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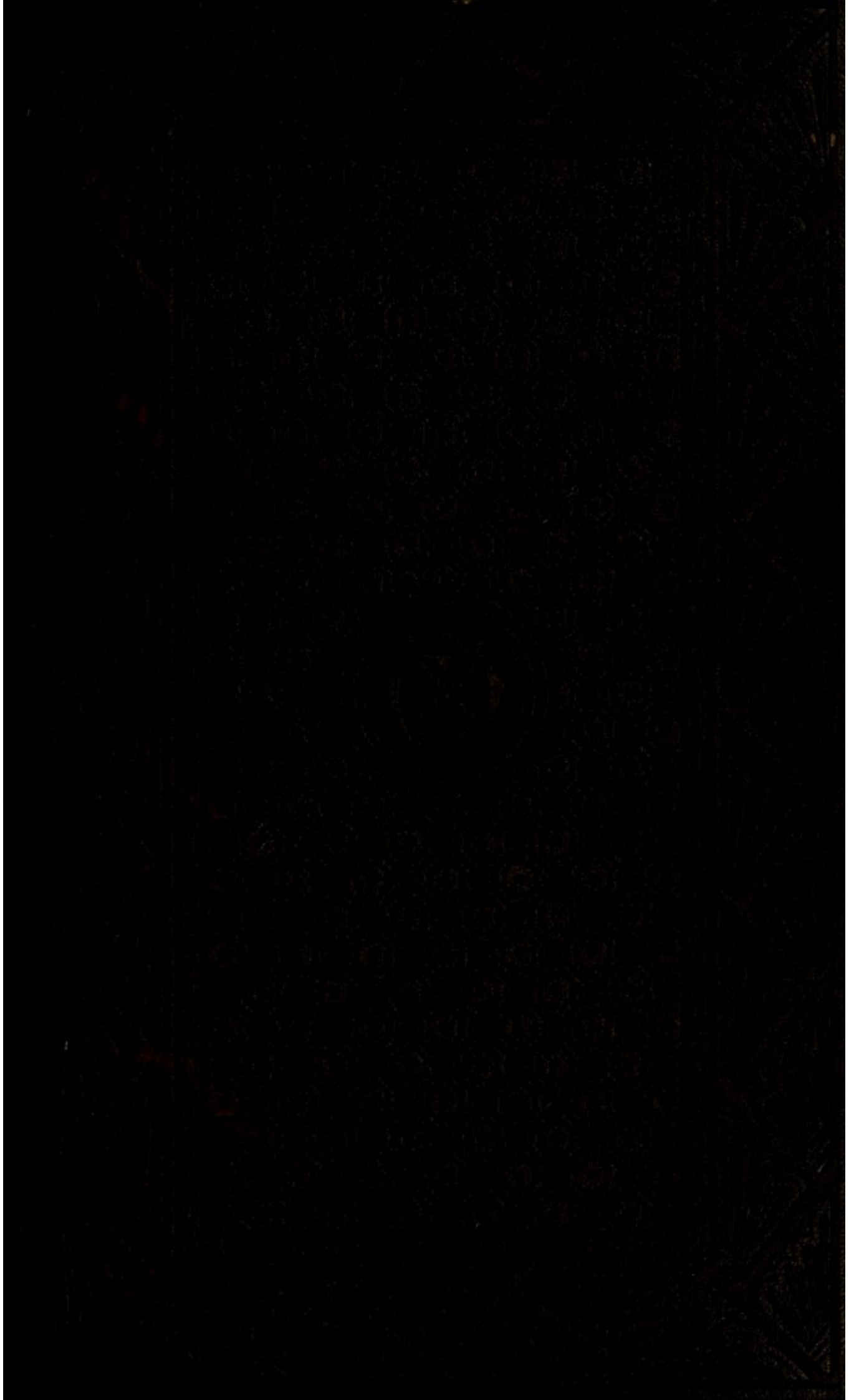
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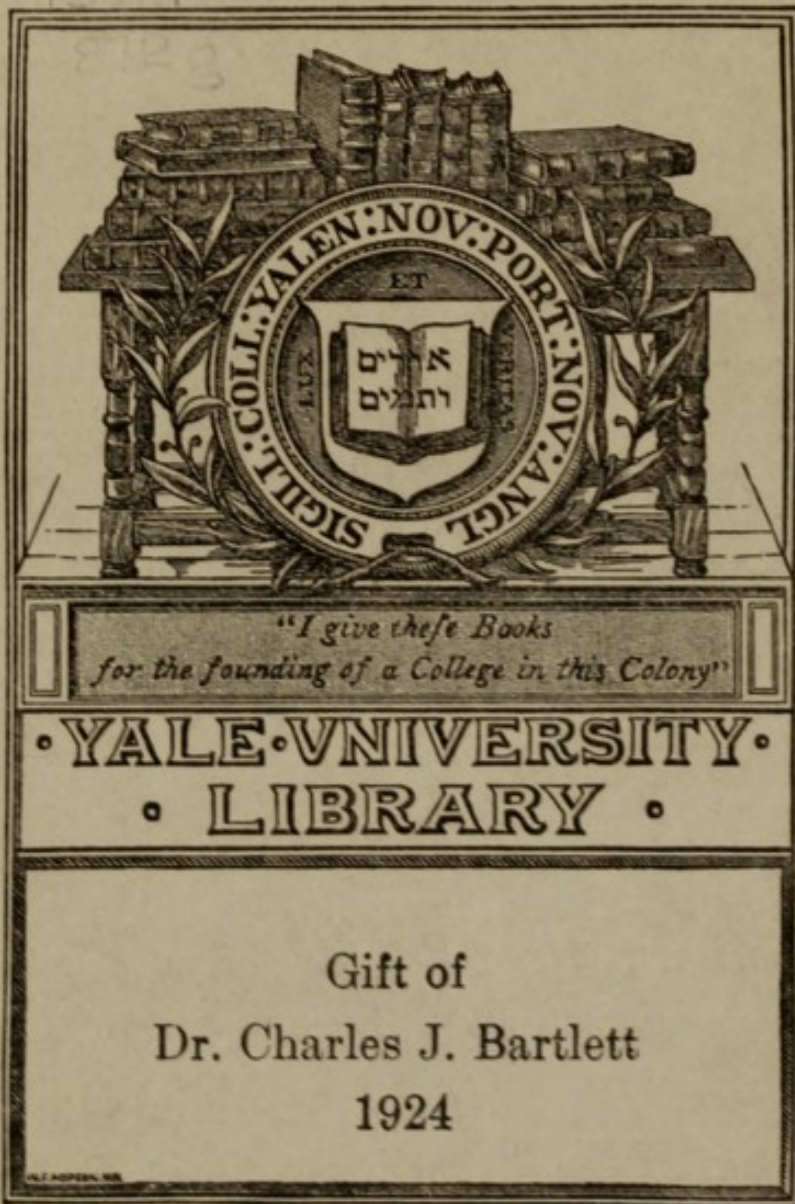
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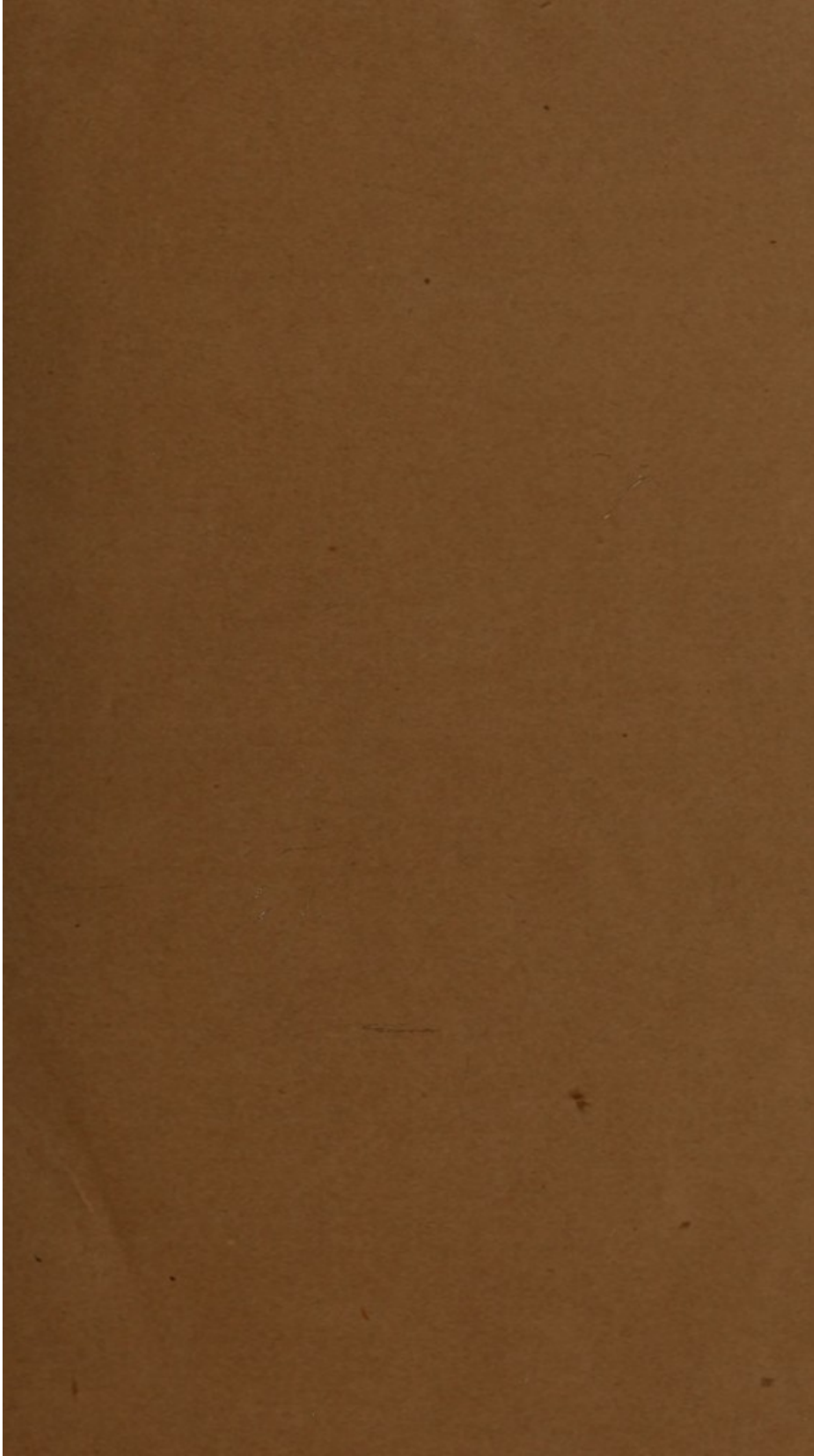


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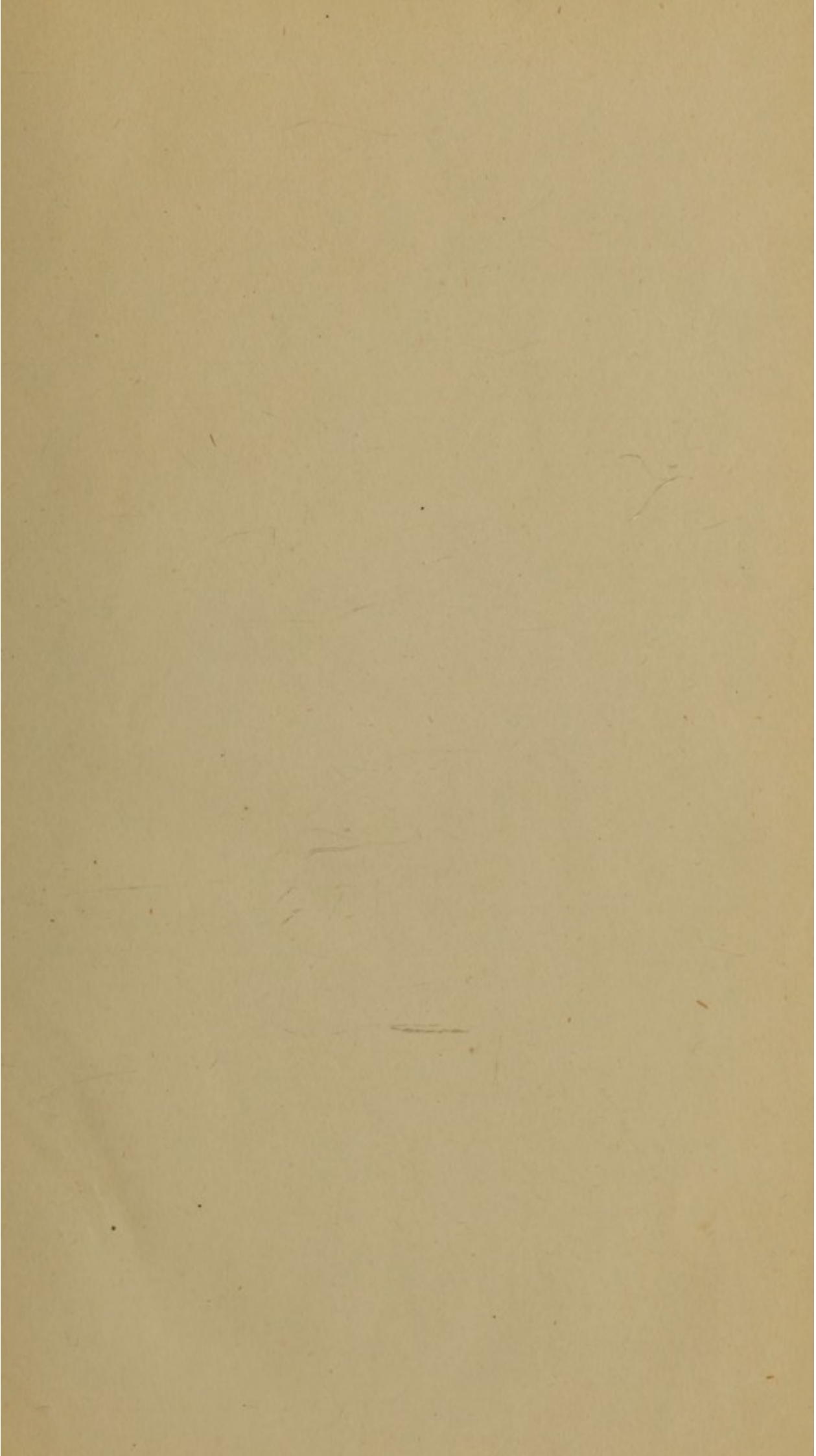


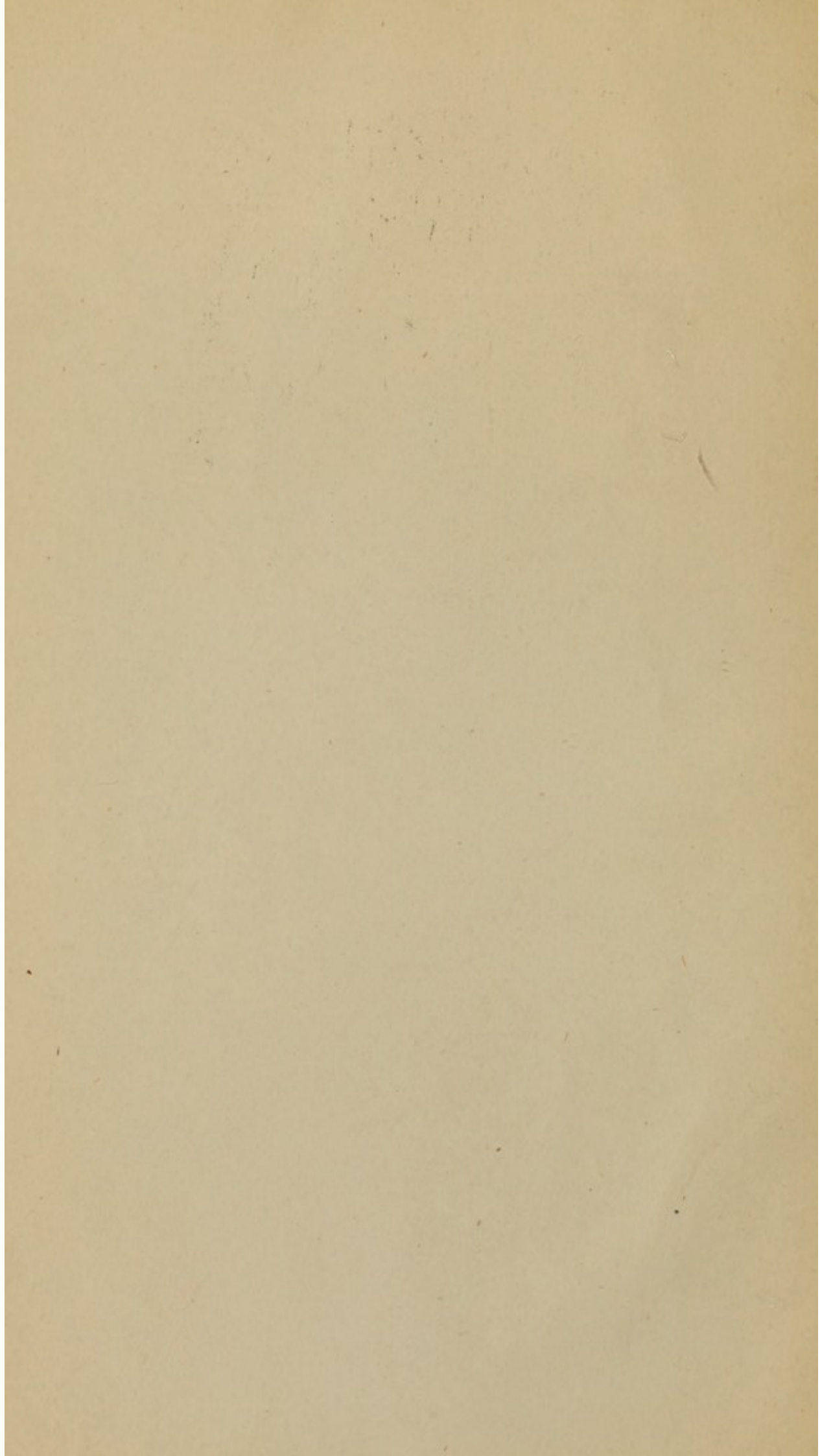


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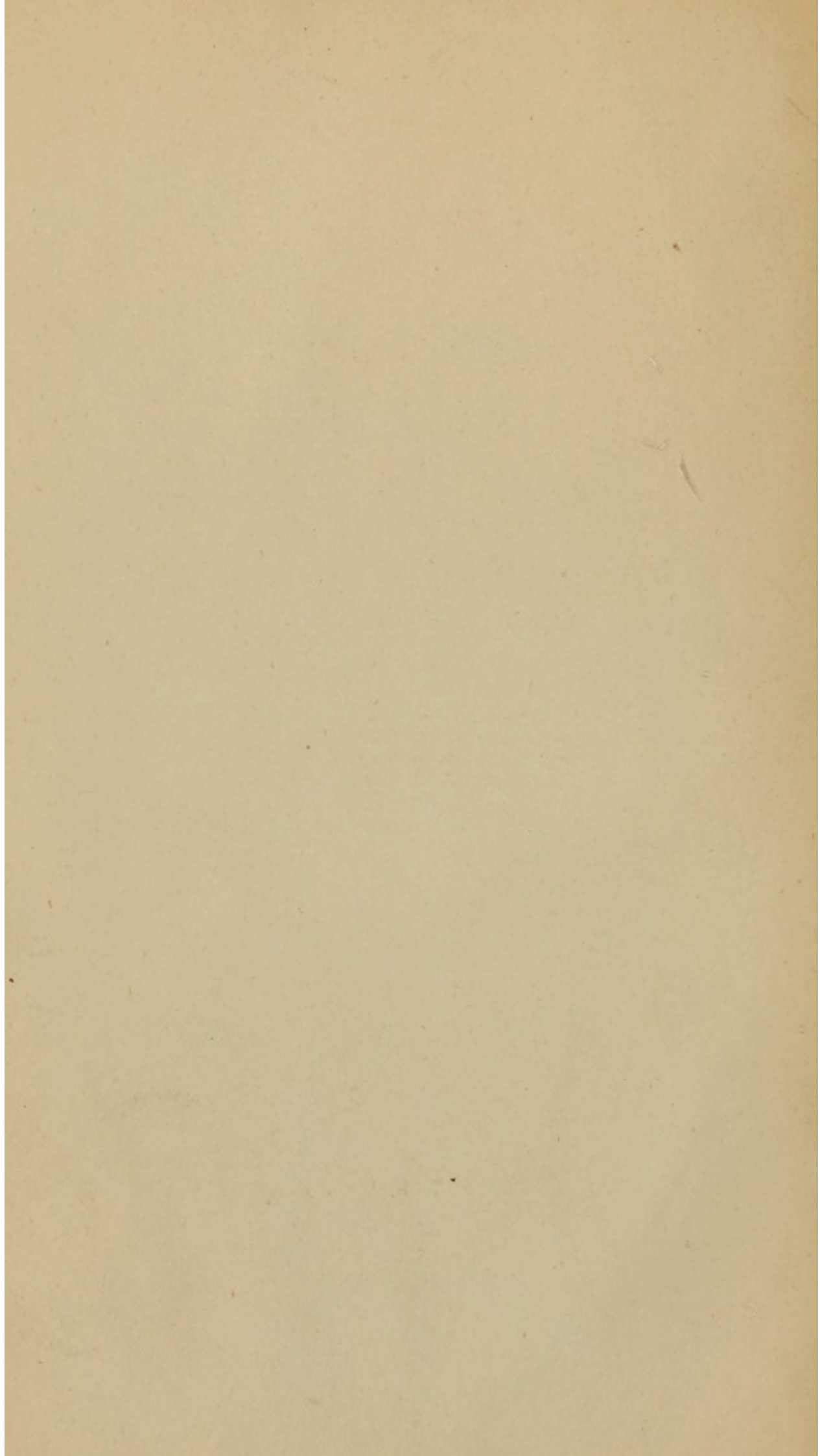








D.B. Delavan



SELECTIONS
FROM
FAVORITE PRESCRIPTIONS
OF
LIVING AMERICAN PRACTITIONERS.

BY HORACE GREEN, M.D., LL.D.,

PRESIDENT OF THE FACULTY, AND EMERITUS PROFESSOR OF THE THEORY AND PRACTICE OF
MEDICINE IN THE NEW YORK MEDICAL COLLEGE; CORRESPONDING FELLOW OF
THE LONDON MEDICAL SOCIETY; MEMBER OF THE AMERICAN
MEDICAL ASSOCIATION, ETC.



NEW YORK:
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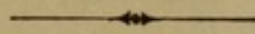
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PREFACE TO THE SECOND EDITION.



IN publishing the first edition of this work, the author was influenced, as he stated in the Introduction, by the many requests which he had received from judicious physicians, urging him to collect and publish these Prescriptions (some of which had already appeared in the "American Medical Monthly") in a book form. The call for a new edition of the work, in so brief a period after its first publication, exhibits satisfactory evidence that in this opinion his professional friends adjudged correctly; and, moreover, it has afforded the highest gratification to the author.

To this edition has been added a carefully prepared TOXICOLOGICAL TABLE, in which are exhibited the symptoms of poisoning, the antidotes for each poison, and the tests proper for their detection. Christison's division of poisons into irritants, narcotics, and narcotico-acrids, has been adopted in this Table. The value of the work to the practitioner will be enhanced by this addition.

In preparing the present volume for the press, the author has endeavored to correct the errors that appeared in the first edition; and he sincerely hopes that the

work, in its present form, will be successful in accomplishing what he originally intended it should—namely, that it may afford to the experienced physician valuable suggestions; whilst to the young practitioner it may prove to be a helper in the discharge of his responsible duties.

H. G.

INTRODUCTION.

A PART of the Prescriptions contained in this volume have already appeared in the AMERICAN MEDICAL MONTHLY.

The following are the circumstances under which they were originally collected:

For many years past, the Author's Rooms, for the treatment of patients, have been visited daily by medical men from all parts of the Union, who have called on him, either from curiosity, or from a desire to observe every improvement in practical medicine. It will be within the truth to state that the numbers of those by whom he has been in this way honored, have equalled nearly one thousand annually.

Ever ready to communicate to the profession any, and whatever, practical knowledge might be in his possession, the author has never hesitated to ask of others such useful information as they might have derived from experience and observation. Acting on this principle, he has accustomed himself for many years, when visited by experienced, practical physicians, to request of them copies of some of their favorite prescriptions—those prescriptions, from the employment of which they have derived the greatest advantage in the treatment of disease. In this way he has collected together two large manuscript volumes of medical formulæ, obtained from practitioners who have come from every section of the

Union—many of them being the contributions of some of the most distinguished American physicians and surgeons of the present time. These therapeutic excerpts, which have come to the author through individual contributions, and are the collections of much labor, he proposes to give back to the whole faculty, as the choice formulæ of many of the profession of our country.

He has been induced to publish this volume of "Favorite Prescriptions of Living American Practitioners," by several considerations.

A part of the formulæ having appeared from time to time in different numbers of the *Medical Monthly* during the last two or three years, they have been extensively copied, not only into the medical journals of this country and of the Canadas, but, also, into many of the European journals, which clearly shows that some degree of estimation was placed upon the value of these preferred formulæ of American practitioners. But a stronger inducement than the above, has been presented to the author, in the many requests that have come to him from eminent physicians in different parts of the Union—physicians, upon whose judgment he feels disposed to rely—urging him to collect and publish these Prescriptions in a Book form.

Moreover, since the intention of the publication of this volume was known, a large number of additional excellent formulæ, which cannot fail to enhance the value of the collection, have been furnished for the work, by different medical men of skill and experience.

With the scientific physician it is a matter of regret that, in our present state of medical knowledge, we cannot claim for the principles of Therapeutics that they are fully established on rational grounds. Until the relations which exist between the pathological condition of internal diseased organisms, and the action of therapeutic agents, are better understood, our knowledge of the ultimate influence of medicinal substances upon these mor-

bid conditions must, necessarily, be imperfect, and our system of Therapeutics be considered rather empirical than rational. We know from experience—and experience only—that certain remedies are valuable in the treatment of certain diseases; but, even this knowledge is limited; and hence the importance of extending its boundaries by collecting further materials from the practical observations of the experienced in our profession.

The publication of these tried formulæ, with appended observations—which are the contributions of many of the distinguished practitioners of our country—will not fail, it is believed, to add to our stock of knowledge in both Rational Therapeutics, and Practical Medicine. To the young and inexperienced practitioner, the work will afford material aid. But, in placing in the hands of this class of the profession so many powerful “instruments for combating the aggressions of disease,” we must not omit to caution the practitioner against a too energetic adoption of active therapeutic agents in resisting diseased action. There is in every living body a vital principle whose constant tendency is, not only to repel the action of morbid causes, but to restore that body when diseased, to its original normal condition. The scientific and experienced physician will always respect this conservative power or principle; and in each instance of disease, will seek to ascertain how far the case may be safely intrusted to the care of Nature, and to what extent the intervention of Art may be required. From long experience, in observing the practice of medical men, the author is convinced that, as good judgment and as careful discrimination are required, in the practitioner, to enable him to decide at what point, and how long, to withhold, altogether, the administration of remedies, as to know when, and to what extent, therapeutic measures are to be invoked, in the management of disease. But he cannot do the profession a better service

than to embody here the experience of one of the most eminent and judicious living practitioners of this country, as it is given, in his own words, in a recent communication to the Author.

