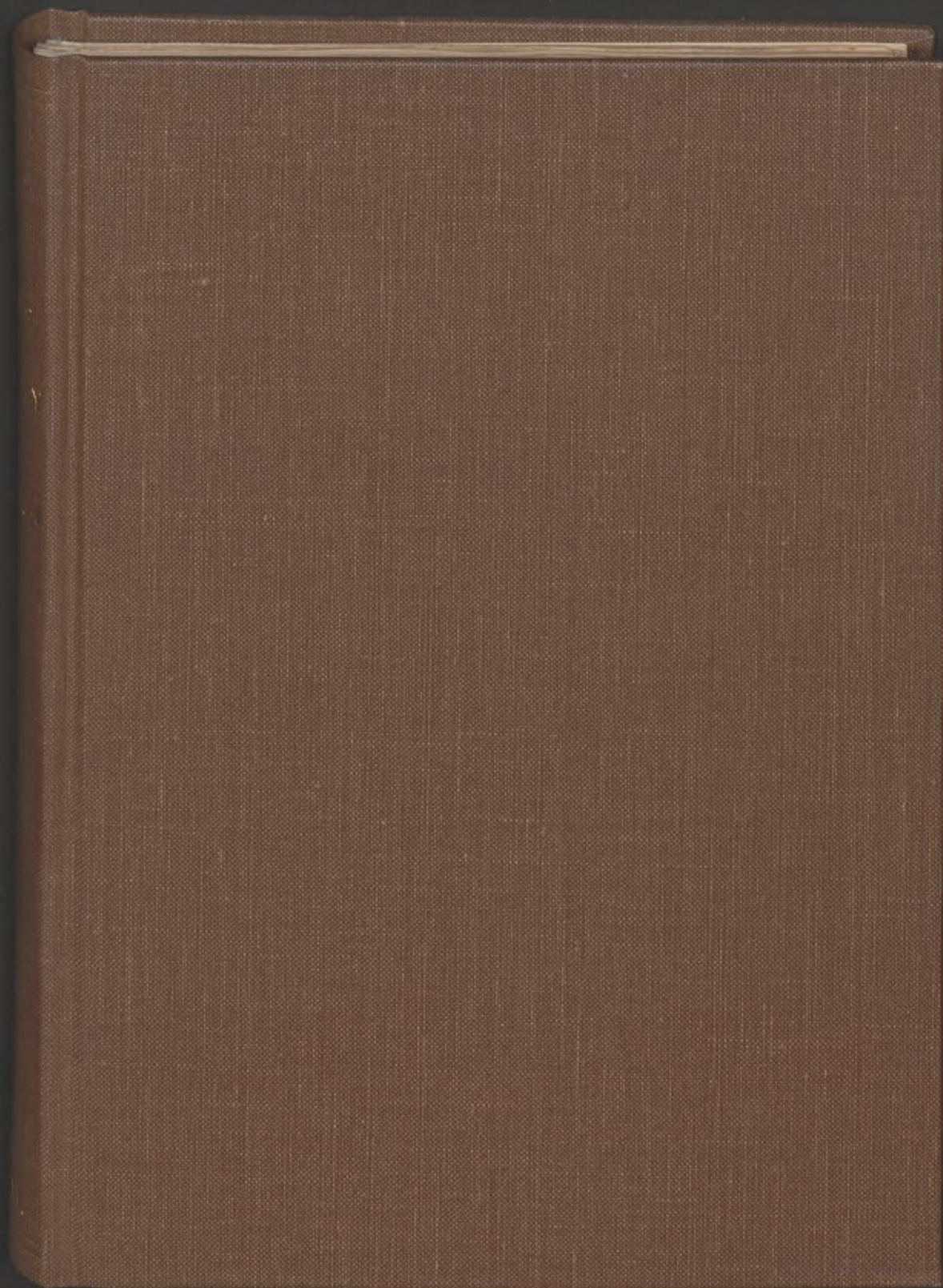




NATIONAL LIBRARY OF MEDICINE

Bethesda, Maryland

Westfield Atheneum,

WESTFIELD, MASS.

No. 791

Class 1

ABBREVIATED REGULATIONS.

Any person shall be entitled, under the regulations of the Atheneum, to the use of the Library and Reading-Room for one year upon payment of two dollars, and for six months upon payment of one dollar.

The books shall be divided into three classes:

1. Books of reference, which shall not be taken from the Library.
2. Books for circulation.
3. Magazines.

Two books only of the second class shall be drawn by one person at one time, and they shall be kept out only two weeks, but may be again drawn by the same person, unless they have been called for in the meantime, in which case they shall be retained in the Library two days for the applicant.

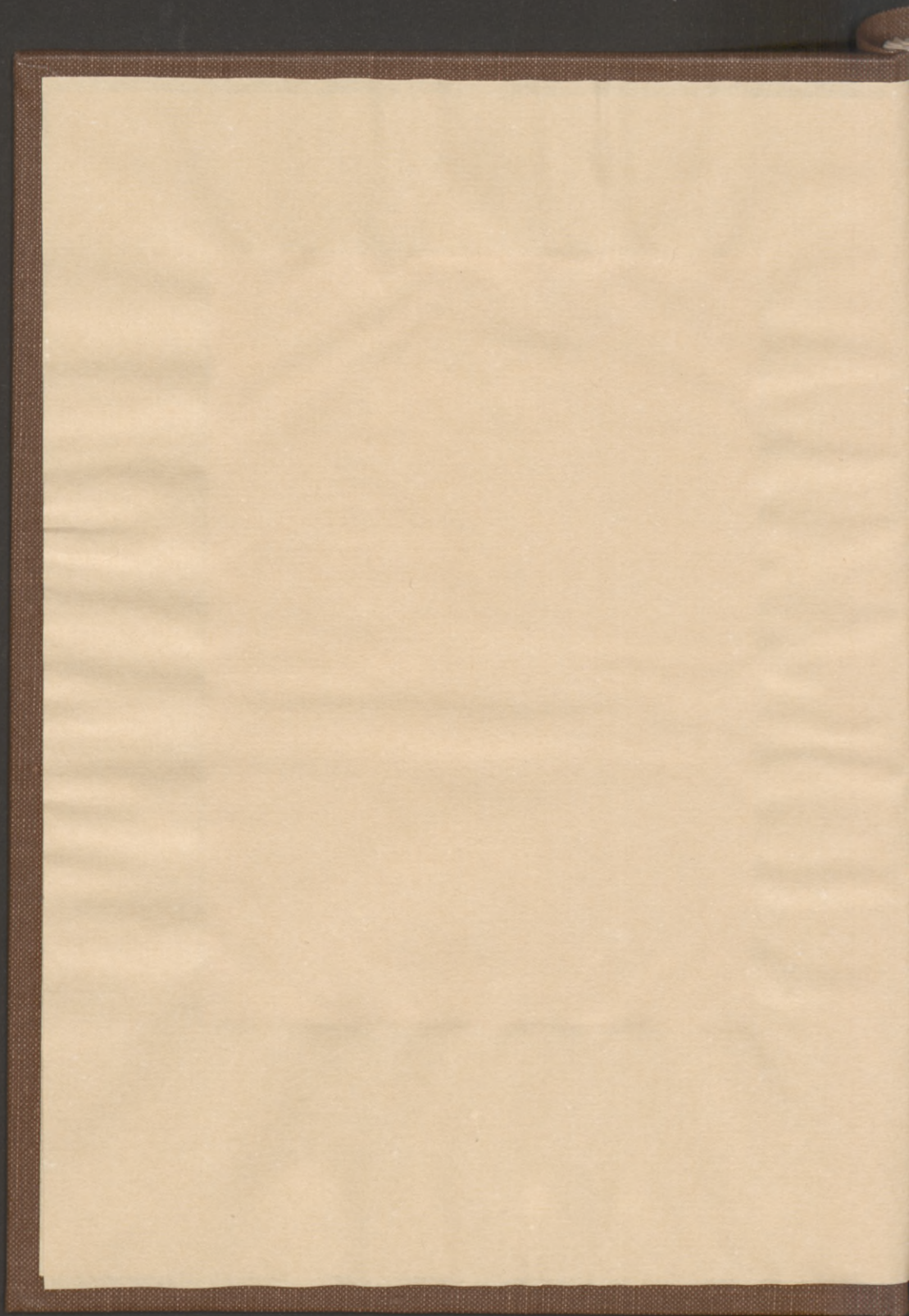
Magazines shall be kept in the Library for one month after they are received, after which time one magazine may be drawn by one person at a time until the expiration of three months after they are received, and thereafter they may be drawn under the same regulations as books of the second class.

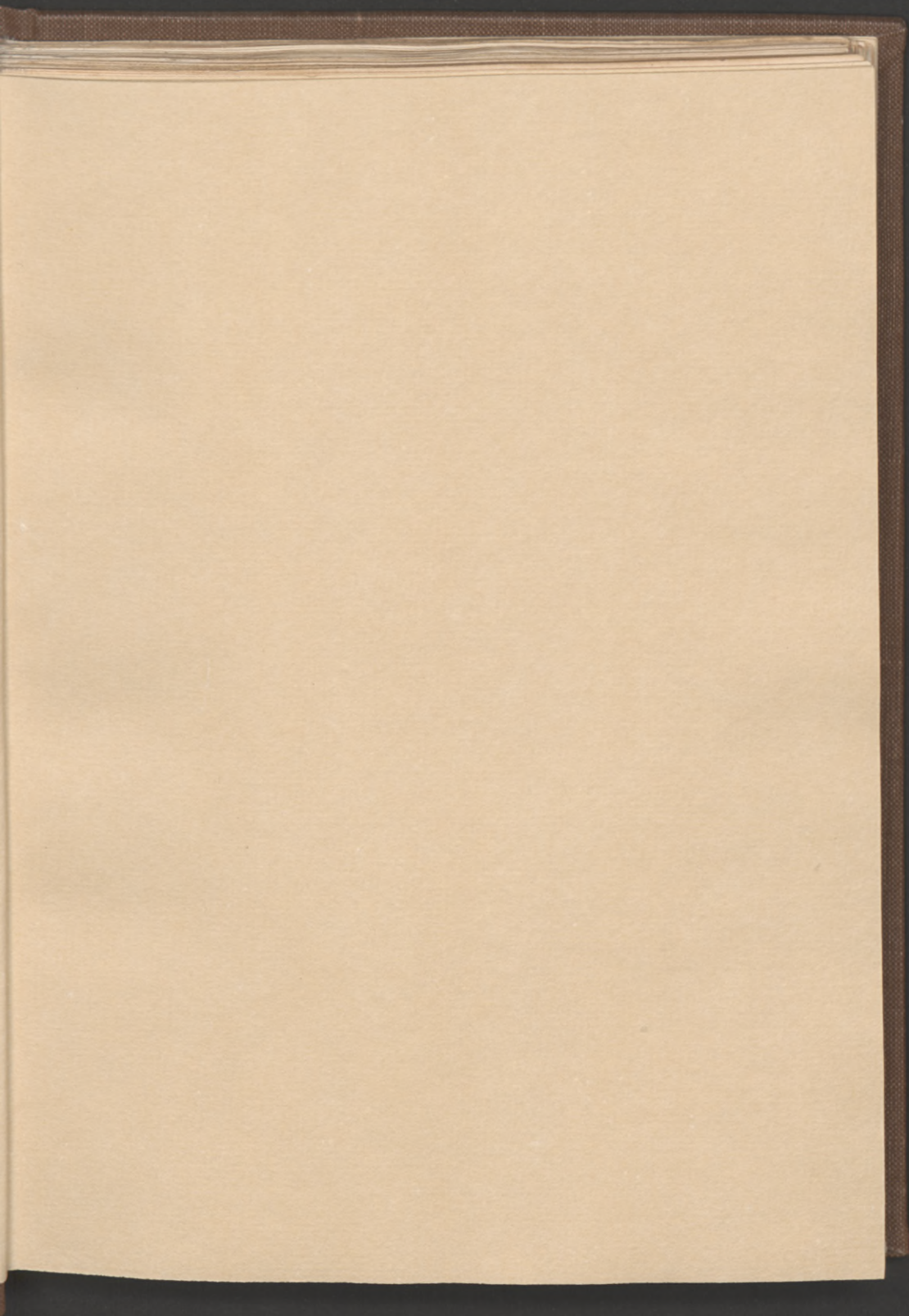
Every person drawing books shall be responsible for all loss or damage to such books while retained by him, and may be required to make a deposit as security against all such loss or damage.

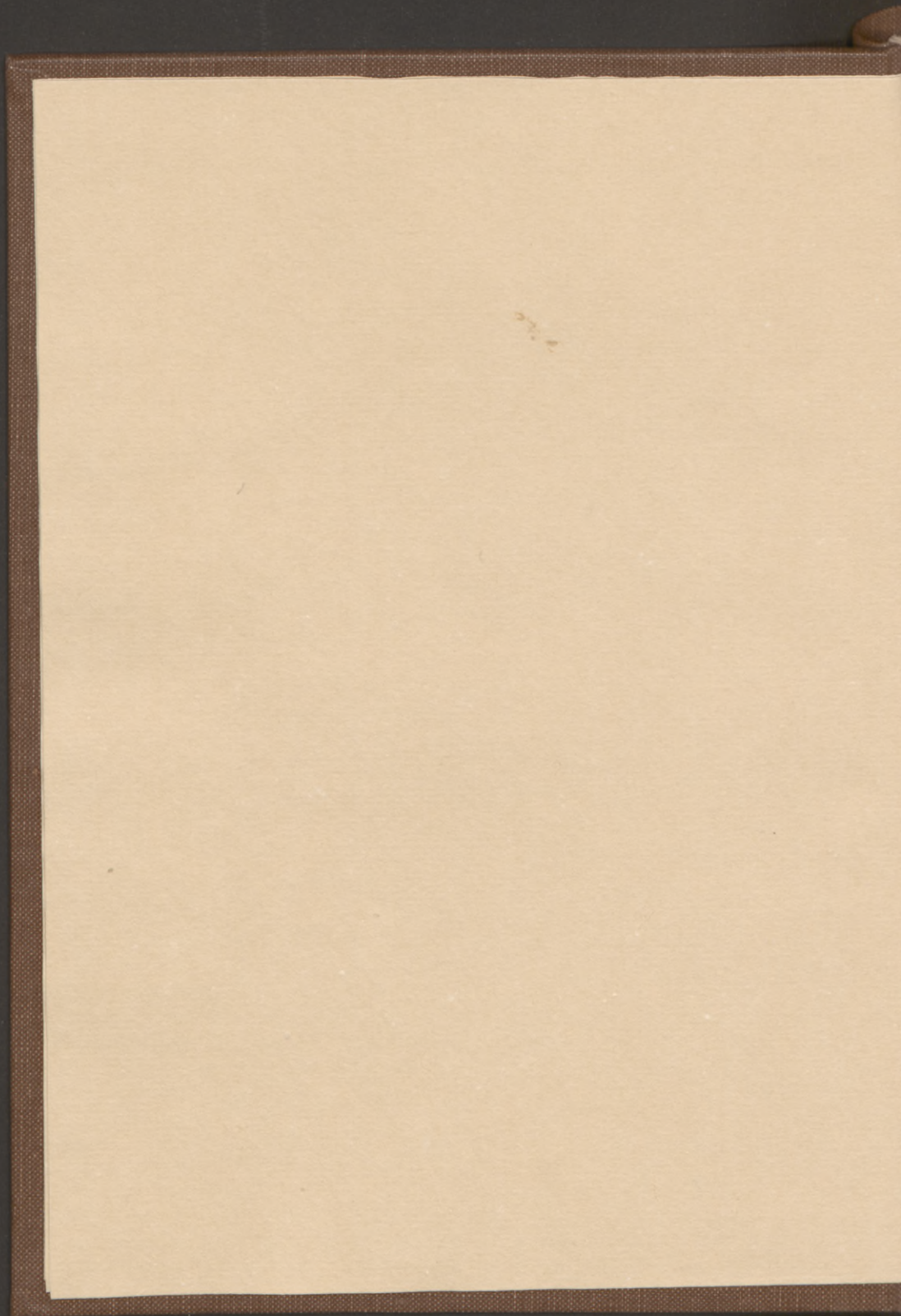
A fine of *two cents* per day shall be imposed for each book kept out over two weeks, which fines as well as all claims for loss of books or injury thereto, shall be paid by the person liable before any more books shall be issued to such person.

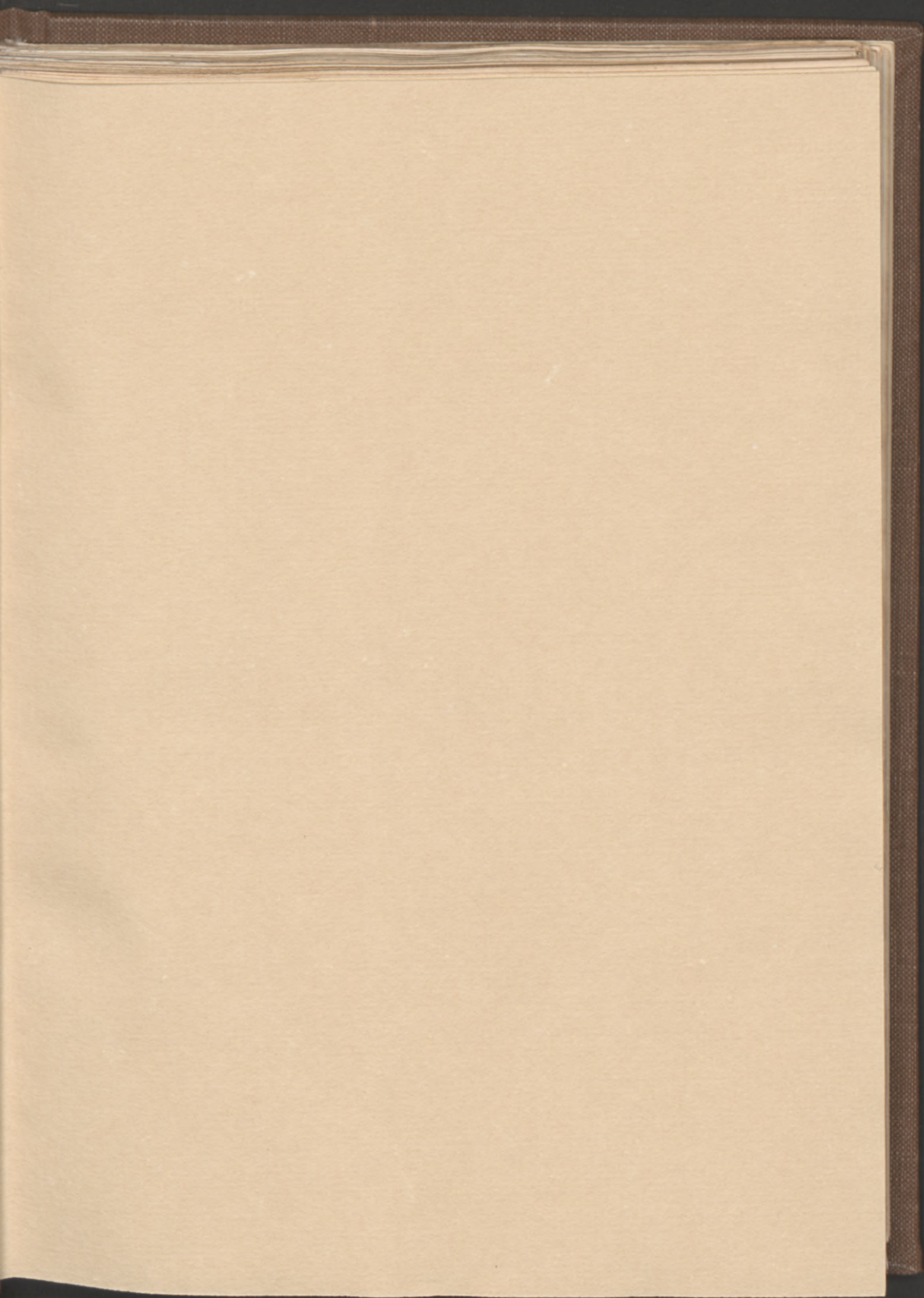
Every person before being permitted to draw books shall sign an obligation to abide by the regulations of the Library.

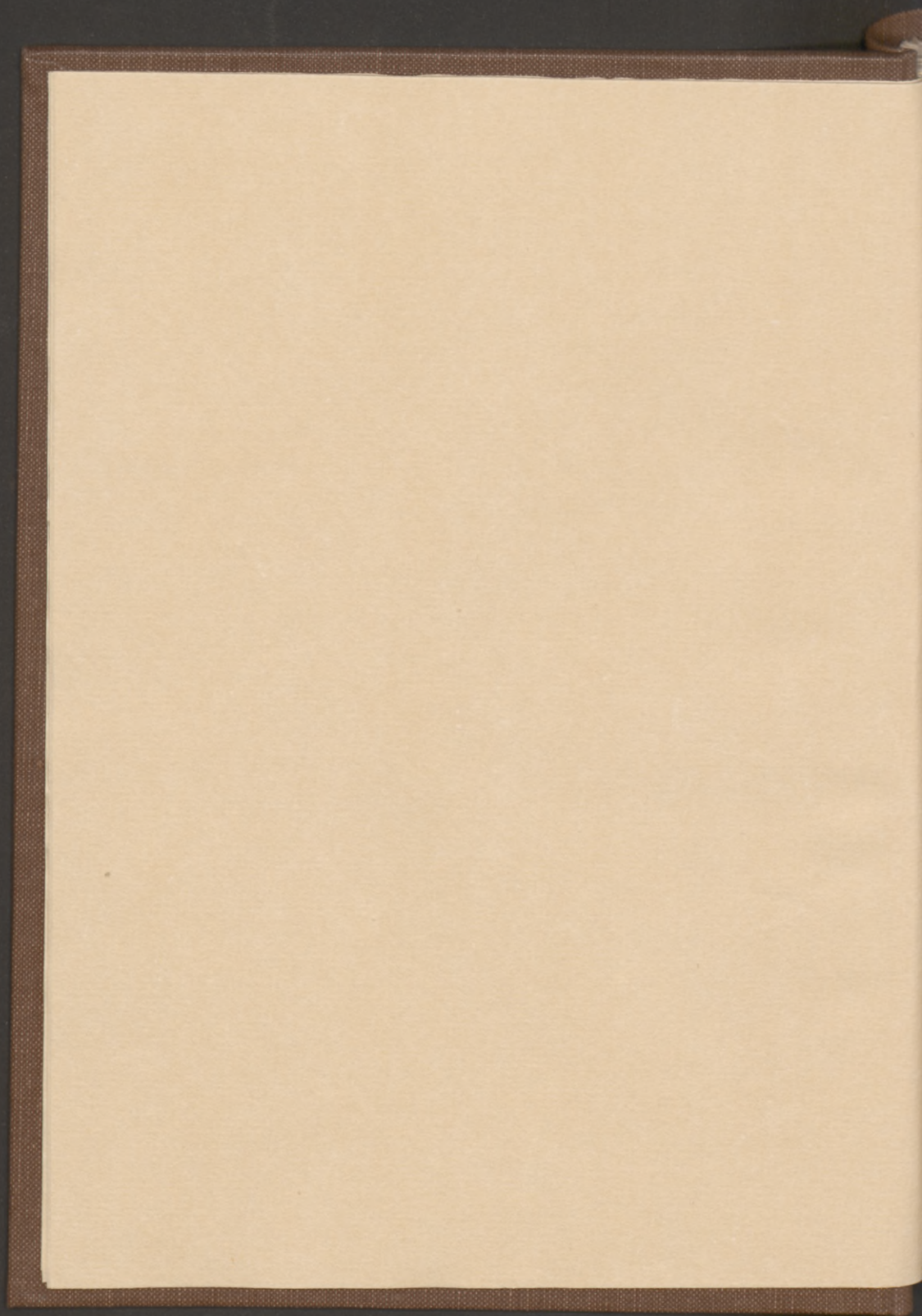
Every book taken from the Library shall be first presented to the Librarian to be charged, and when returned shall be again presented to him to be inspected and credited before it is restored to the shelves.

