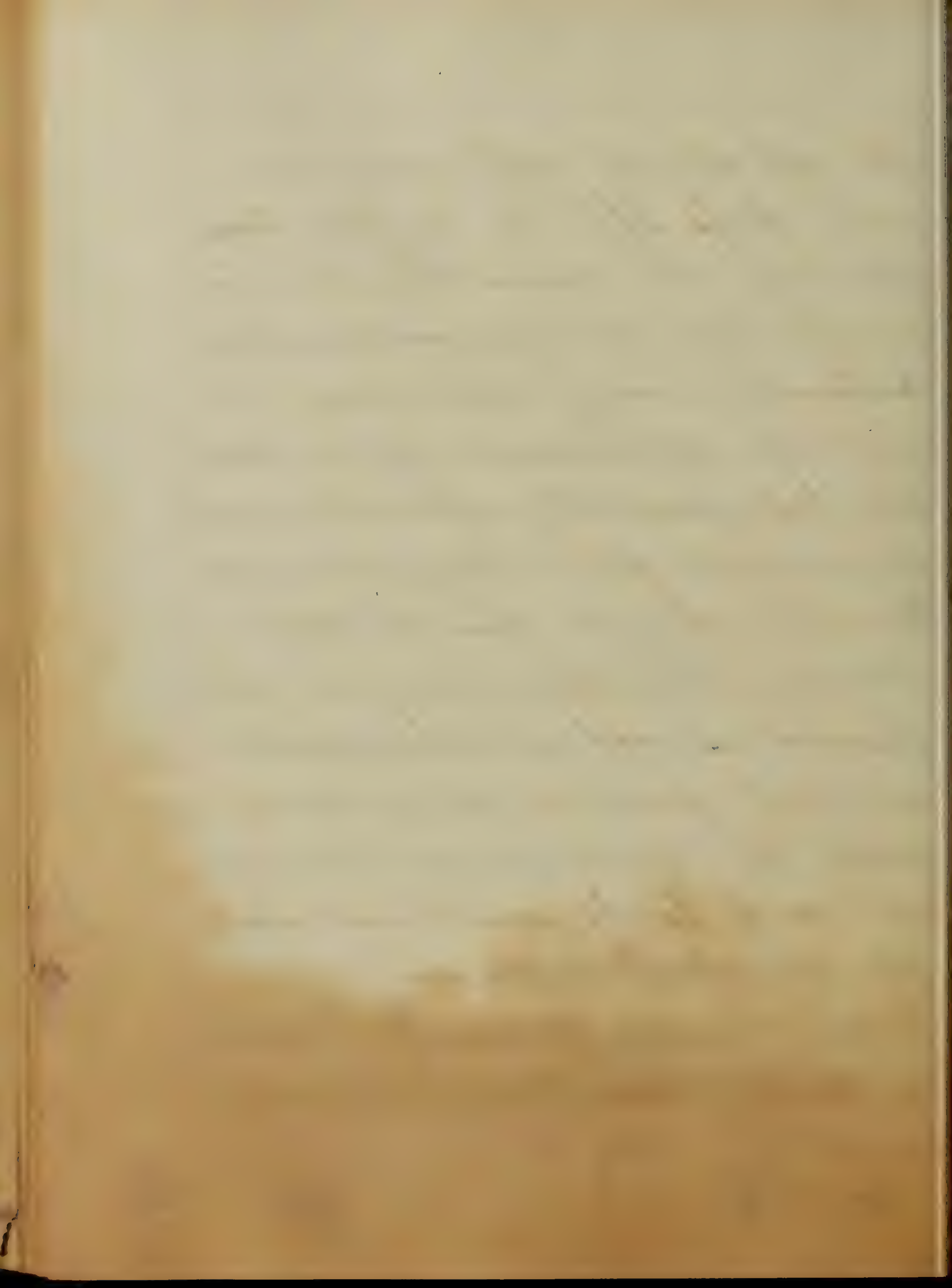
because it implies that it is the chancre which infects, where-as the very existence of the sore is the result of constitutional infection. In examining the statistics, as regards the comparative frequency of chancre & chancroid, we find that there are about 4 chancroids to 1 chancre. A chancre may make its appearance on any part of the body where the virus may be introduced. That chancre has a period of incubation according to the observations of others is beyond a doubt. It averages [illegible] 14 to 21 days



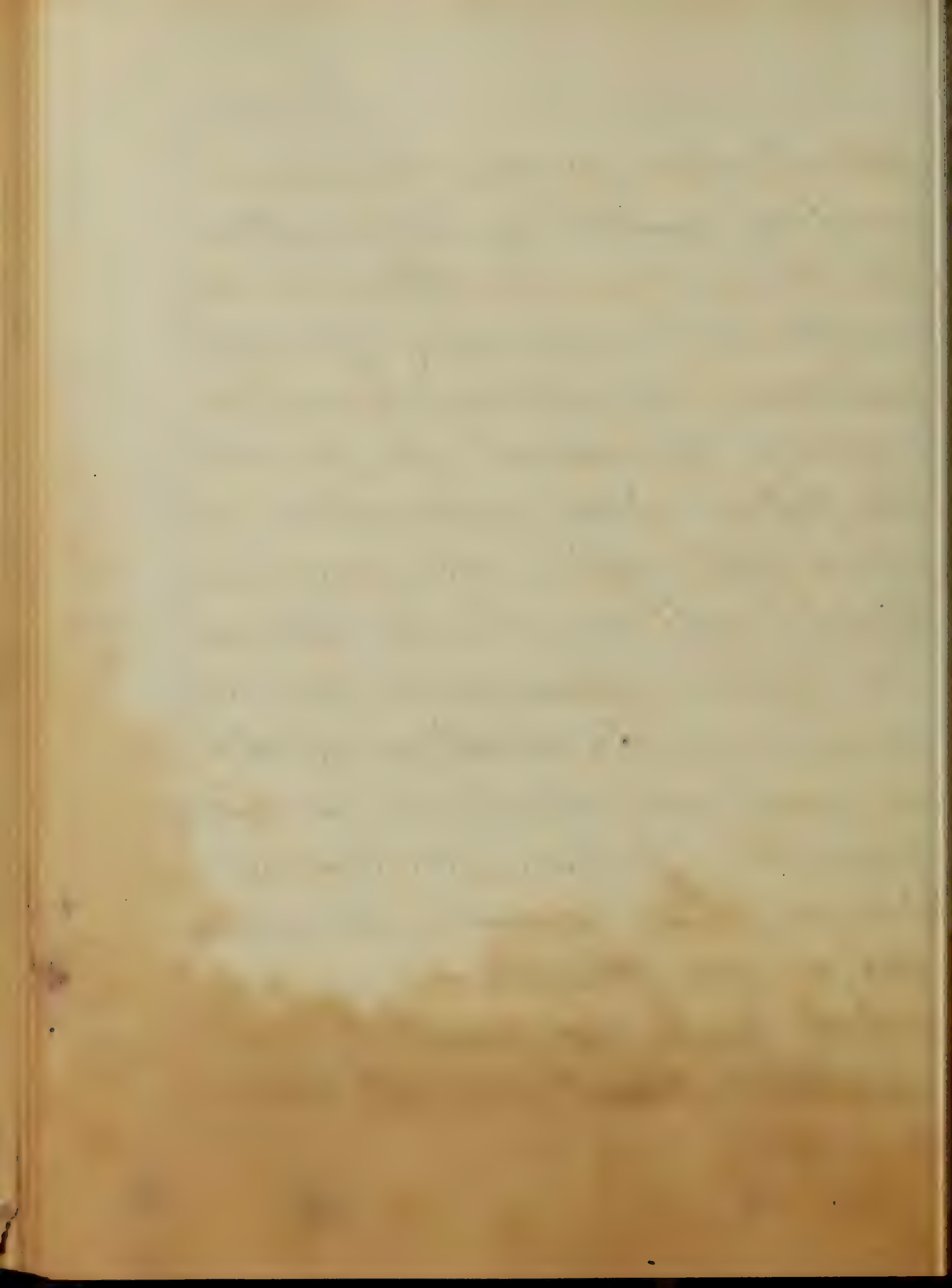
sometimes extending to 5 or even 11 weeks.
Symptoms of chancre.- Induration is a very prominent - symptom of chancre. It is a peculiar hardness of the tissues, around and beneath the sore. It is readily distinguishable from the hardness caused by inflammation by the following characteristics. It is circumscribed where-as the hardness of inflammation fades - off into the surrounding - healthy structures. This deposit occurs in the absence of the symptoms of inflamma-

tion. So insidiously it takes place, that the patient is often ignorant of its presence. The chancral induration is freely movable upon the underlying tissues, whilst that of inflammation is adherent. The difference in the sensations they impart to the fingers is still greater; specific induration is so firm, hard, and circumscribed that it has been compared to a "split pea"; inflammatory induration is soft and doughy. A difficulty in diagnosis often arises when these two conditions exist together. [illegible]

the effects of inflammation will pass off in a few days leaving the characteristic circumscribed specific induration. Induration may take place before the appearance of a chancre, but generally after. It usually remains for a long time after the chancre has healed. Secretion. The secretion from a chancre is not so abundant as that from a chancroid, and is chiefly serous. Chancre is said to be auto-inoculable in about 2 per cent. Duration. Chancre generally remains a shorter time than [illegible]



but it often exists after the se-
condary symptoms have appear-
ed. Termination.— As chancre is
unattended with any loss of
substance it seldom leaves a
cicatrix to mark its position.
As before stated induration is
often left after the sore has
healed, and sometimes ulcera-
tion takes place, and produ-
ces a sore, the secretion of which
is just as infectious as that
from the former, and some-
times this second ulceration
takes on phagedenic action,
which tends to great loss of
substance. Ricord noticed that a



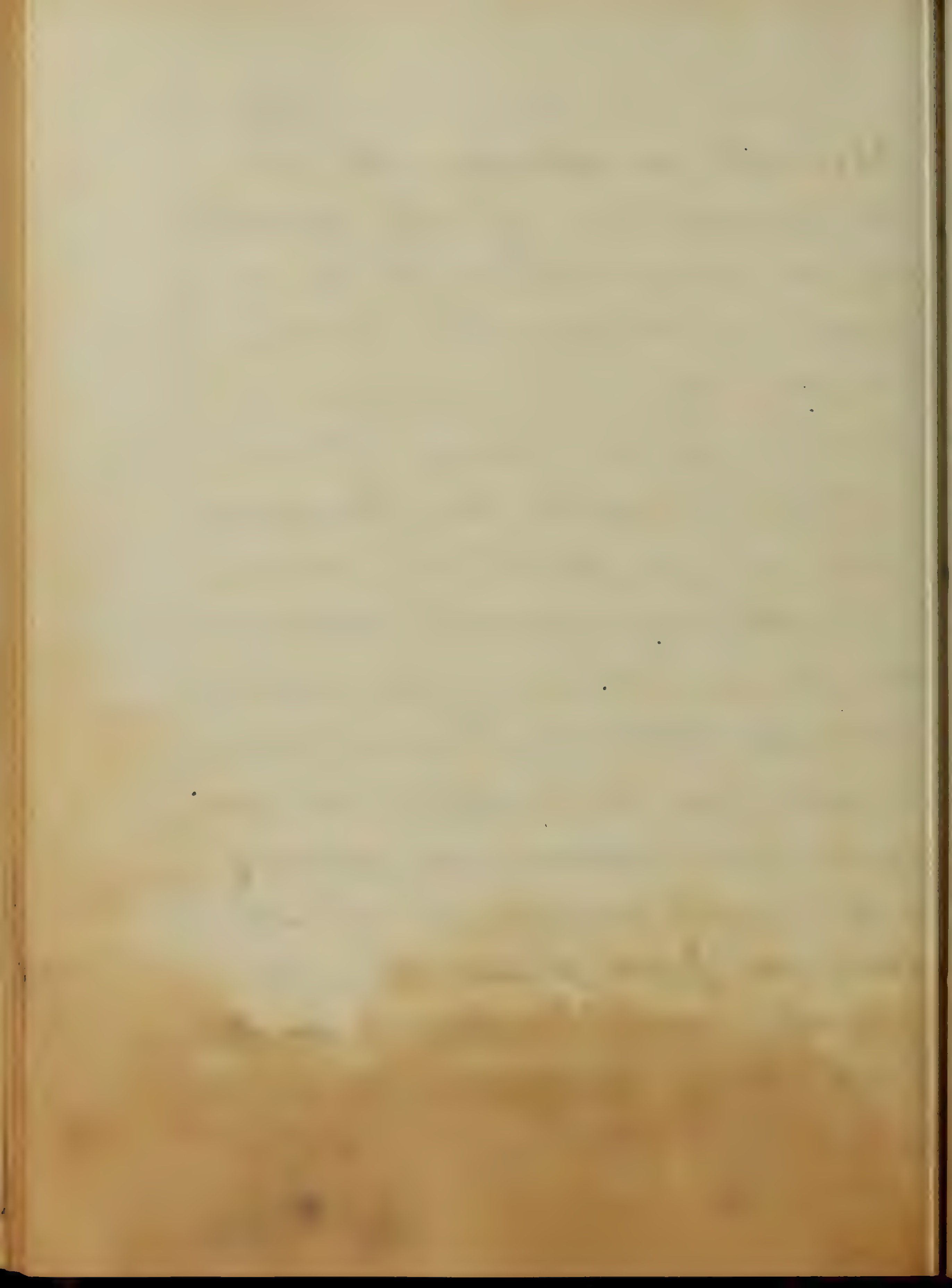
chancre, during the separative period, may be transformed into a mucous patch, thus converting a primary into a secondary lesion. Number of chancres. There is generally but one, if more it commonly proceeds from the fact that the virus entered the system by two different portals at the same time. Phagedaena.— It generally spares the chancre, but sometimes it takes place. Condition of the neighboring ganglia. They become enlarged and indurated without inflammatory action [illegible]

sensation imparted to the fingers is very often compared to that transmitted by chestnuts in the folds of a handkerchief.

Diagnosis of chancre.- The most valuable diagnostic signs of chancre are its period of incubation, induration of its base, and of the neighboring lymphatic ganglia; the peculiarities of which have been described above.

Differential diagnosis of chancre and chancroid. A chancre is always due to the inoculation [illegible] syphilitic virus.

Chancroid is always due to the inoculation of the secretion of a chancroid, or the pus from a chancroidal bubo. In chancre there is always a period of incubation from two to three weeks. In chancroid there is no period of incubation. Chancre generally commences as a papule which usually becomes ulcerated. Chancroid commences as a pustule, or as an open ulcer. Chancres are usually single, rarely multiple, if at all from the first. Chancroids are generally multi[illegible] either from the first or by successive inocu[illegible]



Chancre is generally a superficial erosion, scooped out, rarely deep, cup-shaped, sloping towards the centre. Chancroid perforates the whole thickness of the skin or mucous membrane, "punched out" excavated. The edges of a chancre are rounded, flat, sloping, and adherent to the tissues beneath. The edges of a chancroid are abrupt, eroded, and undermined. The floor of a chancre is red, livid, more or less level sometimes covered by a false membrane. That of a chancroid is whitish, pultaceous, and [illegible] secretion of a [illegible]

serous, and scanty, auto-inoculable with great difficulty. That of a chancroid is copious and purulent, readily auto-inoculable. Induration of a chancre is hard, and circumscribed generally persisting for weeks or months. In chancroid there is no induration of the base, although there may be engorgement as a result of the application of a caustic; &c. in which case it is not circumscribed, and is of short duration. The sensibility of a chancre is slight. That of a chancroid is great. Phagedaena in chancre is very rare and [illegible]

it does take place, it is generally
limited. Phagedaena in chancroid
is frequent and spreads rapid-
ly causing great destruction of
tissue. One person rarely has -
more than one chancre in his -
life time. Chancroid may affect
the same person an indefinite
number of times. In chancre -
the neighboring superficial lympha
-tic ganglia on one or both -
sides are indurated, painless, -
and freely movable, suppuration
rare, but never auto-inocula-
ble. In chancroid ganglionic
reaction absent in the majori
ty of the cases, when present

there is generally but one ganglion affected or inflamed, suppuration frequent, pus often auto-inoculable. A chancre is an expression of a constitutional disease; general symptoms usually occur in about six weeks from the appearance of the sore. Chancroid is a local affection never affecting the constition.

Treatment of chancre.— The abortive treatment has long been abolished; as it has been shown to be of no avail; for it is not the chancre which infects the system but as it were the ch[illegible]

cre only gives evidence that the system has become infected with the syphilitic virus. According to the opinion now held by most authors on this subject, healing a chancre has no effect upon secondary symptoms. Under the use of mercury reparative action is speedily induced.
As before stated the neighboring lymphatic ganglia, that is, those which are in direct anatomical relation with the chancre are generally indurated on one or both sides, in the former case they are generally on the same side as the chancre.

It may generally be discovered by palpation; there are no symptoms of acute inflammation; indolency is one of their chief characteristics. They generally require no treatment.
General syphilis. — The chancre together with the indurated ganglia in its immediate vicinity are the first signs of constitutional infection. After which there is an interval during which the virus remains dormant in the system. Following this period of [illegible] the poison resumes its activity

and gives rise to symptoms distant or near the initial lesion. The period of incubation of general syphilis, or the interval between the appearance of the initial lesion to the occurrence of constitutional symptoms, is from three weeks to six months. Secondary symptoms are contagious. The medical literature is full of cases which go to prove the same. The initial lesion of syphilis whether derived from a primary, secondary, or tertiary lesion is a chancre. Tertiary symptoms do [illegible] cur before the sixth -

month.

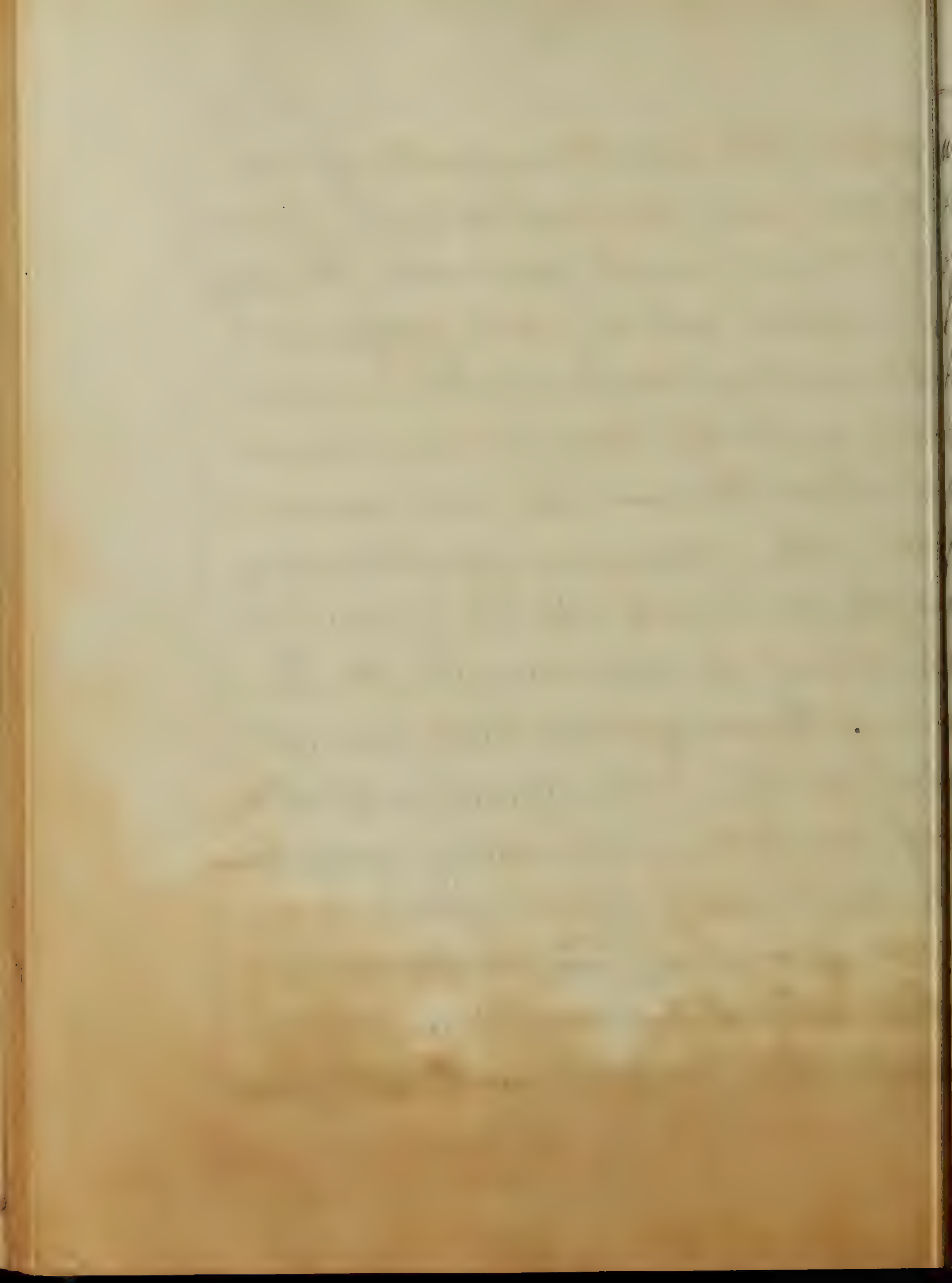
Prognosis.– It is thought by some that syphilis is incurable; but there are others on the contrary who think that it has a tendency to self-limitation. But the question is if a man shows signs of syphilis thirty years after the reception of the virus, being in the enjoyment of perfect health during the interval, when can we say to a patient who has had syphilis, that he is perfectly free from this formidable malady

Treatment.– Let us first [illegible]

at the potency of hygiene and
tonics in the treatment of this
disease. The patient should lead
a regular life, he should ab-
stain from the use of stimu-
lants and tobacco. The func-
tions of the bowels and skin
should be attended to. He
should eat, sleep, and exercise
at regular hours. A cheerful
disposition is of great impor-
tance in the treatment of this
disease. The diet should be
plain and nutritious; so that
digestion will not be over
taxed, and nature sustained
in the work it has to do.

complish. The secretion of the skin should be promoted by such agents, as exercise, warm baths &c. The bowels should be opened at least once a-day. Tobacco, being a sedative, depresses the vital powers, and is moreover objectionable on account of irritating the mucous membrane of the mouth and fauces. The serum of the blood in syphilis is increased, whilst the corpuscles are decreased. What does this condition call for? The use of tonics and other means [illegible] directly or indirectly [illegible] this

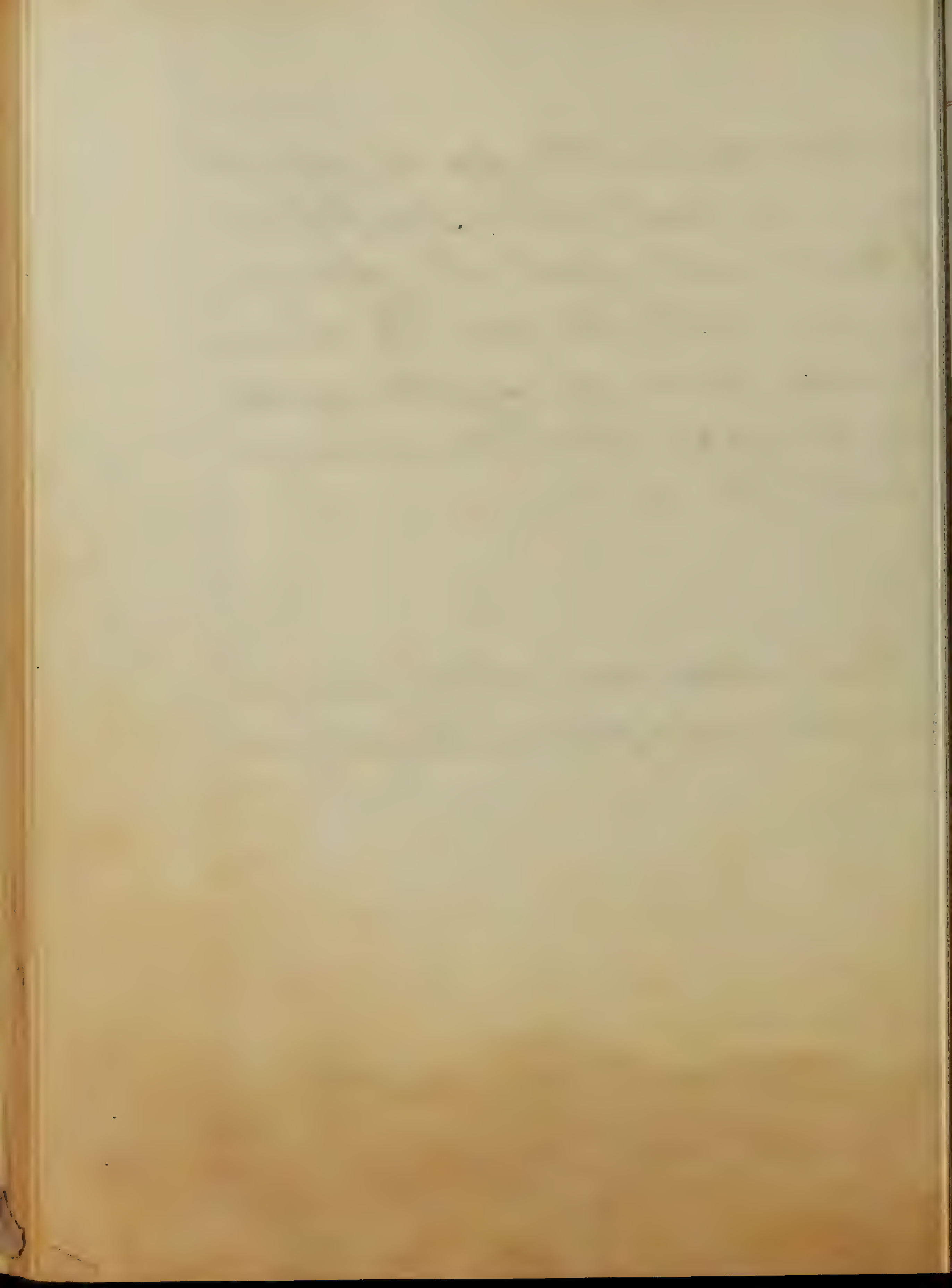
state. The most valuable of all tonics are the preparations of iron, cinchona, and gentian. The chief remedies which are supposed to act directly in the cure of syphilis are mercury and iodine. Mercurials are used in the secondary symptoms of syphilis. Iodine in the form of iodide of potassium in the tertiary. Mercury has been proved to be the only agent capable of combating secondary symptoms. In employing this agent no one form of it can be used exclusively. A preparation which suits one person will not suit



with another. It is often neces-
sary after employing one form
of it for a long time to change
to another, in this way its ac-
tion may be increased without
resorting to large doses which
are liable to cause diarrhoea
In commencing with the use of
mercury it should be exhibited
with some degree of caution,
since some individuals are more
susceptible to its action than
others which can-not be known
without trial in every given
case. Mercury should never be
given too long a time without
any intermission, regardless

the patient's health; for it is always a bad thing to kill the patient and cure the disease if such could be the case. As the secondary forms of syphilis gradually merges into the tertiary so should the treatment.

Time does not allow me to do justice to such a lengthy subject.



Yellow Fever.

A

Dissertation, respectfully submitted to the Provost, Trustees and Medical Faculty of the University of Maryland, for the Degree of Doctor of Medicine

By

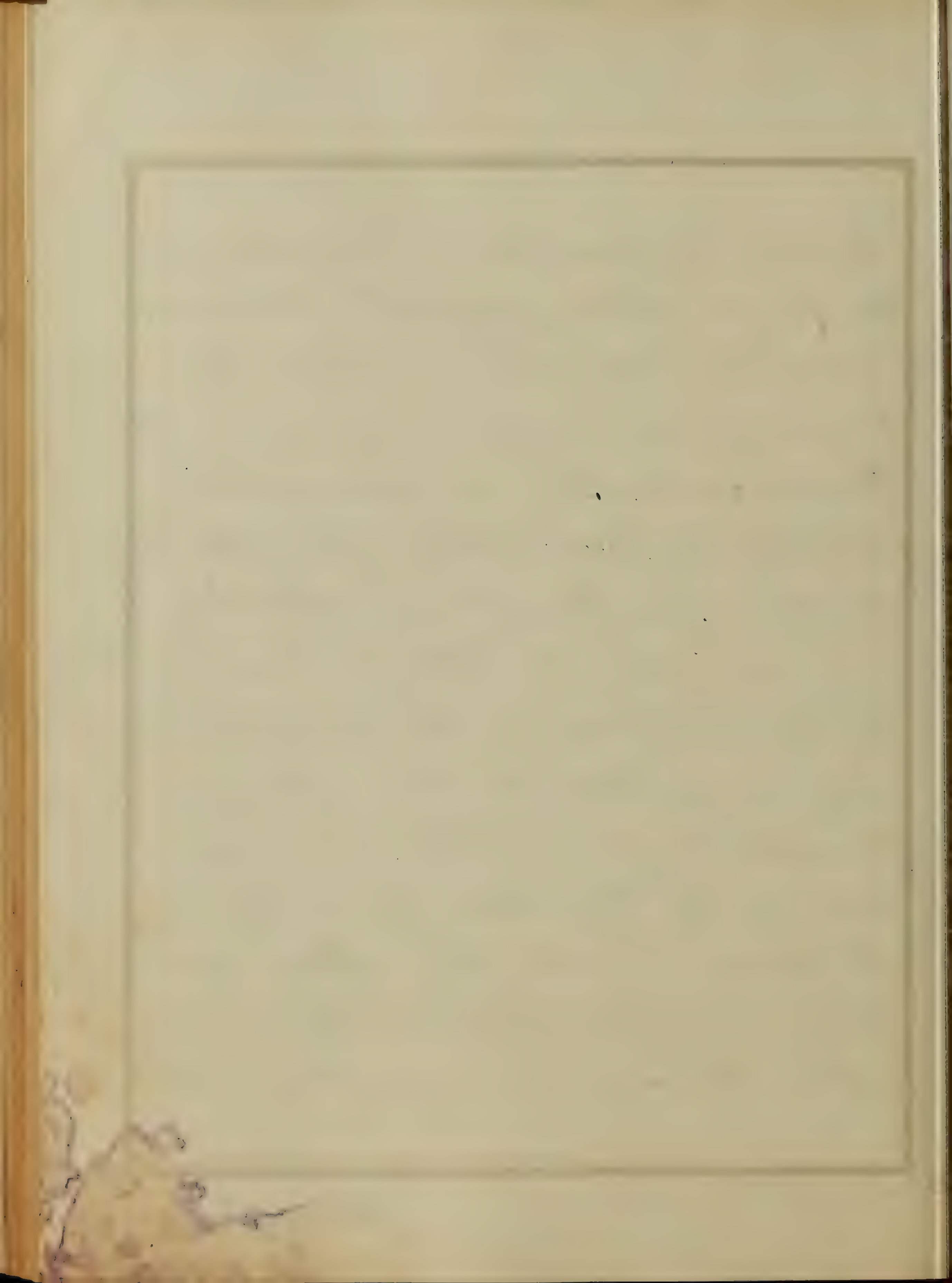
Mason J. Whitehurst.

of

Florida.

February - 1875.

It would be presumption in the extreme, in the present state of medical enlightenment, for any one, especially a student whose limited experience and field of investigation has necessarily been so circumscribed as scarcely to deserve attention, to attempt to offer any thing novel or attracting on a subject upon which so much has already been written, and which has commanded the talents and research, and enlisted the names of some of the brightest lights of our profession. I need but allude to the labors of Rush, La Roche, Stone, and others, too numerous to mention, to be



almost induced to shrink from offering to the indulgence of an intelligent and most learned faculty, the little that may be contained in the following dissertation. But as I shall endeavor to give my own observations, with regard to the treatment and pathological anatomy of this disease. I hope at least to make it interesting.

Yellow fever from the days of Du Tertre to our own times. has received a great variety of names: each writer giving it the title best suited to his own views of its history, origin, and character. Labat speakes of it as the

"Mal du Siam," from its supposed origin in that place. Early English writers called it the "Barbadoes distemper." Pym styles it the "Bulam fever," from it supposed origin on an obscure island by that name, at the mouth of an African river. The French West Indians speak of it as "la fievre jaune" - "fievre matelotte"; the Spanish Americans call it from a striking symptom "vomito negro," vomito prieto." The large majority of English and American writers of to day, generally recognized it as "Yellow fever," & "Yellow Jack," names based upon the icteroid hue of the surface

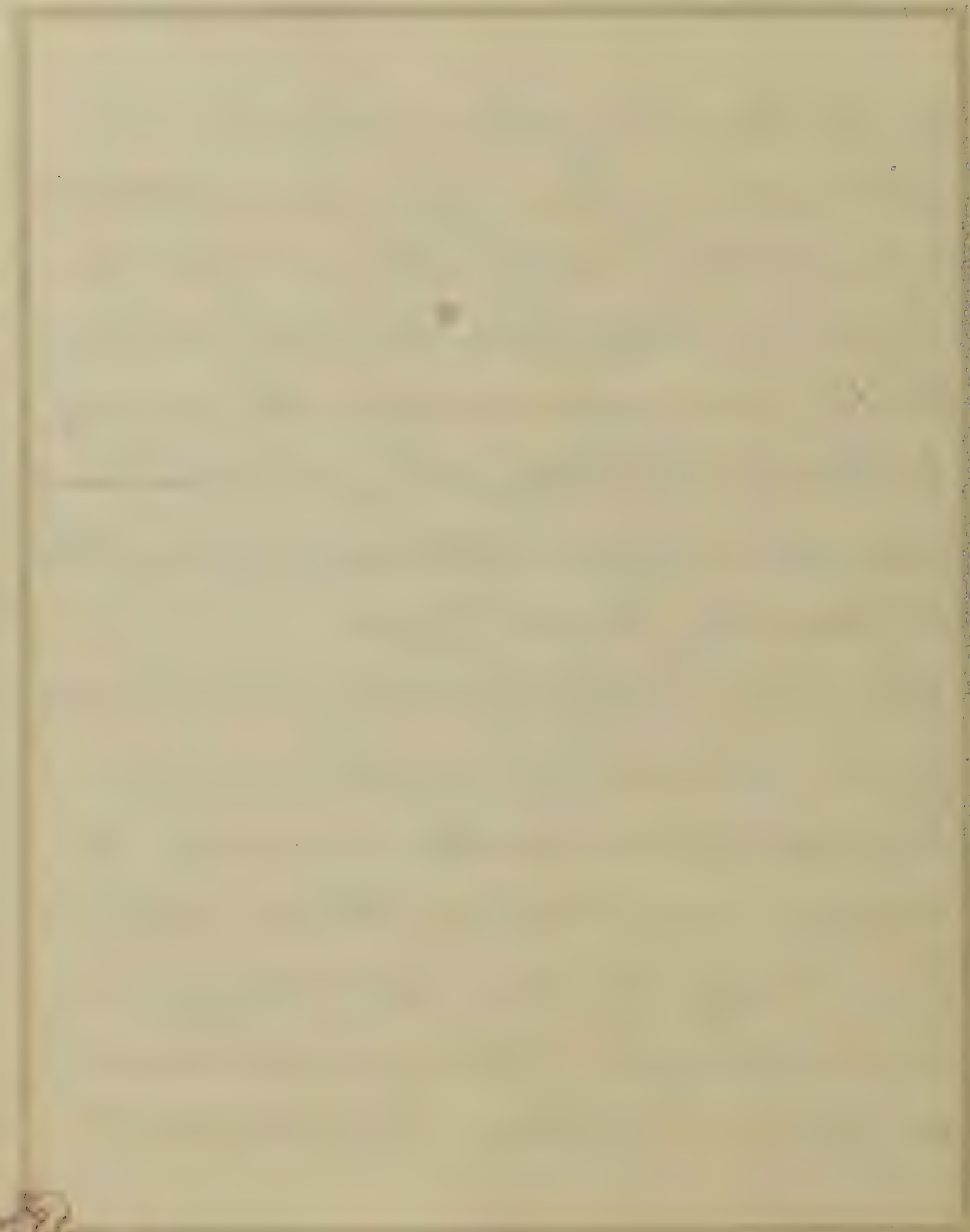
by which the desease is usually attended in some one of its stages.
The earlier historians of the West Indies ascribe the origin of Yellow Fever to the East. An insurrection having broken out in Siam, the French colonists at Bannock were driven from the country, and embarked on the ship "Oriflamme" and two other vessels, in the latter part of the year 1690, and sailed for "Martinique". The "Oriflamme" touched at "Brazil", where yellow fever had been prevailing for seven or eight years, and soon after the desease broke out on board, and by the 5th of January

1691, over one hundred deaths had occured on board of the vessel. The disease spread to the shore, and was carried by other vessels to many of the adjacent islands. Moreau de Jonnés, in his work on yellow fever, argues, however that the disease had existed in St. Domingo for many years previous to that time, and had prevailed in the first settlements formed by the immediate followers of Columbus. However this may be, it is certain that the disease was known for many years as "Mal da Siam", and the fact of its prevalence on board the "Oriflamme", received general credence with the

medical writers of the eighteenth century. Another account ascribes its introduction to slave-ships from Africa in 1699, in which year a fatal epidemic prevailed in St. Domingo. Its first appearance in the United States was in 1693, at Boston, Mass. An English Fleet, under command of Sir Francis Wheeler, which had been sent the previous year 1692, to effect the reduction of Martinique and had spent a month at Barbadoes, returned to Boston with yellow fever on board. The mortality had been so great among the troops and sailors, that over one half of the whole number

in the fleet had died, and the disease is stated to have been introduced into Boston, where it prevailed with great severity. Such is a brief synopsis of its early history and appearance in this country. To follow its history through subsequent years, would necessitate more space than is possible for me to give.

The meteorological condition most favorable for the generation of yellow fever, is a long spell of hot weather terminated by frequent and copious showers, which fall during the day, but seldome or never at night. During such weather or whenever vegitation, putrefaction and



temperature acquire a certain development, a peculiar miasmata is generated, which impregnates the surrounding atmosphere rendering it impure and poisonous. This poison the nature of which is not known, produces its effects upon the system by effecting the blood and other fluids of the body. In certain localities this miasma is permanent and always active; in others, it exhibits only an occasional activity, by which alone its presence can be inferred. In Vera Cruz, Havana, Kingston, it is perennially endemic; it is occasionally so in New Orleans, Mobile, Savannah

and Charleston; which last city seems to be placed upon its extreme northern limit of spontaneous production.
Its relation to temperature is evident; but with regard to season we are in doubt. 'Tis certain that yellow fever will only become epidemic during the hot months of summer and autumn, yet the causes which produce it, exist always in places indigenous to this disease. In Havana the cause always exists, and strangers are in as much danger during the months of December and January as they would be during an epidemic in June. Its contagiousness and trans-

-missibility are articles of faith, or rather axioms which require no proof, they are truths which are without doubt in the minds of all intelligent medical men of to-day. The immunity which old residents and natives have from this disease is no doubt due to the fact that constantly living in an atmosphere so impure their systems are better able to withstand its effects.
Reasoning from analogy we might compare it to an attack of syphilis, the victim being so saturated that it is impossible for him to get another. Negroes are exempt in a remarkable degree from the

miasmatic influences which serve to generate this disease. Why I know not, we might infer, from the same reason that grants immunity to natives and old residents—but change of climate, becoming acclimated in notherm latitudes, and again breathing this poisonous atmosphere, are all the same to him, he is not affraid of it; in fact they court the disease, offering themselves as nurses during epidemics and fulfilling their missions nobely. The paroxysm of yellow fever often commen-ces abruptly in the midst of ordinary health: the patient being seized without warning, with a langour and a sense

of debility, which sometimes supervenes while he is walking in the street or attending to his usual avocations. It often commences for the most part, with a degree of chilliness although there is not a formed rigor. To this, soon succeeds intense heat and dryness of skin, with uneasiness at stomach and pains in the head, back and limbs. Sometimes it is preceded for several days by anorexia; the patient complaining of general uneasiness loss of appetite, flatulence, heat in the stomach, giddiness, pain in the head, combined with dull, watery, or brilliant-red eyes, low spirits &c. The stomach, which Rush truthfully calls "the throne of

the disease, is almost always in this, and
vomiting comes on spontaneously or is easily
excited by anything taken. The respiration
is sometimes hurried, and irregular;
at other times slow and labored, with sighing
and heavy sighs, and great oppression
about the praecordia. When reaction
becomes fully developed, the
pulse is quick and tense, and during
reaction it is rather strong, from
ninety to one hundred and twenty in
a minute. There is also constant
throbbing and beating of the temples,
and headache & pain. [illegible]
and dry, the face highly flushed, hot,

the eye red, sometimes as though blood-shot. hot and more or less painful. it is at the sametime brilliant and watery. present-ing the appearance of one weeping. The tongue is at first soft, swollen and covered with a thick yellowish white fur, but soon becomes very red at the point and edges. The bowels are torpid, responding slowly to the most active cath-artics; stools, when procured, are often from the first dark colored, and acrid. Some authors mention cases which com-menced with diarrhoea. I have never seen any. The countenance in yellow fever is sufficiently peculiar, to denote at

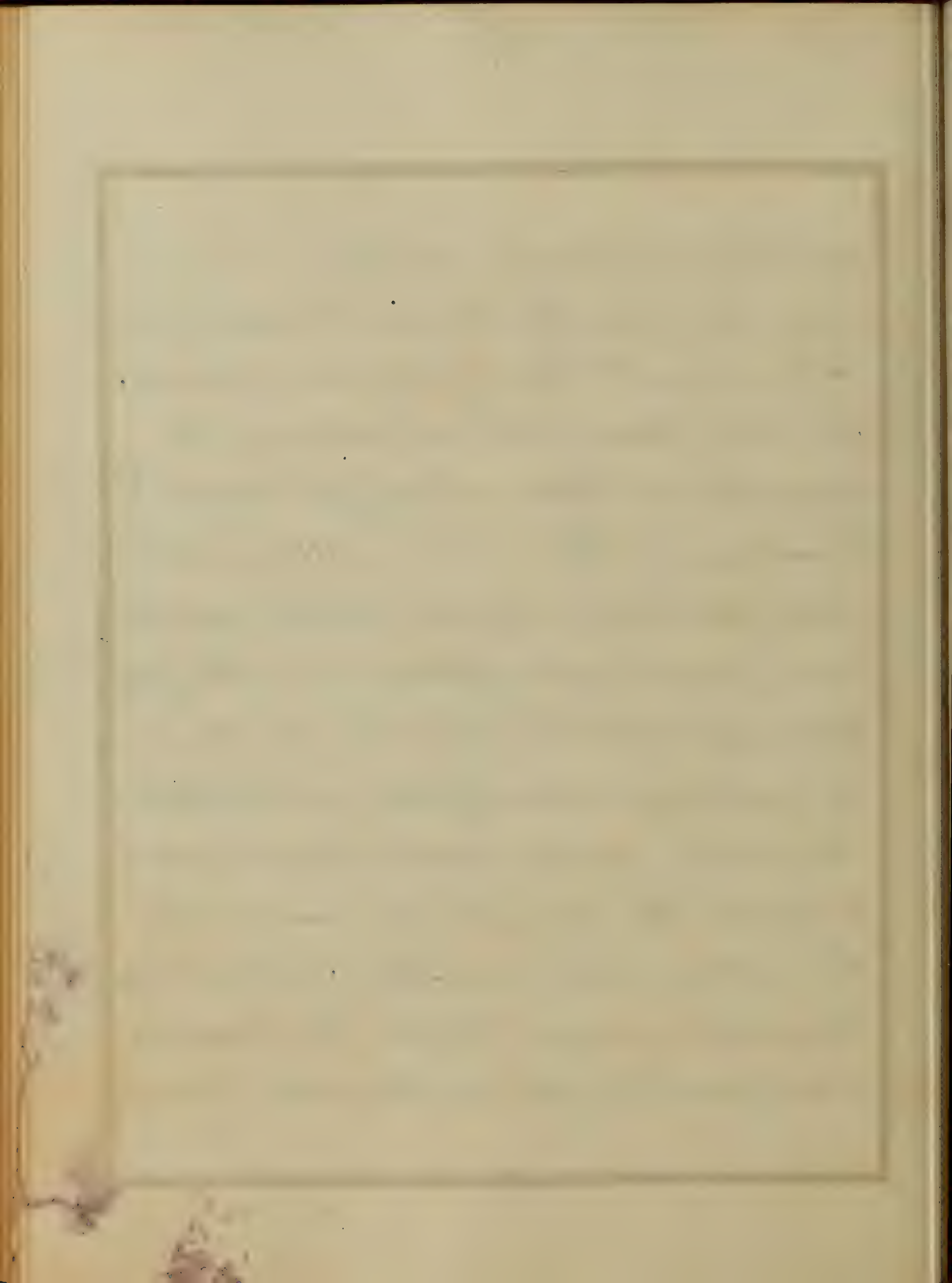
once the character of the attack. The aspect is distressed, gloomy and impatient; the face flushed and turgid; the eye red and watery; and withal a singular wildness and fierceness resembling somewhat that of intoxication, combined with sadness and terror. These symptoms constitute the first stage of the disease, following the division commonly recognized by writers into three periods. Its average duration being probably not far from thirty-six to forty-eight hours.
The second stage or stage of remission commences with an abatement of many of the preceding symptoms. The headache

is now relieved; the skin is moister, cooler and more pliable; the pains in the back and limbs subside or entirely disappear; the pulse is more natural; the resperation is easier; the burning and pains in the stomach lessened; little or no vomiting; the face is less flushed, the eye not so red and less suffused, and on the adnata a yellow tinge is substituted. The well known yellow or orange hue now overspreads the surface; which, according to writers upon that subject, is probably owing to a depraved state of the blood itself, and to a weak and morbid condition of the capillary

circulation. The duration of this second stage lasts but a few hours; from twenty-four to thirty-six,- usually about from twelve to eighteen; 'tis at this junction that the disease, if not subdued or controlled, de--velopes a violence and rapidity of progress which the enfeebled powers of the con--stitution is unable to resist. Of this last stage or collapse, the most prominent feature is the extreme prostration of the patient. The skin, especially the hands and face grow dark, and assume a brown or mahogany color. The tongue oftentimes continues the same as during the first stage- in many cases it will present a

dark brown, dry streak in the center; in the more malignant cases, it becomes perfectly dry and fiery red, oftentimes oozing from its fissures blood. The lining membrane of the mouth presents the same fiery red appearance. The stomach becomes now so irritable that it is unable to retain anything - It is here that the justly dreaded symptom, black vomit makes its appearance; it sometimes escapes during the action of hiccoughing, more frequently it spouts from the mouth like a high black snake involuntarily. The alvine discharges from the bowels become frequent and abundant, consisting often of a fluid

resembling black vomit. All hope is now gone, life rapidly declines; breathing is laborious, with deep sighing and moaning. The skin becomes cold and clammy; the eyes dim and hollow; the tongue black and tremulous; and there is low muttering delirium, probably a farewell to those around, or a prayer of contrition to an Almighty God; and death finally closes the scene of sufferings dreadful to contemplate. It would be useless to attempt in so short a space, the many forms assumed by this "yellow robed monster," I shall therefore endeavor to give the Treatment which came under my observation during



several epidemics in cities situated along the (Gulf of Mexico) coast.
In the treatment of yellow fever, the first and principal indication is the reduction of vascular excitement.
To accomplish this indication the profession resorted to the lancet, but with the ordnary zeal to do good, venaesection was carried to its extremes. Rush, 'tis said abstracted from one-hundred to two hundred ounces of blood:- and he speaks of it as the great sine qua non. There is no doubt but what such treatment was not only uncalled for, but attended with

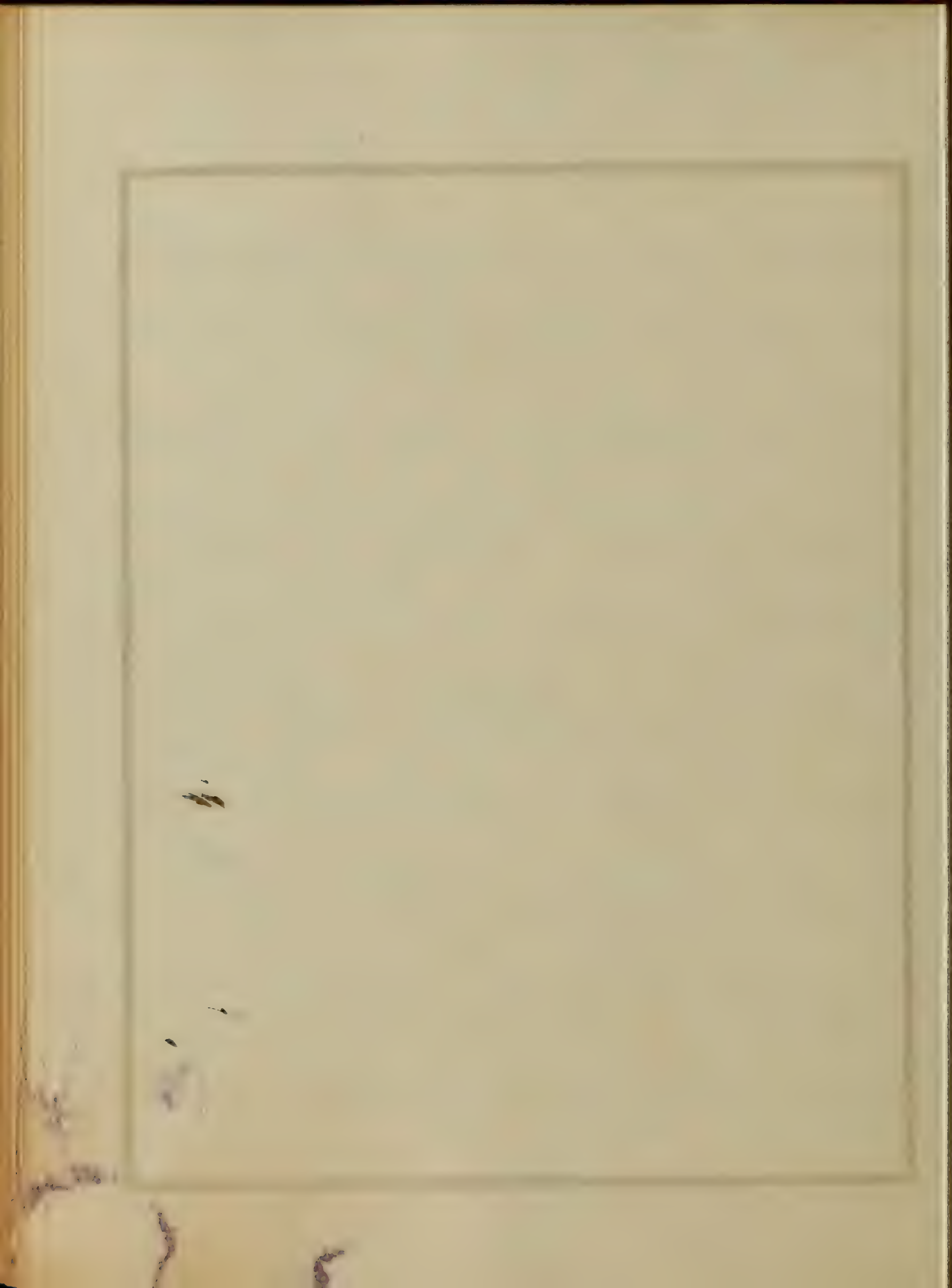
bad results,- Yet we should not condemn the remedy because its has been misapplied & carried to its extreme - rather condemn the Surgeon who thus applies the remedy-
Such has been the fatal results from this misapplication and extreme use of venaesection, that the medical mind has gone over to the other extreme and rejected its use altogether
The probable truth lies between these two extremes & they who condemn its use in every case, should weigh well their success as non venaesectionist & present the wonderful specific to

a grateful world, and receive the crown
of immortality gratitude has in store for
them. If the patient be full-blooded,
robust, and of good health previously
Bleed him, because no other known
remedy will serve to reduce vascular
excitement in such a case, if on the
other hand, the patient be anaemic
stimulants should be used. Stimulants
are used principally in the collapse,
but where the prostration has been so
great at the outset of the disease
stimulants should be commenced at
once. This remark will be more [illegible]
it takes part in many other diseases [illegible]

which can be relied upon in yellow fever — Early in the disease, before there is much irritability of the stomach, an emetic is of great service particularly if the stomach be loaded. Cold affusion is highly recomended Mercury is declared to be of great service and I may state here, that mercury like blood-letting has been and is carried to its extreme — I have seen sixty-grain doses given to patients during an epidemic at Tortugas Island in 67 — And no doubt but what Calomel, the preperation employed in such large doses, will

the bloodletting will be rejected altogether,
the expectant treatment is the one mostly
adopted by Southern physicians & I
believe the profession generally, therefore
it would be useless for me to dwell
longer upon a point in regard to which
so little is known.

The morbid anatomy of yellow fever is
of very little importance as there are
no anatomical lesions peculiar to it.
Sometimes there will be congestion of the
stomach, but often not even this.
There is no truth in the [illegible] condition
of the liver, it may be light brown or
yellow, just as a bruise [illegible]



yellow from effused serum [illegible] [illegible] [illegible] [illegible] [illegible]. The brain is sometimes found to be congested, the spleen is little altered; the kidneys are very often congested. In fact the Post-Mortem teaches us nothing by which we can positively rely upon as an anatomical lesion peculiar to the disease.

In conclusion I pray Him, the God of Nature, that he may soon yield to us the antidote to this most fearful malady and free us from one of the most terrible scourges that the imagination can conceive.

Thesis

on

Synovitis of Knee-joint

By

E. W. Theobald

1875

A synovial membrane is a kind of tube, into the ends of which the articular surfaces of the joint are inserted, it covers the various ligaments of the joint, and is finally attached to the cartilages. It consists of a fibrous membrane, lined by a layer of pavement epithelium, on the outer side a fine areolar tissue; it secretes a thick, viscid fluid.

In the knee-joint the arrangement of the synovial membrane is more complicated than in the other joints & it is more subject to inflammatory [illegible]

Synovitis of the knee-joint may depend for its cause upon certain diathises, as the Rheumatic, Syphilitic & Scrofulous; or it may be induced by various local causes, such as, blows, sprains, dislocations and fractures.

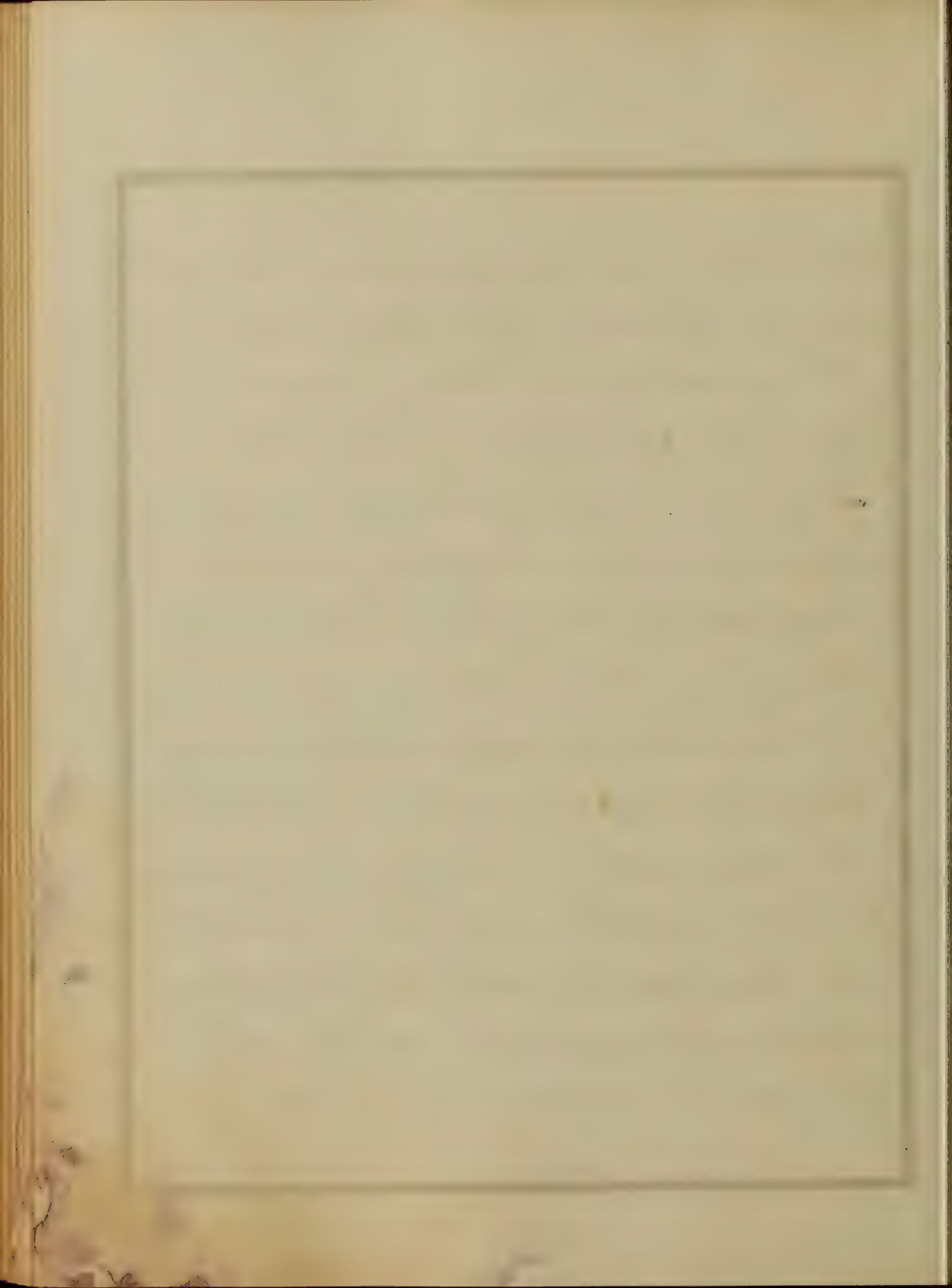
The primary symptoms and signs, in certain forms of the disease especially the strumous, are so slight that, often, its real nature is not suspected. But the symptoms, usually present, are stiffness, pain upon

motion, swelling and fluctuation, and more or less heat within the joint.