“I have seen, and have prescribed,” writes he, “and, in some instances, with apparent, signal advantage, some of the ‘Prescriptions of Distinguished Living American Physicians,’ which have appeared from time to time under your sanction, in the *American Medical Monthly*, and I rejoice that you are about to embody and publish them in a book form, for the benefit, and at the call of the profession. . . . During my whole medical life (now counting forty full years!) I have always been, and, for the last decennial period, have almost daily been becoming more and more a dear lover of simplicity in my use of the *Materia Medica*, especially in all forms of chronic disease. My medical armamentarium comprises but a very small number of the articles which go to swell the bulk of our pharmacopœias and Dispensatories—my distrust of these, and my confidence in the old fashioned ‘*vis medicatrix naturæ*,” have been for several years past increasing ‘*pari passu*.’

“When I commenced my profession (in the spring of 1818), and for many years after, my reliance on medication was most unbounded; that there were known means for the cure of every disease, and that any fatal event within my manor would be justly chargeable to me, I confidently believed. I gloried in the reputation, which I did not fail soon to acquire, both with the profession, and the little public (whose misfortune it was first to receive the yet unfledged *diploma*-tist as their future medical adviser), of being ‘a most heroic practitioner,’ not in the way of reproach, indeed, but of applause. I had just emerged from the ‘Philadelphia School,’ and Dr. Sangrado himself never wielded the lancet more indiscriminately than did I, having just returned from listening to the lectures of Dorsey, Physick, Chapman, and others, who, it has

often seemed to me, actually thought, that there was no limit to the supply of blood in the human body. They had taught, and I had received the dictum, without the slightest grain of doubt, that all disease had its origin in increased vascular energy and force, for which the only legitimate remedy was primarily venesection, and then its congeners, cathartics, sudorifics, emetics, sialogogues, diuretics, 'et id omne genus,'—that all disease was an entity, and like some wild beast, was to be hunted without parley or delay; and, with all the energies and means at command, to be exterminated, lest his ravages should incontinently raze to the ground the citadel of life. And—oh, the delusion!—success seemed, not only to me, but, to my confiding patrons, to be the reward of this mad medical philosophy. But a change soon 'came over the spirit of my *dream*.' For many years past, a masterly inactivity has, in many cases, supplanted this energetic draught upon tissue, organ and function. I still have faith in the efficacy of Opium, Antimony, Calomel, Elaterium, 'Nitrate of Silver,' but action waits upon patient—*patient* Diagnosis; nor is one of those potent life-preservers permitted to make its irreparable entrance into the inner man, until, by scrutinizing observation assured of the 'Nodus vindice dignus.' ”

Whenever simple remedies can be employed with equal efficiency, such, undoubtedly, are to be preferred to compound medicines in the treatment of disease. It should never be forgotten, however, that “it sometimes happens that the most skillful physician is he who prescribes nothing.”

On this great question in Medicine—the powers of Nature to arrest the processes of disease—Sir John Forbes has just published a most valuable work, and the author would earnestly recommend, particularly to the younger members of the profession, a careful perusal of this Essay, on “Nature and Art in the Cure of Disease.”

In the following Prescriptions several ingredients are

frequently combined in one formula. In some instances this is done in order to obtain, simultaneously, the effects of two or more remedies ; in others, to increase or diminish, as the case may require, the action of the base, or principal remedy. But still more frequently are combinations effected for the purpose of rendering the remedies indicated as agreeable as possible, without, in any degree, impairing their efficacy.

Many of the formulæ, as here presented—the proportions of their combinations varied to meet particular cases—have been employed by the author, and their value tested in an extensive practice, and through many years.

For obvious reasons the various formulæ have been arranged under their appropriate heads.

HORACE GREEN.

NEW YORK, 12 CLINTON PLACE,

August, 1858.

FAVORITE PRESCRIPTIONS
OF
LIVING AMERICAN PRACTITIONERS.

CHAPTER I.

NARCOTICS AND SEDATIVES.

THE narcotic principle in medicine differs from that of the sedative in this, that its primary action is in some degree stimulant, whilst the sedative principle tends directly to depress the vital powers without inducing any previous excitement. The ultimate action of both narcotics and sedatives is to diminish the sensibility of the nervous system, thereby allaying pain and promoting sleep.

Among the direct sedatives *Hydrocyanic Acid* is one of the most prompt and efficient. Adminis-

tered in appropriate doses, it tends directly to lower the sensibility of the nervous system, to diminish the frequency of the pulse, and to induce a sensation of quiet and calmness throughout the whole system. Alone, or in conjunction with other remedies, Prussic Acid constitutes one of our most valuable therapeutic agents.

The following combinations with this remedy have been proved to be of great service in the treatment of disease :

1.

℞ Acidi Hydrocyanici, Medicinalis, gtt. lx.
 Morphiæ Sulph. gr. iij.
 Tinct. Sanguinariæ,
 Vini Ipecacuanhæ, aa f. ʒ ss.
 Syr. Pruni Virginianæ, }
 Vel Misturæ Amygdalæ, } . . . f. ʒ v.

Fiat mistura cujus sumat cochlearium parvum bis terve in die.

We have found the above a most valuable remedy in the treatment of chronic bronchial disease ; in allaying the cough present in tuberculosis, and in all pulmonary catarrhal diseases, unattended with fever. As the acid is apt to float on the top of the liquid, the phial should be shaken on the administration of each dose.

2.

℞ Acidi Hydrocyanici, gtt. xl.
Vini Antimonii, . f. ʒ ss.
Syrupi Tolutan., . f. ʒ ss.
Mucil. Acaciæ, . f. ʒ ij.

Fiat mistura, capiat cochl. parvum ter quaterve in die.

This may be used in the same cases as the former, when the cough is troublesome, and is attended with some degree of fever.

As a remedy in the treatment of hooping-cough, Hydrocyanic Acid surpasses in efficiency every other known general remedy. We have employed it for many years in this disease, and can fully substantiate the declaration of Dr. Hamilton Roe, that "Hydrocyanic Acid of Scheele's strength will, if exhibited as soon as the whoop is heard, effect a cure in almost every case of simple hooping-cough. If the disease has been going on for many weeks, its effects are not so immediately felt, but nevertheless it will cure in most instances."*

The following formula we are accustomed to employ :

* A Treatise on the Nature and Treatment of Hooping-Cough, by Geo. Hamilton Roe, M.D., Fellow of the Royal College of Physicians, etc., London, pp. 95-6.

3.

℞ Acidi Hydrocyanici, Medicinalis, gtt. xxv.
 Vini Ipecacuanhæ, f. ʒ ij.
 Syr. Tolutan. f. ʒ j.
 Aquæ Destillatæ, f. ʒ iij.

Fiat mistura, cujus sumatur cochl. parv. quartâ
 quâque horâ.

It is important that its use be entered upon as soon as the presence of the characteristic whoop determines the nature of the disease. If the breathing is oppressed, or the symptoms present indicate the existence of bronchial inflammation, the administration of the sedative should be preceded by the exhibition of an emetic, and perhaps by the application of a few leeches to the chest.

If administered too freely, the acid will produce a greatly depressing effect on the vital powers. Should much debility, therefore, occur during its employment, the remedy should be omitted, and mild tonics, with a more stimulating expectorant, be exhibited for a few days, when the use of the Hydrocyanic Acid may be renewed.

“The dose of Hydrocyanic Acid for an infant,” says Dr. Roe, “is about three-quarters of a minim of Scheele’s strength, gradually increased to a minim, which may be given every fourth hour; for a child of three years of age, about one minim,

gradually increased, if necessary, to a minim and a half every fourth hour ; for children of ten or twelve years of age, a minim and a half, increased to two minims every fourth hour. It is safer to give this medicine in small doses at very short intervals, than to run any risk of producing too great depression by a large dose. The frequency of its exhibition must depend upon the strength of the patient and the severity of the attack. The dose should be repeated when the effects begin to subside, which, in mild cases, generally happens in three or four hours ; but when much fever is present, its influence is felt but a very short time ; under such circumstances, a larger quantity may be given and at shorter intervals, without any apprehension of danger, *so long as the fever lasts.*"*

4.

℞ Acidi Hydrocyanici, Medicinalis, f. ʒ j.
 Liquor. potassæ, f. ʒ ss.
 Infus. Columbæ, f. ʒ ij.
 Misturæ Amygdal., f. ʒ iv.
 M. Capiat cochl. minim. ter in die.

In cases of long-continued chronic bronchitis, the physician occasionally finds this disease complicated,

* Op. citat. pp. 89-90.

with a peculiar irritable condition of the gastric mucous membrane, manifested by tenderness of the epigastrium, a red tongue, frequent headache, and a feverish condition of the system. In such cases where the inflammation has extended to the mucous membrane of the stomach, producing this not uncommon form of *broncho-gastritis*, the exhibition of the above combination, with the hydrocyanic acid, the alkali, and the bitter vegetable infusion, will exert a prompt and a decidedly happy influence on this diseased action.

Combined with the extract of Belladonna, Hydrocyanic Acid has also been found very useful in the treatment of *gastralgia*, and in "*irritable gastric dyspepsia*."

The following mixture prepared, and a teaspoonful of the medicine administered three or four times daily in these affections, will, by acting on the nerves of the stomach, greatly diminish their irritability :

5.

℞ Extract. Belladonnæ, . . . gr. x.
 Acidi Hydrocyanici, Medicinalis, gtt. lx.
 Tinc. Columbæ,
 Syr. Simp., aa. f. ʒj.
 Aquæ Destillatæ, f. ʒij.
 Misce.

The above combination has likewise been employed with great benefit in the treatment of spasmodic asthma.

These, then, are some of the useful combinations of one of our most important therapeutic agents; and we can assure the practical physician that not only in these affections, to which allusions have been made, but in the treatment of many other diseases, he will find these remedies invaluable aids in controlling diseased action.

The *anhydrous*, or pure Hydrocyanic Acid, which consists of one equiv. of Cyanogen, and one equiv. of Hydrogen, is of a nature so exceedingly poisonous, that it cannot be employed with safety in medicine. The *medicinal* acid, which is the preparation that should always be directed to be used in our prescriptions, contains only 2.5 per cent. (United States Pharmacopœia) of the pure acid. That of the Apothecaries' Hall, London, contains 3.2 per cent.; whilst the medicinal Acid of the French Apothecaries is nearly equal to that of the United States Pharmacopœia—namely, 2.4 per cent. of the pure acid of Gay Lussac.

As the strength of the different medicinal acids cannot be depended on, as being always of the same uniform power, it has been proposed that the Cyanide of Potassium be substituted in medicine for the Hydrocyanic Acid.

6.

℞ Cyanidi Potassii, gr. xxii
Alcohol. Officinalis, f. ʒ xi
Misce.

This preparation of Cyanogen, which possesses the same medicinal qualities, and is of the same strength with the Hydrocyanic Acid, is greatly preferred by many practitioners as a therapeutic agent, inasmuch as it can be depended on as being always of a uniform strength. It may be used in the same doses and under the same circumstances in which the Hydrocyanic Acid is administered.

Besides the preceding formulæ, in the combination of which the Hydrocyanic Acid is employed, we have several other preparations into which enters, either the Cyanide of Potassium, or the Hydrocyanic Acid, and which have been found to be of great value in practical medicine. These prescriptions will be given under the head of expectorants.

As palliatives in the treatment of all forms of neuralgia, the narcotics and sedatives are very generally resorted to by practitioners, especially during the paroxysms of the disease. When appropriately combined, their efficacy in these affections is more prompt and decided than when separately administered.

7.

℞ Extracti Hyoscyami, 3 ss.
Morphiæ Sulphatis, gr. iij.
Strychniæ, . . . gr. ij.
Capsici pulv. . . 3 ss.
Zinci Sulphatis, . gr. xv.

M. Fiat massa, in pilulas xxx. dividenda ; capiat unam, ter quaterve in die.

In neuralgia, unattended by organic lesions, the above pills, exhibited every sixth or fourth hour, according to circumstances, will be found to be an excellent remedy. They have proved especially serviceable in that form of neuralgia in which the divisions of the fifth pair of nerves are so frequently involved. Not only in facial neuralgia, but in all cases where the disease has been caused by malaria, this combination may be administered with confidence that the result will be favorable. The valerianate of iron conjoined with the extract of Hyoscyamus is an excellent antispasmodic and tonic, and may be employed with great advantage for the treatment of chorea and all the neuralgic affections of anæmic and debilitated females.

8.

℞ Extracti Hyoscyami, 3 ss.
Ferri Valerianatis, 3 i.

Fiat massa, et in pilulas xxx. dividenda ; quarum date unam ter in die.

The Valerianate of Iron and the Valerianate of Zinc are two highly valuable remedies, and, were the therapeutic powers of these medicines better understood by the profession, they would be much more extensively employed than they now are for the treatment of disease. The Valerianate of Zinc, Dr. Neligan says, is "one of the most valuable modern additions to the *Materia Medica*."

9.

℞ Extracti Hyoscyami, ℥ iss.

Zinci Valerianatis, ℥ j.

Fiant pilulæ xxx. Capiat unam bis terve in die.

The above pill is a valuable remedy in the treatment of facial neuralgia, and, indeed, is equally serviceable in all the nervous and neuralgic affections for which the Valerianate of Iron has been advised.

10.

℞ Extracti Belladonnæ, gr. viij.

Camphori pulv., . ʒ j.

Quiniæ Disulphatis, ℥ ij.

Misce ; Fiant pilulæ triginti.

These pills are very effective in the treatment of dysmenorrhœa. One pill may be exhibited every hour or two hours till the pain ceases. In females of a nervous temperament, when painful menstruation occurs, independent of organic lesions, these pills, administered as above directed, seldom fail of affording relief. In those cases of dysmenorrhœa where a tonic is not particularly indicated, the following are more appropriate, and are equally efficacious :

11.

℞ Extracti Belladonnæ, gr. viij.
 Ipecacuanhæ pulv., gr. x.
 Zinci Sulphatis, . ʒ ss.

M. Fiant pilulæ xxx., quarum capiat unam quâque horâ, donec leniatur dolor.

The following pills are highly recommended by an intelligent and experienced practitioner, in the treatment of leucorrhœa, occurring in anemic and nervous females :

12.

℞ Extracti Hyoscyami, ʒ j.
 Argenti Nitratis, . gr. x.
 Cantharidis pulv., . gr. xii.
 Quiniæ Disulphatis, ʒ ij.

Fiant pilulæ xl. Sumat unam mane et nocte.

The same physician advises the subjoined formula as a combination that may be employed with great advantage as a diuretic and alterative in the treatment of cellular dropsy :

13.

℞ Extracti Conii, . ʒj.
 Cantharidis pulv., ʒij.
 Hydrarg. Submur., ʒss.
 Ipecacuanhæ pulv., ʒj.

M. Fiat massa, in pilulas xl. dividenda. Cujus capiat unam ter quaterve in die.

A combination of the extract of Belladonna with Quinine has been employed, very efficaciously, in the treatment of gastralgia.

14.

℞ Extracti Belladonnæ, ʒss.
 Quiniæ Disulphatis, ʒj.

M. Fiant pilulæ xxx. Sumat unam ter in die.

Professor C. C. Cox, of Maryland, who has contributed some valuable prescriptions to this volume of Medical Formulæ, advises the following mixture to be administered in gastralgia :

15.

℞ Tinct. Opii,
 Tinct. Capsici,
 Æther. Sulph.
 Tinct. Camphori, aa. ʒ iij.
 Chloroformi, . ʒ j.

Fiat mistura cujus capiat cochl. parv. pro re nâta.

The efficacy of the above medicine is much increased if taken in a wineglass of hot ginger tea.

In that variety of gastralgia which is not unfrequently occurring in the course of chronic gastritis, we have derived the greatest benefit from the employment of the following pills :

16.

℞ Extracti Hyoscyami, ʒ j.
 Argenti Nitratis, . gr. x.
 Bismuthi Subnitratis, ʒ iss.

Fiant pilulæ xl. : quarum sumatur una mane ac nocte.

The Nitrate of Silver combined with some one of the sedative extracts, may be employed advantageously in the treatment of almost all chronic

gastric affections.* In cases of obstinate, chronic gastritis, or long continued dyspepsia, we have found the following pills more efficacious than any other single remedy. They should be continued for several weeks :

17.

℞ Extracti Conii, *vel* Lupuli, ʒj.

Argenti Nitratiss, . . . gr. x.

Capsici pulv.

Quiniæ Disulphatis, . . . aa. ʒij.

M. Fiat massa, in pilulas xl., dividenda. Capiat unam bis terve in die.

There is a troublesome and often an obstinate form of gastric irritability, denominated by the French *estomac glaireuse*, in which the patient occa-

* With regard to the danger of "discoloration of the skin," from the internal administration of this remedy, it may be proper to remark that although we have used the Nitrate of Silver very freely, not only in topical applications to the mucous membrane of the air-passages, etc., but have administered it for many years internally in the treatment of diseases of the alimentary canal; yet in no instance has such an event occurred in our practice. We have seldom continued its daily internal use for a period longer than six weeks, or two months, without intermitting the medicine for a time. In doses of from one-eighth to one-fourth of a grain, administered twice or thrice a day, the Nitrate of Silver may be given for two months without incurring the slightest risk of producing discoloration. Indeed, Sir James Johnson asserts, in his "Essay on the Morbid Sensibility of the Stomach and Bowels," that there is not an instance on record where the complexion has been affected by the medicine when restricted to three months' administration.

sionally ejects, by eructation, a tasteless watery fluid, and which is accompanied, often, by a severe burning pain in the epigastric region. This variety of the disease is arrested with great certainty by the exhibition of either the preceding, or the following pills :

18.

℞ Extracti Lupulinæ, ʒ j.
 Argenti Nitratiss, . gr. x.
 Bismuthi Subnitratiss, ʒ iss.
 Quiniæ Disulphatiss, ʒ ij.

Fiant pilulæ xl. ; quorum sumatur una bis terve in die.

In all forms of chronic disease, attended with acute pain, as well as in all painful nervous affections, in the treatment of which, for any cause, full doses of opium are contra-indicated, the following combination may be administered with great advantage :

19.

℞ Extracti Hyoscyami, gr. xv.
 Extracti Stramonii, gr. iv.
 Extracti Humuli, ʒ j.
 Morphiæ Sulphatiss, gr. iss.

M. Divide in pilulas xxx. ; quarum capiat unam omni semihorâ, donec leniatur dolor.

“ I have found,” writes Dr. Porcher, of Charleston, “ a combination of Sulphate of Quinine and Sulphate of Morphia to be particularly beneficial in relieving pain, proceeding from irregular nervous excitement :”

20.

R̄ Quiniæ Disulphatis, ʒ ij.

Morphiæ Sulphatis, gr. x.

Fiant pilulæ xx., quarum sumat unam pro re nâta.

The above pills may also be administered, with great advantage, often, in neuralgia and rheumatism.

Of the therapeutic effects of muriate of ammonia, when internally administered, but little is known, as in this manner it is but rarely employed in this country. With the German physicians it has obtained a high reputation as a good alterative, and a promoter of healthy secretions in chronic diseases of the mucous and serous tissues. It not only promotes the mucous secretions, says Dr. Sunderlin, but the cutaneous exhalations, and improves also nutrition and assimilation. Combined with a sedative and narcotic, we have found it highly valuable, in allaying irritation and in promoting expectoration, in the early stage of phthisis :

21.

℞ Ammoniā Muriatis, ʒ ss.
Opii pulv., . . . gr. x.
Digitalis pulv.
Scillā pulv., . . aa. ʒ j.

M. Divide in pilulas xxx. Sumat unam quâque sexta horâ.

Sleeplessness, occurring in hypochondria, hysteria, and, indeed, in all nervous affections, may be overcome with great certainty by the administration of the following pills :

22.

℞ Assafoetidā, . . ʒ j.
Morphiā Sulphatis, gr. iiij.

M. Fiant pilulae xxx., quarum exhibe unam vel duas horâ de cubitus.

The above pills—two to four exhibited daily—are very efficacious in arresting the dry cough which is occasionally consequent on disordered menstruation in nervous females.

CHAPTER II.

TONICS AND STIMULANTS.

ALTHOUGH these two agents are here arranged together, and are frequently combined in their administration, yet they differ essentially in their therapeutic effects. Tonics, although not confined in their action to the muscular fibre, are generally defined to be those "medicinal agents which restore relaxed and weakened muscles to their state of healthful tone, which renew their elasticity, contractibility, and tension,"* and thereby impart strength and vigor to the whole system. *Stimulants*, by increasing the sensibility and irritability of the parts to which they are applied, powerfully augment, through the nervous system, the organic actions. Stimulants exalt the functions of innervation and circulation without imparting permanent strength to the system. Tonics give tone and strength to the muscular and nervous system at the same time, without increasing, necessarily, the

* Thompson's Therapeut.

action of the heart. "Tonics give strength, stimulants call it forth."

The tone or energy of the system which is gradually acquired through the administration of tonics, becomes permanent, and is not replaced by a consequent exhaustion or depression. The introduction of stimulants into the living body is quickly followed by increased energy of the vital actions, and is succeeded as rapidly by a state of depression or collapse. Stimulants are not indicated when inflammation is present, but "tonics, by imparting strength to the capillaries, operate beneficially in inflammation, even when the use of the lancet is requisite to keep down the action of the heart."* Both tonics and stimulants may produce their effects on the system, by making their impression chiefly on the stomach, or by operating through the medium of the blood, or through the medium of the nerves.

As tonics, strictly speaking, are neither stimulant nor sedative, they may be appropriately, and, often, very usefully combined with either stimulants or sedatives. In many cases, where tonics are indicated, and yet from some cause are not well borne, they may be administered, especially the martial preparations, with much safety, and often with great advantage, by combining them

* Thompson.

with some of the peculiarly sedative medicines. The different forms of iron, whether employed as found in the natural chalybeates, or in the artificial preparations of the chemist, make their primary impression on the digestive organs, augmenting, ultimately, the power of the secretory and excretory systems, and rousing the nutritive faculty in every part of the body.

The following combination of a chalybeate with a stimulant and a sedative has, for many years in our hands, proved a most valuable tonic, particularly when administered during convalescence from disease, and in all debilitated and anæmic cases.

23.

R̄ Extracti Conii, .	ʒj.
Sesqui-oxydi Ferri,	ʒij.
Tinct. Columbæ, .	f. ʒ iss.
Syr. Tolutan., .	f. ʒ ss.
Ol. Gaultheriæ, .	gtt. x.
Aquæ fontanæ, .	f. ʒ ij.

Fiat mistura ; cujus sumat coch. parv. mane ac nocte.

Or the following may be substituted :

24.

℞ Sesqui-oxydi Ferri,
 Extracti Taraxici, aa. ℥ ss.
 Vini Sherii, . . . f. ℥ vj.
 Tinct. Gaultheriæ, ℥ ss.
 Aquæ font. . . . f. ℥ iv.

M. Capiat coch. magn. bis in die.

The following is a very excellent tonic, and may be exhibited whenever any of the ferruginous preparations are indicated.

25.

℞ Ferri Citratis, . . . ℥ ij.
 Syr. Citri *vel* Aurantiæ,
 Aquæ Menth. Pip., . . . aa. f. ℥ ij.
 Aquæ puræ, f. ℥ iv.

M. Exhibe cochlearium parvum ter quaterve in die.

In young anæmic females, with indications of a chlorotic condition of the system; and also in children of strumous habits, the *Phosphate* of Iron, exhibited in combination with the Sulphate of Quinine, is a therapeutic agent of great value.

26.

℞ Ferri Phosphatis, . ʒj.
 Quiniæ disulphatis, gr. xii.

M. Fiant pulv. xii., quarum capiat unam bis terve in die.

A physician of great experience, and celebrated for his successful treatment of diseases of females, has employed for many years, and with much advantage, the subjoined combination of an alterative and a tonic in the management of certain forms of uterine disease.

27.

℞ Syrup. Ferri Iodidi, . ʒj.
 Tinct. Actææ Racemsoæ, f. ʒv.
 Tinct. Rad. Aconiti, . f. ʒiij.

Fiat mist. cujus cap. gtt. xx. ter in die.

We have seen engorgement of the os tinæ and non-malignant induration of this organ, disappear rapidly under the persevering internal administration of the above tonic ; while, at the same time, the following ointment was applied once a week, by means of friction, with the finger, to the indurated os.

28.

℞ Extracti Hyoscyami,
 Extracti Conii,
 Extracti Belladonnæ, aa. p. e.

To each ounce of which mixture add one drachm of Iodide of Potassa—mix thoroughly, and apply as above.

29.

℞ Ferri Sulphatis, ʒ ij.
 Potassæ Iodidi, ʒ iss.
 Tinct. Colombæ,
 Syrup. Zingiberis, aa. f. ʒ ij.

Fiat mist. capiat coch. parv. ter in die.

This mixture may be exhibited with advantage whenever we desire to promote the absorption of glandular enlargements, and in all cases where a tonic and an alterative are indicated.

Not unfrequently the general practitioner will encounter cases of obstinate intermittent; and of uncontrollable neuralgic affections, which will resist, altogether, the effects of the ordinary antispasmodics, when singly administered. In such instances, we have often succeeded perfectly, by the combination and exhibition of a vegetable and mineral tonic—as the following :

30.

℞ Liquor. Potassæ Arsenitis, f. ʒ iss.
 Tinct. Cinchonæ, . . . f. ʒ iij.
 Syr. Aurantiæ, . . . f. ʒ j.

M. Hujus mist., sumat cochl. min. bis terve in die.

During the last two years, intermittent fevers have occurred more frequently, in some parts of this city and in the vicinity of the city, than for many previous years. In some of these cases, where the disease has proved obstinate, not yielding to large doses of Quinine, long continued, we have found it to be promptly arrested by the administration of a teaspoonful of the following mixture, twice or thrice a day—the last dose being administered a short time before the period of the anticipated paroxysm.

31.

℞ Quiniæ Disulph., . . . ʒ j.
 Liquor. Potassæ Arsenitis, f. ʒ ij.
 Acidi Sulph. Aromat., . f. ʒ j.
 Tinct. Cinch. Co.,
 Syr. Zingib., aa. f. ʒ ij.

When the preparations of Arsenic are employed, it is safest to give the medicine after a meal.

When thus exhibited, larger, or more effectual doses may be given with more safety, than when taken fasting. Should, however, gastric irritation arise, under its use, or swelling and stiffness of the eyelids occur, the medicine should be immediately discontinued.

Should it from any cause be desirable to administer these remedies in the form of a pill, we may employ the following formula :

32.

R̄ Acidi Arseniosi, gr. ij.
 Quiniæ Disulphatis, ʒ j.
 Conserv. Rosæ, . ʒ ss.

Misce optime, et fiat massa, in pilulas xxx. dividenda ; sumat unam bis quotidie.