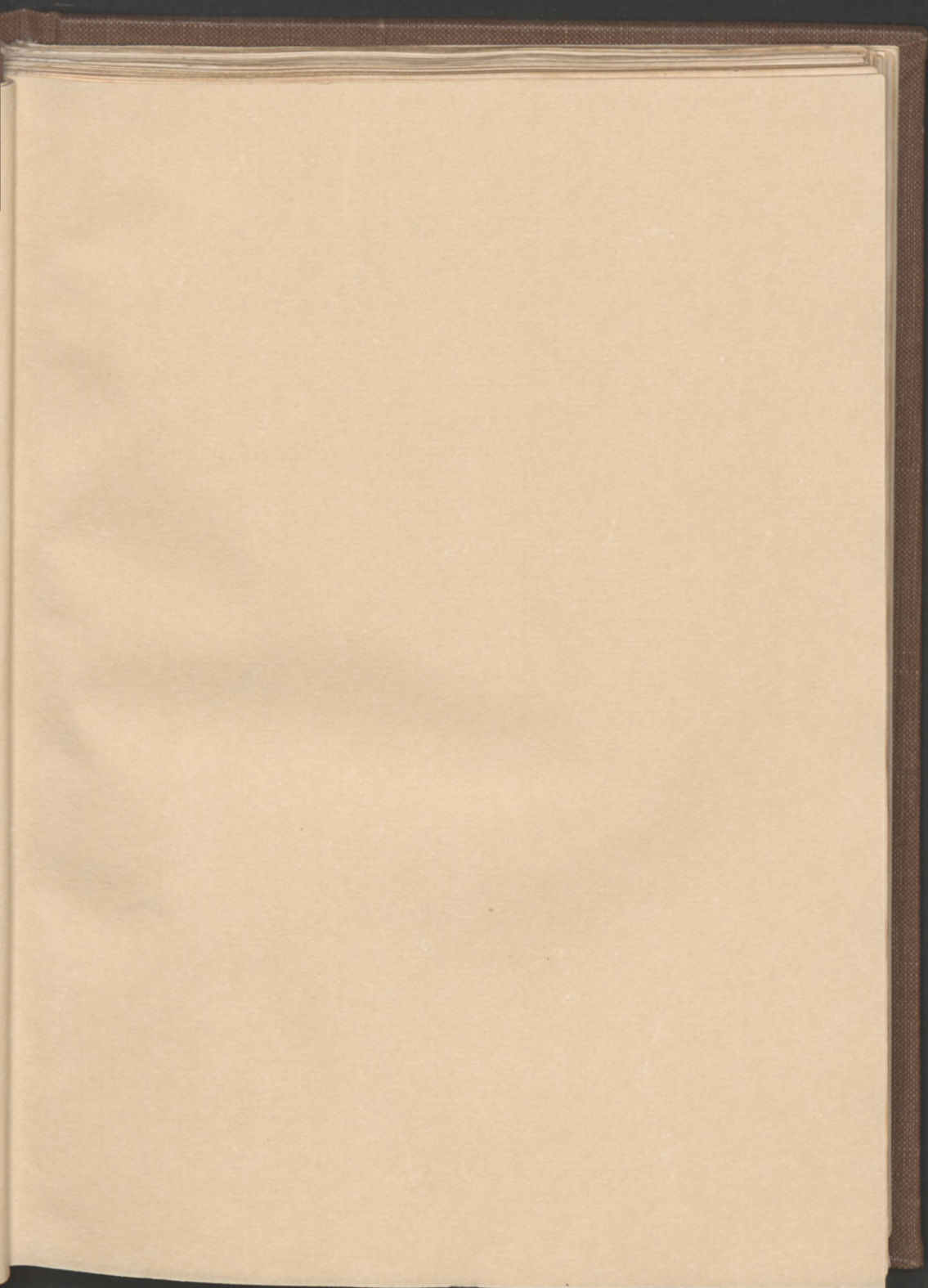


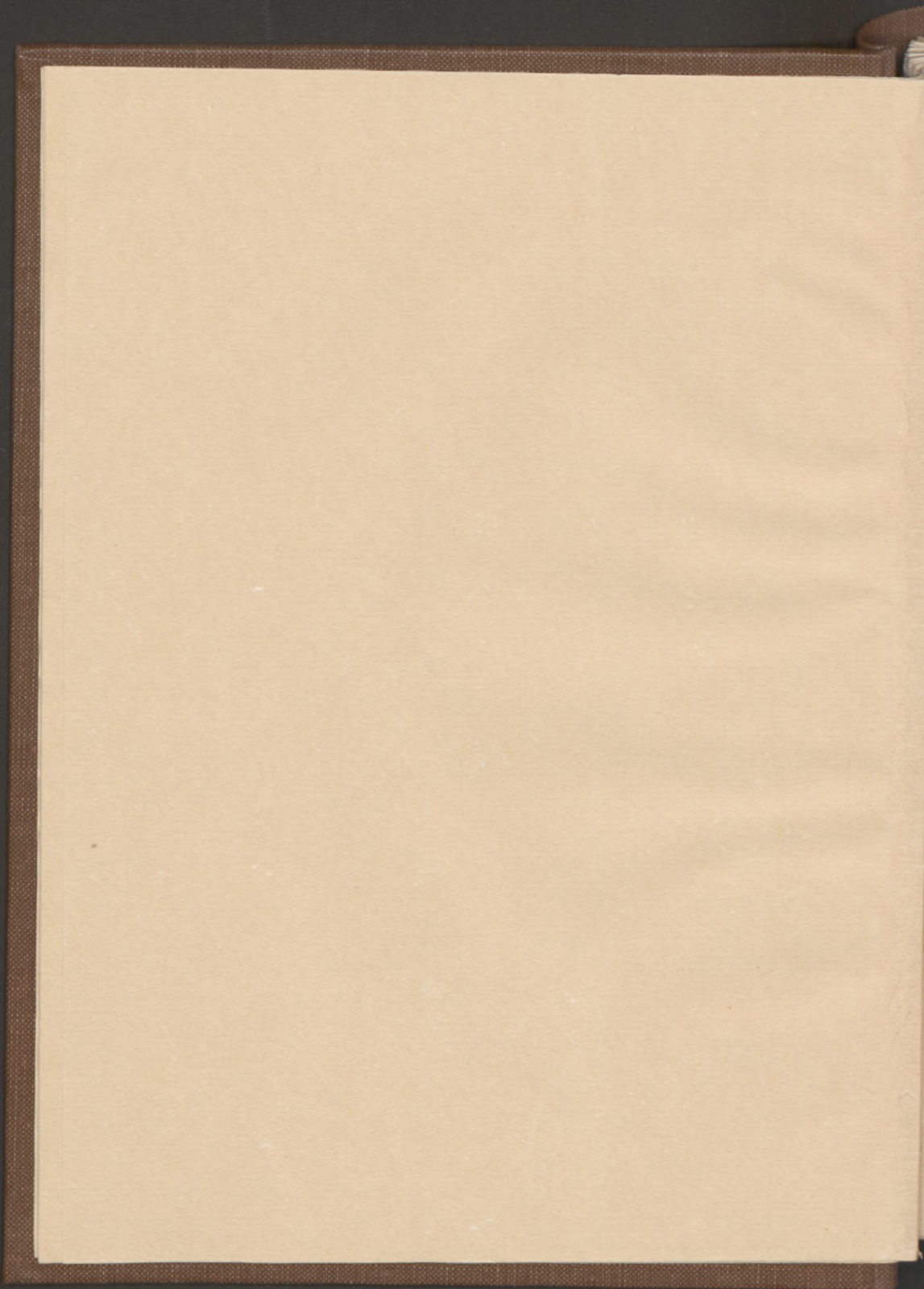








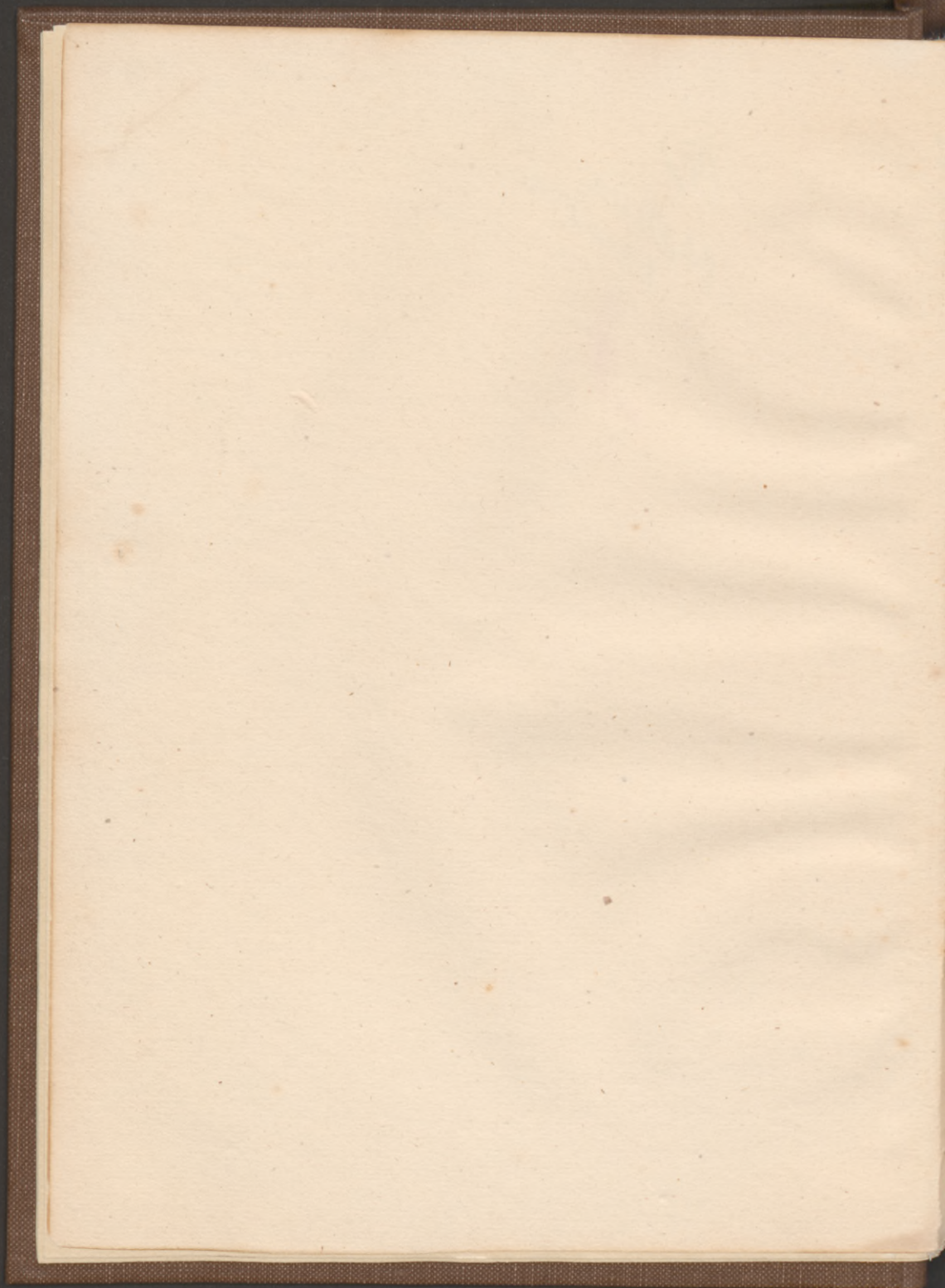


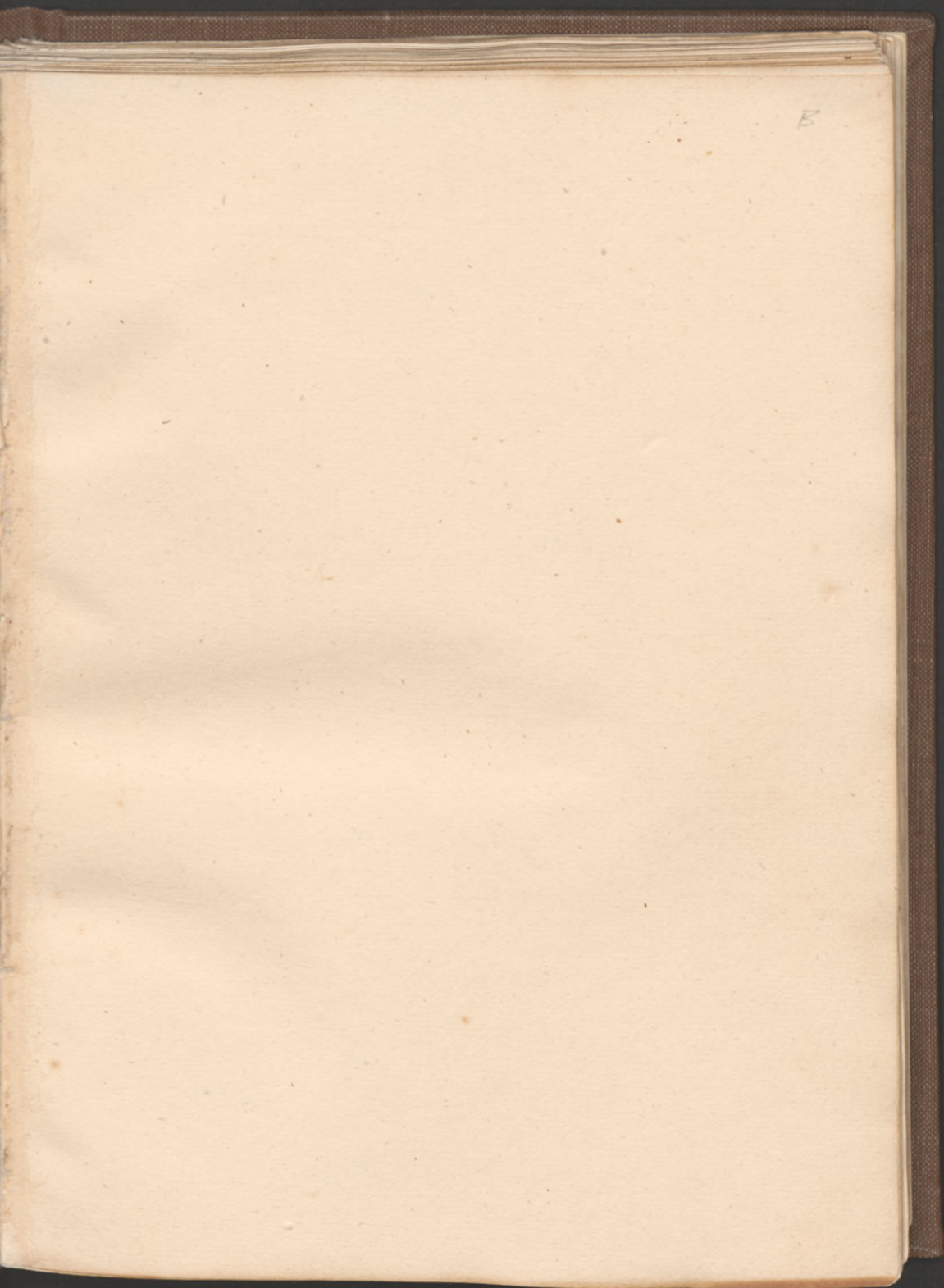


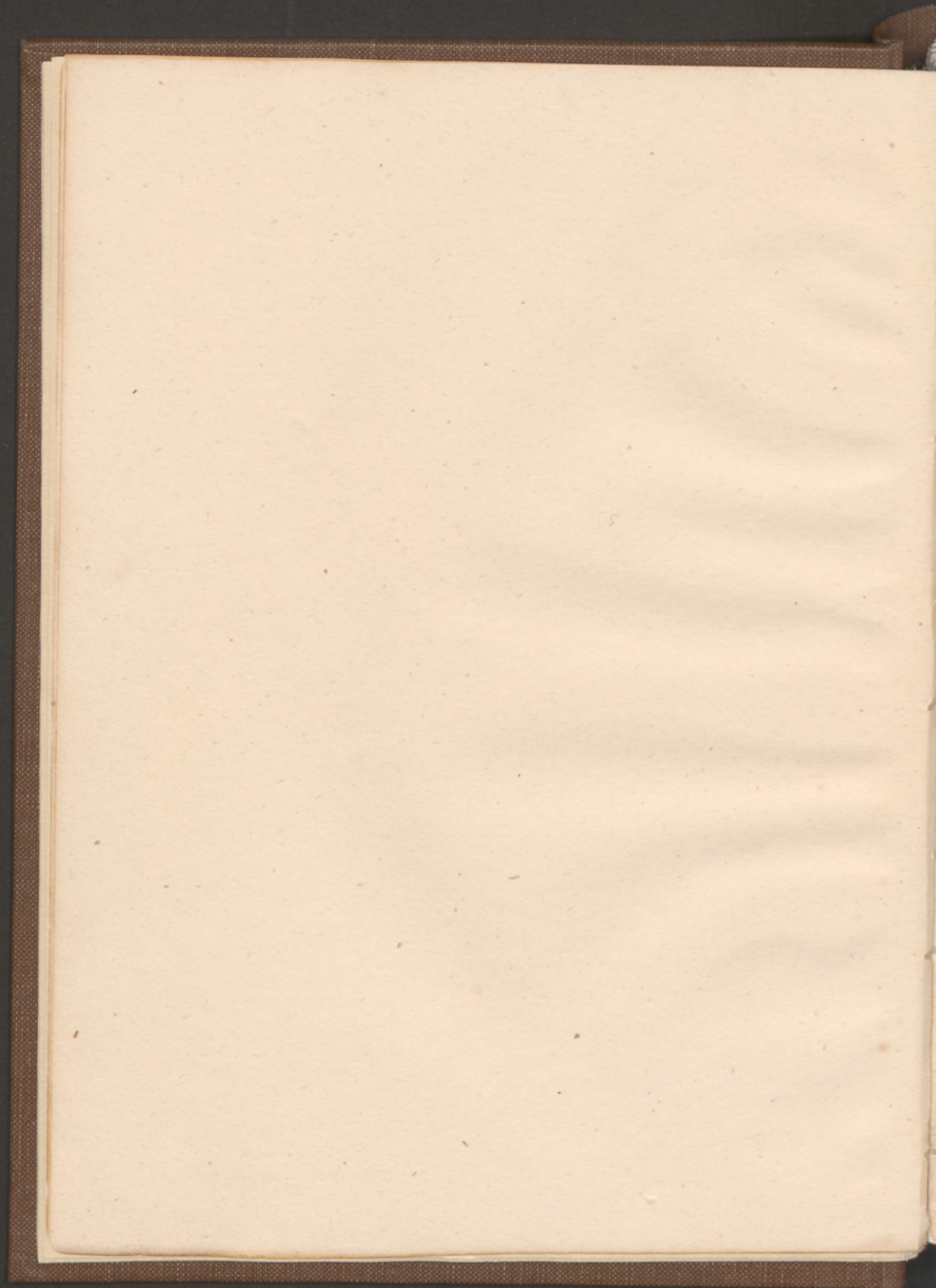
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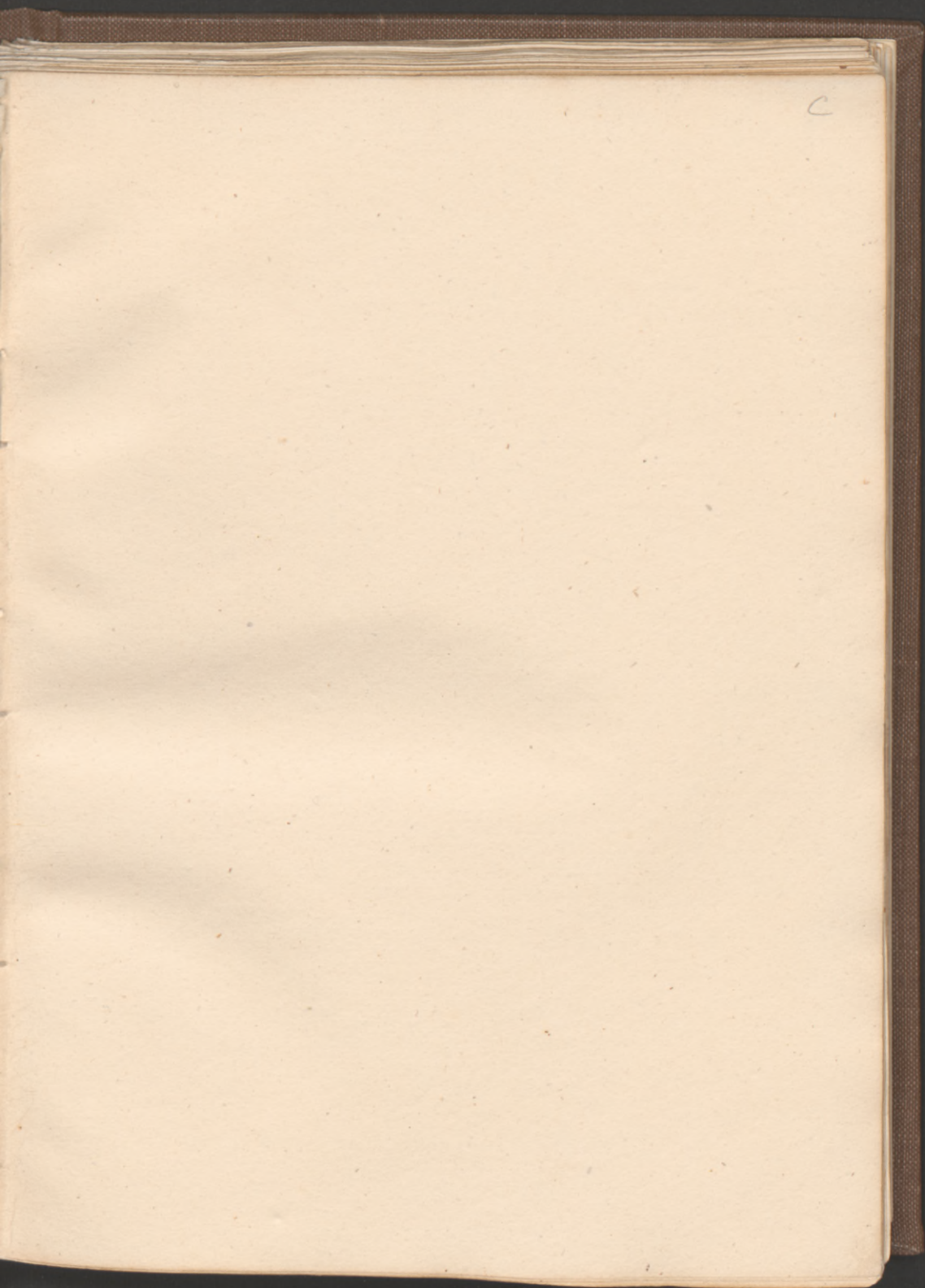
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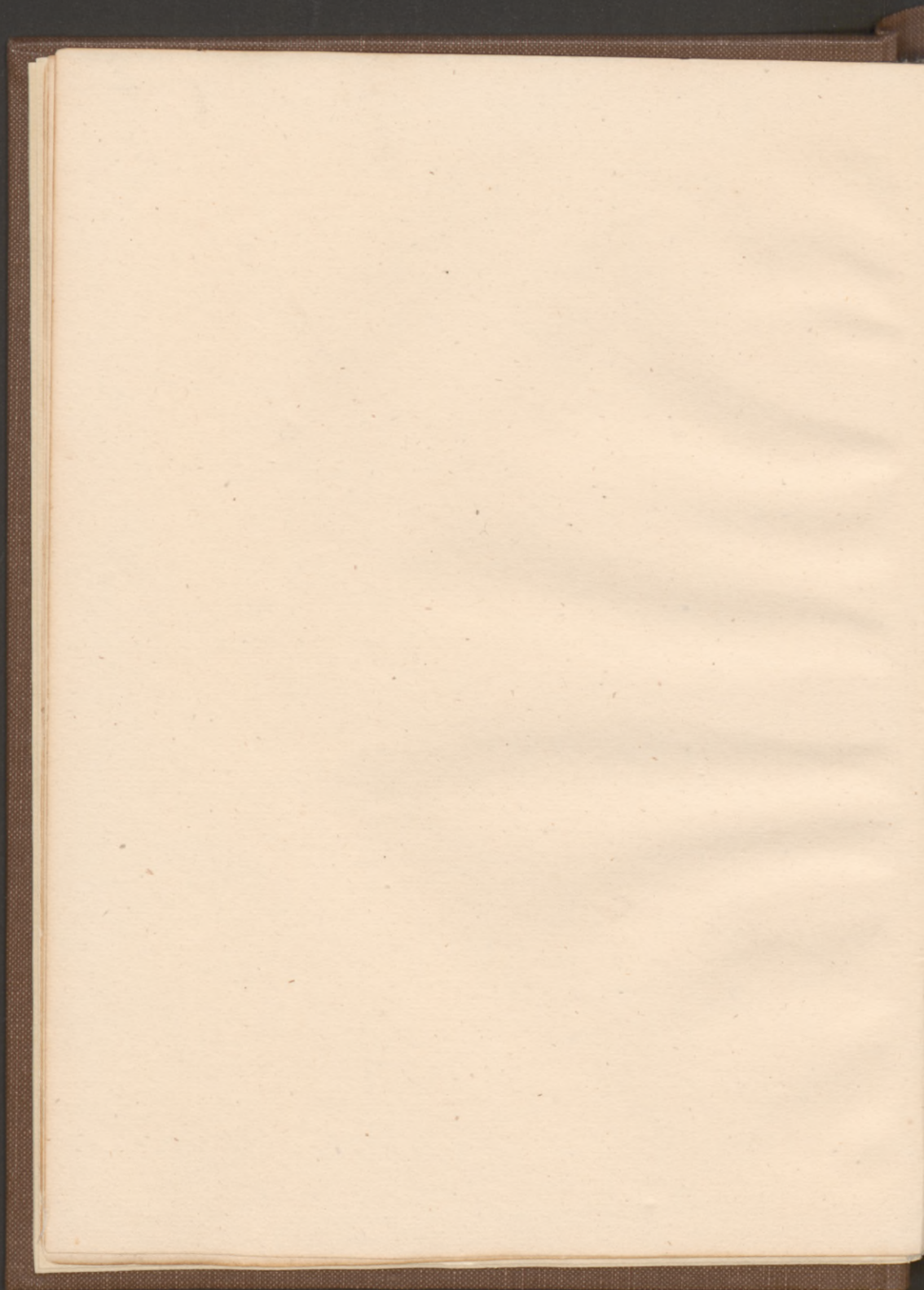
Materia
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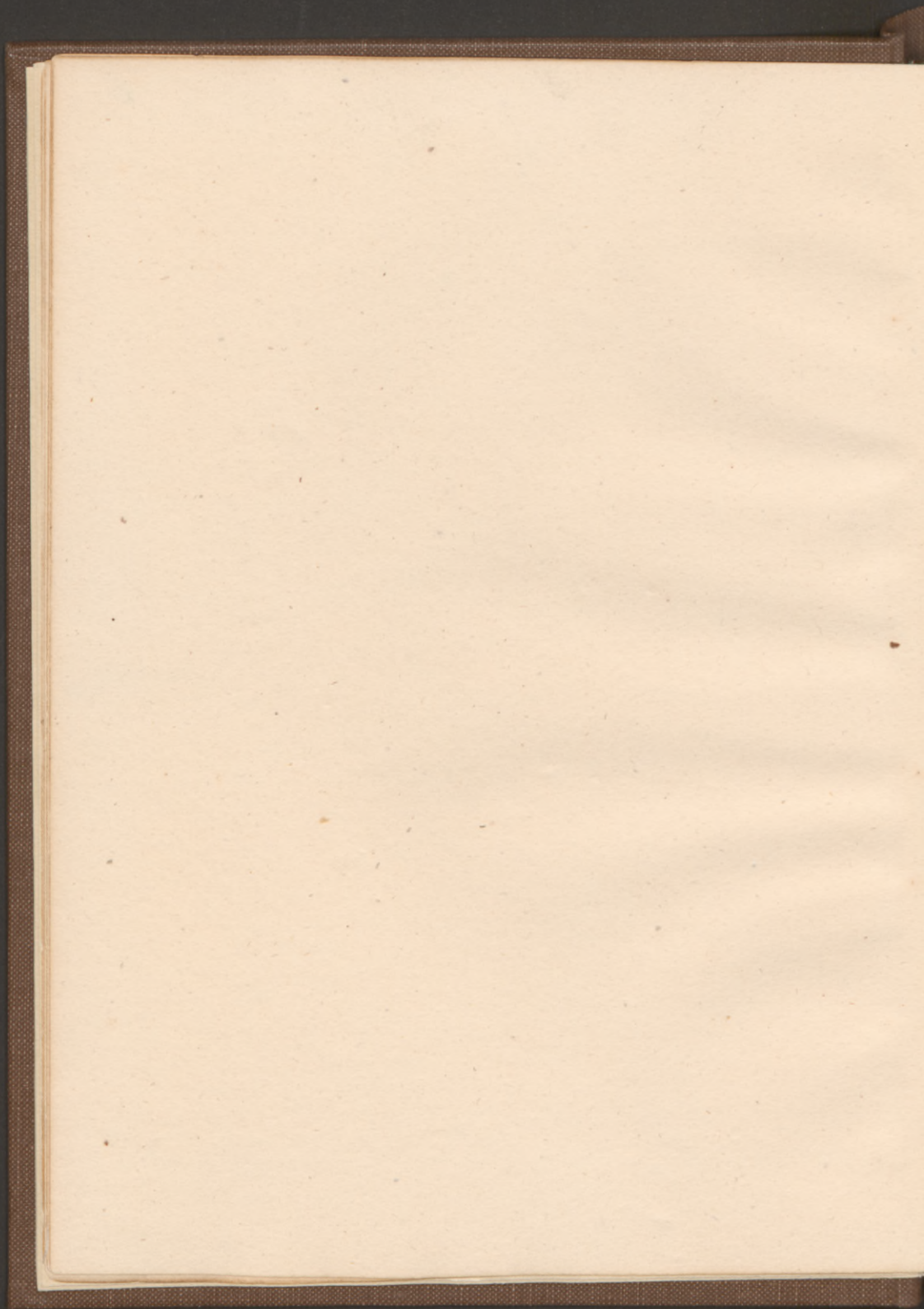