These symptoms vary in degree, in different cases. When the disease progresses slowly, we have, at first, but little pain, upon motion, and slight swelling; and weeks and even months, sometimes, lapse before the disease becomes fully developed. In Rheumatic Synovitis, the symptoms are, usually, well marked, from the first. The synovial fluid is secreted in large quantities; and, if the inflammation cannot

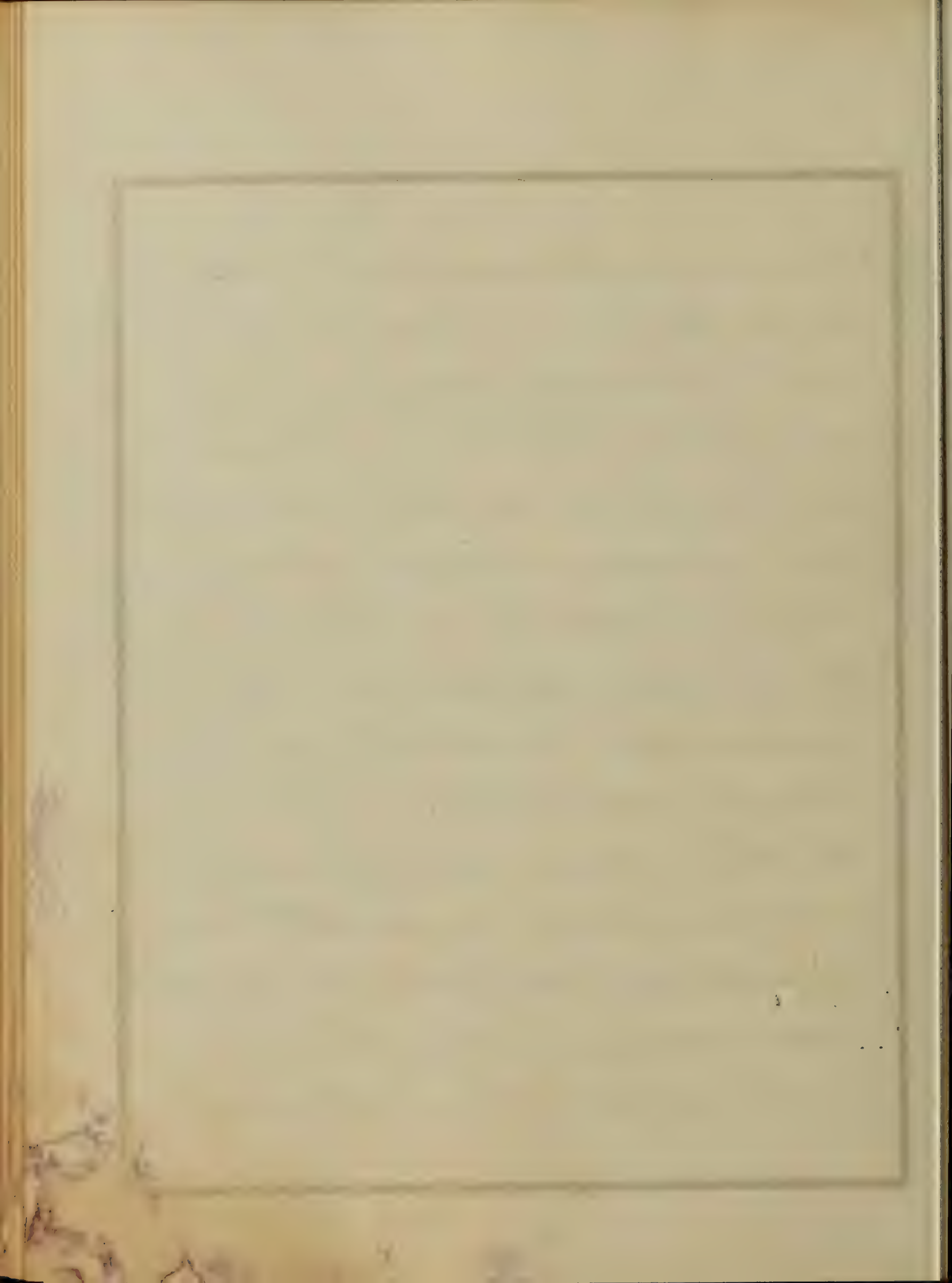
be arrested, suppuration is apt to occur. When this takes place, it is announced by rigors, fever &c. In Syphilitic synovitis, we have considerable swelling, and excessive pain, which is always ~~more~~ worse at night. Suppuration is rare in these cases.

Strumous synovitis (sometimes called white swelling) usually occurs in children under ten years of age. Ulceration of the cartilage is not an uncommon result of the inflammation; the synovial fluid that is effused is less in quantity than



in other forms of the [illegible],
and there is greater tendency
to suppuration. The pus causes
great constitutional disturbance.
A hectic condition is induced;
and sweats and [illegible] alternating,
its formation.
When we have traumatic synovitis
we have the symptoms of [illegible],
though the constitution does not
usually suffer very much. Suppuration
is rare; and, unless the joint
has been opened, and the surfaces
exposed to the air we find it
the most amenable of all to treatment.

The treatment varies with the cause. If it is traumatic, the limb should be placed in some apparatus that will ensure quietude and comfort and keep the articular surfaces from playing upon each other. The very best splints for this purpose are Buck's, Sayre's & Smith's apparatus: starch & leather splints are also used. If the patient is healthy and robust, you may resort to antiphlogistic measures. When the cause of the inflammation is rheumatic,

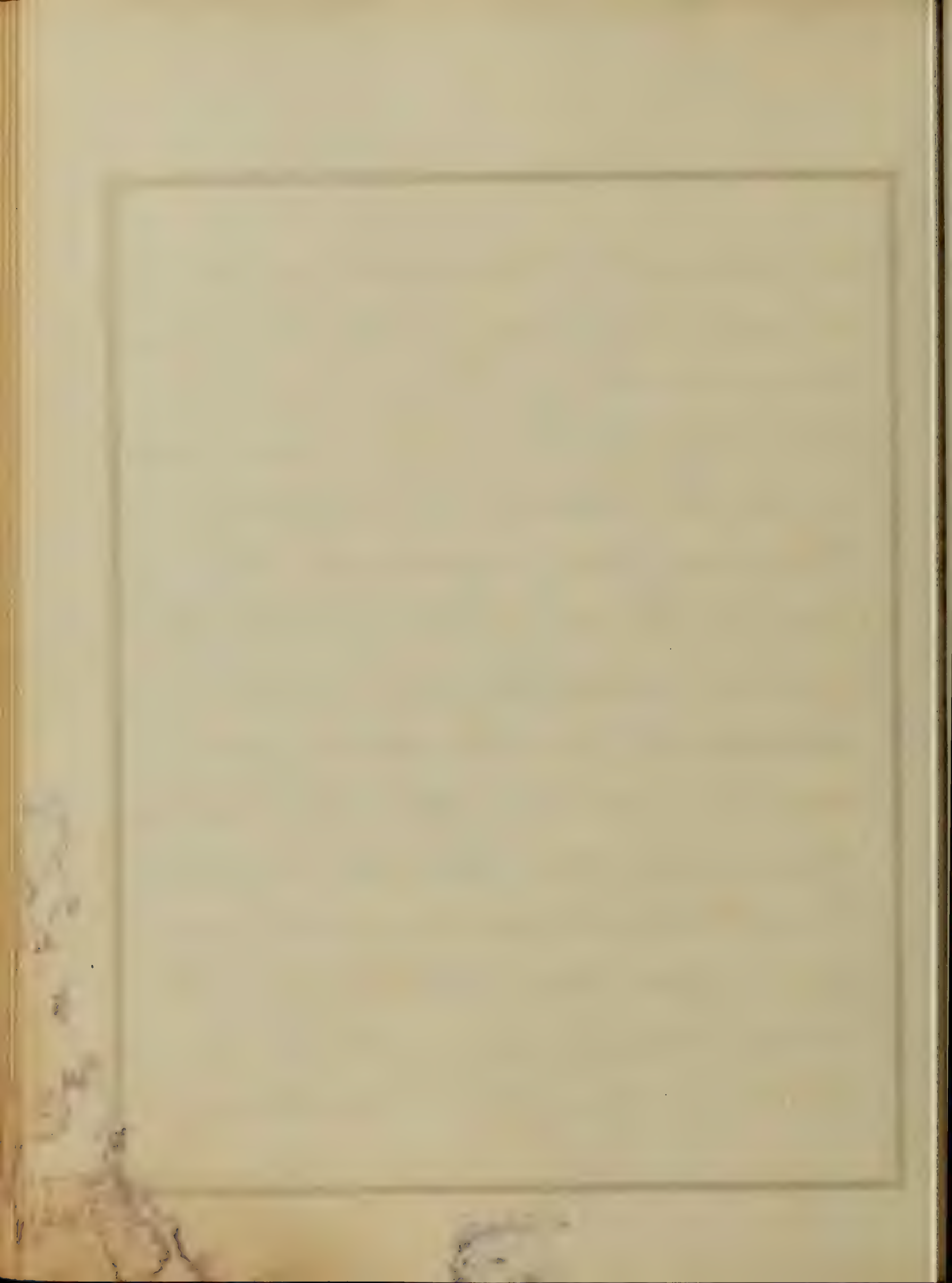


iodide of potassium, colchicum and the alkalies should be administered. When synovitis occurs in a strumous constitution, Iron, Quinine and Cod-liver-oil are most useful. Anodyne lotions are proper in the acute stage. After this is passed, blisters, or painting the part with Tinct Iodine, are recommended by some. Ung. [illegible]. Oleate of Mercury, with gr. i of Morphia to the ℥i added.

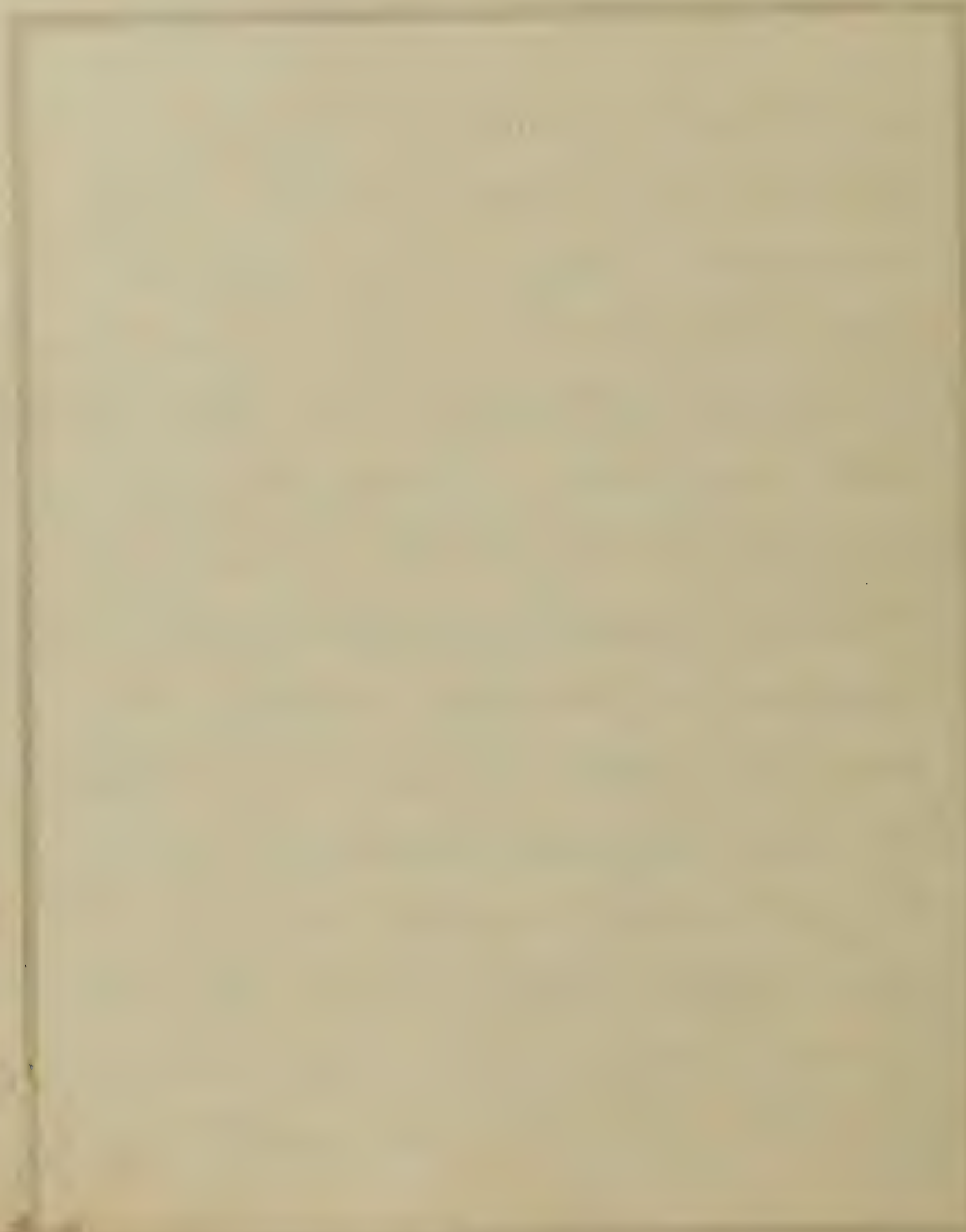
~~Case I.~~ I append the reports of two cases treated

Case I. Colored man, about twenty five years of age. He had been

employed as servant on a
sleeping car on the B. & O. R. R.,
While on one of his trips, the
train collided with a burden
train; the force of the collision
throwing him against the
side of the car & bruising his knee
quite badly. He was able, however,
to attend to his duties for a
considerable time after the injury,
but finally his knee became very
much swollen and painful, and
his nights rest was considerably
disturbed. It was at this time
that he consulted my Grandfather



Prof. Smith. Dr. Smith pronounced
it a case of inflammation of the
knee joint, dependent upon the
blow received. Some pus had formed;
& slight fluctuation was apparent.
The day after he consulted
Prof. Smith, I put his leg in the
Anterior suspensory apparatus,
applied a poultice, & ordered
for him Opium; with instructions,
however, to take it only in case
he should be unable to obtain
sleep. Upon visiting him, the next
morning, I found him very much
refreshed by a good nights rest;



and he informed me he had suffered so pain since bandage had been in the splint. I continued the poultice for several days, & I then used the aspirator, drawing off a considerable amount of pus, which looked quite healthy, I then applied a bandage around the joint. Some three weeks after I commenced treating him, I had the satisfaction of seeing my patient going about, entirely relieved.

Case # 2 —

It was sometime during

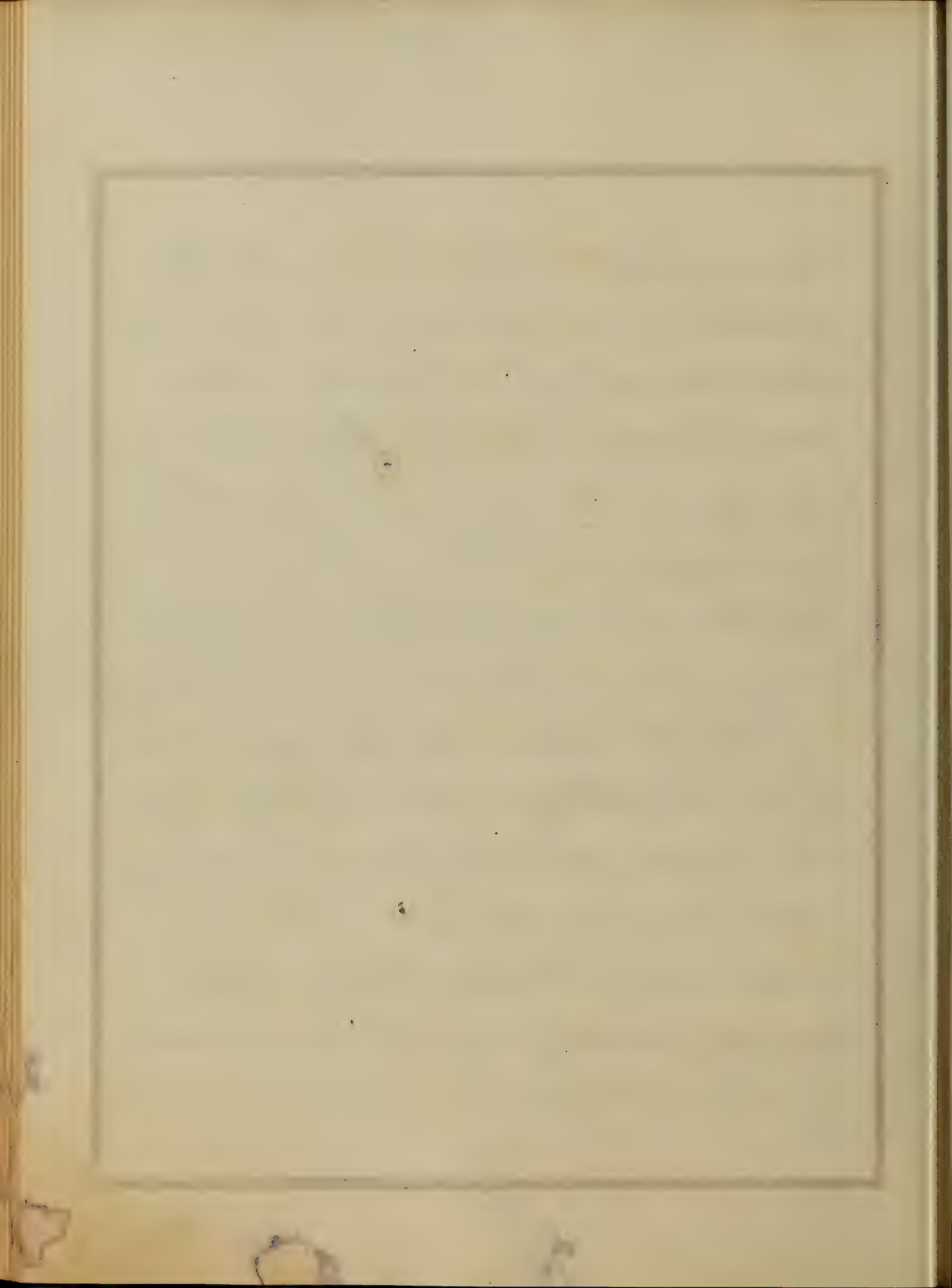
the month of June 1840 that
Prof. Smith requested me to see
a Mrs. Smith. She lived on
Saratoga Street, quite near the
Lexington Market, some of the
hucksters having stands in
front of her house. I have
thus carefully located her
place of residence as it had
a great modifying influence
on the course of the disease.
I called upon Mrs. Smith
and found her suffering with
a subacute inflammation of
the knee joint, following an

attacks of phlebitis, which she had suffered from at the birth of her last child. She had been under treatment for some time before I saw her, but, notwithstanding the careful attention she had received, her sufferings increased. I prescribed Syr. [illegible], in gtt. xx doses, three times a day; and ordered, as a local application, a saturated solution of Opium. To prevent [illegible] in the joint, I placed it in a leather splint. [illegible] the course of treatment for about

a month, with, however, but slight benefit. The swelling was, somewhat, diminished, but a sharp pain, intermittent in character continued, and I had become quite discouraged at my want of success. About this time, my patient was attacked ~~with~~ by intermittent fever, which, after a time, I was able to control with quinine. Still she seemed to be growing ~~worse~~ weaker, and was certainly worse than when I took charge of her case. This was not

very satisfactory. I soon removed the leather splint, and placed her leg in 'Smith's' suspensory apparatus. The support given to the limb by this apparatus seemed to relieve her knee entirely. When I first took charge of the case, I was very anxious she should be removed to a more elevated and healthy part of the city, & if possible to so arrange matters that she should have sun light in her room. I now felt

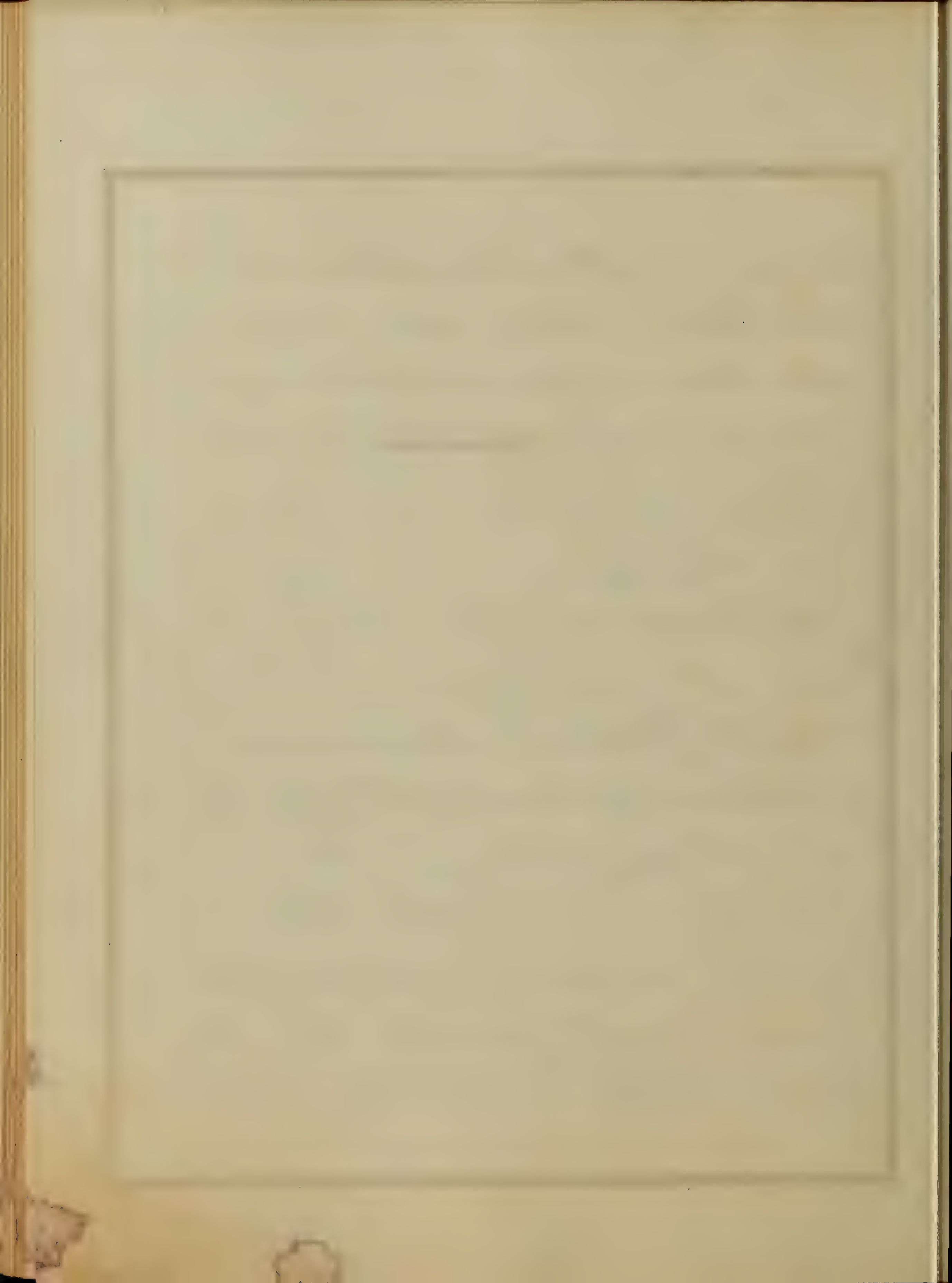
convinced that the unhealthy locality, in which she resided, had much to do with her condition, and I thought, as long as her general health remained in that state, it would be impossible to relieve any local disorder. I, therefore, insisted upon her being removed to a more healthy part of the city. She managed to procure rooms in a very pleasant situation, and she obtained, by her change, plenty of sunlight, one of the greatest of all medicines.



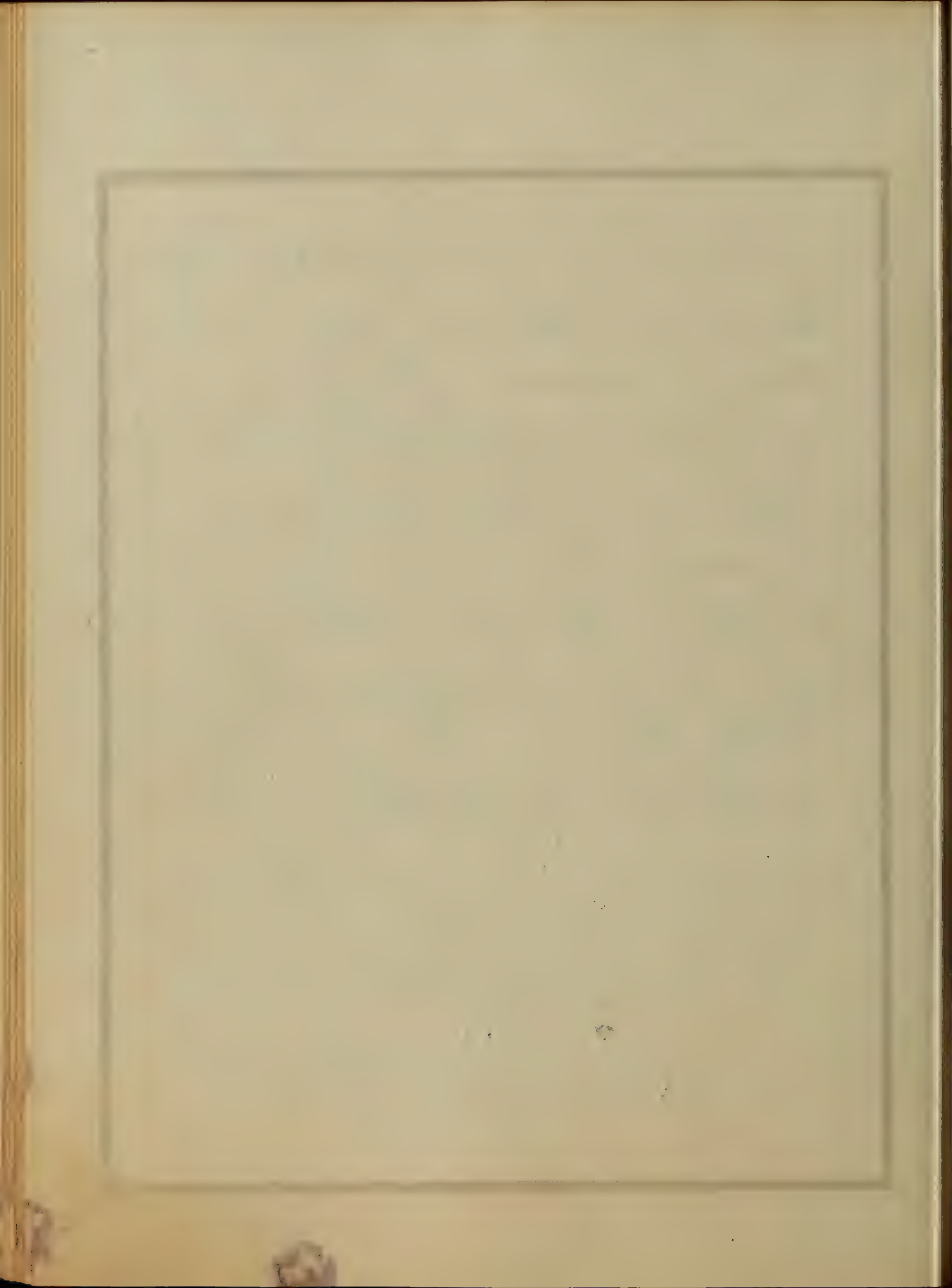
but one so often forgotten or
neglected. I was now giving Iron
and Quin and making use,
as a local application, of

℞
Ol. Camphora ℥ iv
Lini. Chloroformi ℥ ij
Ol. Origani ʒ j
M.

From this time, she commenced to
improve. The color returned to
her cheeks, & she gained in
strength and weight. After a
time, I removed the anterior
splint and placed her knee
in a leather splint; it acting



merely as a sort of brace to
the joint. She was now able
to walk across the room.
There was, of course, more or less
stiffness in the joint, but
no pain. The improvement
went on rapidly, and I
had the great pleasure at
last of seeing her entirely
restored to health.



An

Inaugural Dissertation

on

Sporadic Dysentery

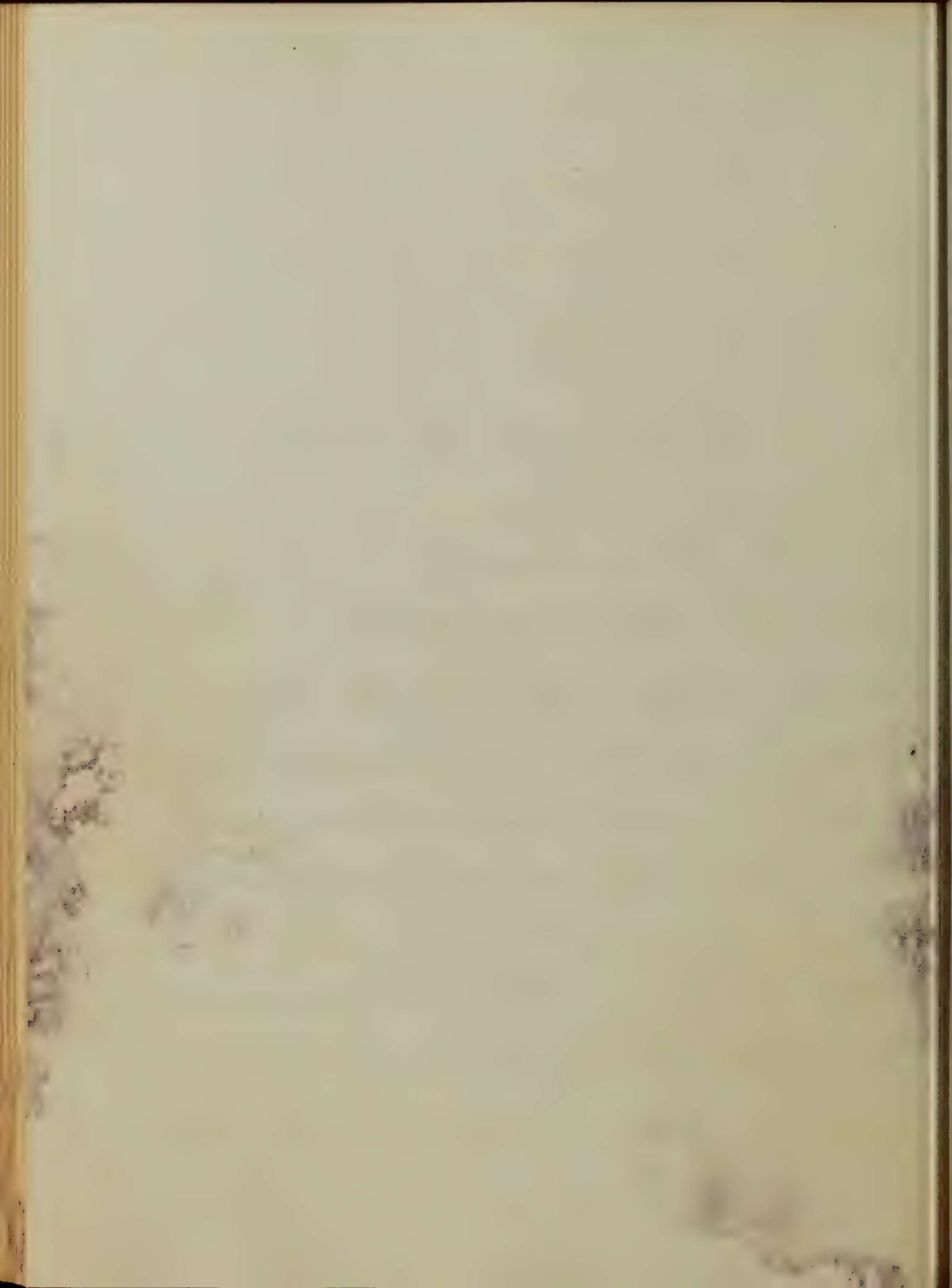
By

Samuel C. Trikker

'75

Sporadic Dysentery

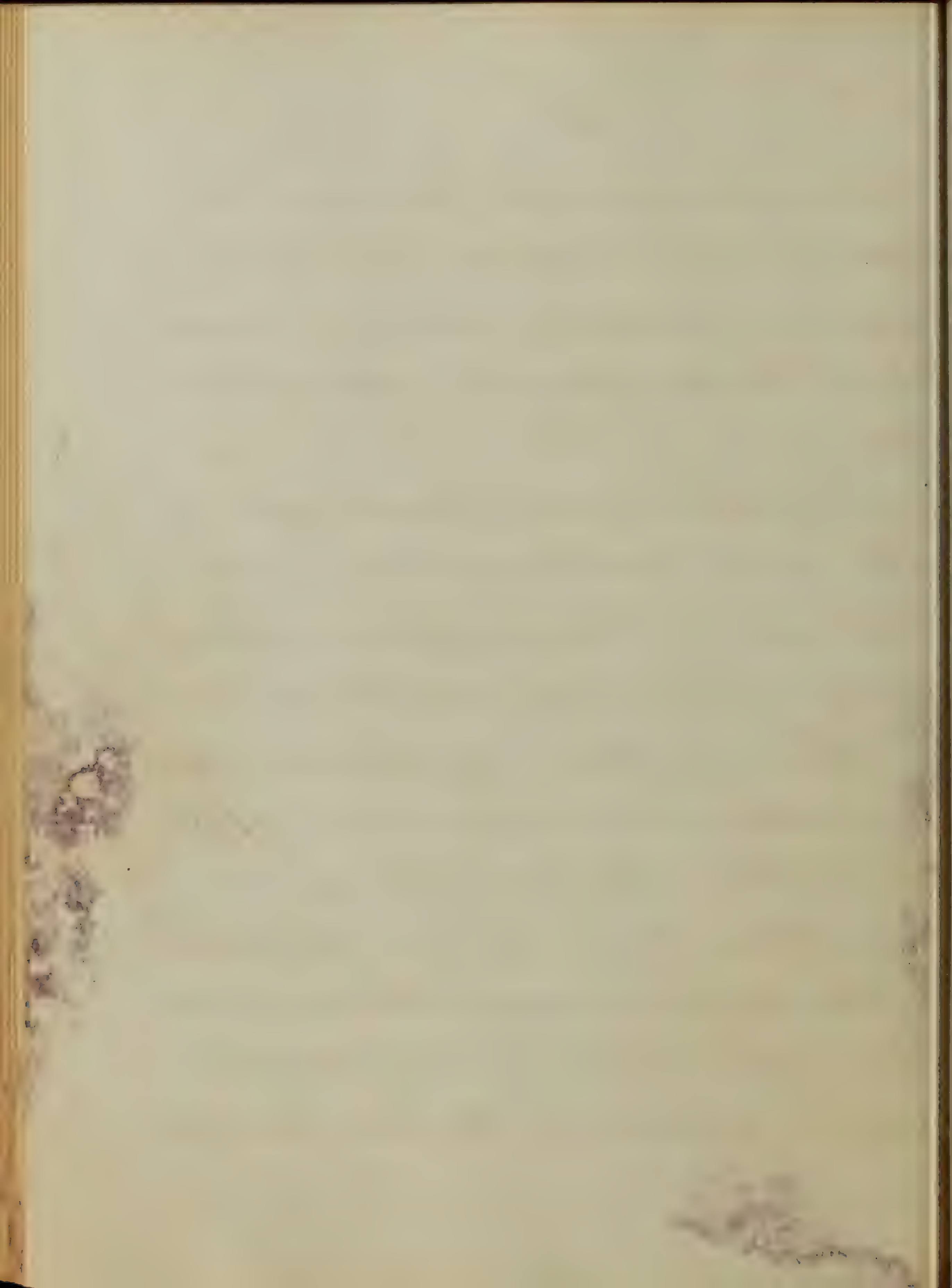
The term dysentery is derived from two Greek words - dus hard or bad, and εντερον a piece of the guts - a term though not very distinctive, simply expressing intestinal difficulties, whereas in this disease we have the whole alimentary tract involved in the inflammation, from the coecum to the verge of the anus. Yet as there is no anatomical name for the large



intestines as a whole, this term for all practical purposes answers, as nothing erroneous or doubtful in regard to the pathological characters of the disease.

Dysentery is an inflammation of the large intestines, attended with mucous and bloody dejections characterized by tormina and tenesmus

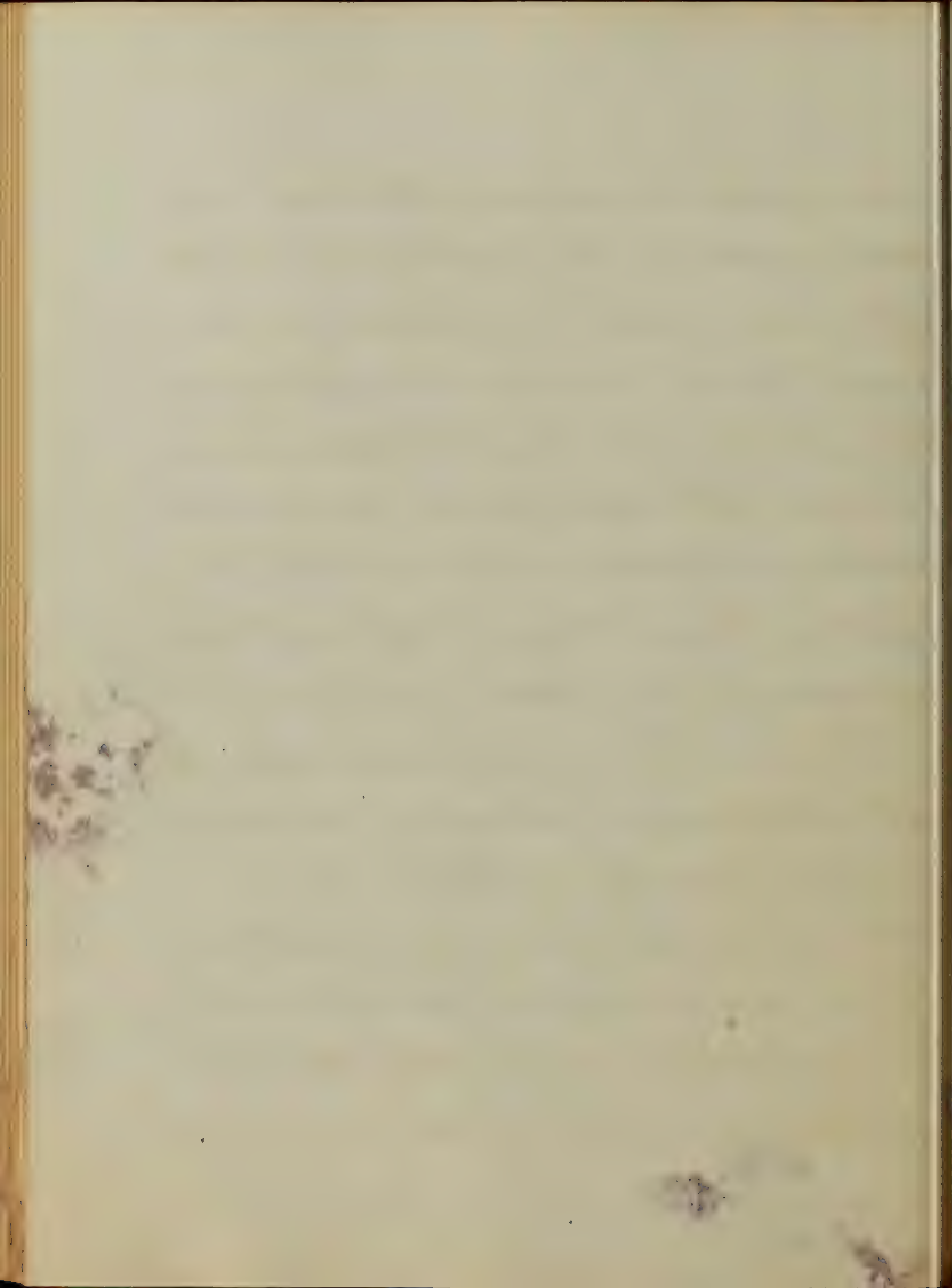
Sporadic dysentery occurs in practice as an acute or subacute affection; that is the local and general symptoms denote more or less gravity of disease; in one case attacking with great severity prostrating and driving its victims to the bed, then again



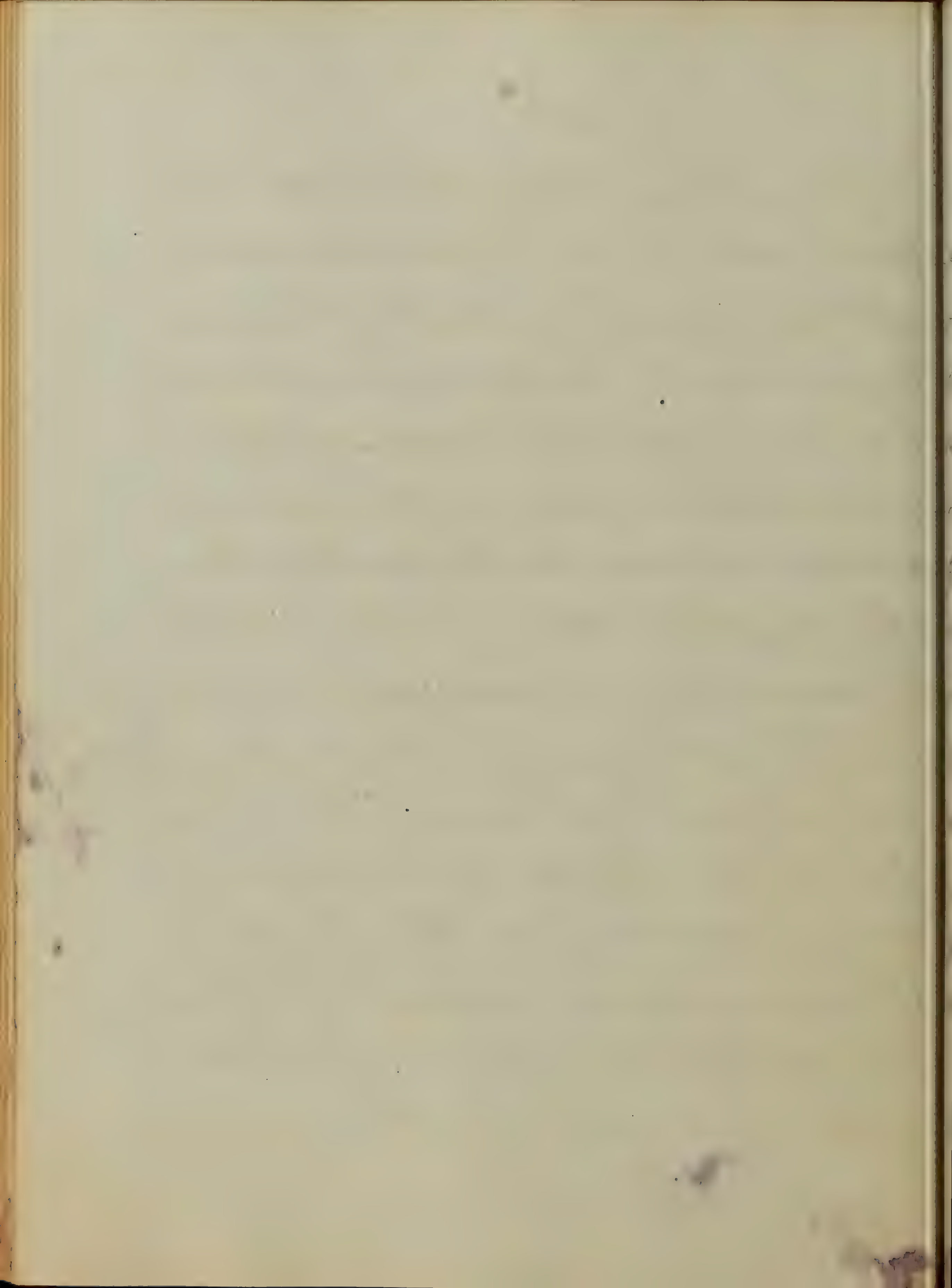
appearing as an extremely mild and almost trivial affection demanding but little attention.

Anatomical Characters - In subacute cases as the disease involves no danger the opportunity of inspecting the parts - Post mortem is n't offered. The inflammation is slight and may be limited in extent being confined perhaps to the rectum. To conjecture, though we would say from the mildness of the symptoms, and its short career that ulceration and other lesions of importance do not occur in these cases, as they do in severer ones - In acute or severer cases the inflammation is n't

only greater in intensity, but also in ex-
-tent, involving the greater part or whole
of rectum & Colon. The fatality in these
cases is very great and the affected mu-
-cous membranes is found upon exami
-nation after death to be reddened from
active congestion, swollen, softened,
pulpy, presenting in different cases
according to intensity, ecchymosis, ex-
-coriation from disquammation of
the epithelium, abrasion and ulcera-
-tions in greater or less numbers
The redness and swelling are not uni-
-form, generally more marked in cer-
-tain portions, more especially the
projecting folds of mucous me[illegible]-



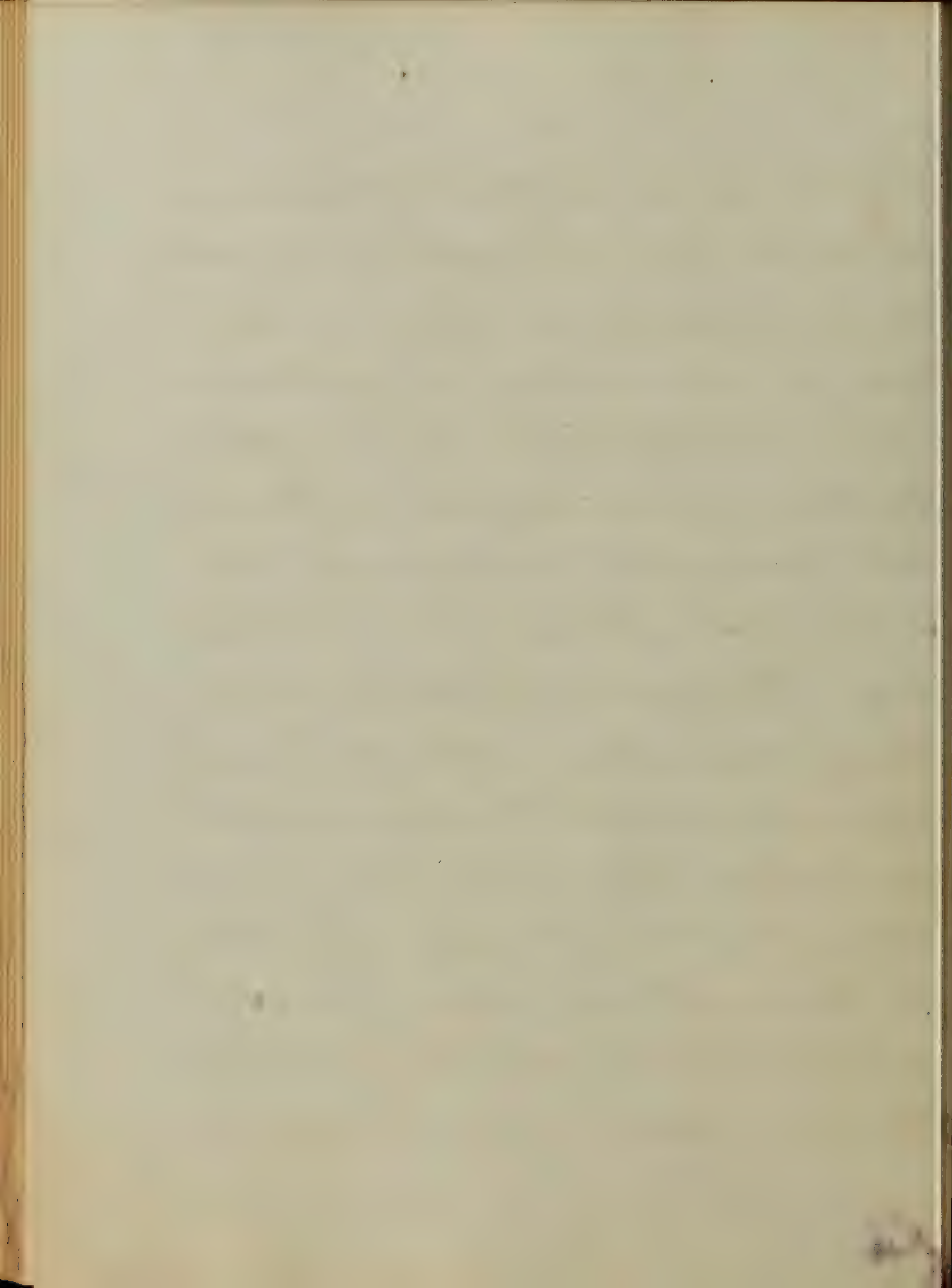
-brane. The swelling of the mucous membrane is due to submucous in-filtration and it is great at times as to give rise to protuberances, looking like warty growths. Patches of fibrine are sometimes found- We find in the small intestines morbid matter like the dejections during life, composed of mucus, pus, serosanguinolent liquid &c. The intestines present a dark, and almost black appearance from conges-tion. As a rule the local lesions incre-ase in intensity from the upper part of large intestines downward to the anus the greatest am[illegible] being at the rectum, and sigmoid flexure.



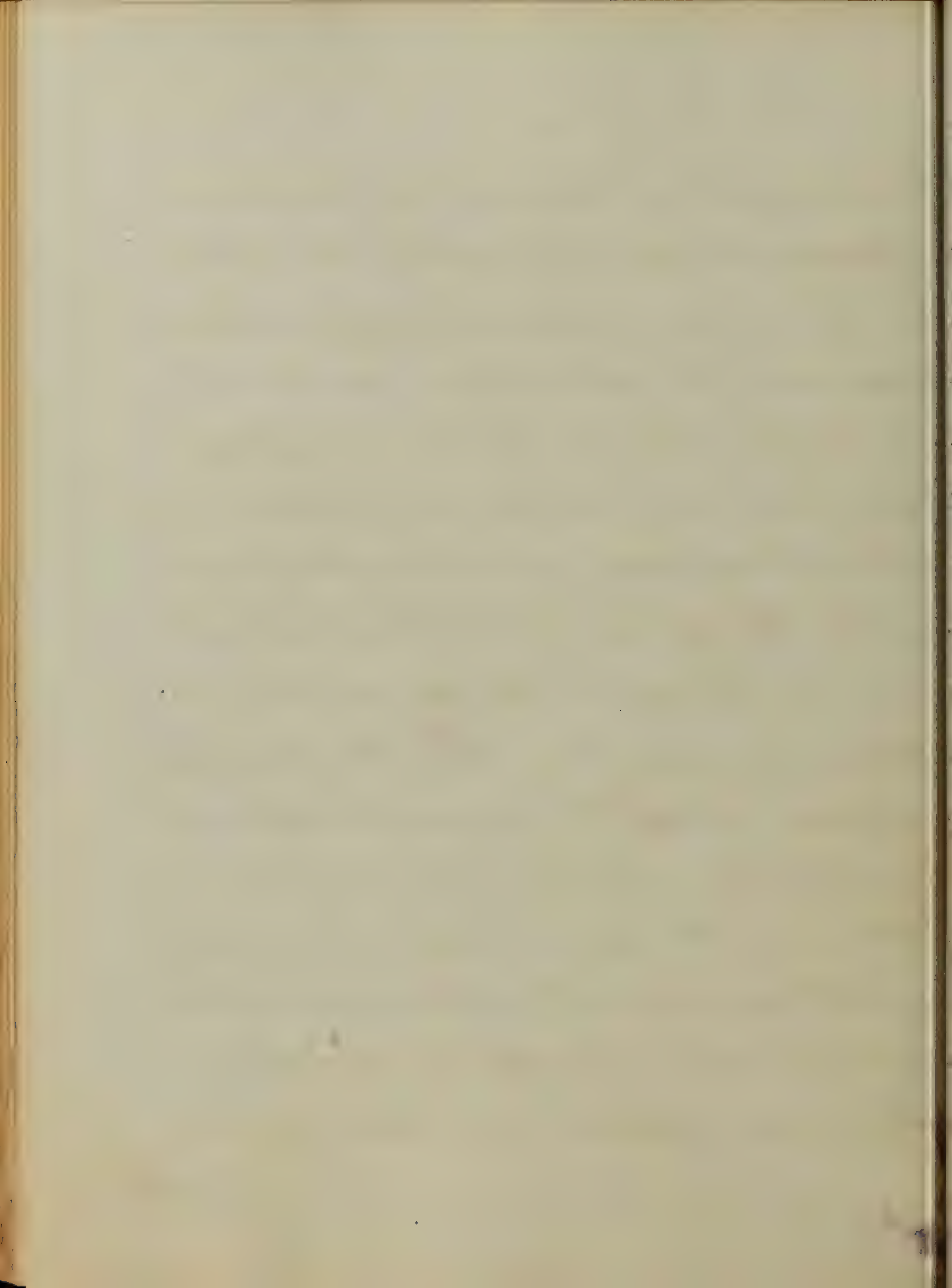
Whether the morbid appearances in dys-
-entery denote ordinary inflammation,
or whether they are due to a peculiar
morbid pr[illegible]; also whether the glands
and follicles are generally, and prima-
-rily involved are questions that remain
yet undecided. The mesenteric glands
are sometimes enlarged, and in some
instances contain pus. Stricture of
the intestine in some cases is produced
by cicatrization of ulcers.