Arsenic is not only a valuable antiperiodic, but it is a most powerful alterative, and has proved efficacious, when judiciously administered, in many cases of obstinate disease. A late number of the *Edinburgh Medical Journal* (May, 1858), contains a highly valuable paper on the "Physiological and Therapeutical effects of Arsenic," by Dr. James Begbie, in which the author expresses, in strong terms, his confidence in Arsenic as a most useful and available therapeutical agent, "powerful in

many intractable affections, and exercising a commanding influence over ailments hitherto considered incurable." The diseases in which this remedy has proved to be particularly efficacious, are, neuralgia, chorea, chronic rheumatism, and, indeed, all that class of diseases which originate in the rheumatic diathesis. "The papular, pustular, vesicular and squamous affections, in their chronic and non-contagious forms, are especially amenable to its influence" (p. 975). Under its use in the treatment of numerous and various diseases, Dr. Begbie affirms, that an improved digestion and a better appetite invariably occur; and in no instance has he observed any injurious consequences to result from its employment.

The *Liquor Arsenicalis* of the pharmacopœia, is the preparation ordinarily employed for securing the remedial effects of the medicine, although Dr. B. frequently administers Arsenic in combination with Quinine, Iodine, Colchicum, etc. In exhibiting the *Liquor Arsenicalis*, it is given, by him, to adults in doses of five drops of the solution, after each meal, largely diluted with water—the medicine being increased one drop every third day, until the physiological action of the remedy is manifested, such as itchininess and swelling of the eyelids; a silvered tongue, or tenderness of the epigastrium. The dose, on the occurrence of any

of these symptoms, should be diminished, or the intervals of its administration lengthened.

It is in the persistent use of Arsenic—in cases of obstinate and intractable disease—that its highest beneficial effects are ultimately obtained. But, throughout the entire use of this mineral, its poisonous action should be guarded against, by limiting its exhibition to the production of those symptoms only which indicate its earliest physiological action.

We have had, recently, much experience in the use of the different preparations of Manganese, and have become fully satisfied that this mineral tonic, in its different combinations, will prove a most valuable addition to our pharmaceutic preparations.

The presence of Manganese in the blood has been fully established by the experiments of MM. Millou, Hannon, and others; and, recently, M. Burin, in a memoir presented to the French Academy of Medicine, has given an analysis, by which he shows the amount of Manganese in the blood globules, and exhibits the condition in which it exists.* It is, indeed, as constant an ingredient of this fluid, in its normal condition, as iron, and it is well known that a deficiency in quantity, of both these metals, may be observed in the blood in

* Bull. de Thérapeutique.

many cases of anæmia, chlorosis, tuberculosis, etc.; and hence the employment of Manganese is proper, in most instances, where the administration of iron is indicated. It can be administered, moreover, with entire safety in those cases in which hæmoptysis is an occasional symptom. Frequently, both remedies may be given in combination with great advantage.

The most important preparations of Manganese, for pharmaceutical purposes, are the *Phosphate*, the *Malate*, and the *Iodide* of Manganese.

After the subjoined formula, we have administered, in tuberculosis, to a large number of patients, the Phosphate of Manganese, with most favorable results.

33.

℞ Manganesii Phosphatis, ʒ ij.
 Tinct. Cinchonæ, . . . f. ʒ iij.
 Syr. Sarsæ, . . . f. ʒ iv.
 Mucil. Acaciæ, . . . f. ʒ j.
 Ol. Gaultheriæ, . . . gtt. xx.

Fiat mistura, cujus sumantur coch. duo vel tria minima bis terve in die.

Or we may administer, under similar circumstances, and to the same amount, the Manganese

combined with some of the preparations of Iron ;
as in the following :

34.

R̄ Manganesii Phosphatis,	ʒ iss.
Ferri Phosphatis,	. ʒ iij.
Tinct. Colombæ,	. . f. ʒ ij.
Syr. Tolutan.,	. . . f. ʒ iv.
Ess. Gaultheriæ,	. . f. ʒ j.

These mixtures should be kept in well closed bottles, and as the Manganese is not altogether soluble, the medicine should be shaken before being administered.

The Malate of Manganese is considered by some practitioners a more eligible preparation, inasmuch as it is quite soluble, and the base of the salt is in the form of protoxide, the acid being easily digested.

35.

R̄ Manganesii Malat.,	ʒ ij.
Tinct. Cinch.,	. f. ʒ ij.
Syr. Simp.,	. . f. ʒ iv.
Ess. Limon.,	. . f ʒ j.

Fiat mistura, date coch. parv. mane ac nocte.

The Iodide of Manganese is an efficient remedy in the treatment of glandular enlargements, especially

those of the neck and of the spleen, in constitutional syphilis, and in the anæmia arising from scrofula and from cancerous affections.

It may be administered in the form of pills ; or, as a mixture in the following formula :

36.

℞ Manganesii Iodid., ʒ ij.

Tinct. Cardamom., f. ʒ j.

Syr. Sarsa., . . . f ʒ v.

M. Sumat coch. parv. bis terve in die.

In a paper published in a late number of the *Bulletin de Thérapeutique*, M. Petriquin recommends a combination of Manganese and Iron, as a highly valuable agent in the treatment of disease. He has found these combined medicinal bodies especially useful in blood diseases, such as the chloro-anæmia, after hæmorrhage, operations, metrorrhagia, etc. In the chlorosis which appears about puberty, in that also which occurs at the critical period of women, especially when profuse hæmorrhage prevails, and in the depraved state of the blood, which succeeds intermittent fevers, M. Petriquin has found the Ferro-Manganese preparations of remarkable efficacy.

We have spoken of the *Phosphate*, the *Malate*, and the *Iodide* of Manganese as being among the

most important of the pharmaceutical preparations of this metal. With some practitioners, the *Carbonate* of Manganese, in combination with the *Carbonate* of Iron, is considered a valuable therapeutic agent. These two Carbonates, combined in equal quantities, and administered in doses of from five to ten grains daily, constitute a favorite remedy with a distinguished practitioner of Massachusetts.

37.

℞ Manganesii Carb.

Ferri Carb., . . aa. ʒ j.

Sacchar. Alb. Pulv., ʒ ij.

Misce et in pulv. xv. divide, quorum cap. ij. vel. iij. quâque die.

Should a liquid preparation of these remedies be preferred, they may be exhibited, combined with some vegetable tonic, as in the subjoined formula :

38.

℞ Manganesii Carb.

Ferri Carb., . aa. ʒ ij.

Tinct. Columbæ,

Syr. Sarsa. Co., aa. f. ʒ iij.

M. Capiat coch. min. bis in die.

This combination of the Carbonate of Manganese and the Carbonate of Iron is especially appropriate for the improvement of that condition of the system which is attended with an ulcerative action of mucous membranes. In the treatment of that often troublesome affection, ulcerated sore mouth, this Ferro-Manganese preparation, it will be found, will prove to be particularly efficient :

39.

℞ Manganesii Carb., ʒ j.
 Ferri Carb., . . . ʒ iss.
 Potass. Iodid., . ʒ ij.
 Tr. Gentianæ Co.,
 Syr. Sarsa. Co., aa. f. ʒ iij.

Fiat mistura. Capiat cochleare parvum bis in die.

In mesenteric obstructions, and for the discussion of glandular swellings in any part of the body, the above preparation is a valuable remedy.

40.

Within a few years, *Fusel Oil* has been much employed by some experienced practitioners, in New England, by whom it is spoken of as a most valuable therapeutic agent. *Fusel Oil*, or Grain

Oil, is the Hydrated Oxyde of Amyle, and is obtained in the distillation of Alcohol.

“This remedy,” writes Dr. Henry J. Bowditch, of Boston, who has communicated valuable information to the author on its use, “was first brought to my notice by Dr. Wyman, of Cambridge, who, on theoretical grounds, suggested it to the profession as a palliative in tuberculous cases.

“For the past few years, I have used it, almost to the total exclusion of Cod-Liver Oil. It produces, at its exhibition, stimulating effects, similar to those caused by the coarser liquors. It also excites nutrition, so that patients grow fat as when using Cod-Liver Oil.

“I have noticed, likewise, in many instances, that it seems directly to influence the cough, almost like an opiate—checking it and lessening the amount of sputa. In some persons it produces nausea; in others it causes fever. In such circumstances I lessen the dose or discontinue the remedy.

“But I have been as much pleased with the effects of this remedy in another series of cases, viz.: in those poor, miserable, emaciated, whining children, who are so thin that one can see the bones almost as well through the thinned skin, as if they were actually exposed to view. I have seen such individuals (even when there were some suspicions of pulmonary or abdominal disease),

arise with an extraordinary degree of elasticity, marked even from the first dose. A week changes them very much, and sometimes a month restores the little creatures to health and plumpness. Of course, I do not mean to say that it always produces this effect, but I have seen it successful so often, that I may consider it as my 'favorite remedy.' In conclusion, let me add, that my doses vary from half to one drop for a child five or six months old, up to five or ten drops for an adult. I give it in syrup to a child, and often in a little whisky and water to an adult."

The alkaloid, and the extract of *Nux Vomica*, are ordinarily arranged under the head of Excitants. We have employed these preparations, however, with great advantage, in cases where both tonics and excitants were indicated. *Strychnia* and the extract of *Nux Vomica*, as therapeutic agents, it is generally supposed, produce the same, or nearly the same effect upon the animal system. By some practitioners it is believed that the extract determines more to the head than *Strychnia*. This salt may be exhibited in appropriate doses without producing any obvious effect on the cerebral circulation. The alkaloid, therefore, should be preferred in those cases where we would excite the powers of the nervous system without increasing the action of the brain.

41.

℞ Extract. Nucis Vomicae, gr. xxxii.
Tinct. Cardamom.,
Syr. Zingib., . . . aa. f. ℥ j.
Aquæ font., . . . f. ℥ ij.

Fiat mistura, cujus cap. gtt. xx., vel xxx., bis terve in die.

In chronic, gastric affections, with diminished energy of the digestive powers, the administration of the above preparation will, in many cases, by improving the appetite, and increasing the powers of assimilation, impart tone and energy to the whole system.

With one of our oldest and most experienced physicians the following pills, exhibited one night and morning, is a favorite remedy in chronic gastric affections, chronic diarrhœa, etc. :

42.

℞ Extract. Nucis Vomicae, gr. iv.
Extract. Opii, . . . gr. vi.
M. Fiat massa, et in pilulas xvi. dividenda.

Under similar circumstances Prof. Cox, of Maryland, recommends the following as a valuable remedy :

43.

℞ Nucis Vomicae, . ʒ ij.
 Argent. Oxydi, . gr. xvi.
 Extract. Gentianæ, ʒ iss.

M. Fiat massa et in pil. lx. div. Sumat unam
 ter in die. Vel :

44.

℞ Bismuth. Subnit., . ʒ j.
 Rad. Columbæ Pulv., ʒ ss.
 Acaciæ Pulv., . . ʒ ij.

M. Fiat massa, in pilulas xx. divide.
 To be taken as the above.

On account of the great insolubility of Strychnia, this alkaloid is generally administered in the form of pills, the salt being made up with the conserve of roses, or the extract of Gentian or of Liquorice. It is of importance, in the exhibition of Strychnia, in many cases, gradually to increase the dose ; but this is with difficulty effected when the medicine is made up in the form of pills. A perfect *solution* of the salt may be obtained in the following manner ; and we would advise that prescriptions be made up from such a solution :

45.

Solution of Strychnia.

℞ Strychniæ, . gr. xii.
 Acidi Acetici, gtt. lx.
 Alcohol, . f. ℥ j.
 Aquæ font., f. ℥ xi.

M.

The above solution may be administered in doses of from ten to thirty drops, twice or thrice daily. Beginning with the smallest number of drops, and gradually increasing the dose, the medicine may be continued until its specific effects on the system are slightly induced, when the remedy should at once be arrested for a few days, and its administration be recommenced, if necessary, beginning again with the minimum dose. We have found it a most valuable and efficient remedy in some obstinate forms of neuralgia.

The following preparation may be often employed with great advantage in the treatment of chronic gastric irritation :

46.

℞ Solutio. Strychniæ, . f. ℥ ss.
 Tinct. Cardamom. Comp., f. ℥ iiiss.

M. Cap. coch. parv. ter in die.

A physician of much experience in the management of malarious diseases, recommends the following mixture as a most efficient remedy in the treatment of obstinate cases of intermittent fever :

47.

℞ Solutio. Strychniæ, . . f. ʒ ij.
 Quinæ Disulphatis, . . ʒ ss.
 Tinct. Ferri Sesquichloridi, f. ʒ ss.
 Aquæ fontanæ, . . . f. ʒ iss.

Fiat mistura, cujus sumatur coch. parvum quartâ quâque horâ, intermissionis tempore.

An eminent German physician, M. Frisch, has recently recommended a similar combination, in the treatment of intermittents, when the Sulphate of Quinia fails. This physician prescribes “from six to ten grains of the rasped seed mixed with two ounces of the Cinchona Bark, or with twelve grains of the Disulphate of Quinia, to be taken in divided doses in the intervals of the paroxysms.” In some forms of neuralgia we have derived more prompt and decided effects from the use of the Strychnia, when administered in combination with an anodyne, as in the following combination :

48.

℞ Solutio. Strychniæ, . . . f. ʒ iij.
 Solutio. Morphiæ (Majendie), f. ʒ iss.
 Tinct. Gentianæ, f. ʒ ij.
 Syr. Acaciæ, f. ʒ iss.

M. Exhibe cochleare parvum, quaterve ter in die.

A distinguished physician of Maryland, highly recommends the following as a very useful anti-periodic :

49.

℞ Quiniæ Disulphatis, ʒ ss.
 Piperin. Pulv., . gr. xv.
 Strychniæ, . . gr. j.

M. Fiat massa et in pil. xii. div. Sumat unam ter in die.

50.

In certain forms of impotence, writes an experienced practitioner, of South Carolina, proceeding from a feeble action of the erector muscles, "I have found, in many cases, Strychnia to have an excellent effect ; I administer it in doses of a 12th of a grain, three times a day."

Not only in the diseases already named, have the

extract of *Nux Vomica* and *Strychnia* proved useful, but in hemiplegia, in general paralysis, and in spasmodic asthma, great advantage has been derived from the use of these remedies. In administering *Strychnia* in paralysis we obtain the greatest benefit from its use, if the dose is gradually increased, until slight tetanic movements of the paralytic limbs are produced.

Administered alone, or in combination with the Tincture of *Lobelia*, *Strychnia* has proved serviceable, in some instances, in the treatment of spasmodic asthma.

51.

℞ Solutio. *Strychniæ*,
 Tinct. *Lobeliæ*, . aa. ʒ ij.
 Syr. *Tolutan.*, . ʒ iss.

M. Ft. mistura, cujus date coch. parv. ter quaterve in die.

In one very common form of dyspepsia, attended with derangement of the biliary organs, the subjoined combination constitutes a most valuable remedy, administered in doses of one teaspoonful three times a day.

52.

℞ Hydrarg. Bichloridi, gr. iv.
Tinct. Nucis Vomicae,
Vel Solutio. Strych., ℥ ss.
Tinct. Rhei Comp., . ℥ iss.
Syr. Aurantiæ, . . ℥ ij.

M.

In the administration of so powerful a remedy as Strychnia, much caution should always be observed. As it is one of the most valuable of our medicinal agents, every practitioner should become acquainted with its therapeutic powers, and with its best modes of administration. By commencing with small doses, and gradually increasing the amount, the remedy may be continued with safety, until slight tetanic twitchings of the muscles are produced.

In one case of most obstinate and long-continued neuralgia, occurring in a lady of this city, we administered the Strychnia, and gradually increased the dose, until the spasmodic movements of the muscles were quite apparent, but without any abatement of the disease. Commencing with the original dose, the medicine was again administered up to the same point; and this was done for the third time, and with the effect of completely arresting

the disease. In most cases, however, it will not be necessary to continue the remedy until these tetanic movements are manifested.

Other remedies have been employed with advantage in the treatment of neuralgia. Prof. Harvey Lindsly, of Washington, recommends highly the following. One pill, he affirms, administered every four hours and perseveringly taken, has proved very efficient in his hands.

53.

℞ Extract. Aconiti, gr. x.
Acidi Arseniosi, gr. j.
Quiniæ Disulph., ʒ ss.

M. Fiat massa, et in pil. xx. div

The addition of Morphia to the above pill is of advantage in some cases. The same physician recommends the following in neuralgia :

54.

℞ Extract. Belladon., gr. x.
Ferri Pulv.,
Quiniæ Disulph., aa. ʒ j.

M. Fiat mass. et in pil. xx. divid. quarum cap. iv. vel v. quâque die.

In neuralgia of the kidneys and stomach, Dr.

Cox, of Maryland, advises the employment of the following combination :

55.

℞ Bi-Carb. Potass., . ʒj
Acidi Hydrocyanici, gtt. xxiv.
Sol. Sulph. Morph., gtt. xxiv.
Aquæ Camphori, . ʒiv.

M. Fiat mistura, cujus capiat coch. parv. ij. pro re natâ.

CHAPTER III.

EXCITANTS AND ALTERATIVES.

IN the therapeutical classification of medicinal agents, by Dr. Thomson, *Iodine* and its compounds are arranged under the head of excitants.

Uncombined, Iodine is a powerful excitant, stimulating the tissues of the organs and accelerating their action. In some of its combinations, it acts with much energy upon the capillary and secretory systems ; combined with Mercury it is a most valuable alterative, and in combination with Potassium it not only stimulates the whole of the glandular system, but acts in a special manner upon the kidneys. It is Dr. Clark's opinion, that the action of Iodine upon the animal economy resembles in a great degree that of Mercury. In some respects the therapeutical effects of these two remedies may be similar. The action of the tissues of the organs is accelerated, and the excretory system is promoted, it is true, by both remedies, but not in the same degree. Paleness, or blanching, is frequently produced by a course of Mercury, an effect which

has been ascribed to the diminished number of red globules of the blood; whilst, on the other hand, an increased nutrition of the body, or *embonpoint*, is the frequent result of the employment of Iodine.

We have found no other general remedy, to compare, in its beneficial effects, with that of Iodine and its compounds in the commencement of the treatment of follicular, and other diseases of the air-passages.

In uncomplicated folliculitis of the pharyngolaryngeal membrane, the administration of the following mixture, conjoined with the topical applications of a solution of the crystals of Nitrate of Silver to the diseased membrane, will, in most cases, effect a speedy cure :

56.

℞ Potass. Iodid., . ʒ ij.
 Tinct. Rhei, . f. ʒ i.
 Syr. Sarsa. Co.,
 Aquæ font., . aa. f. ʒ ij.

Fiat mistura, cujus sumatur cochl. parv. mane ac nocte.

In chronic bronchitis, whether idiopathic, or consequent upon follicular disease, we have derived great advantage from the use of the subjoined preparation :

57.

℞ Decoc. Polygalæ, ℥ v.
 Potass. Iodid., . ℥ iij.
 Tr. Opii Camphor., f. ℥ j.
 Syrupi Tolutan., f. ℥ ij.

Fiat mistura. Capiat cochleare parvum bis in die.

Although the constitutional effects of Iodide of Potassium are very analogous to those of Iodine, yet it may be given in larger doses, and for a longer period, without producing disorder of the system, than the free Iodine. When indications of a scrofulous diathesis are present, in any case, it will be preferable, and will prove more efficacious, to exhibit the two preparations in combination :

58.

℞ Iodini puræ, . gr. vj.
 Potass. Iodid., ℥ iss.
 Tinct. Cardamom., f. ℥ i.
 Syr. Sarsa. Co., f. ℥ iij.

Fiat mistura. Exhibe cochl. parv. bis terve in die.

In the treatment of asthma, particularly when this disease is consequent upon, or is complicated with, bronchial inflammation, we have found the Iodide of Potassium, conjoined with the use of

Lobelia, and Decoc. *Polygalæ* prove greatly beneficial.

59.

℞ Potass. Iodid., . . . ʒ ij.
 Decoc. *Polygalæ*, . . . ʒ iv.
 Tinct. *Lobeliæ*,
 Tinct. *Opii Camphor.*, aa. ʒ j.

Fiat mist. capiat cochl. parv. bis terve in die.

The Iodides, which are formed by the combination of Iodine and Mercury, are valuable medicinal agents.

The Protiodide of Mercury, and the Biniodide are the preparations ordinarily used in the treatment of disease. But for several years we have been accustomed to use a combination of the Protiodide of Mercury, with the Iodide of Potassium, by which combination a double salt, a Hydrargyro-Iodide of Potassium is formed, a remedy which, in our experience, has proved altogether the best alterative we have ever employed :

60.

℞ Protiodid. Hydrarg., gr. iij.
 Potass. Iodid., . . . ʒ ij.
 Tinct. *Rhei*, . . . f. ʒ j.
 Syr. *Sarsa. Co.*, . . . f. ʒ iij.

Fiat mistura, et date cochl. parv. bis in die.

We desire to call particular attention to this compound, because of the striking advantages we have obtained from its use in the treatment of disease. Administered in the early stage of tuberculosis, or in cases of obstinate and long-continued follicular laryngitis, with ulcerations of the epiglottis, or within the larynx, this medicine, as a general remedy, has proved more efficient, in our experience, than any other single agent in the *Materia Medica*. In secondary, or constitutional syphilis, it will be found an invaluable remedy. Under its administration, the syphilitic, ulcerated throat will quickly assume a more healthy appearance; and, ordinarily, will heal rapidly, when appropriate topical measures are conjoined. We generally commence the treatment of such cases, by administering the following combinations:

61.

℞ Potass. Iodid., . . . ʒ ij.
 Protiodid. Hydrarg., gr. ijss.
 Tinct. Gentianæ,
 Syr. Sarsa. Co., . . . aa. f. ʒ ij.

M. Sumatur cochl. parv. bis terve in die.

The apothecary will sometimes object to the above combinations, because a decomposition is effected—the Protiodide of Mercury being con-

verted, by the Iodide of Potassium, into the *Bini-iodide*, and Metallic Mercury. But it is well known to chemists, that these different Iodides will unite together in different proportions, by which those compounds, which Berzelius terms *double Iodides*, are formed. The Biniodide thus formed in the above solution, immediately unites with a portion of the Iodide of Potassium, in solution, and a double salt—the *Hydrargyro-Iodide of Potassium*—is the result.

Our experience in the employment of this therapeutic agent has been extensive, and we have found it more efficacious in the treatment of disease, in a fourfold degree, than the use of either the Proto-iodide or the Biniodide alone.

Not only in the preceding diseases—severe folliculitis, and secondary, or constitutional disease—has this combination of the Iodides, the *Hydrargyro-Iodide of Potassium*, been found useful, but its administration in many obstinate cutaneous affections has proved, in our hands, to be highly advantageous.

62.

R̄ Extract. Conii, . . .	ʒ iss.
Proto-Iodid. Hydrarg.,	gr. iv.
Potassæ Iodidi, . . .	ʒ iij.
Tinct. Cardamom., . .	f. ʒ ij.
Syr. Sarsa. Co., . . .	f ʒ iv.

Fiat mistura. Capiat cochl. parv. bis terve in die.

This preparation, administered as above, may be employed in the treatment of lupus, lepra, and other obstinate cutaneous affections, especially those of a scaly character, with safety and advantage.

With my colleague, Prof. J. M. Carnochan, surgeon-in-chief to the State Hospital, Donovan's solution—which is a combination of Iodine, Arsenic, and Mercury—is a favorite remedy in the treatment of lupus, venereal eruptions, impetigo, and other chronic cutaneous diseases.

63.

℞ Liquor Arsenici et Hydrarg. Iodid., ℥ ss.
 Syr. Sarsa. Co., ℥ viij.
 M. Sumat cochl. una parv. ter quotidie.

In laryngeal and bronchial disease, and also in the early stage of phthisis, when any degree of febrile action is present, the Iodide of Potassium, in combination with Antimony, will frequently prove more useful than when administered alone.

64.

℞ Potass. Iodidi, . . . ʒ ij.
 Antimon. et Potass. Tart., gr. ij.
 Syr. Zingib.,
 Aquæ font., . . . aa. f. ʒ iij.

Fiat mistura cujus sumat. cochl. parv. bis in die.

Or we may, under the same circumstances, exhibit the following :

65.

℞ Potass. Iodidi, ʒ iiss.
 Syr. Ipecac., f. ʒ ij.
 Aquæ font., f. ʒ iv.

M. Capiat cochl. parv. bis terve in die.

A combination of the medicinal Hydrocyanic Acid, with a solution of Iodide of Potassium, constitutes a favorite remedy with some practitioners in the treatment of phthisis.

66.

℞ Potass. Iodidi, . ʒ ij.
 Acidi Hydrocyanici, gtt. xl.
 Syr. Sarsa. Comp.,
 Aquæ font., . . aa. f. ʒ ij.

Fiat mist. Sumatur cochl. min. mane ac nocte.

Although, as we have stated, the Iodide of Potassium is a better preparation for administration than the Iodine in most forms of disease ; yet, when indications of a scrofulous diathesis are present, especially in young persons and children, it will be preferable, and will frequently prove more efficacious, to exhibit the two preparations in combination.

67.

℞ Iodini, . . gr. x.
 Potass. Iodid., ʒ j.
 Syr. Rhei,
 Aquæ puræ, aa. f. ʒ ij.

Fiat mistura, date cochl. parv. ter in die.

Few remedies will be found more efficacious for promoting the absorption of glandular swellings in the neck, or of those in other parts of the body, than the following preparation :

68.

℞ Iodini, . . gr. x.
 Potass. Iodid., ʒ j.
 Liquor. Potass., f. ʒ j.
 Syr. Sarsa., . f. ʒ iij.

Fiat solutio. Capiat cochl. parvum bis in die.

In the treatment of hypertrophy of the heart, and in other diseases of this organ, when it is important to reduce vascular action, the subjoined mixture may be advantageously exhibited :

69.

℞ Potass. Iodidi, . ʒ iiss
Tinct. Hyoscyami,
Tinct. Digitalis, . aa. f ʒ ss.
Syr. Sarsa. Co., . f. ʒ v.

Fiat mistura, date cochl. min. mane ac nocte.

The combining of Iodine and Iron was first practised by Dr. Pierquin, and the product of this combination—the Iodide of Iron—was employed by him for the treatment of disease, in 1824, although the credit of first introducing the remedy into medical practice is attributed to Dr. Thompson, of London.

The Iodide of Iron is a valuable therapeutic agent. In its operation on the system it is considered to be more nearly allied to the preparations of Iron than to those of Iodine. In scrofulous debility, in strumous enlargements of the glandular system, in chlorosis, and amenorrhœa, and in most affections, where ferruginous preparations are indicated, the Iodide of Iron has been found especially useful. It is most frequently

administered in the form of a syrup. Syrup of the Iodide of Iron may be used as a tonic in doses of from xv. to xxv. drops, twice daily, in the treatment of any of the preceding diseases.

Several years ago, Dr. Dupasquier, of Lyons, published some interesting statements in regard to the favorable effects of the Protiodide of Iron in the treatment of pulmonary phthisis. An eminent physician of New Orleans, who has had much experience in the treatment of thoracic disease, strongly recommends in phthisis, chronic bronchitis, etc., the following combination :

70.

℞ Syr. Ferri Iodidi, ℥ vi.
 Potass. Iodidi, . gr. xii.
 Glycerinæ Pur.,
 Syrupi Limonis, aa. f. ℥ j.
 Aquæ font., . f. ℥ iv.