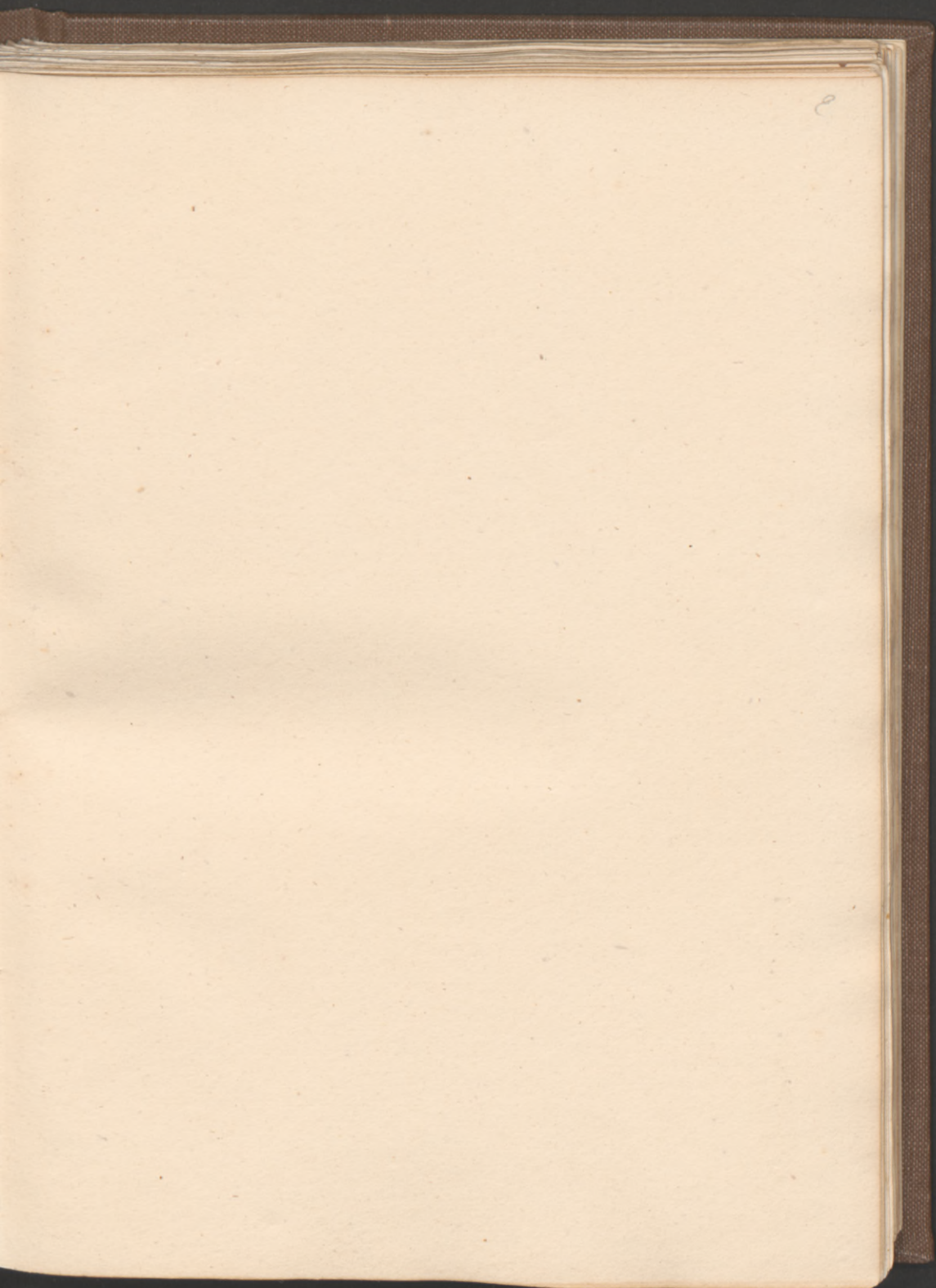


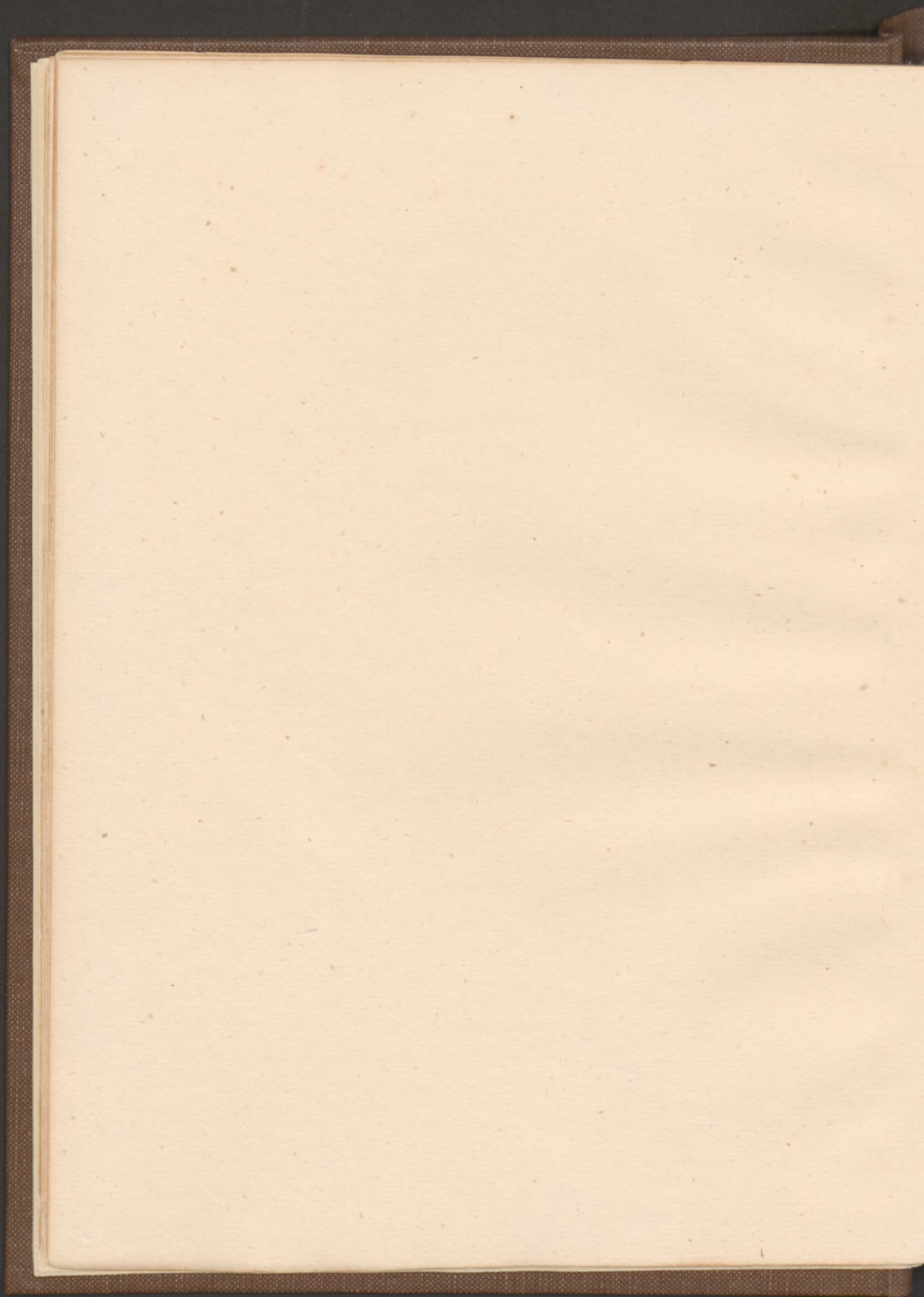




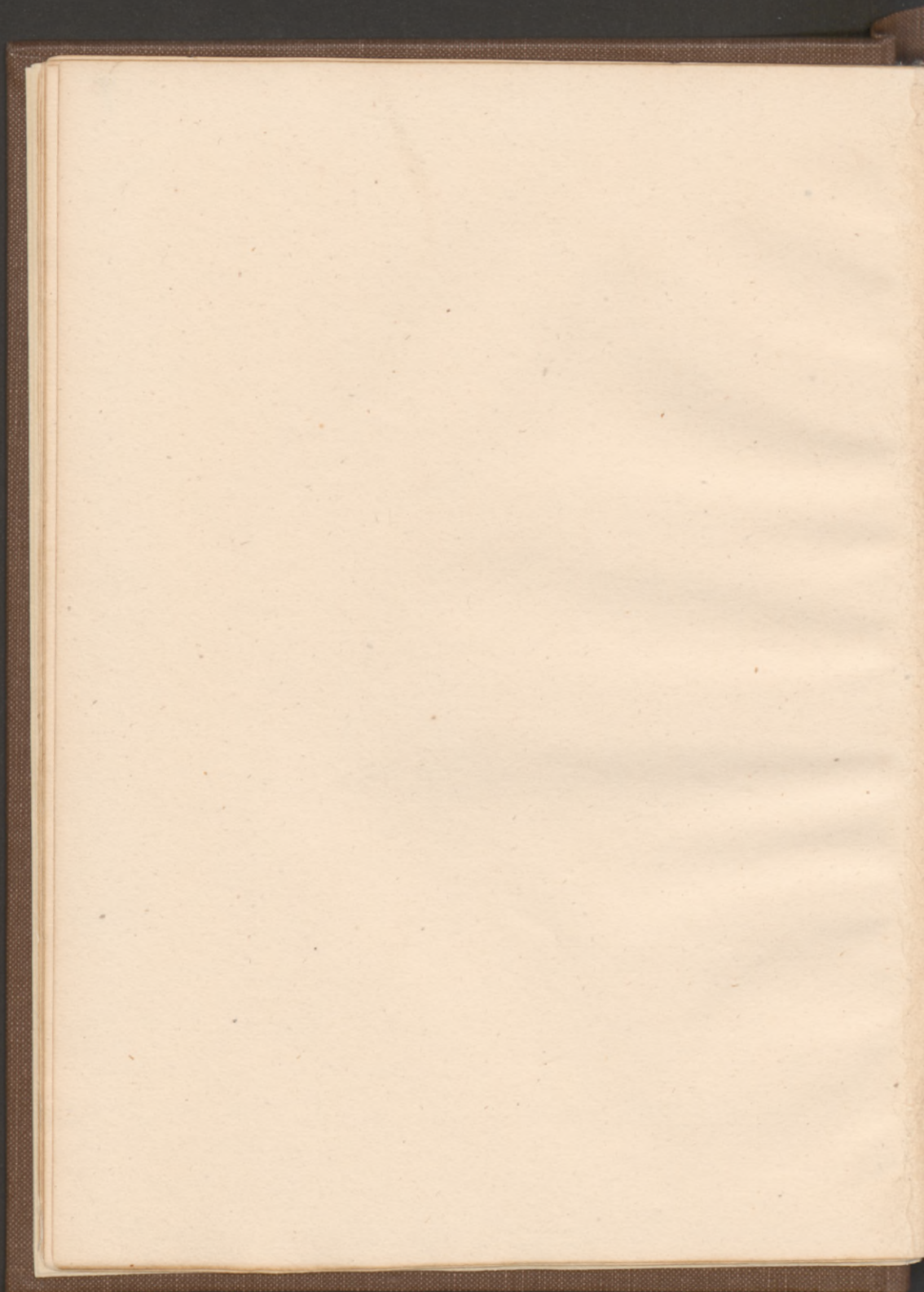
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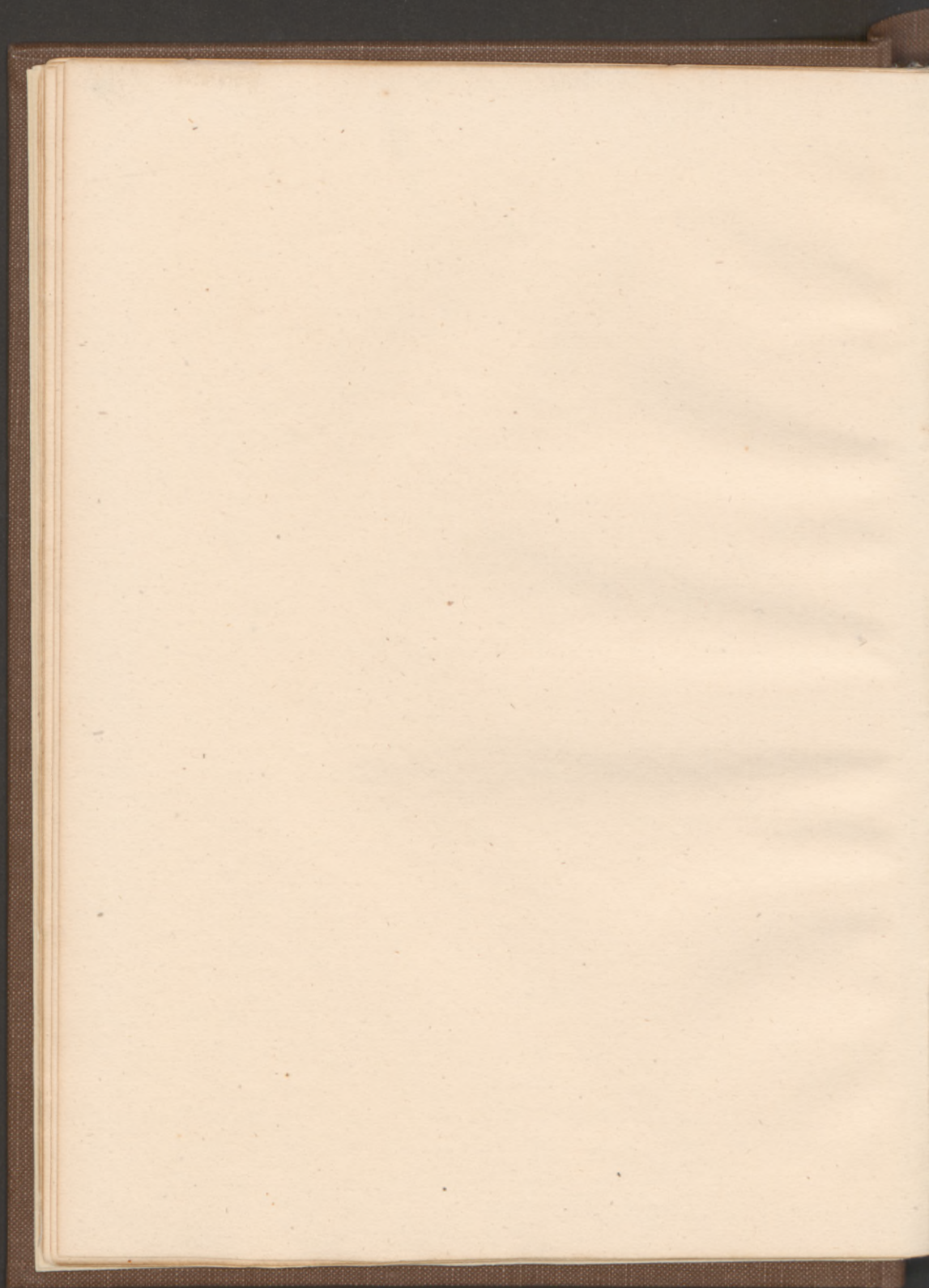


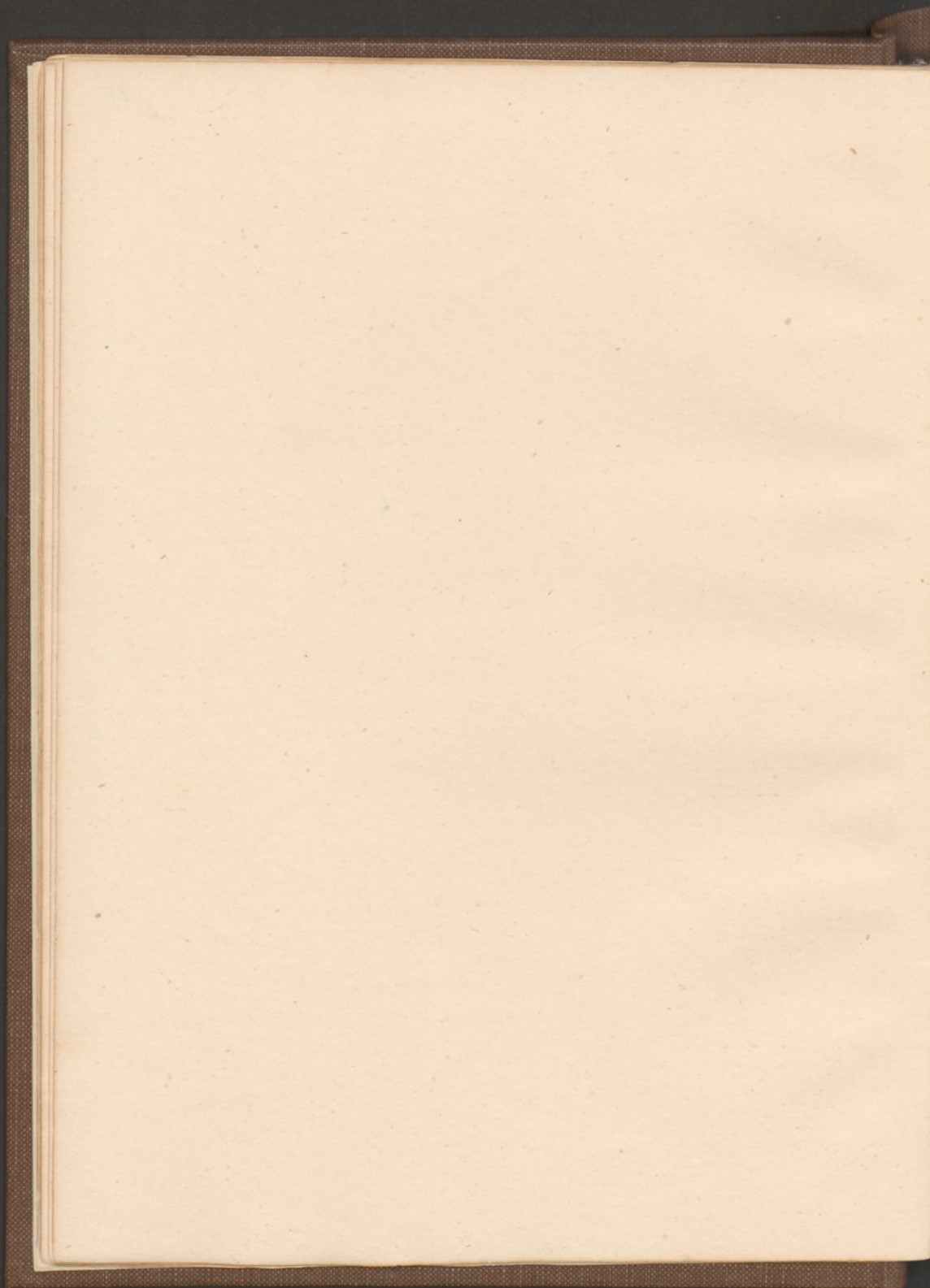




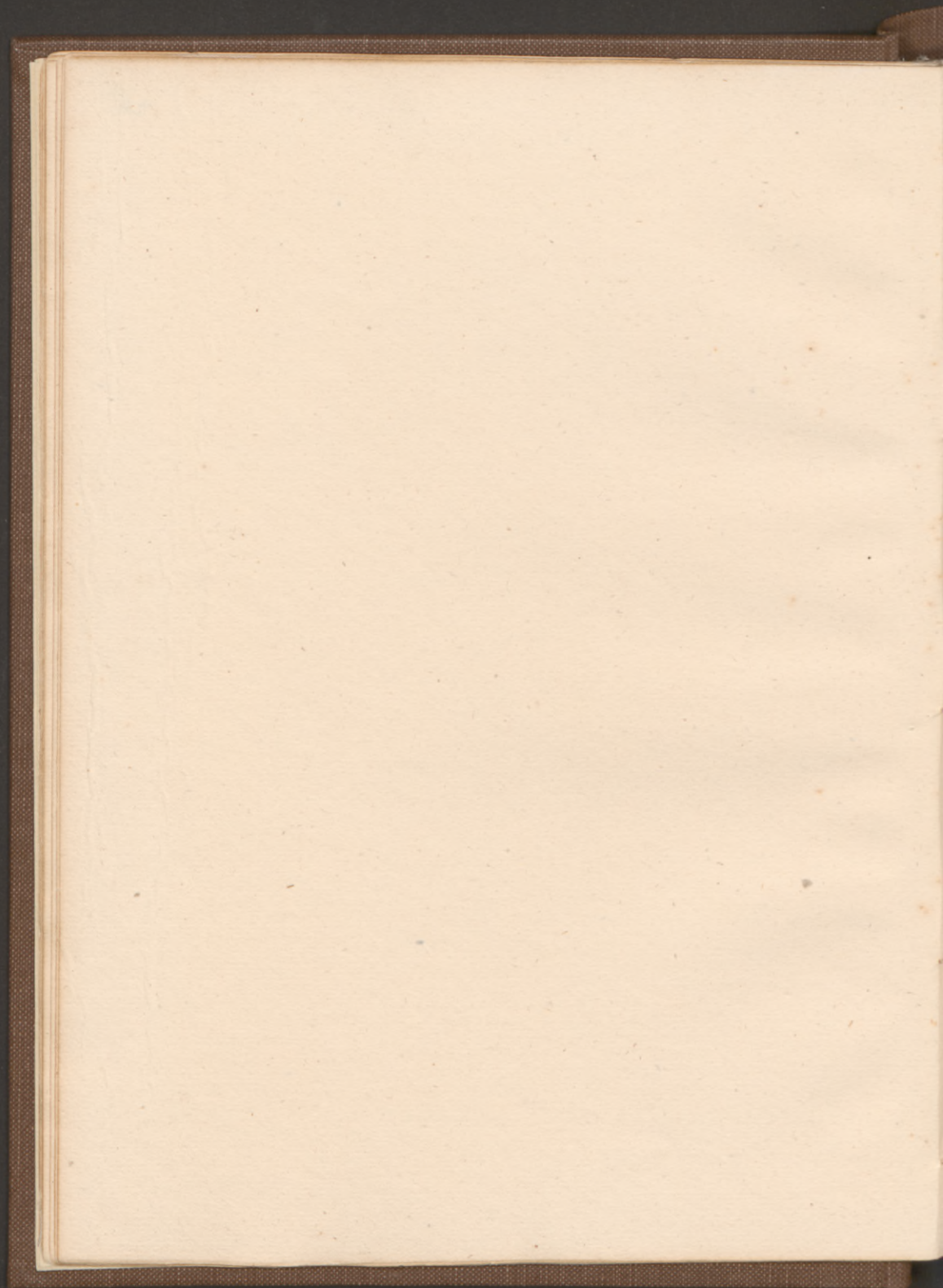
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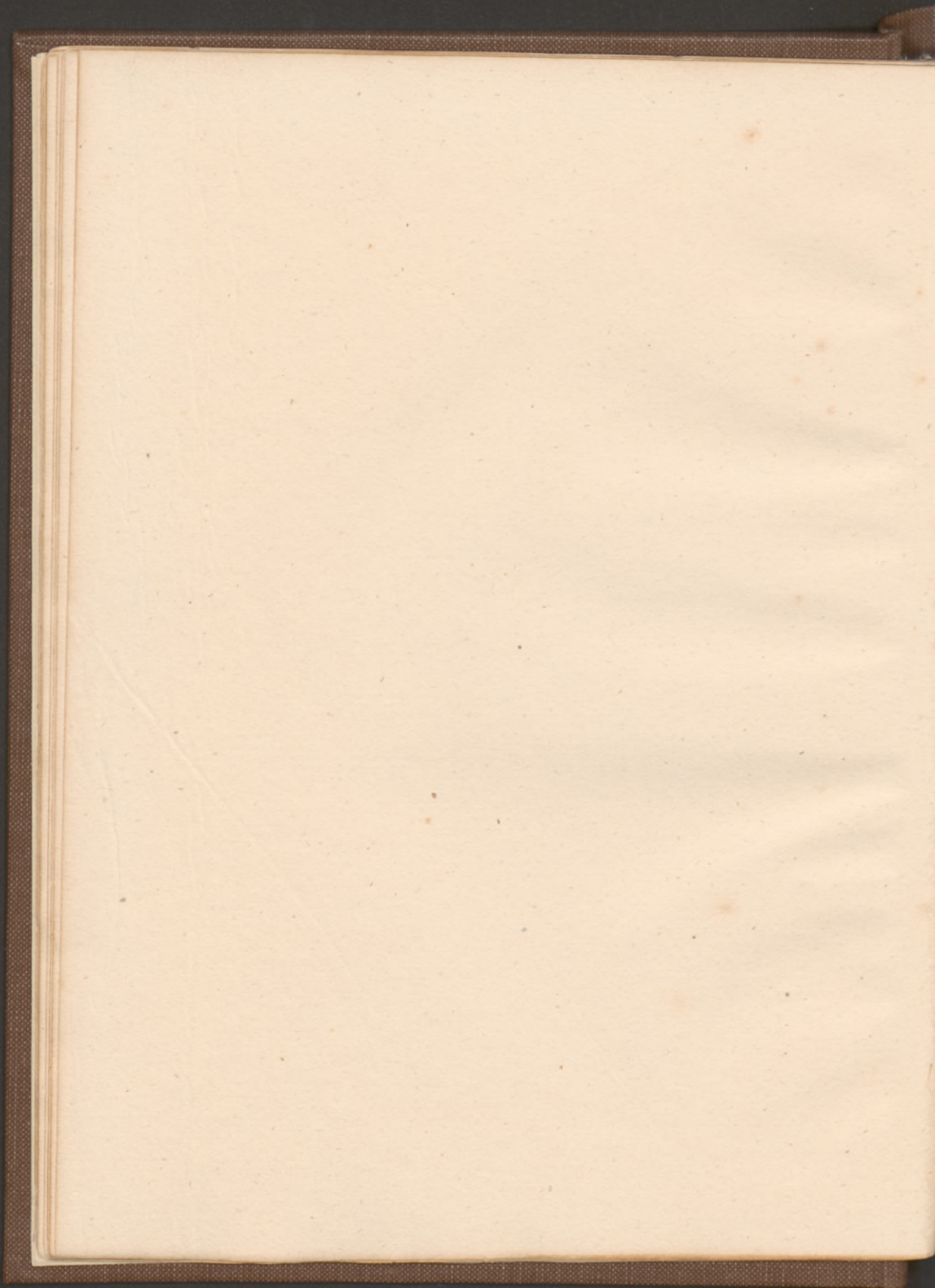




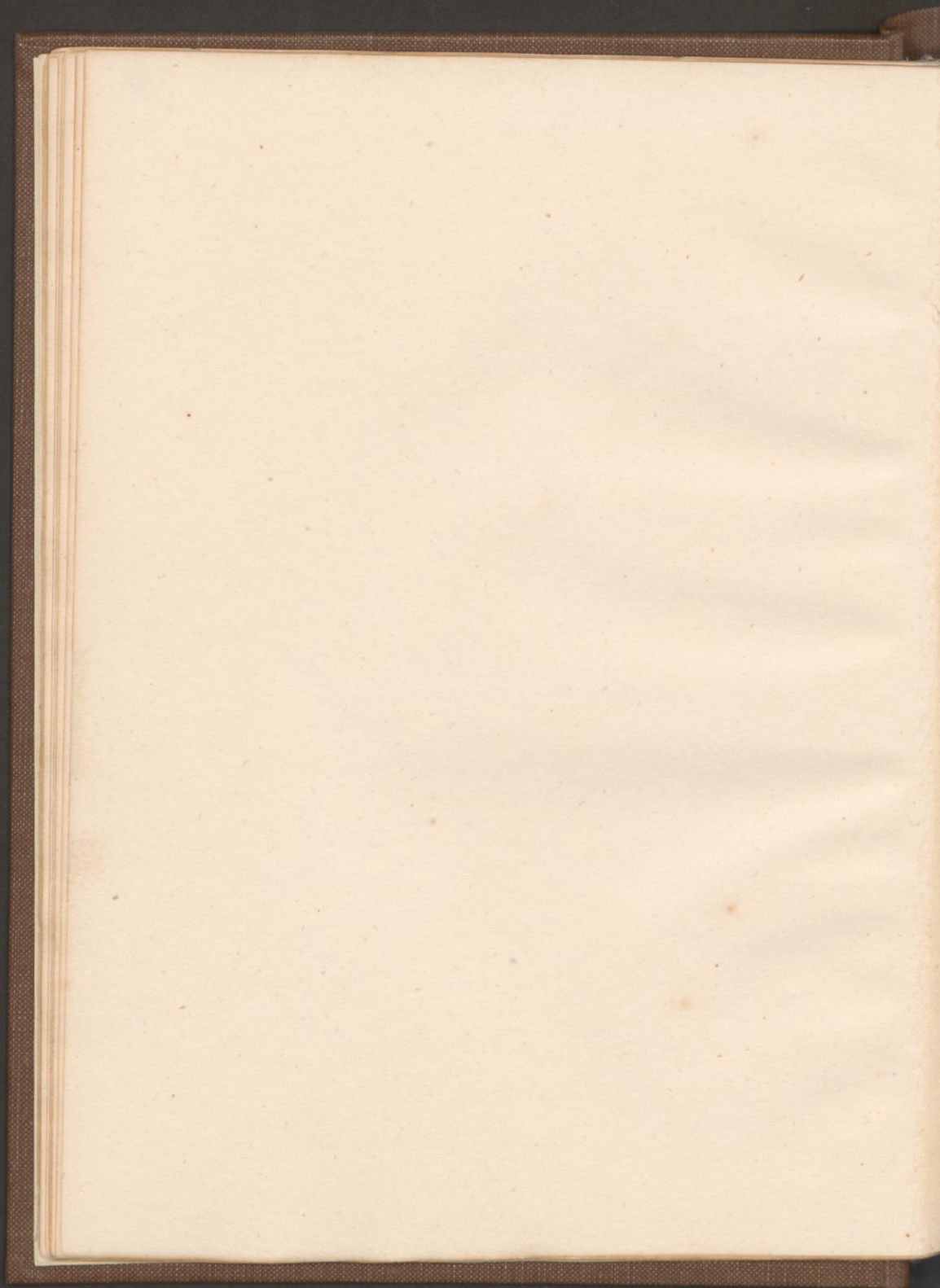
22



J



A.



L

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Type 1

Type

Means an eternal peculiarity in the form of a disease - analogous to habit in botany
There are 4 varieties in feb. diseases

Putrid, Nervous, ~~Septic~~ & Sæptic

1st Putrid Type - Violent in access - severe rigors & pain.