Clinic[illegible] History - This disease is
generally ushered in by an ordinary
diarrhoea varying from 24 hrs to 7 days
Following this prodromic diarrhoea
there are [illegible]c pains, impaired appe-

-tite; and a sense of general malaise. A chill which in other affections is among the first symptoms in this is rare, and even chilly sensations are not common. The outbreak of the disease is marked by characteristic evacuations of mucus with more or less blood preceded by severe griping pains known as tormina. The amount passed at each act of defecation is scanty, but the desire to go to stool is frequent, slight evacuations often taking place every hour or two, and sometimes every few moments the desire returns. In some cases the quantity of mucous discharge is abundant, and forms a jelly like mass known

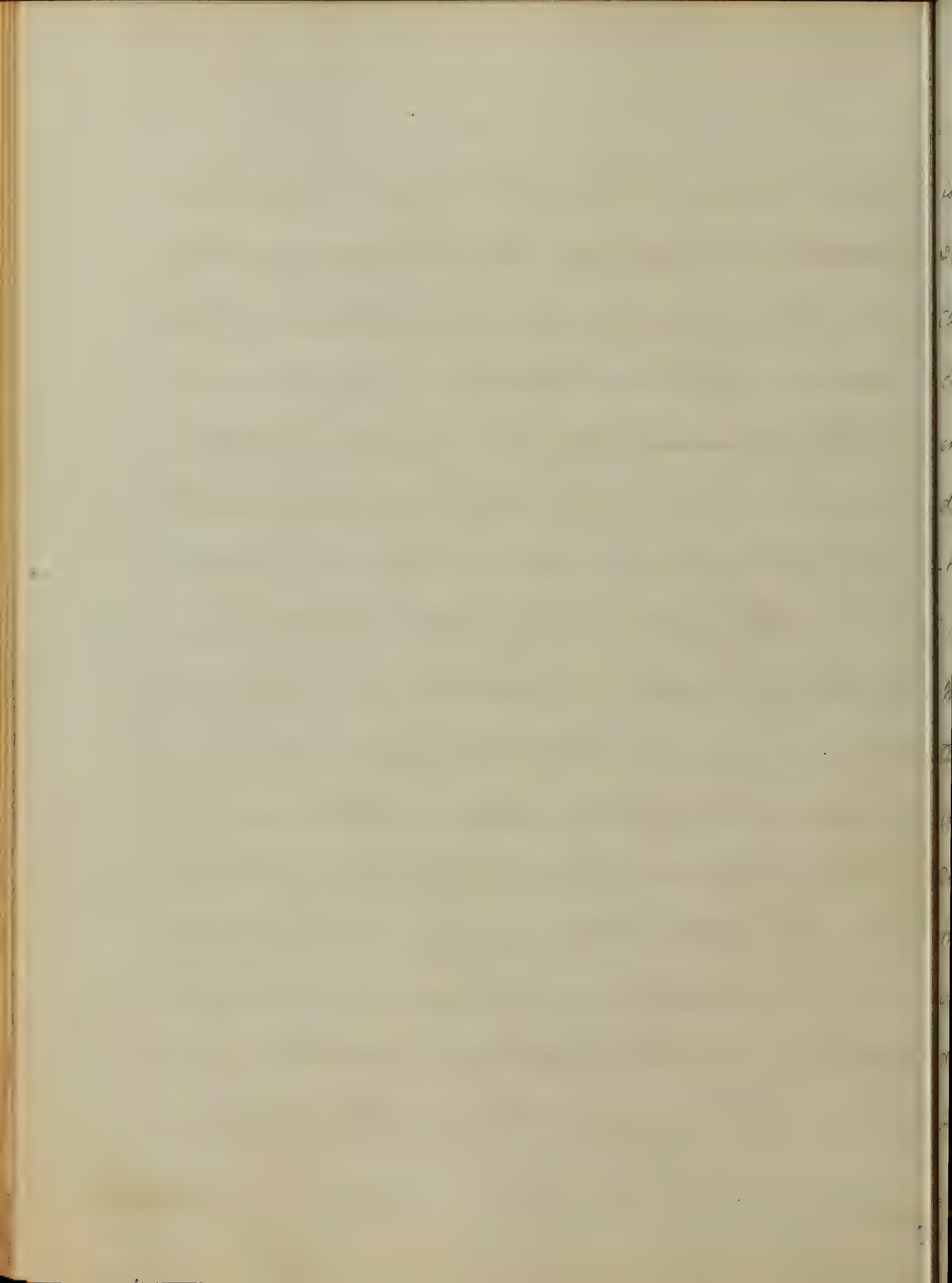


by the popular term slime, resembling the "scrapings of hogs guts". Sometimes in Sporadic cases but oftener in Epidemic dysentery, the evacuations contain fibrinous flakes in greater or less quantity according to severity of attack. There is seldom any lumps found in the stools, and little feculant matter, the dejections being generally exclusively dysenteric; often this presents a green color. The dejections upon examination are found to be rich in albumen, the greater part coagulating on the addition of nitric acid. In the gravest cases lumps of coagulated blood are occasionally passed. The

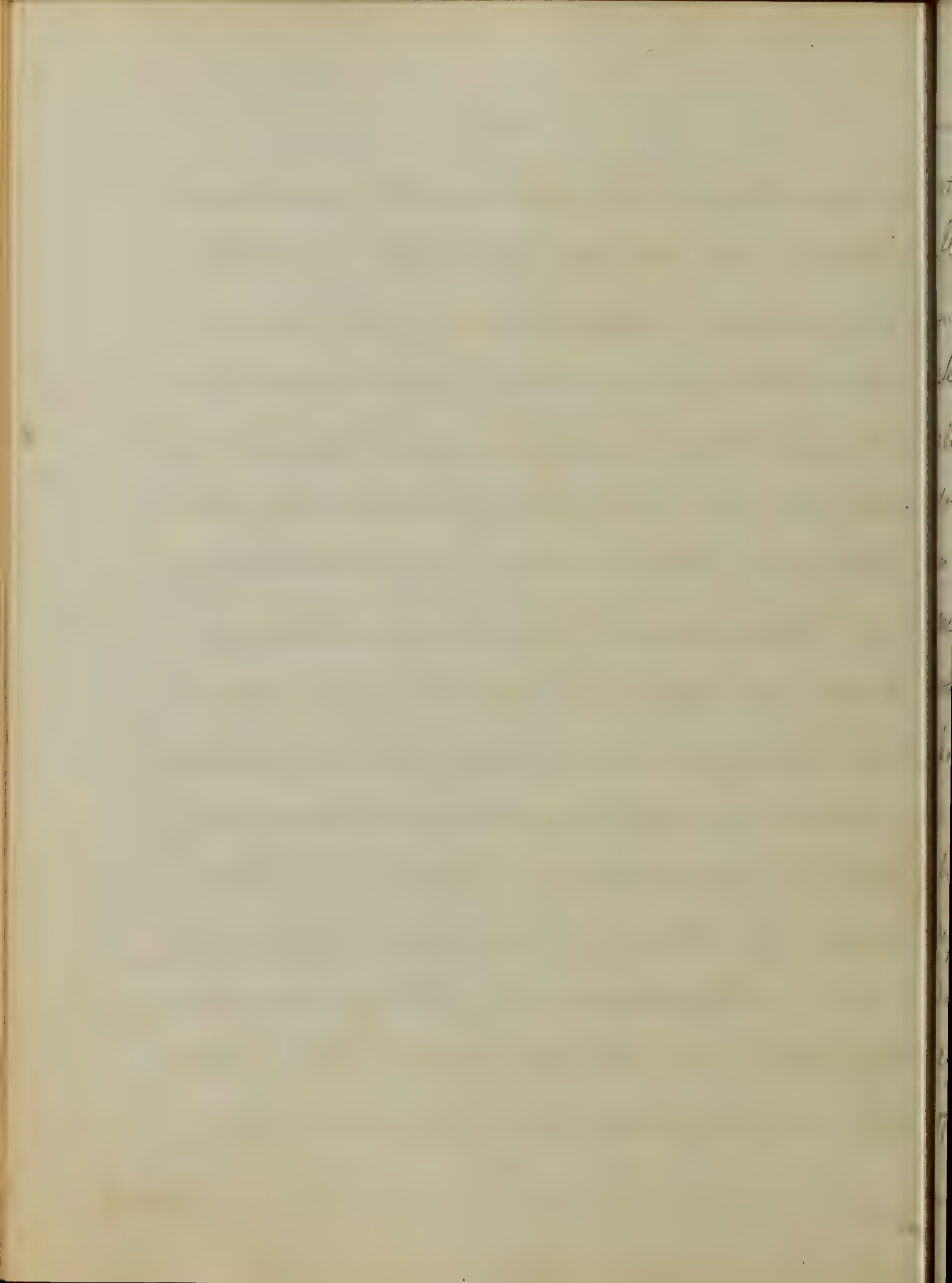


extent and intensity of local lesion is readily recognized by the amount of morbid evacuations together with the absence of fecal matter. In the course of the disease the evacuations may contain more or less purulent matter, but oftener found in chronic dysentery. The odor from the dejections is that of putrid or cadaveric fetor; an order says Dr. Parks to be the most offensive of all the organic effluvia.

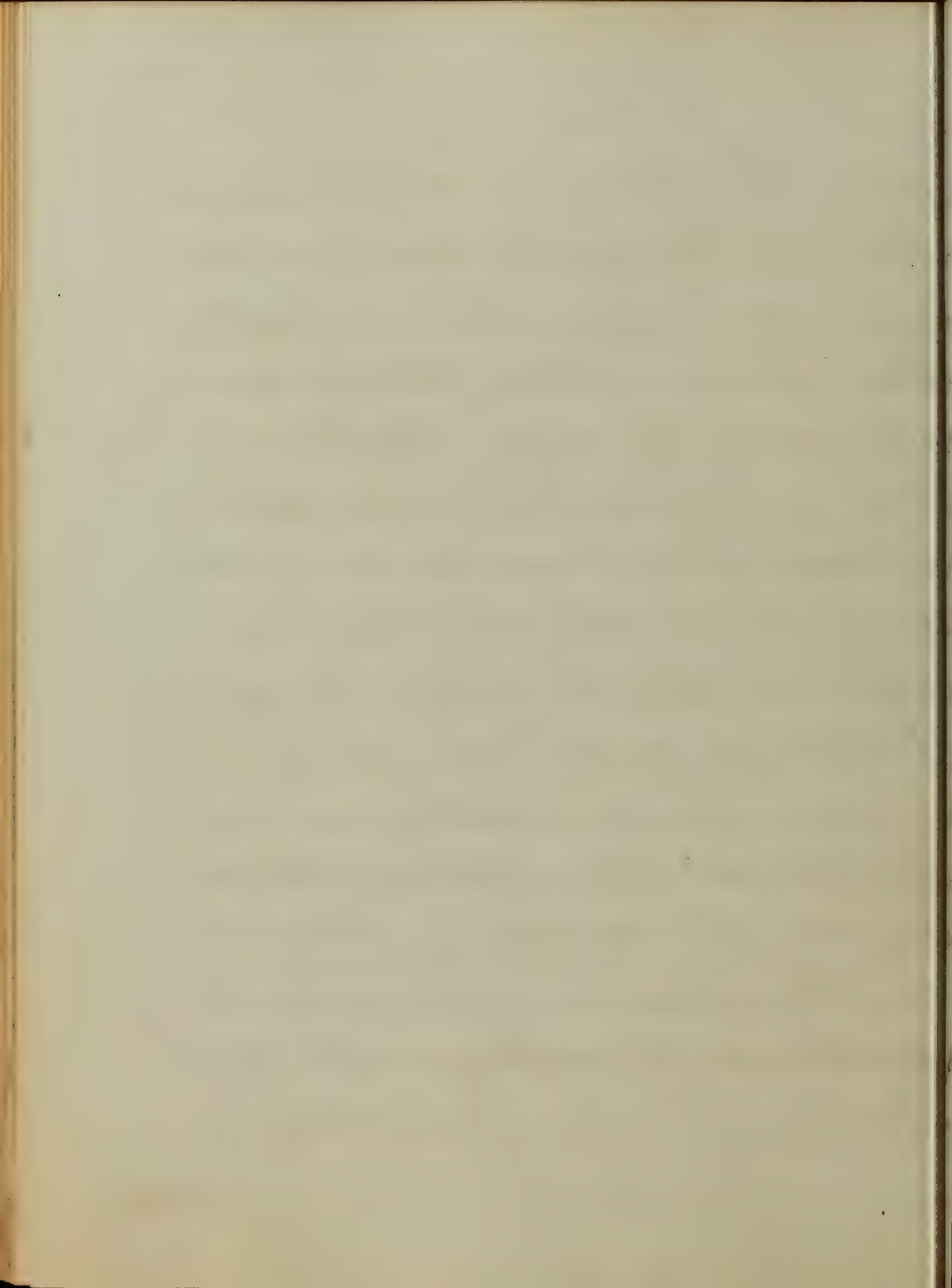
The almost constant desire to defecate, with straining, or tenesmus as it is called, is occasioned by a sensation in the inflamed rectum as if it were filled. Prolapsus of the rectum



is sometimes brought on by constant straining. The great suffering that the patient experiences is caused by the tenesmus, and tormina; yet however they do not always show gravity of disease, as they are sometimes wanting in fatal cases, and are among the prominent symptoms in some mild cases. The abdomen is warmer than usual, and tenderness on pressure is more or less marked over decending colon, and occasionally over whole tract of large intestines. Tympanitis is rare, the abdomen being usually depressed. In mild cases there is little or no fever, but in severe ones

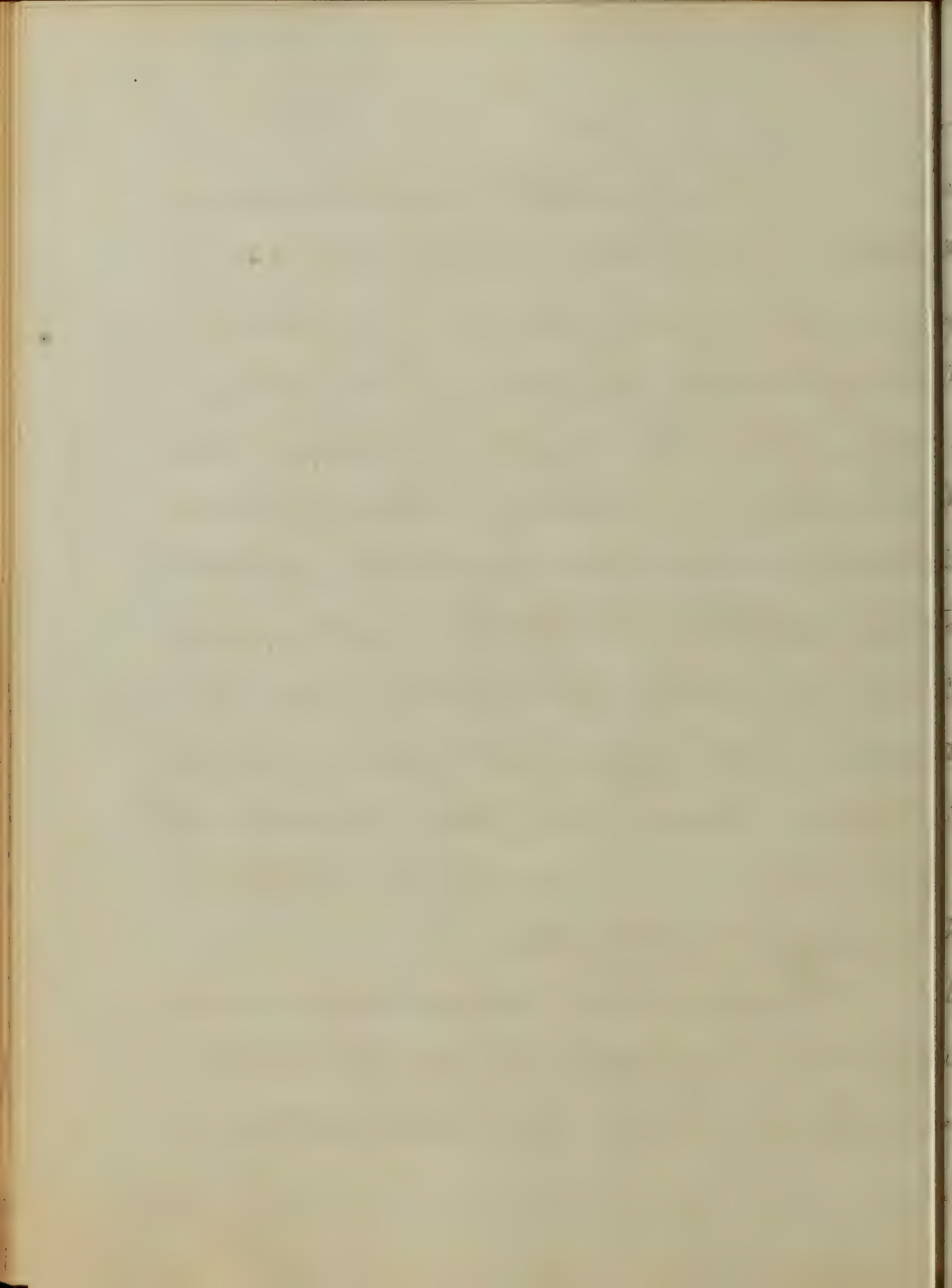


where the patient is robust, and inflammation more intense and diffused than usual, fever is high and skin hot & dry. High febrile movement always denote danger, but the reverse does not always hold good, as we find in some fatal cases the pulse never much accelerated. The tongue is white and moist, thirst great, and patient longs for water; anorexia is a prominent symptom, and all but the mildest articles of food are rejected. The stomach is irritable and vomiting occasionally occurs as a symptom, the matter vomited being of a greenish color. The intellect as



a rule is not affected, delirium seldom occurring in those cases which end in recovery; but at times ~ ~ in fatal ones towards the close of life. Loss of strength varies greatly, in different cases according to intensity & extent of local lesions, also upon condition of patient when attacked. If inflammation is severe there is soon perceptible emaciation with loss of strength. The eyes become hollow, face pale, cheeks sunken in, and whole countenance shows signs of great distress.

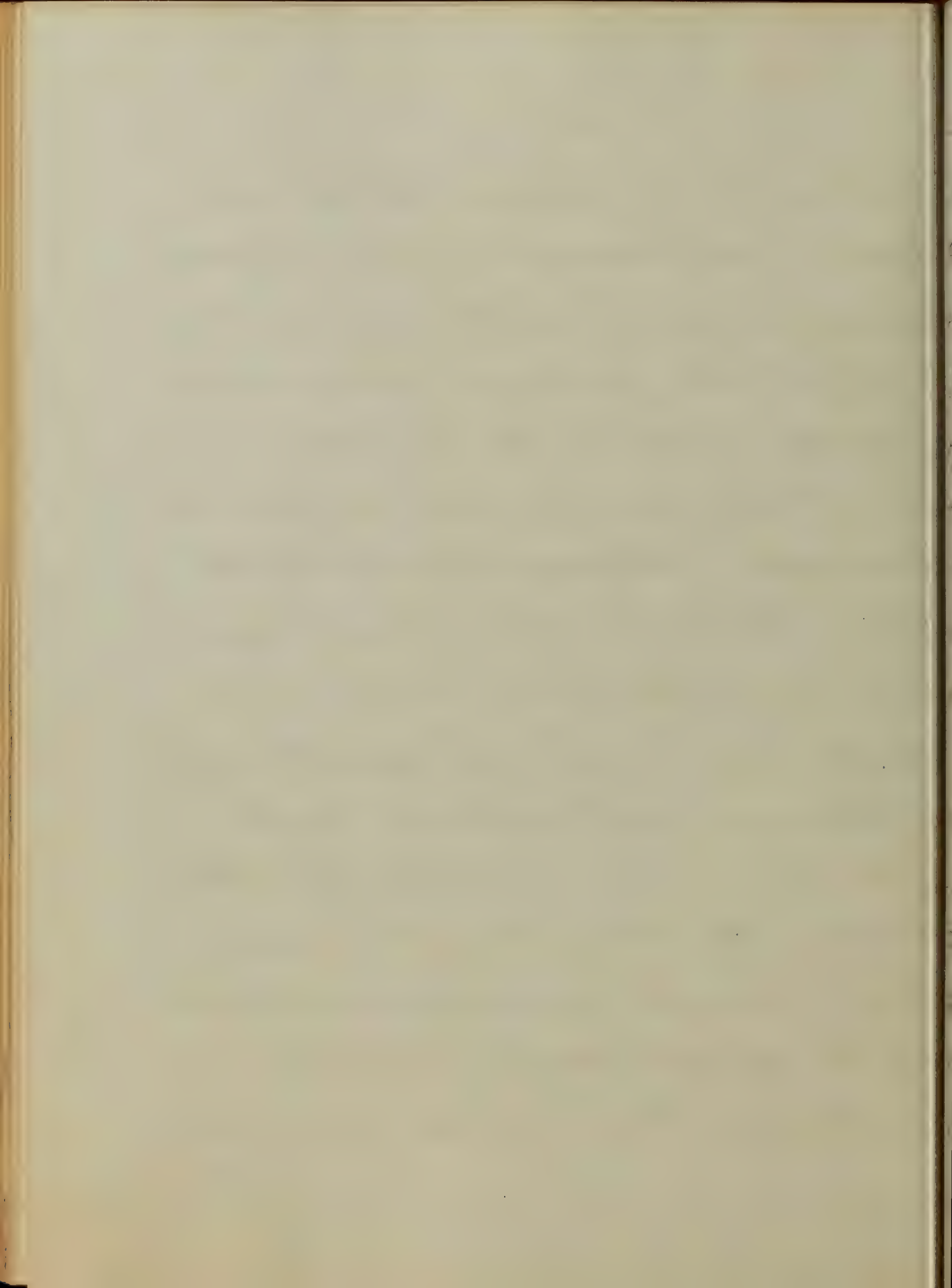
The course of the disease will depend on a variety of conditions such as type, whether it be mild or sthenic



also upon the stage at which treatment has commenced, and still more upon the nature of the treatment and the patients prudence or the reverse.

In mild cases the duration of the attack seldom exceeds 8 or 10 days, sometimes not more than half that time. Healthy alvine discharges a copious lateritious sediment in the urine, and free perspiration proclaiming restoration to heath

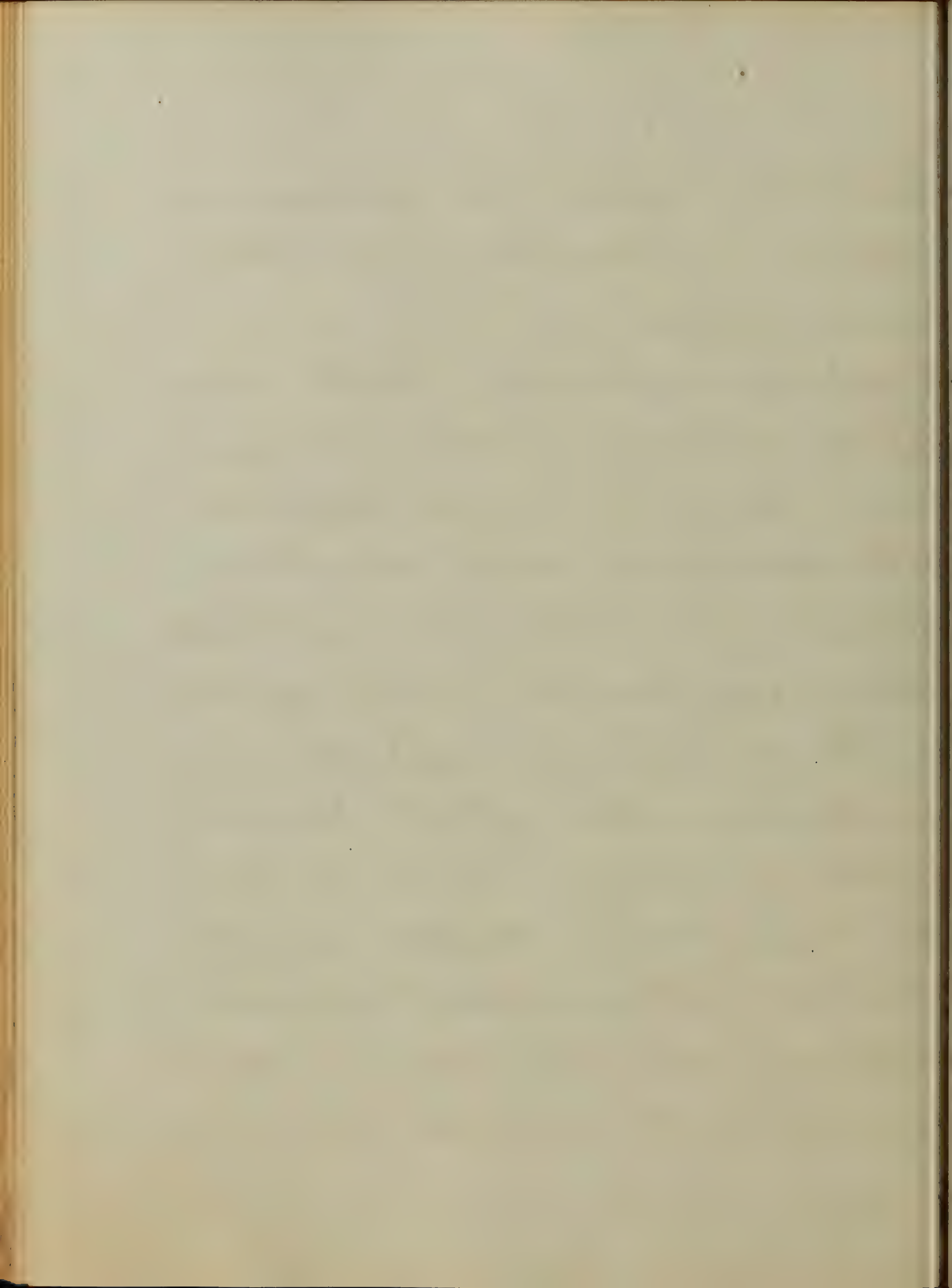
In sthenic dysentery the constitutional symptoms are more urgent, local lesions greater, and if not checked by early treatment is apt to end in death. From 20 cases recorded by



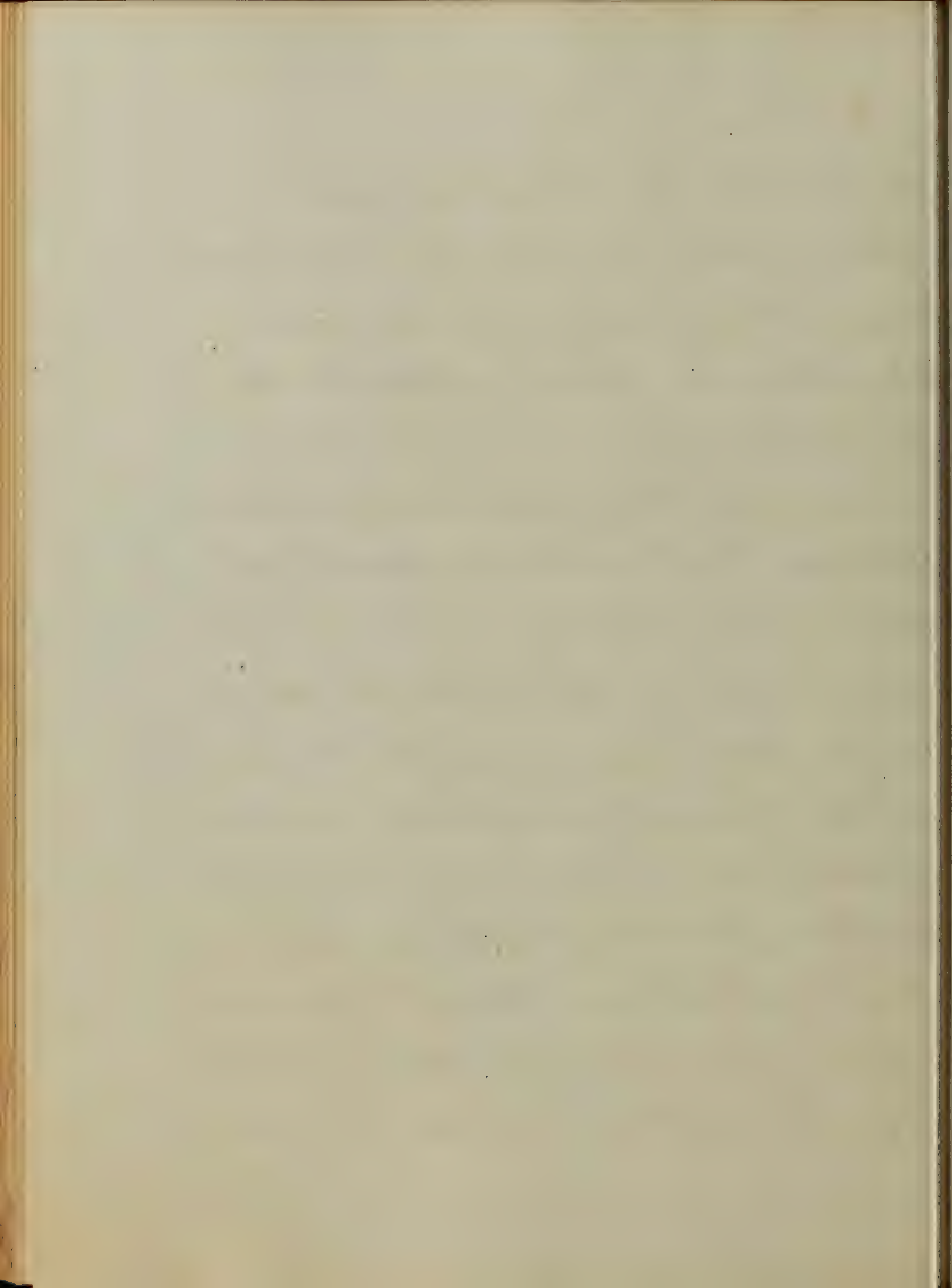
Dr. Flint he found the minimum, & maximum duration to vary from 4 to 24 days.

Pathological Character - Little is known of the pathology of sporadic dysentery other than the int[illegible]inal affections; the local and general phenomena which make up the clinical history being symptomatic of this affection.

The disease is a spontaneous inflammation of the large intestines, - if I may be allowed to use the term - and it altogether probable that the inflammation is a local expression of a prior internal morbid condition of which the pathologist

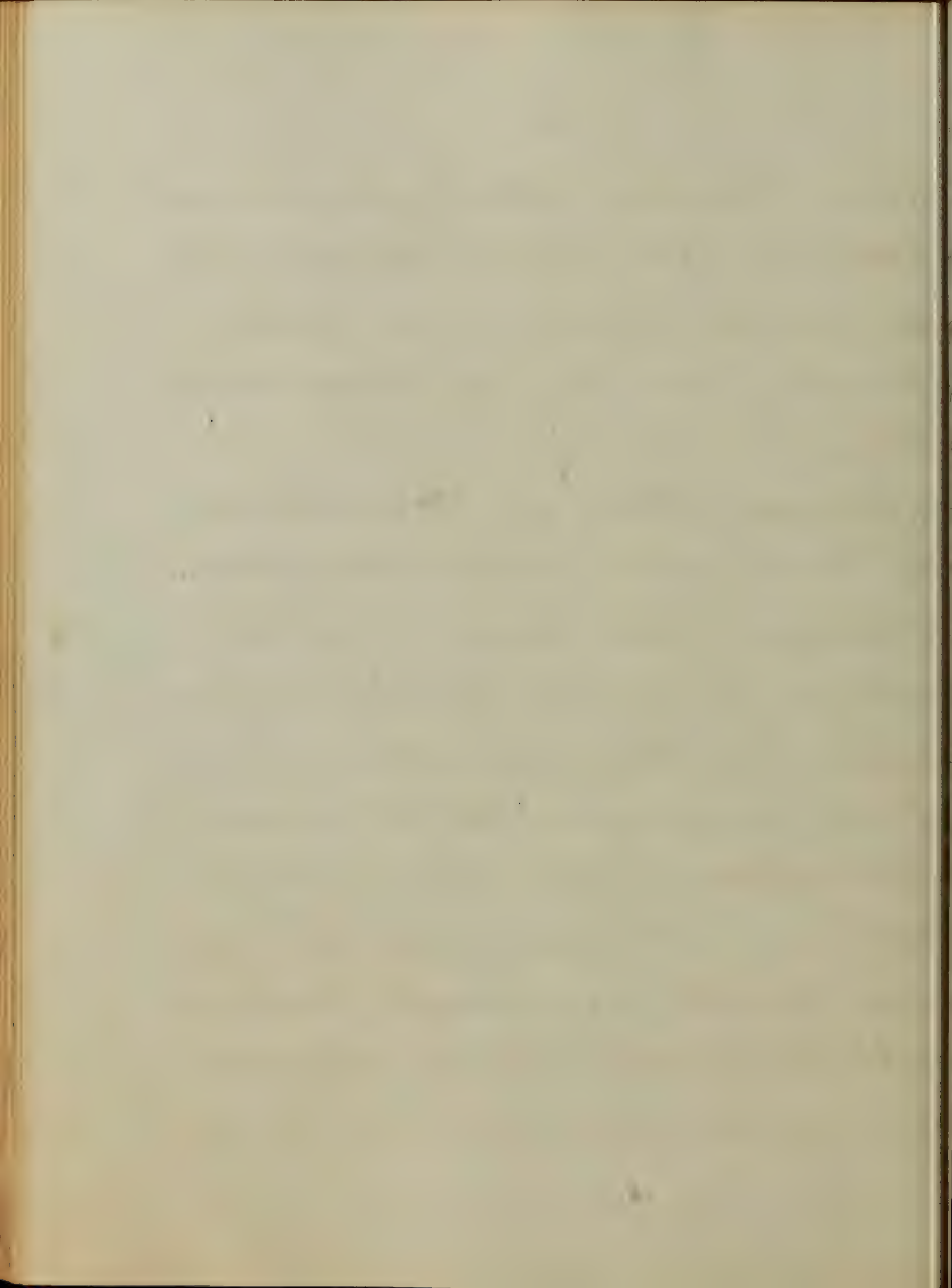


at present has not found out.
This is not peculiar to this disease
alone but to all of the so called
spontaneous local affections. We
find described in books many
varieties of this disease viz. Typhus
Bilious. Intermittent, Remittent,
Rheumatic, febrile & non febrile &c
The terms denote either variations
in the phenomenon of the disease
or the coexistance of other diseases
These combinations are important
in their practical relations but it
does not follow that the disease
under these circumstances is spe-
cifically different from its ordinary

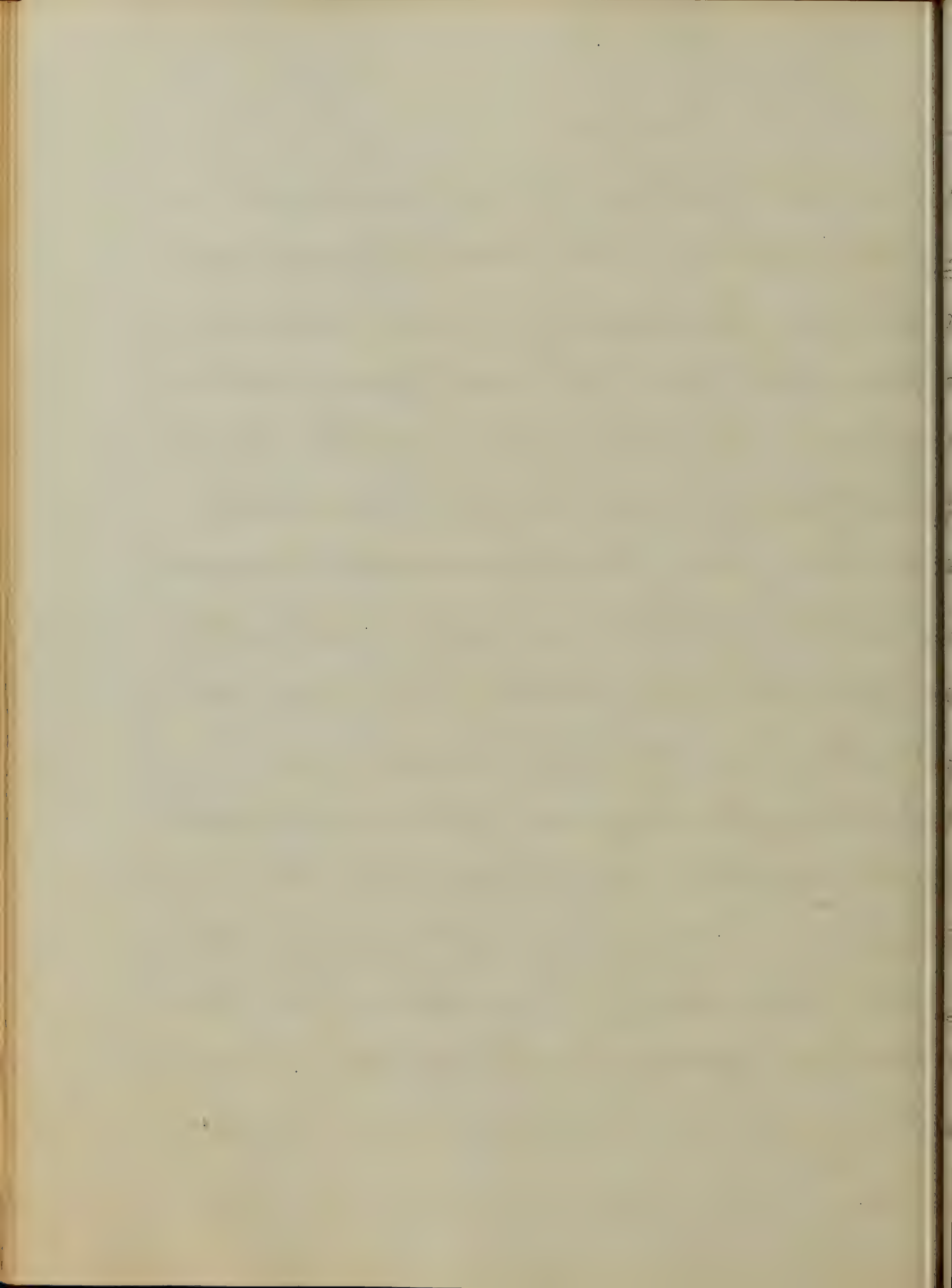


form. Paralysis affecting certain mus-
-cles, especially those of the lower lim-
-bs has been observed in some cases
to either accompany or follow dysen-
-tery.

Causes - These are vicissitudes
of temperature, especially sudden
changes from warm to cold,
which checks the perspiration and
causes a determination of blood
from the surface to the viscera.
Unwholesome food has a potent
action in the production of dysen-
tery, In this way unripe fruits, or
ripe fruits when inordinately con-
sumed, also vegetables, acid wines



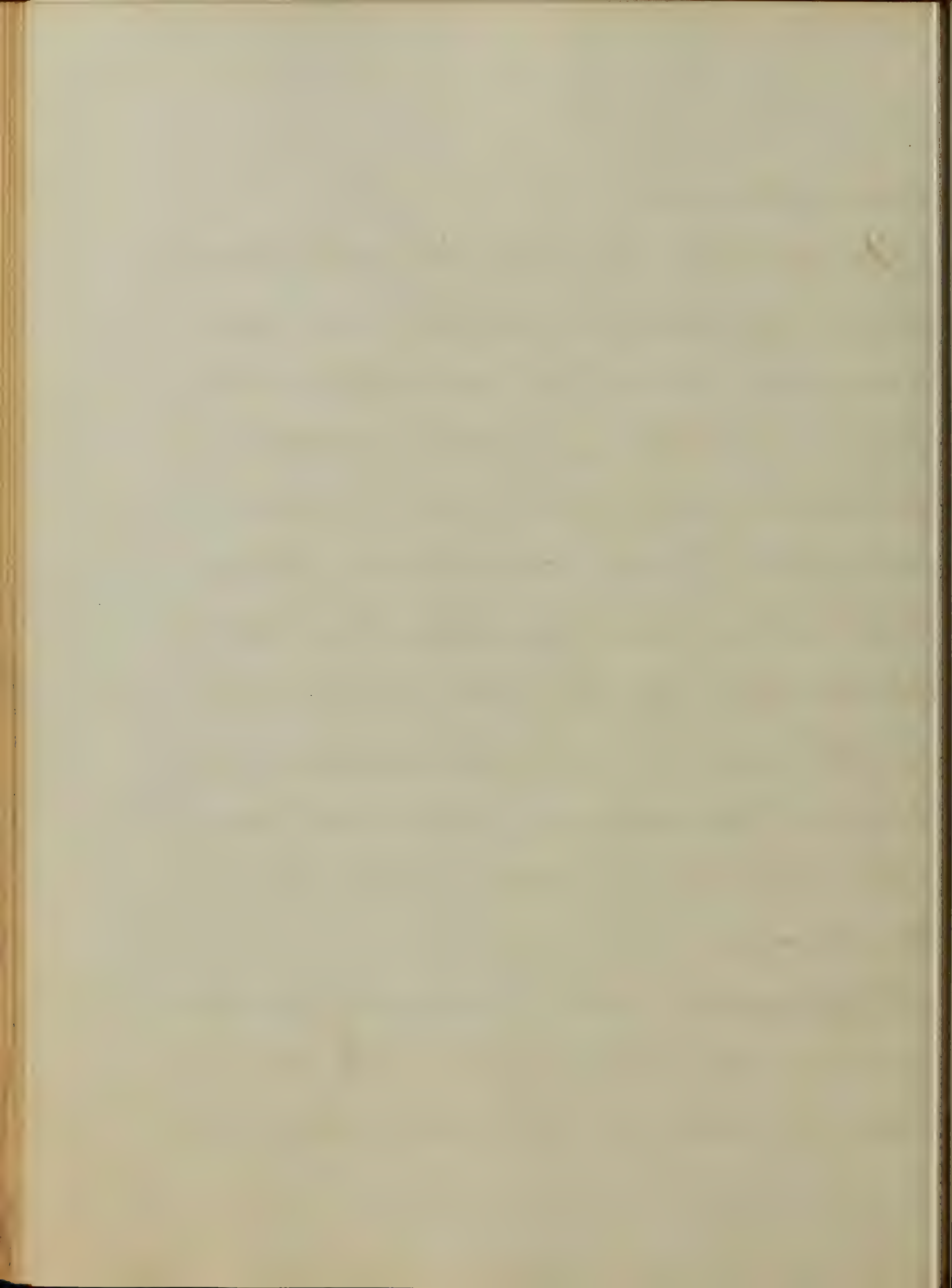
impure water, accumulation of intestines of [illegible], and parenchyma of fruits have particularly been supposed to act. The contagious nature of dysentery has been asserted by some authorities, but as facts are wanted to prove it in this form, (with the consideration of which we are occupied) it is much to be doubted. No age is exempt from liability to this disease but in the majority of cases the patients are adults under 35 yrs. The disease is found more freq[illegible]ly in the tropical climates. It also seems to choose certain seasons, being more frequent during the months of July, August



and September.

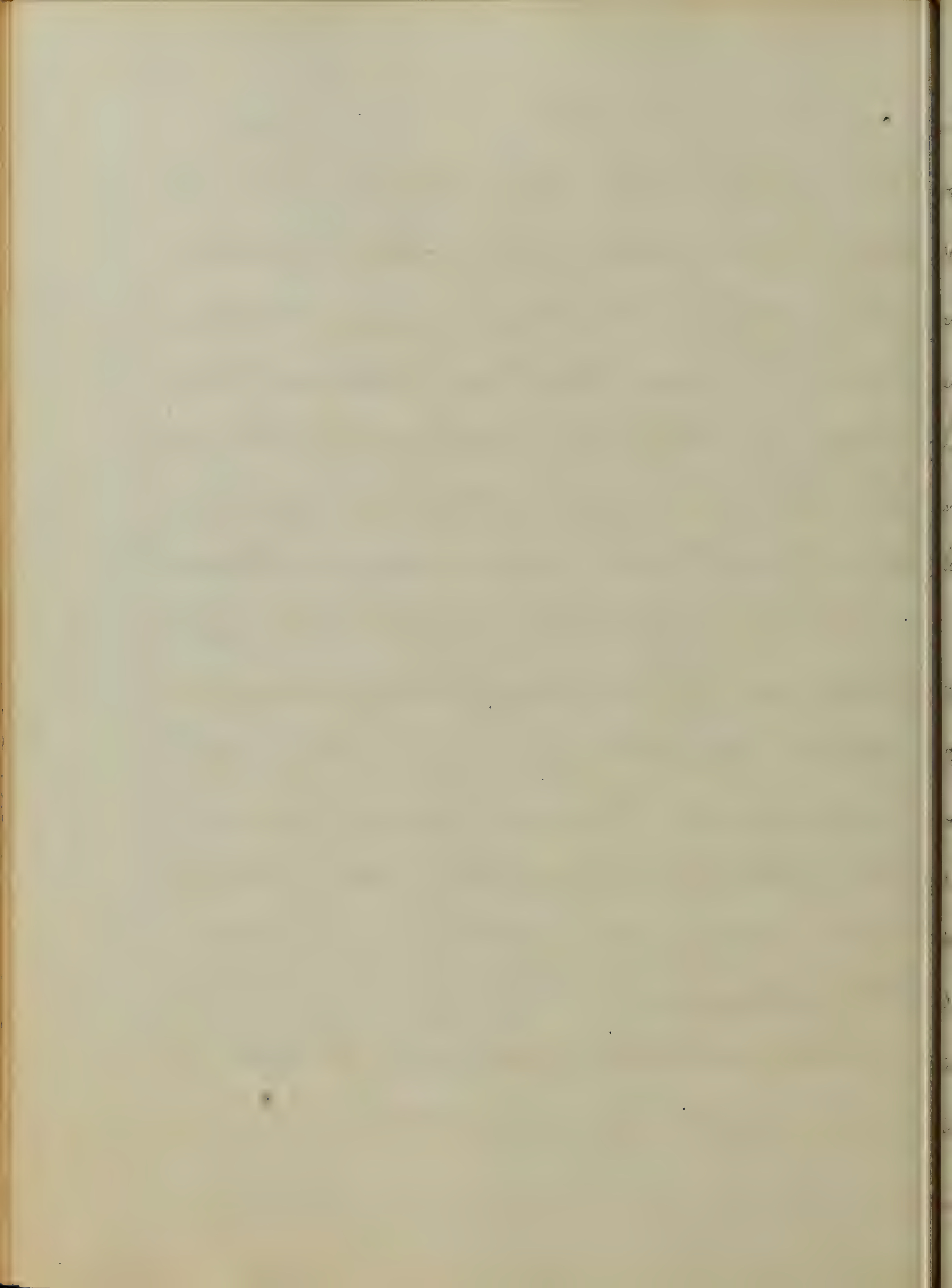
Diagnosis. This ought not to present any difficulty. In acute cases the tenesmus, tormina, muciform and bloody stools, and above all their peculiar odor, will distinguish dysentery from diarrhoea. If seen in a more advanced stage when the stools have become fluid, the history of the case, the nervous depression, the blood in discharges, and once more their cadaveric odor will establish the diagnosis.

Prognosis. From producing a very considerable annual mortality, as was the case in the Seventeenth cen-



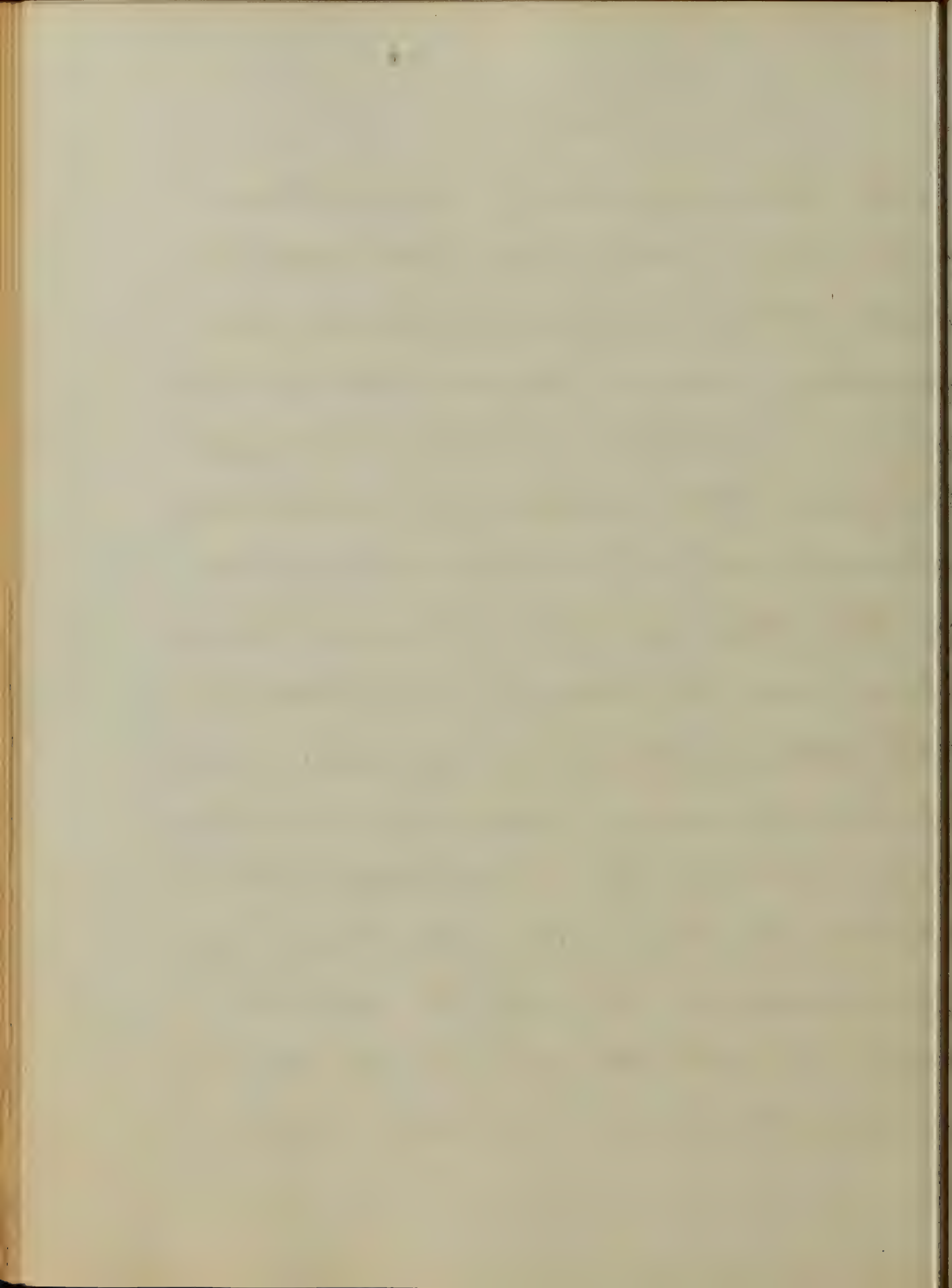
-tery, dysentery now occupies a very low place among the causes of death. It is a very distressing and debilitating disease, but in temperate climates is attended with very little danger to life. Cases that end fatally is either due to an unusual intensity and extent of local affection, or from feebleness of the constitution, being unable to resist the disease. This disease in temperate climates rarely runs into chronic dysentery, nor does it leave any predisposition to any other disease.

While we have seen above that the prognosis in temperate climates is



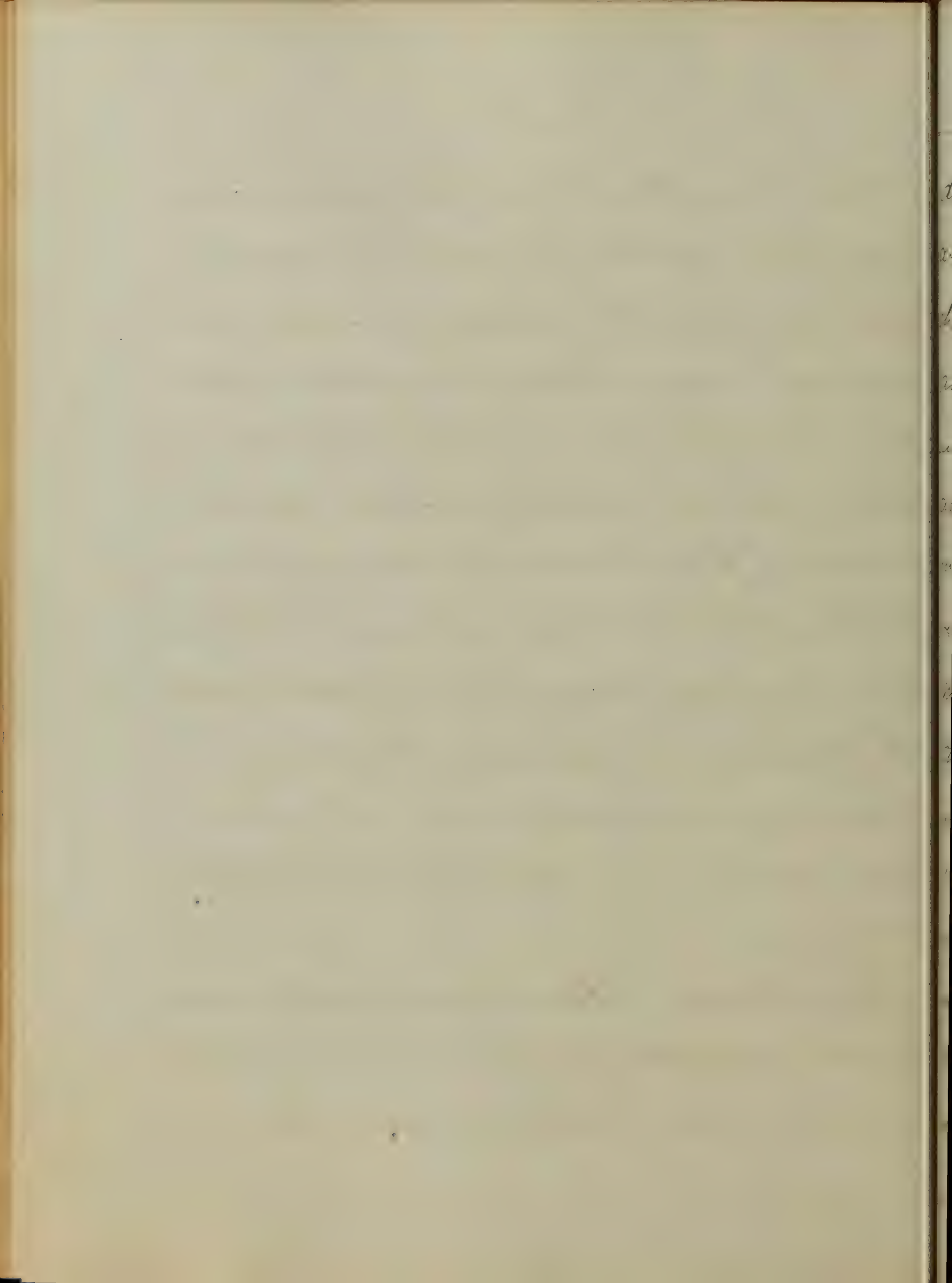
very favorable; yet in the tropical climates is very undoubtly less favorable. Here we have the disease presenting itself in its most malignant form; and leaving behind it, its effects in some of the viscera, e.g. abscess of the liver is not an unfrequent sequelae

The grounds for a favorable prognosis are, the original slightness of the attack, the absence of much nervous depression - a natural countenance with a pulse of good strength and moderate frequency - the absence of gangrenous odor in the stools; and lastly the absence of any signs of serious hepatic complications

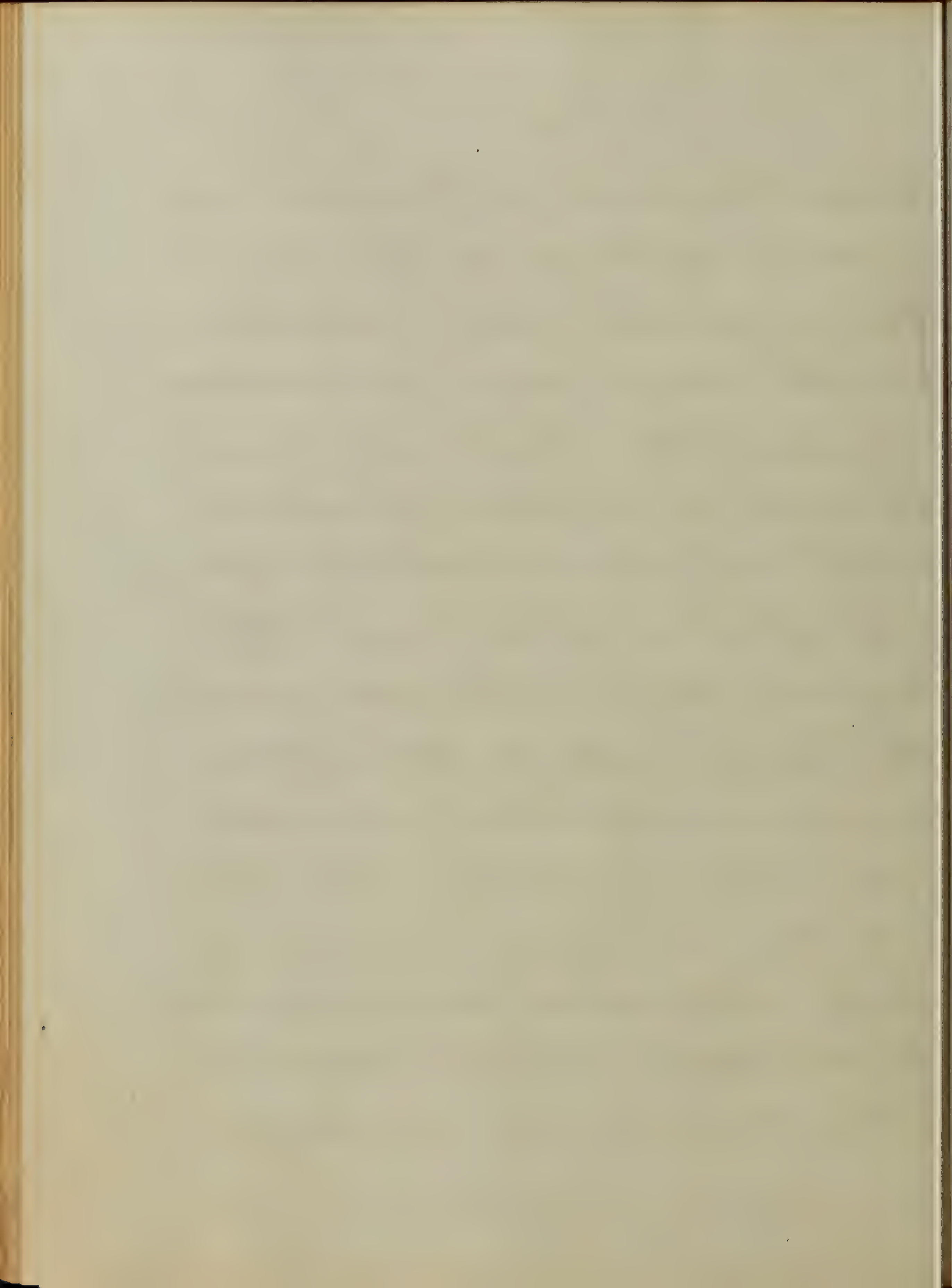


On the other hand a rapid failure of the nervous, and circulatory system: a pulse increasing in frequency and failing in strenght: an anxious and sodden countenance extreme restlessness: sudden subsiding of pain with increasing fœtor of the stools of a gangrenous character: hemmorrhage from bowels mouth or nose, hiccough: black and dry tongue, suppression of urine and delerium, all point to extreme danger.