Fiat mistura, cujus capiat cochl. ampl. ter in die, ante cibum.

It is highly desirable that so important a therapeutic agent as the Iodide of Potassium should be of such a degree of purity as not to affect its medical use. But, unfortunately, not only impurities, but adulterations of the commercial article are often found to exist. It is frequently found adul-

terated with Carbonate of Potassa, with the Chloride of Sodium, and when not prepared with care, will often contain the Iodate of Potassa. Some test, therefore, which will enable us to detect these adulterations easily and with certainty, is quite desirable. When adulterated with Carbonate of Potassa, it may readily be detected by dissolving the suspected article in alcohol. Iodide of Potassium which contains no water of crystallization, is freely dissolved by alcohol; but the Carbonate of Potash will not dissolve. A very simple and certain test is given in a late number of the *London Pharmaceutical Journal*, to detect the presence of either Carbonate or Iodate of Potash. This is the *syrup of the Iodide of Iron*. To a small amount of the Iodide of Potassium in solution, add a drop or two of the syrup of Iodide of Iron. If pure, no change will be produced; but if Carbonate of Potash be present, a *pale blue* precipitate is formed at once. If the specimen contain Iodate of Potassa, a *red* precipitate occurs immediately. If both Carbonate and Iodate of Potash are present, on adding the test, first a deeper blue, and then a red precipitate will be found. If the usual precautions, as to equal quantities, etc., are observed, with the samples examined, the resultant precipitates will show the relative amount of the adulterating agents in each. We have used this test frequently in exam-

ining different preparations of the Iodide of Potassium, and have found it efficient in detecting their presence, when these adulterations have existed.

We have spoken of the valuable properties of the *Protiodide of Mercury*, especially when this salt is administered with the Iodide of Potassium. There are several other salts, the product of Iron and its combinations, which are medicinal agents of great value. The therapeutic action of these compounds is various. The *Iodide of Iron* acts as a *tonic*; the *Iodide of Mercury*, as we have stated, operates as an *alterative*; the *Iodide of Arsenic*, as an *excitant and tonic*; the *Iodide of Lead*, as a *diuretic*; and the *Iodide of Sulphur* acts most decidedly on the skin.

71.

℞ Arsenici Iodidi, gr. iij.

Extract. Conii, 3 ss.

M. Fiant pilulæ xxx. quarum sumatur una ter in die.

This medicine, after many other remedies have failed, has been employed with great success, in the treatment of some most inveterate cases of certain chronic cutaneous disease; particularly lepra, psoriasis, and venereal eruptions. The dose may be cautiously increased to the one-fifth of a

grain, three times a day. When gastric disorder supervenes, the medicine should be for a time suspended, and be subsequently renewed in the original dose.

Some practitioners in this country employ, with success, in the same affections, a combination of a solution of the Arsenite of Potash, and of the compound solution of Iodine ; as in the following extemporaneous preparation :

72.

℞ Liquor. Potassæ Arsenitis, . f. ℥ ij.

Liquor. Iodidi Potassii Comp., f. ℥ ss.

Fiat mist. cujus cap. gtt. v. ter in die.

Both of the above preparations of Iodine and Arsenic are employed with great advantage in the treatment of cancerous affections, particularly when these remedies are conjoined with the use of the following ointment of the Iodide of Lead, employed as an external application :

73.

℞ Plumbi Iodidi, ℥ ij.

Axungiæ, . ℥ ij.

Misce intim.

A small amount of this ointment may be rubbed

in, twice a day, over cancerous, or other indolent tumors.

Under the head of *Tonics and Stimulants*, we have spoken of the therapeutic value of the Iodide of *Manganese* in the treatment of cancerous affections, glandular enlargements, and some other obstinate diseases. We have had prepared by an excellent apothecary of this city, after the formula of Proctor, a *syrup of the Iodide of Manganese*, which, as an excitant and alterative, is superior to the syrup of the Iodide of Iron, in the treatment of many diseases. This medicine—the syrup of the Iodide of Manganese—may be readily prepared in the following way :

74.

℞ Manganesii Sulph., ʒ xvj.
Potass. Iodidi, . ʒ xix.

Dissolve the Manganese and the Potassium separately, each in three fluid ounces of water, to which are added two fluid drachms of syrup. When the precipitation of the crystals of Sulphate of Potassa, which will follow, is completed, filter the supernatant liquor through a fine muslin into a vessel containing *twelve ounces* of pulverized sugar. Then add to this, water sufficient to make the whole amount to *one pint*. Shake until the sugar is well

dissolved, and keep the syrup in a glass-stopped bottle. In tuberculosis, in scrofulous and cancerous affections, in the treatment of glandular enlargements, such as those of the spleen and of the neck, and in constitutional syphilis, the syrup of the Iodide of Manganese, administered in doses of from ten to twenty drops, twice or thrice a day, will be found to be a valuable remedial agent.

As *alterative* remedies, the preparations of *Mercury* are more employed by practitioners, than any of the other inorganic agents. Administered in small doses, the *Bi-Chloride* of Mercury is a valuable excitant. Its effects are more decidedly *alterative*, says Neligan, than those of any other preparation of the metal. In cases of chronic follicular disease, where the symptoms indicate the presence of a thickening of the mucous membrane of the larynx, and in the early stage of some forms of pulmonic disease, we have found the Bi-Chloride of Mercury a most efficient alterative, and altogether one of the best therapeutic preparations of this mineral.

75.

℞ Hydrarg. Chlorid. Corrosiv., gr. iv.

Extract. Conii, ℥ ij.

Fiat massa in pilulas xl. divide. Sumat unam, mane et nocte.

An experienced practitioner affirms that in hepatization of the lungs, the solid matter deposited in the air-cells is often absorbed and the cells rendered permeable to air by the use of this preparation. In irritable subjects, opiates should be conjoined with this remedy, as the mucous membrane of the stomach and bowels is sometimes irritated by its use.

76.

℞ Hydrarg. Chlorid. Corrosiv., gr. iv.
 Extract. Opii, gr. x.
 Extract. Gentian., ℥ ij.

M. Fiant pilulæ xl. quarum sumatur una bis terve in die.

This preparation has also been highly extolled in secondary venereal affections, in chronic cutaneous diseases—particularly those which are attended with dry, scaly eruptions—and in chronic rheumatism and arthritis. The following is the formula of Dzondi, of Halle, who is a great advocate for the use of the Bi-Chloride of Mercury :

77.

℞ Hydrarg. Chlorid. Corrosiv., gr. xii.
 Solve in Aq. distil. q. s.
 Adde micæ Panis Albi,
 Saccharis albi aa. q. s. ut fit pilulæ numero ccxl.

Of these pills—each of which contains the twentieth of a grain of the Mercury—two may be given night and morning.

In many of the above chronic forms of disease, this medicine is advantageously administered, conjoined with a vegetable bitter tonic :

78.

℞ Hydrarg. Chlorid. Corrosiv., gr. iv.
Tinct. Gentianæ, ℥ iv.
Syr. Aurantii, ℥ ij.

Fiat mistura, cujus date cochl. parv. ter in die.

As an excitant and an alterative, in many of the diseases in childhood, the Hydrargyrum cum Creta has been more universally employed than any of the other preparations of this mineral. It is, however, like the blue mass, not always a perfect preparation, as it consists of Metallic Mercury in a state of minute division, mechanically combined with the Sub-oxide of Mercury, and the Carbonate of Lime. But it has not been ascertained in what proportions the metal and the oxide exist.

As a gentle and more certain laxative and alterative, and one equally well adapted for infancy and childhood, some eminent American practitioners

prefer, altogether, the *Chloride of Mercury* minutely subdivided by being thoroughly triturated with a large amount of sugar.

To one part of Calomel add ten parts, by weight, of white sugar.

79.

R̄ Hydrarg. Chlorid. Mitis, ʒj.
Sachari Alb., . . . ʒx.

Triturate the two substances in a wedgewood mortar for ten or fifteen minutes, so as to subdivide minutely, and intimately to blend the Calomel and the Sugar.

Those who have never tried the Mercury thus prepared, will be surprised at the increased activity which will be imparted to the medicine, by this fine subdivision of its particles. Indeed, it is to this well-established fact, that many medicines become much more active by minute subdivision, that the whole secret of the Hahnemannic "potency," or dynamization of remedies, may be referred.*

* The editors of the "British Journal of Homœopathy," admit, in a late number of this Journal, "the theory of dynamization to be untenable, and that it is now rejected by the great majority of Hahnemann's disciples."—*Journal of Homœopathy, July, 1852.*

Five grains of the above preparation will contain half a grain of Calomel, and this small amount, taken on going to bed, will produce, with most persons, a mild laxative effect the following day. With young children, half this amount, or from two to three grains of the medicine placed on the tongue (and children take it as readily as they will pure sugar), will be sufficient, ordinarily, to prove cathartic.

A physician of this State, of large experience, who practises in a region of the country where dysentery prevails as an endemic almost annually, assures us that this preparation of Calomel is his favorite and most efficient remedy in the treatment of dysentery in children. He administers *one grain* of the powder, once in four or six hours ; employing, at the same time, injections of a solution of Morphia, to control the dysenteric discharges. With this plan of treatment he has succeeded, he affirms, in arresting the disease more frequently than with any other method.

More than twenty years ago, we were instructed by our preceptor—who has since been a distinguished lecturer and writer on *Materia Medica*—to employ the following combination, as our “official” preparation of Calomel :

80.

℞ Hydrargyri Chloridi Mitis, ʒ ij.

Extract. Opii,

Ipecac. Pulv., aa. gr. vj.

Pulverize, and mix intimately and thoroughly, as in the preceding combination.

Thus prepared, every scruple of Calomel will contain one grain each of Opium and Ipecacuanha, intimately combined with the mineral.

During a period of twenty years, we have used no other preparation of Calomel than the above in our practice. We have recommended its employment in our lectures to the students and graduates of the N. Y. Medical College, and to many physicians, who have adopted its use ; and we venture the assertion, that no practitioner, after having once employed this combination, will prefer, afterwards, to prescribe pure Calomel in the treatment of disease. Under all circumstances, a given amount of this combination, whether administered as a laxative or as an alterative, will prove fully as efficient as double the amount of pure or uncombined Calomel ; and without producing—whether given to children or adults—at all that degree of irritation which ordinarily follows the administration of the latter. As a laxative, from three to

five grains may be administered to an adult, and from one and a half to three grains to children.

Besides the excitants and alteratives, which are obtained from inorganic substances, there are some important therapeutic agents of this kind belonging to the organic or vegetable kingdom, which are of much value.

The extract of *Podophyllum*, or *May-apple*, is much used as a remedial agent by physicians in some parts of this country ; and when the remedial value of the preparations of this plant are better known, they will be still more extensively employed by the profession.

81.

R̄ Extracti Podophylli, . ʒ j.
 Extract. Aloës Hepat., ʒ iiij.
 Gambogiæ, ʒ j.

M. Fiat pilulæ lx.

The above constitutes excellent alterative and cathartic pills, and may be administered with great advantage in cases of hepatic derangement, in anasarca, and in all glandular diseases.

The following is the favorite cathartic pill of an eminent practitioner of Connecticut :

82.

℞ Extracti Podophylli, . ʒ ij.
 Hydrarg. Chlorid. Mitis, ʒ j.
 Olei Cajuputi, . . . gtt. vj.

M. Fiat massa, in pilulas lx. div.

Instead of the extract we have recently employed the *Podophyllin*, which is the active principle of the plant, obtained from its root, and which, from the commendation of several of our professional friends and from the trial we have ourselves made, we are confident will prove to be an addition to our *Materia Medica* of great value.

Judiciously administered, it is a superior excitant and alterative, and in appropriate doses, a certain and safe cathartic. Care should be taken not to prescribe this remedy in too large doses, as it is apt to produce griping and nausea when thus administered. This, however, is said to be effectually prevented by combining the medicine with a diffusible stimulant.

83.

℞ Podophyllin, . gr. xv.
 Zinziberis Pulv., ʒ ss.
 Ext. Gentianæ, ʒ ss.

M. Fia^t Mass. et in pilulas xxx. div.

These pills may be administered in all cases in which the blue mass or other mild mercurials are given. This remedy has been highly recommended in cases of secondary syphilis, when Mercury has been long-continued, or is from any cause inadmissible. Administered in a full cathartic dose, it is declared to have been eminently successful in the expulsion of ascarides ; and, also, when thus administered and followed in four or six hours with a full draught of Olive Oil to the amount of four or six ounces, Podophyllin has proved successful, it is said, in many instances, in the dislodgement and expulsion of large quantities of biliary calculi, with very little pain. Triturated with sugar in the same manner as we have recommended Calomel to be prepared, Podophyllin is a most excellent laxative and alterative.

84.

℞ Podophyllin, . ʒj.
Sacchari Albi, ʒix.

Mix and triturate until the two be finely subdivided and thoroughly blended. As a mild laxative and alterative, this powder may be exhibited in doses of from five to ten grains. The medicine may be given in all cases where mercurials are indicated.

Among the remedies obtained from the organic or vegetable kingdom, are several therapeutic agents that are not found in many foreign pharmacopœias, but which are much employed, and are held in high estimation by many American practitioners. Among these may be mentioned the *Sanguinaria Canadensis*, the *Actæa Racemosa*, or *Cimicifuga Racemosa*, as this plant is named by some botanists; and the *Veratrum Viride*, or *American Hellebore*.

The *Sanguinaria*, or Bloodroot, has been long employed as an excitant and alterative, and is a favorite remedy with many practitioners in New England, and in the Western States. It is ordinarily administered in the form of tincture; but the officinal preparation of our pharmacopœias (four ounces of the root in two pints of diluted alcohol), is nearly an inert preparation; and, as this is the strength of the tincture ordinarily kept and dispensed by our apothecaries, we have long been of the opinion, that the disappointment in the effects of this remedy, which has occurred to many practitioners, has arisen altogether from the fact, that they have prescribed a preparation too weak to be efficient. We have used the *Sanguinaria* in the treatment of disease, during a period of many years, but we have always employed the *saturated tincture* (four ounces of the bruised root macerated in

one pint of diluted alcohol), and we can speak with much confidence, with regard to its valuable therapeutic properties.

The following combination of the bloodroot, with the compound Tincture of Aloes, is employed by some experienced practitioners in Ohio, in the treatment of a torpid condition of the bowels, arising from a derangement of the hepatic organs, and is esteemed an excellent eccoprotic :

85.

℞ Tinct. Sanguinariæ Sat.
Tinct. Aloës Comp. p. æ.
Fiat mistura.

From 30 to 60 drops of this preparation may be administered twice, daily. It tends to improve the digestive organs, and to increase the peristaltic action.

86.

℞ Tinct. Sanguinariæ Sat.
Vini Ipecacuanhæ, p. æ.

To which, in some instances, a little laudanum is added.

The above combination is employed by many Western practitioners, in the treatment of fevers, and is considered by them a most excellent *febri-*

fuge. But, it is in the treatment of some forms of cough, dependent upon bronchial or pulmonary irritation, that we have found the saturated tincture of Sanguinaria to be a remedy of the highest excellence.*

87.

℞ Tinct. Sanguinariæ,	℥ j.
Tinct. Opii, . . .	ʒ ij.
Vini Ipecacuanhæ,	ʒ vj.
Syr. Tolutan., . . .	℥ ij.

Fiat mistura, quarum capiat M. xxx. usque ad lx. quater in die.

In catarrhal affections, and in cases of troublesome cough following influenza, the above preparation may be given with much advantage.

We have employed the preceding mixture for many years, to mitigate the cough in the early and in the advanced stage of phthisis.

* The following is the original formula for the preparation of "Ayer's Cherry Pectoral:"

88.

℞ Morph. Acetat.	gr. ij.
Tinct. Sanguin. Canaden.,	ʒ ij.
Vini Antim. et Potass. tart.,	
Vini Ipecacuanhæ,	aa. ʒ ij.
Syrupi Pruni Virgin., . . .	℥ ij.

M.

Should the cough be dry, or much inflammatory action be present, antimonial wine may be substituted for the syrup of Ipecac, and less of the anodyne be added, as in the following :

89.

℞ Tinct. Sanguinariæ, ℥ j.
 Morph. Sulph., . gr. iss.
 Tinct. Digitalis,
 Vini Antimo., . aa. ℥ ss.
 Ol. Gaultheriæ, . gtt. x.
 Misce.

This may be administered, as above, in doses of from 20 to 40 drops twice or thrice, daily.

We are assured by an old and experienced physician of this State, that he has succeeded in overcoming habitual constipation more frequently with the following pill, than with any other laxative :

90.

℞ Sanguinariæ Pulveris,
 Rhei Pulveris, . . aa. ℥ j.
 Saponis, ℥ ij.

Misce. et cum aquæ fiat mass. in pilulas xxxii. dividenda, quarum capiat una mane ac nocte.

The *Actæa Racemosa*, or *Cimicifuga Racemosa*, or *Cohosh*, or *Black Snakeroot*—names by which this plant is sometimes called—is a native of the United States and of the Canadas. It has been employed as a popular remedy in this country, for many years, for the treatment of pulmonary diseases, rheumatism, chorea, anasarca, etc. Early in the present century, a nostrum, or secret remedy, which obtained great celebrity in many of the New England States, on account of its success in the treatment of rheumatism, was composed principally, as it was subsequently ascertained, of a saturated tincture of *Actæa Racemosa*.

We find this remedy to be held in high estimation by many excellent practitioners from different parts of the United States, for the treatment of the above named, and other kindred diseases. During a period of more than twenty years, we have employed the *Actæa* as a therapeutic agent, either alone, or in combination with other remedies, with great advantage.

It is best administered in the form of tincture, but it may be given in substance or in decoction. The *saturated* tincture (four ounces of the root to *one* pint of alcohol), should only be employed. It may be given in doses of from twenty to forty drops, repeated every two or three hours, in the treatment of acute rheumatism.

Its powers in rheumatic affections, and in anasarca, are greatly increased by administering it in the following combination :

91.

℞ Tinct. Actææ Racemosæ,	℥ j.
Potassæ Iodid.,	ʒ ij.
Syr. Ipecacuanhæ,	℥ j.
Aquæ font.,	℥ ij.

M. d. coch. parv. bis terve in die.

In chronic bronchial disease, and in the early stage of phthisis, it has been proved to be an excellent and efficient remedy, when combined with an anodyne, and the tincture of Sanguinaria.

92.

℞ Tinct. Cimicifugæ Racemosæ,	
Tinct. Sanguinariæ,	aa. ℥ j.
Morph. Sulph.,	gr. ij.
Syr. Acaciæ,	℥ ij.

Ft. mistura exhibe coch. parv. tusse urgenti.

In the treatment of *chorea*, the *Cimicifuga* has been extensively employed in the United States.

After free purging for several days, preparatory to its use, many practitioners depend altogether

upon this remedy for the cure of chorea. By some it is administered in the form of decoction.

93.

℞ Cimicifugæ Racemosæ, ʒj.

Aquæ ferventis, . . . Oj.

M. Ut fiat decoction. cujus sumant, coch. mag. ij. ter in die.

Other practitioners prefer the use of the powdered root, administering it in doses of a teaspoonful three times a day.

In the treatment of dropsy, the following is a preferred prescription, and has been much employed by an experienced practitioner in Massachusetts :

94.

℞ Tinct. Cimicifugæ Racemosæ, ʒj.

Tinct. Myrrhæ, ʒvj.

Tinct. Opii,

Tinct. Capsici, aa. ʒj.

Fiat mist. capiat M. xxx. *vel* xl. quater in die.

The *Veratrum Viride*, or American Hellebore, is found in various parts of the United States, and is, also, a native of the Canadas. The plant is known

in some places as *Swamp Hellebore*, *Indian Poke*, etc., and is found growing in swampy places, in meadows, and along the borders of water courses. It belongs to the same order of plants as the *Colchicum Autumnale*, and was highly recommended, many years ago, by Professor Tully, of New Haven, as a substitute for *Colchicum* in the treatment of many of those diseases for which this latter remedy has been employed. Within the last few years, public attention has been called especially to the remedial powers of the *Veratrum Viride*, by Dr. W. C. Norwood, of South Carolina, who has devoted much time and careful attention to ascertain the nature, properties, and uses of this powerful remedy ; and whose vast experience in its use, he declares, "fully justifies him in confidently asserting to the profession, that it stands unrivalled as a curative agent." The experience of Dr. Norwood as to the effects of *Veratrum* in disease, has been corroborated by some of the most eminent physicians of the Southwest. In a paper read before the Tennessee State Medical Society, and published subsequently in the *Nashville Journal of Medicine and Surgery*, Professor C. K. Winston asserts that the *Veratrum Viride* is an arterial sedative of high power ; that the most remarkable and, at the same time, the most important physiological effect of the remedy is the reduction of the

heart's action. The pulse, he affirms, may be reduced by the veratrum, "from 130 to 40 beats in the minute, with entire safety to the patient, and without the least injury to the circulatory or nervous system."

Employed in the early stage, before the occurrence of organic lesions, the *Veratrum Viride* is peculiarly adapted to the treatment of pneumonia, pleurisy, rheumatism, typhoid fever, pulmonary inflammation; and, in the phlegmasiæ generally it is regarded as more or less valuable. In a pamphlet recently published by Dr. Norwood, on the "Therapeutical Powers and Properties of *Veratrum Viride*," the author reiterates his confidence in the great value of the remedy, and appends the favorable opinions of many eminent physicians of the South and West, who have employed the *Veratrum* with great success in the treatment of disease.

"We rely on it," writes the author, "as the remedy in typhoid fever, and administer it with every assurance of success. We put the patient on the free use of it, and press it till every symptom is controlled or arrested. Our plan is to reduce the pulse to between 55 and 75 beats, and keep it at the point desired night and day. In some cases, it should be reduced at least to the natural standard, if not below it. By this kind of reduction the febrile and inflammatory symptoms

vanish, and the patient is kept quiet and tranquil and comfortable."

In pneumonitis, Dr. Norwood "considers it as much a specific as Quinine is for intermittent fever; and in combination with diuretics, in the treatment of scarlet fever, he "finds it superior to all other remedies he has ever tried." With regard to the power of the *Veratrum Viride* to reduce the heart's action, no doubt whatever can remain.

We have employed the remedy frequently since 1851, when Dr. Norwood gave us a quantity of the tincture prepared by himself. It has never failed in our hands, when properly administered, to diminish arterial action. In one instance of tuberculosis, a pulse of 120 was reduced to 58 beats in a minute, and kept steadily at that point day after day. Its effect, as an arterial sedative, has been fully tested by our colleague, Professor Carnochan, on many of his patients in the Emigrant's Hospital. In one case, a pulse of 130 was reduced 68 in fifteen hours; and in a case of articular rheumatism, the exhibition of the tincture in doses of from five to eight drops every three hours, a pulse of 120 was reduced to 30, in fifteen hours.

The saturated tincture, "made by macerating eight ounces of the dried root in sixteen ounces of alcohol for at least two weeks," is the form in which the remedy is usually employed.

In the following combination, the tincture is administered by Dr. Norwood :

95.

℞ Tinct. Veratri Viride,
Syrupi Scillæ p. æ.
Misce intim.

Of this mixture to an adult male, Dr. Norwood advises to begin with from four to six drops, increasing the amount from one to two drops at each subsequent dose, until the pulse is reduced, or nausea and vomiting are occasioned, when the medicine is to be diminished one-half, and continued as long as may be necessary to prevent a return of the symptoms. In females, commence with from three to four drops, and increase the above until the necessary result is obtained.

When administered to children, the remedy is given in the following proportions :

96.

℞ Tinct. Veratri Viride, ʒ ss.
Syrupi Scillæ, . . ʒ jss.
Misce bene.

From two to three drops of this combination may be administered to children (from one to two or

three years old) according to the age, increasing one drop at each subsequent potion, until arterial action is reduced, or nausea or vomiting occasioned.

When the Veratrum is administered too freely, nausea and vomiting will, in some instances, be very severe, and will be attended with prostration, and great coldness of the surface. When these symptoms occur, they are promptly relieved by the administration of an opiate, and brandy or any of the alcoholic stimulants.

CHAPTER IV.

CATHARTICS AND LAXATIVES.

CATHARTICS and Laxatives may be classed together, although, as pharmacological agents, a distinction between them is of considerable importance in practice.

Cathartics are usually divided into purgatives and laxatives. *Purgatives* are those medicinal substances which, by producing a temporary irritation on the mucous membrane of the intestines, excite the action of the exhalant and secreting organs of these parts, causing them, thereby, to evacuate their contents.

Laxatives are those agents which, by their relaxing efforts on the intestines, excite alvine evacuations without occasioning irritation, or stimulating the exhalants of this tube.

From a very early period in medicine, purgative remedies have been in greater requisition than medicines of any other class ; and physicians of all ages have considered them as the most effectual, certain, and valuable of all other therapeutical agents.

In the intelligent administration of these remedies, it is necessary to consider their immediate and remote effects, as well as the anatomical structure and physiological relations of the parts affected by purgatives. Purgatives act powerfully on the mucous membrane of the small and large intestines ; it is only by accident that the stomach is affected. An irritation is set up on the intestinal surface, by exciting the exhalant and secreting organs, by which action, the serous and mucous discharges are greatly augmented.

The excretory ducts of the liver and pancreas open on the interior of the duodenum, and the irritation of their extremities is communicated to these glands, by which their secreting functions are much increased. The fibres of the muscular tunic, through which the vermicular motion of the intestinal canal is effected, becoming stimulated by the action of purgatives, have their contractions accelerated, whereby the peristaltic action of the intestines becomes more rapid, all of which tends to urge their contents on towards the rectum.

“The irritation caused by purgatives on the inner surface of the intestines, increases the secretions of the liver and pancreas, as well as those of the mucous follicles, covering this surface ; it augments the energy of the intestinal exhalants ; all these products flow into the alimentary canal, by

which means all the abdominal organs are disgorged. . . . During their operation, the blood is carried, in increased quantity, towards the abdomen ; there is, then, more heat and increased movement in this part of the system ; this increased action of the abdominal organs exercises a derivative or revulsive effect with respect to the head and chest. The irritation produced by purgatives on the nerves distributed over the intestinal surface, is communicated to the plexuses of the ganglionic nerves, to the spinal cord—rarely to the medulla oblongata ; this movement is diffused over the whole system, and gives a shock to the entire frame.” *

In prescribing cathartics, regard should be had to the fact that each purgative substance is characterized by a peculiarity of action, as regards the part of the intestinal canal affected by it ; mercurials produce their effect, mainly on the upper portion of the tube ; Gamboge exerts its influence on the stomach, while Aloes, passing by the superior portions of the intestinal canal, spends its powers on the inferior part of the tube. Hence the importance of exercising care in the *selection of a cathartic to be prescribed*, that the article may be adapted to the impression we desire to make.

* A Manual of General Therapeutics, etc. By D. Spillan, M.D., London, p. 277.

When we wish to evacuate the contents of the bowels, without occasioning irritation, or any increased action of the exhalants—as in those diseases in which irritation or inflammation of the gastrointestinal surface already exists—we then have recourse to laxatives or aperients.

In disease, cathartics may be administered at any period during the twenty-four hours; ordinarily, they are best given in the morning, when the stomach is empty. In intermittent diseases they should be administered during the period of intermission.