In the 2nd stage - hagg. counten. skin parched crimson & livid. Calor mordax - eyes suffused - Pulse very full but weak face flushed - tongue dry - thirst great
Smell Cadaverous

In the 3rd stage - fetid sweat, urine & feces brown or black & fetid, passing insensibly - hemorrhage from muc. memb. pulse frequent full & quick. Examples Typh. putrid. T. Letrodes Plague Many cases of Interm. & Remitt. in hot climates Malign. sore throat Putrid pneum. typh. Some cases of measles & small pox

2 Nervous Type. Rigors & cereb. perceptible - a coolness or torpor or debility continuing several days or even weeks

MS
B 327
V.4

2nd Stage - Pain behind the eyebrows -
 little heat - often an actual reduction of
 warmth - Countenance pale & slightly
 flushed, like hectic - Little or no thirst
 Pale urine - Little or no smell or one like
 the that that of a recent human brain on
 dissection (Bees on which the patients lay have
 retained this smell 12. mo. - It is never
 cadaverous) Pulse small frequent soft
 weak & sometimes slow

3rd Stage - Coma or a tendency to it - Ab-
 sence of pain - Cool & moist skin - Tongue
 moist, brown or red &c. Pulse same as
 in 2nd stage. Examples of this are
 Typh. nerv. of Huxham. T. mitior. T. levis.
 T. sudatorius, T. syncop. Cholera of India
 Delirium Tremens, Puerperal Delir. Common
 child's fever (Chf. Rem.) Intermittents in
 N. Eng. Group - Some cases of Urinary
 Peripn. no the 4th. Philip which is the most
 usual form of p. typh. with no - there is
 often no reaction gangrene often arises
 & is like that of the extremities in old people

The range of the nerv. type is very great
 Some diseases are intermediate between
 putrid & nervous, or leucina & the leucina
 tria phlogotica. Petechiae consist of
 minute extravasations of blood & afford
 no evidence of putrescence. ~~It has been~~
~~said that at~~ ^{(nervous)?} In these cases, brisk
 purging & spontaneous diarrhoea reduce
 the put. suddenly & in warm climates
 bring on gangrene of the bowels

It has been said that the dis-
 eases of warm climates are usually in-
 flammatory & those of cool & mountain
 ous countries putrid or typhus, but the
 reverse is generally the fact.

3. Arthritic Type 1st Stage - Func-
 tional derangement of the dig. organs -
 followed by lassitude, Colic, loss of exten-
 sity, numbness - costiveness

2nd Stage - Heat - thirst anxiety - tongue
 coated ^{with white fur} - pains wandering & varying with
 the weather. Pulse frequent quick & full

urine high colored - perspiration profuse
 & alternating with heat & anguish of skin
 - disease exacerbating & remitting - usually
 a great exacerbation every night

3^d stage - rigors edema debility

Examples - Gout - Acute, subacute &
 epidemic (?) rheumatism - Spargangia
 purpurum Pleuritis, not the (a rh. aff.
 of intercostal muscles) - Some cases of ce-
 phalitis & other inflammations. In pri-
 vately misplaced cases of this class you
 can have no other test for ascertaining the
 disease than the type, I have seen more
 phlogogenic of the arthritic kind than of
 any other, except epigeniss - the attending
 infl. is erysipelatos, the fever gangrenous
 & putrid

4th Hectic Type - Chill, heat &
 sweating intermingled - exacerbations chief-
 ly in the evening

Examples - Laiposth Hectic Phthisis

2

Chlorosi Struma Tabes Prostrabass
Lues White swelling

Hectic fever is generally chronic but
sometimes is acute.

The fever called synocha is thought
by many to be synocha at the commencement.
It is milder which, reliving only for a time
is repeated & followed by anten. mitis &c.
Soon the symptoms change & "typhus set in"
the pat. gets about perhaps in 3 wks. in spite
of best disease & doctor. Now these cases
are distinguished from Canina thus—
In Canina the prodrom. is shorter, signs
severer, reaction occurs sooner & may
occur at any hour of the day. In synocha
the reaction occurs usually in the evening.
In Canina the pain is universal & permanent
subsiding only at the crisis. in syn. it
is partial & fluctuating. In Canina the
heat is uniform & not stinging. in syn.
variable & stinging. In Canina, the flush

is universal, uniform, florid, there is throbbing & the surface appears distended
 In syn. the reverse is true. In Canma
 the edge of the tongue is florid red, the
 fur close & dry. In synochs, the edges
 are at first moist & natural, becoming
 crimson - the fur is thin & like cream.
 In can. the mouth is dry & thirst constant
 - In syn. the mouth is not so dry & the thirst
 disappears & returns. In Canma res-
 piration is more disturbed & laborious
 - improving only with the subsidence
 of the disease. In syn. it is less so & may
 return. In Canma there is more rest-
 lessness, pectitation & anxiety; these are
 more frequent & not returning - while
 in syn. they may subside & again return.
 In can. the pulse is scanty, high col^d & not
 changing - not so in synochs. In can.
 the bowels are slow & a loose state indicates
 without cathartics, improvement. There
 is never a spontaneous diarrhoea in synoch.

They vary from extreme torpor to natural
 & to profuse diarrhoea. In Can. there is no
 augmented secretion of bile or yellow tinge of
 the skin - In typhus, both & sometimes at the
 commencement. In Canina there are no fu-
 gitive sweats till after the crisis - In typhus
 night sweats without alleviation. In Can.
 the pulse is never more than 112 & is strong
 In typhus. It is more freq. & ~~is~~ never stronger
 In C. there are proresae & remissions - there
 are in typhus. Canina never requires or
 will tolerate sedatives or tonics - typhus al-
 ways in the secondary stages. C. is never
 epidemic, always sporadic - typhus is epid.
 C. left to itself will run its course in a week
 or pass into one of the phlogotica. typhus
 continues two wks & if left to itself after
 3 or 4 wks & never passes into one of the
 phlogotica. In Can. there is from the
 first, intolerance of light - in typhus only
 in the sec. stage. In C. there is a morbid
 increase of susceptibility at the outset - in
 typhus in 2nd stage.

In Can. v. s. relieves all the symp. but gradually & in proportion to the quantity of blood taken. In sym. a consid. quant. must be taken & the relief is then sudden, but of short duration unless a very large quantity is taken. In C. fainting does not make less blood necessary to be taken - not so in Synch. In Can. v. s. is useful in any stage before the crisis - in sym. only at the commencement. In C. v. s. obviates irritation - in sym. it increases it. In C. v. s. evacuates & refriger. subdues the disease perfectly & convalescence is rapid & perfect. In sym. recovery by these means is lingering & imperfect. In Canma resolution at the commencement is more easy to effect. In Canma the blood is fluid - coagulum firm, surface concave, buffy coat considerable - in sym. it is less so or the buffy coat is absent. Canma will yield to no other treatment - sym. better or sooner under another treatment - Canma is always

attended with entaeric infl. - synoch.
 with erythemat, varying from phlegmo-
^{nodes} ~~nodes~~ to gangrenous. I confounded these
 diseases at the commencement of my
 practice & many do so at the present
 time

Treatment for Synochus

The best is cal. & opium in the forming
 stage followed in the secondary by tonics
 as cinchona &c.

Of the synochus kind is
 Jackson's supposed inflammatory yellow
 fever - Intermittent remittent. Many
 cases of intermittents. The last cases of Am-
 strong's typhus, of our pneumonia typhoides,
 where the expectoration is mingled blood
 mucus & mucus & of bilious pneumonia
 of the South.

There is a variety of the nervous
type - attended with torpor, no pain -
 Patients think they are not sick - skin cool
 pulse natural - mind dull & wandering.

In these cases there is great hazard of sudden death without energetic practice. If the patient should die, an empiric would say it was a fit Depletion & refuse using purgatives - An emetic of Turp. min. or Sul. copper or Zinc or Sanguin. with ipecac will sometimes raise susceptibility to the effect of purgative agents, but sometimes the exhaustion is so great that an emetic would extinguish the feeble spark.

Of this kind are Darwin's Parais irritativa Good's typhochus soporosis - Pneumonitis typhodes of Paine Armstrong's congestive typhus

Cullen's Gravior & Mitior do not denote a difference in degree. Patrid fevers are often mild - Nervous may be as rapid & deadly as any - These two terms are perhaps better than grav. & mit. as the difference is in kind. Still these terms may lead into error. The T. Carcerum of Winchester 1780, described by Dr. Carmichael Smith was a nervous fever

T. sync. is purely nervous though mistaken by many for putrid

It is often said "if the bowels are evacuated early the fever will be nervous, if not, putrid" But as I understand the terms the difference is original & natural - pervading all stages - a difference in kind. Much vom. & purg. at the comm. of nerv. fever will approxim. it to putrid - while in a put. fever they will heighten the put. type

It is very easy to convert a nervous fever into a putrid bilious fever - the following is an effectual recipe

Give ant. ^{emetic} followed by nat. salt & Cal & jal. - repeat them - Give ant. in nauseating doses - Give the veg. acids For food give warm water in which toasted bread has been dipped or beef has been scalded - & you will soon have a dry mouth, thick fur on the tongue - nauseous taste, stomach unobtainable, with discharges of bile & skin hot &

dry - A long case - a good bill -
unless the dis. is malignant & then he
is killed at once. Polon. said - The
man that runneth against his maker
let him fall into the hands of the physician.

I speak of ill selected, ill managed
excessive emetics & cathartics; for emetics
& cath. are often indicated, except in
low cases.

All possible fevers are of one of
these kinds 1st nervous 2nd putrid 3rd ar-
thritic 4th hectic 5th Canina.

The nervous & putrid have each
two varieties - the perfect & imperfect
So perhaps also of the arthritic & the hectic
or acute & subacute rheumatism for the for-
mer & for the latter the perfect which takes
place after opening an abscess & the
imperfect which exists before opening an
~~abs~~cess. Abernethy is also of this
opinion. (about hectic & rheumatism?)

Malignancy

(Additions to my notes)

Sennertus gives the following symptoms of it.

- 1st Disproportionate violence of action in different parts of the system
- 2nd Peculiar changes in the character of the symptoms compared with ordinary cases
- 3rd Remarkable ex. haustion & imbecility in some part without apparent cause.
- 4th Pains in any or every part fixed or shifting appearing & disappearing - limbs sore as if broken
- 5th Extreme pains in the head - watchings, startings - Coma or lethargy perturbation of mind
- 6th Face pale, livid, haggard - with a peculiar expression
- 7th Pulse small weak freq. variable & intermittent & sometimes morbidly natural
- 10th Heat sometimes great, often less, unequal - extremities cold
- 11th Urine thin, without sediment, dark col^d
- 12th Discharges black & fetid or green
- 13th Sweats on the forehead or neck - profuse on one side (one side being dry) or universally

14th Livid red or ash col^d spots, carbuncles, buboes, not suppurating - or other affections of the skin

Lenneston adds, the more safe a patient appears the more danger sh^d be apprehended.

The following are the symptoms I have usually observed - ~~in case of~~
 Pain (in case of sudden attack) in some part, sometimes in the ear or toe - Spasms Delirium Coma Epigastr. sinking Black vom. Hemorrhage Rest interrupted Pulse, freq. - very slow - or intermitting Exhaustion following evacuation & threatening immediate death Contraction or dilat. of Pupils Double vision Irritability of or torpor of stom. intest. & sometimes of all the organs Disproportion of musc. action to all the other symptoms Color morose or cold extremities, Skin very liable to be affected - buboes, carbuncles, pitechie, vibices, ecchymoses. Diff. of the Parotids - Aphthae Irregularities of

the different functions some of them morbidly natural

Malignant diseases are chiefly confined to the class Haematomata with typhoid fever of the nervous or putrid type

In a malignant tetanus which prevailed in Hartford 1826. S. M. 15 would prove soporific & calm. gr. j. would prove cathartic while neither would have any effect on the disease

In malignant cases the treatment should be more simple & should be directed chiefly to the brain & nerves. But from the strong sympathy between the brain & surface, that bark, irritants, evacuates of oil. pins are serviceable

It is important to observe that in many cases some symptom or stage that we should expect to find is wanting & the vital energy is very unequally distributed among the different functions. The pulse & tongue are of no use for the diagnosis

in the worst cases, being morbidly natural
Malignant cases are more likely to
occur in the country than in the town

Dr. T. witnessed in White Hall
N. Y. a malign. epidem. One pat. took
40 grs of opium 1 qt. of Brandy & 90 grs
of Sulph. Quin. in a day. Another phys.
took the case & increased to 8 grs op. 2 qt. br.
& 180 grs Sul. quin. The symptoms immediately
yielded & the pat. got well

Refrigerants

17

1st Group

Refrigerants matter
as being contained in
Ambalua in the water
on Sulph. Nit. part. &c

20

Nervines

21

24

Narcotics

25

26

The first of these is the
 fact that the system is
 not a simple one, but a
 complex one, involving
 many different factors.
 The second is that the
 system is not a simple one,
 but a complex one, involving
 many different factors.
 The third is that the
 system is not a simple one,
 but a complex one, involving
 many different factors.
 The fourth is that the
 system is not a simple one,
 but a complex one, involving
 many different factors.
 The fifth is that the
 system is not a simple one,
 but a complex one, involving
 many different factors.
 The sixth is that the
 system is not a simple one,
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 many different factors.
 The seventh is that the
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 many different factors.
 The eighth is that the
 system is not a simple one,
 but a complex one, involving
 many different factors.
 The ninth is that the
 system is not a simple one,
 but a complex one, involving
 many different factors.
 The tenth is that the
 system is not a simple one,
 but a complex one, involving
 many different factors.

The state of the mind has much influence on the effects of opium. If it is disturbed, a larger dose of opium is required to produce sleep.

Physicians do not now understand the use of opium so well as 30 yrs ago. Sydenham's knowledge was good, Cullen's better, Rush's good, Darwin's almost perfect.

Conjoining narcotics often increases their efficacy, as is the case with tonics and aromatics.

Opium produces prostration, which Brown called indirect debility, in the most prominent degree.

Nervines enhance the remedial effect of stimulants & will contribute to obviate the effects of inordinate doses of narcotics.

Epigastric distress is produced by the stimulant & nervine narcotics, by nervine narcotics not stimulant as tobacco, & also by pure nervines, as coffee, hops &c. I formerly supposed it to be the effect of a stimulant operation, but now think it

one effect of a nervous operation

Some articles produce their ultimate narcotics, before you can get the medicinal effects. Congruing narcotics often prevent ultimate narcosis - This is not laid down in the books

Cullen's treatise on opium is the best yet it is imperfect

Ultimate narcosis may be abated by the acids, aromatics and stimulants without the least diminution of the remedial effect of the narcotic operation

All the narcotics are capable of producing an excitation of the brain. An excitation is a morbid degree of energy of function & may be of the nervous or muscular system. This state of the cerebral & nervous systems exists in some diseases to such a degree as to excite the surprise of the physician at an activity of intellect in the patient, never before manifested. It exists in delirium tremens, in the

stage which precedes the appearance of the delirium & when the latter comes on, giving place to something else. It exists through all the stages of some fevers.

Some articles produce a peculiar irritation of the brain, which promotes the appetite and the digestion of foods & increases the muscular power. Such are *conium*, *nuxvomica*, *digitalis*, which have been erroneously supposed to possess tonic power. Such a state has been supposed to indicate resection. It is often observed in delirium tremens before the disease is fully formed. The patient feels better, has more appetite and more muscular strength than formerly, but this is not tone. If the circulating system be examined there will be found not an increase but a diminution of action - *From Tonics*

Narcotics

Habitual use - Simoni's Syncope - cure

This commonly supposed that the habitual use of narcotics produces torpor & insensibility & ultimately exhaustion of the vital energies or debility & "visceral obstructions" as they are called. From my own experience & that of my friends I am gratified in saying that this opinion is unfounded. The use of any of the narcotics does indeed cause insensibility to that particular article, but not to other narcotics - much less does it to other articles of different powers. It is erroneous to suppose that the elevation of spirits produced by opium is followed by depression (of them?) that its immediate effect is torpor & that its ^{proper} ultimate effect is exhaustion. See Conf. of an Op. Eater. This opinion of opium was formed from alcohol which does produce the bad effects ascribed to narcotics in general. I never knew any bad effects from tobacco & tea except that they occasionally produce nervous tremors & perhaps Simoni's Syncope.

& this only in a few cases. Still I am far from being an advocate for the use of the former. There is no evidence that visceral diseases are produced by the continued use of any narcotic except alcohol & perhaps in a less degree by wine. Opium may be safely taken in large quantities for a long time without disturbing the functions of the body or impairing the energies of the mind.

The long continued use of the nervous & stimulant narcotics, or of the merely nervous ^{& perhaps of all the narcotics} narcotics, produces such a state of the system that leaving off their use is attended with an indescribable effect which leads to their repetition. This effect is altogether different from mere habit & is not trick or pretence or mere habit relish. Only a few narcotics do this, the most prominent of which are alcohol, opium, tobacco & tea - the abstraction of these after long & copious use occasions a ^{disagreeable} sinking. This sensation may be a symptom of disease

as of *T. syncopalis*, or it may be an idio-
 pathic disease, in which case it is called
~~by~~ *Sinosis Syncopica* - a disease descri-
 bed by no author but Good & imperfectly
 by him. During the prevalence of *T. syncop.*
 some persons had procyga, or epigastric
 sinking who escaped all the other sym-
 ptoms of the disease. Others had it as a se-
 quel of an attack of the disease in a regular
 form. In dyspepsia the procyga of sin-
 king is between 9 a.m. & 6 p.m. When
 one has missed a meal, the fainting that he
 feels after the sensation of hunger has
 passed away is a somewhat peculiar sen-
 sation. This feeling (epigastric sinking) oc-
 casions many to become intemperate. A
 slight degree of it is felt in the former stage
 of intermitting & other fevers - in hysteria;
 Hypochondriasis, hectic fever - in grief
 fear disappointment chagrin & other de-
 pressing passions. It is experienced in
 syncope & is the last feeling of the dying.

Literary & professional men are most
 liable to it. It exists in its most exquisite
 form in typh. pyrex. & can be well known
 by those only who have ~~had~~ been familiar
 with the disease. In this disease by stan-
 ders often consider it ideal, but it has
 a real existence. When attended with
 nausea, faintness, cold skin & extren-
 ities, palpitation & irregular pulse, the
 disease is more palpable but in the
 chronic form of Senosis by apoplexy,
 these urgent symptoms are absent & the
 patient complains of an unpleasant
 sinking sensation in the epigastrium, which
 unfit him for exertion of body or mind.
 The faintness which occurs after an inter-
 val of long fasting when the sensation of
 hunger is subsided, incapacitating one
 for exercise & being a sensation of faintness
 - this if augmented 40 60 or 100 times
 will give some idea of it. A single

full dose or temporary use of opium
alcohol tea &c. never occasioning the symptom
- nor do occasional large doses, but the
want of the article after habitual use.

Boerhaave mentions this symptom
under the name of anguish. Sæmæ in
his description of the disease in the Mil-
bank Penitentiary in 1823 seems to refer
to it under the name of anxiety - It has
been confounded with hysteria.

To cure intemperance
means must be devised to obviate this
sensation.

The proximate cause of
has been thought to be a deficiency of
the vital energy of the stomach produced
by deficiency of vital energy in the brain
- but I think it is not confined to the
stomach. It varies in different diseases,
in typhus enterodes it is seated in the
membrane of the stomach. Some forms of
this disease are without this symptom.

The nerves more particularly affected are the par vagus & the ~~or~~ intercostal or great sympathetic & semilunar ganglion with their branches. In dyspepsia the gastric branch of the par vagus, in dyspnea & sternalgia the pulmonary ^{& cardiac} branches, in hemiplegia & syncope the great semilunar ganglion & perhaps the gastric branch of the par vagus are the seat of the affection - in typh. enterodes it is seated in the membranes of the stomach, but it is not inflammation. It occurs in t. cancer & t. sudatoria. When it arises from poison, as from mushrooms or fish, particularly from the rattlesnake it has its seat in the semilunar ganglion. In typh. syn. when the sensation is most exquisite the patient will eat & digest beef steak &c. & this proves that the affection is not seated in the coats of the stomach. Here both the brain & semilunar ganglion are affected & the par vagus not at all. In true

hemorrhage. also patients will take food with a relish & in t. sync.

Treatment — when caused by narcotics — The indications are two 1st to relieve urgent paroxysms, 2nd to prevent their recurrence & obviate the condition of the system on which they depend.

Alcohol is nearly though not precisely similar to opium, lactucarium & Camphor in its effects on the system. As it is a law of the animal economy that narcotics of near affinity & not identical do not produce their effects at the same time. The same is true in diseases, e.g. Variola & Rubella — also scarificient & erysipelatous inflammation. In the same manner opium & Camphor counteract the effect of alcohol & wine & vice versa. A person, by taking opium at the same time can take more wine with impunity. Hence opium & Camphor are indicated both to relieve the paroxysms of an

In *L. dyspnoea* ~~the~~ ^{to} prevent ~~the~~ ^{its} recurrence
 from alcohol & wine will invariably
 cure it if no other disease be complicated
 with it & if the exciting cause be indul-
 ged in more than by a person in health.
 Small doses of opium & camphor given
 regularly will generally be sufficient.
 The remedy should be concealed from
 the patient or he will infallibly abuse
 it. It should be given in pills & disguised
 by creosote, aloes, or especially by
 petroleum. Tonics may be necessary
 at the same time to retain the ground gained.
 After a time you may slowly abstract
 the opium & Camphor - but a continuance
 in diminishing doses for 12 mo. is often
 necessary. So long a continuance does not
 occasion a nervous dyspnoea from opium
 & if it does it is of little consequence.
 Tonics & simple & pure stimulents are
 entirely insufficient to cure the disease.
 L. S. from opium may be cured by abstinence but the
 practice is dangerous. It may be generally cured
 by abstracting gradually the opium. This can be
 done with mild.

Stimulants

Excitants, or stimulants are articles, which produce a quickly diffused & transient increase of the vital energies generally & of the strength of arterial action in particular & sometimes, an increase of appetite & digestive power.

Most stimulants operate by an effect on the muc. memb. of the alim. Canal e.g. Capsicum & other acrid stimulants do not affect the fundus till they have acted some time on the al. Canal & even then less than the direct stimulants as alcohol &c.

The excessive, habitual & long continued use of stimulants is said to produce torpor & want of tone first in the digestive organs & then throughout the system. Perhaps this is so but I never saw the effect except from wine & alcohol.

Stimulants cure few diseases by themselves - they are preparative or adjunct

In low typhoid fever, ^{after proper preparation} it is important to bring the system under the influence of stimulants before a critical effort is made. A favorable crisis seldom occurs without artificial support. It is important to accompany the stimulants with liquid food. After fasting 24 h. 3j of spirits will produce vertigo in a well man. In the secondary stages of typhus the patient is in a state of irritation. I give the stimulants at regular & short intervals & with each dose 3j of liquid food, as gruel porridge or broth. This promotes the salutary operation of the medicine & counteracts its unpleasant effects on the stomach. This course is more particularly necessary when narcotic stimulants are used; for the nervous & circulating systems must be ^{adequately} ~~adequately~~ balanced. Irritation is unfavorable to the action of stimulants - there sh^d be something for the stomach to act on when under increased excitement.

In following this course I meet with no distress of the stomach - no irritation or
 jaclitation - no disagreement of medicine -
 a less reduction of muscular strength -
 Convalescence more rapid - relapses less
 frequent, recoveries more complete. Some
 object to food in typhus on the ground
 that it is not digested & must occasion
 irritation - but these persons vomit & purge
 their patients first with oilimony or ipecac
 & refriger. salts or Cal. & jalap - they repeat
 the purging - give antism. in nauseating
 doses - give refriger. salts in form of efferv.
 mixtures & veg. acids in lemonade, tartaric
 acid water &c. After such a course
 stimulants & food will disagree - they
 would work a well man. I tried this
 practice at first myself & it spoiled
 the stomachs of my patients. The refriger.
 salts & Dover's powders were the best items
 of this hot & cold, tight & loose practice
 which I discarded. In malignant &

In cases I have seen the sulphur pot.
 of Dovers powders evidently disturb the
 stomach when the opium & ipecac wd
 agree. Vin. ipecac. & Tinct. opii are
 far better than Dovers powders in ordinary
 cases, or we may give them in powder or
 pill. In the pure nervous fever of the
 Northern States the stomach is rarely
 disturbed by the disease & food can be
 digested & assimilated, as is proved by
 the little emaciation produced & by the
 fecal evacuations. The food should
 be in solution but not so much so as to
 cause distention of the stomach.

Pure reducing & pure stimulating
 agents are rarely necessary in combination
 the case case - never in combination
 I know of but one disease, acute rheu-
 matism, that requires both this. Symp-
 tom is not really antonic at the commence-
 ment - Alteratives only at the beginning
 will cure the disease more speedily &

without stimuli in their progress.

It is generally but incorrectly supposed that if used too soon in atonic diseases stimulants will sink the system still lower. Disease is not always attended with increased excitement at the commencement. In moderate doses of atonic diseases begin with small doses & observe the effects. In violent cases begin with commanding doses - small doses will fall in with the disease & aggravate it; you must not be behind the symptoms.

The simplest indication fulfilled by stimulants is to support the powers of life in a state of exhaustion.

A. Murray has no class of stimulants - he distributes them among the other classes & sometimes very capriciously. The following are the stimulants found there here & there in Murray. Sulph. ether (not narcotic) - Ag. ann. - Caps. Iugiber Guaiacum Sassafras. Ellet

Cordaromum, *Anthesis Pyrethrum* (all
 the acids if chewed will increase the saliva)
Arum maculatum, *Cochlearia armo-
 racia* *Arnica montana*. (I never saw
 it produce narcotic effects, but it will
 produce Coma, as will all the acids
 that produce erythematous inflammation)
 — *Soalis Rhis Toxicodendron*. *Aconit
 bulbosum*. *Sinapis alba & nigra* (but the
 entire seeds are Cathartic) *Angelica
 archangelica* *Azaron Europeanum* (it has
 also some tonic power, most of the acids
 stimulant if taken in large quantities are
 thrown from the stomach) — *Piper ni-
 grum*, *longum*, & *Cubeba* (they contain
 a terebinthinate essential essential oil &
 an acrid principle besides) *Pimenta vul-
 garis*, *Myrtus coryophyllata* (contains an
 acrid essential oil & an acrid principle
 the offic. oil of Cloves is the above oil
 with the acrid principle added, or
 the oil of the bark of the root of the

of the tree or sometimes the oil distilled from the leaves of another tree) Con-
 th. vesic. *Conell. alba* (tonic also)
Daphn. Mezereum, *Allium sativum*
Maleleuca capienti, *Sauro*, *Cinnamon*
L. Cassia, *Citrus Aurantium* & *C. vulgaris*
 (oil of flowers & rind) *Citrus Medica* or
 Citron (oil called bergamot) *C. Limetta*
C. Limonum - The oil of *Carum Carvi*
Mentha Piperita, *viridis* & *Pulegium* of
Cuminum cyminum (cumin, of Sison)
Anisum (anise), *Meum Feniculum* (fennel)
Pastinaca graveola, (dill) & of
Sauro Sassafras (not diaphoretic ex-
 cept in atonic states) of *Origanum*
vulgare & *O. marjoranum* (almost i-
 dentical) - of *Sarandula Spica*, *Ros-*
marinus offic. *Tanacetum vulg.* (also
 anthelmintic, emmenagogue & nervine
 - in excessive doses produces epileptic
 convulsions & death like Camphor &
 "probably narcotic")

of *Myristica moschata* (also causes epileptic convulsions in large dose - case after delivery of supposed puerperal convulsions, found the patient had taken a whole nutmeg as was the custom there, but she was more susceptible) of *Ruta graveola* (emmenagogue, supposed to cause convulsions) of *Juniper*, *Sabina* (likewise emmenagogue & eschrotic) of *J. Communis* (like *Savin*) of *Abies balsamifera* (balsam fir of Canada - like *Copaiba*) of *Sorix Europaea* (European oil of pine - diuretic & anthelmintic)

Stimulants I divide into *Chemp. an.* & *veg.* e.g. *amon. phosph.* - *Canth.* & the other *relicating insects* - *Capricum* - *Arum Rhiz.* &c.

For proof that stimulants do not exhaust the vital energies see *God on Colica Cibaria*. Practitioners in tropical climates assert the necessity of stimulants, where prisoners first &c. have been taken & care but little for previous evacuation.

Tories

49

Astringents

Produce vital contraction & condensation of the living fibres while at the same time they moderately augment & diminish absorption & decrease increased secretion (from the mucous membranes).

Dr Lee, thinks they diminish ^{morbid} irritation, irritability, &c. & I am of the same opinion. Their action is vital not mechanical. Entony & Atony do not depend on tension & relaxation. Many of the simple incitants as capsicum produce the same contraction, thus proving it to be vital.

Astringents increase absorption, increase rapidity & strength of action in non-phlogistic diseases, & moderately diminish the secretions. These are all their effects. They are allied to tonics & deobstruents & rank between them.

In vegetables astringency depends on their tannin (tannic acid of Thoms. & Berz.)

This (for its properties, see chemistry) is usually but not always in conjunction with Gallic acid as in Catechu. Gallic acid has no medicinal astringency. It differs, 1. in composition from tannic acid by containing an additional proportion of oxygen.