Treatment. Dysentery in mild cases would doubtly end in recovery without medical treatment; but by ju



dicious treatment, we believe that the disease is sometimes arrested, and that its duration may be shortened and the patient relieved of the distressing symptoms- Severe cases demand an energetic treatment- Confinement in bed is of primary importance, the very rest favoring the arrest of the malady as much as the movement of the body promotes it- Bloodletting was formerly practiced, and is still recommended by some when pain is severe and remains unrelieved by warm applications and rubefacients; leeches applied over the abdomen when the tenderness is greatest will

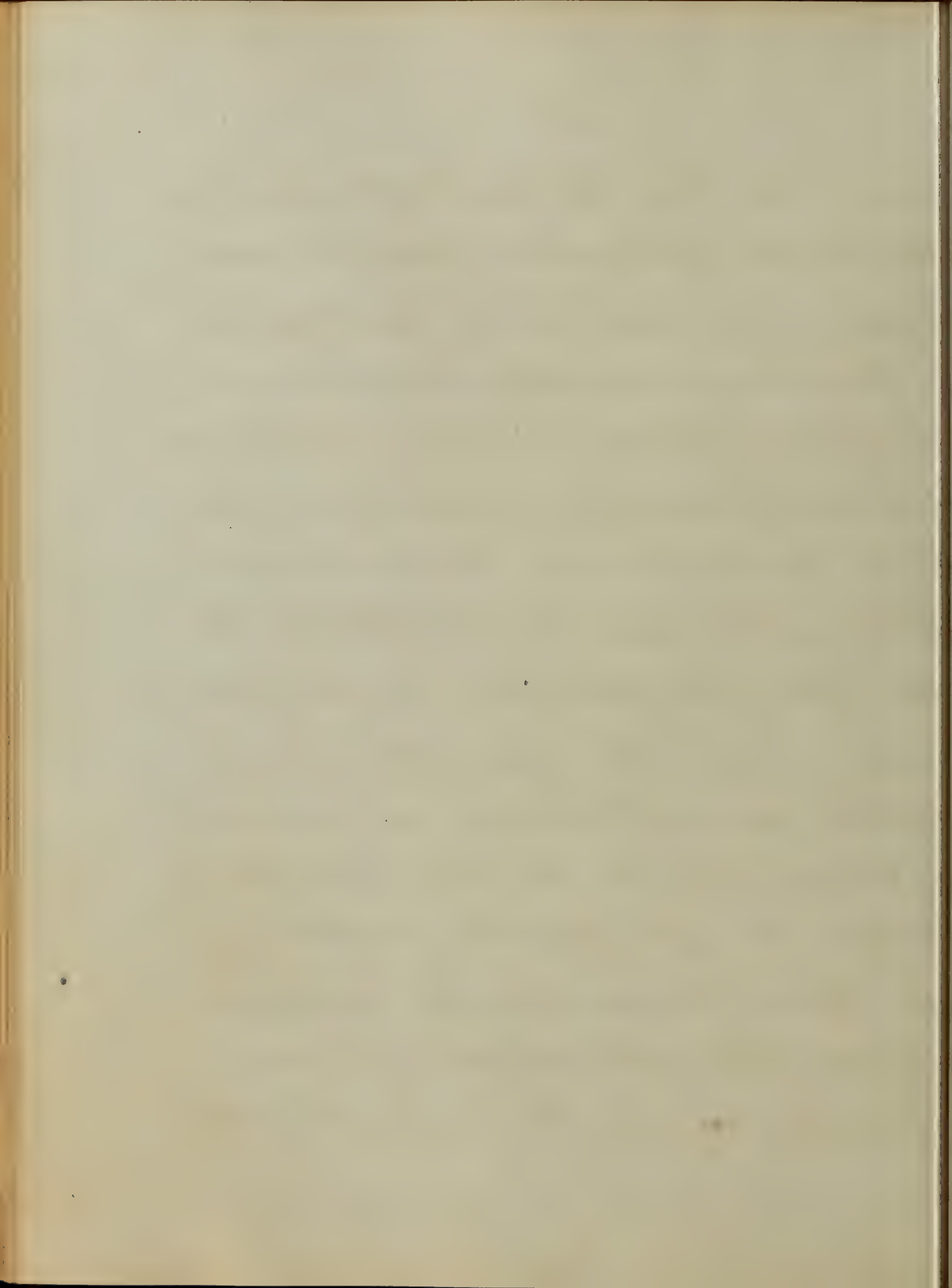


be suitable.

An indication as early as possible to free the bowels of all fecal matter—(if they have not been cleared out already by the diarrhoea which precedes the dysenteric dejections)—in order to prevent their continued passage over the inflamed surface and to secure so far as may be possible the rest of the inflamed parts, so necessary in all forms of inflammation. For this purpose Castor Oil has been almost universally regarded as the best remedy, combined if there be any great pa[illegible] with few gtts of Tr Opii; but as there is such a dis-

-gust: or it on the part of the patient; the saline purgatives may be substituted, and indeed are prefered by some.

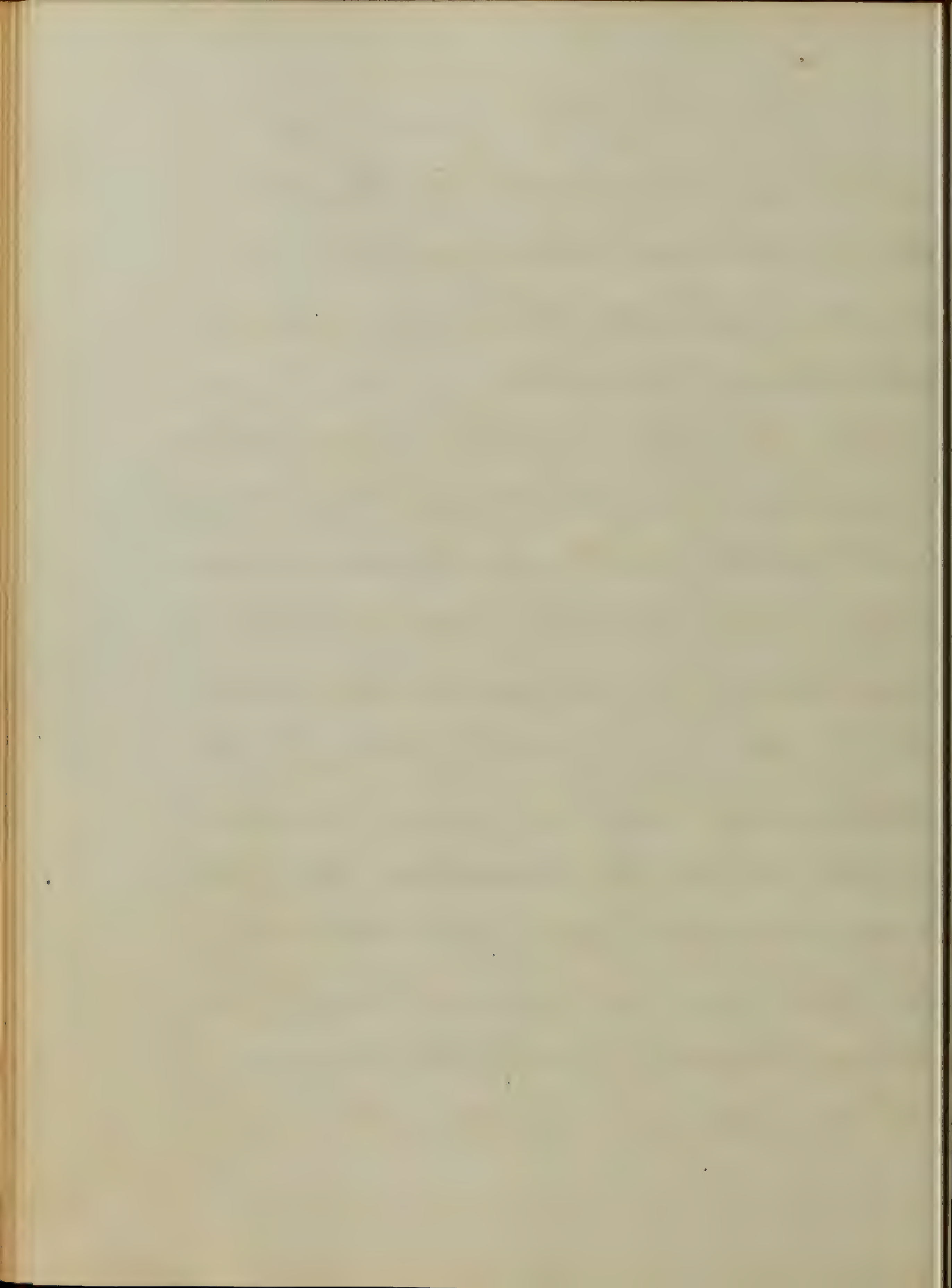
The saline selected should be given in sufficient doses to promote promptly abundant dejections, and then to be discontinued. By this simple treatment it sometimes happens that the tormina & tenesmus are notably relieved and the dysenteric evacuations do not return, and recovery at once ensues: it is but just to state though that this happens only in those cases where the inflammation is not intense, and only limited to the lower part of the



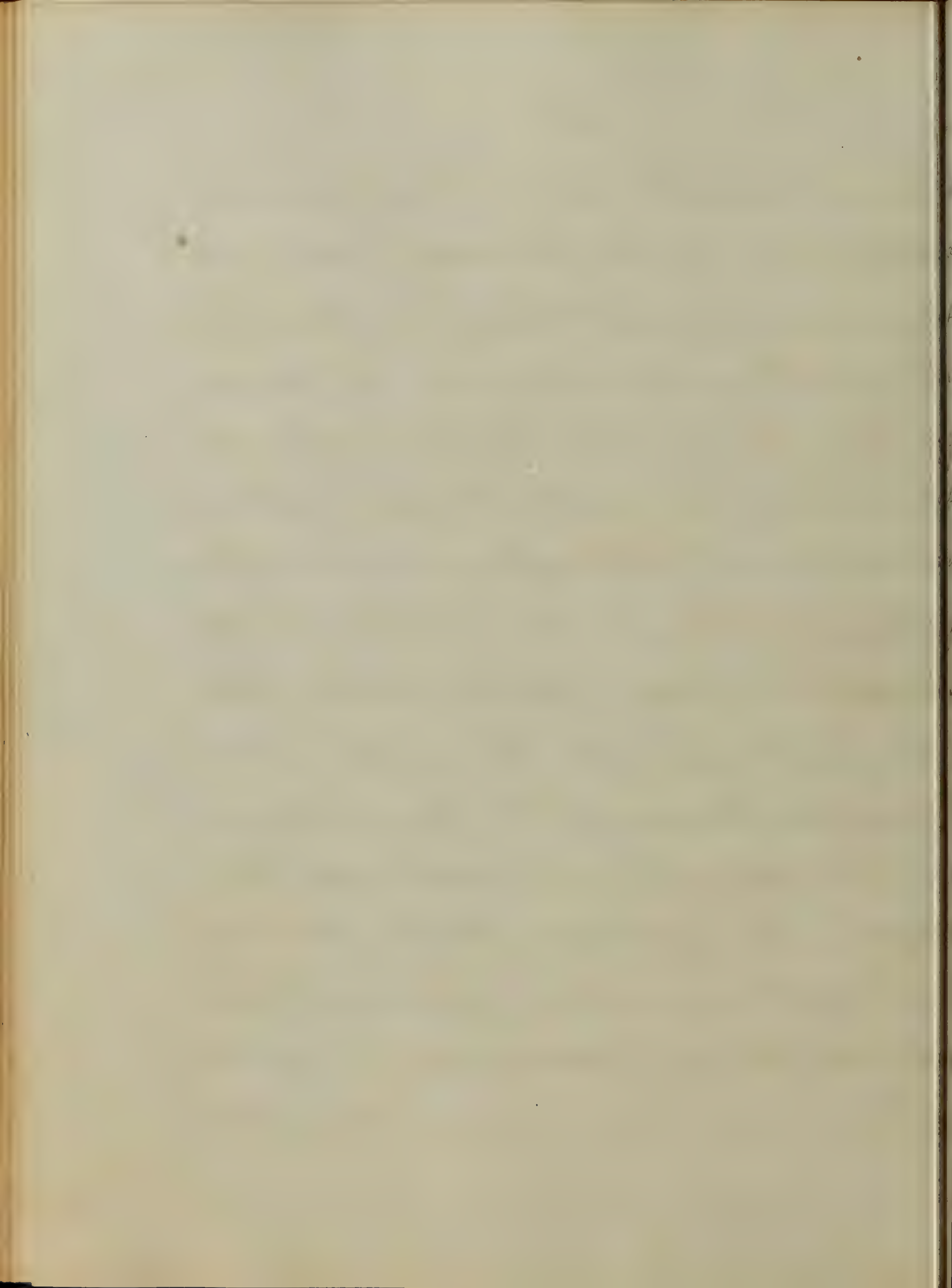
intestines. Probably Castor Oil is better in cases where salines are contraindicated by feebleness of constitution of patient.

After this preliminary treatment as it were, our next treatment should be directed to the tormina & tenesmus symptoms which give such marked pain and distress to the patient, and tend to break down his vital force; for this nothing can be found more remedial in the whole Pharmacopoea than Opium a remedy which has been relied upon for ages; and is regarded as the Summum remedium in this disease

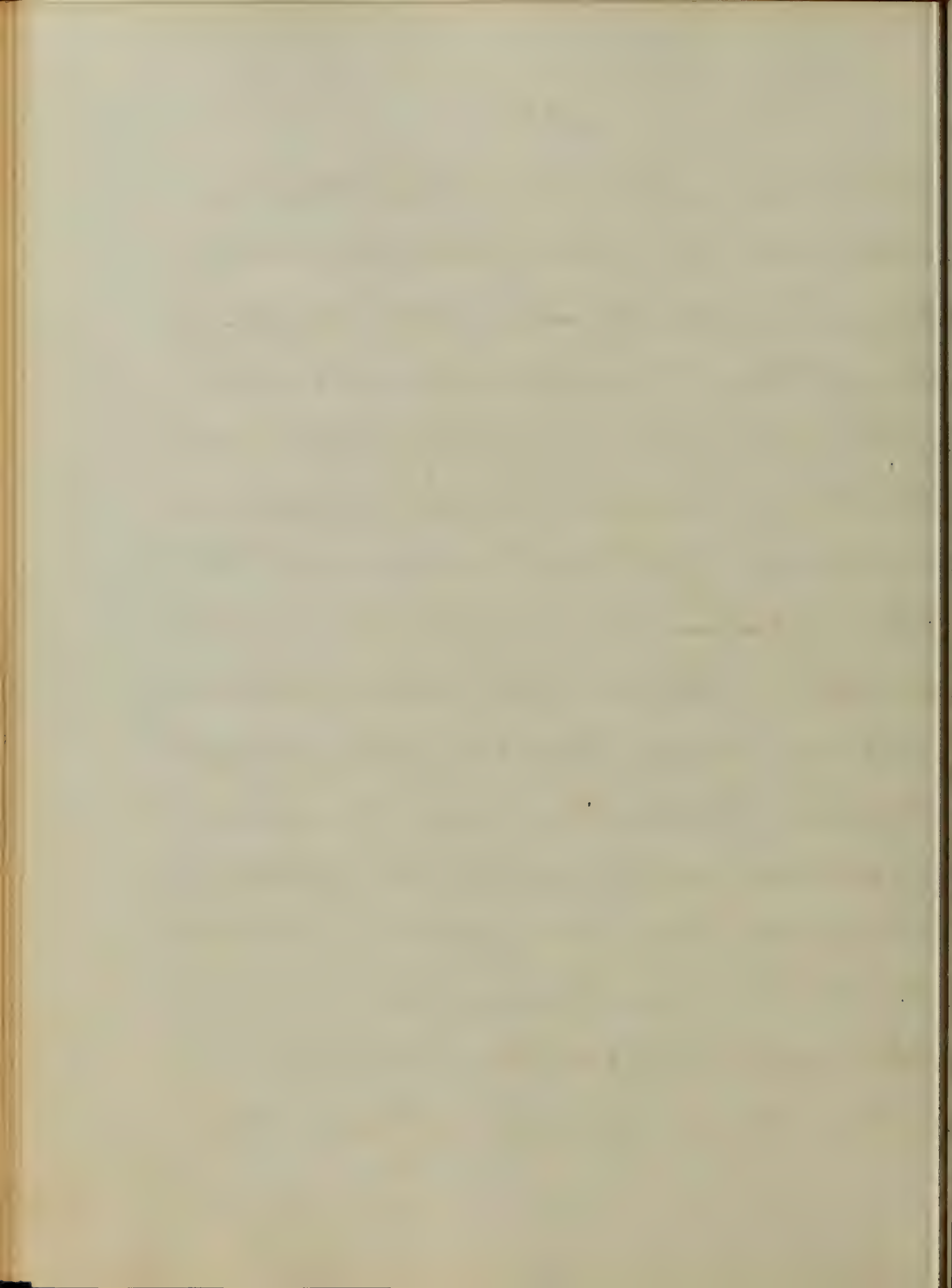
It may be given in large doses every



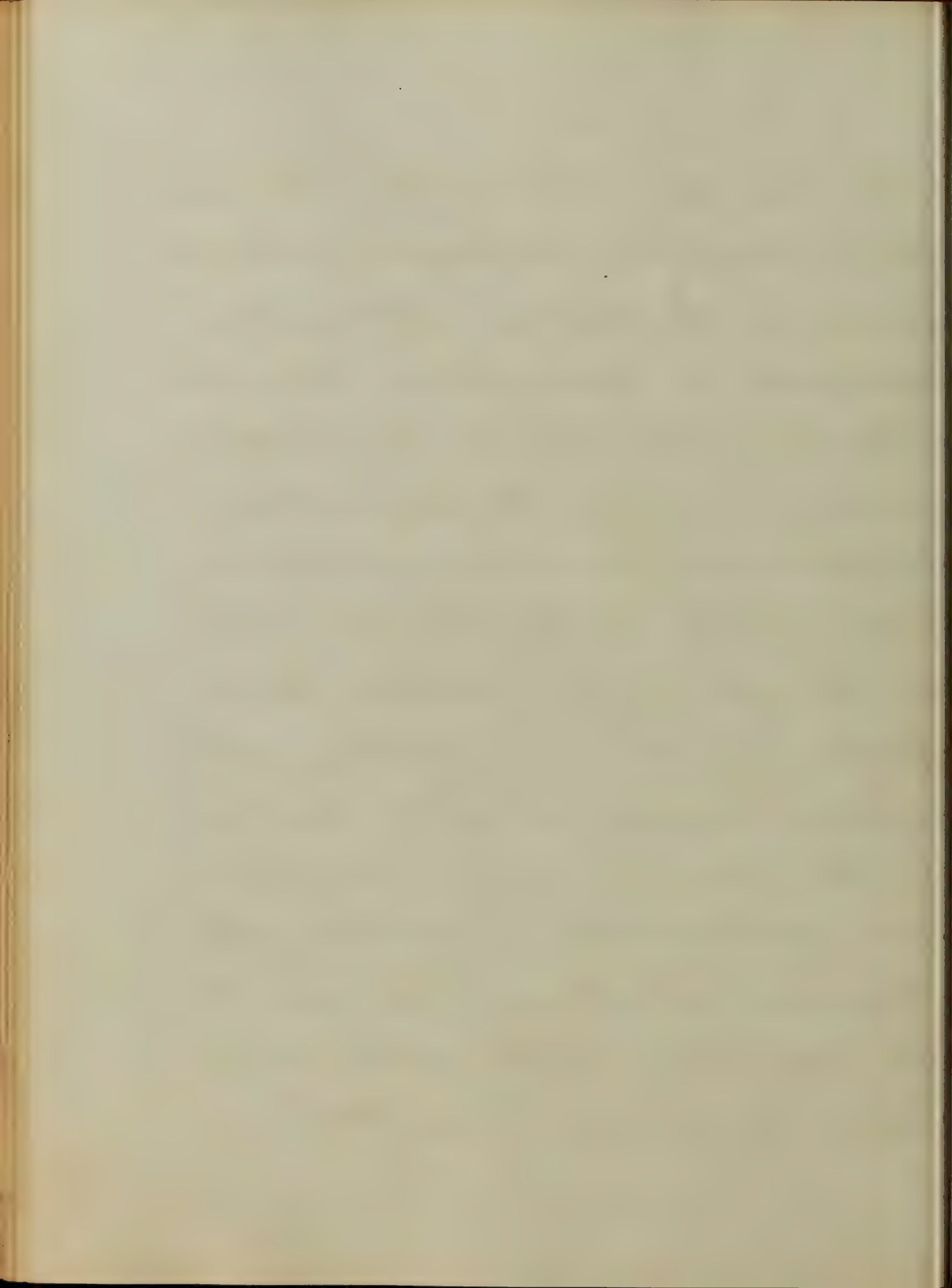
every 4 or 6 hrs, or in small ones at shorter intervals. It may be given alone or combined with Ipecac in form of Dover's Powder. As regards the prepa-ration to use it is better to give the one that agrees with the patient and continue it throughout course of dis-ease; gradually diminished as the dysenteric evacuations become less frequent, and the tormina and tenes-mus subsides. After two or 3 days if the symptoms do not abate, the saline purgatives or Castor Oil accor-ding to condition of patient may be repeated, and ~~course~~ administration of resumed. Enemas and fomentations



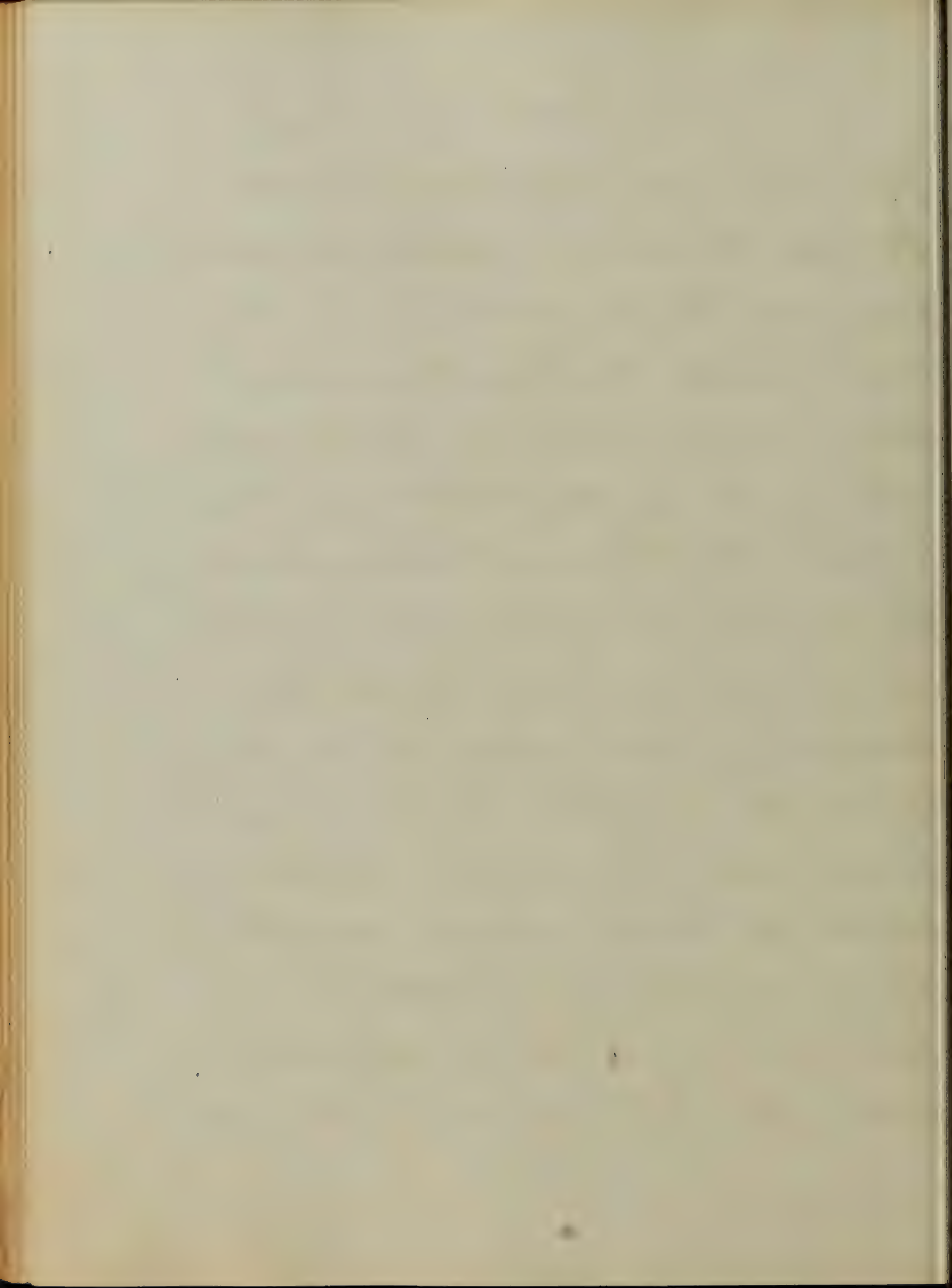
are very important:- the following acts well, and gives marked relief to patient - ℞ Starch water ℥i - Tr Opii gtts xx or if there be much ulceration few gtts of Creasote or Carbolic Acid may be added. I know this from experience in regard both to the enema & hot fomentation, and remember well its soothing effects. The subnit Bismuth in ℈ or ℥i doses - Acetate of lead - Sulph Copper, Gallic acid, and the various vegetable astringents, Kino, Catechu & these are valuable agents in the treatment of dysentery, and are to be relied upon when Opium cannot be borne and in cases that have become chronic



Of late years Ipecac has been large-
-ly employed, and recognized as a valuable
remedy in the treatment of dysentery
especially in India. Some have attrib-
-uted to it a special curative influence
and have advocated its employment
in as large doses as can be borne
As regards its therapeutical action
we are indebted to Dr. McLean for the
following. "It is probably (he says) that
Ipecac owes much of its usefulness
in this disease as an evacuant.
It is a blood depurant of an effec-
-tive kind. It appears to increase the
the secretion of the whole alimen-
-tary canal aswell as that of

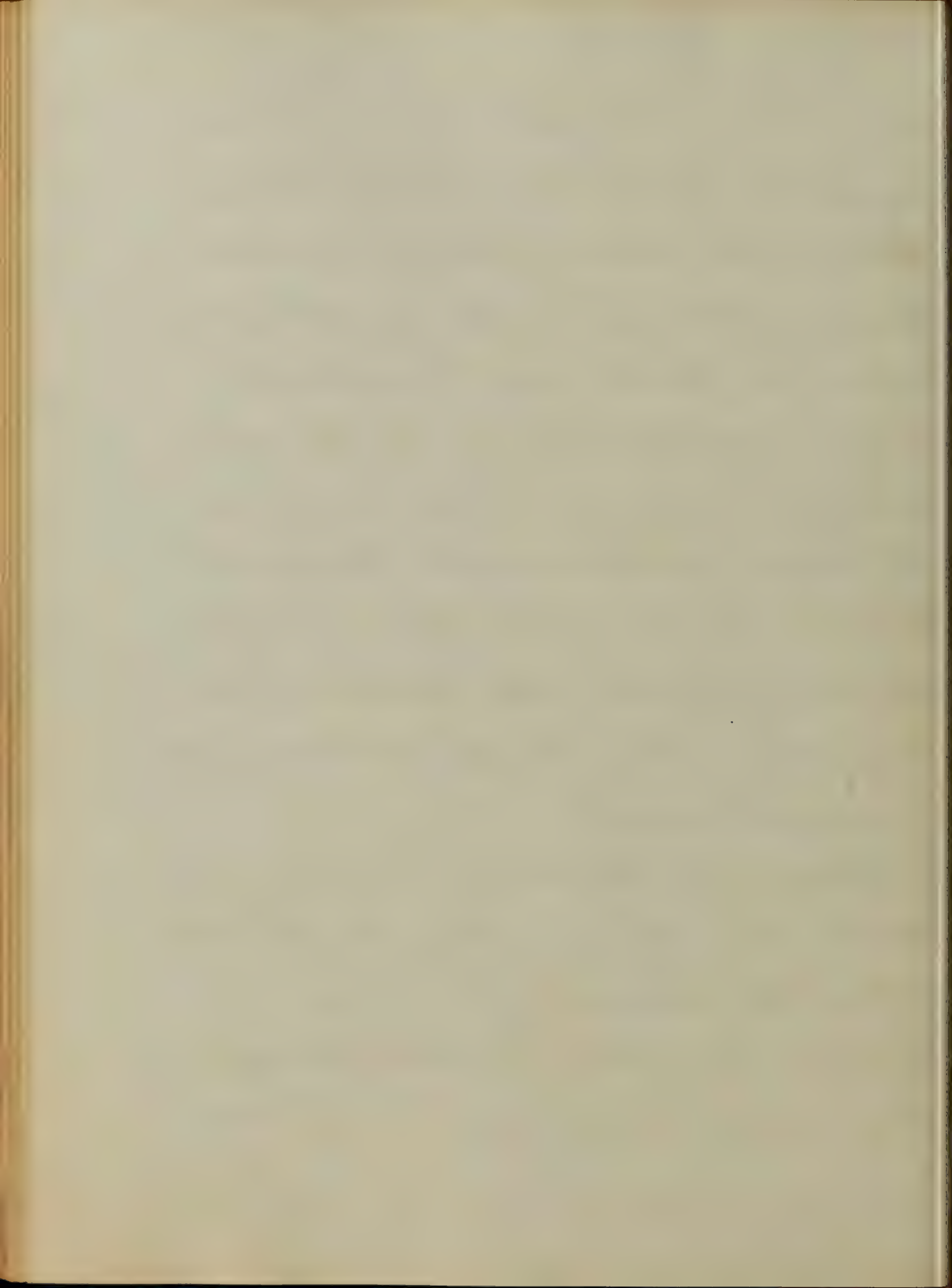


the liver, and pancreas: under its use tormina & tenesmus disappears, and feculent evacuations are more quickly restored, than by any other known remedy". Before administering it, all pains should be taken to make the stomach, tolerant of the remedy, restraing nausea and vomiting. For this purpose the following plan may be resorted to - 30 gtts of Tr Opii should be given and in half hr, followed by from 25 - 30 grs Ipecac, given in as little fluid as possible, a little orange peel will cover its unpleasant taste: The patient should be kept



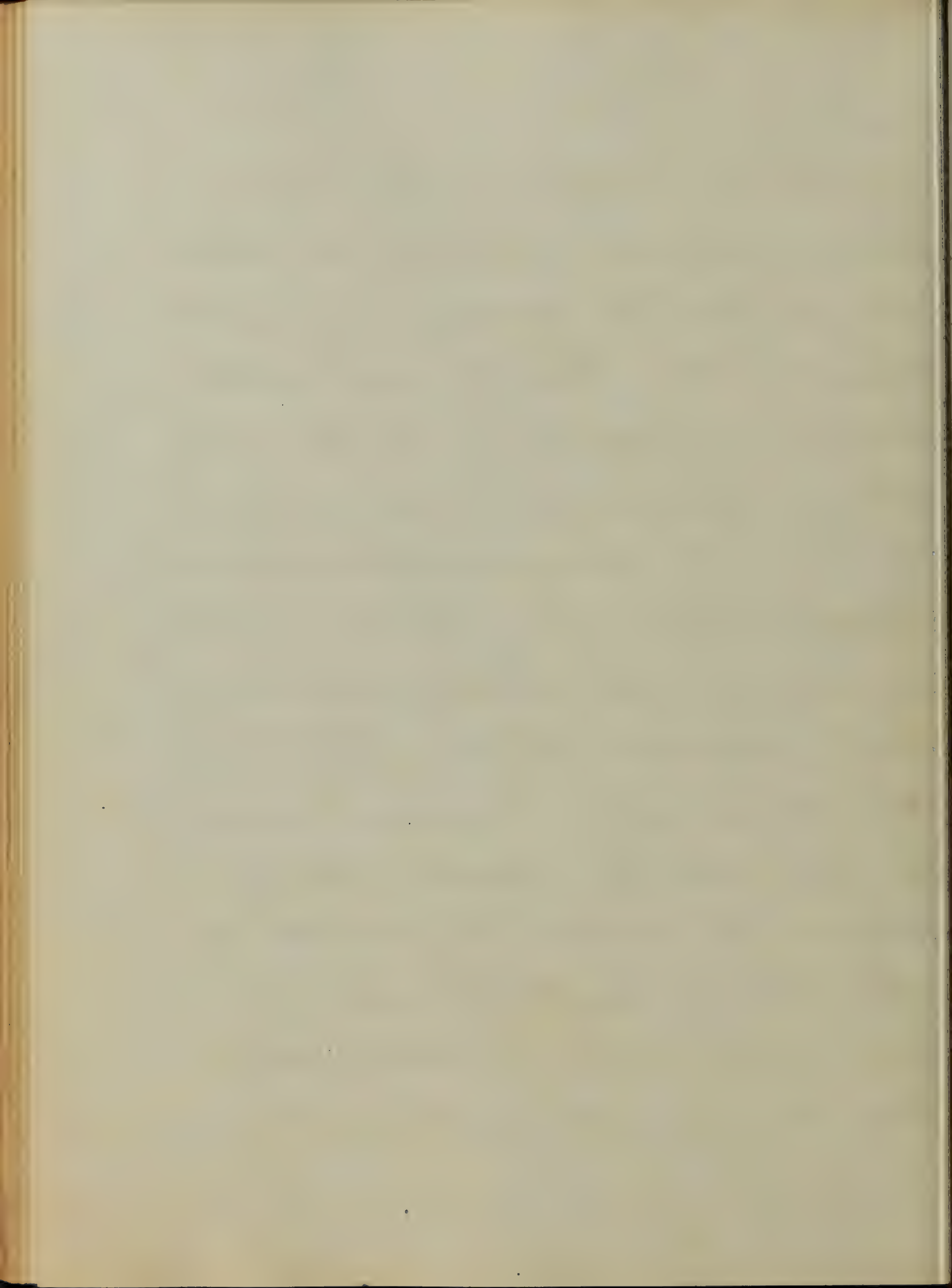
perfectly quiet, and abstain from fluids for at least 3 hrs: a sinapism may be applied over stomach. After 8 or 10 hrs the Ipecac may be repeated in reduced doses. If required the treatment is to be continued for several days in diminished doses with intervals sufficient to allow nourishment to be taken" This treatment has been tried in this Hospital I believe without much success.

Mercury which has heretofore been much relied upon in dysentery has of late fallen almost into disuse its efficacy being denied: still though it is used by some, in combination



with Opium and Ipecac, with supposed good results; I am inclined to think though that the mercury does little or no good, and that the good effects that are brought about by the combination depends exclusively upon the action of the Opium + Ipecacuanha.

Diet During the early part of the disease the diet should be restricted to the blandest articles of food; but throughout whole course of disease the food should be sufficiently nutritious to sustain the patients strength. Milk is excellent sometimes with lime water or beat up with eggs, and good sherry wine. Rice

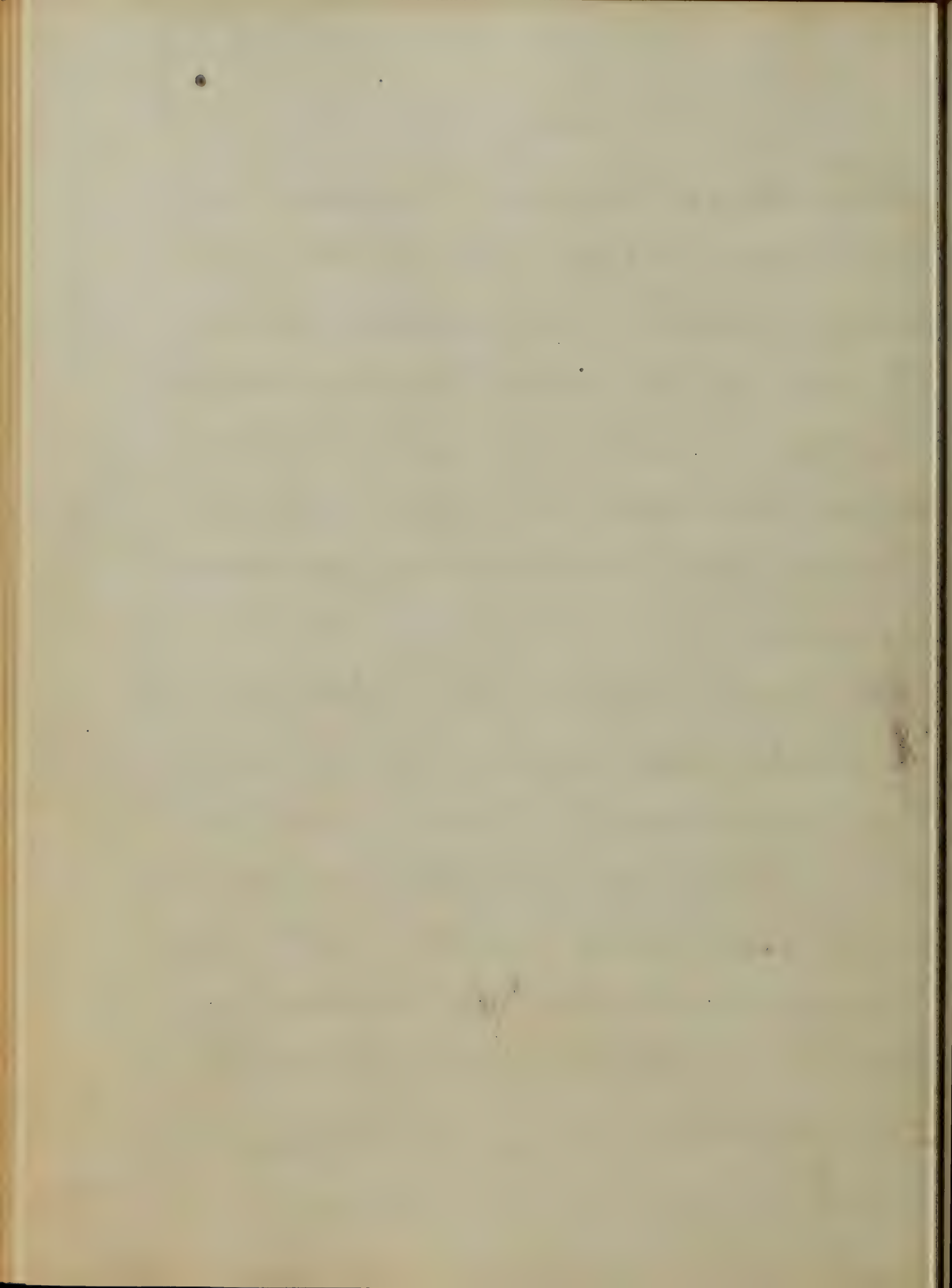


flour-Sago, Arrowroot &c may be allowed, as a change to suit the capricious appetite. If symptoms denote failure of the vital powers, concentrated nourishment, and alcoholic stimulants are to be given freely. Tonics are useful during convalescence.

Finally enjoin upon patient that absolute rest in bed is absolutely necessary for a cure; and to refrain from going to stool whenever so inclined, that the desire to do so is dependent upon the inflammatory condition of intestine alone.

Feby 14th 1875

Samuel C. Trikker



A

Thesis

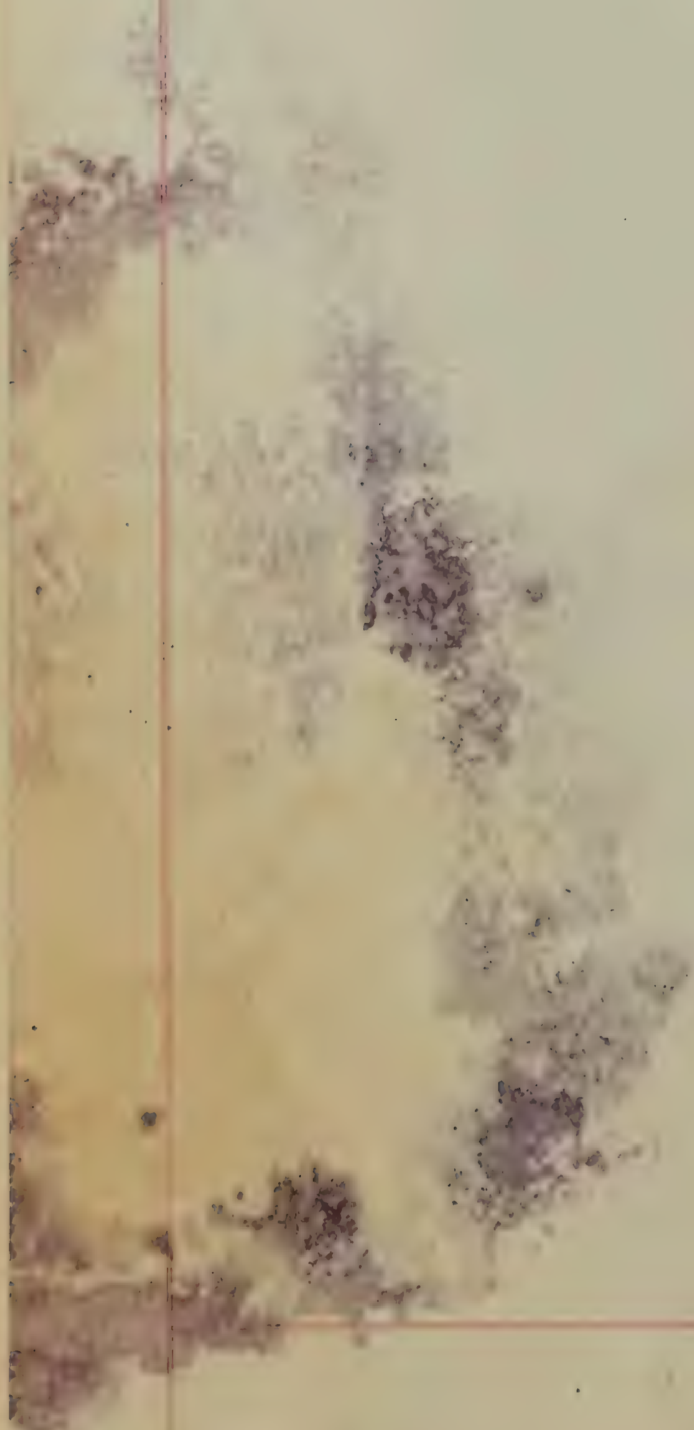
on

"Digestion"

by

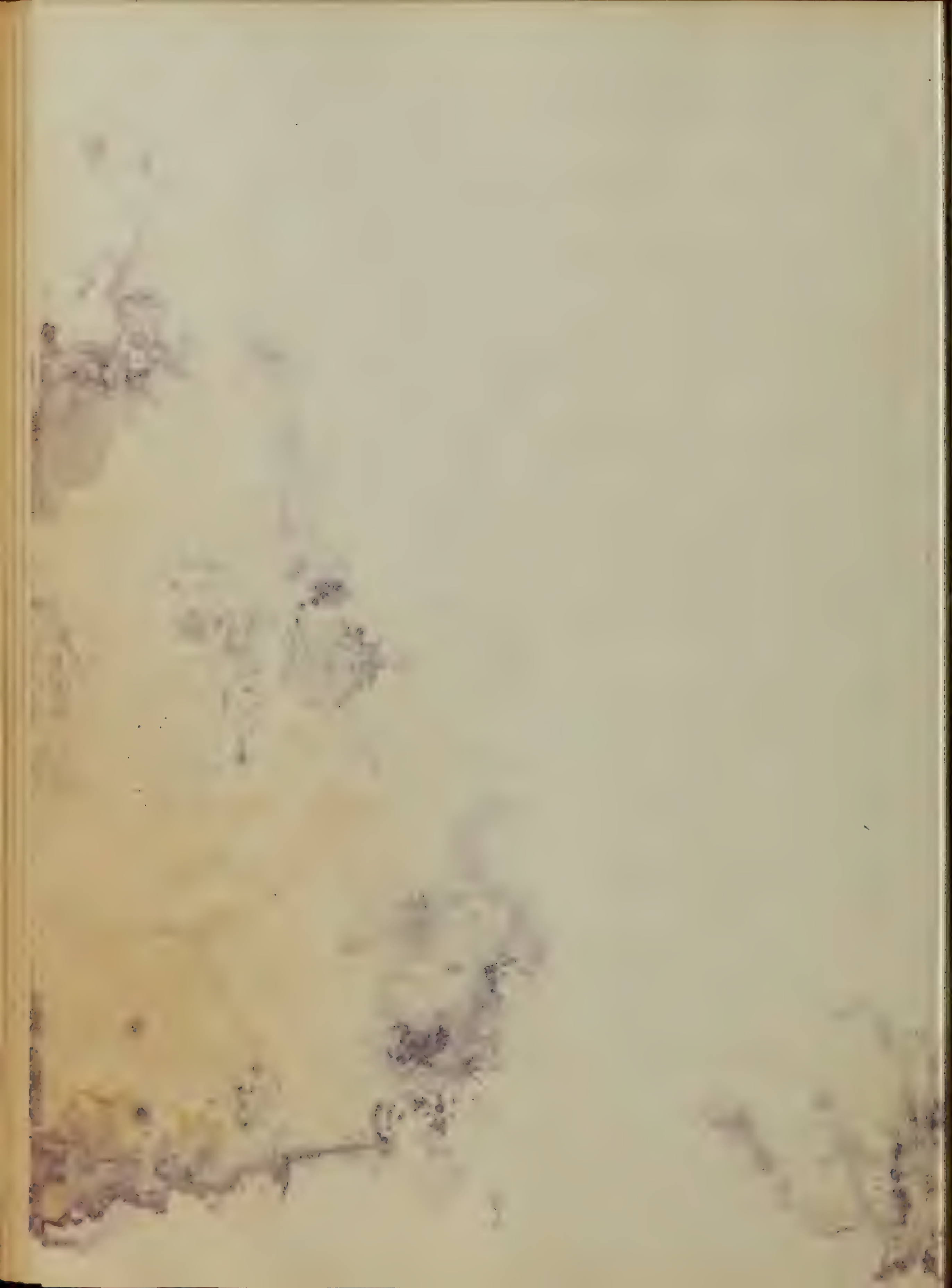
H. C. Cl[illegible]

Class '76

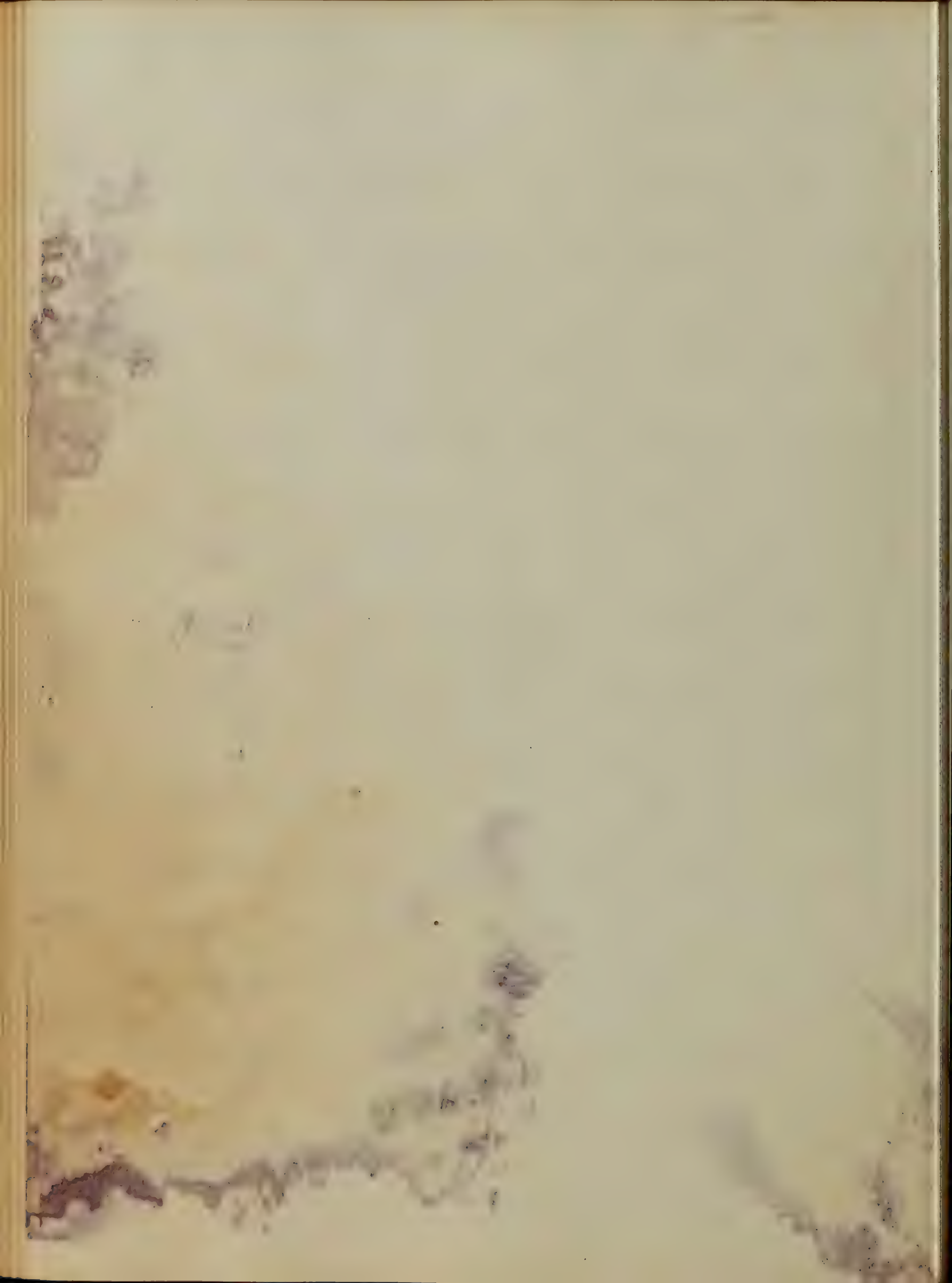


"Digestion"

Digestion is that process by which the food is reduced to a form proper for its absorption into the blood by which it is conveyed to all the tissues of the body for their nutrition. This process in man is very complicated owing to the great variety of substances used by him as food and is accomplished in a mucous tract beginning at the mouth and terminating at the anus known as the "alimentary canal"; here the food comes into contact with the various digestive fluids which are secreted by the mucous membrane and certain glandular organs whose ducts open into it. These fluids differ much [illegible]

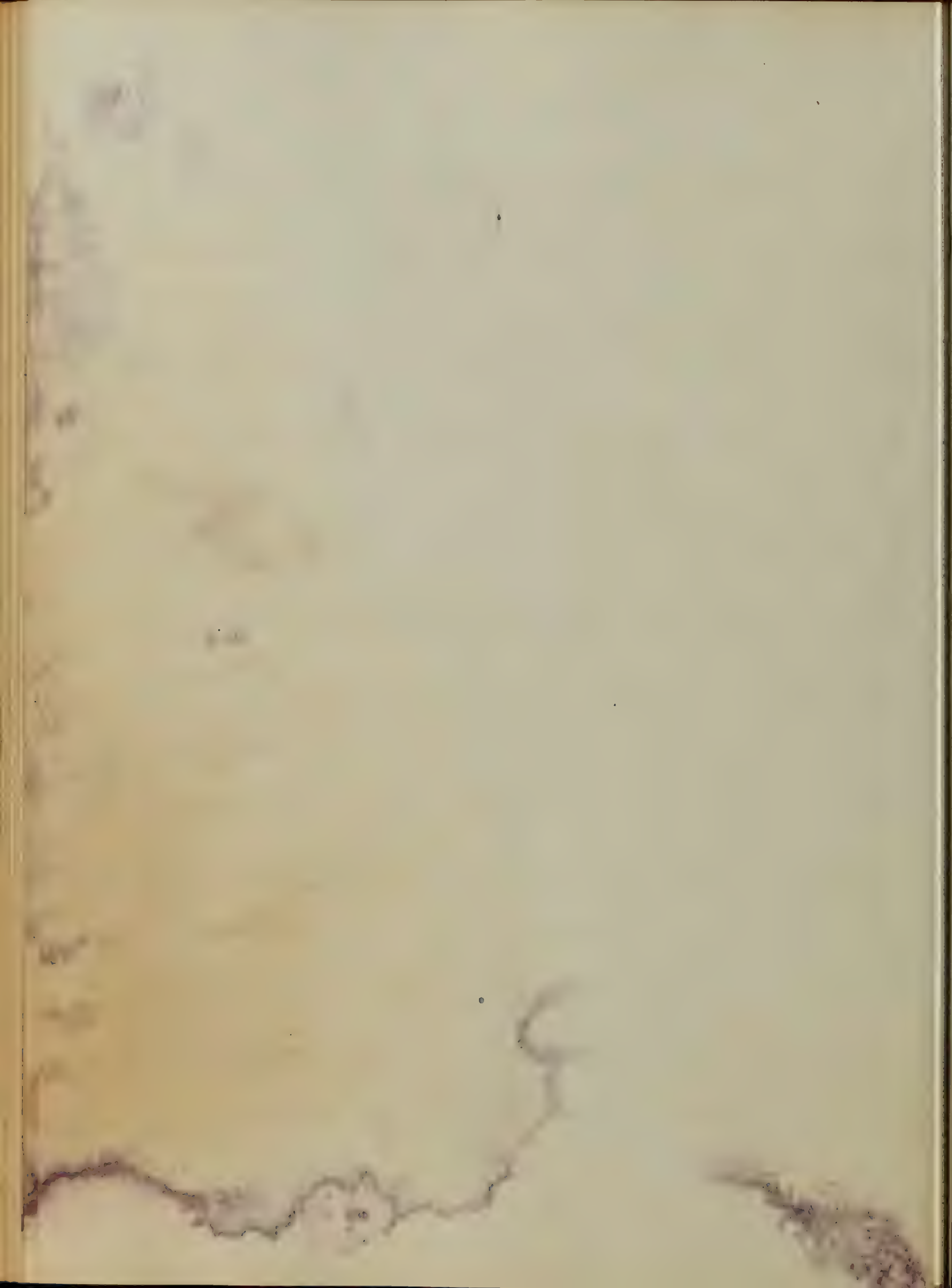


are physically and are designed to eat
only on certain articles of diet. As the
food in its passage along the alimentary
canal meets successively with the various
liquids those portions upon which it
has the correct power and the portion
thus liquefied is absorbed.
The food is first taken into the mouth
where it, if necessary, undergoes masti-
cation. this is performed by the teeth
assisted by the tongue and cheeks and
is very important in the digestive pro-
cess to break up compact substances so
that they can be swallowed and well of-
fer a larger surface for the digestive
fluids to act upon. [illegible]

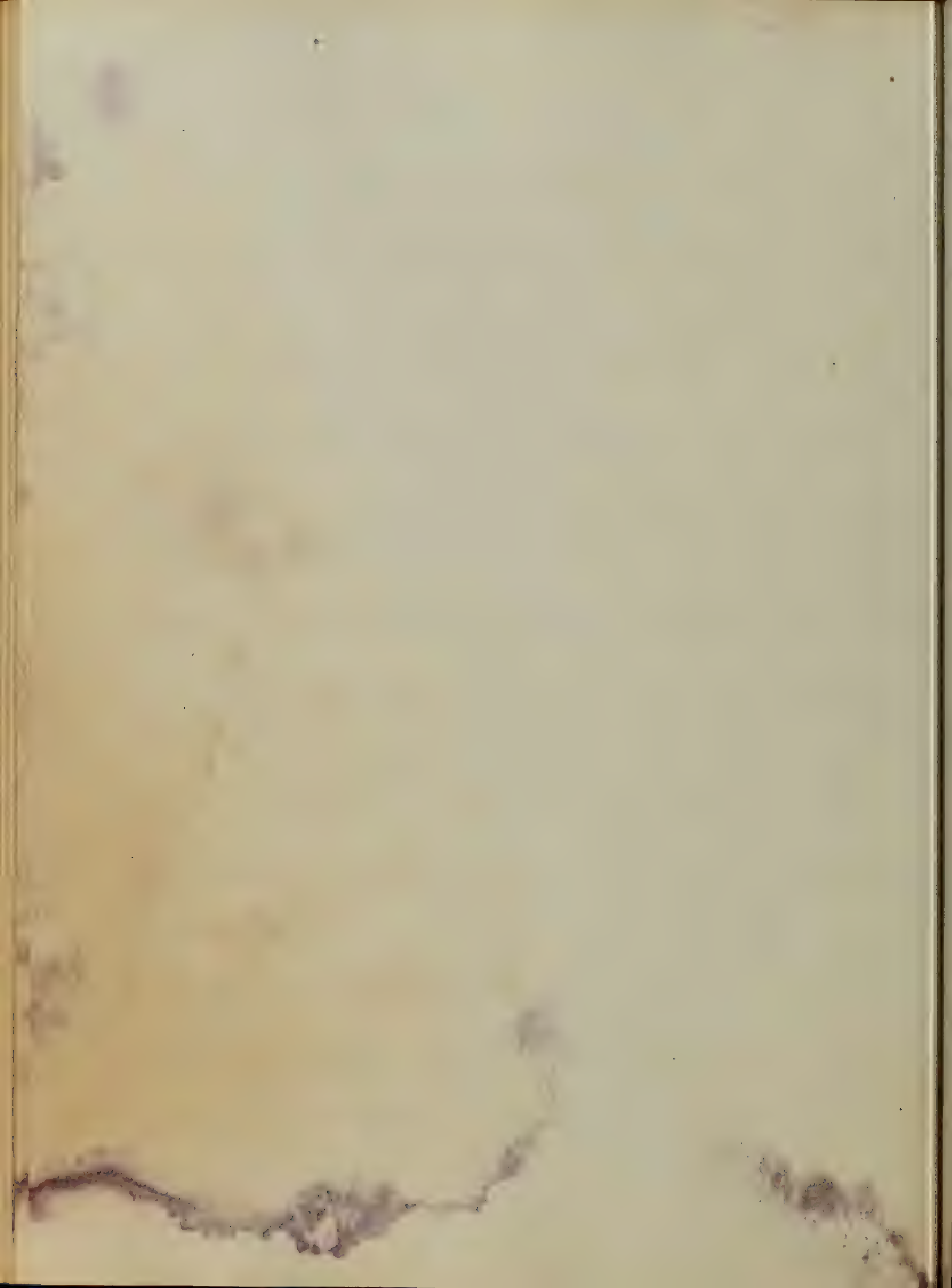


the first of the digestive fluids viz.
the saliva which is a colorless, viscid
saline fluid of complex composition,
formed of no less than four distinct
secretions which are all discharged
and mix in the buccal cavity. These
four secretions are those of the parotid,
submaxillary and sublingual glands,
and of the mucous follicles of the mouth;
and their principal difference is in their
organic matter, that of the first being
fluid, of the second moderately viscid, &
that of the others is excessively viscid.
The saliva though only secreted when
the mouth is [illegible] at rest in [illegible]
[illegible] [illegible] [illegible] the first [illegible]