Most physicians of experience have a favorite *pill*, which they are accustomed to employ as their ordinary, every day cathartic. Pills composed of the following ingredients have been used for many years, by a physician of large experience and extensive practice, in Vermont:

97.

R Extract. Aloës Pulveris,	3 ij.
Guaiaci Pulveris, . .	3 j.
Gambogiæ Pulveris, .	3 iss.
Saponis,	3 j.

Fiat massa et in pil. lxxxii. æquales div. sumant.
ij. vel iij. pro dosi.

Pills, made with care, of these ingredients, in the

above proportions—the materials being intimately pulverized and blended—constitute a most excellent, ordinary purgative. From two to four, taken at bed-time, will be followed, the next morning, by decided catharsis, without producing, ordinarily, any disturbance of the stomach whatever.

Prof. P., of New England, an old and experienced practitioner, recommends the following as “a valuable purgative, and every day cathartic:”

98.

℞ Ext. Aloës Pulv.,
 Gambogiæ Pulv., . aa. ʒj.
 Hydrarg. Chlo. Mite.
 Jalapæ Pulv.,
 Saponis Dur., . . aa. ʒss.
 Ol. Ricini Syrupi, q. s.

Fiat massa, in pl. lx. æquales div., quarum capiat ij. vel iij. pro dosi.

99.

℞ Ext. Aloës Pulv., ʒss.
 Gambogiæ, . . ʒj.
 Rhei Pulv., . . ʒss.
 Olei Cinnamomi, m. xx.
 Syrupi Rhamni, q. s.

Fiat massa, in pilulas 120 dividenda.

The above is the favorite laxative pill of a distinguished lecturer and practitioner of Massachusetts.

For overcoming habitual constipation in dyspeptic patients, the following are useful pills :

100.

℞ Aloës Socat.
 Rhei Pulveris, aa. ʒ ij.
 Pulv. Aromat., ℥ ij.
 Saponis, . . ʒ j.
 Syrup. Rhamni q. s.

Fiat massa in pil. lx. div. quarum sumat ij. pro dosi.

101.

℞ Extract. Aloës Pulv.
 Rhei Pulv., . . aa. ʒ j.
 Ipecac. Pulv.
 Sapon. dur., . . aa. ʒ ss.

Fiat massa et in pil. xxx. div. sumat. j. vel ij. pro dosi.

By some practitioners, the above pill is preferred in the habitual constipation of dyspeptics.

The following were the favorite anti-dyspeptic pills of Dr. Chapman :

102.

℞ Extract. Aloës, . . . ʒj.
 Ipecacuanhæ Pulv., ʒj.
 Mastich, . . . ʒj.
 Olei Fæniculi, . . . gtt. xx.

Fiat massa in pil. xl. div. sumat una mane nocteque.

Many distinguished physicians of this country are accustomed to combine a small amount of Calomel and Tartarized Antimony, in their ordinary aperient pill :

103.

℞ Extract. Aloës, . . . ʒ ss
 Rhei Pulv., . . . ʒj.
 Hydr. Chlorid. Mite, gr. iv.
 Ant. et Potass. Tart., gr. ij.

M. intim. Ft. massa et in pil. xxx. divid. sumat ij. pro dosi

The above are the favorite cathartic pills of many Southern practitioners.

Dr. Cox, of Maryland, commends the following as a valuable cathartic pill :

104.

R Hydrarg. Chlorid. Mite,
Extract. Colocynth. Co., aa. ℥ ij.
Ol. Tiglii Croton., . . gtt. ij.

M. Fiat massa et in pil. xii. divid. capiat ij. vel
iij. pro dosi.

105.

R Massæ Hydrarg.,
Rhei Pulv.,
Extract. Aloës, aa. ℥ ss.
Ol. Tiglii Croton., gtt. iv.
Sodæ Bi-Carb.,
Capsici Pulv., . aa. gr. xii.

M. Fiat Mass. et in pil. xxx. div. sumat j. vel ij.,
horâ decubitus.

The above is considered an excellent aperient by
the same eminent practitioner

With many patients, aperient mixtures, or elec-
tuaries, are preferred to pills. The following mild
laxative mixture, which was originally prescribed
by an eminent physician of Virginia, has been since
employed by many practitioners of our acquaint-
tance—all of whom speak of it as a most excellent
and efficient aperient :

106.

℞ Aloës Soc. Pulv., . . . ʒ v.
 Sodæ Bi-Carb., . . . ʒ iss.
 Tr. Lavendul. Comp., f. ʒ ss.
 Aquæ puræ, . . . f. Oj.

Fiat mistura, cujus capiat coch. j. mag. quotidie.

After constipation is overcome by the administration of the medicine in the above doses, a teaspoonful taken at bed-time will in most persons be sufficient to keep the bowels in a soluble condition.

In cases of constipation, attended with flatulence or acidity, an experienced practitioner of Virginia, highly recommends the subjoined :

107.

℞ Extract. Aloës Pulv., ʒ iij.
 Potassæ Bi-Carb., . . ʒ vj.
 Syrupi Rhei Aromat., f. ʒ ij.
 Sp. Lavendul. Comp., f. ʒ ij.
 Aquæ puræ, . . . f. ʒ vj.

Fiat mistura, cujus capiat coch. parv. una meridie nocteque.

Physicians are frequently called on to prescribe for cases of habitual, or occasional costiveness, in which laxatives, although indicated, yet have the

effect to weaken the patients, or induce debility of the alimentary canal, whenever they are administered. Under such circumstances, our colleague, Professor Peaslee, has been accustomed to employ, for many years, in his practice, the subjoined mixture, which is a combination of a tonic and a laxative, and which, after years of experience in its use, he assures us, is admirably adapted to such cases—being especially useful in troublesome constipation occurring in feeble persons, and in that which often attends convalescence from fevers and other severe diseases. It may be employed for several weeks in succession without irritating or weakening the alimentary canal :

108.

℞ Rad. Columbæ Contus., ℥ ss.
 Fol. Sennæ, . . . ℥ j.
 Extract. Taraxaci
 Mannæ, aa. ℥ ss.
 Aquæ fervent., . . . f. ℥ xij.
 Macera per horam, cola
 et adde *Holland Gin*, ℥ iv.

M. Sumat cochleare mag. j. vel ij. pro dosi.

The above is also an excellent vehicle for the administration of Iron and other tonics, in cases of

anemia and dyspepsia, accompanied by constipation.

When it is desirable to employ a very certain cathartic in cases of obstinate constipation, arising particularly from inaction of the liver, or from other causes, the same physician places great reliance in the following mixture :

109.

R̄ Extract. Aloës, . . .	ʒ ij.
Extract. Taraxaci, . .	ʒ ss.
Sennæ Fol.,	ʒ j.
Rhei Contus.,	ʒ iij.
Nucis Vomicae Pulv., .	ʒ iss.
Aquæ fervent.,	f. ʒ xij.
Macera per horam, cola et adde Magnesiæ Sulph.,	ʒ iss.
Holland Gin,	ʒ iv.

M. Cujus sumat. cochl. mag. pro dosi, secundâ quâque horâ, donec alvus soluta sit.

In robust adults, two tablespoonfuls may be administered at first, followed by one spoonful every two hours until relief is obtained.

A tablespoonful may be taken every night to prevent a recurrence of the constipation.

110.

℞ Magnesiæ Carb.,	. . . . .	ʒ ij.
Rhei Pulveris,	. . . . .	ʒ iss.
Tinct. Rhei,		
Syrupi Simp.,	. . . . .	f. aa. ʒ j.
Aquæ Menthæ Piper.,		f. ʒ iv.

M. Fiat mistura, cujus capiat cochl. mag. j. pro re natâ.

The above is a very gentle and excellent aperient in some forms of dyspepsia, attended with flatulency or acidity of the stomach.

Prof. J. H. Dixon is accustomed to employ the following cathartic mixture :

111.

℞ Rhei Pulv.,	. . . . .	ʒ j.
Magnes. Sulph.,	. . . . .	ʒ j.
Ol. Anisi vel Menth. vel Sassif.,		gtt. ij.
Aquæ puræ,	. . . . .	f. ʒ vj.

Fiat mistura, sumat cochl. mag. j. vel. ij. pro dosi.

An excellent, active cathartic, writes Dr. F. Y. Porcher, of Virginia, is the following. In dropsical affections accompanied by high arterial action, it procures copious alvine evacuations, and often, at the same time, a copious flow of urine :

112.

℞ Sodæ Sulph., Potassæ bitart., aa. ℥ j.
 Sp. æther. nitrici, ʒ iij.
 Aquæ puræ, ʒ viij.

M. Sumat cochl. mag. ij. pro re natâ.

As a mild and refrigerant aperient in febrile complaints, the subjoined mixture may be given when a laxative operation is desired. It may also be advantageously prescribed for patients laboring under torpidity of the liver.

113.

℞ Infusi Sennæ Comp., f. ʒ iij.
 Rhei Pulveris, . . ʒ j.
 Tinct. Sennæ,
 Tinct. Cardam. Co., aa. f. ʒ iij.
 Syrupi Zingib., . . f. ʒ ij.

M. Fiat mistura, cujus sumat cochl. ij. amp. pro re natâ.

The physician is not unfrequently called upon to prescribe for patients enfeebled by chronic disease, in whose cases tonics, although indicated, are not well borne because of the presence of a deranged condition of the digestive organs. In such cases we have often administered for a week or

ten days the following aperient alterative pill ; after which, tonics, may, generally, be advantageously exhibited :

114.

℞ Extract. Hyoscyami, ʒj.
Massæ ex Hydrarg., ʒj.
Ipecacuanhæ Pulv., ʒj.

Fiat massa in pil. xl. div. sumat unam mane nocteque.

Under the same circumstances as above, Professor T——. of New Haven, recommends the following :

115.

℞ Hydrarg. Chlorid. Mite, gr. iv.
Capsici Pulveris,
Extracti Conii, . . aa. ʒj.

M. Fiat mass. in pil. xxxii. divid.

One of these pills may be administered morning and evening. In dyspeptic phthisis, in cases of ordinary dyspepsia, attended with inaction of the liver, the exhibition of these pills for a short time will often prepare the system for the administration of a tonic or supporting plan of treatment.

116.

℞ Ext. Aloës Pulv., . ʒj.
 Ferri Sulphatis, . ʒj.
 Ext. Hyoscyami., . ʒj.
 Ext. Nucis Vomicæ, gr. x.

M. Fiat massa et in pilulas lx. dividenda, quarum sumat j. mane ac nocte.

The above pills, Prof. Davis assures us, he has used many years with the most satisfactory results, in cases of imperfect digestion complicated with habitual constipation. One pill each night, or one night and morning—sufficient to procure, daily, a regular intestinal evacuation, should be administered.

117.

℞ Ext. Aloës Pulv., . ʒj.
 Rhei Pulv.,
 Jalapæ Pulv.,
 Scammon., . . . aa. gr. xvj.
 Ant. et Potass. Tart., gr. j. vel ij.
 Olei Croton., . . . gtt. j. vel ij.
 Gambogiæ, . . . gr. vj.

Fiat massa et in pil. lxiv. divid. quarum capiat unam vel duos in die, post prandium.

The above pill, writes Dr. John Ware, of Bos-

ton, "I have used very much for habitual costiveness. It has been used a good deal in this city, and is kept by some of the druggists under the name of the compound Alvine pill."

In habitual constipation, the following cathartic or eccoprotic pill, is highly commended by Dr. Dickson, of South Carolina. One or two of the pills are advised by him, to be taken every second night, on going to bed.

118.

℞ Extract. Belladon., gr. v.

Rhei Pulv.,

Extract. Aloës, . aa. gr. xvj.

M. Fiat massa in pil. xii. div.

119.

The best remedy I have ever tried, writes Prof. Lindsly, in habitual constipation, is to take half a drachm of Epsom Salts, dissolved in half a pint of water—adding ten drops of Elixir of Vitriol—*one hour* before breakfast. The smaller the dose of salts the better, provided it will operate. It may be taken for weeks, till a cure is effected.

CHAPTER V.

EMETICS AND EXPECTORANTS.

WE may arrange Emetics and Expectorants together, inasmuch as some of the direct emetics are among the best remedies for promoting expectoration ; although as therapeutical agents, and in a pharmacological sense, they are widely different in many instances.

Emetics are those substances which excite vomiting. *Expectorants* are the medicinal agents which possess the property of increasing the secretion from the pulmonary mucous membrane. Direct emetics operate by an irritation which they cause of the gastro-duodenal surface. The production of vomiting has been thus explained : “ The irritation of the stomach makes a call upon the brain for the aid of the diaphragm and the abdominal muscles, in order to expel its contents ; the diaphragm then becomes contracted and fixed, the ribs drawn down, the abdominal muscles drawn inwards, so that the stomach is pressed on all sides by voluntary mus-

cles, which, together *with its own contraction*, expels the contents."

In the administration of an emetic, the irritation of the gastric and duodenal surface is communicated to the mucous follicles of these parts, by which the ordinary exhalation is accelerated and greatly increased; the irritation of the mouths of the excretory ducts of the liver and pancreas, which, as we have seen, open on the duodenal surface, is transmitted to these glands, by which their fluids become quickly augmented, and the bile thus secreted in increased quantity, flows into the duodenum, from thence it ascends into the stomach and is rejected by the mouth. "We are not to suppose that all the bile passed by vomiting existed in the stomach or primæ viæ before the emetic was taken. The secretion of this fluid is caused by the emetic, and is the result of its influence upon the liver."*

In the operation of an emetic, not only is an action aroused in the viscera, to which we have alluded, but an irritation is communicated, through the nervous filaments of the stomach, which are received from the pneumogastric nerve to the medulla oblongata, and finally to the whole ganglionic system of nerves; so that, by reason of the

* Manual of Gen. Thera., p. 254.

sympathetic connections which the stomach maintains with the different centres of innervation, the shock caused by the administration of an emetic is at once transmitted throughout the entire system. Hence it is that the well-timed exhibition of an appropriate emetic will often destroy disease in embryo.

As in selecting cathartics the physician is guided by the indication to be fulfilled, so in the administration of emetics it is important that the emetic agent chosen, should be adapted to the existing circumstances or nature of the disease prescribed for.

There often occurs a morbid state of the digestive organs, manifested by a sense of fullness in the epigastrium, a loss of appetite, a bitter taste in the mouth, the tongue is moist, and is covered with a whitish coat ; symptoms which indicate turgescence of the liver, and a congested condition of the gastro-duodenal mucous membrane. Under such circumstances the following emetic is indicated :

120.

℞ Ant. et Potassæ Tartrat., gr. ij.

Ipecacuanhæ Pulv., . . . ℥j.

Aquæ puræ, . . . f. ℥iv.

Fiat mistura, sumat cochleare j. amplum omni horæ quadrante donec super venerit vomitas.

In administering Tartarized Antimony to young children, great caution should always be observed. We have before attempted to show the uncertain, energetic, and often dangerous effects of this powerful agent, when administered in continued doses to young persons.* In membranous croup, and some other acute diseases of children, Emetic Tartar, when employed to a certain extent, and with that caution which should always be observed when administering so powerful an agent, is an invaluable remedy ; but after one or two exhibitions of this remedy some other agent should be substituted, when it becomes necessary to repeat the emetic operation in the course of the progress of the same disease.

121.

℞ Ant. et Potass. Tart., gr. j.
Ipecacuanhæ Pulv., ℥ ss.
Aquæ tepidæ, . . f. ℥ iv.

Fiat mistura, sumat cochleare parv. omni horæ quadrante ad emesim.

In the commencement of croup, the above may be administered in teaspoonful doses, once in five, ten, or fifteen minutes, according to the urgency of the symptoms, until vomiting is effected. Should

* Observations on the Pathology and Treatment of Croup, pp. 104-7.

the continuance and severity of the disease require the emetic operation to be several times repeated, the following combination may be substituted. We have found it to be one of the most certain, efficacious, and safe emetics that can be administered.

122.

℞ Zinci Sulphatis, . gr. x.
 Ipecacuanhæ Pulv., ℥j.
 Aquæ tepidæ, . f. ℥iv.
 Fiat mistura.

This emetic may be administered under the same circumstances as the preceding, and to the same amount.

Turpeth Mineral is another active mineral emetic, much employed by some practitioners in New England, in the treatment of membranous croup.

Some years ago the attention of the profession was called to the properties of this remedy by Dr. Hubbard, of Maine, who highly recommends it as a certain and sure remedy in croup.

123.

℞ Hydrarg. Sulph. Flav., gr. x.
 Syrupi Simplicis, . f. ℥ss.

M. Cap. cochl. parv. j. omni horæ quadrante, ad effectum.

In cases of poisoning, where it becomes important to evacuate the stomach as quickly as possible, and to prevent absorption, an emetic which occasions but little nausea, and operates promptly, should be selected.

124.

℞ Cupri Sulphatis, gr. x.

Aquæ tepidæ, f. ℥ ij.

M. Fiat haustus emeticus. Vel :

℞ Zinci Sulphatis, gr. xv.

Aquæ tepidæ, f. ℥ ij.

M. Fiat haustus emeticus.

In the treatment of hæmorrhage, particularly hæmorrhage from the lungs, some eminent American practitioners are accustomed to place much reliance on the use of nauseating emetics, it being well known that the force of the circulation is greatly diminished during the period of nausea. The following is a suitable emetic in hæmorrhage :

125.

℞ Ipecacuanhæ Pulv., . ℥ j.

Aquæ Menth. Pulegii, f. ℥ iv.

Fiat mistura, sumat cochleare mag. j. omni horæ quadrante ad emesim.

In the treatment of chronic diarrhœa and dysentery, emetics act in some cases as revellents, and thus prove very serviceable.

126.

℞ Ipecacuanhæ Pulv., gr. xv.
 Aquæ Menth. Pip., f. ʒ iv.
 Fiat mistura.

The above may be given in divided doses in chronic diarrhœa.

Among the vegetable emetics are two remedies much used among some American practitioners, particularly in the treatment of croup, and spasmodic asthma; these are the *Sanguinaria Canadensis* and the *Lobelia Inflata*. *Bloodroot* is an acrid, stimulating emetic, and has been highly extolled by some physicians, in croup, in asthma, and in pertussis. It is administered as an emetic in the form of infusion, and the saturated tincture of the root.

127.

℞ Sanguinariæ Canadensis, ʒ j.
 Aquæ ferventis, . . . Oss.

Macera. Sumat cochl. ampl. omni horæ quadrante ad emesim.

The tincture of *Sanguinaria*, administered in tea-spoonful doses, is equally effective as an emetic.

Lobelia is an active and powerful remedy, and is seldom employed as an ordinary emetic. But in the treatment of spasmodic asthma, it is esteemed by many as a most efficient and valuable therapeutic agent. The officinal tincture is the best form in which to administer *Lobelia* as an emetic. In asthma, it may be given in doses of from one to two fluid drachms, repeated every half hour, or oftener, until vomiting occurs, or relief is obtained. If continued for any length of time, however, in full doses, it is apt to produce distressing relaxation. It is, therefore, advised not to continue the remedy beyond three or four doses, if vomiting does not follow.

To relax the spasm, in attacks of asthma, some practitioners administer the tincture in half drachm doses every half hour, sufficient to effect nausea for a time without producing vomiting, and they ascribe to the medicine thus exhibited most extraordinary efficacy, occasionally, in the paroxysm of spasmodic asthma.

128.

℞ Tinct. *Lobeliæ Inflatæ*,

Syrupi *Scillæ*, aa. . . f. ℥j.

M. Sumat M. xx. vel xxv. bis terve in die.

The above combination has been recommended by experienced physicians in the treatment of hooping cough. In doses of twenty or thirty drops, it may be administered with safety, and often with much advantage, several times a day to young children affected with hooping cough.

Expectorants, we have stated, are those medicinal agents which are supposed to have the power of increasing the secretion from the pulmonary mucous membrane, and of aiding in the expulsion of secreted matter from the air-passages. Expectorants are frequently given in combination with alteratives; and, to allay irritation, in some forms of bronchial and pulmonary disease, they are, with advantage, frequently combined with sedatives.

In chronic bronchitis, and in catarrhal affections, after the inflammatory symptoms are somewhat subdued, we have found, after much experience in its use, the following to be a most valuable expectorant:

129.

℞ Decoct. Polygalæ Senegæ, f. ℥ iv.
 Potass. Iodid., ℥ ij.
 Vini Antimonii, f. ℥ ss.
 Syr. Tolutan., f. ℥ iss.

Fiat mistura, capiat cochl. parvum bis terve in die.

A similar combination is highly recommended by Dr. Stokes for the treatment of bronchitis.*

For cases of chronic bronchial disease, attended with profuse expectoration, the subjoined stimulant expectorant has been much commended :

131.

℞ Misturæ Ammoniæ, f. ʒ vi.
 Syr. Scillæ, . . . f. ʒ j.
 Tr. Opii Camph., . f. ʒ ss.
 Tinct. Hyoscyami, . f. ʒ j.
 Vini Ipecacuanhæ, f. ʒ iij.

Fiat mistura, cujus capiat cochl. mag. pro dosi.

In the treatment of both bronchial and pulmonary disease the following mixture is highly recommended by an eminent physician of Connecticut :

* "Among the local or specific stimulants in bronchitis," says Dr. Stokes, in his work on Diseases of the Chest, "I know of none to be compared with the following :

130.

℞ Decoct. Polygalæ Senegæ, f. ʒ v.
 Syr. Tolu. Tr. Opii Camph.,
 Tinct. Scillæ, aa. . . . f. ʒ ij.
 Ammoniæ Carb., . . . gr. xv. vel xx.

Fiat mistura."

132.

℞ Syrupi Scillæ Comp.,
 Syrupi Tolutan., aa. f. ʒ ij.
 Tinct. Sanguinariæ, f. ʒ j.
 Tinct. Lobeliæ, . f. ʒ vj.
 Tinct. Camphori, . f. ʒ ij.
 Acidi Hydrocyanici, m. xl.

Fiat mistura, sumat cochl. parv. pro re natâ.

When the cough is severe, from two to four grains of the Sulphate of Morphia may be added to the above mixture.

The subjoined antispasmodic cough mixture has been recommended by Prof. S. H. Dickson, as a remedy well adapted "to pertussis, and to all nervous and habitual coughs."

133.

℞ Potass. Iodid., . . . ʒ iss.
 Aquæ Amygd. Amar., f. ʒ iiij.
 Tinct. Mosch. Fact., f. ʒ ij.
 Tinct. Opii Camph., f. ʒ ij.
 Aquæ puræ, . . . f. ʒ iv.

Fiat mistura, sumat cochl. parv. pro re natâ.

In troublesome and chronic cough, Prof. Cox recommends the following :

134.

℞ Decoct. Polygalæ Senegæ, f. ℥ iv.
 Syrupi Tolutan., . . . f. ℥ ss.
 Morph. Sulph., . . . gr. j.
 Ext. Pruni Virgin., . . . ℥ ss.

Fiat mistura, sumat cochl. ampl. pro re natâ.

135.

℞ Polygalæ Senegæ Pulv., ℥ ij.
 Ipecacuanhæ Pulv., . . . ℥ j.
 Mel. Opt., ℥ ij.
 Aquæ fervent., ℥ vj.

Fiat mistura, cujus sumat cochl. parv. pro re natâ.

The above is the ordinary expectorant prescribed by Prof. ———, of Philadelphia, in the treatment of catarrhal affections. It is a very useful remedy in the early stage of bronchial irritation, and may be employed before the more stimulant expectorants are indicated.

In catarrhal and bronchial inflammation of children, when it becomes important to promote promptly the expulsion of phlegm from the bronchi, the following combination will be found to be of great efficiency :

136.

℞ Decoct. Polyg. Seneg., f. ʒ iij.
 Oxymel. Scillæ,
 Vini Ipecacuanhæ, aa. f. ʒ ij.
 Vini Antimonii, . . f. ʒ ss.

M. Et exhibe m. xv.—xxv. omni horæ quadrante ad emesim.

After the occurrence of nausea or vomiting, it may be administered in diminished doses once in two hours, sufficient to promote expectoration.

As stimulant expectorants, the balsams are frequently employed, alone, or in combination with nauseants and sedatives. Among this class of remedies the Canadian Balsam is one of the most agreeable and useful, and is much employed in some parts of the United States and in the Canadas.

137.

℞ Balsam. Canadensis,
 Liquor. Potass., aa. f. ʒ j.
 Vini Ipecacuanhæ, f. ʒ ss.
 Syrupi Tolutanis, f. ʒ iss.
 Aquæ font., . . f. ʒ ij.

Fiat mistura, sumat cochl. parv. bis terve in die.

A useful remedy in chronic catarrhal and bronchial affections.

The following combination is the favorite expectorant and cough mixture of a distinguished physician of Montreal :

138.

℞ Balsam. Canadensis, f. ʒ vj.
 Potass. Cyanidi, . gr. iss.
 Tinct. Aconiti, . f ʒ j.
 Liquor. Potass., . f. ʒ j.
 Syrupi Tolutan., . f. ʒ ss.
 Aquæ font., . . f. ʒ iijss.

Fiat mistura cujus sumat cochl. parv. pro re natâ.

In chronic bronchial disease, and in long-continued catarrhal affections which are attended with a copious muco-purulent expectoration, the Balsam of Copaiba is a valuable stimulant expectorant.

139.

℞ Copaiferæ Officinalis, f. ʒ ss.
 Tinct. Opii Camph., f. ʒ j.
 Vini Ipecacuanhæ, f. ʒ ss.
 Syrupi Acaciæ, . . f. ʒ ij.
 Ol. Gaultheriæ, . . gtt. xx.

Fiat mistura, capiat cochl. parv. bis in die, vel sæpius.

In the treatment of chronic diseases of the air passages, the following mixture is strongly recommended by an experienced practitioner, as an efficient remedy for allaying the cough and diminishing the expectoration :

140.

℞ Morphiæ Acetat., . gr. iv.
 Potass. Cyanidi, . gr. iij.
 Vini Antimonii,
 Vini Ipecacuanhæ, aa. f. ʒ iij.
 Tr. Sanguinariæ, . f. ʒ ss.
 Syrupi Tolutanis, . f. ʒ iij.

Fiat mistura, cujus capiat cochl. parv. ter quaterve in die.

As a mild expectorant for young children, when threatened with an attack of croup, or in the commencement of bronchitis or catarrhal fever, the following mixture will prove highly useful :

141.

℞ Vini Ipecacuanhæ, f. ʒ iij.
 Syrupi Tolutani, . f. ʒ v.
 Mucilaginis Acaciæ, f. ʒ j.

Fiat mistura, sumat cochl. parv. omni horâ vel quâque secundâ horâ.

Among some valuable formulæ contributed by Professor N. S. Davis, of Chicago, are several most excellent remedies for the treatment of thoracic disease.

142.

℞ Glycerin., . . f. ℥ iij
 Syr. Ferri Iodid., f. ℥ ss.
 Morphiæ Sulph., gr. ij.

Fiat mistura, capiat cochl. parv. ter quaterve in die.

“To allay cough, retard emaciation, and palliate the symptoms of phthisis pulmonalis,” writes Dr. Davis, “I have no remedy superior to the above ; or, the following, namely :

143.