Astringents are not indicated in the acute stages of diarrhoea & dysentery & this is said to be owing to phlog. diarr. But these stages may be benefitted by the acids as Trillium Erigeron Canadian Capsicum & even brandy. Astring. are here contraindicated on account of irritability & irritation which require stronger agents. After their subsidence & when a state of relaxation comes on veg. astring. are useful. So of physick of all sorts of Coryza - of acute Haemorrhoea Acetate of lead & opium however will counteract dysenteric action even in the first stage as well as Calomel & even some

times better when there is much atony &
 it is desirable to avoid producing evacua-
 tions. Acelate of lead has something pe-
 culiar in its operation, it will abate
 phlogistic action as well as refrigerant
 & if given in atonic diseases it will
 not sink them lower, which is not the
 case with refrigerants.

Astring. are 1st Veg. 2nd Metallic
 1st Vegetable — are — *Cortanea Ameri-*
cana (cravings of wood contain most
 tannin, one of the most intense & best
 may be given in decoction — the extract
 is a very elegant preparation. *C. parvula*
Quercus alba & *tinctoria* (inner bark) — ext.
 by decoct. is best — *Coccoloba uvifera*
 indigenous & also found in the East, ext. by
 dec. one of the varieties of the kind of the shop,
Spices tomentosa the leaves — ext. by decoct.
 (the Pharmac. says the root but this con-
 tains no tannin at all). *Coumarum* / *luteo-*
leaves (in decoct. or ext.) Of the following

the root is a part used *Geranium mac.* (I sh^d
 think the ext. by deco. not by coo) *Heuchera*
Americ. *Statice Carolina* (intense astring.)
Cassia rivale (intense - better of tonic also)
Saxifraga Pennsylvanica (pure & intense)
Parnassia America. *Polygonum Virg.* (once con-
 founded with *Bistorta*, which it very nearly re-
 sembles) *Ceanothus Americ.* *Rubus villo-*
sus, & *trivialis* *Staph. Advena* & *Staph. phae-*
odorata (the latter purer, astringent & mucil-
 laginous & hence used for Cataplasms) *Epiphe-*
gy Virginia (W. J. Barton says this is purer
 it is pure & pleasant, at least when dry)

The following are foreign astringents but
 we have no need of them - *Pterocarpus eri-*
naceus - affording a variety of tinct. *Pl. Draco*
 affording dragons blood which is almost pure
 tannin & yet was formerly called a balsam
Butea frondosa - a variety of tinct.
Acacia catechu (ext of bark) *Acacia vera* (bark)
Calamus Rotang (dragons blood also)
Crameria tandraia the rhubarb root of

Thomas & called in our shops the Continental ext.
 of bark - It is bitter, astring. & used in intermittent
Eucalyptus resinifera (produces another variety
 of (Rins) *Potentilla Tormentilla* - *Polygonum*
Bistorta - *Statice Simonian* - *Quercus*
pedunculata & *Q. Robur* - *Q. infusctoria*
 of the East produces the gall nut from the sting
 of the *Diptolepis Scirpioria* - *Q. Cerris* rarely
 produces the galls. *Rumex Granatum*
 (rind of the fruit - an elegant astringent
 & good tonic) *Camelia Chimensis* - green
 tea - narcotic as well as astringent

Mineral Astringent - Protacetate
of Lead - Sulph. of alumine Sulph.
Ac. of Zinc Bi-per-sulph Copper (Proto-
sulph. copper now)

Astringents are indicated internally
in all passive hemorrhages & perhaps in sec-
ondary stages of all active hemorrhages. - In
Phylaxis - two cases of acute, ^{viz} idiopathic & mer-
curial & in chronic pt. - In the secondary
stages of diarrhoea - sec. stages & sequels of
dysentery - Sequels of cholera - Sec. stages
of coryza - In chronic cough with collig-
ative expectoration - sec. stages of phthisis with
profuse expect. & sweating - Sec. stages of
aphtha - In Porphyra hem. (Anabara)
Parasemia superflua - San corroha com-
munis & senescentium Simple & chronic
hemorrhoea - Peruria incontinens var. atonica
P. mellita. P. agnosa - Recon. in Lithia
renal is but doubtful. Ephraosis profusa

Protocelate of Sead may also be used
in entonic stages & cases

Externally astring. are used for
spongy ulcers (the mineral one generally better)
Atonic Parodontitis - Sec. stages of infl. of
Conjunctiva - Polypus elasticus of the nose
(they retard the growth) - Proctocantheria
(piles & prolapsus ani)

For toothache, an intense solution
of the veg. astring. in spirits will give a
speedy & as permanent relief as any applica-
tion that can be made

Obstruents

Affect the whole or a part of the secretory & absorbent system - remove torpor & promote secretion of the glandular system - relieve dyspeptic & cachectic types diseases & resolve many acute subacute & chronic inflammations - without affecting the state of artery or artery - independently of any increased arterial action & without any evacuation is essential to the operation

They restrain excessive, increase deficient & change morbid secretion

They are less powerful in diseases of the brain than in those of the abd. visc. perhaps because the brain has ^{fewer} ~~no~~ lymphatics, the vessels performing their office, or perhaps from inferior susceptibility

Lat authors make little mention of this property & give us such class. Cullen defines them as articles that "remove obstructions" - but he sh^d have mentioned the obstructions. The term is derived from the absurd humoral pathology & was originally applied to many of

of the articles which I call as

Defence of the class by the example of mer-
cury (vide my notes E. D. A.)

Deobstruents may be indicated in company
with stimulents or tonics or refriger. - hence
the class must be distinguished from these
Some articles are pure deobstruents e.g.
Iodine - Commonly they have other powers
in addition. The power of colchicum to
cure infl. of muscles & joints has long
been thought inexplicable singular &
unaccountable, its power of removing
torpor of the liver & altering the secretion of
all the glands ^{of all kinds} has been overlooked

Veratrum album & viride have are the
only articles observed by authors to have the
same powers - but I am certain there are
many others

The deobstr. generally affect
some part organ or texture more than
others e.g. liver lungs brain arteries kid-
neys salivary glands, skin. Mercury

given body & to produce a little or slight ex-
 thesis will increase the bile in certain states
 of the system - in others it will increase the
 secretions from the lungs - with diuretic reg-
 imen it will increase that of the kidneys - in
 an emorhea it increases secretion - with
 diaph. reg. it secretion from the skin. It
 will often increase the secretion from the
 salivary glands. All these operations but
 the last are apt to be overlooked & it is thought
 a great wonder that mercury sh^d salivate!
 Mercury acts on the whole secretory & absor.
 syst. & in a somewhat greater degree on the
 saliv. glands than other parts. I should be
 of opinion that emmen. expect. diuret. &
 diaph. effects are invariably the parts
 of a more general deobst. operation - were
 it not that many deobst. are destitute
 of these one or more of these powers.

It is not essential to a deobstruent
 operat. that it affect the whole sec. & abs.
 system.

Even. exp. Direct. & diaph. effects may occur independently or as parts of a general adest. operation - hence they sh^d be divided into direct & indirect. But if an article has all these four powers combined we may probably be justified in calling it deobstruent. even though it affects no other part. S. ptygalia may be indirect or direct from topical application.

When astringents produce effects on other parts of a viscus, the al. canal they seem to resemble adestment in their mode of operation though they differ in the effect produced.

Even a deobst. effect may be indirect for elaterium appears to cure diseases of the skin & to resolve infl. by virtue of its cathart. power - but perhaps it has some direct deobstruent power & purging is besides a deobst. process.

Rejecting this class he brought many valuable
 artic. into disrepute. Colchicum itself
 is not valuable as a diuretic or cathartic.
 Many artic. are thus expurged from M. M.
 e.g. dandelion.

Debility follows from a long use
 of deobst. particularly from those which pro-
 duce evacuations still they will not re-
 duce phlog. action.

No deobstment possesses refrigerat-
 ing power ^{in conjunction} with it be the salt of Chlor-
 rates & chlorids of potash & ammonia. Some
 possess tonic & stimulant power in combi-
 nation, but not stim. sufficiently to be ^{useful} ^{enough}.

Narcotics reduce infl. by their
 anodyne power for irritation though
 not the essence of disease is often the cause
 of it.

Opium is a necessary adjunct to
 all veg. deobst. in dysentery as well as
 to Colic. Full dose ^{often} with opium
 of Colic.; Sanguinaria, Iris versicolor.

Spargan. cann. baptisia, chinaphila & andromeda will counteract dysentery action. Nitric acid with opium will have the same effect. It is best to give full doses of these they cure as surely and as completely as calomel.

Vomiting is a deobstruent operation.

Emetic deobst. are hydragogue this I know from experience to be true of many e.g. Caperba & guaiacum.

The most important effect of a deobstruent is its resolvent operation.

The subordinate powers of deobstruents are
 1st Resolvent 2nd Antiphlogistic 3rd Discutient (signifying tumors by external application)
 4th Cholagogue. These four powers are characteristic of deobst. & almost peculiar to them they are not the foundation separately or in conjunction of any other class & may be considered essential to that of deobst. 5th Emm.

6. Diuretic 7. Diaph. 8. Expect. 9. Purg.

The terms Spersion, Detergent & Attenuant & seven Vulnerary are applicable to no articles but deobst. Spers. applies to articles increasing secretions from lungs, kidneys & skin & by old authors to a variety of operations. Detergents remove such viscid humours as obstruct the vessels - they shd be employed in torpid cases. Attenuants render the secretions thinner & hence probably increase the quantity - hence they are deobstruents. Vulneraries in the sense of external applications & promoting the healing of wounds do not exist.

Diseases. Deobstruents are indicated in functional derangement of the digestive organs, but not all deobst. indiscriminately. - In some of Gord's pneumonia (order pneumoniae rather than phlogica) - In atonic acute & subacute inflammation, of ext. or internal parts - but some deobst. are preferable. These

infl. are of the kind attended both with fever & infl. irritation. In eruptive & cutaneous diseases, febrile or non febrile. In cachectic diseases, not referable to the preceding.

The great division of deobstones is into Mineral & Vegetable

1st Pure min. deob. arranged in order of power Iodine Bromine & Chlorine - supposed to possess no other power - Iod. possesses tonic power but in an inferior degree. Bromine is similar but less efficient - Chlorine less powerful than either but valuable in many cases

2nd Nitric, Chloric & Hydrochloric acids

3rd Chlorides of barium, calcium, gold, & chloride of gold & sodium (essence) - used in numerous cases & often in syphilis - per chloride & peroxide of mercury (corr. lub. & red prec.) - All these have the deob. stone effect most prominent. The most acting mineral deobstones they are Protoxide & protochloride of mercury

2nd Vegetable Deobstruent

1st Pure or simple - They are resolvent, anti-
psoric, perhaps cholagogue. It is a weak
group, but in appropriate cases, highly serviceable.

They are *Scutellaria Toxicaria* (often badly
prepared in the shops) *Rubia tinctoria* - *Fusaria*
offic. *Cichorium* *Lapp. Ditylon* - *Peponaria* *off.*
Lanthusca hastata (the resin) - "yellow
resin of N. Holland" which probably belongs
here though its nature is not settled. &c

Others might be mentioned

2nd Spicist veg. deobst. - which augment
or restore the fluid secretion, as the hal-
luc of the lungs, anapnoea & diuresis.
The powers of this group are often questioned
yet the articles are frequently useful.

They are called in old authors attenu-
ants, detergents & sweeteners of the blood.
& are now called "diet drinks". A few do
produce no perceptible other operation
but a long continuance produces decided

benefit. Most are given as strong decoction but a few in infusion. More active agents may be used in conjunction & these as auxiliaries.

They are: Smilax off. & ^{clim.} *epiphyll.* (*serapilla*)
S. China! *S. pseudo-china* & *rotundif.* *S. glauca*
 - all similar - root bitter & mucilaginous
Comptonia asplenifolia & *Myrica Gale*
 (similar & perhaps not inferior to *Serap.*
 - leaves of the former & fruit of the latter, which
 has a yellow powder about it like the hop-
 leaves of *Comptonia* put into water de-
 stroy fish.) *Aralia nudicaulis* & *A.*
(Spikenard) (the root bitterish, sweetish &
racemosa with a resinous flavour) *Asclepias*
coronata *A. tuberosa* (roots sub-acrid
 bitterish & mucilaginous) *Actium Sep-*
pa & *Banana* (active, root sub-acrid
 bitter, sweet, resinous - *ginseng* also used)
Dioscorea Canadensis (fish honey-suckle)
Calystegia scandens (climbing staff)
Anticarsinum off. (allied to *actium*).

Perhaps the following belong here
Collinsonia Canad. (Archangel root
 similar to *liatris*) *Solanum Dulcamara*
 & *S. nigra* (but these are rather nar-
 cotics des bestiments, leaf sub visco-
 trious & shoots) This division is indi-
 cated in dyspepsia where the stomach is
 not very much affected in Idiopa-
 thic Hectic in *Bucconia tropica* to as-
 sist other articles as arsenic Rheu-
 matism when the infl. has become chronic

Uranz - Common & grows in the rocks
Sney syphilis & *S. syphilodes* (with pain
 in the bowels, nodes, bad ulcers, wander-
 ing pains in the night - Elephantiasis
Scleria senilis *Leprosus* *Eczyema*
S. pythiosis *S. leprosis* *S. parvula*
S. Ichthyosis & ccc. in *Porrigio*

3 *Acrid veg. dest.* *Chelidonium*
Majus *Glancium flavum* *Meconopsis*
 two spec. formerly *Chelid.* *Myrica*

cerifera *Daphne Mezereum* *Dica-
palustris* *Anemone Virginiana* *Aconitifolia*
memorosa - *Ranunculus*, bulbosus &
paleratus, *Clematis erecta* (*introd. ad
Stork*) All the *Trillium*, *Achillea*
Plantago

4th Narcotic (& not a cold) veg. deobst.
Solanum Dulcamara nigrum & *tuberosum*
 (ext of top) *Conium mac.* belongs here
 but more to narcotics - so *Aethusa Cy-
napium* & *Cicuta maculata bulbifera*
 & *virida* *Argemone Mexicana* (quite
 efficacious - used in Providence & Boston)
Lactuca elongata, *integrifolia* & *san-
guinea* (common plants) & *L. virida* &
scariola in Euro. - the cultivated
L. scariola & another species. Of these
 the expressed juice, decoct. & ext by
 decoct. belong to this group. As a de-
 obstant I prefer the expressed in sp.
 sated juice to *Lactucarium* which is rather

5. *Azida* narcotic deobst. *Aconitum Na-*
pellus *Stychnus nuxvom.* *P. Ignatii* (False
Argemone (probably a *Stychnus*) *Rhododendron*
Epiphanthum of North of Europe. *R. maximum*
 has been thought to possess similar power.
Kalmia latifolia *hirsuta* & *angustifolia* have
 considerable power, notwithstanding Dr. Bigelow
 eating a leaf. N.B. this term accord sig-
 nifies a quality of the narcotic operation.

6. Astringent & tonic deobst.

Chimaphila corymbosa & *maculata*. *Andro-*
eda calyculata (the most powerful) *Arcto-*
staphylos uva-ursi (inferior) — *A. Cal-*
iculata — Here perhaps belong *Sedum*
palustre & *latifolium* — *Aletris fari-*
nosa & *A. aurea* (often confounded with the
 former)

7. Resins & their oils — *Guaiacum*
Juniperus *Sabina* *J. virginiana* *J. de-*
pressa (called *juniper*) *J. procumbens* (called

the same) *Copaifera* off. Resins &
 oils of *Pinus australis* (America oil of pine)
 & of *Pinus Europaea*, & *Pinus sylvestris* (Euro-
 pean oil of pine) American *Pinus Strobus*
Abies Canadensis (the larch) & *A. balsamifera*
 These if pushed purge & then vomit
 they stimulate & prove diuretic

8. Another group - *Aralia hispida*
 (dwarfelder) emetic & diuretic I could never
 make it cathartic. *Erythronium Ameri-*
canum & *albidum* (in this vicinity the re-
 cent plant is used) - emetic if pushed
 & diuretic - probably not cathartic

9. Another group - Emetic in large
 doses, cathartic if freq. repeated & maybe
 diuretic emmenag. & expect.

Conithogalum squilla *Polygala Sen-*
ega & *pubescens* (confounded with *P. senega*)
Gratiola off. *Hellebom. nigr.* & *fetida*
Sobelia & *philitica* (perhaps they are near

cotic. I have used them freely & never saw
 the effect) *Lobelia siphilit.* *Eryngium*
yuccifolium (Eaton's aquaticum) not nar-
 cotic & I never perceived a large dose possi-
 ble & often repeated acts as a ^{hydrog.} cath-
 -diuretic in dropsy. *Sanguinaria*
Canad. & *Veratrum viride* belong here
 they are not cathartic but emetic.
Lobelia inflata not cath.

10. Another group - Emetic cathartic &
 diuretic. *Colchicum autumnale*
Illicium *Ascyrum Canad.* *Sandrose*
A. hypericifolium *Aralia spinosa* of
 the South (angelica tree) has all these.
 Probably also *Veratrum album*.
Phytolacca decandra *Anacardium occidentale*
Delphinium *Strophanthus* & *Consolidum*
Cocculus two species *Baptisia tinctoria*
 - perhaps narcotic, certainly composing
Stylinia sylvatica of the South perhaps
 belongs here. (green's delight) This is a
 very important class of diobstments

2nd Growth 77
Diuretics

Increase the urinary discharge. They are
often thought more powerful, than other remedies,
Paris's speculations are weak. Canstic
Colach is not a diuretic, it is useless in dropsy.
Nitro, potassium is not a suffic. diuretic. to
be useful in dropsy it might be if the latter
were ever active, as it never is. It acts on the
stomach solely & is not taken into the system un-
til after the effect is produced. Oil of
pine is not taken into circulat. but only its
odorif. principle & produces its ~~residual~~
effect before being decomposed, unless ta-
ken in large quantities & then it passes off
as a cathartic, the torpor of the kidneys it may
stimulate & thus prove diuretic. The same
is perhaps true of cantharidis - it is certainly
not taken into the circulation. When a
bee stings the belly of the ear & urticaria
appears in the palm of the hand sh^d we say
that the virus ~~is~~ absorbed & carried to the hand.
Paris's class^{of diuretics} is a heterogeneous collection with
various properties.

They may be divided into direct & indirect
- also into

1st Pure diuretics - These are not very
numerous & not the most powerful. This is
a general rule in deed in all the classes - arti-
cles that have but one operation are generally
weak except some narcotics & stimulants -

Chrysanthemum leucanthemum - not pow-
erful enough to be relied on in dropsy - use-
ful when there is a preternatural dimin-
ution of urine & to stop morbid sweating &
morbid secretion from the bronchial membrane
Spina petroselinum (root) *Asparagus off.* (root)
Eupatorium purpurascens & *verticellatum* (a
transp. weed) - but I have not investi-
gated them accurately & they may be de-
obstruent. *Collinsonia Canadensis* - but
perhaps deobstruent.

2nd Refrig. diuretics *Bi-tart. potas.*
Acetate pot. Nitric ether - Most of the
neutral bi & di salts not active, cath. may

be used as diuretics. *but not*

3^d Narcotic diuret. with no other power
 Ect. by deco. & expressed inspissated juice
 of the Sactuca - but perhaps mildly acob-
 struent, I think not however. The Tea
 plant is narcotic nervous & diuretic when
 used freely.

4th Stimulating & exciting diuretics
Cantharis vesicat. villata marginata &c.
 several weeps of the order coleoptera
Apis mellifica Several stimulant
 essential oils, as of *Gaultheria proc.*
Erigeron Canadense. This class is
 more important than the last.

5 - Acobstruent diuretics are far the
 most important & numerous & will sur-
 pass all others except the stimulant
Cantharis &c. These & *Cantharis* are
 all the articles relied on in dropsy.
 There are several groups of them
 1st Expect. Cholag. resol. antipson.

eretic & cath. if given freely, - not
stimulant or narcotic.

Stratiola off. - *Arnica* *off.* *Squill.* - *Polyg.*

Seneg. & *pubesc.* (sold indiscriminately for

Senega) *Eryngium* *off.* (efficient & like

Senega) *Iris* *versicolor* & *prismatica* -

Cytisus *Scoparius* (brown) *Sambucus* *niger*

& *S. Ebulus* (last most used in Europe)

S. Canadensis & *S. pubescens* (last most active

& most like *S. Ebulus*, ^{very} efficient in many cases

But the article which I think superior to

all others is the *Asclepias* *Syrriaca* (root) -

no other above is more efficient, but it is not

infallible. *A. decumbens* is a very good

diuretic. *Aralia* *hispida* has been

much celebrated under the name of dwarf

elder. I have seen it decidedly diuretic but

have never known it cathartic.

Erythronium *lanceolatum* used in this

country the leaves macerated in cider are

decidedly diuretic, but not active enough

for dropsy. *Arctium* *Lappa* (seeds & root)

2- Soft resins & terbinthinate. These are expectorant, may be ~~common~~ ag. & resolv. are emetic if given in large doses, but not very decidedly so, & cathart. but not so much as the preceding. *Pinus australis* - *P. lyocast.* *Larix Europ.* *L. Americ.* & *microcarpa*. *Abies balsamifera* *A.* *Canadensis* (oil) *Copaifera* aff. *Juniperus* *Sabina*, comm. *depressa* & *prostrata*.

3- Another group not adequate to recover water in dropsy & yet useful for several subordinate purposes. They are resolvent, antispasmodic, discutient, astringent & supposed to be tonic. *Arctostaph.* *Uva ursi* - *And. calyc.* - *Chimaph.* *Corymb.* & *maculata*.

4. A group which besides deobstruent & power active cathartic, emet. & narc. - also resolvent & discut. powers. *Nicotiana Tab.* is the type of the group. *Digitalis purp.* *Lobelia infl.*? *Actaea* - not emetic or cath. though narcotic. *A. racem.* has produced

free diuresis & is the best in dropy. In irritative conditions it may be proper. *A. cinicif.* on the N. W. coast is said to be more active. *A. subra* & *pechypoda* are inferior but not inert.

Mucilages & Lungs have been called demulcent diuretics. Their efficacy is considerable but they may promote the secretion of urine when there is irritation.

Conditions of the system when Diuretics are indicated 1st When there is irritation, ^{& irritability} with little or no atony 2nd irritability with considerable atony 3rd irritab. & c. atony & also insusceptibility & torpor. In the last case, use stimulating diuretics as *Cantharis* or stimulant & diuretic conjoined, as *gin.* For the 2nd state stimulant diuret. are also appropriate. For the 1st use narcotic diuretics.

Diuretics are not indicated nor will they operate unless there is an accumulation in the cavities or cell membrane. If the distention is extreme they will not operate till it is diminished. E.g. in Ascites purging with calomel will diminish the quantity & then other diuretics will take hold. Formerly paracentesis was practised with the same view.

Diuretics are never principal remedies but preparations & auxiliaries. They are incompetent to cure dropsy but must be followed by tonic & deobstruent. It is no reproach to diuretics that they will not cure, retain the ground gained. The morbid condition must be obviated. // I have not seen diuretics fail oftener than other remedies - they do not act so speedily as other emetics or cath. ~~but~~ but when properly persevered in I never knew them fail of producing diuresis. But diuresis when produced does not of course

make the case curable & sometimes is
of no service at all

This certainty is increased by com-
bination.

Dr Paris's account of their in-
compatibility is altogether groundless.
e.g. Cantharis & Digitalis. He says
alcohol is incompatible with ^{the} ~~the~~
Yet in one case after trying many
diuretics for a week without effect,
we gave off. alcohol $\frac{zj}{\text{every hour}}$
& in 24 hours a very copious diuresis
resulted.

Diaphoretics

Restore or augment perspiration

The secretion in health consists of water, with an odorous principle, acid, & some saline matter but it is changed by disease & by remedies.

It is false to say that increased secretion must depend on increased action & thus a stimulation. There may be want of action & of power to resist the vis a tergo e.g. passive hemorrhage, uterine hem. & the profuse sweats of the dying.

1st Secretion may be deficient in a high phlogistic state. 2nd in a low atonic state. 3rd in one of excessive irritation. In the first case diaph. are indicated but not stimulating ones. Deplet. & purg. will here contribute to diaph. Antisept. &c. are proper. Stimulating articles will increase the dryness of the skin. In the second case the stimulating diaph. are almost success-

ful. Tart. ant. will increase dryness
 One wd think many practitioners con-
 sidered reducing agents, or the only article
 which c^d prove diaph. Even Jas^d Johns
 says the frig. salts (citrate potash) with
 small doses of antin. & acidulated drinks
 are the only safe diuretics

In the 3^d state, either reducing or stim.
 agents will be tolerated if. Conjoined
 with opium & the narcotics are the dia-
 phoretics indicated or at least must attend
 Diaph^{oretics} may be direct or indirect i.e.
 deobstruent - acc. to manner of operation

Diaphoretics as to degree of operation
 are D. perspirantia & D. sudorifica
 Diaphoretics considered as to quality of
 operation are 1st Stimulating 2nd An-
 tispasmodic 3^d Refrig. 4th Nauseating
 5th Deobstruent

1. - Stim. diaph. Pure stimulants
 will produce diaphoresis in low atonic
 states. But stimulants which are also

diaphoretic are Indigenous aromatic
herbs that contain an essential oil
Sassa, Benzoin & Sassafras - all the pep.
virid. M. Puleg. ⁱⁿⁿ Hedera pulegioides (Pennyroyal)

Pycnanthemum. 6 or 8 spec. - used in infusion.
But a small quantity of the essential oil is thus
obtained, but this with the hot water produces
the effect & the Ess. oil added to hot water
are perfect substitutes.

The oil of
Rosmarinus off. may be used as above, but
this is more diaph. in proportion to its
stim. power. *Salvia* off. is allied to the
rosenmary.

Next articles
containing an aromatic principle & a
tonic power ^{which} are diaph. also *Asarum*
Europaeum *A. Canad. arifol.* & *Virg.*
Aristoloch. perfol. - more diaph. & tonic
than the above. *Panicula floribunda*
(root a valuable one) Other *Aristolochies*
are less diaph. & more tonic

- 2 - Antirrhizant Diaph. Camphor

§ Opium are most important. Not
 purgatives but pretty certain to pro-
 duce diaphoresis in certain parts of
 the system. Hot water in which can-
 phor is dissolved is an effectual mode

3^d Refrig. diaph. - important -
 Tart. ant. & pot. Protoc. ant. (glyc) -
 preferred by some but I agree with Cullen
 that Tart. ant. will answer all the purp-
 ose, of antenomy. The protoc. with phosph.
 of lime is much used James's Powder -
 Salts of pot. sod. amm. magn. with
 the two acids of anten. may be better.
 Acet. amm. Citrate pot. & most of the
 refrig. salts that can be taken freely without
 Cathart. under diaph. regimen prove
 diaph. just as under drastic reg. they
 prove drastic.

4th Nauseating diaphoretic - not stim-
 ant nor seducing - nor drast. - Ipecac

which is the product of several roots especially if we buy it in powder. *Cephaelis Ipec.* is the best *Psychotria emetica* is next *Richardia* & *Richardsonia emetica* & *scabra* & *Pambolia stuber*. These three are not as strong as the first $3j = \text{only } 7i$. *Gillenia trifoliata* & *stipulacea* approach nearer than any other Am. plant of ours. *Euphorbia* ^{*Peccary*} ~~*corollata*~~ & *E. gracilis* (often confounded) *E. corollata*.

5. Deobstruent diaph.

Decoc. of wood of *Guaiac. off.* (*Sigmaria*)

— It is a sudorific — useful in rheumatic complaints & sequelae of syphilitic diseases.

Aralia spinosa (effectual diaph.)

Apocyn. Cann. & pubesc. (active)

Phytol. dec. (poud. of root) *Asclepias*

tuberosa (root) — ^{very effectual} active

Diaphorico

Diaphoretic are emetic rather

which is not at all
 necessary of course
 to be done in the
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Diaph. are auxiliary rather than principal remedies, with one exception. Fevers not entonic nor very low or but intermediate are to be broke up by diaphoresis in the forming stage. But this is not the most eligible mode of breaking them up, though often successful. When it is too late to hope for resolution it is often well to commence the treatment with diaphoresis.

They are often much abused. I have seen a patient sweated till the water dropped through his bed. To excite a profuse persp. is never proper.

Moseley adopted diaph. treatment in dysentery supposing it a febris enterovasa like Sydenham. I have seen such treatment succeed - warm bath, nauseating article, &c. But this treatment is adapted to cases not entonic nor much entonic.

Many cases are attended with morbid sweating from beginning to end of diaph. and aggravate them. It is not a specific remedy.