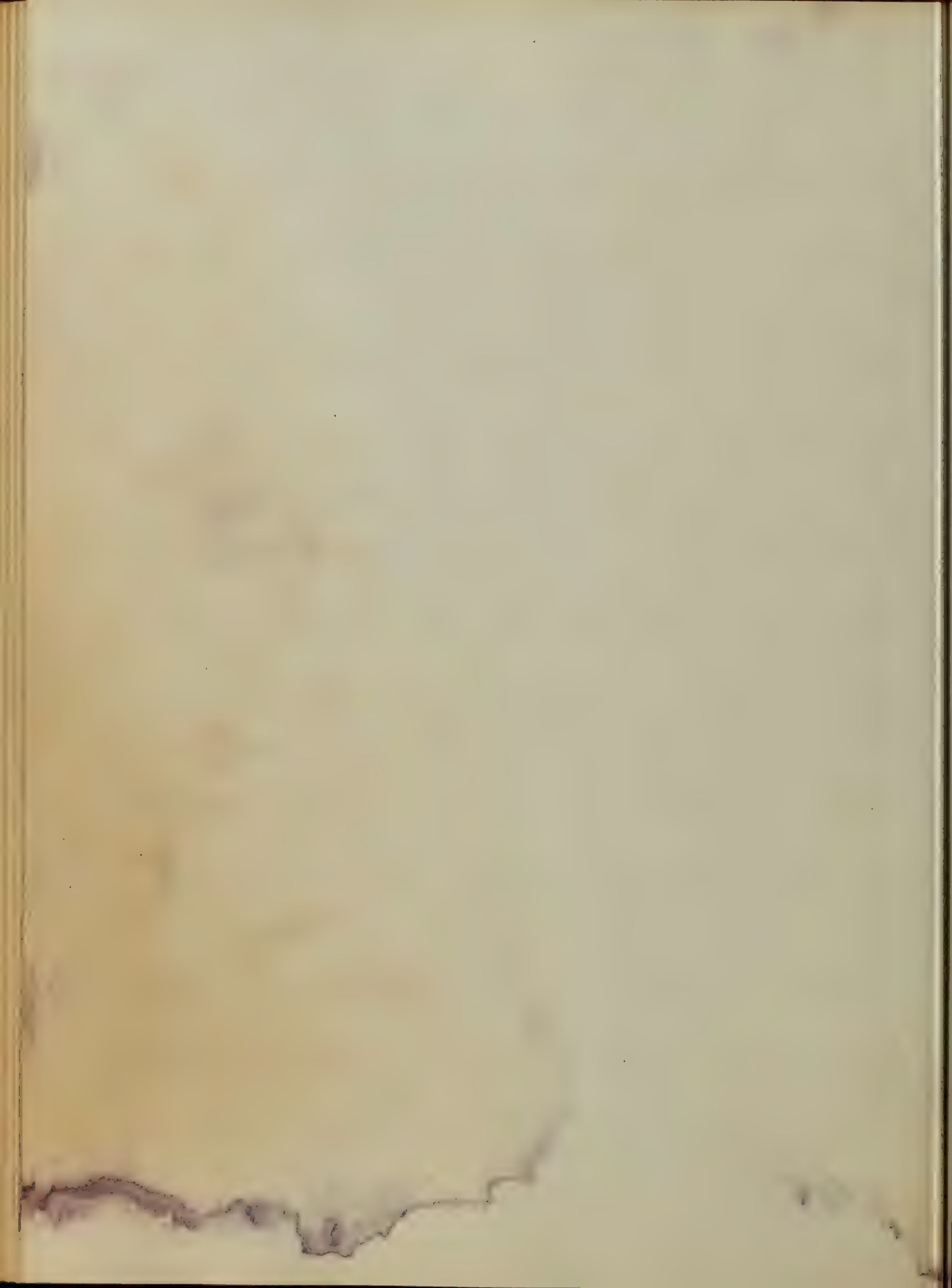
is poured out in greater or less quan-
tity when food is taken according to the
degree of comminution or mastication of it.
When it was first discovered that the sa-
liva would convert starch into sugar
this was supposed to be its function in
digestion but subsequent experiments
have proved the fallacy of this view and
its action is now considered to be only
a physical one which is to moisten and
lubricate the food thus facilitating its
passage through the oesophagus. After
the food has become thoroughly mastica-
ted and insalivated it is carried back-
ward into the fauces by the tongue
thence passes through the pharynx



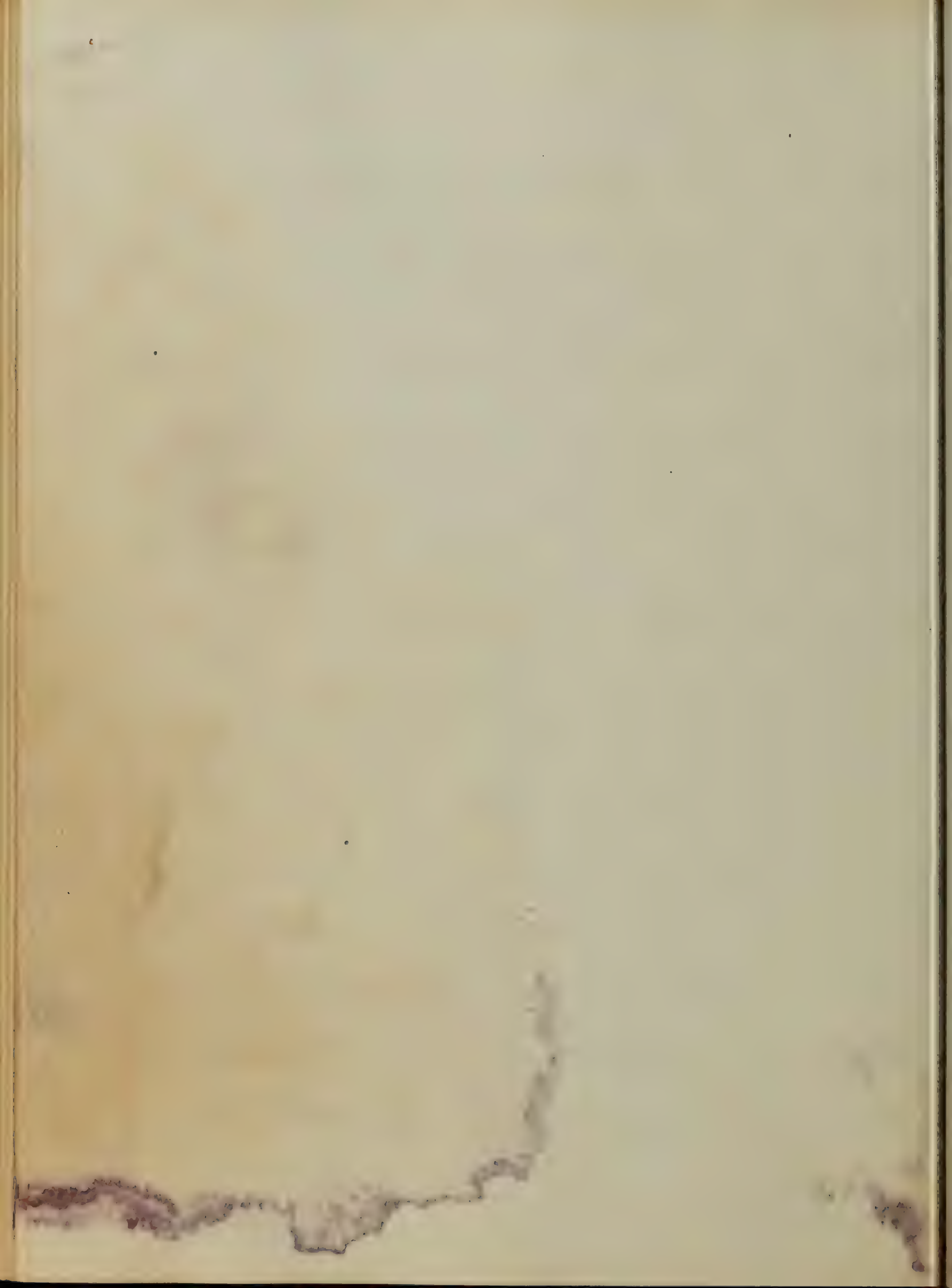
oesophagus into the stomach.
The stomach is a hollow, muscular
organ lined with a mucous membrane
of soft consistency and thickly set
with small glandular bodies, the gas-
tric tubules, between which ramify cap-
illary vessels. The gastric mucous mem-
brane is thrown into longitudinal folds
called rugae, when the organ is empty or
contracted but becomes smooth when it
is distended, and is lined by columnar
epithelium. In this cavity the food mixes
with the gastric juice and the work
of digestion that takes place here
regarded as the most important part.
Our knowledge of the gastric juice



and stomach digestion was very im-
perfect until the celebrated experiments
of Beaumont on St. Martin in 1825.
These experiments were made at vari-
ous intervals for several years and
from them he deduced that the ac-
tive agent in digestion was an acid
fluid secreted by the stomach; that
this was poured out under the stimu-
lus of the food by the glandular
walls of the organ; and that it would
exercise this solvent action outside
the body at the same temperature.
He also made various other very in-
teresting and important experiments
regarding the digestibility of [illegible]

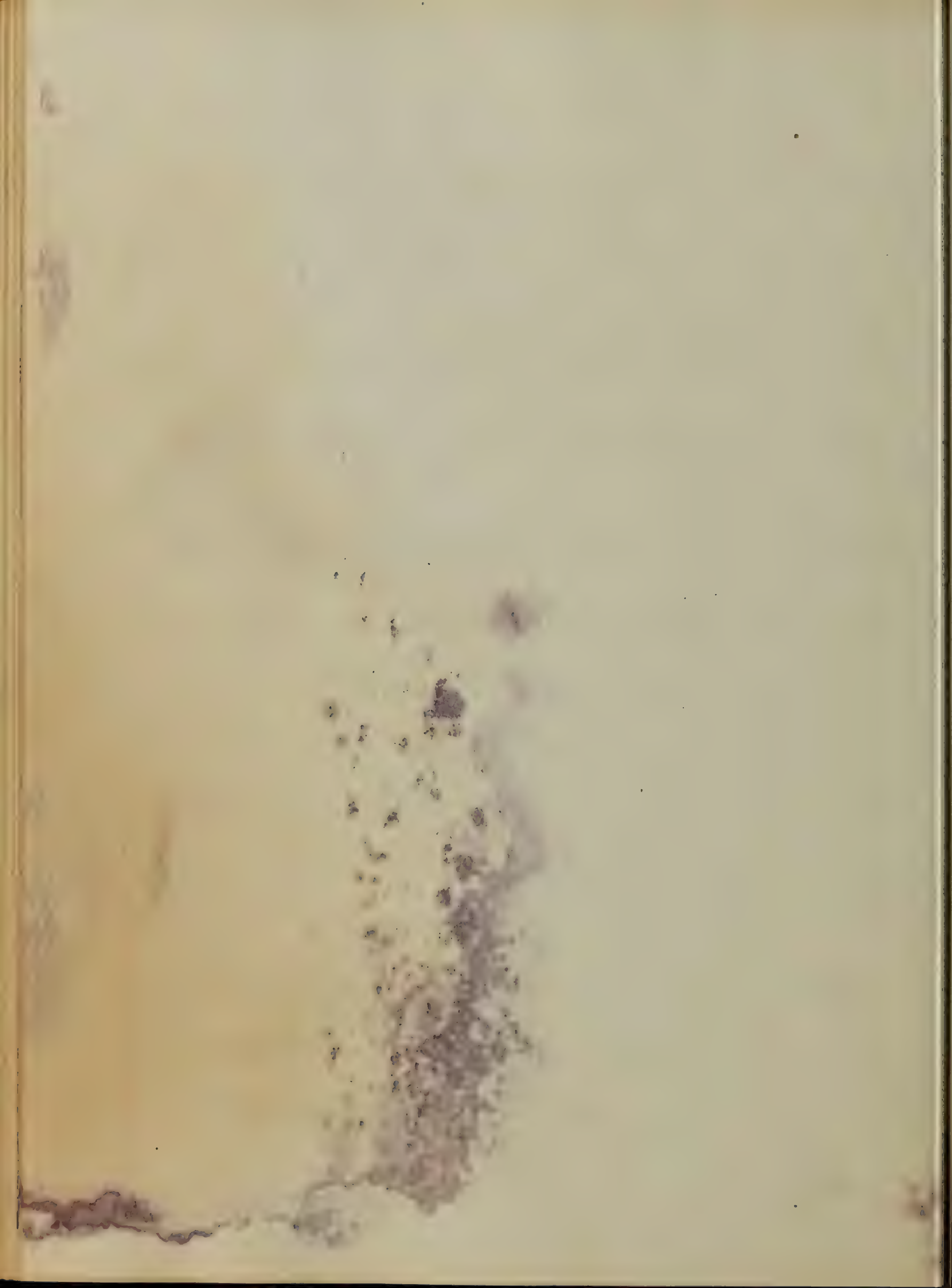


ent articles of food, as to the rapid-
ity with which the process takes place
&c. Since these memorable experi-
ments similar ones have been made
upon the lower animals by pro-
ducing artificial fistulae which
have been even more satisfactory
because they are more under the
controll of the operator.
The stomach when empty contains
nothing but a little mucus but
when food is taken the mucous mem-
brane becomes red, turgid and mel-
low and a clear, acid, watery fluid
collects everywhere upon the mu-
cous flows abundantly into

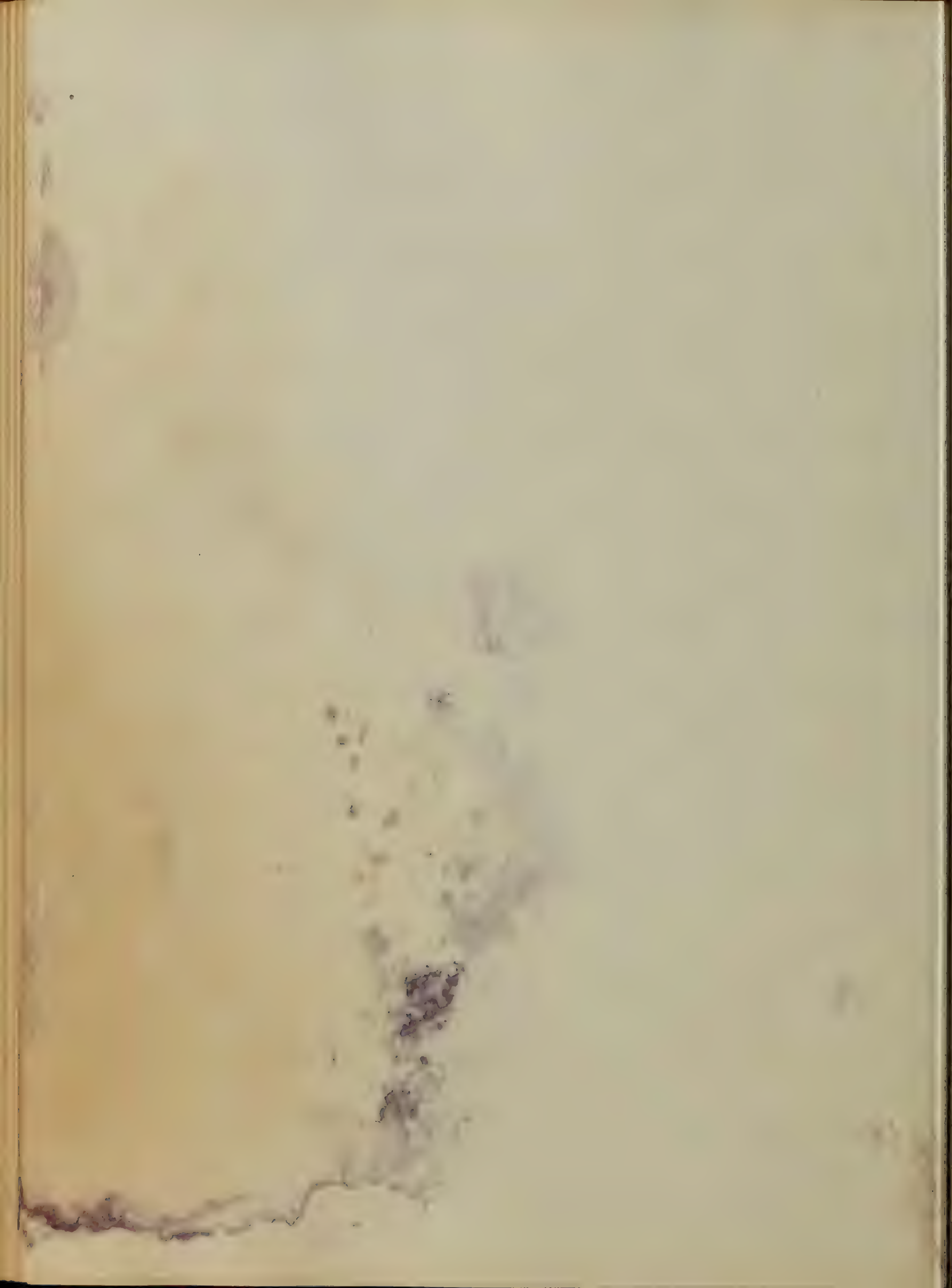


curdy, this is the gastric juice. Its most important constituents are the free acid (lactic) which is absolutely essential to the solvent action of the fluid as shown by its loss of this power when it is neutralized and the pepsine or organic matter which is in solution and is also necessary to the proper performance of the function of the gastric juice. If gastric juice be boiled the pepsine will be coagulated and precipitated and the fluid will be found to have lost its solvent power, and the same thing will occur if bile be added to the gastric juice [illegible]

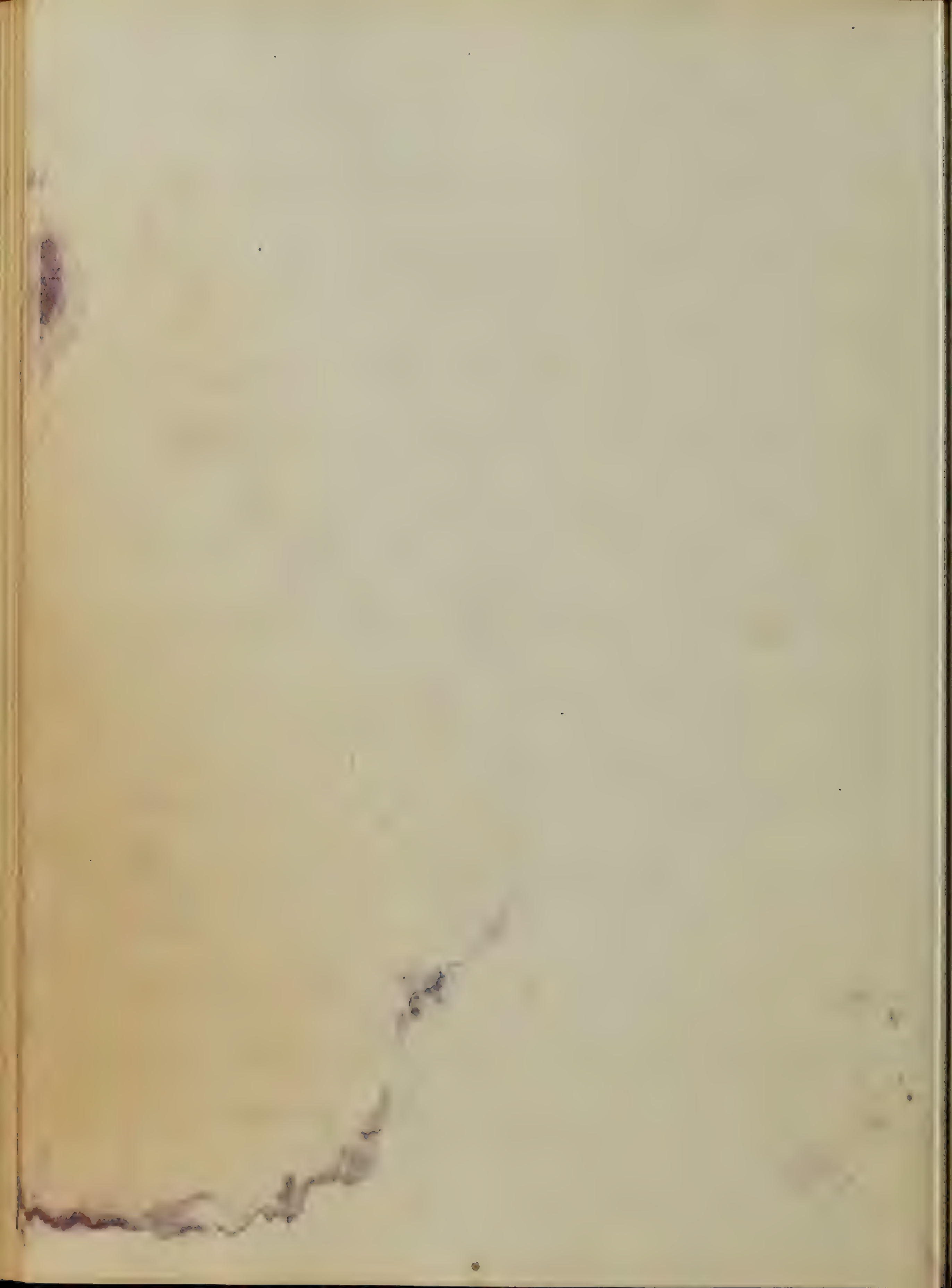
entirely loses its digestive property. Another peculiar property is that it may be kept for a very long time without putrefying or losing its digestive properties. It was universally believed prior to Beaumont's experiments, and even he himself believed, that the gastric juice was a solvent of all alimentary substances but we now know that such is not the case and that it acts only upon a certain class of proximate principles viz., the albuminoid or organic. It has no effect whatever upon starch or oils while any albuminoid substance is at once affected —



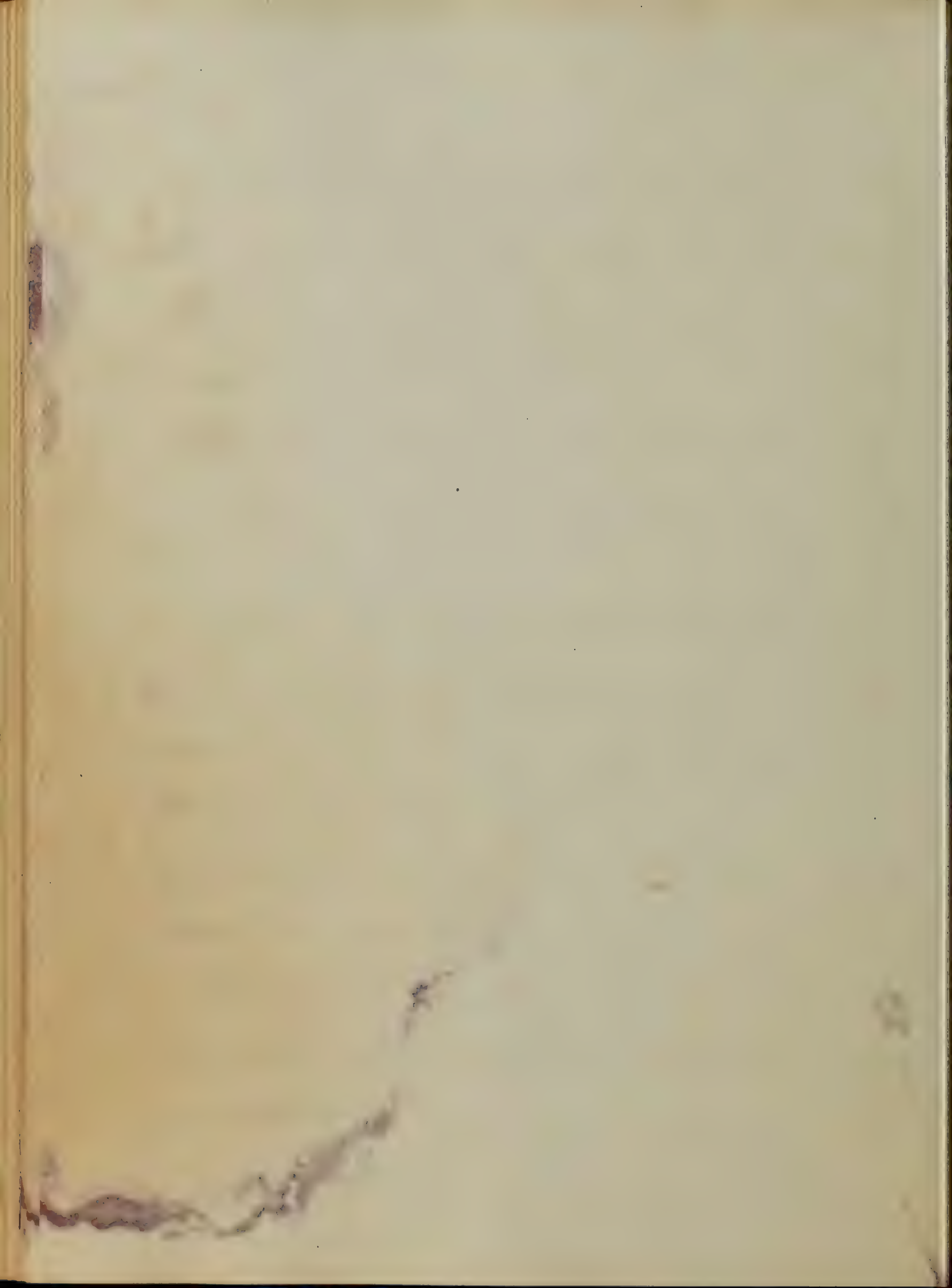
liquefied by it. The change which
the food undergoes in the gastric
juice is a true catalysis. By the
action of this fluid all albuminous
substances no matter what was their
original character are converted in-
to albuminose. This has many of the
general characters of albumen but
unlike it remains fluid under all
circumstances. The fluid when thus
liquefied is ready for absorption. Al-
buminose in combination with gas-
tric juice has the remarkable pro-
perty of interfering with Trommer's
test for grape sugar. This combina-
tion also prevents the [illegible]



tween leucine and starch while the gastric juice alone does not interfere with either of these tests.
The action of the gastric juice is assisted by the muscular action of the stomach by which the contents of the organ are thoroughly intimated thus bringing the digestive fluid into more intimate contact with them. The amount of gastric juice secreted daily in man has been estimated to be about fourteen pounds. This statement would be almost incredible did we not know that as soon as the juice that is poured out has dissolved its quota of [illegible]

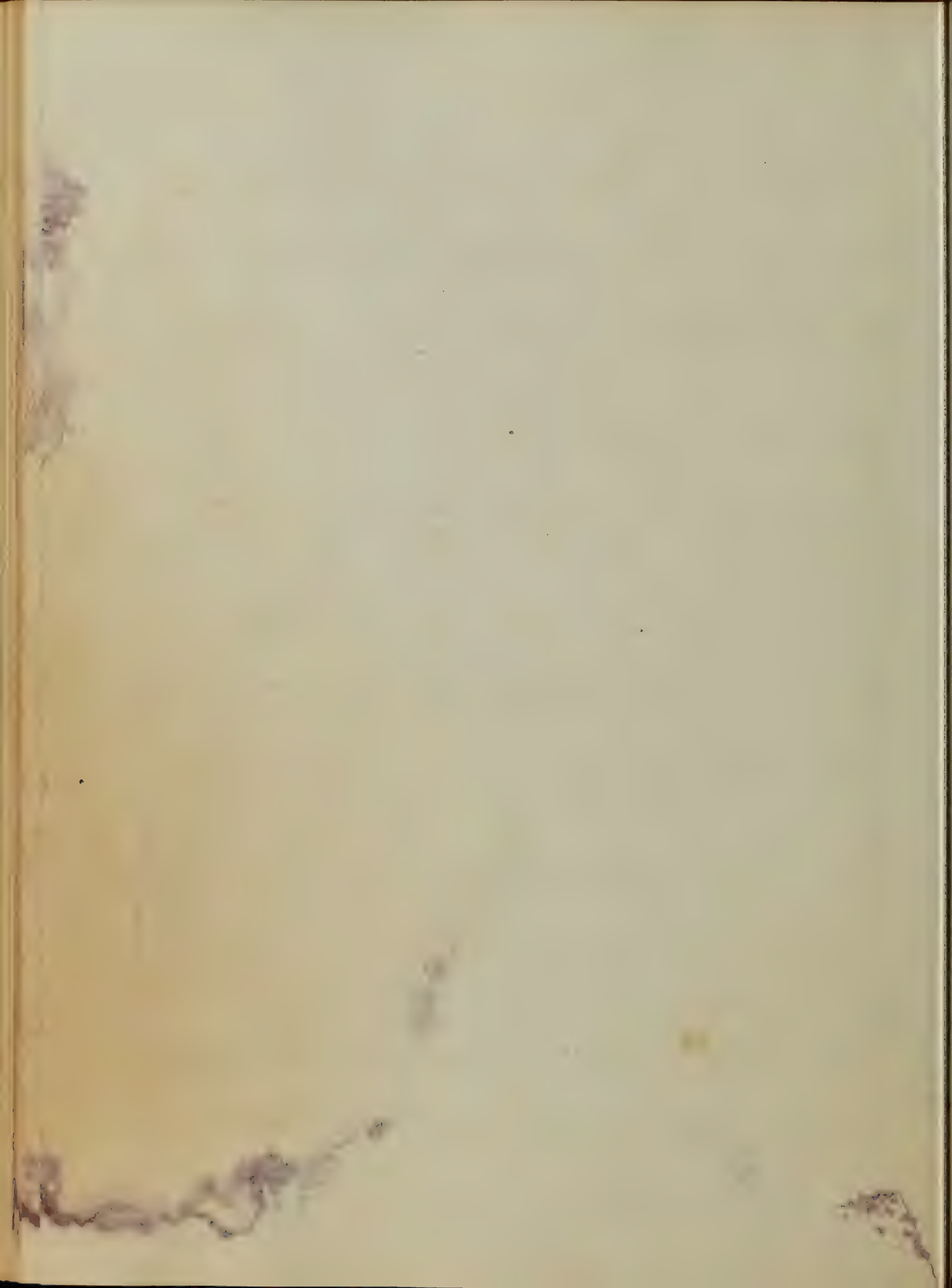


by reabsorbed [illegible] the circu-
lation and thus the fluid that the
blood is constantly losing is being
just as constantly replaced by absorp-
tion. Thus it will be seen that the
gastric juice never accumulates in
the stomach but is gradually absorbed
again together with the portions of food
which it has dissolved; in short during
digestion there is a constant circula-
tion of the digestive fluids from the
blood into the alimentary canal and
back again into the blood. As soon
as death occurs the gastric juice in
the stomach begins to act upon the
walls of that organ and [illegible]

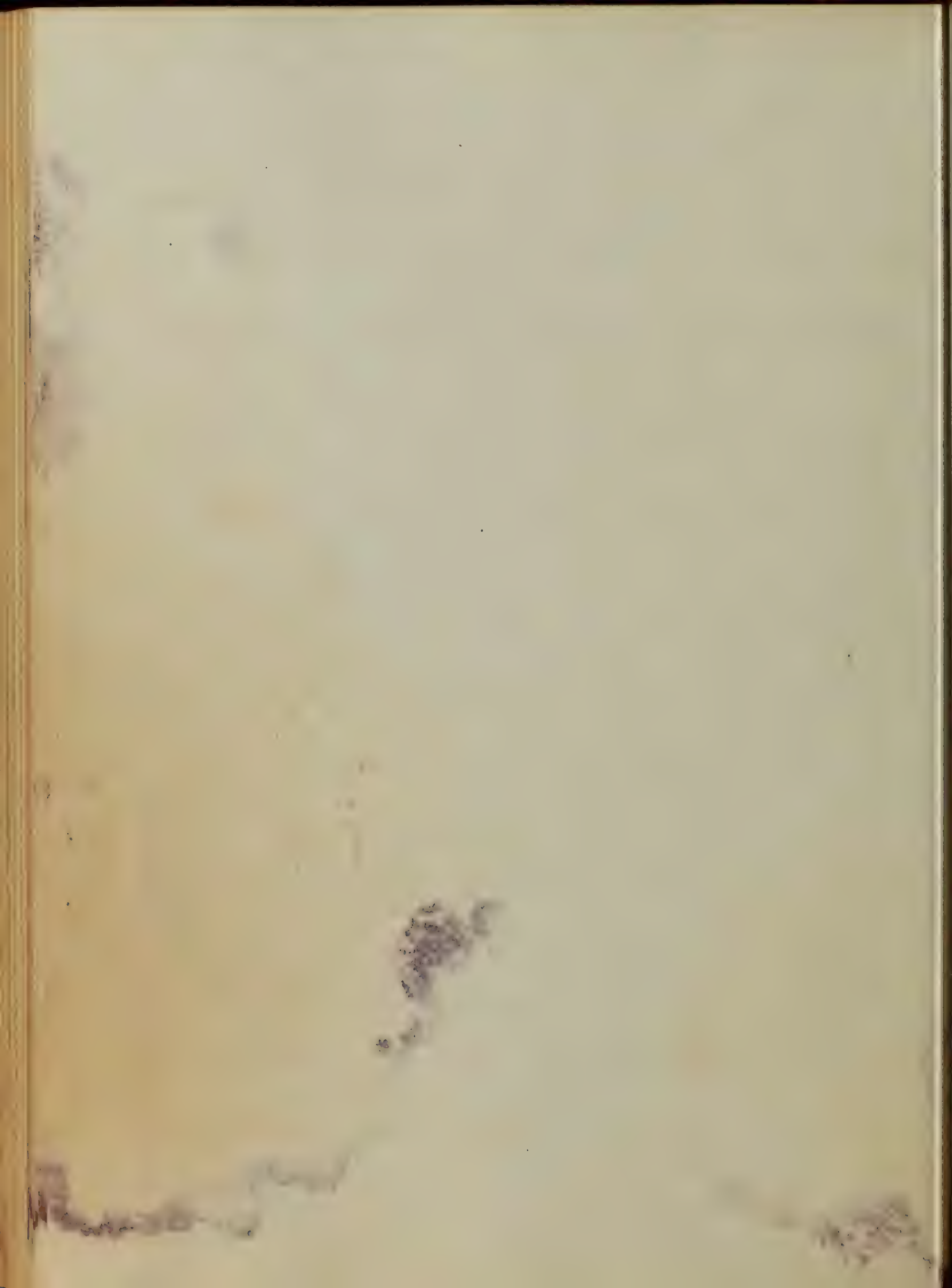


liquefies it, this is prevented during life by other catalytic changes which exclude those of digestion and putrefaction which consequently take place after death.

When all those portions of the food upon which the secretion of the stomach have any effect have been dissolved viz., the albumenoid, the rest, the starch and fats pass through the pylorus into the small intestine. Here they meet with the intestinal fluid which rapidly convert the starch into sugar. These intestinal juices consist of three separate secretions viz., the bile which may be [illegible]

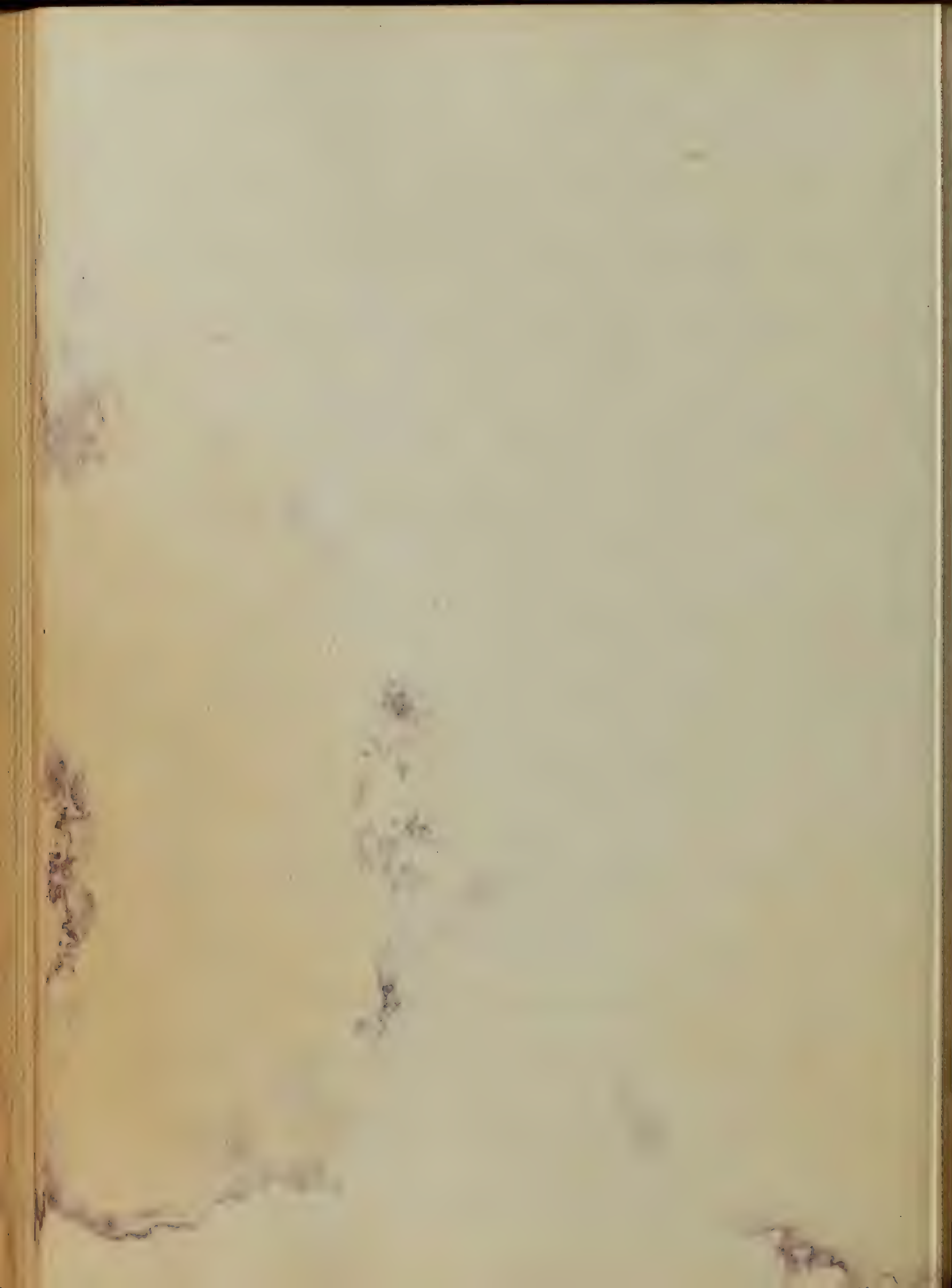


and it has no digestive action on starch;
the pancreatic juice converts starch
into sugar but it is not known wheth-
er it is always present in the duode-
num; and the true intestinal juice which
is the secretion of two sets of glands situ-
ated in the mucous membrane (1) the
follicles of Lieberkühn and the glands
of Brunner. The first of these are by
far the most numerous and are
found throughout the whole intes-
tine; they are nearly straight tubes
lined with intestinal epithelium the
glands of Brunner are confined to
the upper part of the duodenum and
are [illegible]



with an excretory duct in the cen-
tre lined with epithelium. The in-
ternal juice the presence of the
gland has not been thoroughly ex-
amined on account of the difficul-
ties in obtaining it but it appears
to resemble very much the secre-
tion of the buccal mucous follicles
and rapidly changes starch into su-
gar, and this appears to be its func-
tion in the digestive process.
There now only remains the fat
to be digested and these being un-
affected by the gastric juice are
consequently unchanged in the sto-
mach except that they are more fin

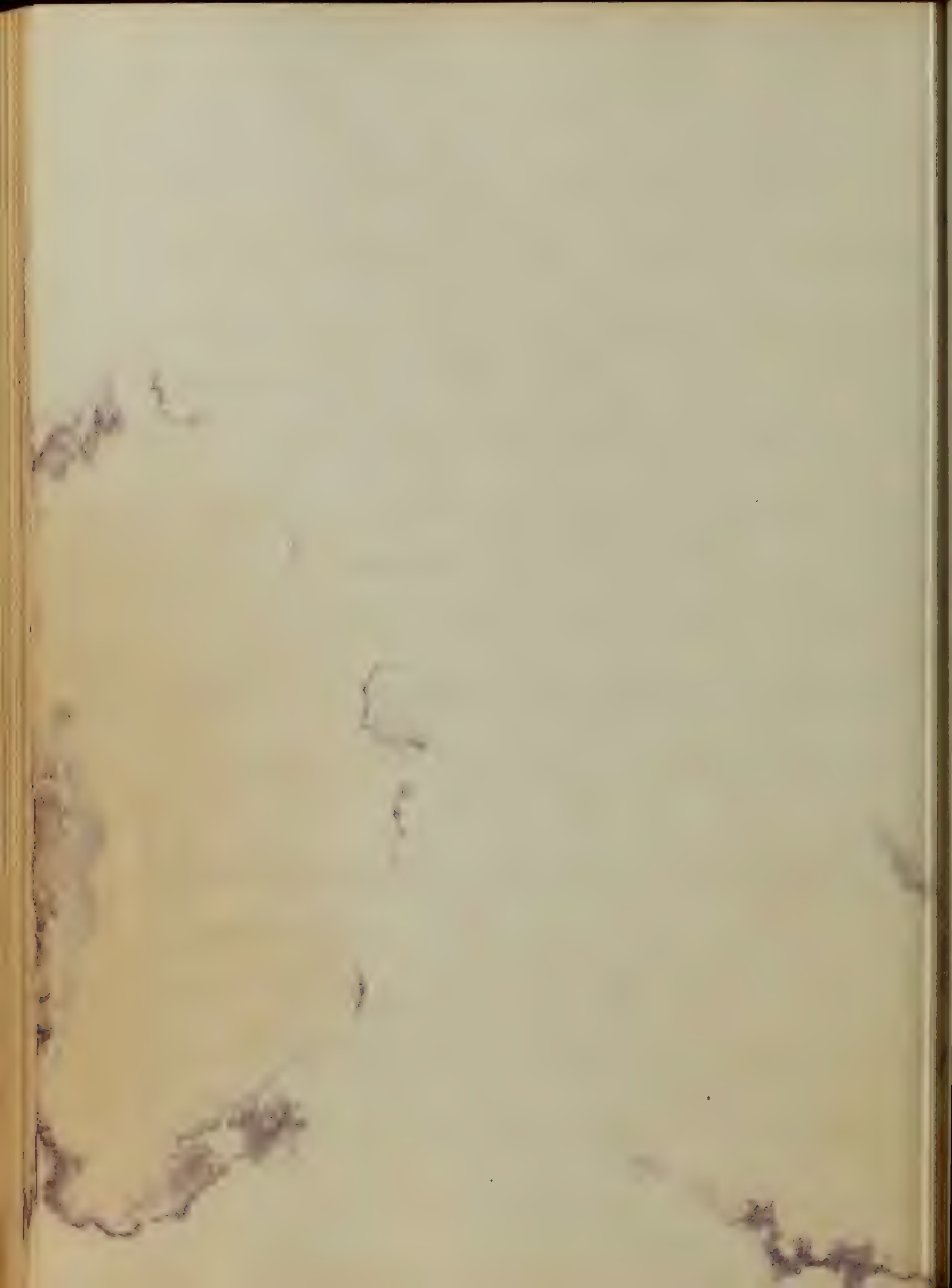
by the solution of the vesicles and walls. But soon after they enter the intestine the oily portion is converted into a white, opaque emulsion, called chyle, which is gradually absorbed. This change into chyle does not take place until the fats have passed the pancreatic orifice from which it might be inferred that the pancreatic was the digestive fluid for fats, and this has been proved beyond doubt by experiments upon the lower animals. The amount of this secretion as compared with that of the gastric juice is very scant [illegible]

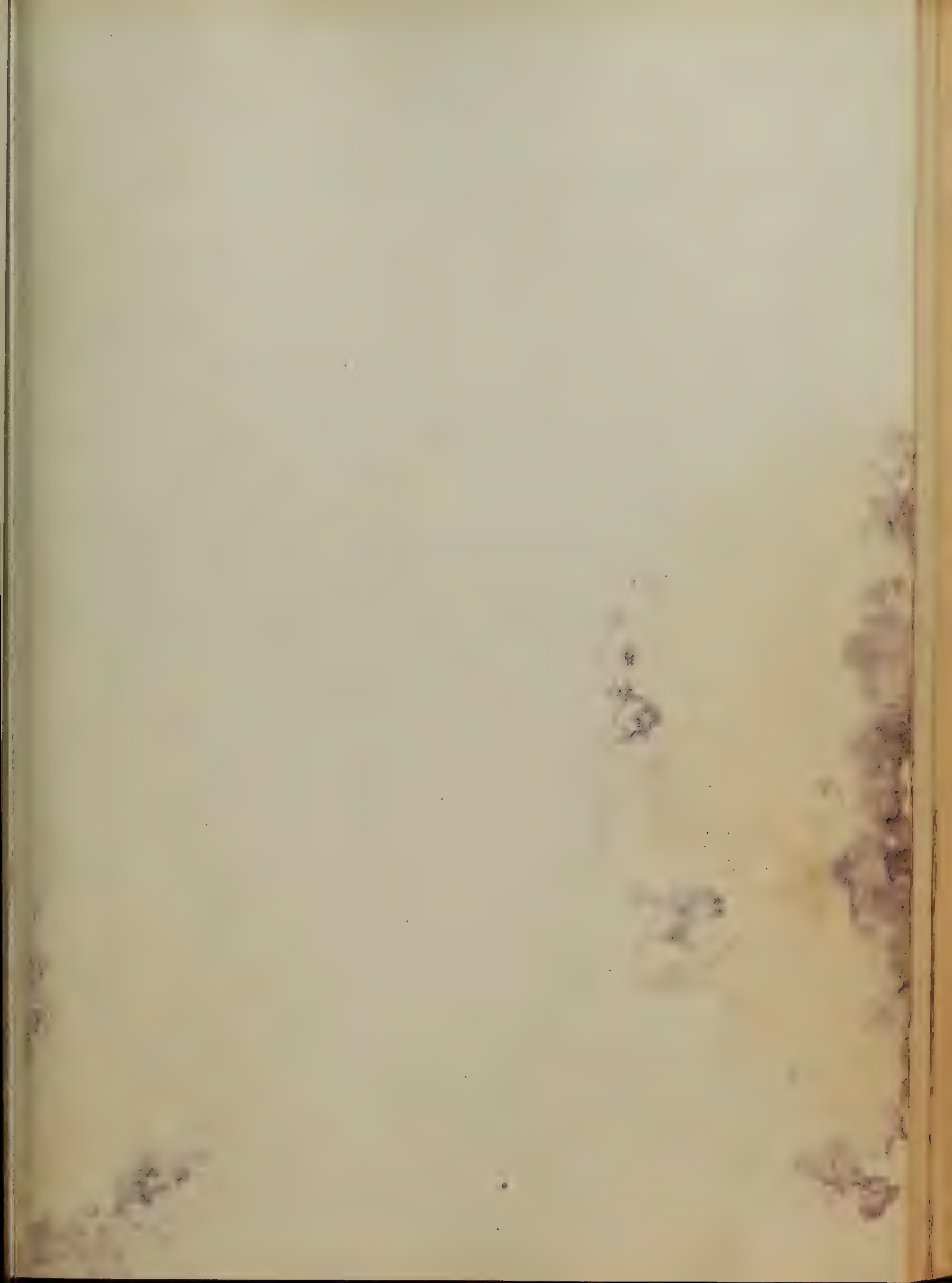


about 1 4/5 lbs. in twenty four hours. When pure it is a colorless, viscid, alkaline fluid, its most important ingredient being the pancreatine which exists in greater proportion than the organic matter in any other of the digestive fluids. The fat is not chemically changed by the pancreatic fluid but simply emulsionized and this takes place instantly and permanently. In this state the fat is in a condition to be absorbed and hence it may be said to be digested.

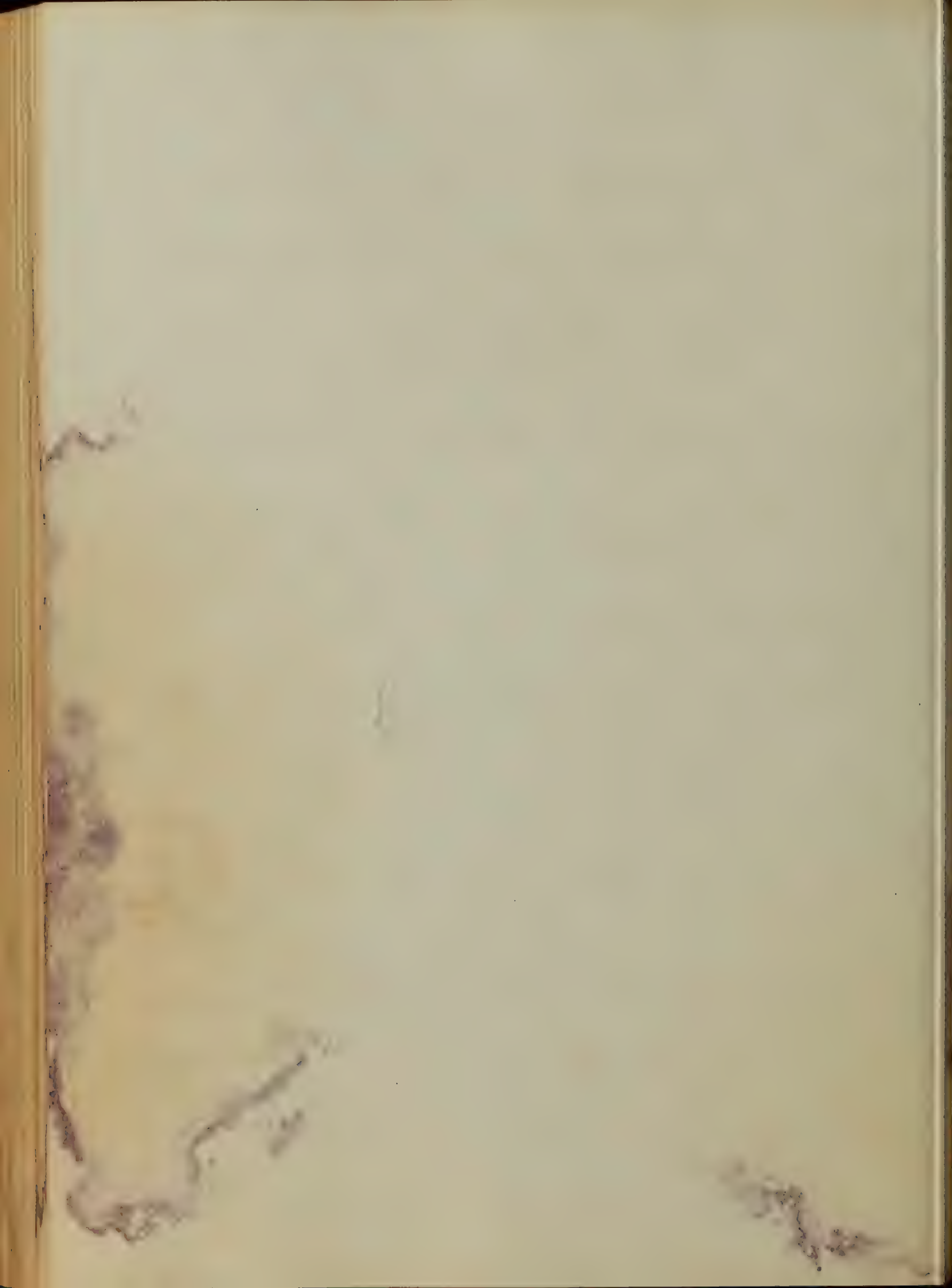
From this very imperfect description it will be seen that [illegible]

cesses of digestion are very compli-
cated and that they commence in
different parts of the alimentary
canal, but while they commence
in different places they all go on
simultaneously in the small in-
testine, the gastric juice contin-
uing to act upon the albuminoid
matters, the intestinal juice upon
the starch and the pancreatic
upon the fats.
By the time the contents of the
intestine reach the ileo-caecal
valve all those portions of the
food which were digested have
been absorbed and what re-





consists of either indigestible or un-
digested substances which pass in-
to the large intestine and help to
form the feces but by far the larg-
est amount of this is formed by
animal substances excreted by the
mucus membrane. Our knowledge
of these substances is very incom-
plete but there can be no doubt
that their discharge by the mu-
cus membrane is absolutely neces-
sary to health. The feces contain
a peculiar crystallizable substance
called excretine, fat, fatty acids, cho-
lesterine and remnants of undigest-
ed food. Very little absorption [illegible]



place in the large intestines, its office being to separate and discharge certain excrementitious substances.

The effect of digestion being to prepare food for its absorption and appropriation by the tissues of the body, the fact at once presents itself that it is absolutely necessary for this process to go on, and that anything which interferes with it will be prejudicial to the general health just in proportion to the extent of the interruption. Such being the case everything should be done to pro-

mote this physiological action. And to do this it is necessary that the food should only be taken when the appetite demands it; that it should always be thoroughly masticated; and that both mental and physical excitement should be avoided during the process.

[illegible signature]

January 20th. 18[illegible]

Inaugural Dissertation

on

Diphtheria

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

[illegible] Crum

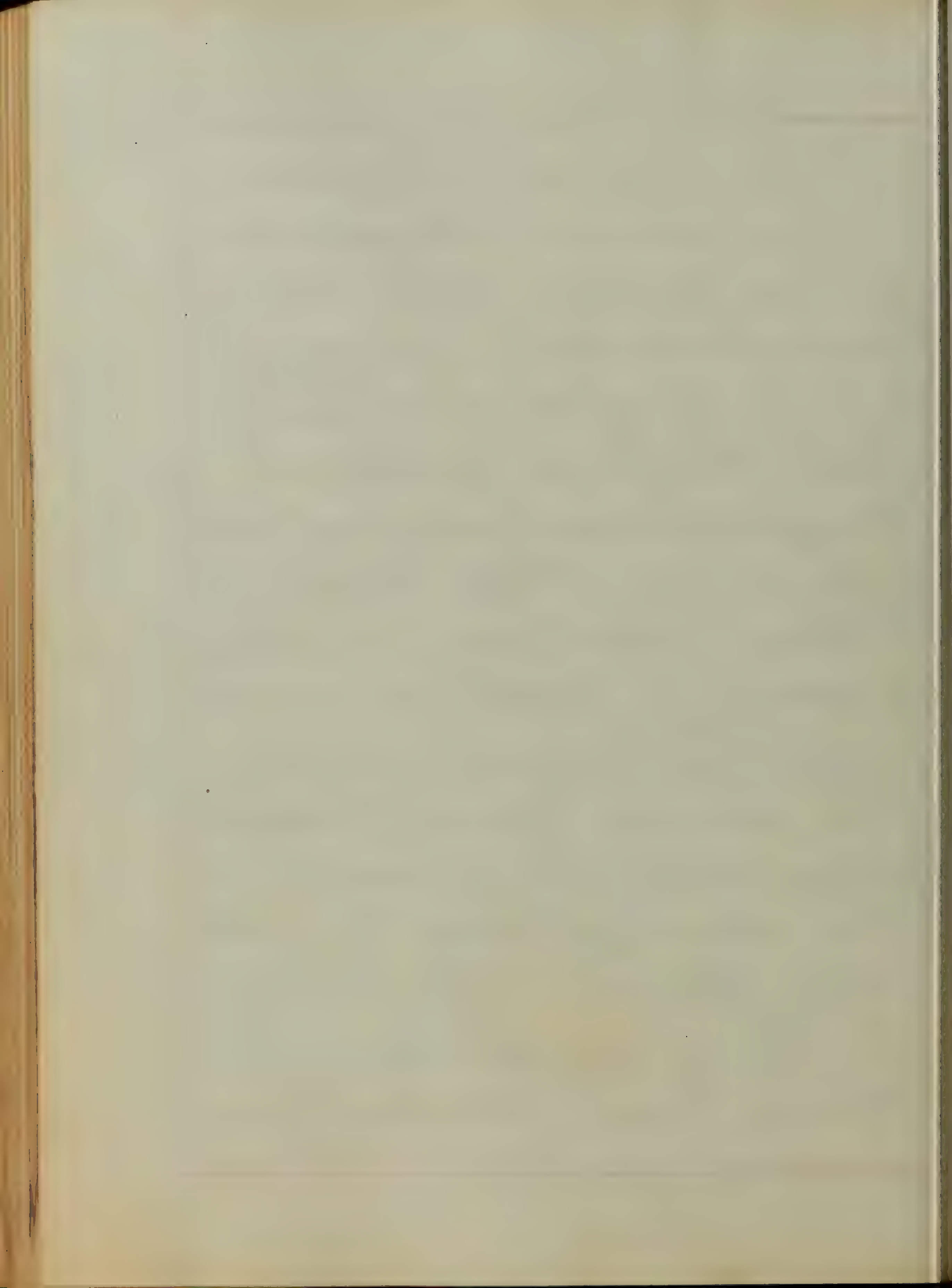
of Maryland

Feb. 3rd 1875.

The history of this disease seems to be somewhat obscure. It is supposed by some to be ancient in origin, by others that it was unknown until Bretonneau brought it before the Medical world in the year 1826. It has been prevailing in our country only about 15 or 20 years, but it is supposed that Washington fell victim to it, making it appear to be an old inhabitant of our country. The first epidemic in our country was in 1856 beginning in California.