℞ Glycerin., . . f. ℥ iij.
 Sodæ Hypophos., ℥ j.
 Morphiæ Sulph., gr. iij.

Fiat mistura, cujus capiat cochl. parv. ter quaterve in die.”

Whenever the anodyne effect of Opium is needed, and the ordinary preparations of that article always produce secondary vomiting and exhaustion, as is the case with many patients, Dr. Davis recommends the following combination :

144.

℞ Magnesiæ Sulph., . ʒ ij.
Acidi Sulph. Aromat.,
Tinct. Opii, aa. . . f. ʒ ij.
Aquæ font., . . . f. ʒ ij.

Fiat mistura, sumat cochl. parv. pro re natâ.

CHAPTER VI.

ASTRINGENTS.

ASTRINGENT medicines are usually defined, substances which coming in contact with living organisms corrugate and condense their fibres, and thus diminish the action of secretion and excretion. As astringents exert, ultimately, a tonic influence on the human body, and as some tonics often prove astringent, many writers have considered tonics and astringents as identical. Tannin, which is an important ingredient in many astringents, is not indispensable to tonics ; in many respects, however, they appear to be very nearly allied. Some of the most powerful of the astringent remedies are derived from the mineral kingdom, but by far the largest and most important portion of this class of medicinal substances is obtained from the vegetable kingdom.

Caution should be observed in adopting the astringent plan of treatment, in most diseases. In acute inflammations, in all affections which are

accompanied with any degree of fever, or even those of a chronic nature attended with serious alteration of the tissues, medicines of the astringent class are likely to prove injurious.

Some of the more powerful of the astringents, are frequently employed locally, for the purpose of arresting hæmorrhages ; they are then called *Styptics*.

In some cases where astringents are indicated, if irritability exists, Opium, although belonging to the division narcotics, may be administered with great advantage, either alone or combined with some more immediate astringent.

As the most convenient preparation of Opium for the ready formation of pills, we recommend to practitioners the *officinal* mass of Dr. Tully :

145.

℞ Opii Pulveris, . ʒ ss.
 Camphoræ Pulv., ʒ j.
 Saponis Alb., . ʒ vij.

Subige in massam, divid. equal. in pil. ccxl.

Each of the above pills will contain one grain of opium.

This mass will remain of the same consistence for a great length of time, and may be readily formed into pills of any desired size ; or other

medicinal substances, or astringents, can be most conveniently combined with it.

146.

℞ Pil. Opii Officinalis, . ʒ ss.
 Plumbi Acetatis, . . ʒ j.
 Ipecac. Pulv., . . . gr. xv.

Fiat massa in pil. xxx. divid. cap. unam pro re natâ.

These pills, administered once in two or four hours, according to circumstances, are useful in hæmoptysis, and other internal hæmorrhages.

147.

℞ Pil. Opii Officinalis, ʒ ss.
 Argent. Nitratis, . gr. viij.

Fiat mass. in pil. xxx. divid. quarum sumat unam terve in die.

In chronic diarrhœa, and in the latter stage of dysentery, the above pills have been successfully employed by us to allay the irritation of the intestinal membrane.

In active hæmorrhages, the subjoined astringent pills have been much extolled :

148.

℞ Plumbi Acetatis, ʒ ss.
 Digitalis, . . . ʒj.
 Opīi Pulv., . . . gr. v.
 Conservæ Rosæ, ʒ ss.

Fiat massa divide in pil. xx. et exhibe unam ter quaterve in die.

An experienced physician of this city has employed for many years in pulmonary hæmorrhage the following astringent mixture :

149.

℞ Plumbi Acetatis, ʒj.
 Tinct. Opīi, . . . f. ʒ ij.
 Aceti, f. ʒ v.
 Aquæ font., . . . ʒ iij.

Fiat mistura, cujus capiat cochl. unum parv. pro re natâ.

This mixture is declared to be more efficacious in arresting hæmorrhage from the lungs, than the Lead and Opium are, when administered in the form of a pill. The medicine may be exhibited in teaspoonful doses once in two hours, or oftener if required.

150.

℞ Plumbi Acetatis, ʒj.
 Tinct. Opii, . . . f. ʒ iss.
 Aquæ Cinnamom.,
 Aquæ fontanæ, aa. f. ʒ ij.

Fiat mistura, sumat cochl. parv. ter quaterve in die.

In both uterine and pulmonary hæmorrhage, we can recommend, from experience, the above mixture as a most excellent remedy; and less disagreeable than the preceding mixture.

151.

℞ Tinct. Catechu, f. ʒ iss.
 Aquæ Cinnam., f. ʒ vss.
 Tinct. Opii, . . f. ʒ ij.
 Syr. Simp., . . f. ʒ j.

Fiat mistura, cujus capiat cochl. mag. pro dosi.

In the last stage of dysentery, or in protracted diarrhœa, attended with profuse evacuations, the above mixture may be administered after each liquid evacuation, often with great benefit.

In cases of incipient ulceration of the mucous membrane of the ilium and colon which so often occurs in the latter stage of typhoid fever, and

dysentery, Prof. N. S. Davis is accustomed to recommend, as a remedy of great value, the following :

152.

℞ Olei Terebinth.,
 Tinct. Opii, aa. . f. ʒ ij.
 Acaciæ Pulv.,
 Sach. Alb. Pulv., aa. ʒ iij.
 Aquæ Menth. Pip., f. ʒ ij.

Fiat mistura, sumat cochl. parv. tertiâ vel quartâ quâque horâ.

For the same purpose the above practitioner employs the following pill :

153.

℞ Argenti Nitratis, gr. viij.
 Opii Pulv., . ʒ j.

M. Et in pil xx. divid.

In persistent chronic diarrhoea, the following preparation is much employed by Dr. Ware, of Boston :

154.

℞ Cascarillæ, . ʒ j.
 Cinnamoni, . ʒ ss.
 Gentianæ,
 Nucis Vomicae, aa. ʒ ij.
 Aquæ puræ, . Oss.

Fiat infusio, et adde Sach. Alb., ʒ iv. capiat ʒ ss.
 vel ʒ j. pro dosi.

155.

℞ Zinci Sulphat., . . ʒ ij.
 Opii Extracti, . . gr. x.
 Confectionis Aromat., ʒ ss.

Syrupi q. s. ut fiant pil. xl. sumat unam ter in die.

The above pills may be employed advantageously in some forms of chronic bronchitis, when the expectoration is profuse. They are also a valuable astringent and tonic remedy in the treatment of leucorrhœa. Under the same circumstances the following pills, if preferred, may be administered :

156.

℞ Cupri Sulphatis, gr. x.
 Opii Extracti, . gr. x.
 Confectionis Rosæ, ʒ j.

Fiat massa in pil. xxx. div. sumat unam ter quaterve in die.

In hæmorrhage from the kidneys or bladder, or from the intestinal mucous membrane, Tannic Acid is by far the most effectual astringent of this class of remedial agents.

157.

℞ Acidi Tannici, . ʒj.
Extracti Gentian., ʒij.

Misce in pil. xx. divide, cap. unam tertiis vel quartis horis.

Combined with Opium, Tannic Acid is often successfully administered in the treatment of uterine hæmorrhage, and in protracted diarrhœa.

158.

Acidi Tannici, . ʒj.
Extracti Opii, . gr. x.
Conservæ Rosæ, ʒss.

Fiat massa in pil. xxx. divid. sumat unam ter quaterve in die.

In uterine hæmorrhage one of the above pills may be administered every hour.

159.

℞ Decoc. Uvæ Ursi, ℥ iv.
 Acidi Tannici, . ʒ j.
 Tinct. Opii, . . f. ʒ ij.
 Syr. Acaciæ, . ℥ ij.

Fiat mistura, sumat cochl. parv. ter in die, vel sæpius.

In albuminuria, and in chronic catarrh of the bladder, the above astringent mixture is a most valuable remedy.

By some practitioners the Gallic Acid is considered preferable to Tannic Acid, inasmuch as the administration of the latter is apt to be followed by constipation of the bowels. Gallic Acid is said not to produce this effect. The following mixture may be employed :

160.

℞ Acidi Gallici, . . ʒ j.
 Mucil. Acaciæ,
 Syrupi Aurantiæ, aa. f. ʒ ij.
 Aquæ fontanæ, . . f. ʒ iv.

Fiat mistura, cujus sumat cochl. j. mag. ter quaterve in die.

In menorrhagia, hematuria, and other internal

hæmorrhages, the above mixture may be given with great advantage.

The following preparation, which does not differ materially from the above, is a favorite prescription of our colleague, Prof. Barker, in menorrhagia.

161.

℞ Acidi Gallici,
 Acaciæ Pulv., aa. ʒ ij.
 Syrupi Tolutan.,
 Aquæ font., aa. . f. ʒ ij.

Fiat mistura, sumat cochl. parv. pro dosi.

Although belonging more properly, perhaps, to the class narcotics, we shall, under the head of astringents, speak of a medicine, which, after its employment for many years, not only by ourselves, but by many professional friends, we can confidently recommend as one of the most useful, and, in one class of maladies, the most certainly remedial, of any of our therapeutical agents.

162.

℞ Tinct. Camphoræ, . f. ʒ iss.
 Tinct. Capsici, . . f. ʒ ss.
 Spiriti Lavendul. Co.,
 Tinct. Opii, aa. . . f. ʒ j.

Fiat mistura, capiat m. xx. vel xl. pro re natâ.

Not only in the milder forms of diarrhœa have we found the above mixture an excellent remedy, but it has proved in our experience, most valuable and efficient when promptly administered on the occurrence of the "premonitory diarrhœa," in the early stage of epidemic cholera.

During the prevalence of the cholera in this city, in 1849, and again in 1850, we administered this mixture in a large number of cases of cholera, in the access of the disease, with entire success. On the occurrence of the earliest symptoms of the choleraic diarrhœa, it should be given in doses of from thirty to sixty drops, every hour (or oftener if required), confining the patient *strictly to a horizontal position*, until all tendency to the diarrhœa is entirely overcome. The adoption of other measures will, of course, be required, if the disease is much advanced.

When travelling in summer, we are accustomed always to take a small phial of the above mixture with us; as this medicine is quite sure to arrest, in children or adults, the intestinal irritation which, in the warm season, is so liable to follow a change of diet and the drinking of a different, and, perhaps, a *harder* kind of water than that to which we had been accustomed.

CHAPTER VII.

DIAPHORETICS.

THOSE medicinal agents which promote or increase the insensible transpiration are called *diaphoretics*.

The term *sudorifics* is applied to the same remedies when they produce free perspiration or sweating. Diaphoretics, which operate by promoting diminished, or reëstablishing suppressed perspiration, are important agents in the treatment of many forms of disease. They are indicated in some varieties of febrile disease ; in chronic cutaneous inflammations, in anasarca, pulmonary catarrh, and in rheumatic and gouty affections.

In common colds, and in pulmonary catarrhs, we have long employed the following mixture with great advantage :

163.

℞ Liquor. Ammoniaë Acetatis, f. ʒ ij.

Vini Antimonii,

Tinct. Opii Camph., aa. . f. ʒ ss.

Syrupi Tolutan., . . . f. ʒ j.

Fiat mistura, sumat cochl. parv. bis terve in die.

After the exhibition of a cathartic in a severe cold, or in influenza, the above diaphoretic mixture, administered in drachm doses, every four or six hours, we have found to be a most valuable remedy.

164.

℞ Liquor. Ammon. Acetatis, f. ℥ ij.
 Misturæ Camphoræ, . . f. ℥ ijss.
 Vini Ipecacuanhæ, . . f. ℥ ss.
 Syrupi Tolutan., . . . f. ℥ ij.

Fiat mistura, cujus exhibe cochl. mag. sextis horis vel sæpius.

In the commencement of fevers, and other inflammatory affections, the above mixture is a cooling and highly useful diaphoretic.

As a refrigerant and excellent diaphoretic in pneumonia, and in the commencement of febrile diseases, the following is employed :

165.

℞ Vini Antimonii, . . . f. ℥ ss.
 Potass. Nitratis, . . . ℥ ij.
 Liquor. Ammon. Acetatis, f. ℥ ijss.
 Syrupi Tolutan., . . . f. ℥ j.
 Aquæ puræ, f. ℥ iv.

Fiat mistura, sumat. cochl. mod. tertiâ vel quartâ quâque horâ.

In the commencement of fevers, or other inflammatory diseases, when it is desirable to obtain a purgative and diaphoretic effect, the subjoined mixture may be advantageously employed :

166.

℞ Magnes. Sulph., . f. ʒ j.
 Ant. et Potass. Tart., gr. ss.
 Syrupi Simp., . . f. ʒ j.
 Aquæ Cinnam., . f. ʒ ij.
 Aquæ puræ, . . f. ʒ v.

Fiat mistura, sumat. cochleare unum ampl. omni horâ.

As a diaphoretic and alterative, in rheumatic and other inflammatory affections, the following pills are useful :

167.

℞ Pulvis Antimonialis, . ʒ ss.
 Hydrarg. Chlo. Mite, ʒ j.
 Opii Pulv., . . . gr. x.
 Conserv. Rosæ, . . q. s.

Divide in pilulas xx. sumat unam quartis horis.

In acute rheumatism, when an anodyne diaphoretic is indicated, we may employ the following with great advantage :

168.

℞ Potassæ Nitratis, ʒ ij.
 Opii Pulv., . . . gr. xii.
 Ipecacuanhæ Pulv., gr. xvij.

Fiant pulv. xii. cujus sumat unam horâ somni.

When a still more powerful diaphoretic is required, as in the treatment of dropsical affections, and in the early stage of acute bronchitis, we may have recourse to the following pill :

169.

℞ Pulvis Ipecac., Comp., . ʒ j.
 Ant. et Potass. Tart., . gr. iij.
 Hydrarg. Chlorid. Mite., gr. xii.
 Mucil. Acaciæ, . . . q. s.

M. Fiant pil. xii. cujus sumantur ij. mane nocteque.

If, after taking the above pills, the patient drink plentifully of warm fluids, a free perspiration will be likely to ensue.

In the commencement of fevers, and in catarrhal affections, attended with increased vascular action, the following is a useful diaphoretic :

170.

℞ Liquor. Ammon. Acetatis, f. ℥ ij.
 Spirit. Æther. Nitrici,
 Vini Antimonii, aa. . . . f. ℥ ss.
 Syrupi Acaciæ, f. ℥ j.

Fiat mistura, cap. cochl. parv. quâque horâ.

Vel :

171.

℞ Ant. et Potass. Tart., gr. ijss.
 Aquæ Cinnam., . . . f. ℥ ij.
 Syrupi Simp., . . . f. ℥ ss.
 Aquæ puræ, . . . f. ℥ iijss.

Fiat mist., cujus sumat. cochl. parv. secundâ vel
 tertiâ horâ.

In inflammatory affections of the respiratory organs, such as pneumonia, bronchitis, croup, etc., Prof. Samuel H. Dickson, of Charleston, administers the following with advantage, as a diaphoretic and expectorant :

172.

℞ Ipecacuan. Pulv., . . . ʒ j.
 Infus. Rad. Serpentaria, ℥ vj.
 Tinct. Opii Camph., . . f. ʒ ij.

Fiat mistura, sumat. cochl. parv. pro re natâ.

The dose may be varied according to the age of the patient and emergency of circumstances, from one drachm to half an ounce, at intervals varying from half an hour to two hours.

173.

℞ Potassæ Bi-Carb., ℥ j.
Tinct. Opii Camph., f. ℥ ij.
Aquæ Puræ, . . . f. ℥ viij.

Fiat mistura, cap. cochl. ampl. omni bi horâ.

The above is recommended by the same distinguished practitioner, in cases of fever, with (or without) marked gastric irritability.

174.

℞ Sod. Carb., . . . ℥ ij.
Spts. Æther. Nitrici,
Syr. Zingiberis,
Aquæ puræ, aa. . . f. ℥ j.

M. Vel :

175.

℞ Potass. Nitrat., . . . ℥ iij.
Ant. et Potass. Tart., gr. j.
Aquæ puræ., . . . ℥ iv.

M. Fiat solutio., cujus sumant. cochl. parv. ij. secundâ vel tertiâ horâ.

Either of the above preparations, says Dr. Lindsley, of Washington, may be administered in fevers, and will prove efficient and valuable remedies.

“The following,” writes a very excellent physician, of Massachusetts, “I have often used with very happy effect in scarlet fever :

176.

℞ Ammon. Carb., . . . ℥ iiss.
 Tinct. Opii Camph., f. ʒ ij.
 Vini Ipecacuanhæ, f. ʒ ss.
 Aquæ puræ, . . . f. ʒ vj.

Fiat mistura, sumat. cochl. mag. quartâ vel sextâ quâque horâ.”

The above remedy should be taken in the following way : To one spoonful of the mixture, add two ounces of water, sweeten, and mix with it one drachm of lemon juice, and take while effervescing.

CHAPTER VIII.

DIURETICS.

DIURETICS are a class of remedies which have the property of augmenting the secretion of urine.

Some diuretic agents, being absorbed by the mucous or cutaneous surfaces, are received into the circulation, and act by directly stimulating the kidneys to secrete an increased quantity of urine. Other remedies of this class, by making a general impression on the absorbent system, act indirectly or secondarily, exercising in this way an influence on the amount of urine secreted.

It is important to recollect that the diuretic treatment is ordinarily merely secondary ; and is not generally indicated until other remedies, which have reference to the primary cause of the disease, have been employed. "Like all medicines endowed with special properties, diuretics require two conditions to produce their effects. The first is, that the organ into which they are introduced should be exempt from inflammation ; and secondly, that the organ on which they are intended to

act after being absorbed, should be a healthy one. Let the stomach be inflamed, and diuretics will increase the inflammation without producing the diuretic effect ; or let the kidney be inflamed, and we shall only inflame it still more without increasing its secretion." *

If administered on an empty stomach, and followed by gentle exercise in the open air, or if the surface of the body be kept cool, diluent drinks taken freely, the operation of diuretics will be greatly promoted.

177.

℞ Infus. Juniperi, . ℥ vss.
 Spirit. Æther. Nitrici,
 Tinct. Cinch. Co., aa. f. ℥ j.
 Tinct. Cardamom., f. ℥ ss.

Fiat mistura, capiat cochl. mag. ter quarterve horis.

The above diuretic mixture has been found very beneficial in anasarca attended with much debility.

When it is desirable to promote free diuresis, in cases of general effusion into the whole cellular tissue, the subjoined mixture can be relied upon as a most useful diuretic :

* Manual of Therapeutics, p. 301.

178.

℞ Infusi. Digitalis, . . f. ʒ vi.
 Hydrarg. Chlo. Corrosiv., gr. ij.
 Tinct. Cantharid., . . f. ʒ ij.
 Aquæ Menth. Pip., . . f. ʒ ij.

M. Fiat mistura, sumat. cochl. mag. bis terve
 in die.

In hydrothorax, and other forms of dropsical
 effusions, where a tonic is indicated, the follow-
 ing diuretic combination has been much recom-
 mended :

179.

℞ Misturæ Camphoræ, ʒ viiss.
 Spir. Æther. Nitric., f. ʒ j.
 Tinct. Digitalis, . . f. ʒ ss.
 Tinct. Opii, . . . f. ʒ ij.
 Tinct. Columb., . . f. ʒ j.

M. Fiat mistura, sumat. cochl. mag. bis quo-
 tidie.

Should a still more powerful diuretic be re-
 quired, the subjoined may be substituted :

180.

℞ Tinct. Colchici, . . . f. ℥ ss.
 Infus. Juniperi, . . . f. ℥ vi.
 Tinct. Aurant. Comp., f. ℥ j.
 Potassæ Carb., . . . ℥ ij.
 Potassæ Nitrat., . . . ℥ j.

M. Fiat mist., capiat cochl. larga j. vel ij. ter quaterve in die.

In the treatment of the different forms of anasarca, but particularly in that which arises from diseased heart, we have employed for many years, and frequently with great advantage, the following diuretic combination :

181.

℞ Vini Colchici, . . . f. ℥ ij.
 Tinct. Digitalis, . . . f. ℥ vi.
 Potass. Iodid., . . . ℥ iiss.
 Syr. Sarsa. Comp., f. ℥ ij.
 Aquæ puræ, . . . f. ℥ iij.

M. Fiat mistura, cujus sumat. cochl. parv. ter quaterve in die.

By some practitioners Elaterium is esteemed a most valuable diuretic, especially in anasarca consequent on cardiac disease.

182.

℞ Elaterii, . . . gr. v.
 Digitalis Pulv., . gr. xv.
 Extracti Gentianæ, ℥ j.

M. Fiat massa et div. in pilulas xx. quarum
 capiat unam mane nocteque.

183.

℞ Aquæ Fœniculi Dulcis, f. ℥ vi.
 Tinct. Cantharid., . . f. ℥ ij.
 Spirit. Æther. Nitrici,
 Syrupi Cort. Aurant., aa. f. ℥ j.

M. Fiat mistura, sumat. coch. j. amp. pro re natâ.

The above mixture is a very pleasant, and quite
 an active diuretic.

In some cases of anasarca, where the disease is
 attended with, or proceeds from debility, the fol-
 lowing tonic and diuretic may be exhibited fre-
 quently with great advantage :

184.

℞ Tinct. Cinch. Comp., . f. ℥ iij.
 Tinct. Cardamom. Comp., f. ℥ ij.
 Tinct. Cantharid., . . f. ℥ iij.
 Syr. Acaciæ, . . . f. ℥ j.

M. Fiat mistura, sumant. cochlearia duo parv.
 ter in die.

With some practitioners, the subjoined stimulant diuretic is a favorite remedy in general anasarca attended with debility :

185.

R̄ Juniperi Fructi, ʒ ij.

Potass. Nitrat., ʒ ss.

Vini Albi, . . Oij.

Macera per horas duodecim ; sumant. cochl. duo
ampl. bis terve in die.

CHAPTER IX.

ANTISPASMODICS.

WE define *antispasmodics* to be medicines which exert a direct control over spasmodic action ; or those substances which counteract irregular or inordinate muscular action.

It is doubted by some therapeutists whether we possess any medicinal substances which do act directly on the muscular fibre. Those agents which are ordinarily arranged in the class antispasmodics are, by many, believed to act as indirect agents, relieving spasmodic action by revulsion, or through the influence which they exert upon other parts of the nervous system than those concerned in the muscular contraction. There is, however, a class of medicinal agents which exerts, unquestionably, a direct control over spasmodic muscular action. We have, therefore, both direct and indirect antispasmodics.

As an efficacious remedy, in the treatment of hysterical affections, and in subduing great nervous irritation, we may administer the following antispasmodic :

186.

℞ Assafoetidæ, . ʒ iss.
 Morph. Sulph., gr. v.
 Saponis Dur., ʒ ij.

M. Fiat massa in pil. xl. divide, quarum capiat unam pro re natâ, vel binas, horâ somni.

Should a more stimulant antispasmodic be required, the following may be substituted :

187.

℞ Assafoetidæ, . ʒ j.
 Morph. Sulph., gr. iij.
 Camphoræ Pulv., ʒ ij.

M. Fiat massa et in pil. xxx. divide. Sumat unam ter quaterve in die.

Musk, when it can be obtained pure, is a powerful nervous stimulant. It is sometimes given in nervous and hysterical affections, in combination with other antispasmodics.

188.

℞ Moschi, . . . ʒ j.
 Assafoetidæ, . ʒ iss.
 Camphoræ Pulv., ʒ ss.
 Extracti Gentianæ, q. s.

Ut fiat pil. xxx. quarum capiat unam ter in die.

The administration of musk has been much commended in hiccough, and in the subsultus of typhus and other low and malignant fevers.

189.

℞ Moschi, . . . ʒj.
 Æther. Sulph.,
 Tinct. Opii, aa. f. ʒ iss.
 Aquæ Cinnam., f. ʒ iiss.
 Syrupi Simp., f. ʒ iss.

M. Fiat mistura, de quâ capiat cochl. j. mag. ter in die.

By a combination of two or more of the anti-spasmodics, we obtain a more powerful effect in the treatment of hysterical and other nervous affections, than results, ordinarily, from the single administration of any one of these remedies.

190.

℞ Tincturæ Castori,
 Tinct. Assafoetidæ, aa. . f. ʒ iss.
 Aquæ Camphoræ, . . . f. ʒ j.
 Spirit. Ammon. Aromat., f. ʒ ss.
 Syrupi Acaciæ, . . . f. ʒ iss.

M. Fiat mistura, quarum capiat cochl. j. mag. pro re natâ.

The above mixture, given in doses of a table-spoonful every hour or two, has been recommended as a powerful antispasmodic in hysteria.

We have found the following mixture a very useful medicine in various nervous and spasmodic diseases :

191.

℞ Tinct. Castori, . f. ℥ iss.
 Morph. Sulph., gr. iv.
 Tinct. Valerianæ, f. ℥ iss.
 Syrupi Acaciæ, . f. ℥ j.

E. Fiat mistura, sumat. cochl. j. mod. secundâ quâque horâ.

In spasm of the stomach, arising from flatulence ; and for relieving cardialgia, the subjoined mixture will be found very efficacious :

192.

℞ Tinct. Valerianæ, . f. ℥ j.
 Magnesiæ Carb., . ℥ ij.
 Tinct. Opii, . . . f. ℥ j.
 Aquæ Menth. Pip., f. ℥ iij.
 Olei Anisi, . . . m. xl.

M. Fiat mistura, cujus capiat cochl. parv. omni horâ, vel sæpius. Vel :

193.

R̄	Tinct. Lavendul. Comp.,	f. ℥ iss.
	Spirit. Carui,	f. ℥ ij.
	Tinct. Opii,	f. ℥ j.
	Æther. Sulph.,	f. ℥ ss.
	Aquæ font.,	f. ℥ iv.

M. Fiat mistura, capiat cochl. j. mag. pro re natâ.

The Valerianate of Zinc has been much employed by some practitioners, by whom it is recommended as a valuable tonic and antispasmodic, in the treatment of hysteria and other nervous affections.

194.

R̄	Zinci Valerianatis, .	gr. xii.
	Tincturæ Valerianæ,	f. ℥ ss.
	Aquæ Cinnam., . . .	f. ℥ ij.
	Syrupi Simp., . . .	f. ℥ ss.
	Aquæ font.,	f. ℥ iij.

M. Fiat mistura, cujus capiat semiunciam sextis horis.

As an antispasmodic in the treatment of chorea, the Valerianate of Zinc has been much commended by some experienced physicians. In combination

with the Subnitrate of Bismuth, and the extract of Hyoscyamus, we can recommend the Valerianate of Zinc as a most useful remedy not only in chorea, but in neuralgia and other nervous diseases.

195.

℞ Extract. Hyoscyami, ℥ ij.
 Zinci Valerianatis, . ℥ ij.
 Bismuth Subnit., . ℥ j.

M. Fiat massa, et in pil. xl. div., quarum capiat unam, ter quaterve in die.

The Valerianate of Ammonia has been recommended, recently, by practitioners, both at home and abroad, as an antispasmodic in hysteria, but more especially in the treatment of facial neuralgia. It has been employed by Dr. Declat, and some other foreign practitioners, with great success, in the treatment of nervous diseases.