I have been thinking of you very much lately
 and wondering how you are getting on.
 I hope you are well and happy.
 I have been very busy lately
 but I have managed to find some time
 to write you a few lines.
 I have been thinking of you very much lately
 and wondering how you are getting on.
 I hope you are well and happy.
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 but I have managed to find some time
 to write you a few lines.

Expectorants

Promote the secretion & facilitate the excretion of mucus from the bronchial membrane. The discharge of the matter is not part of the exp. operation. The matter secreted may be pure, mucus, or intermediate, but not halitus. It is my belief that there are no articles which produce an expectorant effect directly.

The exp. operation involves 1st the resolution of infl. of bronch. vessels, obstructing the secretion. 2nd Obviating spasm, or irritation or atony & irritation - these last cases, cannot always be distinguished.

There may be articles that act exclusively on the bronchial membrane, but I have not met with one that has this sole direct effect. The effect is produced by various & dissimilar articles. V. S. Cinchona, Arsenic &c. may have this effect. These opinions are now generally entertained by popular writers, e.g. vide Paris & Murray.

The conditions of the system in which expect.
are indicated are 1st Phlog. action 2nd Irrit.
3rd Irrit. with exhalation 4th Exhalation
with insusceptibility, 3 with or without torpor

In atonic infl. the deobst. will effect
a resolution but without expectoration unless
the infl. is near effecting a spontaneous resolu-
tion expectoration & then they hinder it

Expectorants are divided as follows

1st Excitant 2nd Nervine 3rd Narcotic
4th Refrig. 5th Tonic 6th Deobst. 7th Enetic
8th Diaph. & 9th Demulcent or some
suppose

The cases in which expectorants
are indicated are not very numerous & I
doubt not they are often used injuriously
E.g. in Cough it is common to excite expect-
oration - but in many cases it is not possi-
ble to adopt a worse treatment. In many
cases the cough arises from irritation of the
digestive organs but if expect. is excited it
will go on of itself & become incurable

relent & the dyspeptic cough be changed into membranous phthisis. So of dyspnea & most of the varieties of phthisis, there is no inflammation in the case. After the secretion, however, commenced it must be stopped before the cure can be effected.

In case of positive infl. however, if we fail of resolution in the early stage, the next ^{best} method is to produce expectoration. But it must not continue long or it will run into phthisis even in this case.

In a case of phthisis with expect. success depends on restraining the cough & expect. or the pat. will die of the disease. We can hence draw a prognosis.

I call all cases phthisis which are accompanied with hectic, emaciation, night sweats, &c. - & do not limit the term as the French do to tubercular phthisis.

Emmenagogues

Restore the Catamenial secretion when suppressed & increase it when deficient or sparing.

As the uterus has sympathies of its own we might expect that ^{some} certain articles would act on it independently of any general doobst. effect - but no such article is known to exist.

Idiopathic Parox. obstructions exists & is distinguished by pains at certain periods, by neither an antonic nor atonic state of the system. There is said to be plethora but the symptoms depend on irrit. with atony. ~~There~~ are ~~the~~ cases commonly considered antonic & v. d. is prescribed. It will often succeed if followed by stim. & tonics. Such cases require simple deobstruents or if there were such articles direct emmenagogues. To them Sang. & Helleb. niger are peculiarly adapted. They may be terminated at once by

or by ligature to a limb or by one
or two fingers it is true, but this does not
prove the action to be entonic. Cullen
et al. say that venotomies acts better without
the p. or fingers. This is the only idiopathic
suppression of the Catamenia

Articles that excite the secretion of the uterine
are not of course doabt. for amenorrhoea
may depend on different Condition of the
system e.g. atony as in dyspepsia, phthisis
stomach. It is a wise provision of nature
to retard in such diseases the progress
of debility by suppression of this secretion
& much injury will be done by restoring it,
without altering the condition of the system.
Such attempts generally fail of success
but this leads to a perseverance in the plan
which does not fail to produce injury.

At some ^{periods} ~~years~~ idiopathic suppres-
sions are more common, as when I
commenced practice. It is now some years
since I saw an idiopathic suppression

Cured. Most cases now are symptomatic - e.g. of an insidious progress of dyspepsia, not noticed until the suppression receives attention as cause not consequence.

Stomachy subjects reduced beyond a certain point almost always have suppression, but the first symptom noticed is often anorrhoea & the phys. will be in posture for essence agogues. This suppression is an effect of the vis medicatrix naturae as Cullen would say.

Beware of directing all your efforts to restoring the secretion. Attend to the primary disease. So in phthisis often the first thing noticed is the suppression. In slender feeble & stomachy young women the catarrh. will not come on so early - all their complaints will be attributed perhaps to this & phys. are apt to take the same view & give aloe & hellebore with V.S. thus reducing the pat. still more. P.M. exam. shows enlargement

of mesenteric glands, extreme immaturity
 of the uterus, not developed more than in
 a child 10 yrs of age

Now a days most Cases are symptomatic

A few Cases of idiop. amenorrhoea may oc-
 cur in young women who have exposed them-
 selves to wet & cold at the natural period
 Symp. amenorrhoea sh^d be cured by
 curing the main disease

1. Stimulating emmenagogues. These
 are possibly deobstruent also. Ol. of oute-
 grae colons - efficient & ^{imm.} analogous to the bre-
 benthinats oils - Ol. tereb. - stimulant
 acts on the uterine system particularly &
 seems to be allied to Camphor & even to
 muscavacca - Ol. menthae Pulegii -
 sh^d have the same properties, but none of
 it is found here "Ol. pulegii" of our shops
 is that of *Hedera pulegioides* & this is superior
 to the mint & approaches nearer to the
 brebenthinats. • Seeds in powder of
Pinapis alba & nigra answers a good pur-

use in leucophlegmatic & habit
Cath. vesic. in certain stages of the system

I I. But the Deobstruent emmenag.
are far more efficient & will often res-
tore the secretion when it had better not
be restored - Sanguin. ^{has} even
produced menorrhagia when there was no
disturbance of the Catamenia - supposed
to produce abortion - used in dysparth.
supp. & in symptomatic when the disease
is not very severe - I think the acorus
Calamus acts on the uterus with Sanguin.
Compounds of sulph. fer. & zinc with
Sanguin. are useful

Helleborus niger has been long known
in the books for this purpose - called
a cathart. but cannot be used for this
property ^{in ordinary cases} - It is a deobstruent. In large
doses it vomits, in small it is a hydrag.
Cath. & it may be so used as to promote
diuresis & expectoration. I have used it

in rheumatism & it carried it off just as Colchicum would do. In the shops it is in a bad state - badly prepared or collected in the wrong season or in improper localities. If sanguin. is collected in the flowering season it will exert power much sooner than if in autumn. I once thought it an uncertain article. Now this maybe the case with Hellebore & many other foreign articles. Helleboms felids, naturalised in the middle state, as we have it in a better state is more uniform in its effects. The hellebore of Anticyra is *h. orientalis*.

Rubia tinctoria, recent & collected at the right season is a pretty certain emetic & will obviate many diseases, in which amenorrhoea depends. As collected for the dyers, it is quite inert.

Copaifera off. the resin & oil

Cl. juniperus, *Sabina* has been quite celebrated & much mischief has been done

Unseasonable use
Protochloride of merc. is an efficient agent
in obstructed menstruation. It may often
be relied on alone & it is often a valuable
adjunct to other emmenag.

V.S. is adapted to the same purpose, tho
tho debilit. emmenag.

III. Cathartici emmenagogues - not
otherwise emm. - i.e. unless cathartic
Ext. Aloe vulg. & spic. act on the pelvic
viscera - Ext. ^{by decoction} of *Emvalleria Maialis*
& of *Polygala polygama*

IV. Certain tonics remove the supps.
when connected with atony or debility or
if you have reduced the part to it by
V.S. Cathartics &c. Proto & per sulph. &
Proto & per oxide of Iron - Carb. & phosph.
of Iron - Sulph. Quic &c.

V. E. nervina - w. hyster. irrit. cases
Asafet. Opoponax - Galbanum Sagapenum
(Femula Persica)

Ecbotica or Partu, acceleratores

~~Exante~~ Bring on or increase parturient effort

No article supposed by the ancients to possess this power here it in reality & the class has been dropped. I have retained it

The article, now known to possess this power do not act on the principle of emmenag. Clavus merely restrain excessive menorrhoea & is acknowledged not to be worth much as an emmenag.

Succinic acid (real succini of the shops) possesses some ecbotic powers - Dr Field of Enfield

Ecbotics are direct & indirect

Direct as the Clavus - succ. acid. Probably other agents & processes have ecbotic powers

Indirectly I think Sanguin. will produce this effect occasionally by its action on the sec. & abs. syst. & thus on the uterus. Active purging with Aloes - Evon to-

ken freely is supposed to produce abortion but I have given it freely & constantly to gravid women in a feeble state & it will even

abortion. In some states of the system it will probably cause it. Many articles have a popular reputation for this effect & some on unjust grounds.

1. Direct - *Sclerotium clavus* - I see has it in an eminent degree. *Lycoperson Boovista* (puffball) taken before quite ripe is said to possess decided abortive properties. *Actaea racemosa* has this effect. ^{I have known it produce violent uterine pains in the puerperal} I have reason to believe so. (1830) - It has a popular reputation to this effect & is said to have been used as a partus accelerator by the Indians, who did not need such an effect.

Trillium has testimony to this effect (besides popular report.) from physicians, but I doubt the testimony. *Decodon verticillatum* (*Lysitrum*) is said to have this power. Probably many will be discovered hereafter.

II. Indirect Ecbolics - Verection
 Nausea by antimony under certain cir-
 cumstances or vomiting. Cathartics of
 Aloetics & drastic cath. generally
 Ligatures upon the limbs will some-
 times produce abortion. Active deob-
 struents given in improper state of
 the system will sometimes have the same
 effect

S. Grant

Emulsines

By top. applic. produce a serous or if very
 strong, a mucopurulent discharge from the
 Schneiderian mem. Useful not by exco-
 nation, ^{to help} as supposed by ~~it~~ probably by counter-
 irrit. & perhaps by ^{the} Concussion. Dr. Lee re-
 marks that the translation is of action, not of
 fluid;

Diseases - Chron. ophthalmia. Certain forms
 of cephalia - Rheumatic aff. of muscles of face
 near inner angle of eye - Chronic cephalitis
 Serous apoplexy - Anurosis & Hemiplegia

Neuralgia auris & faciei & certain cases of deafness
Sometimes in their humble ^{studies} they are valuable

Suspension of the habit of snuff taking pro-
duces headache, is drying on the nose & would

hence pedagogues would relieve it.

The bad effects of the habit are on the voice, the
sense of smell, the digestive function - Sinusitis
syncoptica & probably cordialgia - Anorexia
& many symptoms of dyspepsia. It is to produce
paralysis of pancreas & spleen - but perhaps
the analogy has been drawn from alcohol

Tobac. is the worst evul. for habitual use

as it is a narcotic as well as topical irritant

I. Veg. eschives - White ^{Hibiscus} sugar - ^{flowers of}

Mel. ^{Powder of any of the} ^{flowers of} ^{flowers of}

Ulex. ^{antenn.} ^{Veratrum} ^{than even as it}

is in the shop, case of an Apoth. who sneezed

20 times before he c^d speak. Nivide more

powerful when fresh. Punguin. - very active

& produces by continued irritation. Euphor-

bia off. - Capsicum

II. Mineral eschives - Calomel - Turpentine

- exceedingly active. # S. Florentina isorris root

Sialogogues

By topical application increase the saliva
 They act probably on the principle of an
 issue, perhaps also on that of counterirritation
 though perhaps this is the only effect of issue.
 Their application is limited but
 not unimportant

Diseases - Odontia dolorosa - cases aggra-
 vated by cold - Rheumatic aff. of the
 jaw - Paralysis of the tongue & muscles
 of deglutition

The habitual use of tobacco pro-
 duces a waste of saliva - anorexia -
 Cardialgia - Common dyspepsia - func-
 tional derangement of the pancreas &
 liver - perfect limosis typocoptica -
 It also occasions thirst especially for
 spirituous liquors. The inebriate can
 scarcely be found who does not chew
 or use tobacco. It has one good
 effect. It obviates costiveness; but
 many other articles are better.

Anthrenis pyrethrum *Myrica cerifera*
 - very efficient but disagreeable to the water
Anonum Europ. Canad. Arif. & Virgin.
Bochleria Annonacea - *Daphne* *be-*
Zercon - *Peels of Anonum grana*
Paradisi *Timiber off.* *Alpinea:*
Calanga *Elate Cordamonum*
nicotiana Tabacum

Emetics

Produce vomiting independently of taste odor or bulk

When a moderate dose of antimony is taken the stomach is quiet for a time, from 15 to 60 min. The nausea commences & gradually increases - pain in the head - rigor - pulse weak & low - face & lips pale - eyes lose their lustre - countenance becomes dejected. At length vomiting begins - great agitation succeeds - the blood vessels become congested - face & eyes red - sweat breaks out - pulse becomes full - at length vom. ceases - pat. becomes languid & feeble - nausea often continues for a time - & patient at last becomes drowsy.

Nauseating medicines reduce the frequency & strength of the pulse & contract the small vessels. They reduce the powers of life & have a debilitating effect - but the degree is proportioned to the article used. The nausea from antimony is more debilitating than

that from any other emetic
 vomiting comes rather than depression
 Many who would sink under continued
 nausea, bear vom. very well

Hicatus

The act of ~~vom.~~ vom. is deobst. so long
 as it continues & is more so if produced
 by deobst. articles. Emetics sometimes
 remove disease at the outset. But ge-
 nerally they are only auxiliary remedies

Emetics are employed to fulfil the
 following indications

- 1st To resolve dis. by a shock & strong impres.
- 2nd To increase susceptibility - equalize
 excitement - & change the secretions, ac-
 tion & condition of the al. canal
- 3^d To excite the absorbents & promote the
 resolution of infl. particularly local infl.
 as of testis, &c. & to promote the absorption of
 matter from abscesses

4th To remove poisons from the stomach
Emetics are Vegetable & Mineral
Veget. Emetics

1st Simple veg. emetics Ceph. Ipecac.

Psychotria eratica Rhipichardia eratica
& scabra Pamb. Etuba (Brazil)

Dorstenia Brasiliana & asarifolia

Asclepias Currucaviana

In the U. S. Viola purpurea & calceolala

Gillenia trifol. & stipul. the best substitutes
for ipecac Euphorbia ^{Ipecac.} gracilis, &

corollata more active than ipecac

Cypripedium ipecac. & toment.

These veg. em. are indic. when
mere evacuation is required & a gentle agi-
tation to break up disease.

2nd Veg. deobst. emetics. Their great-
est power is deobst. Sanguin. Phytol.
may both be relied on Apoc. cann. &
androsace. though more known is inferior. - It
has been distributed as ipecac & was very ef-
fectual in one parcel, but it contained

(art. emetic) — *Aralia spinosa*
 Dr. M^o Bowie thinks it the best indigenous
 emetic — *Polygala lutea* — strong infu-
 sion or decoct. but it leaves the stom. & cl.
 Can. in a bad condition — if employed
 as a deobst. diarrhoea & hydrag. co-
 lics often follow — efficient as an
 emmenagogue but does as much hurt
 as good. *Osmith. Symplica* — celebrated
 of old — it may be made an effect. cath.
 & also a deobst. — but leaves stom. in a bad
 state. *Sobelia inflata*
Stillingia sylvatica (green's delight-
 wort root). *Ranunculus Flammula* proba-
 bly belongs here — the distilled water — has
 no taste — ʒss to ʒj remains 5 to 10 min.
 on the stom. without disturbance & then
 suddenly empties the stom. without nausea.
 — adapted to remove poisons. *Pinap.*
alba & nigra — (effectual)

These emetics are proper when
 counterindication & strong impression on

the system are indicated in croup - angina maligna - Typhoid pneumonia & the commencement of the effects of the bites & stings of reptiles & insects. The sinapis & ranunc. are excellent to remove narc. poisons.

3 - Mineral Emetics

1st Refrig. min. emetics. Tart. ant. & pot. Protox. ant. (glass) Protox. ant. & ph. Calcei. (Gal. Powd) - but more used as a diaphoretic. Antimoniate, & its of pot. - not well known.

These are used in the first attack of mild atonic dis. If rapid & severe they fall in with them - Drs Good & Percival speak of the injury resulting from Cullen's plan of giving ant. nauseants.

2nd Tonic min. em. - if given in doses short of nausea acting as tonics - if increased as emetics but still retaining their tonic power - Sulph. Zinc - of copper - Cuprous ammonium (probably a nitro-gen of copper) Peracetate of Cop. (verdigris) - Di-her acet. - per-ac. & bi-perac. are called verdigris.

These are indicated in Dyspepsia & Phth. pulm.
Phthisis pulmonalis

3^d Doebest. min. emet. - Turpeth. min.
 is the best. De-per-nitrate of merc.

Proto chloride mercury

Employed when the strength is unimpaired to remove narcotic poisons from the stomach - also to obviate disease by the shock to the system.

In the W. I. when poisons first have been eaten they evac. the stom. if convenient but do not lay much stress on it. Stimulants, will in all cases effect a cure.

[Faint, illegible handwriting on a piece of aged paper.]

Cathartics

Accelerate or increase the evacuation from the intest. Canal

Dr Eves article on cath. is valuable. He is correct in saying that they often debilitate by removing the stimulus of distention. But in malignant dis. there is a want of energy in the brain & nervous syst. & vis. & cath. impair it still more - even before the evac. is produced & the evac. reduced by depletion of the system & not by removal of stim. of dist.

Cath. are of more universal applic. than any other class of remedies. There are few diseases that do not require them.

They may be divided into

- 1st Eccoproptic - restoring nat. perist. action
- 2nd Laxatives - increas. perist. action
- 3rd Purgatives - increas. perist. act. & ^{secretions & discharges} augm. the
- 4th Drastics which actively increase peristaltic action & the secretions & probably occasion also an inverted action of the absorbent

Drastics cannot be made substitutes for laxatives. If given in small doses they will produce no effect till they accum. on the syst. & act as drastics. The same is true of many purgatives, but Ole Tigli may be made to act as a laxat. in gradually diminished doses.

Eccoprotics & laxatives may be substituted for each other.

Copra gogues - discharge merely fecal e.g. castor oil in ordinary dose.

Cholagogues - Calomel given alone & acting slowly produces bilious discharges. These are often thought to be morbid matter in the more purg.

In the 2nd stage of nervous fever Cal given as a laxative will move the bowels but will remain in the duodenum & be cholag. - all which is ascribed to the disease. Unless there is a constant tendency to secret. of bile Cal. is applic. only to the early stage. Its cholag. powers sh^d be borne in mind.

Hydragogues — Elaterium is the
purest — Croton Tiglium in full dose
Refrig. salt, — yet hydragogues differ in
their effects on the system — The neutral salts
are refriger. they reduce ^{also} by the watery evac.
& by removing the stim. of distant. But
elaterium has no refriger. eff. Patients
will even rise under its use who will sink
under refriger. salts. I presume it will
aggravate phlog. diarr.

Refrig. Cath. are Sulph. & Bisulph.
pot. sod. & amm. & magn. — The sul-
phites & hydrosulphites have the same
powers but are not permanent salts —
The triple Sulphates of pot. sod. & magn.
Sulphites & Hydrosulphites of Lime
Phosphates & Bi-phos. of pot. sod. amm. &
magn. — Bi-phosphates of Calcia — Di-phos-
phate of Potassa — Phosphites, hypo-ph.
& quadrophosphites of Calcia
Tartrate & Bi-tarb. of pot. sod. magn. & amm.

Bitrates of Calcia - Tartrate of
double base -

These refrig. Carb. act on the channels
of the intestines & all the collaterals vis-
cera except the liver. They are apt
to produce flatulency in the bowels (Croton
& Calomel will not) & together with
the carbonate & bicarb. are "improper
for those who have hernia" as they thus
endanger strangulation. As they do
not produce tenesmus they are suppo-
sed to be mild & adapted to all cases
They are injurious to old dyspeptics

Tonic Cathartics - Guilandina Bon-
ducella (nickernut) in full doses purges
- but it does not debilitate in low dis-
eases & patients will even recover vigor
under its use if its purging is not
pushed too far. Its effects on the sys-
tem when it purges are like that of
cinchona when it purges but a less

dose is requisite. For John in Trop. Clin. prefers it to bark as a tonic in paludal fevers & ^{also} to any other article as a cath. in the same disease. It is valuable in dyspepsia & it w^d be well if it were more used.

Polygala polygama (or umbellata) short of purging is a tonic - more purges actively. It may be given so as to keep the bowels lax & yet prove tonic. Aloe vulg. has some power in ecoproptic doses - it certainly does not reduce.

Astringent Cath. - *Rheum australe* in dose, not too large. Other species are more astring. *Rumex* is more astring. than *Rheum*. *R. sanguin.* & *obtusif.* are the best. *R. crispus* is good. *Alum* is good in full doses. In fevers of a low nervous type, purging takes place & diarrhoea follows & the abd. becomes tympanitic. Purging with alum is very useful in such cases for its astringent effect.

Diaphoretic Cathartics - *Eupator. purg.*
Eurhinaef. (wild hickory - Southern)
Asclepias syriaca & *tuberosa*. *Oloporosa*
gigantea - a decoct. *Cumj. caten.* dec. &
sylph. & *pre-arsyph.* Complaint - is diuretic.
 The expressed oil of seeds of *Euphorbia* *La-*
thyrus purpur. like *Crota* but more kindly.
 The dose must be four times as large. It is
 Conjugate use.

The *Phledelthiophys.* boar of four
 grains half an hour. R. *Sul. dtd. 3j* & last.
 ant. gr. 1/2. It will purge very speedily - But
 in the forming stage of fever it will fall in
 with the diseased action.

There is a feeling with respect
 to the use of Cath. in malig. dis. e.g. to syno.
 mild laxatives after interrupt the energy
 of the brain & nervous syst. ^{before} ~~while~~ operating,
 & after the operation the pat. feels better -
 hence they are thought to have relieved.
 So too in Putrid typhus the pat. is worse
 while the Cath. remains. In Convalescence

from acute disease, & when emetics only
ought to be given the pat. will prefer mag.
or castor oil from the same mistake.

It is remarked by a disting. practit.
formerly of this state "his everlasting use of
Cast. & of antine ought to be resisted"

One half of the fatal cases of disease
which I have seen he were accelerated by purg
in Conn. N. D. does little injury for it is little
employed

N. S. Purgings & Vomiting are now
more remedial for all in typhus than they
are in ~~some~~ Intermittent fever. In ty-
phus they may be often required but if given
judiciously the injury is more irreparable
In ~~some~~ malig. typhus I have seen the pat.
daily purged with salt & senna whenever
dose reduced the pat. or was evident even to
the attendant - One large dose of opium
would then be given with ~~relief~~ relief for a time
but soon the secondary effects w^d follow hot &
dry skin restlessness &c. & more purging
was in all cases.

w^d be resorted to. I have seen a pat. thus kept along 3 weeks & 3 mo. he required for recovery which at last was never complete. If the case had been malign. the pat. w^d soon have sunk. By many Cathartics are resorted to when nothing else occurs. Hamilton on purgatives only proves as it has been remarked how much the human body can withstand.

In acute & chronic dysentery cath. are never indicated for the disease - J. G. J. remarks in his review of Gregory's Practice "In dysent. there is both irrit. & infl. & yet with some cath. are the principal rem. I sh^d like to know on what principle the irrit. of purgatives superadded to the irrit. of the dis. can be of service. They aggravate & protract the dis. & add greatly to the sufferings of the patient." *Emphysema abdominis* sh^d never be treated with cathartics.

The views of the skin practitioners in this country seem to think they must first cleanse the patient's blood with purges of refriger. salt or of sulph. & even tart or cal. or blue pill. I have known life destroyed - in one case almost immediately - the health ruined in thousands of instances by this practice. Case of Erysipelas, Erythema - purged successively by 3 phys. - patient died from the treatment.

Dr. McClelland, phys. to P^r Seepold remarks on the prevailing fashion in England (& he might have added the U. S.) of giving cathartics in all cases - the self empiric never is giving that salt & cal. can do hurt. He speaks of Cheltenham & Seawater Spa - he might have added Ballston & Saratoga as the great resort of fashionable folly. He says the habit of gluttony is not to be remedied by a habit of purging. He speaks of "motherly medicine chest" & of children educated to purgatives & of the natural consequence - a train of nervous diseases & even ill health. Sir W. Scott speaks

in the Leg. of Montrose of over physicking
a pat. till Cordial cannot recover him
The class of remedies is so much abused
Science depends on discrimination
The evacuation of cath. is the least impor-
tant part of their operation

Additional remarks on Cathartics
Evacuation result from increase of per-
istaltic motion only & this frequently from
the state of the system. Suppressed per-
spiration, ~~with~~ combined with other cir-
cumstances may bring it on - so cold
water to the rectum - friction also.

J. R. Jewett relates that by means of knea-
ding for 24 hours the N. W. Indians produce
a cathartic operation. But such modes
of are indirect - that of Cath. is direct

The healthy action of the intestines
is said by phys. to depend upon the bili-
pancreatic juice & natural mucus of the
intestines. I am not disposed to dispute

but do not think it altogether true
 We know that the heart has an inher-
 ent power, the "vis insita" of the an-
 cients, residing in its muscular fibres &
 this is one agent at least in keeping up
 its motion. So I believe it to be with it
 in testies. Murray says "cath. stim.
 the intest. & thus increasing their peristal-
 tic motion cause their contents to be evo-
 cated by propelling them along" "Why
 then" says Dr. F. do not alcohol & other
 stim. act as cath. they stim. ~~the~~ or
 rather increase the peristaltic motion.

Cathartics are employed for ^{three} ~~four~~
 five purposes

- 1st As antiphlog. agents - Use refrig. salts
- 2nd To resolve diseases by sudden & strong im-
 pression - The evac. is not the object. The
 impression may be made by small evac.
 & later on might do better an article
 less evacuating would be better Calomel is
 the best.

3^d To increase susceptibility to other articles - to equalize excitement - & prepare for other remedies - in diseases not phlog. nor strictly atonic.

Calomel is best

4th To remove effused fluids as in Dropsy & promote absorption. To affect the absorbent system, the secretory must also be affected - Euterium - it possesses deobstruent as well as evac. powers & affects the secretion.

5th To remove offending or poisonous matter in the intestines - Shd be brisk Castor oil is one of the best. I have given a wine glass full - To quicken it add a drop of Croton oil

The six following Considerations sh^d influence you in choosing a cathartic

1st Degree of power

2nd Quality of evacuation

3^d Influence on system independent of evac. - as refriger. deobstr. irritant, astringent.

- 4th Part of intest. Can. operated on - whether
the upper, lower, or intermediate as the
Colon
- 5th The ordinary time required for operation
- 6th The Condition in which it will leave the
al. Canae - It is important also to know
whether its operation is kind or disagreeable

Eccoprotic Cath. sh^d be given 2 or
3 times a day. Examples are Sugar
Molasses (useful in hemorrhoidal aff.)

Honey Sub-acid fruit
Flowers of plants (nearly all) Some
flowers, however are too powerful to be
eccoprotic - or even for laxatives

Examples of Laxatives are Penna
Castor oil. Carb. Magnesia

Examples of Drastics are colocynth
Elatium Tylum Euphorb. Lath. &c.

As to Quality of operation Cath.
are Coprogogue Cholag. & Hydrag.

Calomel & Gamboge are examples of those cath. that act on the upper part of the al. Can. viz. stomach & duodenum.

Of those which act on the internal part examples are Podophyllum.

Of the 3rd kind aloes is the best - Ex. ^{or decoct or inf.} of *Convallaria majalis* - Ex. ^{or inf.} of *Polygala rubella*.

As to the Time of their operation they are 1st slow 2nd Rapid 3rd Intermediate
Ex. of 1st are Calomel & di-protonit. of merc.
Ex. of 2nd are ol. ric. - ol. tigl. - ol. Eupst. Sars.
Elater. Gamboge - Rhamn. Cath. - Refr. salt
Ex. of 3rd are Jalap. Scammony - Colocynth
Senna & butternut.

Cathartics may be divided into

- 1st Refrigerant - vide cathartica supra
- 2^d Nervine - e.g. Cocculus two species
- 3^d Narcotic - Nicotiana Tab.
- 4th Tonic - vide supra - also Empet. ^{ergatum.} perf.
- 5th Astringent - It is commonly supposed that an astringent is opposed to a Cath. operation. But an astring. operation is merely restoring morbid increased secretion, - Condensation of living fibres &c.