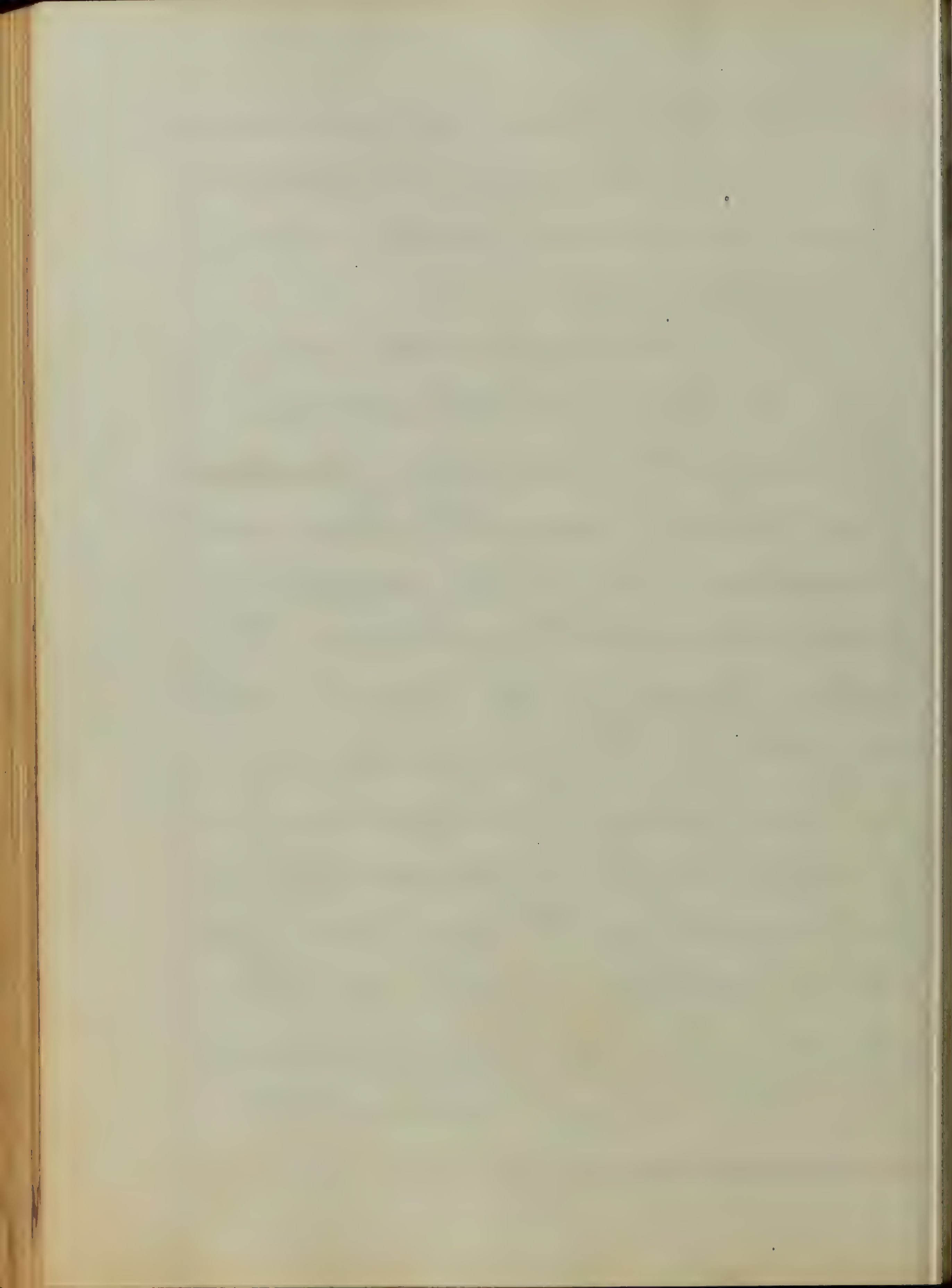
Pathological Character

The feature characteristic of this disease is the pseudo membrane, in a greater number of cases affecting first the fauces and in some does not extend further, while in others it extends to the Eustachian tube, anterior and posterior nares into the mouth affecting the gums down the oesophagus into the stomach, to the larynx down the trachea into the bronchial tubes to the conjunctiva, to the anus and indeed many

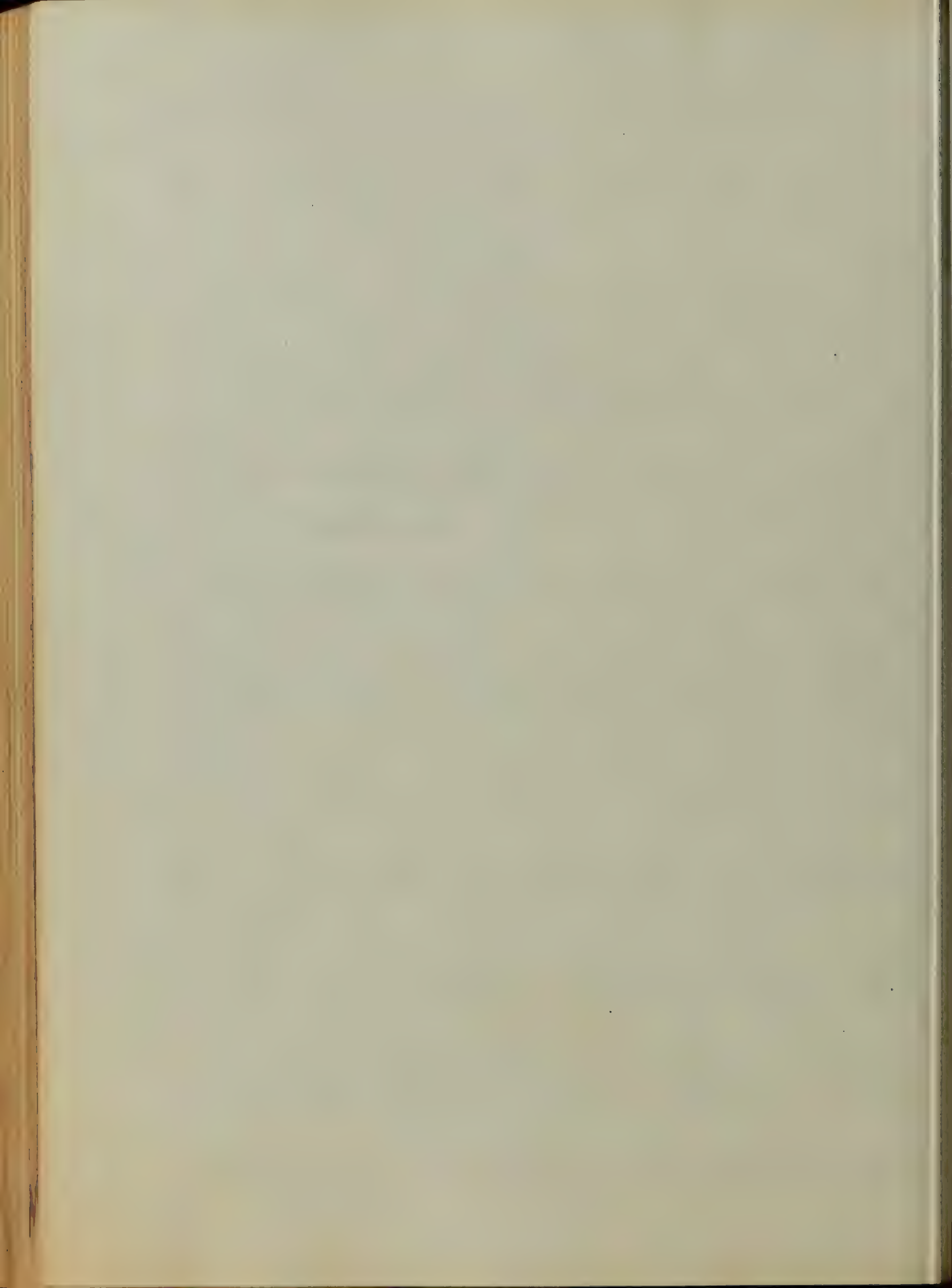


[illegible] in [illegible] [illegible].
Such cases are fortunately
[illegible] rare.

The pseudomembrane
of a fibrinous character
gradually becoming firmer, at
the same time thicker and
broader. It is of a grayish or
grayish white colour. The
membrane is closely adherent
to the mucous sur-
face [illegible] being it becoming firm
and not easily removed. In
attempting the removal of it
the engorged vessels are torn
producing a free discharge
of blood. The thickness of the



pseudomembrane varies from 1/20 to 1/3 of an inch. It is sometimes firmer in one part than in another, the most distinct portion being [illegible] than that underneath which is less [illegible]. When it begins to decompose the first becomes softer than that underneath. When this occurs, the color of the membrane is changed from a grayish or grayish white to a dirty brown, and the surface is uneven from the separation of the shreds.



The [illegible]

[illegible] the [illegible]

place when the [illegible]

[illegible] found the

congested or engorged

vessels, causing an appear-

ance like that of an ulce-

ration, or like [illegible].

The pseudomembrane returns

very quickly indeed, & forms

again in force during the

height of inflammation

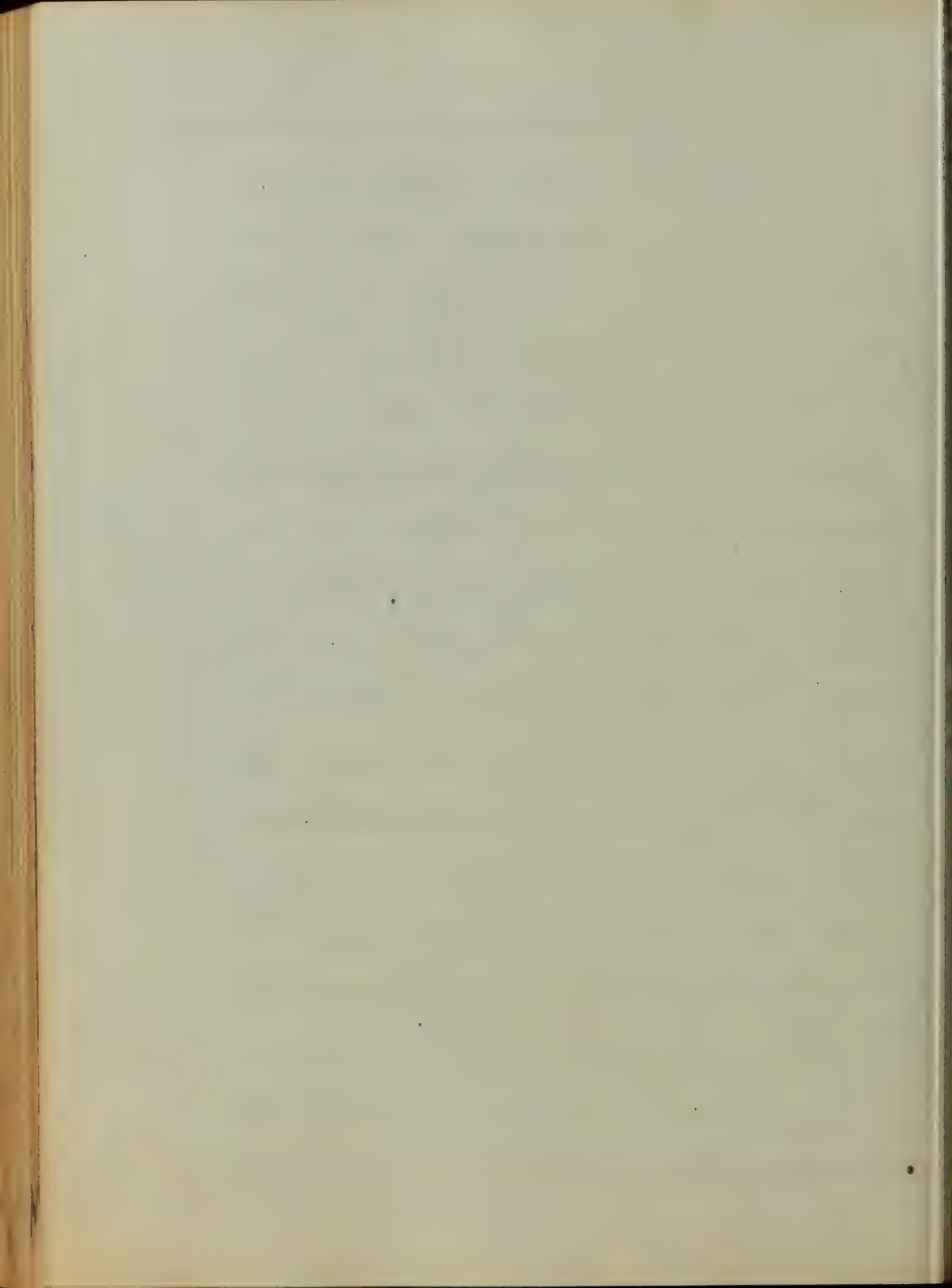
a few hours being suffi-

cient [illegible]. The

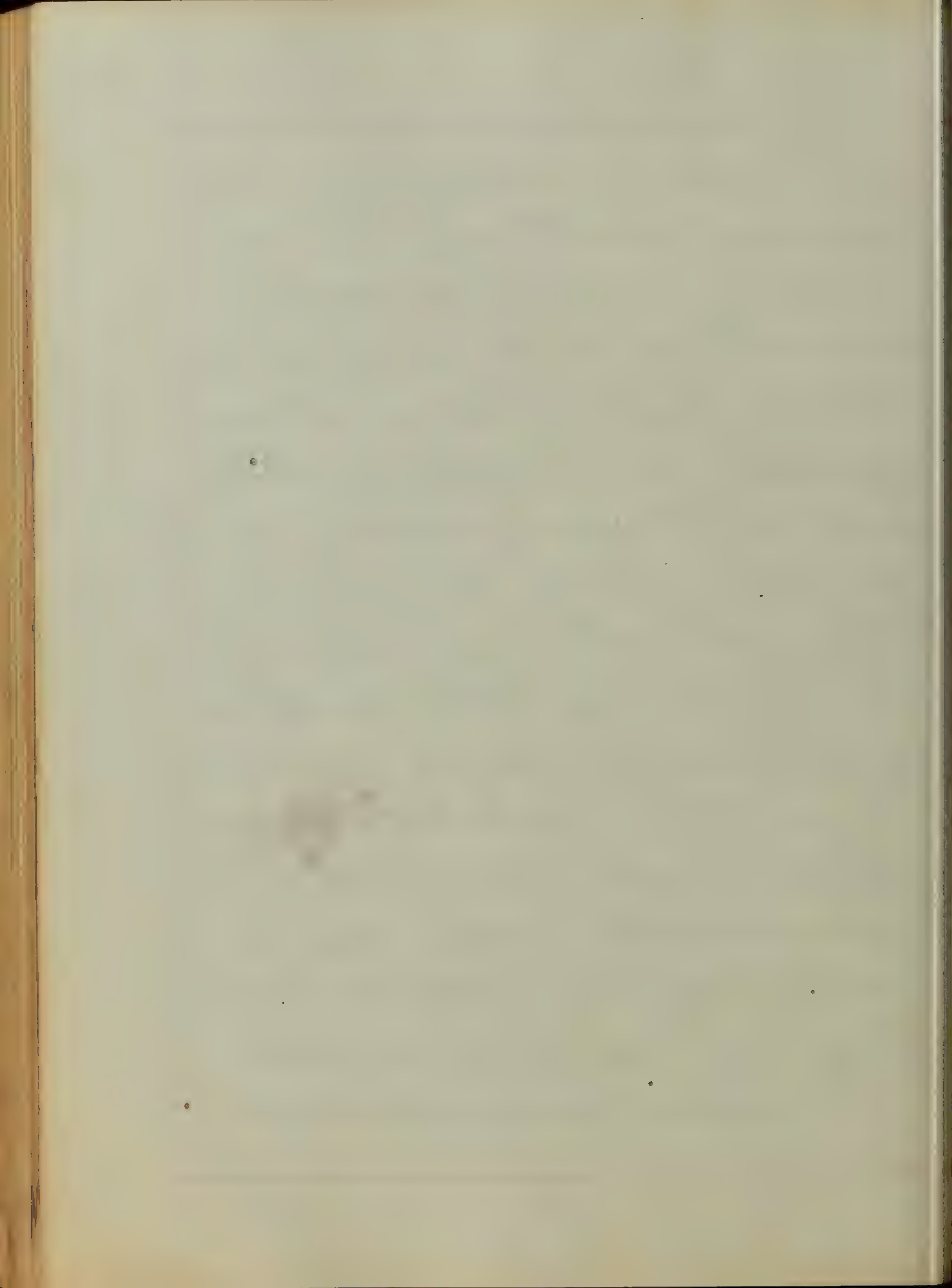
microscopical appearance

of this membrane when

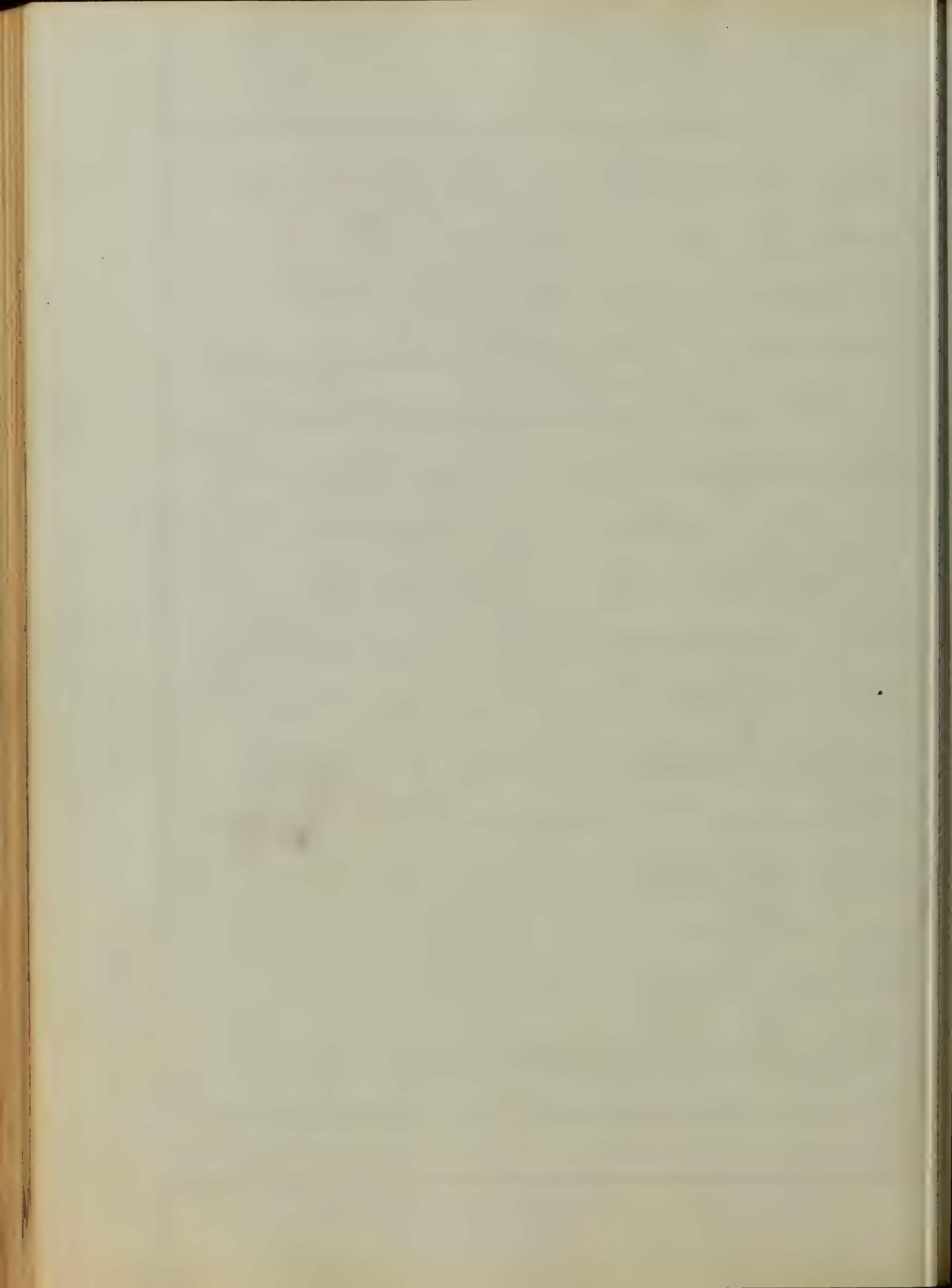
examined soon after its



appearance, shown to contain mixed with epithelium plastic nuclei amorphous matter and delicate interlacing fibrillae. In some instances we are enabled to detect a resemblance in the products before [illegible]. This product is generally the Oidium Albicans or a plant closely allied to it or the "Leptothrix buccalis". It gradually disappears in favourable cases and is either expectorated or swallowed with the ingesta. The [illegible] underneath.



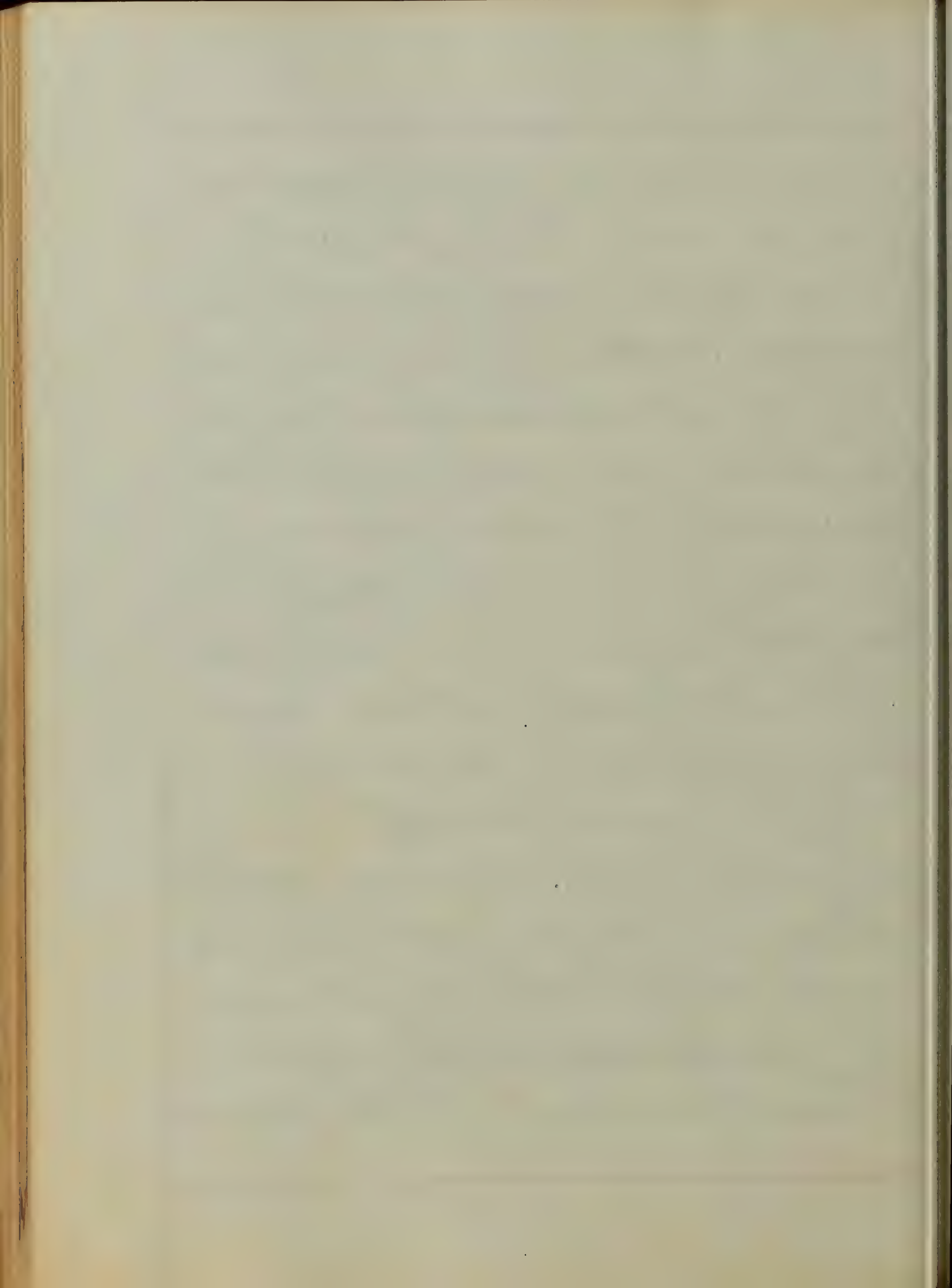
promotes its separation espe-
cially [illegible] When the mucous
membrane occurs in the
nares it is attended with
a fluid mucous or [illegible]
discharge, running over the
lip producing excoriation
around the lips and in
the nares. The disease is
generally attended with
inflammation of the
cervical glands which
are situated in the con-
nective tissue behind
and below the angle of
the lower [illegible] and in
grave cases the connective



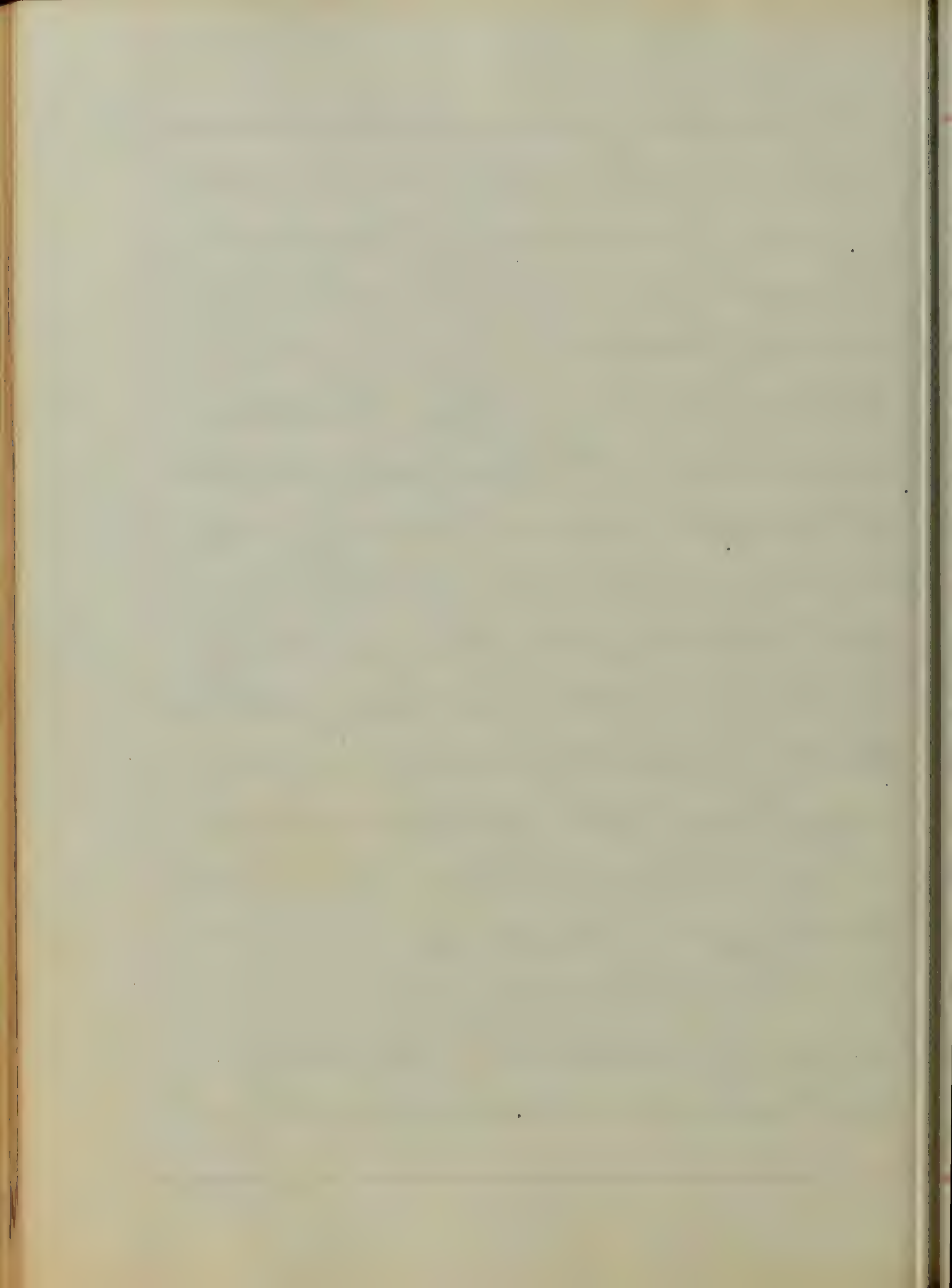
tissue also is involved. In a very few cases the glands but connective tissue suppurate. Bronchitis and pneumonia are sometimes present in this disease. The blood from a patient who has died from diphtheria is of a brownish color & by some has been compared to prune juice.

Symptoms.

The symptoms vary greatly. They are premonitory but not distinctive, a degree of chilliness slight sore throat swelling of the glands



[illegible] the [illegible] nausea
fever, headache, languor
loss of appetite, furred tongue
constipation, difficulty of
swallowing &c. The inflam-
mation of the fauces then
is a red or purple appear-
ance and also of the ton-
sils and palate. Usually
on the [illegible] day or third
the deposit may be seen
making its appearance
in patches. The [illegible]
[illegible] membrane extends
to the larynx quite
early in the attack
which is manifest by the



Such as [illegible] congestion of
with [illegible] [illegible]
[illegible] [illegible] The breath-
ing is most intolerable
[illegible] and in worse cases
the palate and tonsils are
destroyed, attended with
a [illegible] [illegible]
[illegible] [illegible] the
hemorrhage from the
mouth stomach and
rectum, and an enor-
mous engorgement of
the parotid, cervical or
submaxillary glands are
present in [illegible] severe cases

The circulation, cutaneous
respiratory, digestive, nervous
and urinary systems are
all involved to a greater
or less extent in very un-
favourable cases. The
pulse varies. In very bad
cases it is rapid, in others
rather at first than finally.
Below the standard of health.
It is soft and compress-
ible and sometimes irreg-
ular. The skin rarely presents
an increase of heat. Sweats
are sometimes seen and
sometimes it presents an
anaemic aspect although

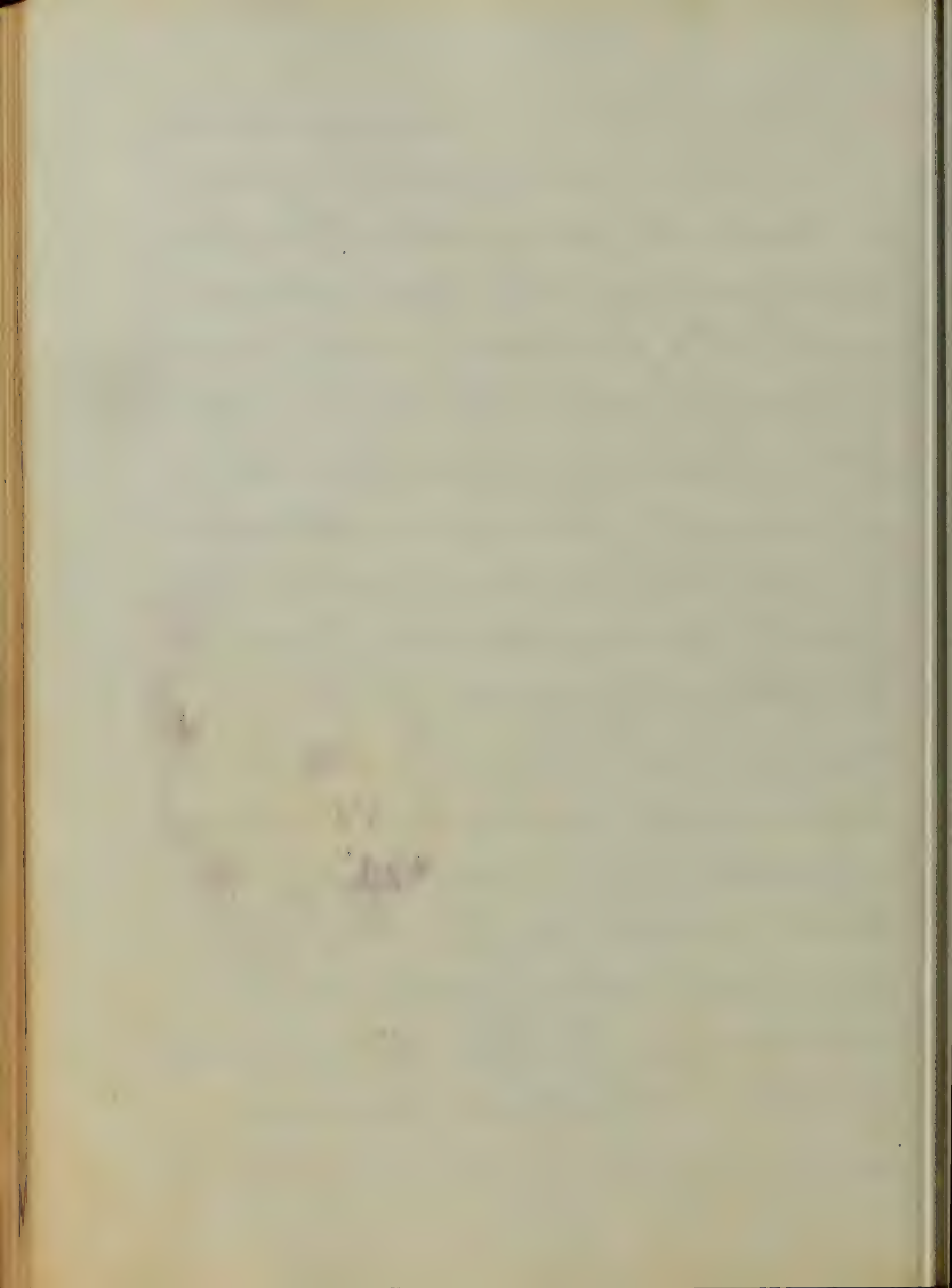
[illegible]
or large. Rose spots are also
sometimes seen, but the
disease has no character-
istic eruption. The res-
piratory affection is due
to diphtheritic inflam-
mation of the larynx,
trachea and bronchial
tubes. Appetite in most
cases is [illegible] much dim-
inished or lost and in some
diarrhoea is present, and is
usually a bad sign. In a
majority of cases the mind
is affected. Convulsions
and coma are rare and

when present are supposed to be due to uraemia most of all cases. Ailam[illegible] is frequent. Para[lysis] of the muscles of the palate sometimes also paraplegia and hemiplegia.

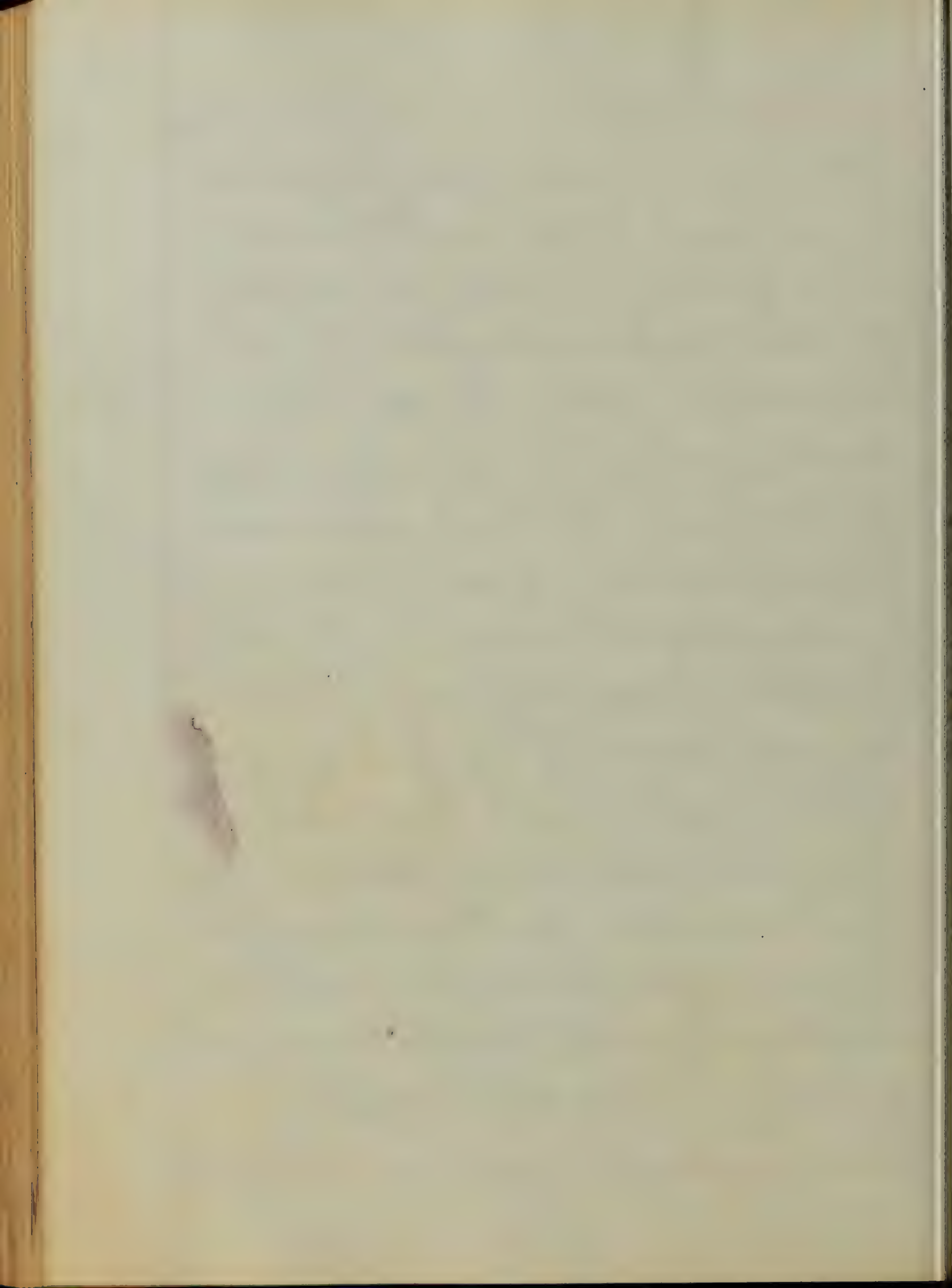
Vaccinia.

This disease must be placed in the same class as measles smallpox, scarlet fever and [illegible] being a blood disease. The infectious character of the disease is doubted by some, but admitted by [illegible] pathologists, [illegible] [illegible] attack once in [illegible]

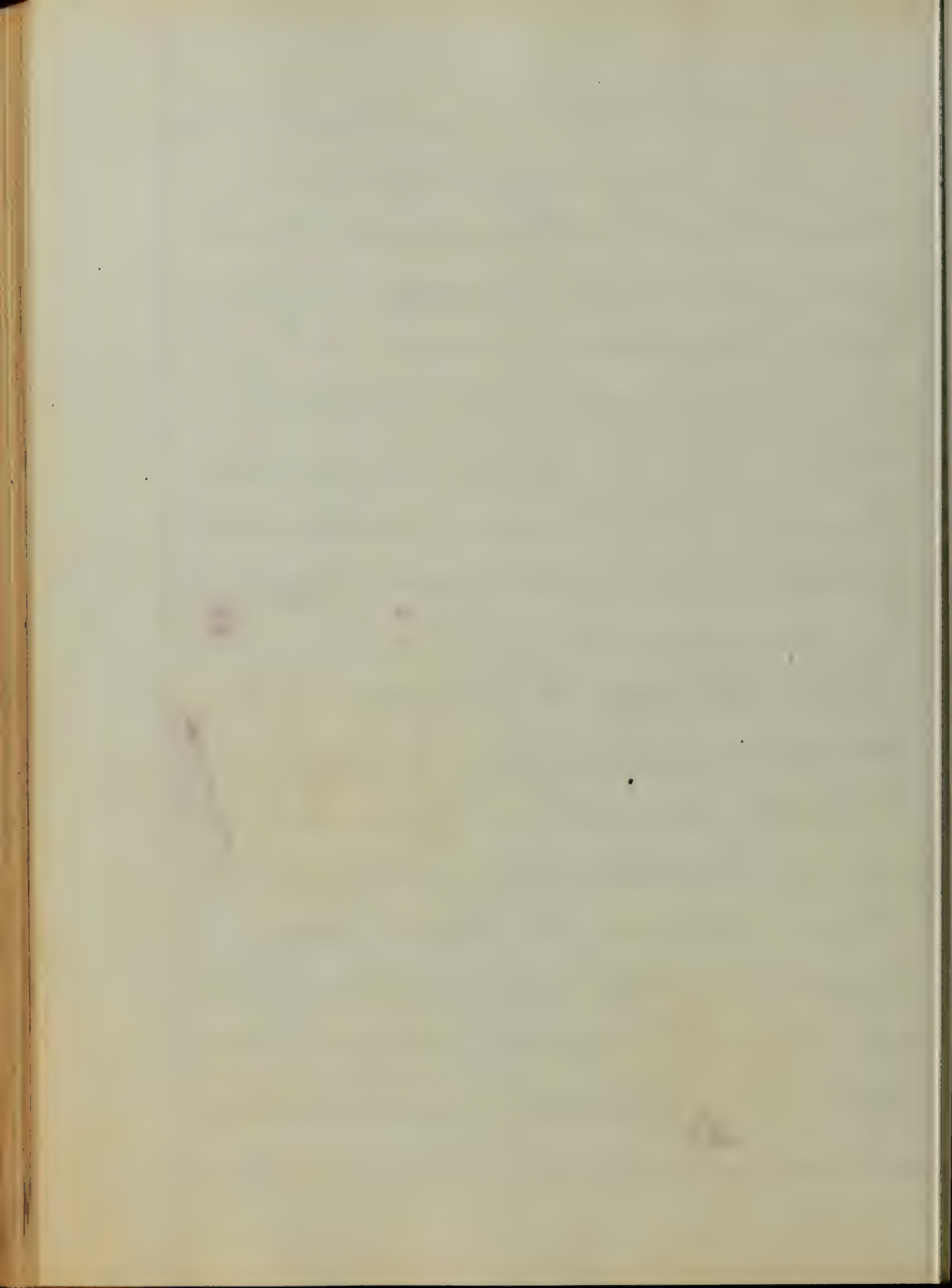
family who may expect
to have it generally. Those that
remain in the same room
with the patient, are the ones
attacked while those in the
compartment are freed
from it. The inoculability
of diphtheria has not been
fully demonstrated, but it is
believed by many that the
saliva from a diphtheritic
patient (or even contaminated)
applied to a mucous or abra-
ded surface of a healthy
person, communicates the
disease. Of the inoculability
of this dreadful disease
I



[illegible] a sad example [illegible]
[illegible] 1869 in the loss
one of the former professors
of our Alma Mater. The la-
mented Prof. Fick, who
lost his life in saving some
a patient. He had performed
tracheotomy, and it being
necessary to remove the col-
lected matter from the tube
he removed it by placing
the tube to his own mouth.
Thus he received a portion of
the matter in his own life.
In a short time he was at-
tacked with diphtheria and
soon was a corpse.



[illegible] is [illegible] in the
death of Valleix who fell
victim to it by receiving a
bit of saliva from a patient
into his own mouth. On the
other hand however, Trousseau
and Peter tried without
success to communicate it
by inoculating themselves.
Diphtheria is epidemic or
endemic — Sporadic cases
rarely occur. The period of
incubation is from one to
three days. It is always
essentially the same wheth-
er in a similar manner
found. Climate and season



does not occur in [illegible], nor
does it show any [illegible]
preference for otherwise un-
healthy places where filth
and ground-poison abounds,
says Hartshorne; but Prof. [illegible]
[illegible]ith, says "It is more [illegible]
and fatal where antihy-
gienic conditions prevail."
Diphtheria occurs at any
age. Instances are on record
of infants three months and
persons [illegible] years of age
dying of it.

Diagnosis

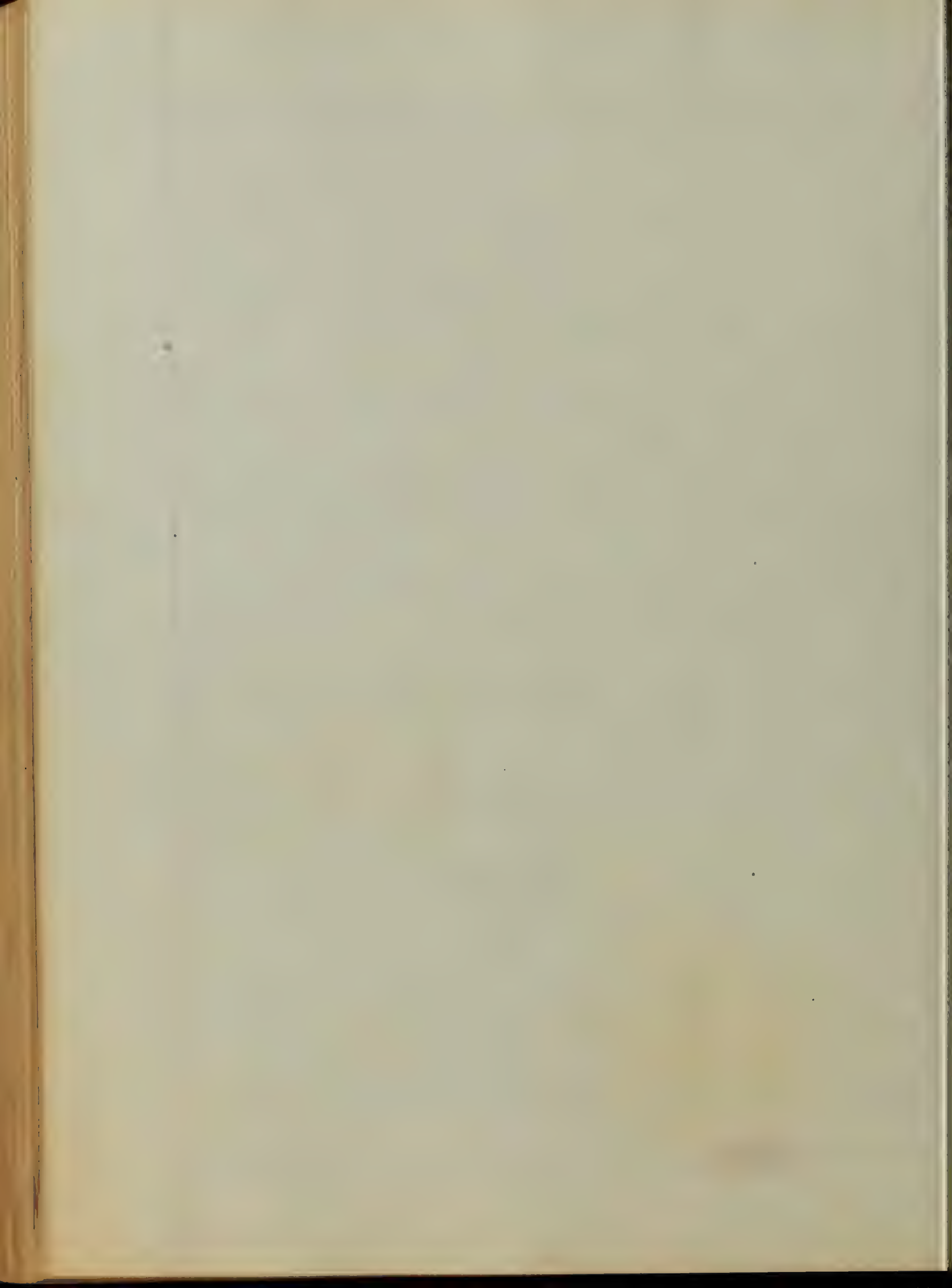
The diagnosis in most cases
is easy, when the local mani-

[illegible] . have taken [illegible]
[illegible] be [illegible]
simple pharyngitis [illegible]
attended with [illegible]
By the microscope [illegible] to
be detected, the [illegible] swell-
ing is greater in diphtheria
than in simple [illegible].
In some cases there is a close
[illegible] blance to scarlatina
The rash upon the skin and
the absence of the [illegible]
branes are enough to distinguish
scarlet fever from diphtheria.
Besides there is [illegible]
[illegible] in diphtheria. [illegible]
[illegible] it [illegible] be distinguished

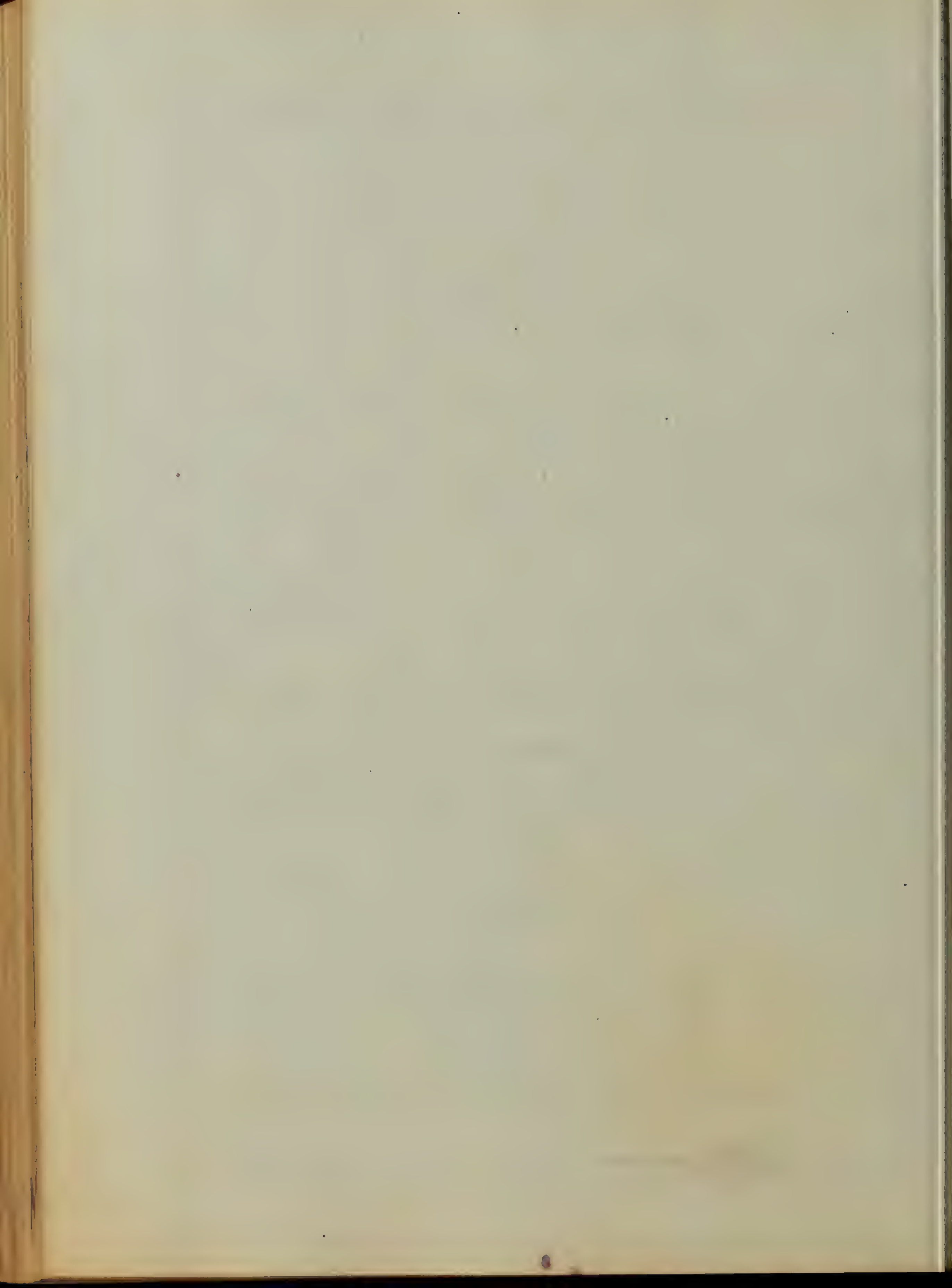
by the extent of the [illegible]
which in most cases of diph-
theria does not extend to the
larynx, while in croup it
does, also by the absence of severe
constitutional symptoms in
croup, from thrush [illegible]
the diphtheria is known by
the deposit being much thicker
and larger, never vesicular
mostly [illegible] in colour and
attended by more severe con-
stitutional symptoms.