Administered in doses of a teaspoonful, morning and evening, it has succeeded in controlling neuralgic pains after all the ordinary means have been tried, in succession, without avail. If pure, it should be administered in diminished doses from those recommended by Dr. Declat.

We have employed the following mixture in severe facial neuralgia :

196.

℞ Ammon. Valerianatis, f. ʒ j.

Syrupi Tolutan., . f. ʒ j.

M. Sumat cochl. parv. quartis horis.

CHAPTER X.

ANTHELMINTICS.

THAT class of medicinal agents which possesses the property of destroying worms, or of expelling them from the intestinal canal, is called anthelmintics. The principle on which anthelmintics operate is not the same with all. Some by their disagreeable odor destroy or dislodge the worms ; others by mechanical irritation ; and others, again, by some unknown, specific operation.

In selecting these remedies, regard should be had to the character of the agent employed, and to the mode of application, with reference to the species of intestinal worms to be destroyed or removed. A great variety of animal parasites have been found, from time to time, in the human body.* Of those whose *habitat* is the alimentary

* A very valuable work on the "Animal and Vegetable Parasites of the Human Body," by Dr. Friederich Küchenmeister, of Germany, has been, very recently, translated and published by the Sydenham Society. It contains much that is new and interesting on this subject, and adds to our knowledge of human parasites.

canal, and for whose removal medicinal agents are frequently required, there are four species; the tænia or tape worm, the trichuris or tricocephalus, ascaris vermicularis, and ascaris lumbricoides.

The preparations of Mercury have long been employed for expelling the lumbrici from the intestinal canal. Calomel, especially, administered in the ordinary purgative doses, has proved a most efficient anthelmintic for the removal of the round worm. In the United States, the *Spigelia Marilandica* is much employed, and is considered one of the most powerful and certain of the anthelmintics.

197.

℞ *Spigeliæ Mariland.*, ʒ ss.

Aquæ ferventis, . Oj.

Macera per horam, quarum sumat cochl. mag. tertiis vel quartis horis.

If a moderate dose of Calomel be given in the evening, sufficient to produce a mild cathartic effect, and its operation followed the next day by the administration of the infusion of Pinkroot, in doses of from half a fluid ounce to a fluid ounce, once in three or four hours, we have found this plan altogether more efficient than when the *Spigelia* is given without the Calomel. An active

dose of Castor Oil should follow the last dose of Pinkroot.

198.

℞ Spigeliæ Pulv , ʒ iss.
 Stanni Pulv., ʒ j.
 Syrupi Simp., q. s.

M. Fiat electuarium, cujus sumat. ʒ j. omni mane nocteque.

After the second or third day this medicine should be followed by a full dose of Castor Oil. The above combination of Spigelia and Tin is considered, by some practitioners, as being a very powerful and efficacious anthelmintic. Küchenmeister, however, protests against the administration of tin-filings, not only because of the uncertainty of the remedy, but because of the irritation of the intestinal membrane, excited by this agent.

It is advised by some practitioners to unite a purgative with the Pinkroot.

199.

℞ Spigeliæ Mariland., ʒ ss.
 Sennæ, ʒ iij.
 Anisi, ʒ j.
 Aquæ ferventis, . Oj.

Macera per horam, sumant. cochl. ij. ampla tertiis horis.

Dr. A. L. Cox, a distinguished, and, for many years, a successful practitioner in this city, was accustomed to employ the following anthelmintic:

200.

℞ Spigeliæ Mariland.,
 Sennæ, aa. . . . ʒ ss.
 Potassæ Bitart., . ʒ j.
 Jalapæ Pulv., . ʒ ss.
 Sem. Cardamom., ʒ ss.
 Extract. Glycyrrh., ʒ ij.
 Aquæ ferventis, . Oss.

Macera per horam, sumat. cochl. j. vel ij. ampla, pro re natâ.

The *Filix Mas*, or *Male Fern*, although a foreign remedy, has been much employed in the United States as a vermifuge, particularly for the expulsion of the tape worm. It may be administered in the form of powder, or in decoction.

201.

℞ Filicis Maris Pulv., ʒ j.
 Syrupi Simp., q. s.

M. Fiat electuarium, cujus sumat ʒ j. vel ʒ ij. omni mane nocteque.

The remedy should be given on an empty stomach, and after being continued two or three days should be followed by an active cathartic.

202.

R̄ Filicis Maris, . ʒj.
Aquæ ferventis, Oj.

Macera per horam, sumant. cochl. ij. ampla,
mane ac nocte.

To an adult, a wineglassful of the above decoction may be given, fasting, twice or thrice daily; and followed by a cathartic as above.

The *Kousso*, another foreign remedy, has also been employed by American practitioners with considerable success, for the treatment of the tape worm

Kousso is the flowers of a plant, the *Brayera Anthelmintica*. It is ordinarily given in powder, and should be administered on an empty stomach.

It will prove more certainly efficacious if preceded by a cathartic.

203.

℞ Flo. Brayeræ Anthelmint., ℥ ss.
 Aquæ tepidæ, Oss.
 M. Sumant. ℥ ij. omni hora quadrante.

The infusion should be taken in divided doses as above, on an empty stomach. After a few hours, a full dose of Castor Oil, or some other brisk cathartic, should be administered.

Prof. Raimann, of Vienna, has been quite successful of late in the employment of Kouso, exhibited after the following manner: An infuso-decoction is made by macerating ℥ vi. of Kouso for twenty-four hours in cold water, and then boiled for half an hour. It is then taken whilst fasting, in two portions, without straining, and two hours afterwards from one to two ounces of Castor Oil. This remedy acts with great certainty.*

Many American practitioners consider the Oil of Turpentine the best anthelmintic in tinea. Large doses are required for the treatment of the tape worm.

204.

℞ Olei Terebinth., ℥ j.
 Decoc. Hordii, ℥ ij.
 M. Fiat haustus.

* Küchenmeister, pp. 161-2.

After repeating this dose for two or three mornings, if it does not purge, it should be followed by a dose of Castor Oil.

Küchenmeister likewise regards Oil of Turpentine one of the best and most energetic remedies for tape worms. He advises that this medicine be administered at bed time, and in a dose of one ounce triturated with the same amount of Castor Oil and honey, and the yolks of three eggs. It should be given in divided doses, and all in the course of an hour or an hour and a half.

Under the name of *Semen Coutra*, the East has furnished to Europe a species of worm-seed, which has enjoyed a great reputation as an anthelmintic. It has seldom been used in this country. It contains two principles, which are equally efficacious, a volatile oil and *Santonin*. This latter principle has recently been introduced into this country, and is especially recommended for the treatment of worms in children, on account of its want of taste. It is given in the dose of from a half a grain to three grains, twice a day. An agreeable form for children is the sugar-coated pills of Garnier, Lamoureux & Co., which contain each one half of a grain, and invite the little patient by their appearance to take what otherwise he would struggle against. The dose should be repeated for several days. It seldom requires a cathartic,

as it acts efficaciously as a cathartic in the larger doses.

The species of worm-seed better known to practitioners in this country is the *Chenopodium Anthelminticum*. It is reputed for its expulsive powers over the round worm. The oil is a favorite anthelmintic in some of the dispensaries of this city. In this form the *Chenopodium* is used with much success by one of my friends, Physician to the Children's Department of the Demilt Dispensary.

205.

R̄ Ol. Chenopodii, gtt. x.

Syr. Simp., . f. ℥j.

M. Cochl. parv. ter in die.

The dose should be continued for two or three days, and then followed up by a brisk cathartic.

To dislodge ascarides of the rectum, we have employed, successfully an enema composed of *Olive Oil*. From four to six ounces of the oil should be administered to an adult, and retained as long as possible in the rectum. Young children, who often suffer greatly from the presence of ascarides in the rectum, are frequently promptly

relieved by the employment of an enema composed of two ounces of Olive Oil.

In the treatment of this troublesome parasite, Trousseau and Pidoux have found injections of the Biniodide and Bi-Chloride of Mercury extremely effective. To an adult they administer, two or three days successively, an enema consisting of a quart of water in which five centigrammes (about three-fourths of a grain) of the Biniodide are dissolved by means of one-tenth of Iodide of Potassium ; or they employ the same quantity of Corrosive Sublimate without the Iodide of Potassium. Injections of the following strength may be used with safety :

206.

℞ Hydrarg. Biniodid., gr. j.
 Potass. Iodid., . gr. ss.
 Aquæ font., . . Oij.

M. Pro enema.

When administered to children, from four to six ounces of this solution may be employed.

These authors say they have rarely failed of success in the employment of either of the above remedies.

They advise a repetition of the enemata in a fortnight afterwards, and again at the end of four or five weeks.*

* *Traité de Thérapeutique*

CHAPTER XI.

EMMENAGOGUES.

ALL those means or agents, whether external or internal, which possess the power of stimulating the generative organs, and of causing a determination of blood to the uterus, are considered emmenagogues.

In therapeutics the term is restricted to those medicinal agents which "have the property of promoting or restoring the menstrual discharge."

Before employing emmenagogues we should carefully investigate the causes which tend to obstruct menstruation, that our efforts to remove these causes may be intelligently directed. Suppression, or absence of this discharge, is generally dependent upon some abnormal conditions of the system; or, the irregularity may be the effect of debility or of some organic disease of the generative organs; therefore, the remedies which are to be employed must have reference to these varied causes.

When the suppression of this discharge is dependent upon general debility, tonics are the

appropriate remedies ; and of these, bark and the preparations of steel are the most efficacious. Occurring in persons of a full and plethoric habit, venesection, or other antiphlogistic measures may be required. Under other circumstances and conditions, again, amenorrhœa may be successfully treated with active purgatives, or with stimulating diuretics ; and sometimes antispasmodics are the means indicated. Hence, no single remedy, nor only one plan of treatment can be adopted as being applicable to all cases.

The subjoined medicinal agents belong to that class of remedies which experience has proved to be the most efficient in promoting the menstrual discharge.

207.

R̄ Ferri Sulphatis, . ʒ iss.
 Potass. Iodid., . ʒ ij.
 Tinct. Cardamom.,
 Syr. Simp., aa. . f. ʒ j.
 Aquæ font., . . f. ʒ ij.

M. Fiat mist. cujus capiat cochl. parv. ter in die.

In cases of suspended menstruation, attended with headache, and with pains in the pelvic regions, the above preparation may be advantageously administered.

In chlorotic amenorrhœa attended with debility, other ferruginous preparations are often very serviceable, particularly when combined with vegetable tonics.

208.

℞ Ferri Carb., . . . ʒ ij.
Tinct. Columbæ,
Syr. Zingiberi, aa. f. ʒ ij.

M. Fiat mistura capiat cochleare parv. mane ac nocte. Vel :

209.

℞ Ferri Citrat., . . . ʒ ij.
Syrupi Aurantii,
Aquæ Menth. Pip., aa. f. ʒ ij.
Aquæ puræ, . . . f. ʒ iv.

Fiat mistura, de quâ sumatur cochl. parv. bis terve in die.

“There is one formula,” writes Dr. John Ware, “I have used for many years in chlorosis, and think it the most satisfactory remedy in this disease which I have ever employed. I mean for cases of young girls with pale catamenia, pale cheeks, pale lips—in short, paleness everywhere ; with thin, transparent alabaster fingers and ears,

short breath, palpitating throbbings in head, bruit du diable, etc. etc. Ecce signum

210.

℞ Aloës,
 Ferri Sulph., aa. . . gr. xvi.
 Hydrarg. Chlorid. Mitis, gr. iv.

Fiat massa et in pil. xvi. div.

“ Taken twice or thrice a day ; the quantity of Aloës to be varied according to the state of the bowels, which are best kept moderately relaxed—at least two stools a day if this can be borne. The quantity of Calomel also to be varied, if necessary, and the mouth carefully watched.

“ I know of hardly any combination in medicine so sure of doing its duty.”

When we have reason to suspect the obstruction to depend upon a rheumatic condition of the womb, the greatest benefit may be anticipated from the exhibition of the following combination :

211.

℞ Potass. Iodid., . ʒ ij.
 Vini Colch., . f. ʒ iss.
 Syrupi Sarsa.,
 Aquæ font., aa. f. ʒ ij.

M. Fiat mistura, de quâ capiat cochl. parv. ter de die.

In connection with any of the preceding emmenagogue preparations the following pills may be taken, should a laxative be indicated :

212.

℞ Aloës Pulv., . ʒ iss.
 Ferri Sulphatis, ʒ ij.
 Myrrhæ Pulv., ʒ ij.

M. Fiat massa, in pil. xl. divide ; quarum sumat. j.-ij. bis quotidie.

In difficult and painful menstruation, attended with a torpid condition of the bowels, the following is a useful remedy :

213.

℞ Decoc. Aloës Comp., ʒ iij.
 Sodæ Sub-boratis, ʒ j.
 Tr. Aloës Comp.,
 Tinct. Castori, aa. . f. ʒ ss.
 Aquæ Cinnam., . f. ʒ ij.

M. Fiat mistura, capiat cochl. amplum ter in die.

In those cases of dysmenorrhœa which are dependent on rheumatic irritation of the os and cervix uteri, Prof. Davis is accustomed to employ,

with great advantage, the following combination :

214.

℞ Vini Colchici Sem., . . . ℥ j.
 Tinct. Stramonii, . . . f. ℥ ss.
 Tinct. Cimicif. Racemosæ, f. ℥ iss.

M. Fiat mistura.

“ Administered during the interval, between two or more menstrual periods,” says Dr. Davis, “ in doses of from half a drachm to a drachm, three times a day, it will often completely cure in the above cases.”

After other remedies have failed, we have employed successfully the following mixture for the treatment of suppressed menstruation :

215.

℞ Proto-Iodid. Hydrarg., gr. iij.
 Potass. Iodid., . . . ℥ ij.
 Tinct. Gentianæ, . . . f. ℥ iij.
 Aquæ Cinnam., . . . f. ℥ ij.
 Syr. Simp., . . . f. ℥ j.

M. Fiat mistura, cujus capiat cochl. parv. bis terve in die.

The emmenagogue recommended and employed by Dr. Dewees, has been for many years, among American practitioners, one of the most popular of all remedies for the treatment of suppressed catamenia.

The following are the directions as given by Dr. Dewees : *

216.

R̄ Guaiaci Pulv., . . .	℥ iv.
Sodæ Carb., vel Potass,	℥ iss.
Pimentæ Pulv., . . .	℥ j.
Alcohol. Officin., . . .	Oj.

Macera.

Dr. Dewees directs, that the volatile spirits of Ammonia be added to the above mixture, after it has digested for a few days, in proportion of one or two drachms to each four ounces of the tincture ; and given in doses of a teaspoonful three times a day in a glassful of sweetened milk, or wine.

“ I have,” adds he, “ for more than forty years, almost daily used this medicine in suppressed catamenia, and more especially in those of long standing, without its having failed in any case proper for its use.”

* Treatment on Diseases of Females, pp. 123-4.

CHAPTER XII.

GARGLES AND LOTIONS.

GARGLES and lotions may, with propriety, be arranged together, for both are medicated, local baths; the former being employed as washes for the mouth and fauces, whilst lotions are used as washes externally, and for injections.

In affections of the mucous membrane of the mouth and throat, gargles are only serviceable when the disease is limited to the fauces and pharynx; when it has extended into the larynx, or even into the sub-tonsillary fossæ, these parts are not reached by lotions employed as gargles.

As a gargle in inflammatory sore throat, and in the early stage of follicular disease of the throat, we have been accustomed to employ the following:

217.

℞ Argent. Nitratis, ʒj.

Aquæ Rosæ, . f. ʒiv

M. Fiat gargarisma.

The subjoined may also be used under the same circumstances :

218.

℞ Potassæ Nitratis, ℥ ij.
 Mellis Rosæ, . ℥ j.
 Aquæ Rosæ, . f. ℥ v.

M. Fiat gargarisma sæpe utendum.

In chronic inflammation of the throat, and in the latter stage of follicular disease of the pharyngo-laryngeal membrane, we have often derived great benefit from the frequent use of the following Creosote gargle :

219.

℞ Creasoti, gtt. xxiv.
 Tinct. Myrrhæ,
 Tinct. Lavendul., Co., aa. f. ℥ ss.
 Syrupi Simp., f. ℥ j.
 Aquæ font., f. ℥ vi.

M. Fiat gargarisma.

Or the following :

220.

℞ Creasoti, gtt. xx.
 Tinct. Capsici f. ʒ ij.
 Tinct. Myrrhæ,
 Tinct. Lavendul. Co., aa. f. ʒ ss.
 Syr. Simp., ʒ j.
 Aquæ font., f. ʒ vi.

M. Fiat gargarisma.

In aphthous affections of the throat, the following is an excellent gargle :

221.

℞ Decoc. Hordii, ʒ vj.
 Mel. Rosæ, ʒ j.
 Tinct. Opii, f. ʒ iss.
 Tinct. Myrrhæ, f. ʒ vi.

M. Fiat garg.

Or the following, which has been highly recommended in ulcerated sore throat, may be used :

222.

℞ Liquor. Calcis Chloridi, f. ʒ ss.
 Mellis Rosæ, ʒ j.
 Aquæ font., f. ʒ vss.

M. Fiat gargarisma.

As a most excellent detergent lotion in venereal ulcerations of the throat and fauces, the following may be frequently employed :

223.

℞ Hydrarg. Chlorid. Corrosiv., gr. iij.
 Solve in Spirit. Vin. rect., ℥ ss.
 et adde Decoct. Cinchon., f. ℥ vj.
 Tinct. Myrrhæ, f. ℥ iv.
 Mellis Rosæ, ℥ iss.

M. Fiat gargarisma.

Young children, when affected with inflammatory sore throat, or in aphthous affections of the throat, are often much relieved by using frequently a mild wash ; the following may be employed :

224.

℞ Infus. Rosæ, . ℥ vj.
 Tinct. Myrrhæ, f. ℥ ss.
 Mellis commun., ℥ j.

M. Fiat gargarisma.

Or the following may be substituted when a more stimulating gargle is required :

225.

℞ Tinct. Capsici, . f. ʒ j.
 Aluminis, . . ʒ j.
 Mellis commun. ʒ j.
 Aquæ puræ, . f. ʒ ivss.

Misce, pro gargarism.

In chronic sore throat, attended with relaxation of the uvula, the following astringent gargle is frequently employed :

226.

℞ Decocti Quercus, ʒ vij.
 Aluminis, . . ʒ ss.
 Vini Gallici, . f. ʒ j.

M. Fiat gargarisma.

The above is also a useful injection in leucorrhœa, or in ulceration of the rectum or vagina.

As a vaginal injection in leucorrhœa, the following lotion has been found excellent :

227.

℞ Liquor. Alumin. Co.,
 Aquæ font., aa. . f. ʒ vj.

M. Fiat injectio.

In the treatment of old and indolent ulcers, particularly ulcers of the leg, we have employed, for many years, the following stimulating and sedative lotion.

228.

℞ Calcis Chloridi, ʒj.
Opii Pulv., . ʒ iss.
Aquæ font., . f. ʒ vj.

M. Fiat lotio et cola.

By applying constantly pledgets of lint, wet with the above wash, to old and troublesome ulcers, they have been healed, frequently, after other applications have failed. In the treatment of chancre, also, after cauterizing the ulcer, it is the most efficacious remedy that can be employed. Frequently applied by means of the lint, it soon changes the character of the sore, and arrests the ulcerative process. The employment of constitutional remedies, however, should not be omitted.

CHAPTER XIII.

ANTACIDS AND ANTLITHICS.

THOSE substances which are capable of combining chemically with the free acid that is often found to exist in the stomach and primæ viæ, and of neutralizing it, are denominated antacids. By combining with the acid of the stomach and digestive organs, a new innoxious compound is formed, and thus a temporary palliative effect is produced, relieving the symptoms caused by the presence of a morbid acidity. The employment of antacids, however, do not serve to correct, permanently, that peculiar state of the digestive organs, which favors the formation of acids. Their favorable action is only temporary; their protracted use not infrequently serves to debilitate the powers of the stomach, and, therefore, "in no case should their administration be long persisted in without occasional interruptions."

Where the acid exists in the stomach, and the upper portion of the intestinal canal, alkalies of the volatile kind, as Ammonia and its carbonate,

or the preparations of Magnesia or of Lime, should be preferred. If the acid exists in the urinary organs, those alkalies which have a tendency to act more directly on the kidneys, as the preparations of Potash, Magnesia and its salts, should be employed.

In cases of headache arising from acidity of the stomach and primæ viæ, the subjoined has been most efficacious in many instances :

229.

℞ Sp. Ammon. Aromat., f. ʒ vj.
 Sodæ Bi-Carb., . . . ʒ iss.
 Infus. Cascarillæ, . . f. ʒ viiss.

M. Fiat mistura, cujus capiat cochl. ampl. ij. bis in die, ante cibum.

In gastrodynia, and in other gastric and intestinal disturbances, the following is an elegant and invaluable mixture :

230.

℞ Sodæ Subcarb., . . . ʒ iss.
 Aquæ puræ, . . . Oj.
 Acidi Sulp. dilut., . . f. ʒ j.
 Confectionis Aromat.,
 Aquæ Menth. Pip., aa. f. ʒ ss.

M. Fiat mistura, cap. cochl. ij. mag. bis in die.

Or the following :

231.

℞ Liquor. Calcis., . . . f. ℥ viiss.
 Magnesiæ Calcin., . . . ℥ ss.
 Spirit. Ammon. Aromat., f. ℥ iij.
 Tinct. Card. comp., . . . f. ℥ j.

M. Sumat. cochl. ij. larga bis die, vel sæpius.

In heartburn and other cases of acidity of the stomach and primæ viæ, the carminative mixture first recommended by Dr. Meigs, is much employed, and often with great advantage :

232.

℞ Magnesiæ Carb., . . . ℥ ss.
 Magnesiæ Sulph., . . . ℥ iiss.
 Sp. Ammon. Aromat., f. ℥ j.
 Tinct. Rhei, . . . f. ℥ ss.
 Tinct. Hyos., . . . f. ℥ ss.
 Aquæ Menth., . . . f. ℥ iv.

M. Fiat mistura, cujus sumat cochl. unam mag. bis terve in die.

In chronic diarrhœa depending on a redundancy of acid in the stomach and intestines, the following will be found useful :

233.

℞ Mistur. Cretæ, . . f. ℥ vj.
 Spirit. Cinnam., . . f. ℥ iss.
 Aquæ Ammon., . . f ℥ iss.
 Tinct. Opii, . . . gtt. l.

M. Fiat mist. sumat cochl. j. vel ij. ampl. pro re natâ.

The carminative mixture of Dr. Dewees has been extensively employed in this country in acidity, flatulent colic, diarrhœa, etc., of young children. It is an excellent remedy :

234.

℞ Magnes. Carb., . . ℥ j.
 Tinct. Assafœtidæ, f. ℥ ss.
 Tinct. Opii, . . . gtt. xl.
 Sach. Alb., . . . ℥ ij.
 Aquæ puræ, . . . f. ℥ ij.

M. Fiat mistura, date m. xx. vel xxx., pro re natâ.

My colleague, Prof. Davis, highly recommends, under the same circumstances, the following :

235.

℞ Cretæ prep.,
 Sach. Alb., aa. . . ʒ j.
 Acaciæ Pulv., . . . ʒ ij.
 Aquæ Cinnam., f. ʒ iv.

M. Sumat. cochl. parv. bis terve in die.

In the treatment of the lithic acid diathesis, the alkaline bi-carbonates are the appropriate remedies. Their exhibition should be preceded or accompanied by counter-irritation over the lumbar region, and, if indicated, active purgation.

236.

℞ Aquæ Ammon. Carbonatis, f. ʒ j.
 Infus. Gentianæ Co., . . . f. ʒ v.
 Sp. Ætherei Nitrosi, . . . f. ʒ ss.
 Aq. Cinnam., f. ʒ iss.

M. Fiat mistura, de quâ sumat. cochl. j. vel ij.,
 ampl. ter in die.

In those cases where the urine indicates the presence of lithic acid, the above mixture may be employed with advantage. Or the following :

237.

℞ Liquor. Potassæ, . f. ℥ ss.
 Tinct. Humuli, . f. ℥ iss.
 Infusi Columbæ, . f. ℥ iv.
 Syr. Aurantiæ, . f. ℥ ij.

Fiat mistura, capiat cochl. larga unam bis terve in die.

In the arthritic or rheumatic diathesis, in which a tendency to the morbid formation of lactic acid may exist, we have employed, advantageously, the following :

238.

℞ Potassæ Iodid., . ℥ iij.
 Liquor. Potass., f. ℥ iiss.
 Tinct. Colchici, . f. ℥ ij.
 Tinct. Cardamomi, f. ℥ ij.
 Syr. Sarsa., . . f. ℥ iv.

M. Fiat mistura, cujus capiat cochl. parv. ter in die.

The *Potassio-Tartrate of Soda*, in combination with the wine of Colchicum and an anodyne, is the great remedy on which Dr. Fuller, of St. George's Hospital, London, depends, in the treatment of acute, rheumatic affections. He administers these remedies in a simple saline or a nitre draught, as the following :

239.

℞ Haustus Salini, . . . f. ʒ iss.
Sodæ Potassio Tartratis, ʒ ij.
Vini Colchici, . . . gtt. xv.
Tinct. Opii, . . . gtt. vij.

M. Fiat haustus.

“This draught is repeated,” says Dr. Fuller, “for the first twelve or twenty-four hours, at intervals of three or four hours, according to the strength of the patient and the severity of the attack.”*

* Dr. H. W. Fuller, ‘On Rheumatism, Rheumatic Gout,’ etc., p. 99.

CHAPTER XIV

DERIVATIVES OR COUNTER-IRRITANTS, OINTMENTS, ETC.

DERIVATIVE remedies are often of the highest importance in the treatment of disease.

The revulsive method is employed when we wish to remove or relieve a diseased condition of some internal organ or part, by producing a new irritation on the surface of the body, or determination to some part, remote from the disease.

In the employment of derivatives, we should have regard to the condition of the system, and the character and degree of inflammation present.

“That state of the system, usually called *irritable*, seldom admits of revulsive action, the secondary disorder so induced frequently reacting on the primary.”* When any internal organ is the seat of active inflammation, as the lungs, for instance, powerful derivatives should not be applied until vascular excitement has been reduced by general measures. Counter-irritation is of the most value

* Manual of Therapeut., p. 334.

in the treatment of obstinate chronic disease ; in local congestions, and irritations of important internal organs. The principal agents employed as derivatives, in the practice of medicine, are rubefacients, vesicants, pustular counter-irritants, and issues or setons.

The following rubefacient liniment is strongly recommended by an experienced physician, by whom it has been employed for many years, in the treatment of intercostal rheumatism, and other rheumatic pains of the chest and back :

240.

℞ Olei Origani,
 Olei Terebinth., aa. ℥ ss.
 Tinct. Opii,
 Aquæ Ammoniæ,
 Olei Olivæ, aa. . ℥ j.

M. Fiat linimentum.

A very celebrated "Rheumatic Liniment," was extensively sold in New England, several years ago, as a patented medicine, the formula for which was pirated from an American medical journal, published nearly thirty years ago. It was first recommended by an able physician, for the treatment of rheumatic affections of the joints.

The following is the formula :

241.