Epispastics vide M. M. vol. 1. p. 1

(Additional to my notes of 1832-3)

One pain will cure another as in Tooth-ache
 A.T.T. remarks that though at first local
 in their eff. they soon aff. the whole nervous system

Dr. Paris's opinion that blisters affect a
 deeper order of vessels than issues is doubtful

In severe cases when we wish to produce
 an effect on the const. in general they have
 more effect when applied to the spine. This
 is important particularly in Tetanus. Para-
 plegia. Agenesis in potens. Chronic uterine
 aff. Atonic aff. of bladder. Chronic head-
 ache

Abernethy justly remarks that an epis-
 pastic produces a disease, & this may be
 mischievous.

The neg. episp. produce Erythema
 edematosum (Good) The an. episp. produce
 E. vesiculare - the vesicles are at first ex-
 tremely minute

4th. ~~Good~~

Antibion.

Antidote.

Antidote.

Anthelmintics

(Add. to my note of 1832-3)

If the eggs of the oestrous equi be examined on the hairs of the horse, after a ^{certain} time a small foramen will be seen - If the hair moistened with saliva be passed over then the small pores can be seen on the hair.

Persons subject to *Tenia* have the symptoms of *Tenia* years before the worms exist. I have ~~known~~ had such cases & after using ol. pin. faithfully, without success & abandoning the case, the *Teniae* have made their appearance. There is no difficulty in dislodging *teniae* when they really exist; the above fact will account for the supposed difficulty of their case. The symptoms also may continue after the evacuation of the worms - indeed they are difficult to be got rid of.

There is in fact much difficulty in getting rid of the *fasciola hominis*, (round seed worm) - the seat of which is in my

opinion in the liver & bile ducts like
 the *F. hepatica* in sheep which causes the
 rot. When large quantities have been brought
 away & the system apparently freed from
 them, they appear again in great numbers.
 Yet I know of no proof of ^{my} opinion
 but p.m. examination.

It is doubtful whether the
A. lumbricoides ever produces any
 disease or is injurious to health.

Worms are said to pierce the
 intestines "They have a bad mouth for it".
 Irritation & ulceration must be the cause of
 the perforation.

Camphor is efficacious for the
 destruction of *A. vermic.* - given internally
 or by the rectum. When given by enema
 to small children it is extremely apt to pro-
 duce an epileptic convulsion - but no
 harm follows & it readily cures.

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Symptoms " Countenance lead coloured or
pale - sometimes flushed - Eyes dull red-
filled with tears - Saliva frothy - Vomit.
sometimes of blood - Tenesmus - bloody de-
jections. Urine frothy or white or bloody
Pulse unequal, intermitting. Gnawing se-
sation at stomach. ^{Short cough} Bursling pain in the
bowels - Colic pains Tormenta - Abdo-
men alternately tumefied & subsiding -
Faltering steps Grinding teeth - Sudden
starting & screaming. Rigors. Cold sweat
Syncope Palpitation, Vertigo - headache
Symptoms of chorea, epilepsy & often
of Tetanus

Antidotes

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vide M. M. vol. 1. p. 12

Antidotes

vide M. M. vol. 1. p. 12

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Antilithia

Vida M. M. vol. 1. p. 118

~~Antidotes~~

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5th Group

Anticids

vide M.M. vol. 1. p.

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6th Group

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Exhibits

Dominants

Exhibits vide M. M.
vol. 1. p. 111

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Demulcent

vide M. M. vol. i. p. 95

Opium

Papaver somniferum (Linn.) . *P. album* & *nigrum* are only varieties - $\rho\mu\kappa\alpha\sigma$ of the Greeks - Homer & Hippocrates mention the poppy as a nutritive plant of the garden. The seeds are used both day as an article of food and like filberts. The poppy might easily be cultivated in this country and the collection of opium be made an important and lucrative business.

Opium is the exudate, inspissated sap of the tubes of the inner bark or liber. The ascending sap is watery. The ancients used two preparations, meconium, which is the expressed juice of the full grown but unripe capsules of opium (aros juice) which was the exudate, inspissated juice. The moderns have added one or two but none are worth relying but opium.

If the incision in the capsule is made in the morning, there is a coagulation from drying and adhesion of the juice & the sap does not flow well. Let the collected juice stand & inspissate in an open vessel. The capsule,

sh^d be of full size, but still green and just beginning to dry. Some cut off the stem just below the capsule, where a large drop comes, which they scrape off - repeating the process to an inch lower down. I think it is better to make incisions in the capsule. It might be made a profitable business. The opium which I have obtained in this way is better than can be bought.

All parts except the seed contain a white, opaque & viscid juice which is the descending sap. The incision sh^d be perpendicular, made at evening & scraped off in the morning. Sometimes the stalk is cut off & the juice received on cotton.

The plant degenerates in our climate. In its native soil the capsules are of the size of a small teacup.

The recent leaves make a tincture - a weak preparation, of which ℥j = 20m ℥℥. If this tinct. is distilled & evaporated, the product is even more active than opium.

The sp. gr. of opium is 1.336 - & is com-
pared with other inspissated juices, infe-
rior only to opoponax & gum. *Opocacia vera*.

This is the most interesting article of the M. M.
as a therapeutic & prophylactic agent
Nothing is a substitute for it. *Lactus*
Carui (from several species) appproa-
ches nearest but is greatly inferior.

Opium could not be obtained in sufficient
quantities from any other species of *papaver*.

In the species of *papaver* there is a reg-
ular exception, transition from *P. cornif.*
to those that resemble *Sanguinaria* in prop-
erties - being acid narcotic & not mild
nor substitutes for opium.

The seeds of the *Argemone? Mexicana*
have been said to be very similar in power
to opium, but they are no more like op.
than *aconitum* is, or *Sanguinaria* or the
seeds of the *Dirca palustris* are.

P. Rhoeas has the nearest affinity, but it
differs widely. *P. orientale* is nearly al-

led but even its green capsules are used as an article of diet.

We get among us two kinds of opium, the India & the Turkey opium.

India opium (Cone) in rounded masses covered with leaves - When triturated in hot water $\frac{2}{3}$ are dissolved and $\frac{1}{3}$ is suspended. Its smell is strongly euphyrantic & not narcotic - colour dark - taste bitter. Its a. ex. by decoction & is very variable in strength - generally $\frac{1}{3}$ as strong as Turkey.

Turkey opium contains seeds of a species of rumez - brown with a bright flame. $\frac{1}{4}$ part is impurities. I have collected opium more than $\frac{1}{4}$ stronger.

Triturated with hot water $\frac{1}{2}$ are dissolved $\frac{1}{2}$ are suspended & remains at the bottom glutinous. Long boiling destroys the narcotic quality. (Phys. sh^d understand the qualities of drugs. Ignorance on this point is a great source of failure especially in case of the more powerful articles.)

Turkey opium Contains upon analysis
 H. Bicarbonate of morphine. Lactic acid
 is peculiar to the poppy (a xw on a poppy head)
 Morphine is an alkali. Hence pure

it is soluble in 80 parts of boiling water, 122
 parts of alcohol & 8 parts of ether. (Yet ether
 is used as means of denascentizing laudanum
 which it does with a vengeance!) Morphine
 is less active in a separate state than in the
 form of salts - the reason given is its insolubility.
 I doubt the correctness of this inference
 for protochloride of iron oxide of mer-
 cury & trophæ mineral are insoluble.

Morphine ranks next after the alkali-
 es and after magnesia - hence if these
 are given with its salts they will impair
 their power. This rule was given before
 the veg. alkalies were discovered, I know
 not how it ranks with regard to them.

Nitric acid is said to modify mor-
 phine favorably. The power of met. morph.
 ought to be further investigated.

Morphine is most active when mixed with acids, it follows that alkalies diminish the power of opium. If ammonia is indicated give it between the doses of opium.

The acetate of morphine is said to be the most active salt of opium I have perceived little difference between it and the sulph.

Meconic acid was discovered before Codic acid I was erroneously supposed to be mixed with the active principle of opium (The acid itself was supposed to be febrifuge). On the discovery of codic acid, some exchanged names, calling the acid first discovered Codic & v. v.

(Prof. Sill. has cut the knot by ^{striking} leaving out the name Codic ~~acid~~ ^{and} ~~with a name~~; calling the acid last discovered meconic & leaving the other without a name). Acetic salts will of course increase the effect of morphine.

Ammoniated alcohol precipitates morphine in crystals - an important fact

"Dissolve then in acetic acid & this precipitate - you will have 30 grs morph. & 37 of A mixture of aqua ammon. & alcohol will answer" (Harc) Vinegar heightens the powers of opium.

The salts are 1 sulph. morph. the bi-sulph. is the best form - After dissolving it in a little water add gradually sulphuric acid, not so much as to produce an acidulous taste.

2- Nitrate of morph. 3- hydrochlorate
4- Carbonate 5- acetate (very soluble in water - $\frac{1}{4}$ gr. a full dose) 6- Citrate (the most soluble of all the salts of morph.)
7- tartrate (less convenient than the citrate, very liable to be precipitated - oil of cloves will prec. it.) 8- codate (sparingly soluble). There are

all decomposed by potassa, soda & ammonia - a fact which sh^d be recollected.

II. Narcotine. I have never

employed this (1825) Vide Sill. Jour
for Dr. F. S. experim. E. D. N.

III. Opium contains the bi meconate of soda which is inert, also extractive matter, intensely bitter. Said to contain a resinous principle - a vegeto-animal matter - mucilaginous matter, fixed oil &c. N. B. Two new princ. have been discovered meconine & norceine. E. D. N.

The operative effects of opium in a large dose, upon a person in health & unaccustomed to its use, are a calm placid & pleasurable sensation - preternatural wakefulness - increase of force & freq. of pulse - increase of temperature - followed by more or less diminution of susceptibility & sensibility & with the last a slight increase of perspiration & diminution of the other secretions & excretions. If the ordinary stimuli as light, sound &c. are now abstracted the pat. easily falls asleep. The effect lasts for 8 or 12 hours when a person

is in perfect health $\frac{1}{3}$ of which is the period of excitement, the remainder sedative. The next day follows more or less languor, lassitude, vertigo & epigastria uneasiness, fainting on motion or rising, belching & vomiting - bitterish taste or clammy foam in the mouth diminution of appetite, torpor of intestinal canal, diminution of urine & often total inability to void it from torpor of the bladder - not infrequently haemorrhage. It speedily produces sleep either natural or comatose.

These last suggested to Brown the notion of direct debility. But the state is one of prostration. Let it not be mistaken for debility. In a smaller dose the exhilarating or exciting effects only are produced. In a very large dose there do not take place, but a sedative effect in a much higher degree - vertigo, vomiting torpor &c. - the usual symptoms of

narcosis [The contraction of the pupil almost to a point distinguishes narcosis by opium from sleep &c. Wd.]

But the stimulant and sedative effects of opium may exist in their fullest extent at one and the same time

In single full doses opium diminishes the biliary secretion - but in several doses continued at regular & short intervals opium will increase the biliary secretion. So it is with all the medicines which increase the perspirable secretion. It is on this principle that a residence in a hot climate deranges the functions of the liver. So on the other hand, all medicines that do not increase the perspirable secretion, in large doses at long & irregular intervals, diminish the biliary secretion. Opium is the most effectual anodyne in the m.m. When its force is spent in subduing pain, checking diarrhoea, or supporting the system in

malignant fevers - in tetanus & its ordinary laws are entirely altered. The dose must be immensely increased & the interval shortened. This was not well understood by the older physicians.

It is the most effectual specific in the M. M. - It will neither prod. or sleep nor narcosis however, until a requisite quantity has been taken for subduing existing symptoms - when this has been done a little more will prod. exhilar. & a little more still, sleep e.g. pain

The habitual use of opium is not constipating

I have found by experience that opium counteracts the ultimate narcotic effects of Hyoscy. acid, Gelsem. Helonias, Nuxvom. Spizelia. Acon. Conium. & Alcohol does this still more. Opium counteracts the intoxicating ^{narcotic?} effects of alcohol but not its stimulant or revivine.

The French & their imitators in Philadel. ascribe all the kind of sedating effects of opium (in every disease) to morphine & all stimulant effects exclusively to narcotine. Morphine is fully equal to op. in checking diarrhoea (& in equivalent doses, too). I think its nerve power is greater. Its operation is more speedy, probably because the stomach is not obliged to act on the other inert ingredients.

Opium & morphine are direct soporifics. Other narcotics are not soporific unless in cases where sleep is prevented by irritative action. In a state of health they will not prod. sleep.

The sedative ^{effects} of op. may be obtained without its stimulant effect by a ^{single} large dose, or with them by smaller & repeated doses - the latter is generally the most useful.

Opium or Morphine is (1830)

1. nerve 2. stimulant 3. sedative - the

last including 1. antispasmodic 2. anodyne

3. soporific 4. ultimate narcotic (for which narcotic power merely it is given only in emergencies)

Abstracting its stimulant power is great
by impair its utility. The have abundance
of more narcotics.

Opium is a very useful counter-
agent in certain states of disease, when there
is neither irritation, pain, restlessness
increased discharge, wakefulness &c. to
indicate it. In such cases it probably
acts by the joint operation of its narcotic
stimulant, narcotic, diaph. & cholagogue
powers continued some time.

It does not produce as free diaphoresis
as many other articles, but it assists other
diaphoretics.

Opium taken freely proves antiproducin
I have known a single dose produce this
effect for 24 hours & a continued use of
it do so for 4 mos. Wine & alcohol
have a contrary effect unless taken in

excess - but there is a difference in susceptibility. Sanguis furor can be controlled by opium & that only.

In small & frequently repeated doses enormous quantities of opium can be taken with impunity. I have known 75 grs in a day by a healthy person. A student attending lectures took by way of experiment 90 grs daily & continued taking notes &c. Vide Edmund De Quincy's "Confessions of an Opium-Eater" - the only account of the effects of an excessive quantity - a valuable book. He took 320 grs or 8000 drops a day & "never felt better in his life."

In bad wounds, as those of the knee joint more benefit can be derived from op. than from any other article. Course - the greater the quantity requisite in 24 h the shorter sh^d be the intervals - if 16 grs, then once in 3 hours, if 24 grs, once in 2 hours &c. I have seen cases where it seemed probable

that amputation would not save life completely cured by opium with wine & cinchona. Large doses at long intervals would have failed.

Opium when indicated may always be given in quantities sufficient to meet the symptoms without fear of narcosis &c. When there is an uneasy reaction in the head or stomach, if it does not occur immediately but after 1-2-3- or 4 hours, it shows that the action of the medicine has ceased & denotes that you must shorten the intervals. If unpleasant effects take place immediately it shows that the dose is too large, & you sh^d lessen it & shorten the intervals. If the effects take place when the dose is small $\frac{1}{2}$ or 1 gill of milk porridge &c. with each dose may prevent them - or you may combine with it opst. ppt. ol. pip. nigrum &c. In chronic cases it may be necessary to begin with doses so small

as to be insufficient to meet the sympt. & soon increase to the proper point.

Ether, inhaled, drunk, or evaporated from the scalp, or aqua ammonia will counteract the troublesome symptoms.

If the constipating effect of op. was taken away half its value will be destroyed. In typhus we often sometimes increase the dose greatly to produce this effect. Some give Cathartics to counteract the constipation produced; this is wrong. We sh^d combine with it something to obviate this effect. Aloe, is the best article in $\frac{3}{4}$ of the cases where opium is given at stated intervals in Chronic cases Aloe 4 to op. 1 is the greatest quantity required. More often less of aloe disagrees. Rhubarb may be good. I have used ext. Juglans, Cinnamon. I have often added to aloe, ext. Garbage very little is necessary.

After single full doses, or after a continuance of the article an irritation

at the neck of the bladder, is often felt, giving a sensation as if the bladder was full & continuing 3-12 hours. This inconvenience is not great but it sometimes alarms the pat. & the phys. sh^d understand it - they have often often discontinued opium for this reason, in cases, where it was highly indicated. This parosmia is of no consequence in ch. Canth. & ole. pine. will generally relieve it. In chronic cases, it will not be necessary to give so much as to produce it. In acute cases, I conjoin just tinct. Canth. enough to prevent it & this will never be contraindicated where much op. is required. If the effect is already produced or p^{ro}by the catheter and then resort to the Canth. or if the pat. is much exposed to the cath. give ʒi tinct. Canth. which will relieve in 2-3 hours. In acute typhoid dis. there is a great tendency to torpor of the bladder & you sh^d examine daily the state of it - the nurse often passes off without the patient's being aware of any disturbance in the bladder. Epispastics

to the spine or inside of the thigh will relieve
Opium is said to be dangerous to
gravid women. I think it not to be so by
repeated experience

A single pill does not bring on
a continued use of it will often occasion
looseness. This is not generally known - but
is of no consequence

I never saw a case of idiosyn-
crasy with respect to opium - probably
there are such. There is great difference
in susceptibility

Opium in conjunction with other
articles produces a modified operation
analogous to that of a Chemical Compound
- as with ipecac, antine. arsenic &c.

If opium be given in poison, death
is preceded by profound coma, some-
times by convulsions. There is a suspen-
sion of the action of the brain & nervous system
& a deficiency or interruption of the sen-
sorial principle - tho' opium in certain

Case, will increase this supply. After the effect of a large dose has commenced some portion may remain & hence an evacuation be useful - but if the food is reduced to a low state it may cause death.

The stim. purg is preferable to an emetic. Five grs of op. is the least quantity recorded to have destroyed life in a healthy adult.

The individual must have been extremely susceptible for most persons will bear even more than this without the slightest inconvenience. One of my professional friends took 3℥ (88.) and probably 3℥ by mistake, and was not sensible of it for some time. The 3℥ is equivalent to 112 grs. He visited his patients, but was considerably incommoded for several days - yet his life was not endangered. He took some excitants and narcotics. A larger proportion of Morphine & its salts can be borne without danger, than of opium. Opium occasions no structural or organic lesions, that can

be discovered after death

My treatment for poisoning, dose,
is as follows

1. Evacuate the stomach if cal-
led early. As a general veg. emetic, use
not to be ^{veg. mesquite} ~~crude~~ for ~~them~~ poisons, nor min.
em. for mineral poisons. Use active
acrid emetics - fine powder of mustard in
little spoonful dose, in molasses, & water of
sage. once in 5 or 10 min. till 2 or 3 doses
have been taken though rarely more than one
is necessary. Even if it fails to vomit it ~~can~~
will be useful & can do no harm as the
quacks say. Or use the distilled water
of Rhamnus, Flammula. With these excep-
tions, the min. em. are preferable to the veg.
At a tort. ant. however which is liable to fail
& is exhausting, but turp. min. is the best, next
blue vitriol - next sulph. zinc - Conjoin ipe-
cac with them.

Give a decided dose at first. I
have generally given of turp. min., in severe

Cases 5-8 grs at a dose & repeated it till
 25 grs had been taken and it operates kindly.
 I have given 25 grs in groups with the same
 mild result - yet 1-5 grs is an dose in ordi-
 nary diseases. Of Sulph. Coppper less can
 be given. I give 5 grs & never repeat it more
 than once or twice. ^{of sulph. zinc} 10-15 grs. Of Sulph.
 zinc 3j or more are frequently required but
 this practice is admissible when the system is
 not yet strongly under the influence of the
 opium. In such a case, by all means
 resort to the use of the stomach pump in
 preference. If the system is not yet
 strongly affected and the article has proba-
 bly passed into the intestines, a quick & active
 cathart. as of oil of turpentine does good. It is
 useful by its acrimony, is very speedy & if
 used it does no hurt. I usually mix 7-8
 drops with 3j to 3j of castor oil when the
 case is an urgent one.

If a large dose has been taken
 of this a considerable time before I am called

The pat. being in a dying state, I neither vomit
 nor purge. Friction & external irritants must
 be resorted to. Friction with irritants which
 will not vesiculate (for a blister so extensive wd
 be a serious affair) such as ol. capsic. with
 alc. - or even clear - accord. with rubefac-
 tion produced. Ol. capsic. is not liable to
 vesic. and the applic. may be continued
 some time. It is more permanent than most
 rubefacients and its influence on the system
 is better. It is also more speedy in its action.
 Washing cold water upon the head is of
 great service. It has been recommended to
 wash it all over the body. It is better in the
 case of a dangerous dose of alcohol & when
 applied only to the head, the body being
 kept warm & it would probably be so in this
 case. If the pat. be very low it will be
 safe to wet the head, but not the body.
 Aromatic stimulants sh^d be given. An-
 monia - Infus. of capsic. Ol. capsic. with
 alc. to produce an excitant effect. Some

of the nerves may do a great deal - very strong coffee in very large quantities. No doubt the inhalation of sulphuric ether to the extent of producing exhilaration would be useful. Ether evaporated from the head will be better than cold water for the cold is greater & more sudden.

I do not rely much on specific remedies or antidotes. Infusion of nut galls is that resource. Gallic acid decomposes the veg. salts with alkaline bases & the gallate of morphine is nearly inert. If called early it is better to evacuate the article for it is uncertain what effect the gallic acid would have, modified by the vital forces and the gastric liquor. When the narcotic effects have begun gallic acid will not relieve them - yet infusion of nut galls will do no hurt. Serapine & the vegetable acids are improper as long as the article remains on the stomach as the salts of ^{these with} morphine are more active

than the codeine. After the opium is evacu-
ated the salts ^{vegetable acids} ~~of the opium~~ are supposed
by many to diminish the narcotic effect.
They have been tried in the case of many nar-
cotics and found to be stark naught. Per-
haps it is not so in the case of opium &
as the pat. is usually thirsty, no harm will
result from the use of acidulated water. It
is doubtful whether it will do any good.

Pharmac. prep. of Opium

1. Pure opium in substance. Many carry
a lump in their pocket & cut off as occa-
sion requires. Even when soft pure opium
is not easily acted on & is much slower in
producing its effects than the legum. prep.

If dry & hard it will sometimes fail. I had
a case of Simosis, Gastrodynia, which I trea-
ted with pure opium in pills. I thought it
resisted opium wonderfully. Next day, by
an operation of calomel, the pills came
away whole. Hence we may probably

account for some of the enormous quantities taken with little effect. Pure opium whether hard or soft is not eligible. Soap makes it more soluble and breaks up the caustic stone & glute. Camphor also softens it. The pills of the pharmacop. made with soap are hard & buck shot. The following will keep soft any length of time. $\mathcal{R}$ Opium $\mathfrak{z}\text{i}$, dry it thoroughly & reduce it to a fine powder & sift it. White soap $\mathfrak{z}\text{viii}$ pulv^d & sifted Camph. pulv. $\mathfrak{z}\text{j}$. Beat the whole into a homogen. mass & it will pill without further addition. Divide into 240 pills. Each pill will contain 4 grs of the mass - 2 gr. opium. I have kept the 10 grs without their activity being impaired. If the op. is not dried & pulverized the pill will be too soft & besides the *caustic stone* & *glute* are thus broken up. This is the best formula I have ever tried. The pill is so soft that you can incorporate cal. with it or 1-2 grs of ipecac. It is always soft - may be cut or divided &

you can even beat it up for an enema with a cup & spoon in warm water

2. Opium is sometimes given in Powder but powders are generally mixed badly by the nurses - They will be half moistened - the dry powder will stick to the mouth & be disgusting or will stick to the spoon & partly be lost. I avoid giving powders as much as possible unless I administer them personally

3. Tinct. opii or Laudanum.

R. good opium $\mathfrak{z}\text{ij}$ to lb. dilut. alcoh.
 sp. gr. 9.35 If the alcoh. is either stronger or weaker it is said that you have a weaker tinct. Apothecaries often take the refuse opium at the bottom of the box, throw it in in small lumps, let it stand & shake it occasionally & this is their S.D. Dr. Knight once sent for a specimen from every shop in town & evaporated it. The quantity he obtained varied between 2 & 5 grains to the fl. $\mathfrak{z}$ whereas there sh^d be $3\frac{1}{2}$ grs to fl. $\mathfrak{z}\text{i}$

I dry & pulverize the opium - otherwise it will not be acted on & add alcohol by little and little to the powder in the mortar and rub it up. I pour it off when it is completely diffused in the alcohol. & let it stand a week - tho' it is probably of full strength immediately. Tinct. opii thus prepared will be strong & contain full 34 grs to ℥j as I have ascertained by repeated trials. The alcohol dilution is supposed to be saturated. I have found that 3 ii less will make a weaker tincture. The op. soap & Camph. & the tinct. op. are the best preparation.

4. *Unus opii Compositum* or *Sigdenham's Tinct. Thebaica*. Span. wht. wine is substituted for the dil. alcohol. & 3 ii of the opium are taken. Cinna. Clov. & Saffron (crocs) are added. This has been employed as a topical applic., particularly for the eyes, as it is prepared with more care and is better than *Conc. or tinct. opii* -

but not of the latter, made with equal care. It is more pleasant from the spices it contains, but does not keep so well. It is said to contain 10 grs opium to fʒi. I have tried it & it contains only $3\frac{1}{2}$ grs of opium. It is not worth retaining though it is better than the common Sassafras.

5. Black Drop - much celebrated, many years ago - said to be very useful & not unkind in its operation - It is an awkward preparation. The liquor citratis morphine has been substituted by Paris. I made the first that was made in this country & have used two pints of it. Hence I can speak from experience. When small quantities only of opium are required 10 grs of this are equivalent to 30 of Sd. When large quantities are used, it is about twice as strong. It is rather more liable to produce disturbance of the ston. so. than Sd. When the ston. is weak or irritable the acid of fennel & the Sd is better, unless a charge

is expected - or there are prejudices, &c.

On the whole it is little used.

Ammoniated tinct. opii was directed in the Europ. Pharmacopoeia, made of ammoniated alcohol to contain grj to ℥j. The amm. decomposes the cretate of morph. & free morph. is precipitated. It is a weak preparation & is now rejected.

Tinct. opii Camphorata -

The U. S. pharmacopoeia inverted it. All the pharmacopoeias agree in the mode of preparation. The opium, camphor, ol. of anise, benzoic acid &c. are all put in together. Now as part of the opium only is dissolved & that small, it is evident that part of the other ingredients ^{be lost as the action} must adhere to the drugs. ~~and be lost~~. The opium sh^d be digested repeatedly & filtered, or Tinct. opii may be taken & diluted with diluted alcohol & then the other ingredients (which are all soluble) sh^d be added. The following is of the exact strength directed in the

Pharmacopoeia, R. Tinct. Opii $\mathfrak{z}\mathfrak{i}$ Benz. ac.
 $\mathfrak{z}\mathfrak{ss}$ Camph. $\mathfrak{z}\mathfrak{j}$ Ol. anise $\mathfrak{z}\mathfrak{ss}$ Dilut. alcohol.
 $\mathfrak{f}\mathfrak{z}\mathfrak{xv}$ Pulverize the camphor by adding
 a little alcohol - mingle & shake & it is im-
 mediately fit for use. The U. S. phar-
 mac. adds honey & ext. Siquonia. These make it
 more pleasant at first when recent, but hon-
 ey disagrees with many persons & ext. Siquonia
 is apt to be empyreumatic & to communicate
 a bad flavour. Besides, on keeping, these
 render itropy and rapid. If the patient
 wishes it to be sweetened, it can be done with
 loaf sugar or honey & it is pleasant as I
 have directed it. It is often an object
 with country practitioners to have their
 medicines in small compass. For this
 purpose, mingle the articles as follows, &
 label Tinct. opii. Camph. fortis. R.
 Tinct. opii $\mathfrak{f}\mathfrak{z}\mathfrak{iv}$ Pulv. Camphorae 80 grs.
 Ac. Benz. $\mathfrak{z}\mathfrak{ii}$ Ol. anise $\mathfrak{f}\mathfrak{z}\mathfrak{ii}$. The proportions
 are the same as above, but the strength is
 equal to Laudanum. Of this $\mathfrak{z}\mathfrak{i}$ added

to 3x of diluted alcohol makes the common officinal Camph. tinct. of the shops at once. The solution is not exactly perfect as the oil floats on the top. It ~~shd~~^{is} therefore be shaken. It may be useful in the concentrated form instead of ~~it~~ for adults.

Most of the aromatic essential oils disguise opium very imperfectly, but if the oil of ppt. is added to alcohol so as to make a strong spirit of ~~it~~ of this is added to Ld. the article will not be suspected. Empirics adopt this practice in colic. They give opium very freely - but ~~the~~^{talk} strongly against it all the while; and they formerly succeeded better than the regular practitioners who were unacquainted with the power of opium in this disease.

As a Counteragent of disease opium is very important.

By enema it may be given in triple doses & if a large quantity

is indicated, that by evanes should be proportionally large.

Applied to the muc. memb. & parts denuded of the skin it produces pain, heat & infl. - acting first as an irritant & ultimately causing a diminution of irritability & susceptibility. It may produce excessive morborum when the skin is denuded, otherwise there is no danger to an adult from external application. There may be to children.