Prognosis

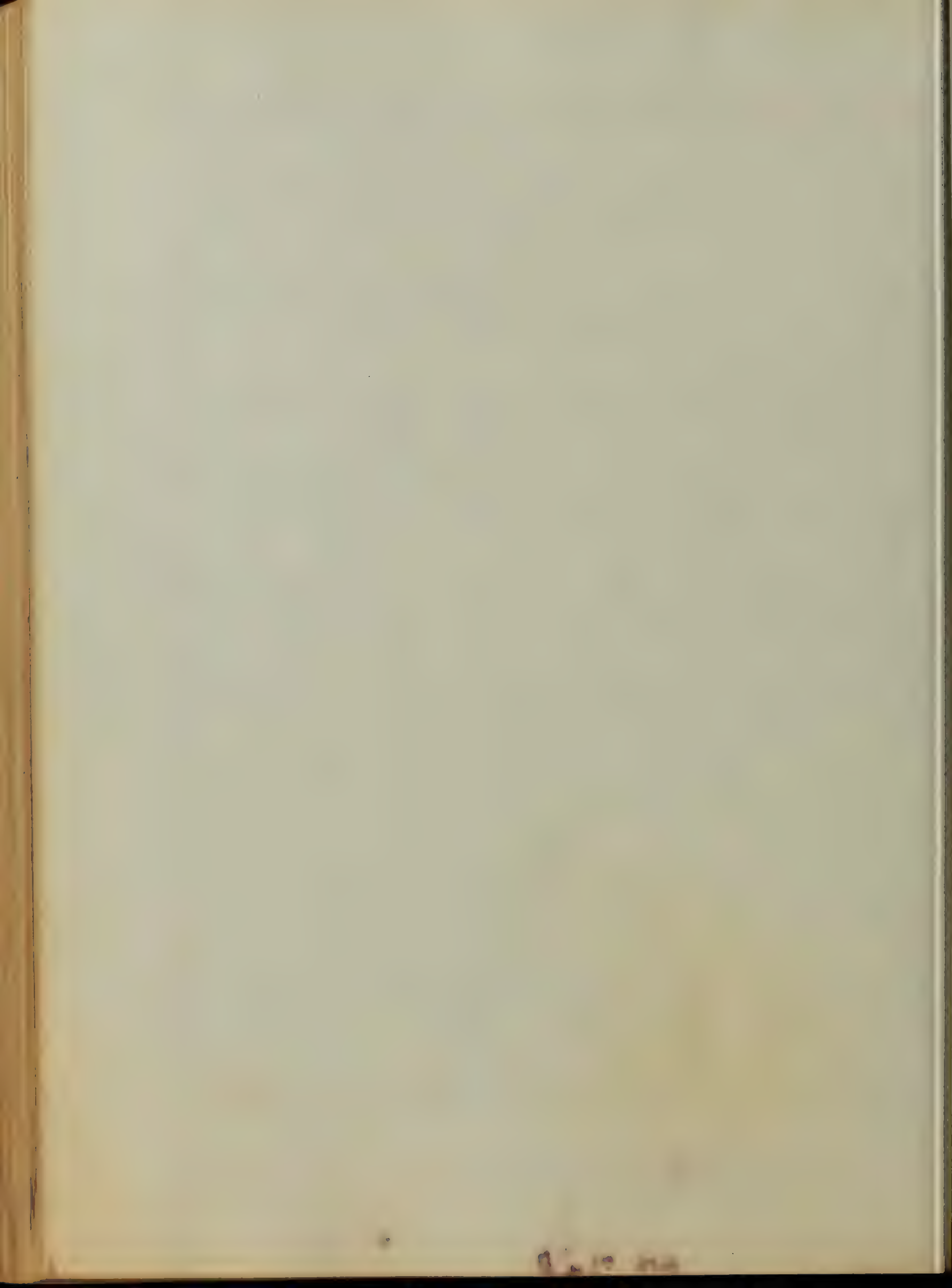
The prognosis is more favor-
able when the disease occurs
sporadically than epidemic[illegible]



the epidemic influence
prevailing. The prognosis depends
also on the amount of exudate
membrane and great cervi-
cal cellulitis and adenitis.
When the disease extends to
the larynx there is little or
no hope of recovery, and may
be considered most dangerous.
There is also great danger
[illegible]
[illegible]. When the larynx is
not affected, the prognosis
is more favourable than the
membrane extends from the
fauces into the [illegible]

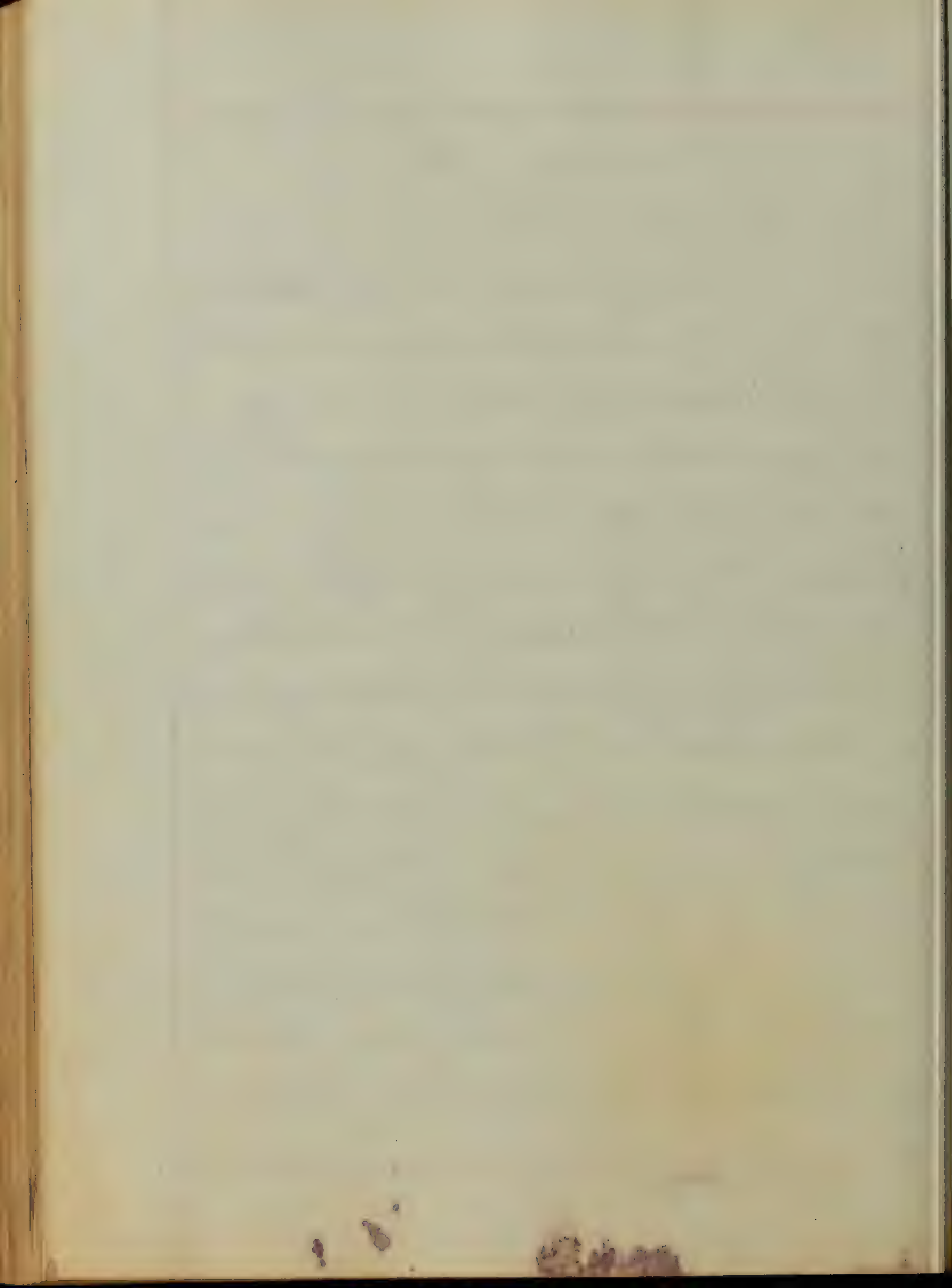


posterior nares, or in the
buccal cavity extensively, or
if it exist in large amount
in any other situation.
Great frequency of pulse
with irregularity, frequent
vomiting, diarrhoea, profuse
hemorrhage from nose, mouth
or other situation, delirium
coma, convulsions, albumen
in urine in abundance and
[illegible]
[illegible] the [illegible]
[illegible] symptoms
[illegible] attempting [illegible]
[illegible]
[illegible]



Treatment —

No specific has been found for this disease as yet, nor any general rule laid down as to treatment, hence every physician must make his own choice. Nothing has been found very satisfactory in very severe cases. Blood letting is rarely if ever necessary nor is depletion by drugs. In some few exceptional cases leeches may be applied to the throat early in the attack. In mild cases, magnesia or rochelle salt may be given as a purgative. Chlorate of potassa is a great —

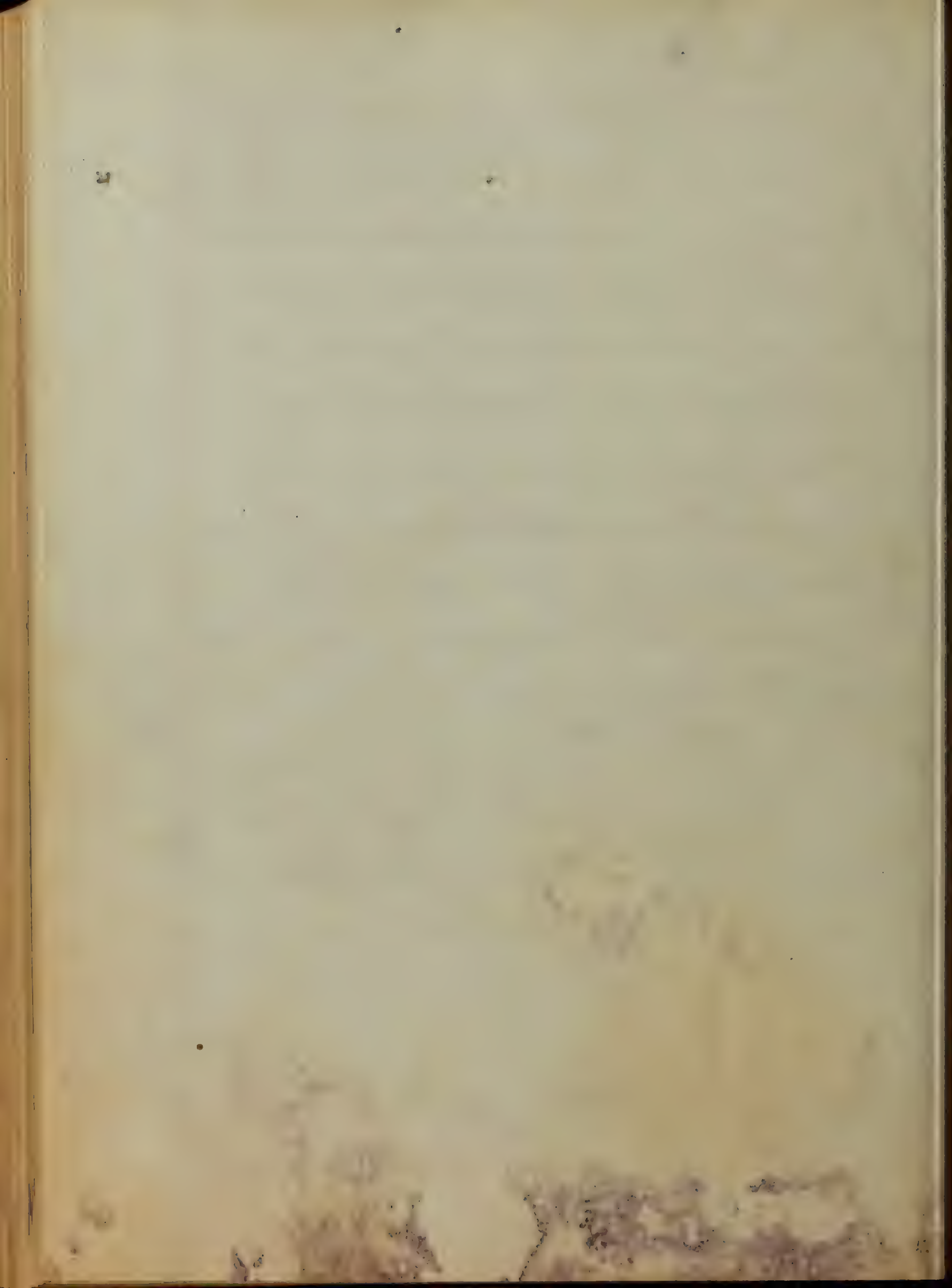


remedies with some and with
supposed advantage in do-
[illegible]
[illegible] The
Tincture of Chloride of Iron is
relied on by many and with
very decided advantage
either with or without the
Potassa Chlorate. Quinine [illegible]
grain doses every three hours
[illegible], Chlo-
rine water. Sulphite of Soda
and Hyposulphite of Soda with
Glycerine are all considered
useful in its treatment.
Creosote and Carbolic Acid
are useful locally.

Concentrated [illegible]
must as a rule be given [illegible]
[illegible]
[illegible] much more when the [illegible]
[illegible]
[illegible] to be of most [illegible]
[illegible]
[illegible] ment. It has been
shown it should not be
violent; Ice in the mouth
[illegible] Acid
Hydrochloric: and honey. and
[illegible]
[illegible] hair brush. [illegible]
and Glycerine, Chlorinated
Soda, dilute [illegible] acid
and almost any astringent

-olution may be used [illegible]
[illegible] or otherwise [illegible]
[illegible] of the steam & lime
water deserves a trial.
[illegible] regards, practitioners
every [illegible] must use his
own judgement. If patient
is tending to die from
suffocation [illegible] put in a
[illegible]
from the operation, [illegible]
if tending to die from poi-
soning of the [illegible] the same
[illegible] so [illegible]

[illegible] H. Crum



Thesis.

on

Bronchitis.

For the degree of M.D.

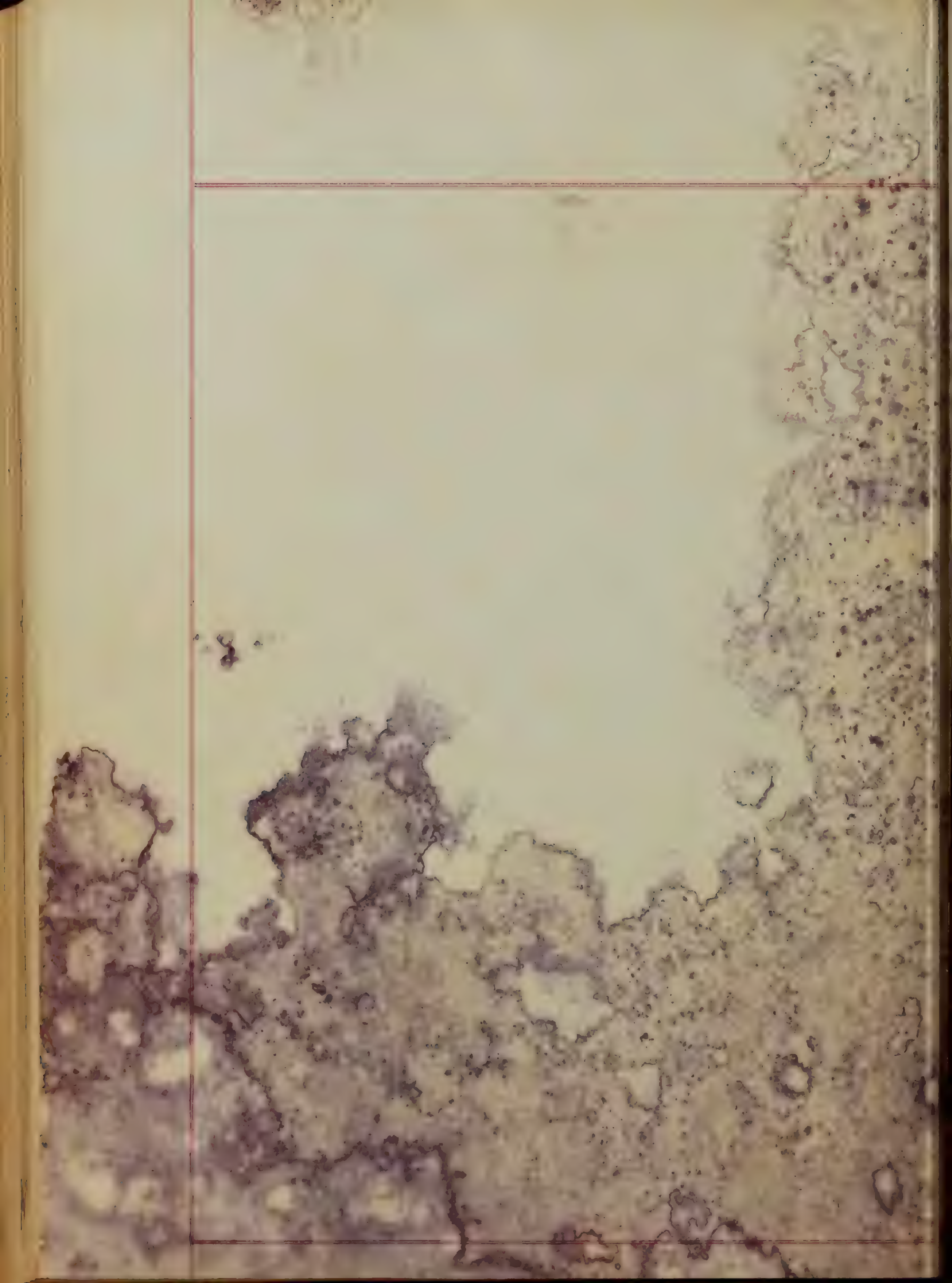
By:

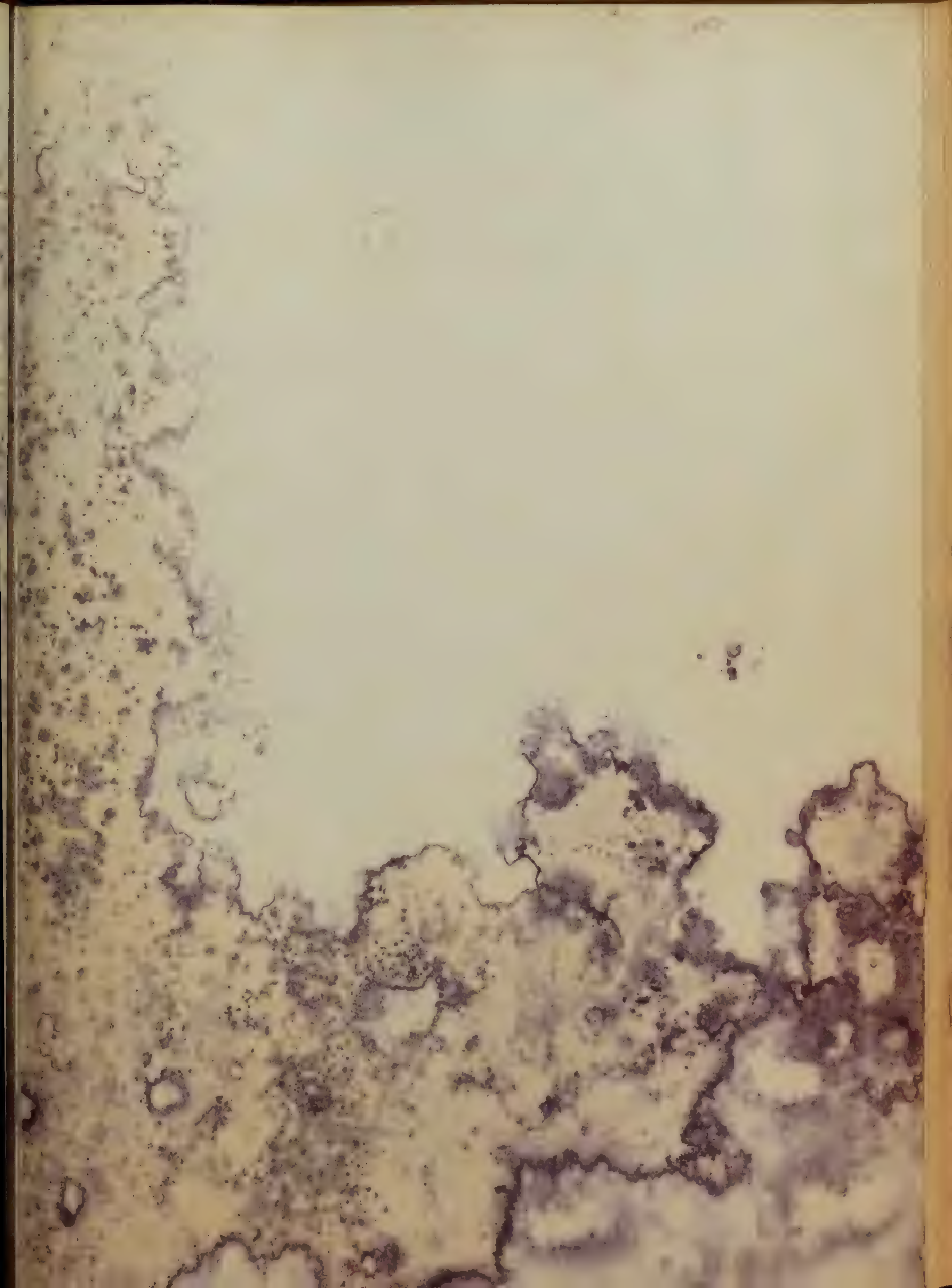
Joseph B. Galloway.

University of Maryland

[illegible]

[illegible]





Gentlemen of Faculty

Respected Sirs.

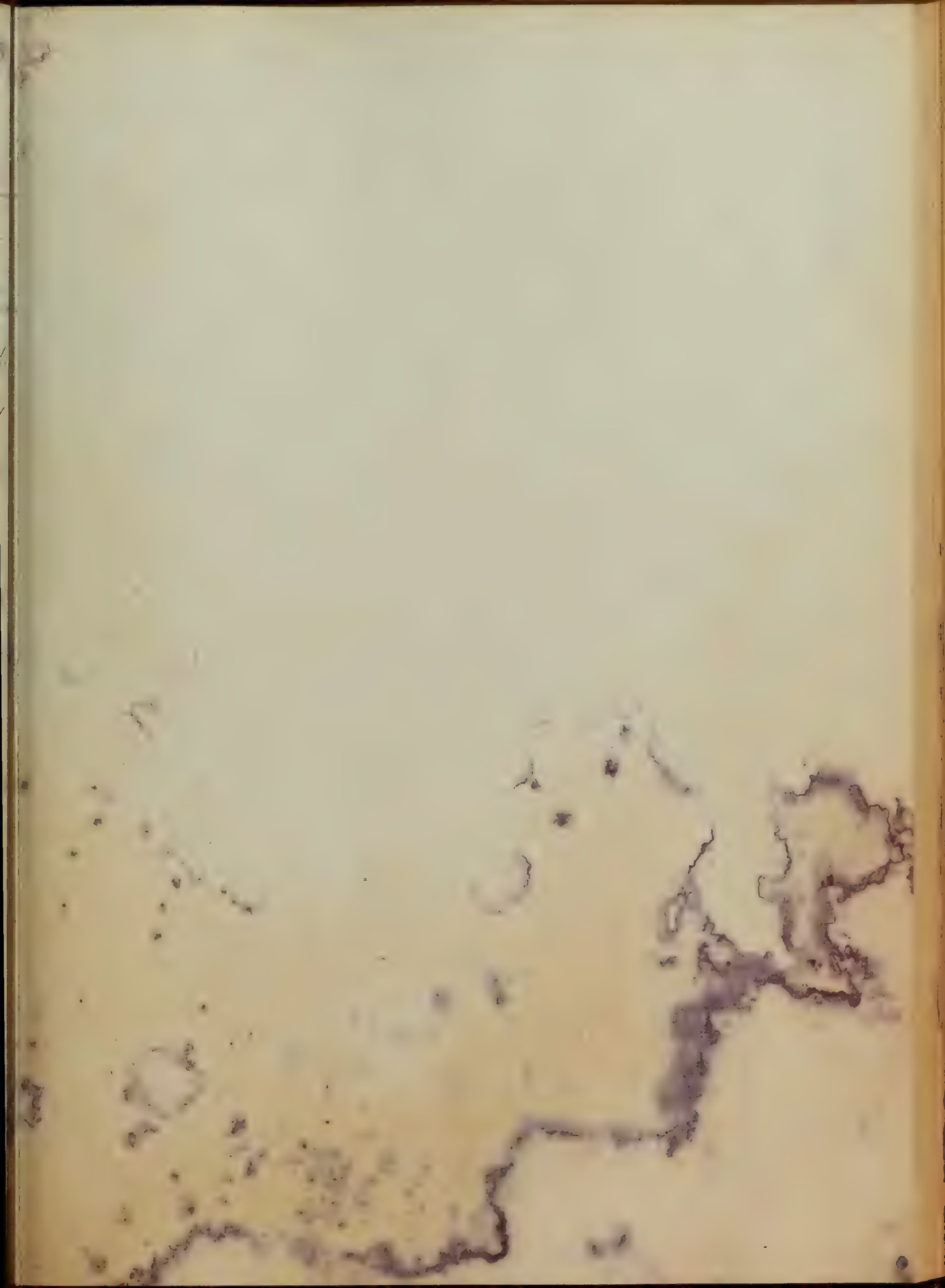
In accordance with the time honored custom of my "Alma Mater" that each candidate for a Degree shall submit a "Thesis" of his own Composition. I submit the following for your consideration, recognizing the fact that my inabilities and limited experience will not permit me to [illegible] [illegible] views or [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] the time [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] and [illegible]

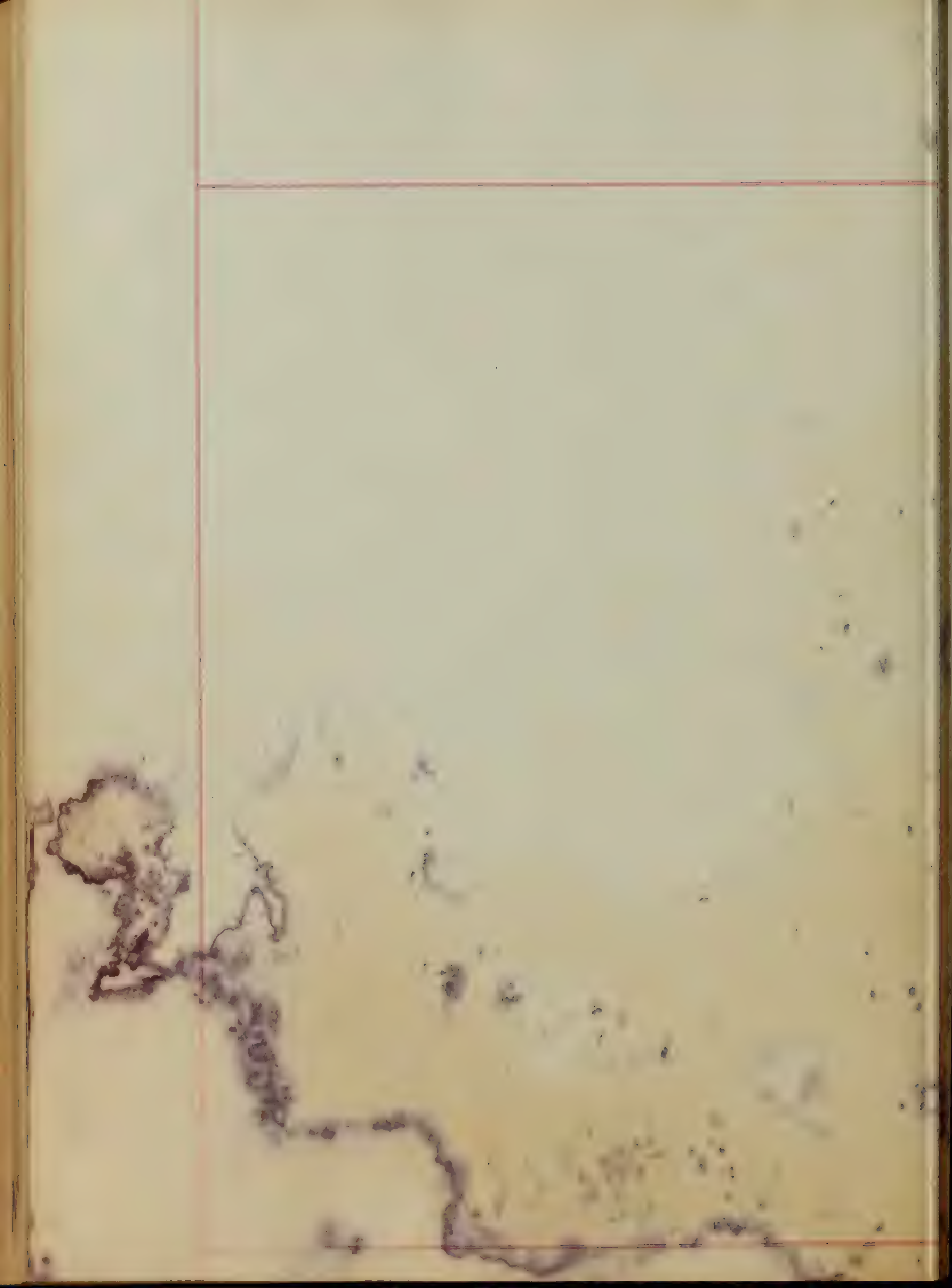
Yours [illegible]

has furnished me with, which in after years may break upon my clouded mind, and awake to being, the [illegible] of the Soul, and lead me to the contemplation of that higher life where knowledge & wisdom has its seat, and where ignorance and superstition can gain no admittance.

Very Respect. &c.
Jas. B. Galloway

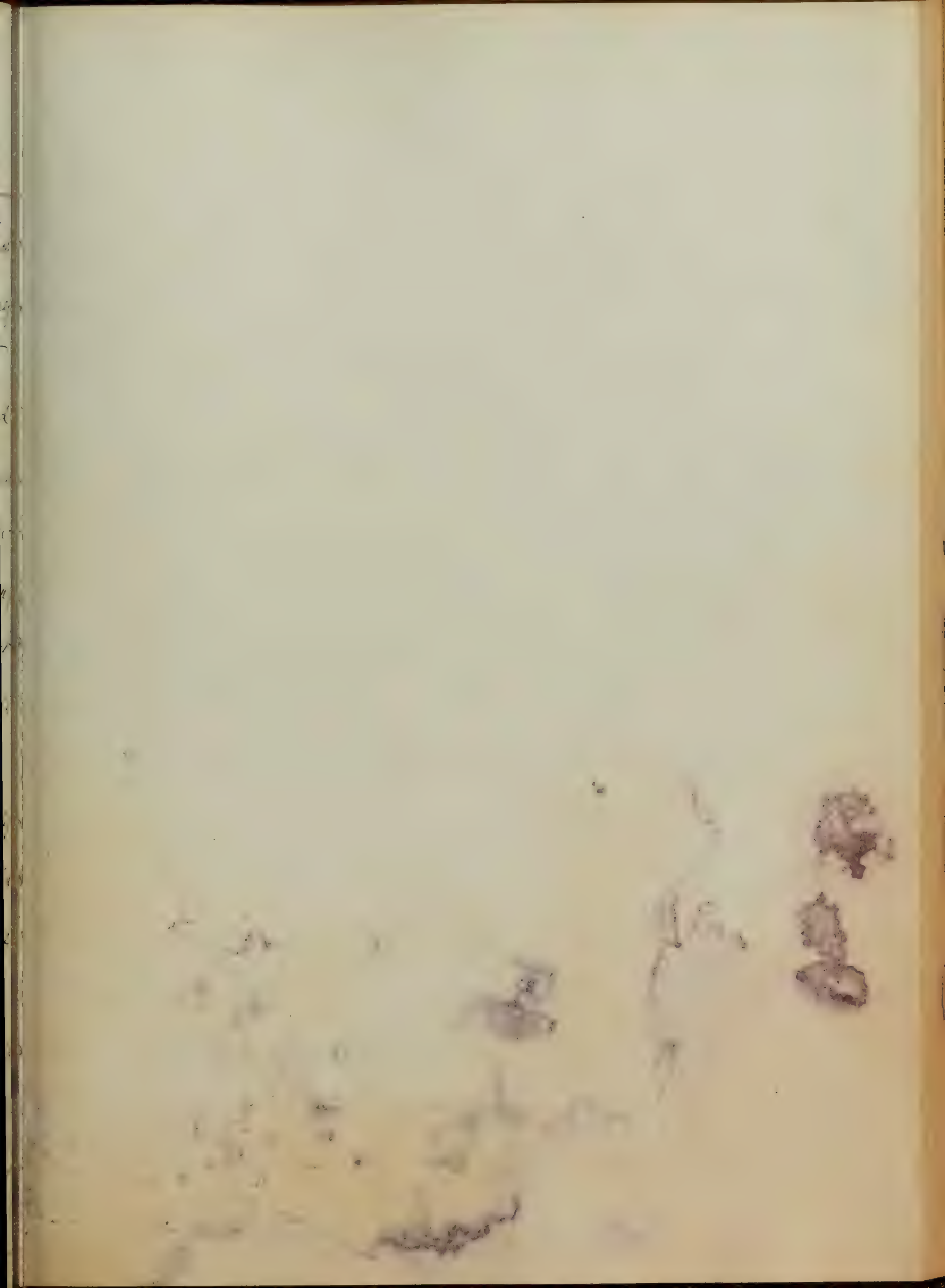
[illegible] 5th 1872





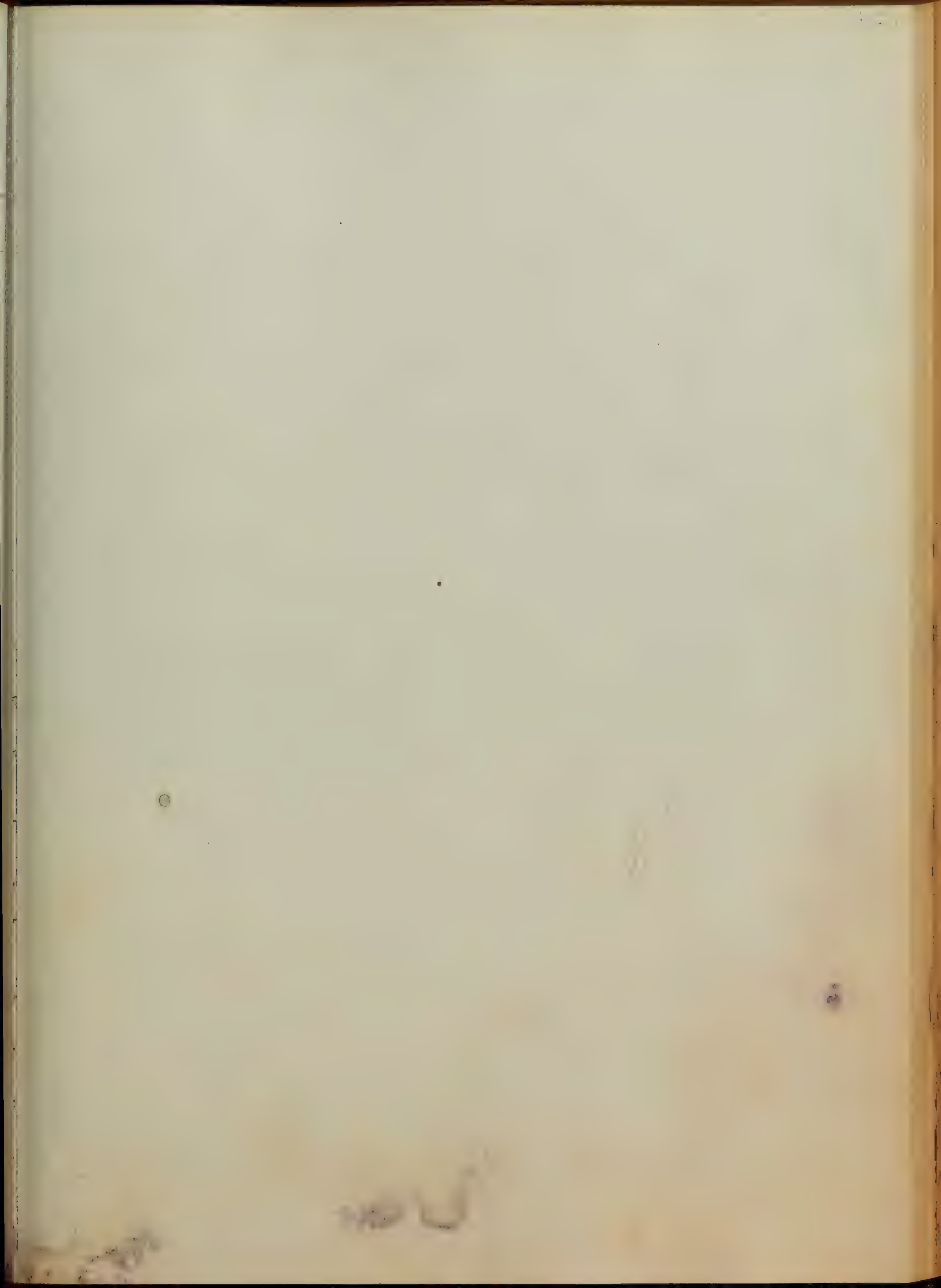
Bronchitis.

The desease ~~about~~ which I am about to give a brief Consideration, is common to all parts of the globe and although in itself, it is a harmless desease, yet by its continuance & complications, may bring about some; or at least one of the gravest desease to which the human race is liable, Bronchitis is Commonly defined to be an inflamation effecting the lineing or mucus membrane of the bronchial tubes either large or small. Acute bronchitis usually ushered in with a slight congestion, hoarseness, lassitude, pain

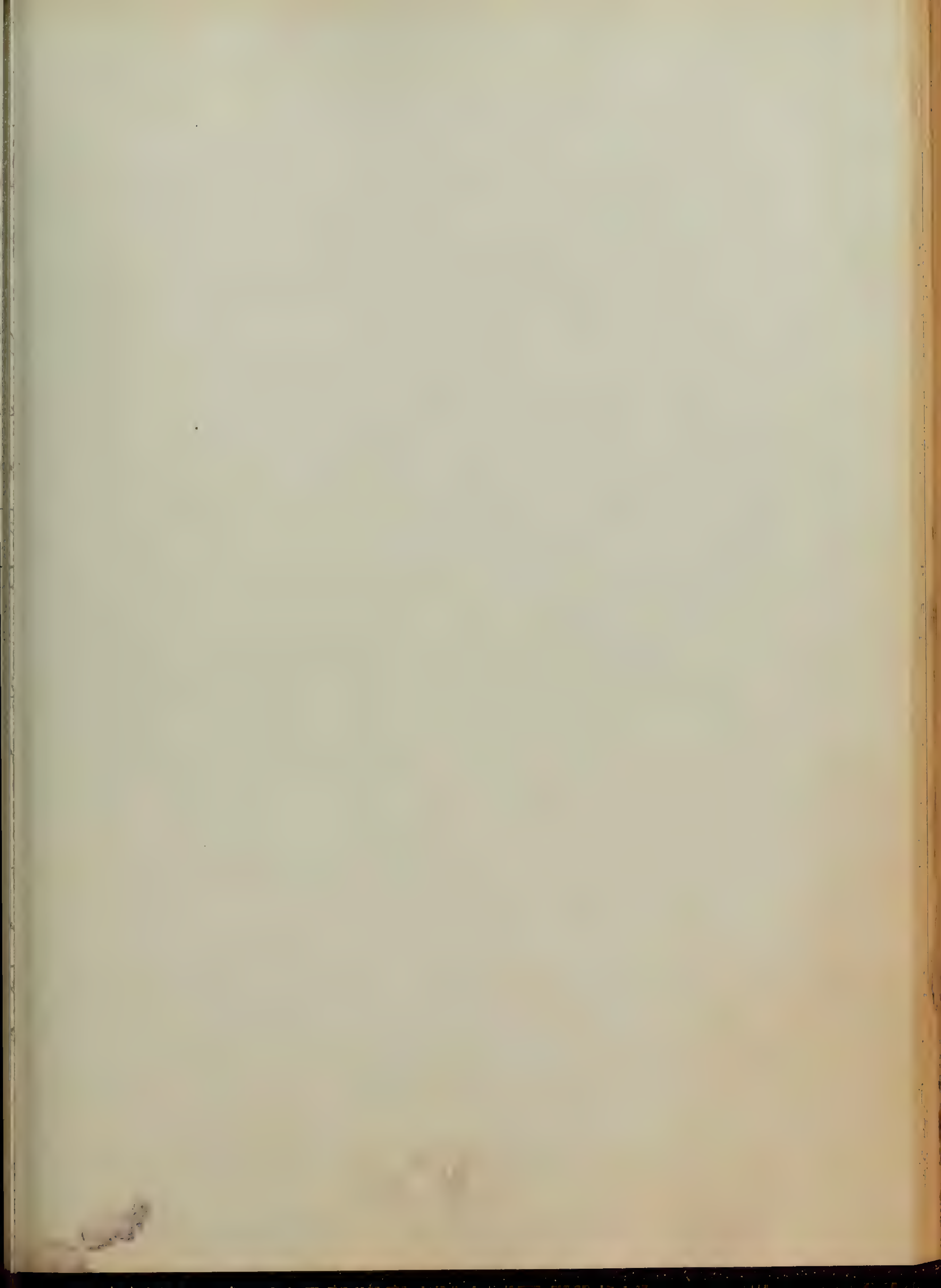


in the back and limbs - and sometimes pain during respiration. Cough is usually one of the first symptoms; which is general- ly of a dry character at the beginning & attended with little or no expectoration; The Cough (may produce con- siderable pain of a tearing and rending character, in & about the sternum. Tongue may become furred - Urine high colored - with gastric symptoms. The attending fever is not always continuous, but, may have a remission in the early part of the day, with marked exacerbation towards

evening. These symptoms may disappear of themselves, within (24) or 48 hours from their onset, but usually it continues for a longer period with an increase in all the symptoms. After the duration of three or four days expectoration may appear, and a tenacious frothy and gelatinous mucus is thrown out by frequent & in some instances violent and paroxysmal attacks of coughing. The matter thus expectorated may become changed in character, it may be streaked with blood from the bronchi or fauces; or it may loose its transparency

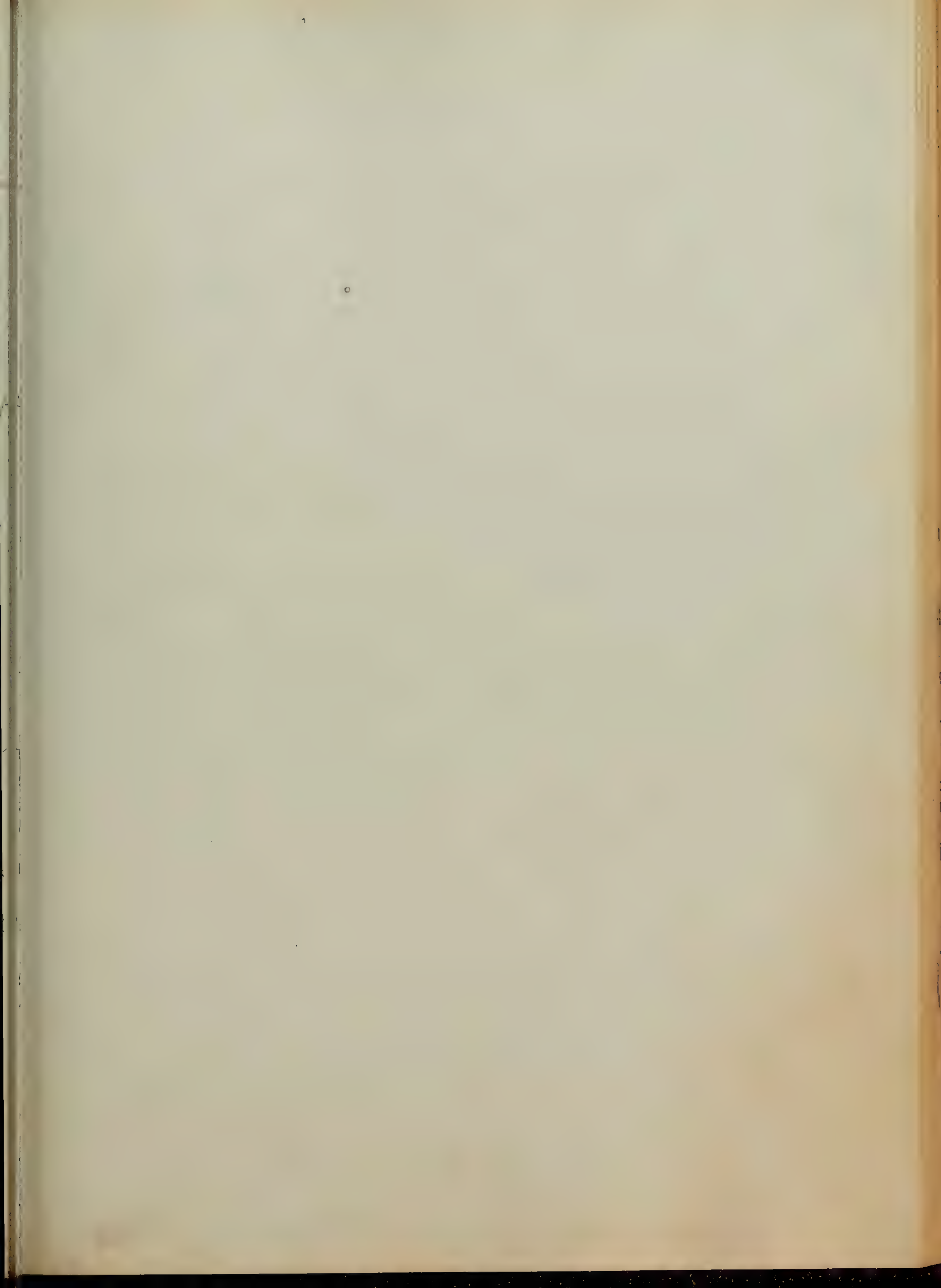


and become more opaque and of a whitish character, or it may present a yellowish or greenish appearance, when the sputa thus become changed the accompanying symptoms may be ameliorated - and the pain attending the cough in its earlier stage may cease, together with the paroxysmal character of the cough. The disease may give way, expectoration become easy, fever abate - skin become moist, tongue clean - and an increase in the urine. In some cases the cough may continue and the patient is liable



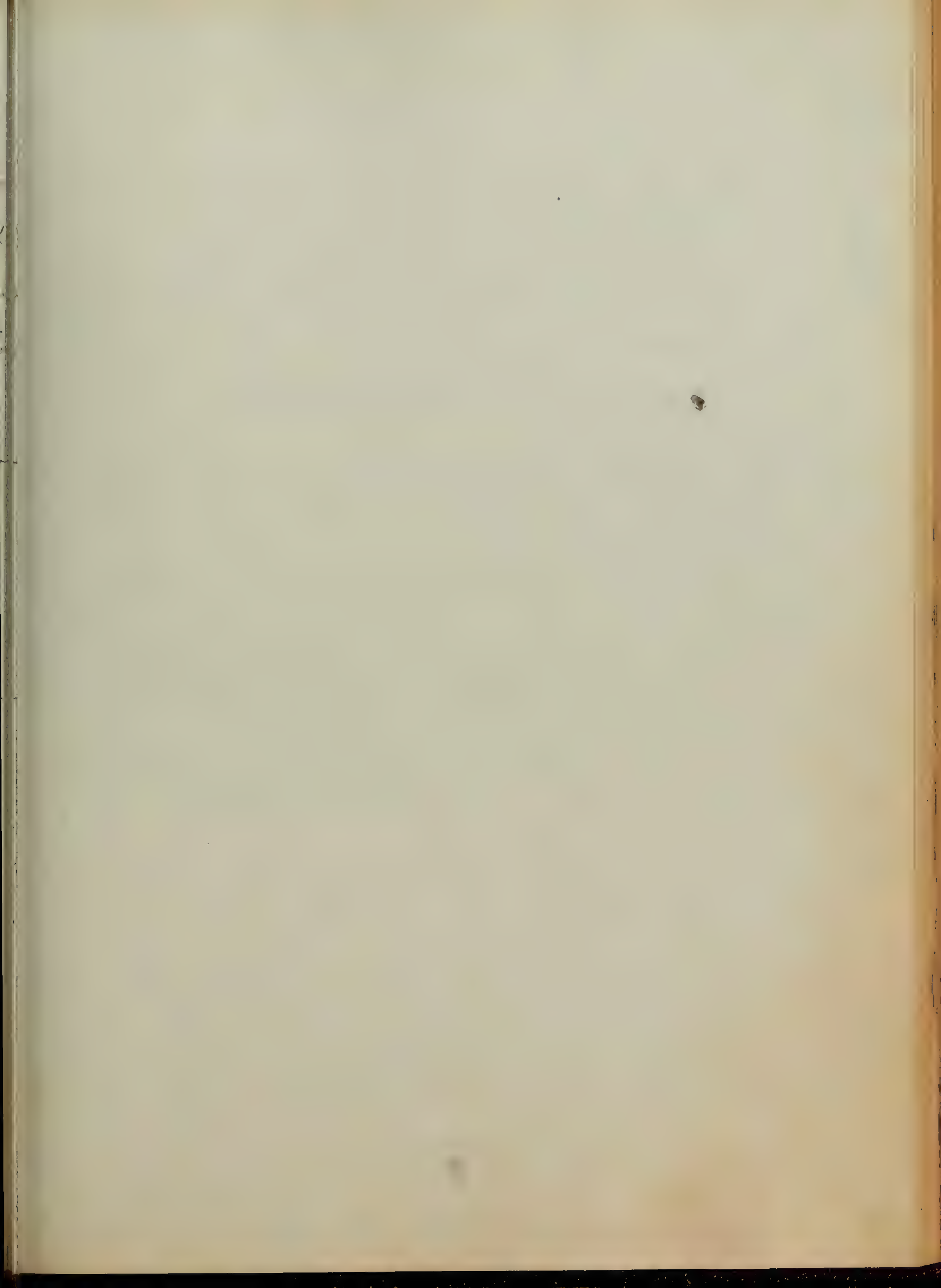
to a second attack from the slightest exposure. The general health may become so prostrated from its effect as to sink from exhaustion unless it is supported by appropriate measures.

Anatomical Characters: the membrane lining the tubes may become reddened and inflamed, and in some instances softened. The redness may be extensive and diffused or it may be confined to spots forming streaks and patches; by the aid of the microscope the surface may be seen to be deprived of

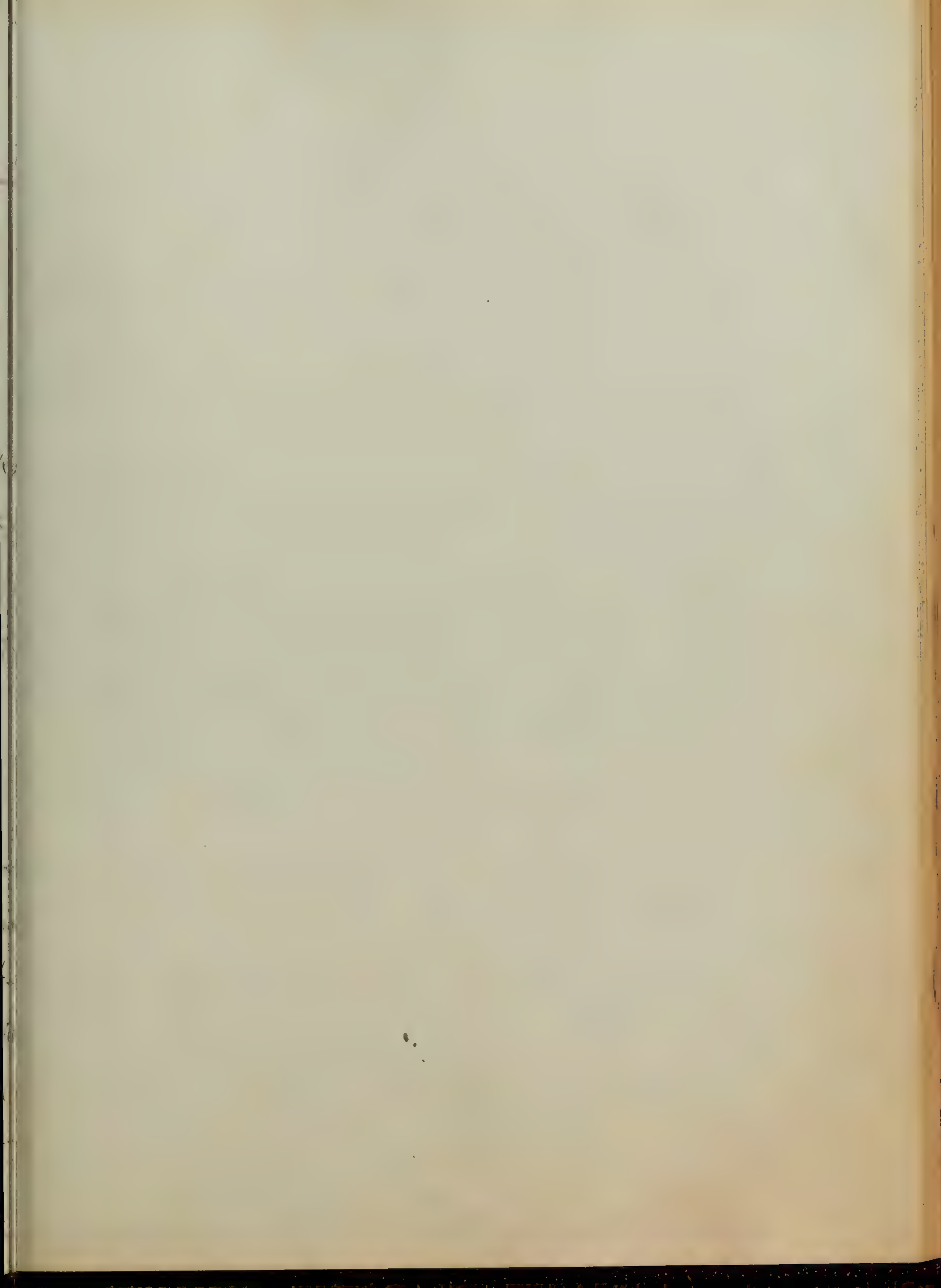


of its epithelium, and covered with fibrous exudation in place of it. The tubes may contain mucus, pus, and blood in different stages. Dilatation & relaxation of the tubes are also seen. The exudation is changed into matter which permits of either being absorbed or expectorated.

Physical Signs. The most important are clearness on percussion over the chest, or on the posterior part of both lungs; this may in some instances be diminished especially where the ramifications are involved constituting capillary bronchitis.



Under these circumstances it is
hard to distinguish it from
Pneumonia. In the first stage
the dry and sibilant ronchus
or rales are heard, it depends
upon a diminution in calibre,
or constriction of the tubes;
also upon inflammatory thickening
& exudation into them.
After the moist or mucous
rales are heard intermingled
with the dry. The vesicular
murmur is in most instances
heard but it may be ab-
-sent, especially when the minute
tubes are involved or where
a plug of mucus interrupts
the passage of air through



the bronchi. This may some-
times be mistaken for con-
solidation. but when such
doubts exist, they can be dis-
-pelled by resorting to percussion
when the sonority of the
chest will be found not
to have been diminished.
Collapse may in some instan-
-ces take place thus giving
rise to more or less dull-
-ness on percussion. The mucous
rales may be present from the
first, with a predominance
of the dry, but when exu-
-dation has taken place
the moist, rales are heard
more distinctly.

Diagnosis. The disease may be confounded with, Pleurisy & ~~Pneumonia~~, from the former it may be distinguished by the absence of the sharp lancinating pains & of dullness on percussion, & by absence of accelerated breathing, from Pneumonia by the absence of the crepitant and sub-crepitant rales characteristic of that disease, also of the dullness, we have not in bronchitis the characteristic brick dust sputa of Pneumonia - also by absence of bronchial respiration & quick respiration of Pneumonia,

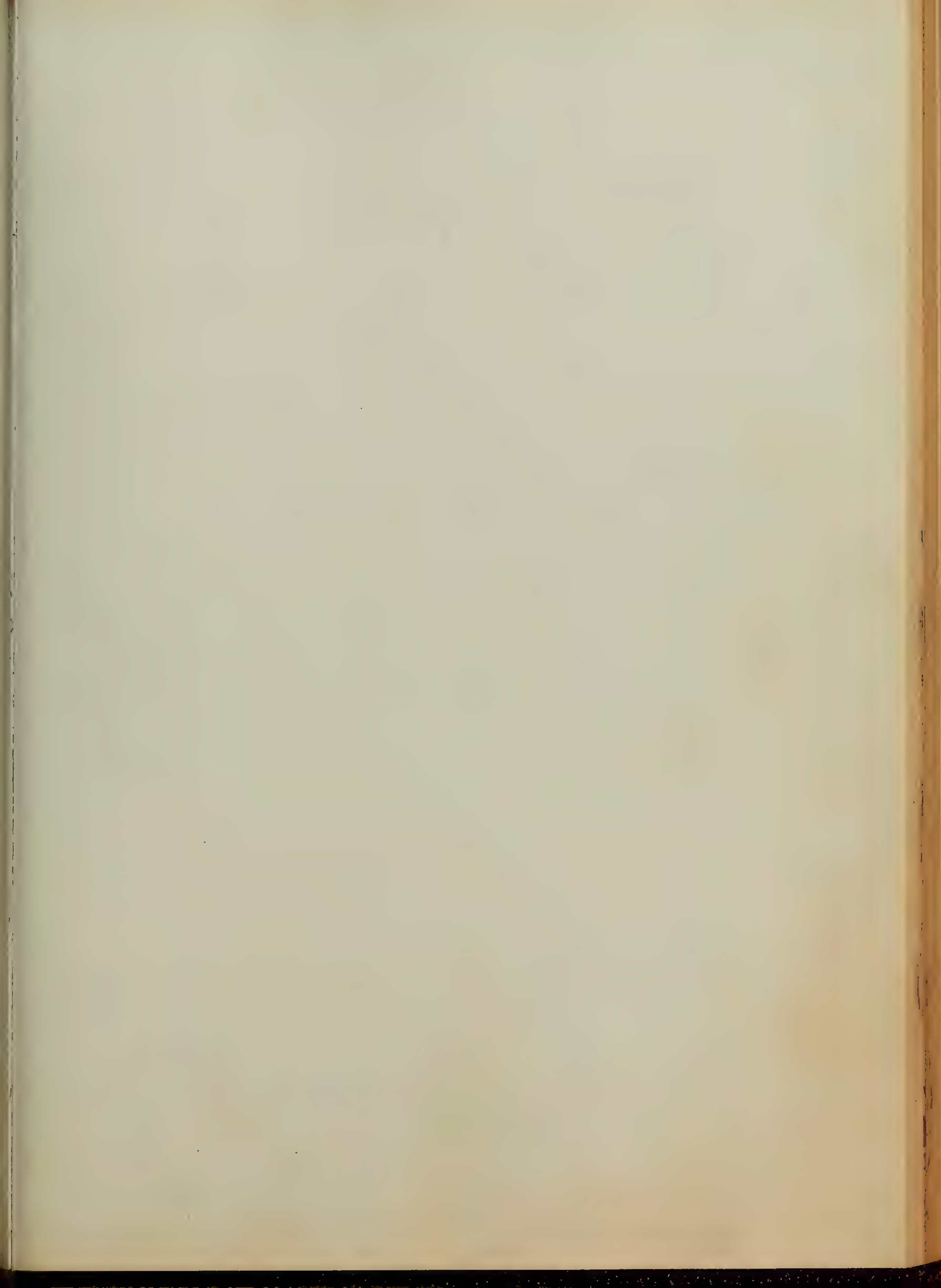
(10)

our chief reliance is placed in auscultation & percussion, and by skillful application of these means, we will be enabled to lay aside doubts & from these hidden caverns we may elicit truths, which may not only allay the fears and anxiety of our patients, but by correct discrimination & judgement may lay the foundation for our future success as medical practitioners. Perhaps I am laying unnecessary stress upon what is not a evident malady, but

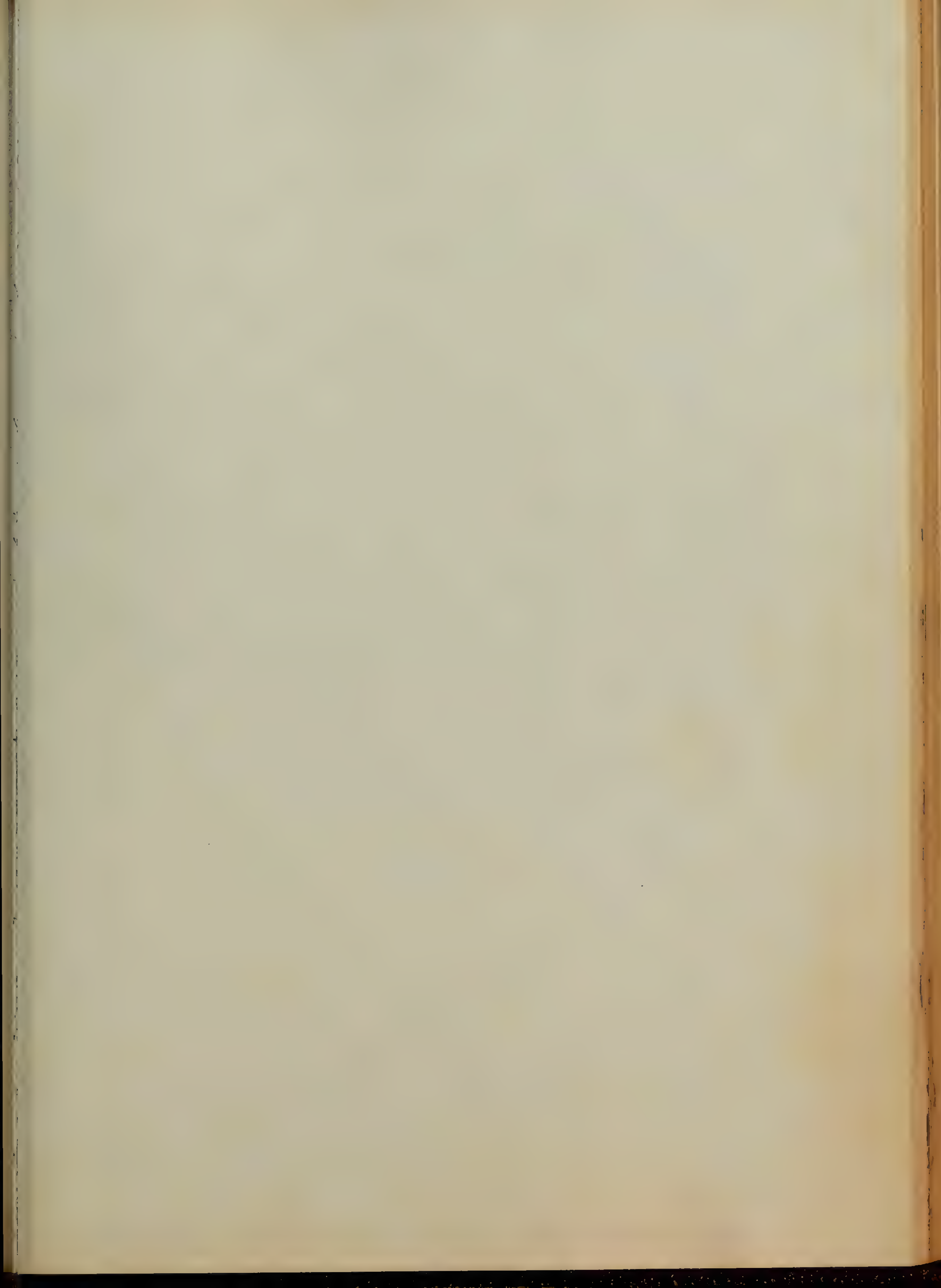
... tumor of the hove you

-ted us that it is by "pay-
-ing attention to little things"
that makes the most suc-
cessful "Medical man."