Opium is never indicated in pure phlogistic diseases. It may be proper in dysentery, and may be useful in the phlogistica after depletion. ~~It~~

When it is indicated in severe disease, the system should be kept constantly under its influence by small doses & short intervals. Given in this way it is very important in typhus. It gives only when the patient is restless. It does not produce the salutary, steady, uniform & permanent effect

In irritative & idiopathic, atonic fever the regular dose sh^d be given, asleep or awake in such quantity as just to remove the irritation or just fall short of producing too great somnolency. The patient sh^d sleep & wake at shorter intervals than in health. He ought not to expect to sleep all night & watch all day in acute febrile diseases. The dose must vary in different cases, as must also the period of repetition. In the same way must alcohol, cider, wine, porter &c. be given. A quantity which in one or two doses sh^d produce intoxication is often taken with advantage in proper intervals, during 24 hours. Many are afraid opium will accumulate on the system, producing Coma &c. but it does not accumulate after 24 hours. After a few days its effects diminish. It does not debilitate in any case. It never loses its power as a stimulant. There is no difficulty in leaving it off.

diminish of the abstract. There is no latent, secret, remote ^{evil} resulting from its use when indicated. In atonic diseases of some kinds it obviates irritated action.

After violent Casualties, as falls, sprains, &c. - the pat. is usually low & cold & S. is then the worst remedy that can be used. A dose of opium will often prevent the irritative fever & infl. that would follow. I have tried it for many years and have never had the troublesome reaction that would occur, & when this has occurred the infl. is often ^{every} irritative & ~~the~~ opium will, assist in its removal.

A common rule is, that opium must not be given in fever. It may unless there be phlog. fever. It may in irritative fever. See Abernethy who advises regular doses at short intervals (His book is well worth reading) So in sympathetic fever, to mitigate the

effect of the local affections. In typhus & typhoid fever, it increases the power of the heart & determines the blood to the surface, thus relieving internal congestion. This important practice has been established within the last 20 yrs & is not now understood by all. ~~It~~ Opium will relieve the delirium of typhus & typhoid diseases, delirium tremens, puerperal delirium ^{fever}, erysipelas.

Opium is useful in Erysipelas, infl. of the membranes of the brain, with calomel in the 1st & hyoscyamus, datura, & digitalis in the second stage - opium being the basis - many abstract it too soon & make the case worse than ever.

Useful in chronic affect. of the bowels. Typhus syn. cop. - pat. exhausted & apparently dying - many give cath. & emetics, under which he is sure to sink.

In Surgical operations, See the emet. for the rules. These are excellent.

In cases where a shock has been produced
opium is good.

Checking a diarrhoea by opium, affects the stomach & bowels & this is thought to forbid the use of the opium. But in 4 or 8 hours these symptoms disappear. We should continue the use of opium without regarding them.

In dysentery opium should be continued after the disease is overcome; till constipation is produced, so as to require evacuating. This rule applies still more to diarrhoea

Andira Inermis

Allied to Calchian & may be used for the same purpose. A large dose at once produces nausea & vomiting. Short of nausea & repeated with diuretic regimen it is diuretic. In moderate doses at short intervals it is narcotic.

The test of an over dose is nausea & vomiting. That of too frequent repetition is Narcosis. That of too long continuance is Catharsis.

It is an acrid narcotic - an emetic - a hydragogue cathartic & a deobstruent. In hints of the latter operation it is diuretic - resolvent, probably choleagogue & expectorant.

The proper remedies for an over dose are opium to check the evacuation & stimulents to support the powers of life. There is no proof or record that lime juice will counteract the effect of the acrid narcotic.

This article is most used in the W. I. & in the Spanish Provinces, as an antihelmintic. They give the powder of the bark as a nauseating emetic, narcotic & cathartic - beginning with small doses & increasing till nausea is produced & then continuing short of nausea.

The medium dose for a strong healthy adult is ʒj. This is large if it is to be repeated. It is better to begin with smaller doses & let them remain some time on the al. Canal, to act on the worms.

Dose for a part. of 14 or 15 is ʒj - of 14 yrs. 15 yrs - of 2-3 yrs 10 grs - 1 year, 5 grs - Vary accord. to circ.

Pharmacetical preparations

Decoct. R ʒj recently dried bark to lbj of water & boil till it is of the colour of Madeira wine. Strain & use immediately
Dose for an adult about ʒij

Extract. R - lbj recently dried bark coarsely powdered - pure water lbvj -

boil till half is evaporated. Strain
 & evaporate to a proper consistence in a
 Salt water bath, stirring it frequently
 that the resin may not rise to the top.

Dose for an adult 3 grs - 14 to 15 grs, 2 grs
 - 10 grs 1 1/2 grs - 2-3 grs, 1 gr - 1 yr. 1/2 gr.

For ordinary purposes this is the best prep-
 aration.

Syrup. R - Take the decoction
 as above made, any quantity & dissolve
 in it while hot, twice its weight of
 white sugar. If there be sugar enough
 it will not ferment. Dose for a
 strong adult 3 j $\bar{j}$ & so for all ages.

Diseases - Helminthia, ascidia,
 lumbricoidis. Use the decoction - It
 is a powerful anthelmintic.

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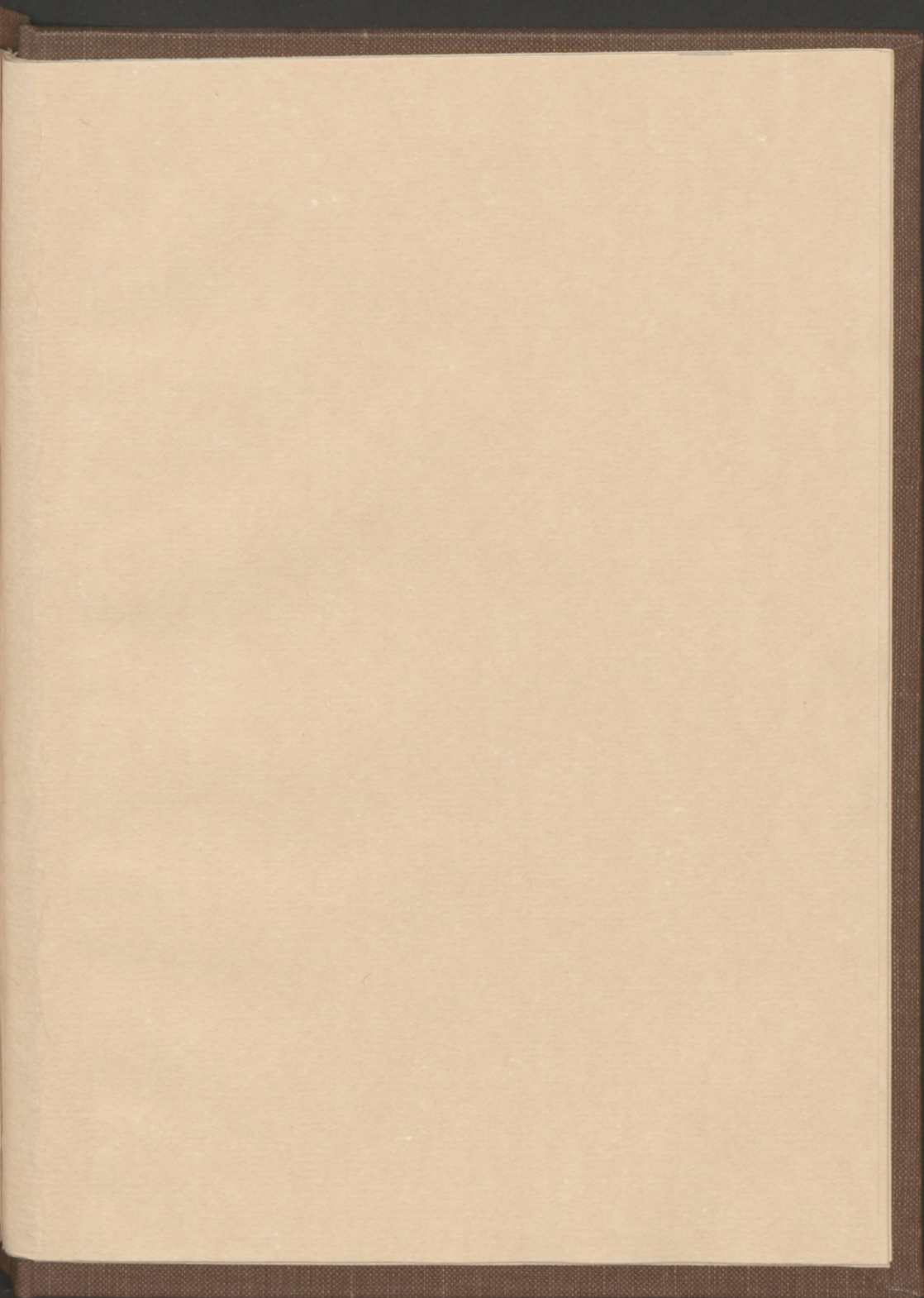
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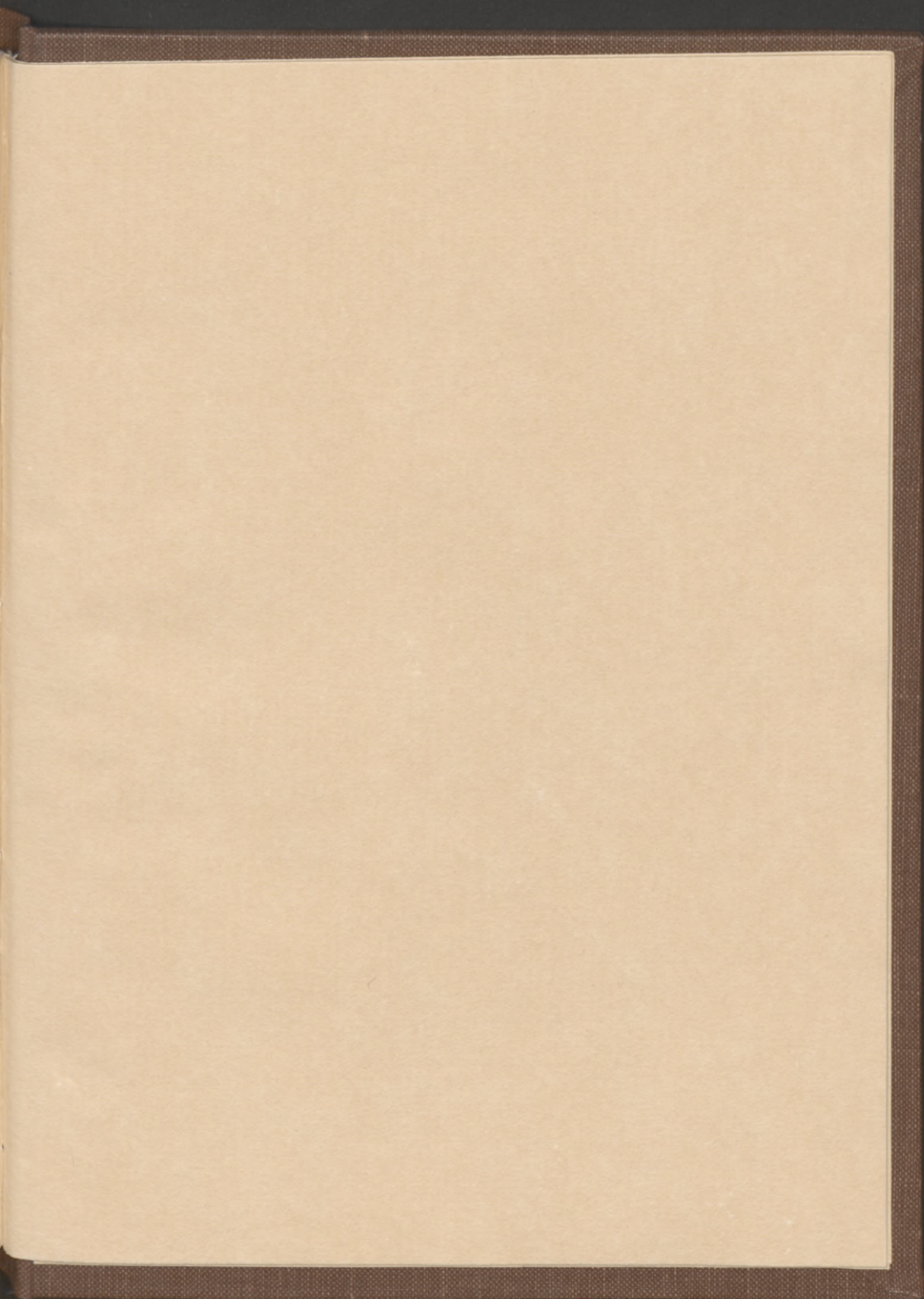
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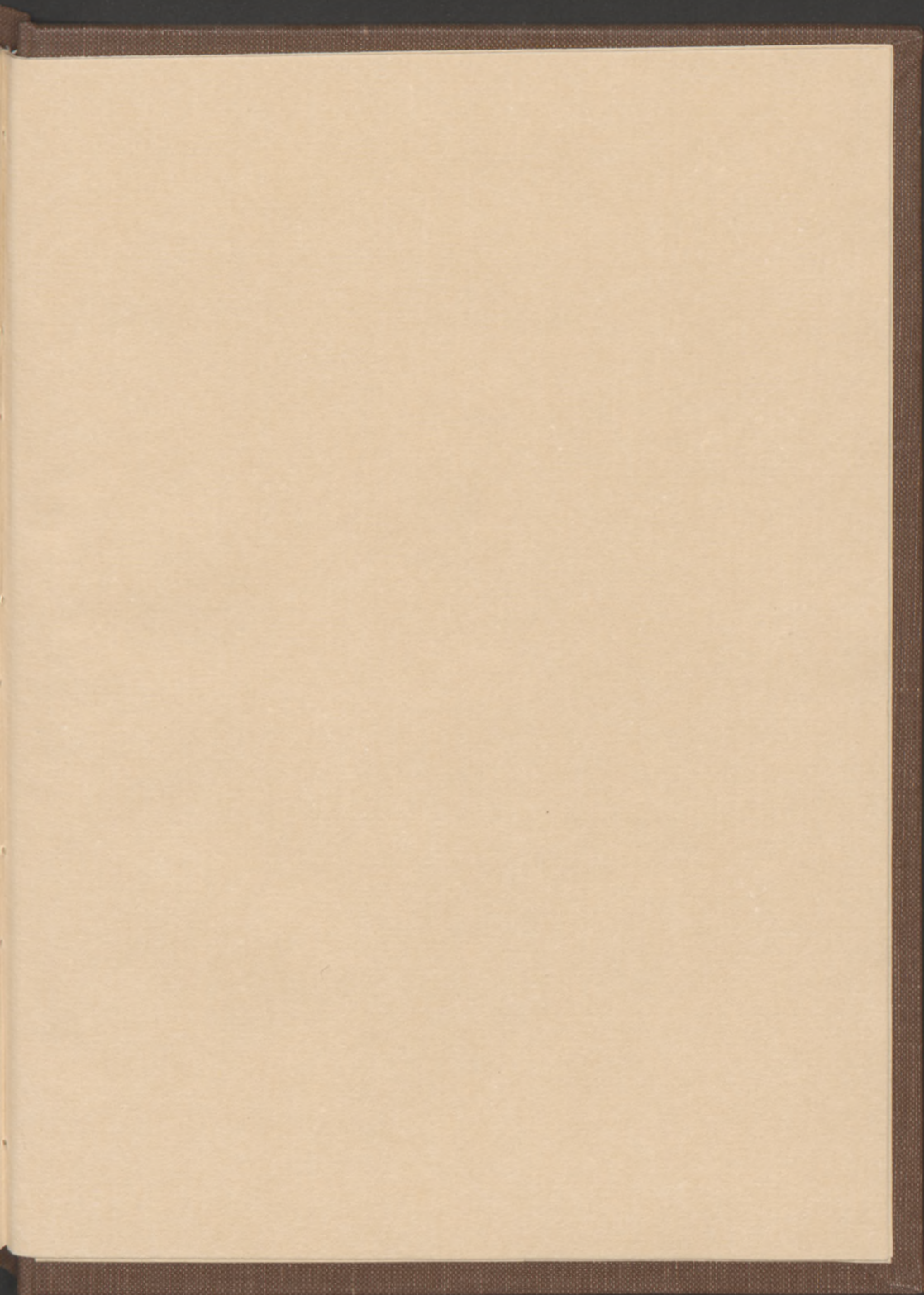
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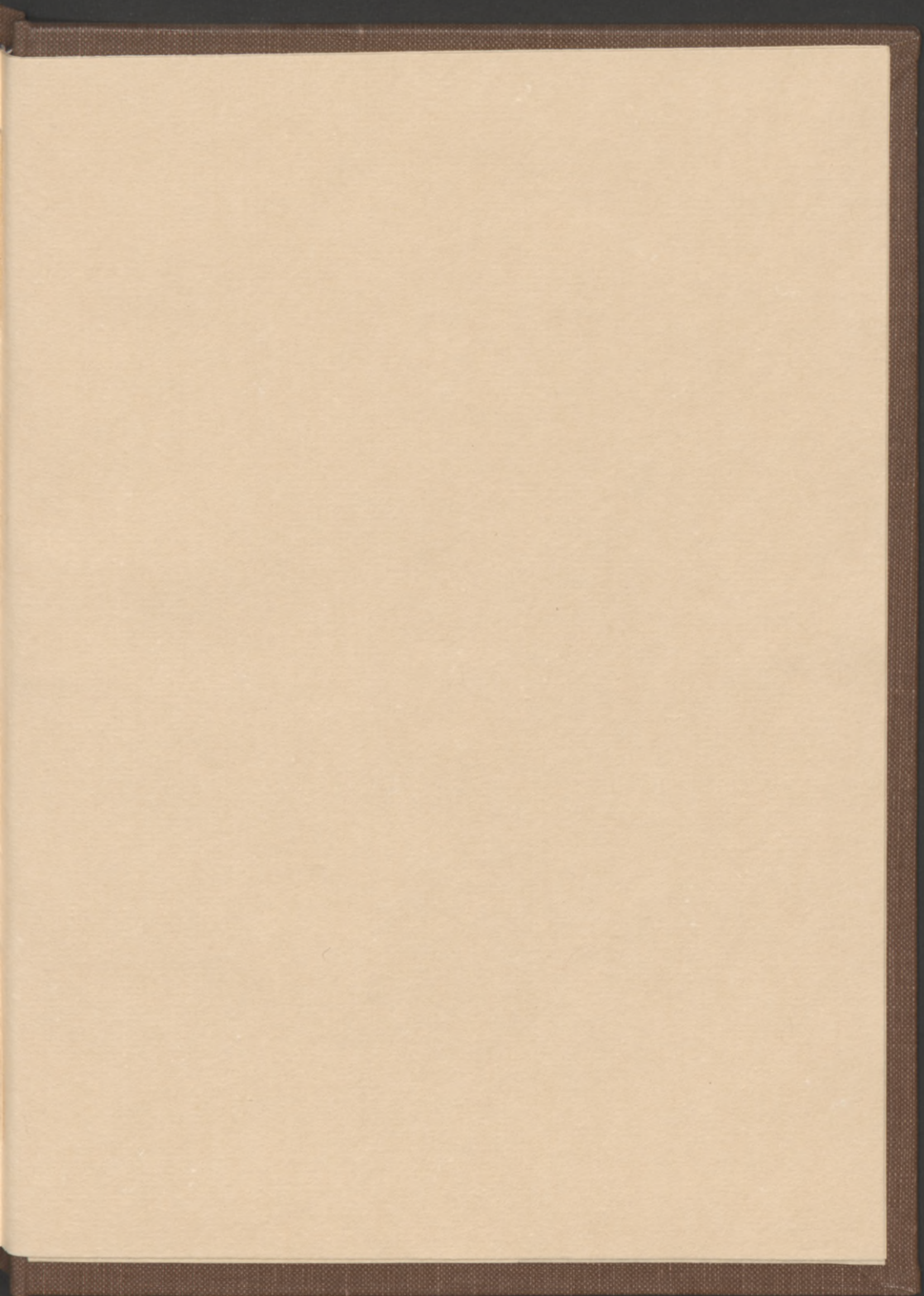




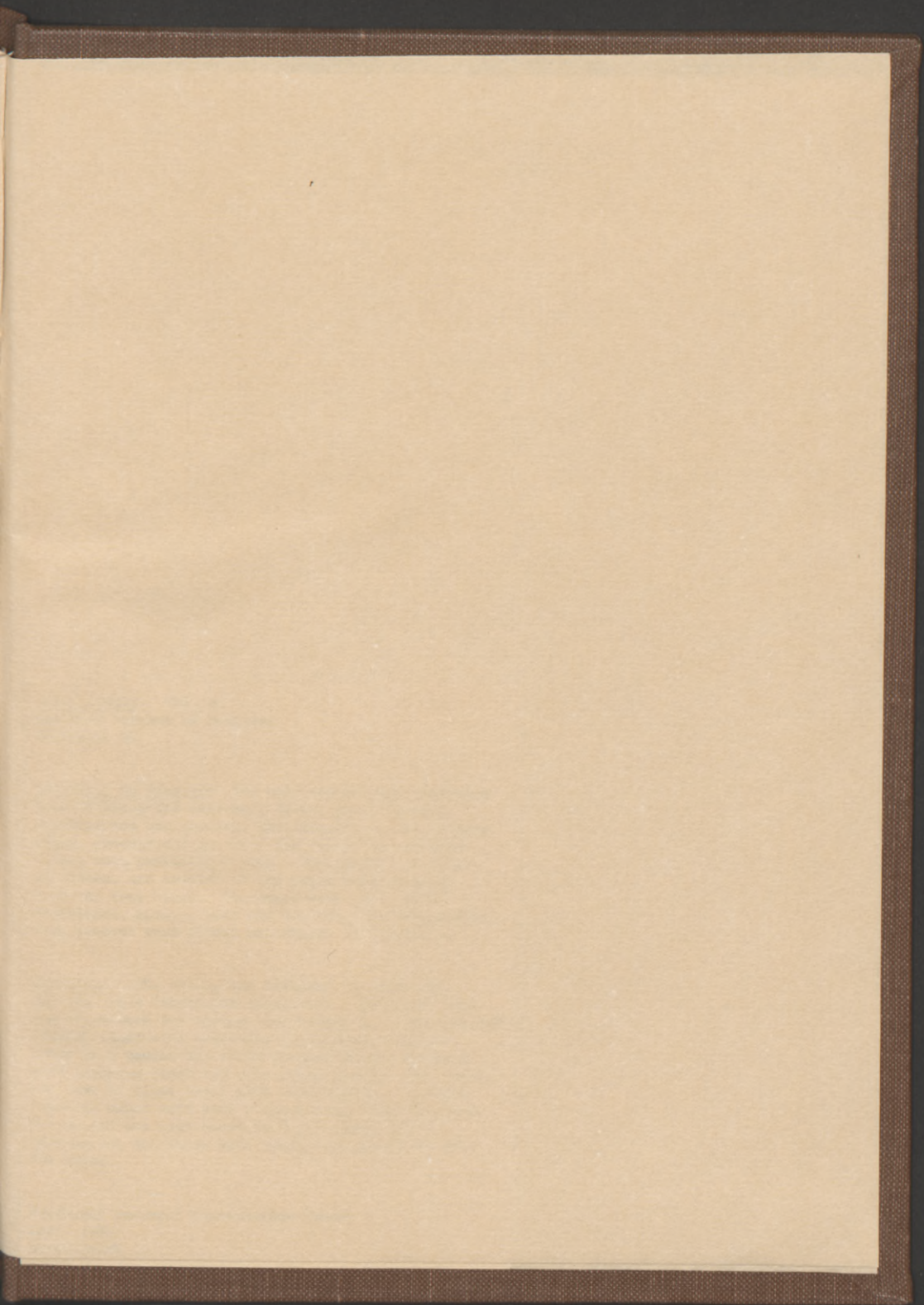


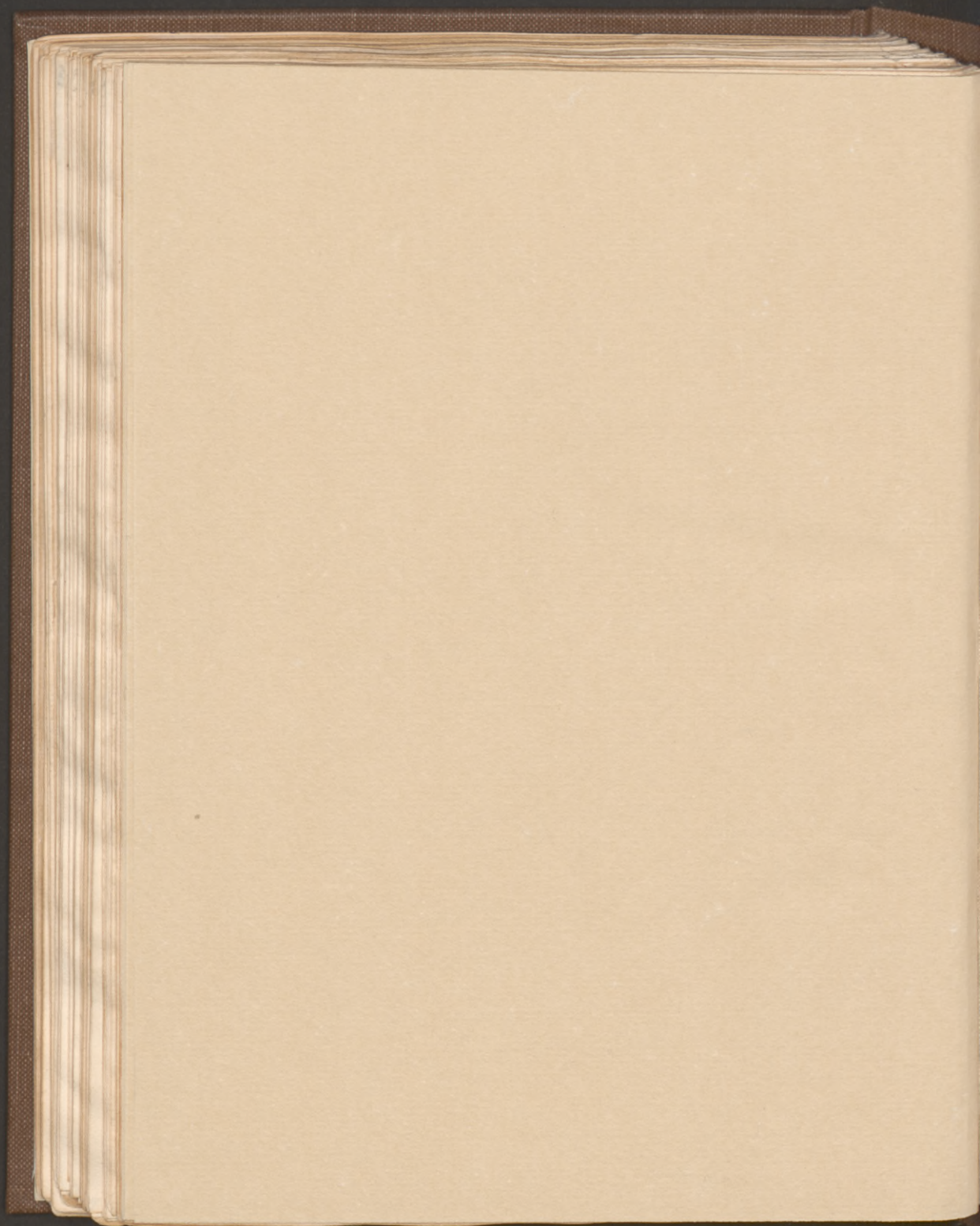












Ives. Tully. Vol. 4.
National Library of Medicine
Bethesda, MD

Condition On Receipt: The half leather and decorated paper binding was extremely dirty, worn, abraded, deteriorated and powdery, particularly at the corners, edges, endcaps and joints. The joints and internal hinges were partially broken. The sewing was loose in places, and several of the pages were detached from the text block. The pages were torn, dirty, discolored, acidic, weak and brittle. The manuscript inks present were acidic and varied in intensity.

Treatment: The volume was collated and disbound. The inks were tested for solubility. The head, tail and pages were dry cleaned and washed and then buffered (deacidified) with magnesium bicarbonate solution. Tears were mended and folds guarded where necessary with Japanese paper and rice starch paste. The volume was sewn on linen tapes with linen thread. Windsor handmade paper ends with a linen hinge were attached. The volume was case bound in full cloth. Title information and lines were stamped in gold foil onto the spine.

Northeast Document Conservation Center
April 1986
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