Chronic Bronchitis, may occur
in a simple or severe and
more aggravated form, there may
be a slight cough with slight
mucus expectoration, which
may exist for a considerable
time; but will gradually
subside- During the summer
months the patient may
have a remission, which
will generally recur again
again in winter, the cough
may be so severe as to
excite the solicitude of



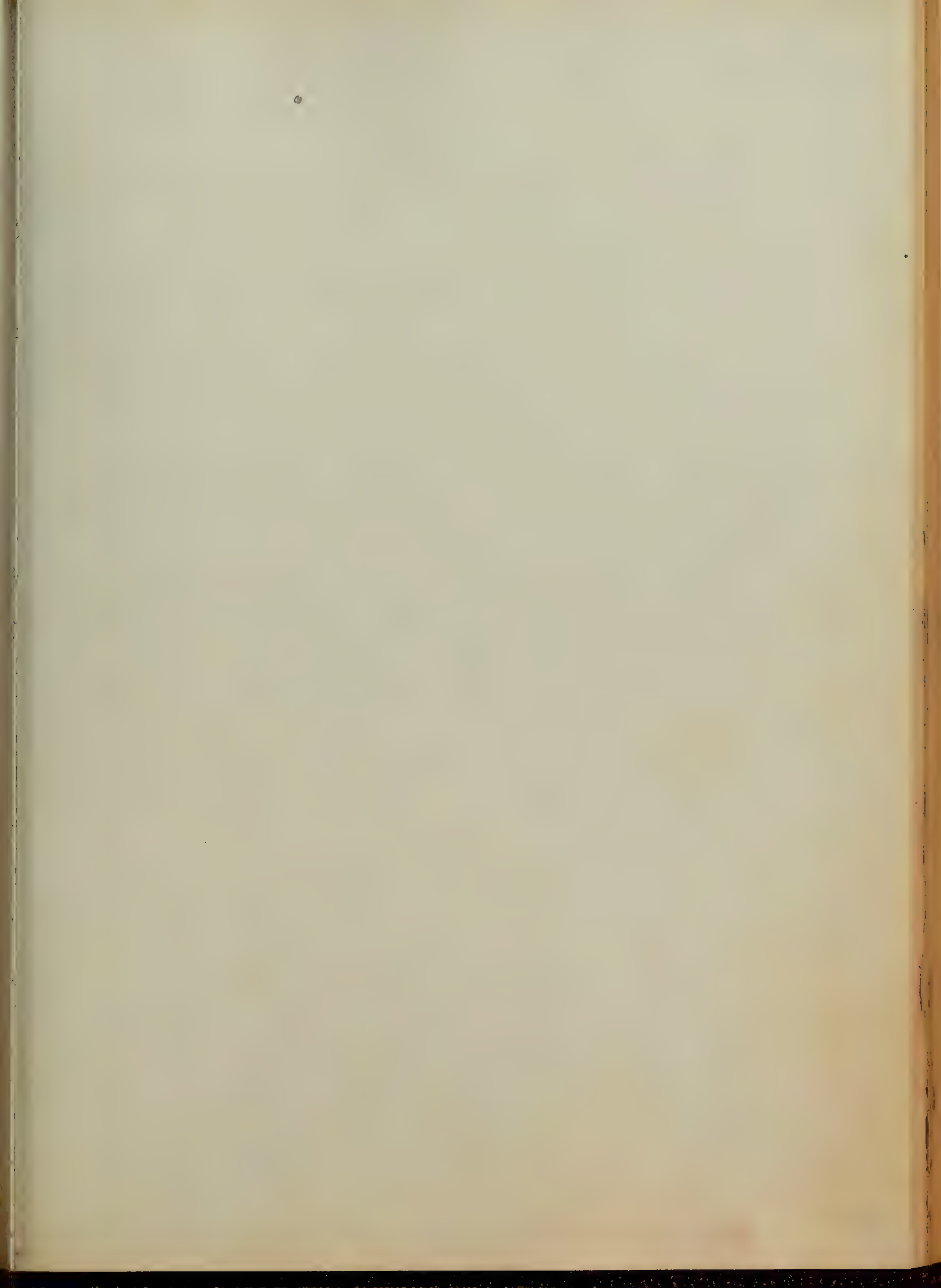
of the patient In the more
severe forms the sputa may
be of a yellowish or greenish
color, is tenacious & occasionally
tinged with blood, in the
morning the cough is generally
more severe, dyspnea is oc-
casioned by least exertion
In some cases night sweats -
emaciation - & in its most
violent form may closely
assimilate "lysis" & unless
patient is relieved by proper
treatment exhaustion of the vital forces
will take place, which will
eventually cause death especi-
-ally where the patient is already in
a debilitated & depressed state of health



Physical Signs — [illegible] with sibilant rales are heard in different parts of the chest. It is only by the physical signs that we are enabled to distinguish it from "Phthisis" but when the signs indicative of a cavity are wanting and when there is copious purulent expectoration it is very apt to be bronchitis. The bronchial tubes may be enlarged & contain pus then leading to some difficulty in diagnosis.

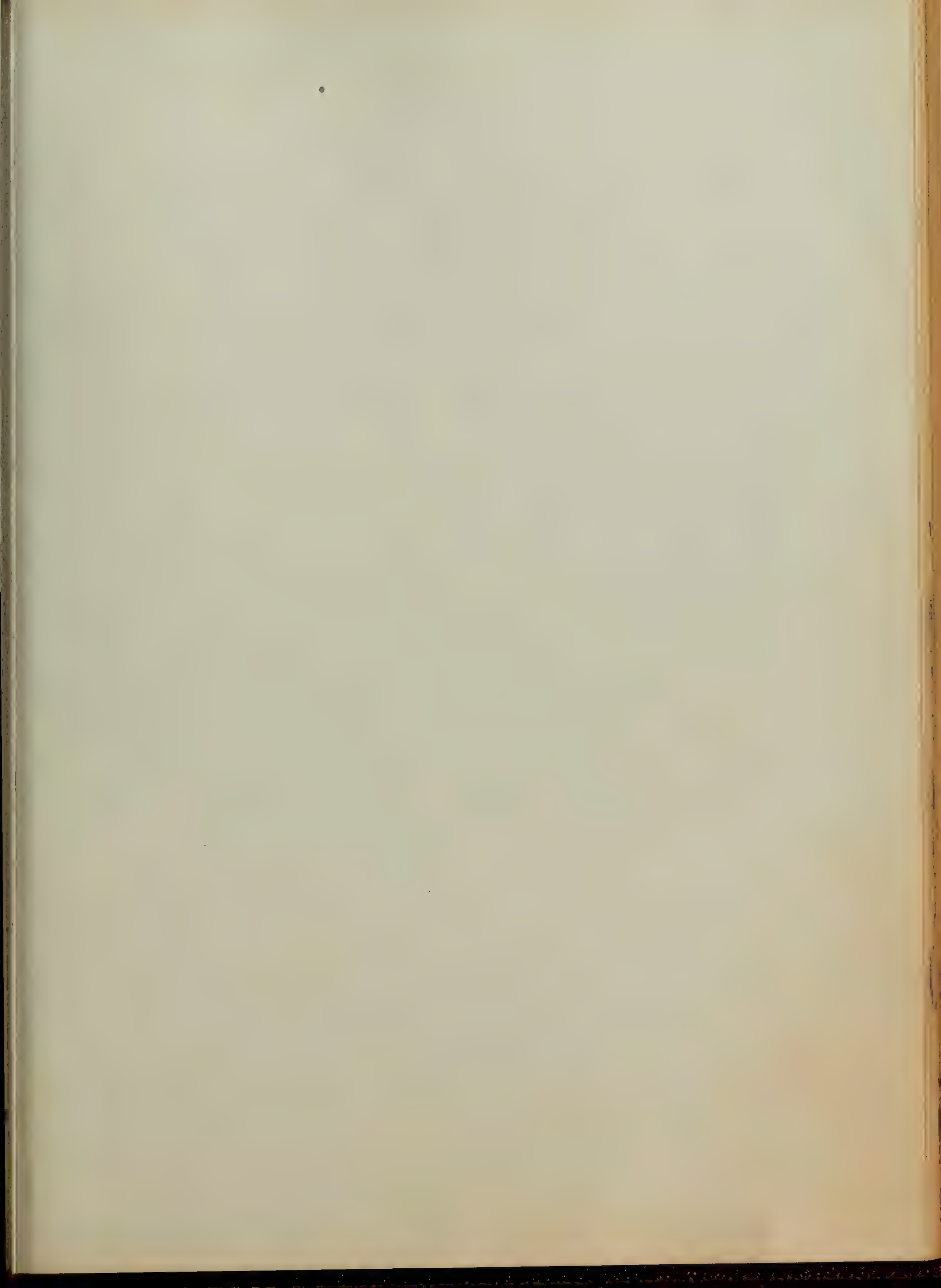
Anatomical Lesions:

The lining mucous membrane is thickened and



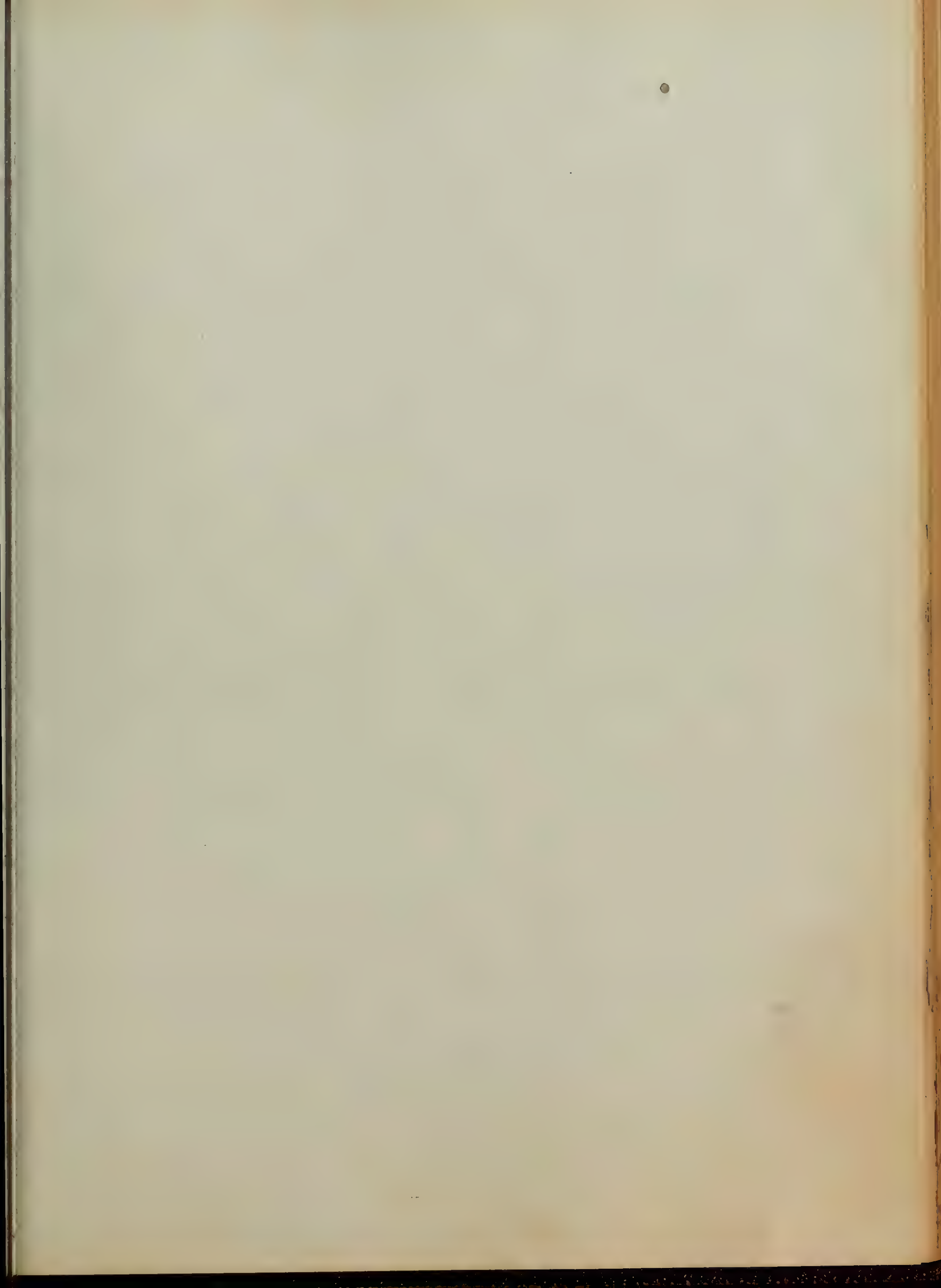
indurated. Softening of the
tissue is seldom found. In
some cases it is of a deep
red and sometimes of a
greyish or whitish hue, and
generally lined with mucus
or pus. The bronchial glands
are enlarged and softened.
The tubes are sometimes
found to be dilated both
the large and small ones
but the enlargement is gen-
erally local; Constriction of
the tubes are almost al-
-ways found from thickening.
Emphysema of lung is al-
most always found in fa-
tal cases of Chronic bronchitis

Causes:- Undoubtedly cold is the most frequent cause of bronchitis, especially when the patients subject them-selves to a sudden draught of wind after becoming overheated by violent ex-ercise, or from sudden change from a warm to a cold room, the frequent alter-nation of temperature char-acteristic of temperate cli-mates. It most frequently occurs during the winter and spring, but it may occur in the summer. Other causes are peculiar inhalations of an acrid

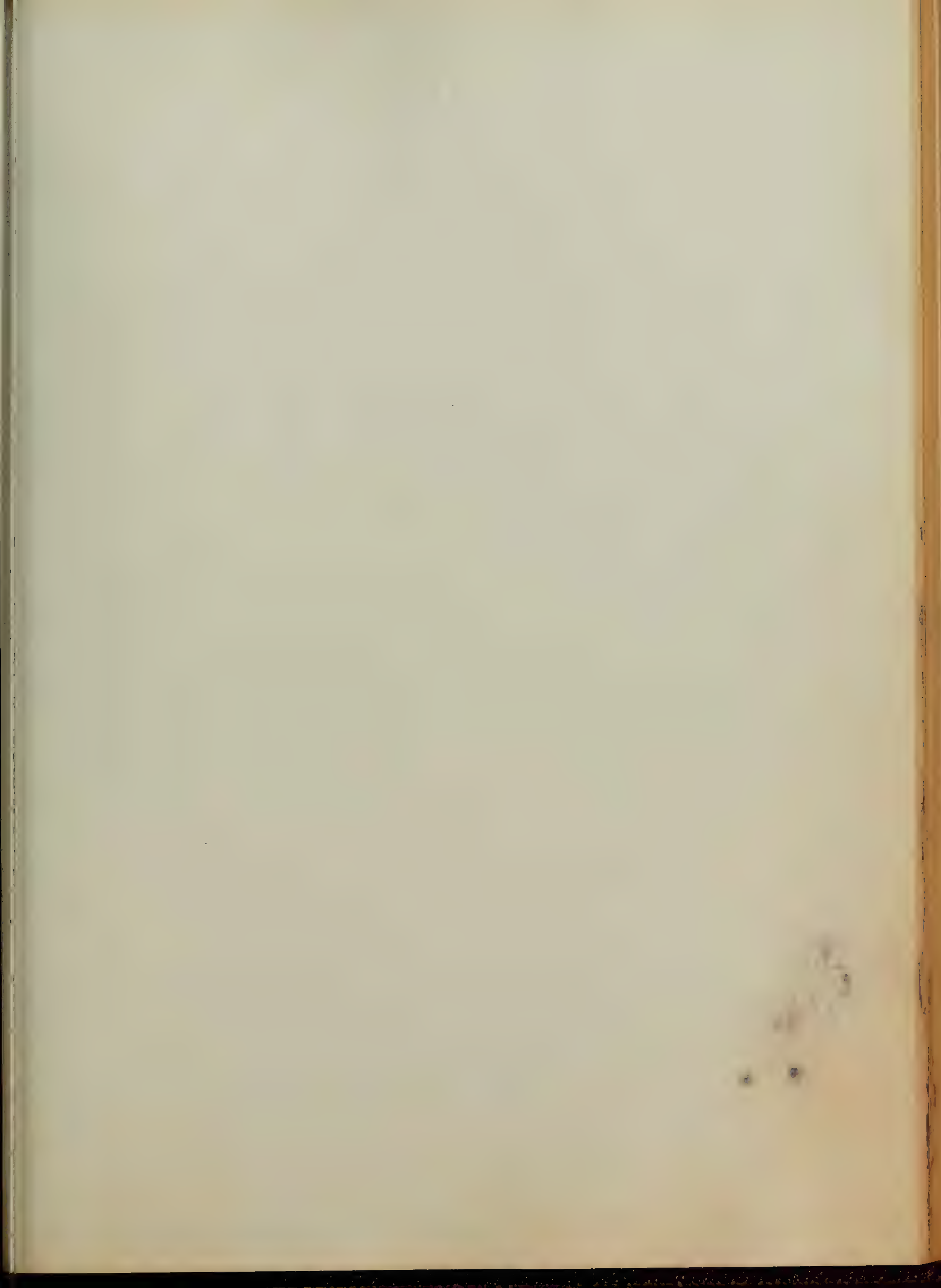


or irritating character. It
sometimes occurs periodically,
also coincident with other
diseases as Scarlatina, Measles,
[illegible], typhoid fever, [illegible]
&c &c. — — —

Prognosis of Bronchitis:
The acute state is seldom
fatal except when it occurs
in old persons and in those
debilitated by previous disease
who have not sufficient strength
to throw off the accumula-
-tion in the bronchial tubes
and very often sudden
death will occur from
this cause. Where the inflam-
-ation is [illegible] with a [illegible]



frequent pulse, high fever and great dyspnoea, and especially when this occurs in the younger or older classes, it is dangerous, the danger is from the nervous shock to the system, and from the interference of due access of air to the lungs, thus giving rise to imperfect aeration of the blood. The blood thus supplying the different functions being impoverished, the vital powers give way & the patient may die in coma, delirium or convulsions, [illegible] [illegible] is in its worst form



is a dangerous affection
and it may be prolonged
for a great many years.
It generally produces debility
and this may cause death,
or the patient may die
from a supervention of heart
disease, of which bronchitis is
an accompaniment, or they may
die from an attack of
spasmodic astma:— —

Treatment of acute form:

In the mildest Cases, Ut-
then no treatment is
necessary (patient may be
Confined to his room 2 or
three days, so as to prevent
exposure, & persistence of the dis-

In the early stage of the acute form, where the patient is plethoric, and where the pulse is high with more or less congestion of the respiratory organs, blood may be taken by cups and leeches, depletion by saline cathartics and reduced diet. Diaphoresis may be induced, to relieve the inflamed membrane and for this purpose small doses of [illegible] & Tart. antimony may be given. Demulcent drinks may be given. if there is much fever with the other symptoms the patient might take a warm bath or pediluvia, and

and immediately wrap up warm, he may take the Neutral Mixture or Acetate Ammonia every two or three hours, or what may be still better where there is considerable fever they may take a Nitrous powder every three or four hours until the febrile symptoms have somewhat abated. These remedies should be used in first stage before secretion of mucus has taken place, ... there in an apartment is very benificial. The fumes of tar or of Iron put in water + boiled so as to allow the fumes to escape.

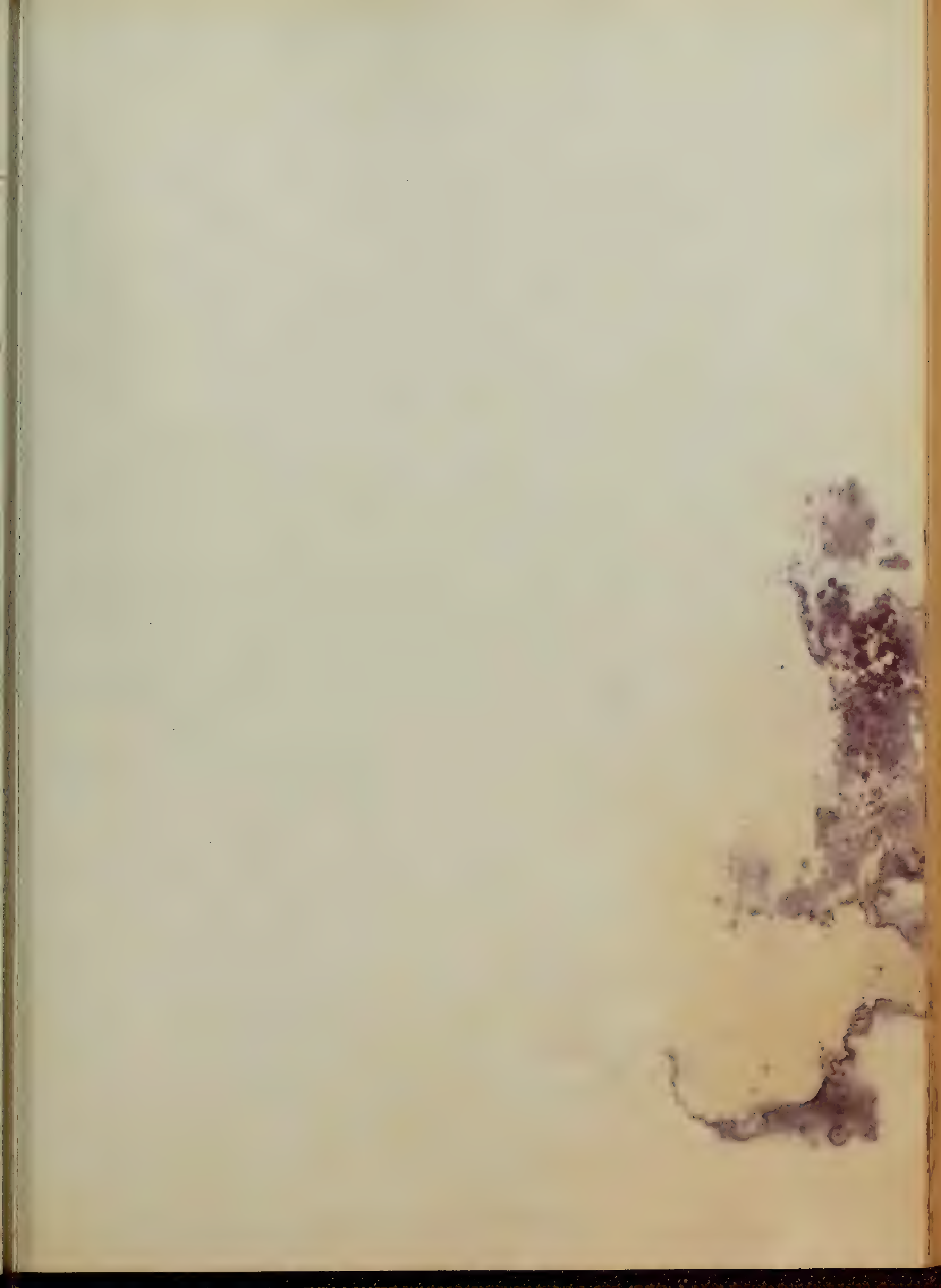
Opium is only useful in the second stage when the cough is out of proportion to the expectoration, to allay irritating cough one of the best remedies is opium either in the form of "Dovers powder" or Sulph Morphia, Inhalation of Water Spray &c, Compresses to breast, liniments, in capillary bronchitis of children blood letting and emetics should be used. Tonics are required when the disease lingers & has a tendency to break down the system, also good diet and warm flannel clothing

Some of the best remedies that favor expectoration are Squills or Seneka, where the Cough is violent accompanied with restlessness and loss of sleep, some of the best remedies, are Opium Hydrocyanic acid, Hyoscyamus. A very good Cough Mixture given by one of my learned professors, is as follows:—

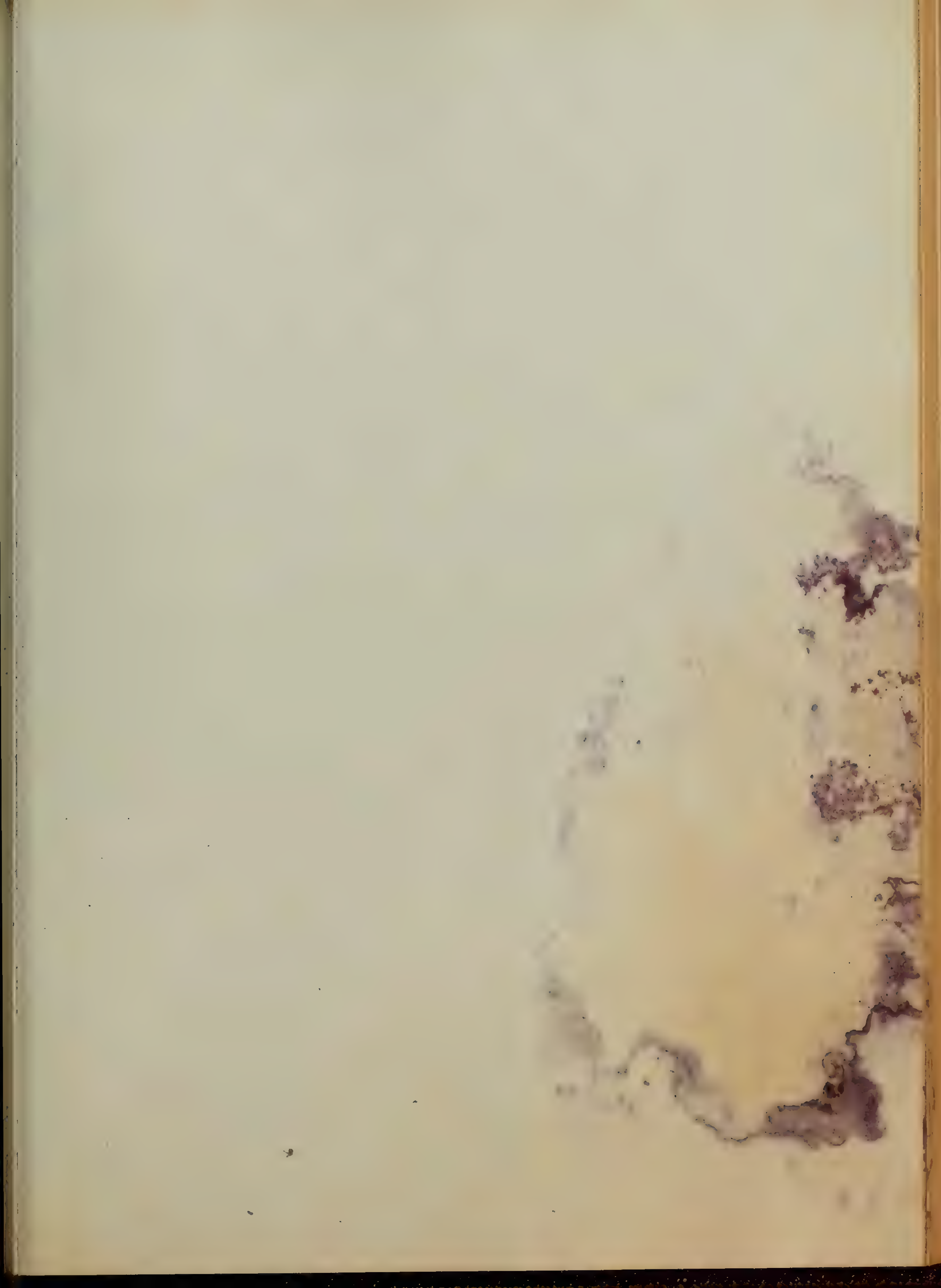
℞

Chlo. Potass ℥iss
Syr. Prun. Virg. ℥ij
Syr. Scillae ℥ij
Sulph. Morph. grs. ij
Acid Hydrocyanic gtt. xxv

M. ʒj ter die.



In treatment of chronic form, Expectorants are the chief agents, such as ipecac Squills Seneka &c. &c.
When there is tightness of breast with want of bronchial secretion, you may give some of the antispasmodics. Belladona Hydrocyanic acid, Conium. Camphor is also found to be useful, the constitution should not be allowed to suffer, but, should be fortified by tonics food diet &c. &c.
Cod liver oil has been highly recommended, as it



will allay Cough, promote Expectoration, and act as a nutrient and tonic to the whole system,

Frictions to the Chest are sometimes useful with Liniments, the patient may wear a plaster over the chest as Burgundy pitch &c. which will in a manner protect the chest from cold and also act as a mild irritant. Tonics may be used, as Iron Quinia, and Inf. wild cherry bark is a very soothing agent in irritating Coughs — — [illegible] clothing with flannel to skin [illegible] [illegible] beneficial.

1875

An

Inaugural Dissertation

on

Intermittent Fever

Submitted to the examination

of the

Provost, Regents & Faculty of Physic

of the

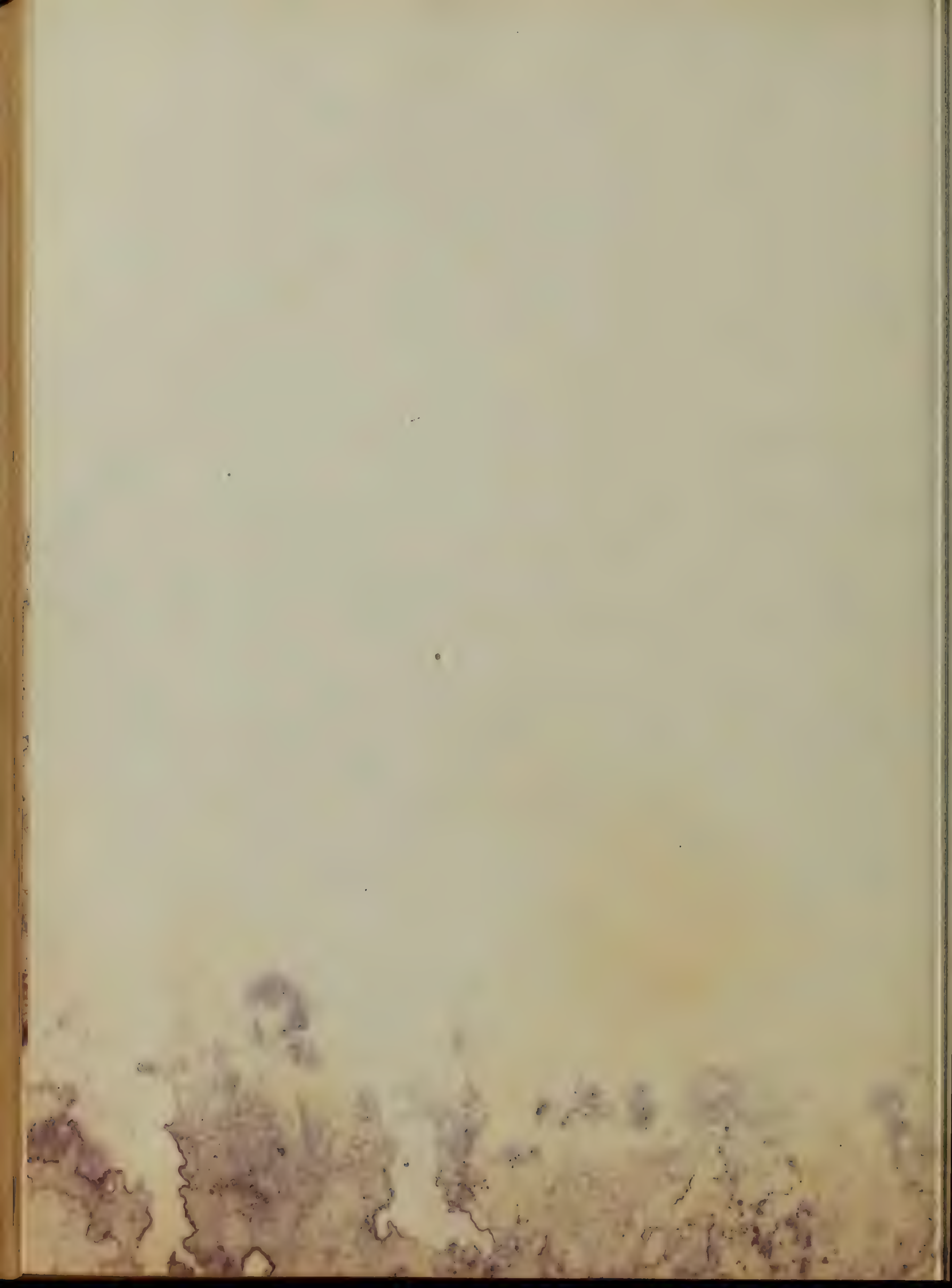
University of Maryland

for the

Degree of Doctor of Medicine

by

William [illegible] Colli[illegible]



[illegible]

This is a fever consisting of paroxysms with a state of apyrexia in the intervals. The disease is known as fever and ague, chill fever, the shakes and by names expressive of the locality in which it is prevalent as in the [illegible] States, Arkansas [illegible] [illegible]. The liver and spleen become enlarged, the system [illegible]. And there is present in the blood a dark [illegible]. Acidity [illegible]

unknown causes, which
are characteristic of this [illegible]
[illegible]
The [illegible]
very sudden with a chill, b[illegible]
sometimes the chill comes
on gradually. The patient
begins to feel badly for
one or two days, with dull,
aching pains in the back
and limbs and also yawning,
with a general disposition
to [illegible] and a loss of [illegible].
The [illegible]
then [illegible]
the [illegible], the [illegible] and [illegible]

sweating stage. The cold
stage com[illegible]
a creeping sensation of
chilliness extending all
over the back and limbs.
The chill is more or less
intense. During the stage
frequently the teeth chatter
and the movements of the
body and limbs sometimes
are sufficient to shake the
bed in which the pati-
ent lies. During the stage
the patient frequently [illegible]
The pulse which is usually
accelerated is small and [illegible]

[illegible]

[illegible]

[illegible]

also the [illegible]

[illegible]

of the heat is present. The

stage [illegible] by the

[illegible]

The change to the [illegible] stage

comes on gradually, flushes

of heat are felt over the face

[illegible]

and the fever begins to disappear

and the cold stage ends.

The cold stage is [illegible]

frequently [illegible]

the pressure [illegible]
pleura [illegible]
surrounding [illegible] and [illegible]
tability [illegible]
children [illegible]
ty came in the [illegible].
Congestion of the [illegible]
organs [illegible]
[illegible]
[illegible]
cold stage, because the [illegible]
of blood is not dimi[illegible]
hot stage is characterized by
[illegible]
[illegible]
[illegible]

[illegible] and full [illegible]
[illegible]
[illegible]
[illegible]
[illegible]
usually to 105 to 106 Fa[illegible]
There is great thirst but some-
times stupor and even coma
[illegible]
[illegible]
high colored, the bowels are
generally cost[illegible]
lasts from three to eight h[illegible]
and the [illegible]
stage. Sweating stage [illegible]
Perspiration [illegible]

[illegible]

indicates a [illegible]

[illegible]

body and the [illegible]

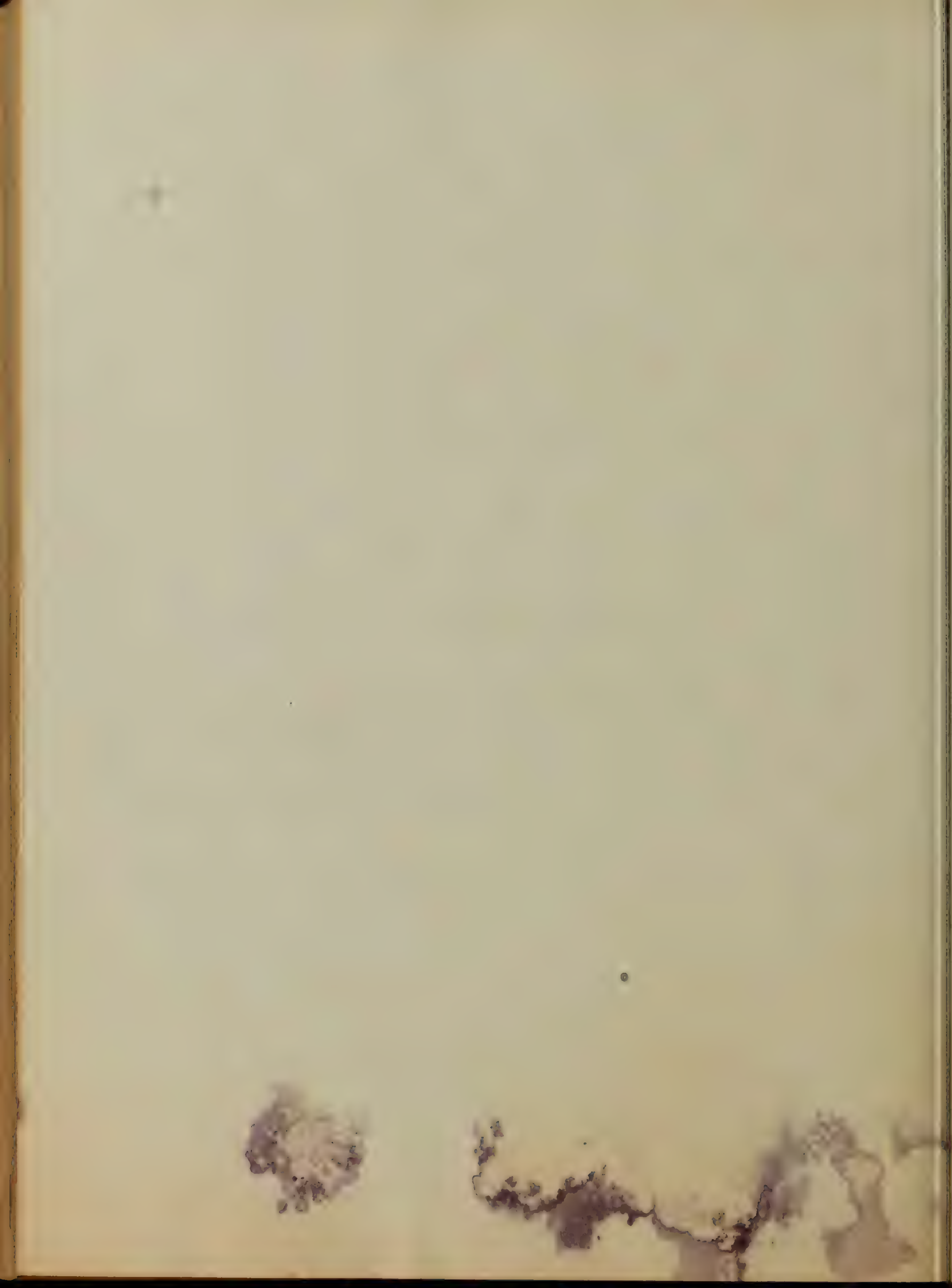
[illegible] and that [illegible]

the patient, for after the [illegible]

[illegible]

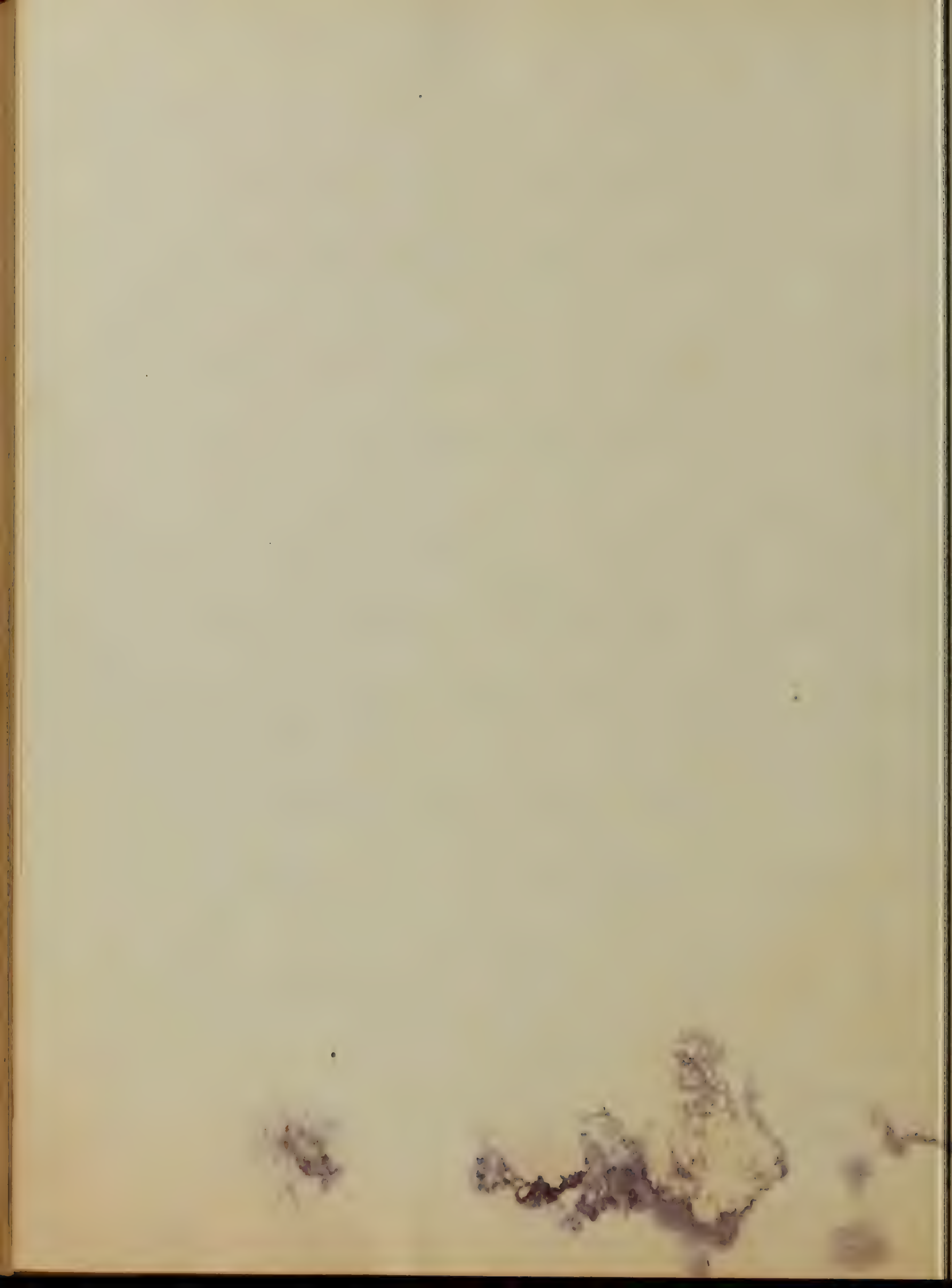
[illegible] same [illegible]

patient appears to have no
symptoms of the disease other
than having a slight un-
pleasant taste in his mouth
and feels debilitated.
Intermission is the space of
time between the two paroxysms.
There are three types of simple
intermittent fever viz the quotidi-
an, tertian, and quartan type.
The paroxysm occurs every day
in the quotidian type. In the
tertian type the paroxysm
comes on about every forty
eight hours or occurs on the
third day. [illegible]



[illegible]
fourth day. Of the th[illegible]
before the quartan [illegible]
on the 2d [illegible].
During the inter[illegible] in [illegible]
[illegible] a great difference in dif[illegible]-
cases. Some persons are [illegible]
from ailments than [illegible].
The appetite and [illegible]
good in some, while [illegible]
other hand, the appetite [illegible]
digestion are very [illegible]
impaired in [illegible]
marked prostration. [illegible]
the spleen is enlarged, so the
[illegible]

is [illegible] to be [illegible]
and the face is pale when
the disease has lasted for [illegible]
time. The duration of the
disease is considerably [illegible]
in some than in others.
Sometimes it ends spontaneously
[illegible] after a few [illegible]
years but many cases last
for weeks or even months
unless arrested by some [illegible]
There is considerable [illegible]
between intermittent and
continued fever in regard
to the duration.
The [illegible] [illegible] form [illegible]

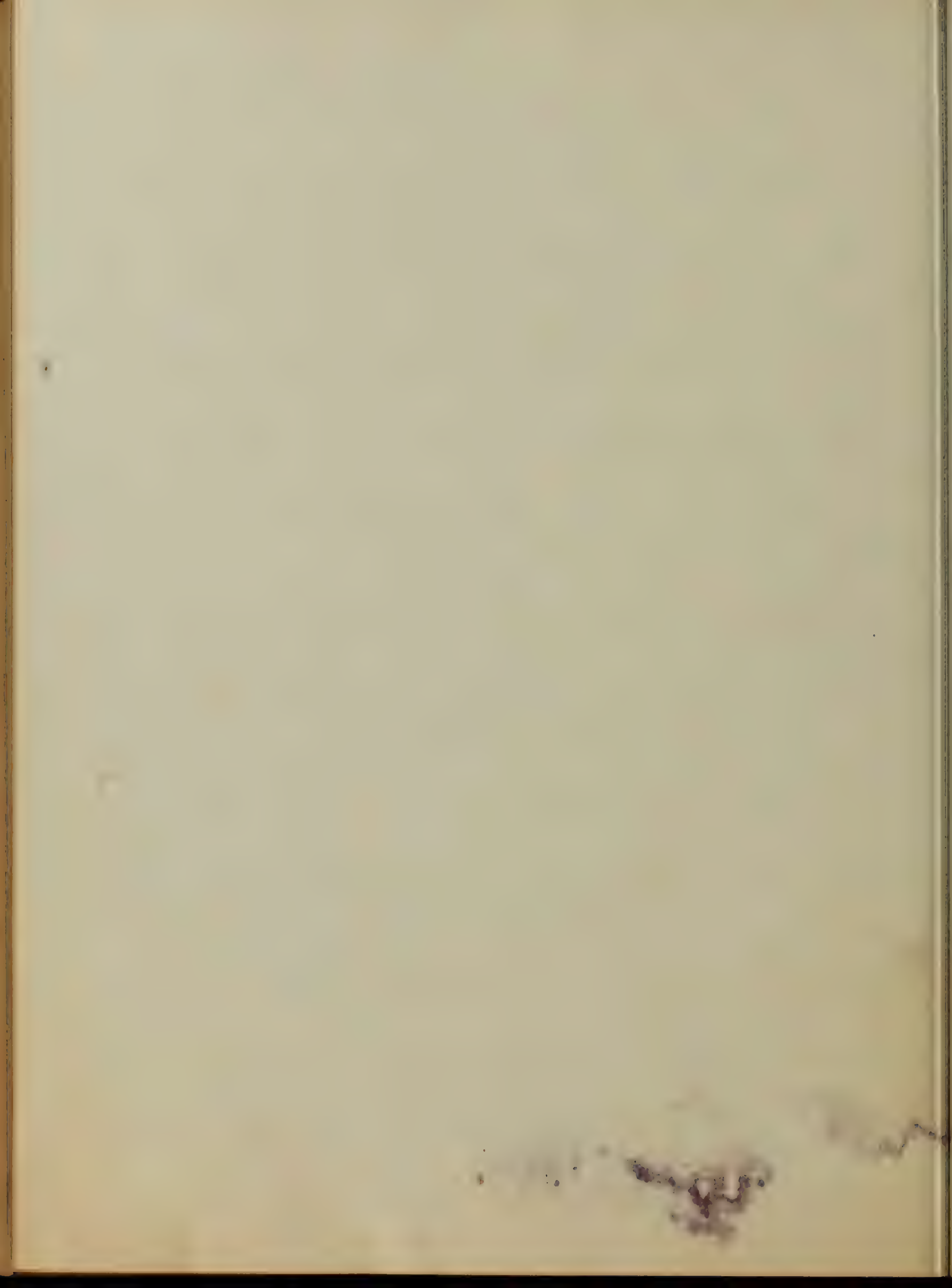


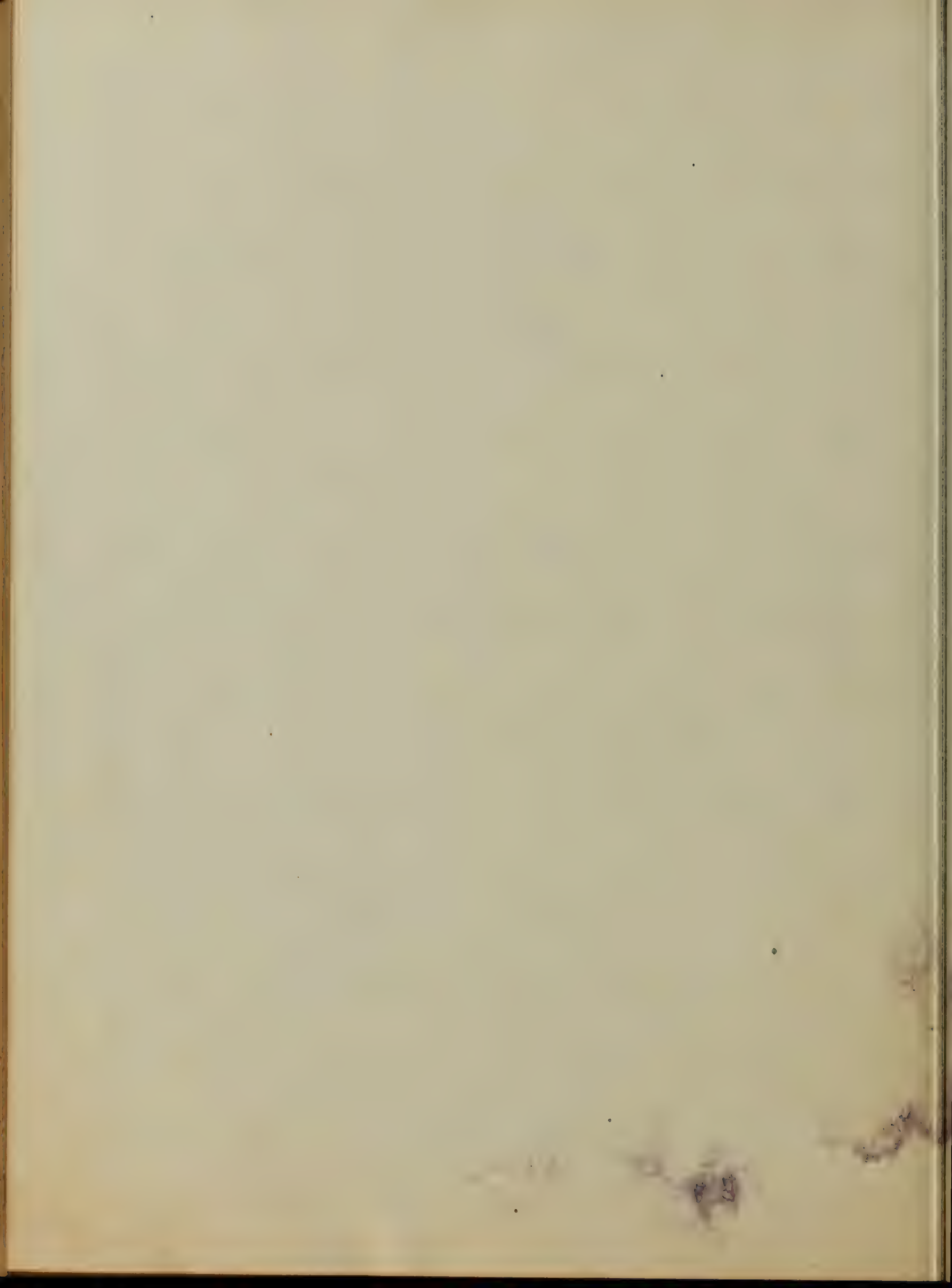
[illegible]

[illegible]

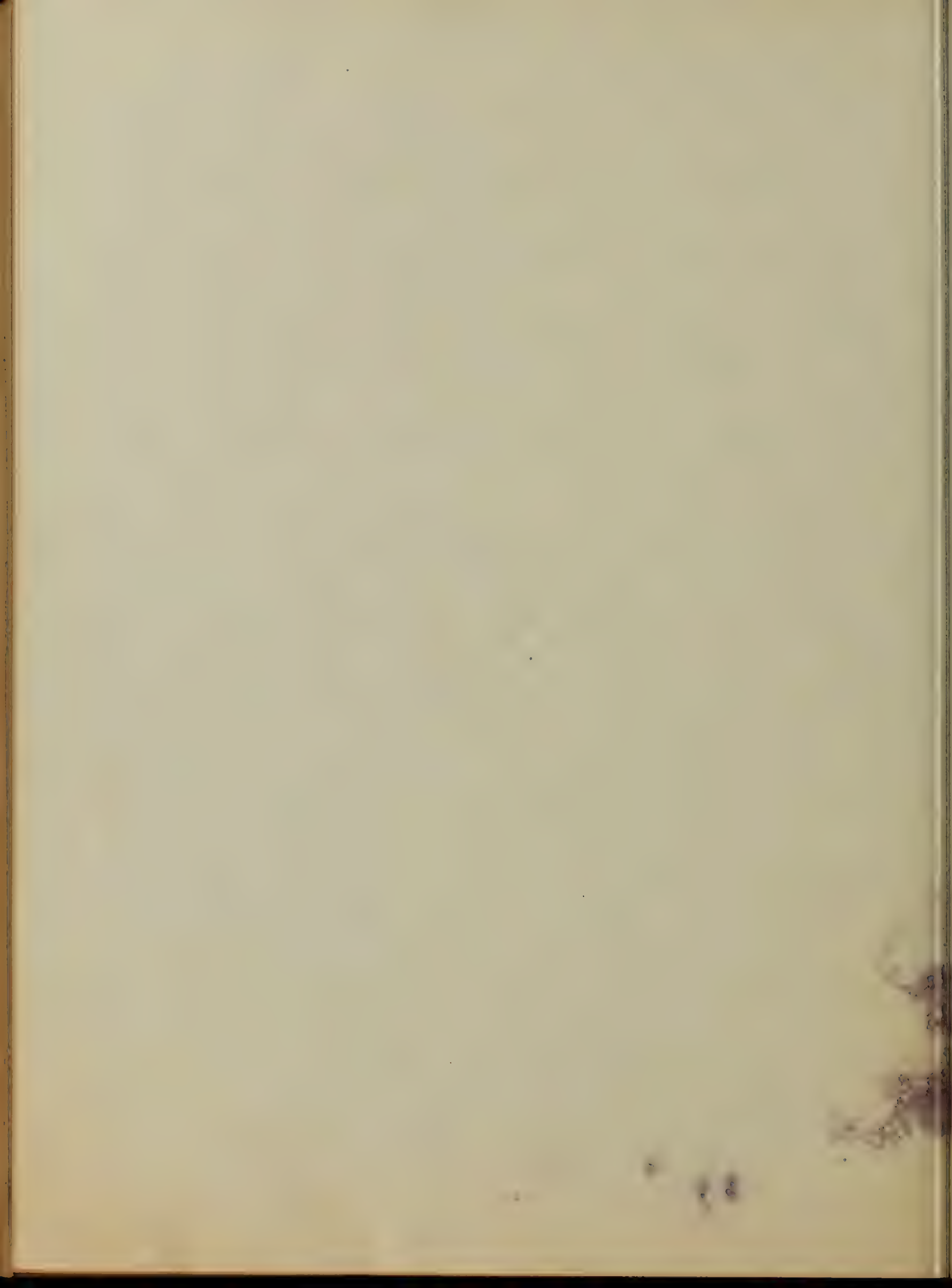
[illegible], and the [illegible] to a
relapse is more in intermitt-
than continued forms. Cause.
The same as of remittent.
May arise from a miasm or
any malarious poison. Heat
and moisture are generally
necessary for the development,
but sometimes it occurs in
winter even in cold weather
but the chills occur in spring
and fall mostly, [illegible]
[illegible] from diff[illegible] of
[illegible] the poison that

which [illegible] [illegible] [illegible]
[illegible] [illegible] from the [illegible]
and swamps, not only cause
it, but sometimes it [illegible]
its appearance in persons
that cannot account for the
cause unless it was
taken in the [illegible]
During [illegible] [illegible] fall of
spring [illegible] in the day [illegible]
in the morning [illegible] [illegible]
night [illegible] may [illegible]
being [illegible] [illegible] at a more
remote period. All ages are
liable to become affected
and in different localities,





[illegible] [illegible] [illegible] of
long [illegible] a [illegible] [illegible]
the [illegible] [illegible] [illegible]
and then the [illegible] will com-
mence with a severe headache
and pain in all of the
limbs and will complain
of [illegible] thirst and some-
times in the condition of stupor
[illegible] [illegible] [illegible] [illegible]
longer than the first stage
and ends in the sweating
stage with a [illegible] [illegible]
of the [illegible] [illegible], and
the patient falls into a deep
or refreshing [illegible] [illegible].



[illegible]

is slight the diagnosis i[illegible]

so easy, and we must [illegible]

for the action of the [illegible]

that has been given for it i[illegible]

simple intermittent it will

most sure to arrest the d[illegible]

Prognosis is favorable in ord[illegible]

or simple cases of intermitt[illegible]

fever. When the disease i[illegible]

be considered dangerous it [illegible]

[illegible] and [illegible]

simple intermittent fe[illegible]

[illegible]