℞ Olei Origani,
 Aquæ Ammoniaë,
 Tinct. Opii,
 Olei Olivæ, aa. . . ℥j.

M. Fiat liniment.

This liniment should be applied and followed by frictions with the hand ; or, pieces of cotton or flannel, wetted with the liniment, may be laid over the inflamed joint, and evaporation prevented by covering the whole with oiled silk.

In rheumatic and neuralgic affections, the following liniment is recommended by Prof. Cox :

242.

℞ Olei Origani,
 Tinct. Camphoræ, aa. f. ℥ ss.
 Granville's Lotion, . . f. ℥ iij.
 Chloroformi, . . . ℥ iijss.
 Tinct. Aconiti,
 Tinct. Capsici, aa. . . f. ℥ ss.
 Ol. Sassafras., . . . ℥ ss.
 Lin. Sapon. Comp., . . ℥j.

M. Fiat Liniment.

In the treatment of incipient sore throat, and in various pains and aches, we have derived great

advantage from the use of the following, employed as a liniment, with cutaneous frictions :

243.

℞ Tinct. Arnicæ,
 Aquæ Ammoniæ, aa. f. ℥ j.
 Spirit. Camphoræ,
 Tinct. Opii, aa. . . . f. ℥ ss.
 Olei Olivæ, f. ℥ j.

M. Fiat linimentum.

To relieve neuralgic or rheumatic pains, the following has often proved very serviceable :

244.

℞ Tinct. Aconiti,
 Tinct. Opii,
 Tinct. Camphoræ,
 Chloroformi, aa. ℥ ss.

Misce pro liniment.

As a stimulating anodyne embrocation, the following is much employed by an eminent physician of Philadelphia :

245.

℞ Liniment. Saponis, ℥ iiij.
 Chloroformi, . . . ℥ j.

M. Fiat Liniment.

Prof. Harvey Lindsly recommends the following as a valuable anodyne liniment :

246.

℞ Camphoræ, . ʒ v.
 Chloroformi, vel,
 Ol. Terebinth, ʒ j.
 Tinct. Opii,
 Ol. Olivæ, aa. ʒ j.

M. Fiat liniment.

All active rubefacients may become vesicants, if applied for a sufficient length of time. The nature and use of vesicating agents proper, are well understood.

Among counter-irritants, tartar-emetic is the principal agent. It is the most certain of all means for exciting pustular counter-irritation ; and pustular inflammation, long-continued, is altogether more effective than vesication, in the treatment of chronic bronchitis, parenchymatous inflammation, and, indeed, in most forms of deep-seated, thoracic disease.

The following ointment may be employed when we wish to insure full, pustular counter-irritation :

247.

℞ Antim. et Potass. Tart., ʒ ij.
 Camphoræ Pulv., . . . ʒ ss.
 Adipis Preparat., . . . ʒ j.

M. Fiat unguentum.

If the part, to which the ointment is to be applied, be first wet with strong vinegar, or stimulated by friction, the effect will be more certain and uniform.

If a milder effect be desired, we may employ the following :

248.

℞ Ant. et Potass. Tart., . . . ʒ iss.
 Ipecac. Pulv., ʒ j.
 Cerati Simp., vel Adipis, ʒ j.

M. Fiat unguent.

In acute inflammation of the lungs and air-passages, where vesication would be improper before vascular action is reduced, we have advised for many years the employment of a saturated aqueous solution of Emetic-tartar. After friction, as for the ointment, the solution should be rubbed on gently with a piece of soft flannel ; and should be applied as hot as the skin can bear it. A full and uniform eruption is thus speedily produced which

proves a very valuable counter-irritant, in these affections.

Or a liniment may be formed of equal efficacy.

249.

℞ Solutio. Ant. et Potass. Tart. saturat., ℥ iss.
 Potass. Iodid., ℥ j.
 Olei Terebinth vel Olivæ, ℥ ss.
 M. Fiat liniment.

250.

℞ Ant. et Potass. Tart., ℥ ss.
 Olei Tiglii, gtt. xx.
 Ipecac. Pulv., ℥ j.
 Unguent. Rosæ, ℥ j.
 M. Fiant unguent.

The above ointment is a mild and very elegant counter-irritant; one which we have long employed when a revulsive has been indicated in the treatment of diseases in delicate females and young children.

One equally mild is recommended by a physician from a neighboring city, as a valuable counter-irritant.

251.

℞ Olei Tiglii, . . . ʒj.
Liniment. Saponis Co., ʒj.

M. Fiat liniment.

Or the following may be employed :

252.

℞ Olei Tiglii, . gtt. xxx.
Æther. Sulph., ʒj.

M. Fiat mistura.

As a derivative in the treatment of tuberculosis, we have employed extensively the following mild counter-irritant. It is a very valuable external remedy :

253.

℞ Potass. Iodid., . . . ʒj.
Proto-Iodid. Hydrarg., gr. x.
Unguent. Rosæ, . . . ʒj.

M. Fiat unguent.

A portion of this ointment should be applied to the part of the chest over the diseased lung, night and morning, and be rubbed in by friction with the hand.

A distinguished French practitioner recommends

the following ointment to be employed in the same way, and for the above disease :

254.

℞ Iodinii, gr. xii.
 Potass. Iodid., ʒ j.
 Adipis preparat., ʒ j.

M. Fiat unguent.

The method of establishing setons and issues, and their effects as counter-irritants, are well understood.

Under the head of unguents, we shall speak of some valuable remedial agents which are not properly classed among the derivatives.

Ointment for hæmorrhoids.

255.

℞ Unguent. Stramonii, ʒ j.
 Plumbi Carb. Pulv., ʒ j.
 Opii Pulv., ʒ iss.

M. Fiat unguent.

In the treatment of hæmorrhoids, we have long employed the above ointment, and in many cases with entire success.

A more stimulating and astringent ointment is

much commended by an old practitioner of this city.

256.

℞ Unguent. Stramonii, . ʒj.
 Gallæ Pulv. intim., . ʒj.
 Camphori Pulv., . . ʒij.

M. Fiat unguent.

The following is much employed by foreign physicians :

257.

℞ Gallæ Pulv., . . ʒj.
 Opii Pulv., . . . ʒij.
 Liq. Plumbi Acetat., f. ʒij.
 Adipis preparat.,
 Cerati Cetacei, aa. ʒj.

M. Fiat unguent.

In discussing scrofulous, and other indolent tumors, we have derived great advantage from the use of the subjoined ointment :

258.

℞ Proto-Iod. Hydrarg., gr. x.
 Potass. Iodid., . . ʒj.
 Cerati Simp., . . ʒj.

M. Fiat unguent.

As an external application in the treatment of neuralgia, the following ointment is declared, by an experienced practitioner, to be almost infallible ; it should be rubbed over the painful part once or twice a day. It is a powerful application :

259.

℞ Veratriæ, gr. v.

Adipis, . ʒj.

M. Fiat unguent.

The venerable Dr. Boyd, of this city, was accustomed, for many years, to use an ointment of Veratrine in the commencement of nervous deafness.

260.

℞ Veratriæ, . . ʒj.

Unguent. Rosæ, ʒj.

Misce pro unguento.

A small portion of the above ointment should be applied night and morning, with friction behind the affected ear.

As an external application in eczema, and some other forms of obstinate cutaneous disease, the

following ointment is recommended by our colleague, Prof. Carnochan :

The internal administration of the Arsenical solution is advised at the same time.

261.

℞ Olei Tabac., . . . gtt. vj.
 Hydrarg. Præcip. Alb., ℥j.
 Cerati Simp., . . . ℥j.

M. Fiat unguent.

In the treatment of chronic inflammation of the eyes, particularly in ophthalmia tarsi, the following we have found to be an invaluable remedy :

262.

℞ Hydrarg. Oxydi Rubri, gr. v.
 Cerati Simp., . . . ℥ss.

M. Fiat unguent.

A small portion of the ointment should be applied at night, along the borders of the eyelids.

As a highly useful lotion in ophthalmia, the following is recommended by Prof. Cox, of Maryland :

263.

℞ Hydrarg. Oxydi Mur., gr. j.
 Mucil. Sassafras., . ʒ ij.
 Vini Opii (Sydn.) . f. ʒ ij.
 Aquæ Rosæ, . . . f. ʒ viij.

M. Fiat lotio.

In a communication from Dr. Porcher of Charleston, containing several valuable formulæ, that experienced practitioner writes: "As a *Collyrium* in simple inflammation of the conjunctiva, as well as in pustular inflammation of that membrane, I have found no lotion so good, as common vinegar—one drachm to two ounces of water. A few drops to be inserted into the eye, three times a day, and a cloth wet with it, should be placed, at the same time, over the closed eyelids. It is far superior to Acetic Acid, diluted, for the vinegar contains a mucilage which has a soothing influence on the inflamed membrane."

THE END.

TOXICOLOGICAL TABLE :

Exhibiting the Symptoms of Poisoning, the Antidotes for each Poison, and the Tests proper for their Detection.

GENERAL SYMPTOMS OF POISONING.

WHEN a person in perfect health is suddenly attacked, after having taken food or drink, with violent pain, cramp in the stomach, nausea, vomiting, convulsive actions, and a sense of suffocation; or when, under the same circumstances, he is seized with vertigo, delirium, or unusual drowsiness, there is every reason to suspect that he has taken poison.

Poisoning may be distinguished from a sudden fit of apoplexy by the stomach and throat not being affected in the latter.

In all cases of poisoning, employ the stomach pump as promptly as possible.

NAMES.	SYMPTOMS.	ANTIDOTES.	TESTS.
ACIDS. <i>Citric Acid.</i> <i>Muriatic</i> " <i>Nitric</i> " <i>Sulphuric</i> " <i>Oxalic</i> "	The mouth and throat has a severe sense of burning; the taste sour and acrid, with acrid eructations; lips, and lining membrane of the mouth, shrivelled; excruciating pain in the stomach; matter vomited brown, or black, and effervesces with carbonate of lime; hiccough; tenderness of the abdomen; laborious breathing; extremities cold and clammy; great sinking	Prompt and free use of mixtures of <i>chalk</i> ; the carbonate of soda, lime, or magnesia, with milk. Any of these may be given freely for citric acid, or for muriatic and sulphuric acids; for nitric and oxalic, the carbonates of magnesia and lime are preferable.	<i>Nitric acid</i> causes yellow stains; and <i>sulphuric</i> , black. <i>Citric acid</i> is blackened by heat; <i>Muriatic acid</i> is detected by the addition of nitrate of silver, which throws down a white precipitate, an insoluble hydrochlorate of silver. The nitrate of baryta in solution gives to <i>sulphuric acid</i> a white precipitate, insoluble in nitric acid. <i>Nitric acid</i> , when heated with the sulphate of

NAMES.	SYMPTOMS.	ANTIDOTES.	TESTS.
ACIDS— <i>Continued.</i>	and exhaustion.— Burning pains in the mouth, throat and stomach; vomiting of dark, bloody matter, or violent purging; pulse faint and fluttering heart becomes paralyzed.		indigo in a tube, destroys the color. <i>Oxalic acid</i> gives a dense white precipitate with nitrate of silver; and with lime-water it gives a white precipitate which is converted into chloride of lime when heated.
ALKALIES. <i>Potassa, Soda, and their carbonates.</i>	Violent burning; caustic taste in the mouth; deglutition difficult and painful, with destruction of the lining membrane of the mouth and throat; vomiting often of blood; pain in the stomach; cold sweats; hiccough; bloody stools; subsultus and death.	<i>Vinegar or lemon-juice</i> ; the fixed oils, as olive, almond, castor, or linseed oils, convert the alkalies into soap.	Caustic potassa has a soapy feel, is very soluble, the solution having a strong alkaline reaction; restores the color of turmeric paper that has been reddened by an acid.
<i>Nitrate of Potassa, or Saltpetre.</i>	Severe pains in the stomach, and over the whole body; violent colic pains, with vomiting and purging of bloody matters.	Active emetic; antiphlogistic treatment; plentiful draughts of mucilaginous drinks.	Yields nitrous fumes, when heated with strong sulphuric acid; chloride of platinum gives a yellow precipitate. Nitrate of Potassa decrepitates on hot coals.
AMMONIA and <i>its Salts.</i>	Symptoms similar to those arising from potassa and soda; pungent suffocating sensation; inflammation of the mucous membrane.	Promptly administer vinegar, or lemon-juice; if inhaled, inhale heated vinegar.	<i>Ammonia</i> is distinguished by its pungent odor. <i>Carbonate of Ammonia</i> is precipitated by the salts of lime. <i>Muriate of Ammonia</i> , with nitrate of silver, yields an ammoniacal odor.
<i>Sulphuret of Potassa, or Liver of Sulphur.</i>	Violent burning pain, and a feeling of constriction in the throat; vomiting; strong odor of hydrosulphuric acid gas.	Chloride of soda or lime; common salt.	<i>Liver of Sulphur</i> , when solid, of a greyish, greenish, or yellowish color. With mineral acids, gives off hydrosulphuric acid gas.
ARSENIC and <i>its combinations.</i>	Intense heat and pain in the stomach; retching and vomiting; great thirst; sense of stricture in the throat; purging; great prostration; severe spasms; pallor of the face; clammy sweats; convulsions; death.	Stomach-pump; emetics, vomiting excited by tickling the throat with a feather; free administration of demulcents, flaxseed tea, warm or cold milk, infusion of slippery elm. But the most valuable antidote is the freshly prepared <i>hydrated peroxide</i> of iron, promptly adminis-	Several different <i>tests</i> are recommended and employed for the detection of this poison. <i>Arsenic in the solid form</i> should be reduced to the metallic state, by mixing it with powdered charcoal; then introduce the mixture into a small glass tube, and heat gradually over

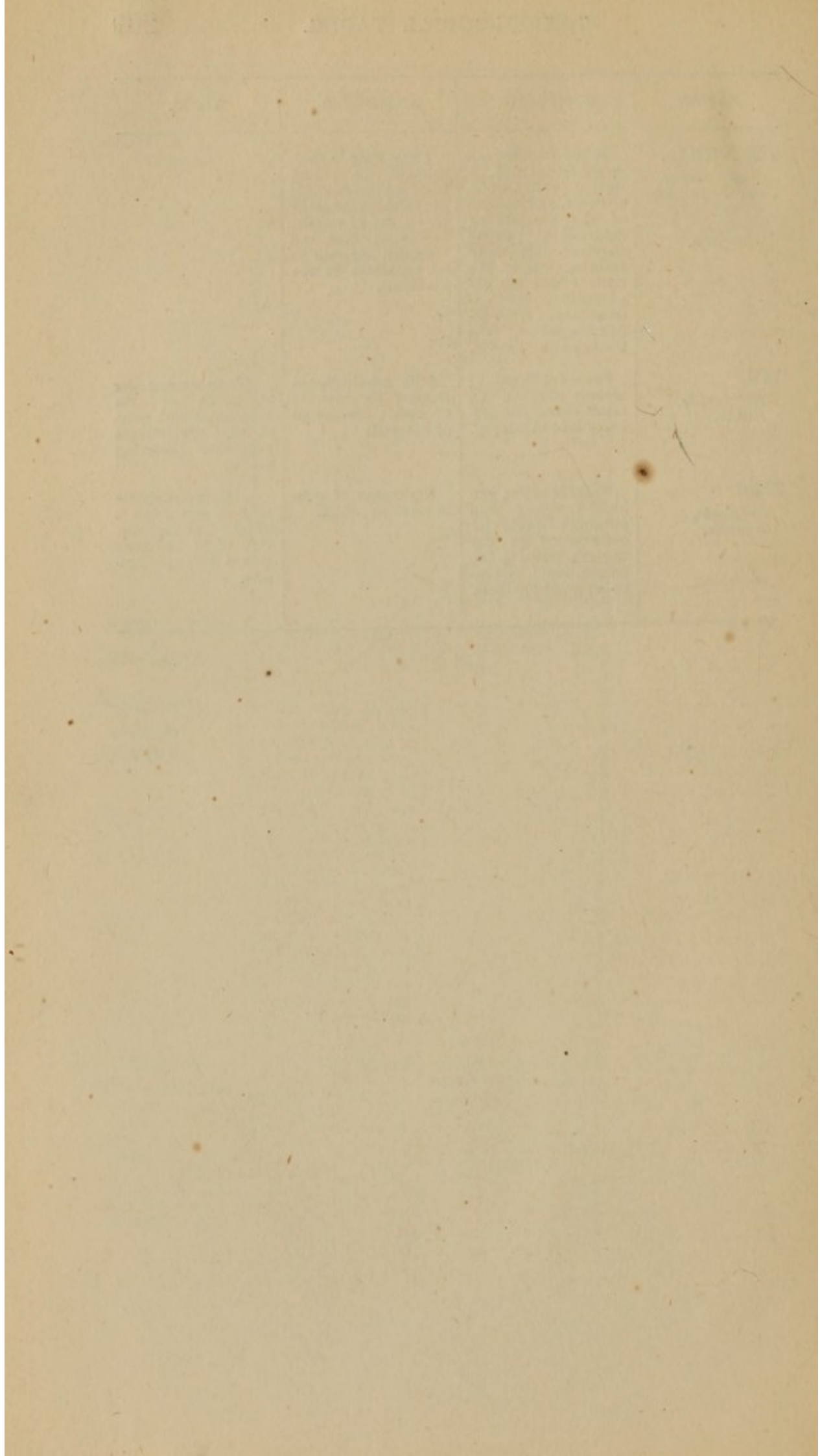
NAMES.	SYMPTOMS.	ANTIDOTES.	TESTS.
<p>ARSENIC— <i>Continued.</i></p>		<p>tered in large doses ; or the precipitated carbonate may be administered every five or ten minutes.</p>	<p>a spirit-lamp; a dark, shining metallic crust will be formed, a portion of which, when heated, will give out the garlic odor, if arsenic be present.</p> <p>When arsenic exists in the contents of the stomach, <i>in solution</i>, the liquid must be first clarified, and to this clear solution apply the following tests: A stream of <i>hydrosulphuric acid gas</i> throws down a <i>bright yellow precipitate</i>. <i>Ammoniaco-nitrate of silver</i> causes a <i>yellow precipitate</i>, which soon changes to a brown. <i>Ammoniaco-sulphate of copper</i> gives a <i>green precipitate</i>. The metallic crust will be obtained by heating any of these precipitates with powdered charcoal in a glass tube.</p> <p>Marsh's test consists "in throwing some of the suspected fluid into a mixture of one part of sulphuric acid and six of water, and some pure zinc being added, in setting fire to the gas, as it issues from the jet, and holding over it a plate of glass; if there be any arsenious acid present in the fluid, a spot of metallic arsenic will be obtained."</p>
<p>ANTIMONY. <i>Tartar Emetic.</i></p>	<p>Violent vomitings ; great heat and pain in the epigastric region ; purging ; colic pains ; difficult deglutition ; spasms.</p>	<p>When vomiting has not taken place, administer large draughts of warm water ; <i>decoction of bark, or of nut-galls ; opium</i>, when vomiting has continued long enough ; strong decoction of <i>green tea</i>.</p>	<p>Infusion of galls gives a <i>dirty white precipitate</i> ; subcarbonate of potassa, a <i>white precipitate</i>.</p>
<p>ALCOHOL.</p>	<p>When taken to excess, intoxication ; insensibility ; apo-</p>	<p>Stomach-pump ; powerful emetic ; copious draughts of</p>	

NAMES.	SYMPTOMS.	ANTIDOTES.	TESTS.
<i>ALCOHOL— Continued.</i>	plexy; paralysis; face swollen; difficult, stertorous breathing; breath has the odor of alcohol.	warm water, to encourage vomiting; large injections of salt and water; erect position; friction to the extremities when cold.	
BARYTA.	Symptoms analogous to those of irritant poisons in general; respiration weak; great prostration; convulsions; death.	The sulphates of soda or magnesia are prompt antidotes.	Sulphuric acid, or the sulphates.
BISMUTH.	Very similar in its action to that of other irritant poisons; acrid disagreeable taste; great irritation of the lining membrane of the alimentary canal; vomiting; spasms; suppressed urine; death.	Administer mucilaginous drinks freely; milk; reduce inflammatory action, on general principles.	
CANTHARIDES	Excessive irritation and burning in the throat, stomach, and belly; aversion to liquids; frequent, sometimes bloody, vomiting; priapism; strangury, with heat in the bladder; blood from the urethra; delirium; convulsions; death.	Emetics; encouraged by copious draughts of tepid water; milk, linseed tea, sugar and water very freely; oily and demulcent injections into the bladder to ease the strangury; antiphlogistic treatment.	
COPPER.	Symptoms resemble those caused by arsenic, and corrosive sublimate; a peculiar coppery taste in the mouth; coppery eructations; if fatal, death preceded by convulsions and insensibility.	The whites of eggs; albumen in any form; milk; iron filings are useful.	<i>Ammonia</i> gives to a solution of copper a beautiful blue color. A polished iron bar dipped in a solution of copper is coated by a crust of the metal.
HYDROCYANIC ACID. <i>Prussic Acid.</i>	Small doses cause nausea, pain in the head, salivation. In large, fatal doses, death almost instantaneous; death is sometimes preceded by convulsions.	<i>Ammonia</i> , in a concentrated form, should be administered; the inhalation of ammoniacal water; chlorine; cold affusion to the head.	The peculiar or peach-kernel odor; nitrate of silver causes a white precipitate; persalts of iron yields a greyish green precipitate.
IODINE.	Burning pain in the throat and pit of the stomach; retching; great pain and tenderness of the epigastrium; eyes suffused; headache.	Vomiting encouraged by tepid water; administer starch; wheat flour mixed with water.	Peculiar odor; mixed with a solution of starch, yields a blue precipitate.

NAMES.	SYMPTOMS.	ANTIDOTES.	TESTS.
<p>LEAD. <i>Litharge.</i> <i>Red Lead.</i> <i>White Lead.</i> <i>Carbonate of Lead.</i> <i>Sugar of Lead.</i></p>	<p>Sometimes slight irritation only is present; usually symptoms of inflammation occur, combined with those of lead-colic, followed by convulsions, coma, or by local paralysis; death.</p>	<p>Emetic of sulphate of zinc; Epsom or Glauber salts; chlorate of potash; dilute sulphuric acid. In paralysis, strychnia; in the mild form, <i>iodide of potassium.</i></p>	<p>Iodide of potassium and chromate of potassa, yield a fine yellow precipitate. A slip of zinc held in the solution receives a deposit of the lead, in the form of arborescent crystals.</p>
<p>MERCURY. <i>Corrosive Sublimete.</i> <i>Nitrate of Mercury.</i> <i>Cyanide of Mercury.</i></p>	<p>Excessive styptic taste; burning in the throat; violent vomiting; purging of blood; great irritation of the urinary organs; loss of voice; cold, clammy sweats; tendency to stupor; convulsions; death.</p>	<p>Whites of eggs; milk; gluten of wheat; albumen in any form should be promptly administered.</p>	<p>"Obtain a solution of corrosive sublimate, of which place a drop on the surface of polished gold, then bring a bit of iron in contact with both—a galvanic circle is thus formed, and the acid will be transferred to the iron, whilst the metallic mercury will be deposited on the gold." Potassa yields, with a solution of corrosive sublimate, a yellowish precipitate; ammonia, a white; lime water, an orange; and sulphurated hydrogen, a black precipitate.</p>
<p>NARCOTIC POISONS. <i>Opium,</i> <i>Henbane,</i> <i>Lettuce Opium,</i> <i>Solanum,</i> <i>Laurel, etc.</i></p> <p>DIAGNOSIS OF APOPLEXY <i>and</i> NARCOTIC POISONS.</p>	<p>"1. Apoplexy is generally preceded by certain premonitory symptoms, headache, tinnitus aurium, etc. 2. Apoplexy generally attacks old plethoric persons. 3. The symptoms of narcotic poisons come on gradually; those of apoplexy generally set in suddenly. 4. In apoplectic stupor, the patient cannot be aroused to consciousness; whilst in narcotism, the patient may be aroused from the deepest lethargy by shaking, by injecting water into his ear, or by speaking to him in a loud voice."</p>	<p><i>Evacuate the stomach.</i> Emetics of sulphate of zinc, assisted by titillation of the throat; cold water dashed on the</p>	
<p>OPIUM.</p>	<p>Giddiness; heaviness in the head; stupor, not preceded by any excitement; inclination to vomit; slow breathing; pu-</p>		

NAMES.	SYMPTOMS.	ANTIDOTES.	TESTS.
<i>OPIUM— Continued</i>	pils generally contracted; eyes closed; ghastly features; inclination to sleep irresistible; sometimes furious delirium; pulse very feeble; limbs relaxed; death.	face, where the stomach is torpid, may assist the action of the emetic. Large salt water or soap and water injections, to evacuate the bowels. The utmost pains should be taken to keep the patient aroused by causing incessant action. He should be dragged between two assistants, and cold water be repeatedly dashed on his head. Artificial respiration, stimulants, as ammonia, camphor, etc. After the poison is removed, strong coffee, decoction of galls, vegetable acids may be administered. If the heat declines, frictions and warmth must be perseveringly employed.	
HYOCYAMUS, or HENBANE.	Vertigo; pupils dilated; loss of voice; coma, or violent delirium.	Same antidotes as in treatment for opium.	
NARCOTIC ACRID POISONS.	This class of poisons includes those possessing a double action, the one local and irritating, the other consisting of an impression on the nervous system, which is sometimes indicated by narcotic, and at other times by violent tetanic, symptoms. They generally prove fatal by their action on the nervous system. The organs on which they act remotely are the brain, the spinal cord, and sometimes the heart.		
ATROPA BELLADONNA. <i>Cicuta Maculata, Hemlock, Tobacco, Thorn-apple, Foxglove, Hellebore, Ergot, etc. etc.</i>	Convulsive actions of the muscles of the face and limbs; violent agitation; delirium; severe vomiting and purging; great prostration; convulsions; death.	Active emetic; free purging with saline cathartic. If stupor, venesection is recommended. Leeches, etc., if inflammatory symptoms arise.	

NAMES.	SYMPTOMS.	ANTIDOTES.	TESTS.
STRYCHNIA. <i>Nux Vomica</i> <i>Cocculus Indri-</i> <i>cus,</i> <i>Upas,</i> <i>Woorara.</i>	These poisons act on the spinal cord, inducing convulsions, stiffness, and spasms of the muscles of respiration. Death may suddenly result from spasms, or the patient may die apparently from exhaustion, or from inflammation of the stomach and bowels.	Immediate expulsion of the poison from the stomach, by the stomach-pump or by an active emetic. Iodine, chlorine, and bromine, are said to be antidotes to the alkaloids.	
TIN. <i>Bichloride,</i> <i>Oxide.</i>	Severe colic pains; violent purging. In fatal cases, somnolency and catalepsy.	Milk administered freely; bicarbonate of soda; decoction of nut-galls.	When strong the bichloride of tin coagulates milk completely; precipitates vegetable coloring matter.
ZINC. <i>Sulphate,</i> <i>Acetate,</i>	Metallic taste; violent vomiting and purging; sense of constriction in the throat; pains in the epigastrium; dyspnoea; great paleness.	Carbonate of soda in solution; milk.	Hydrosulphuric acid throws down a white precipitate. The free alkalies give a white precipitate.



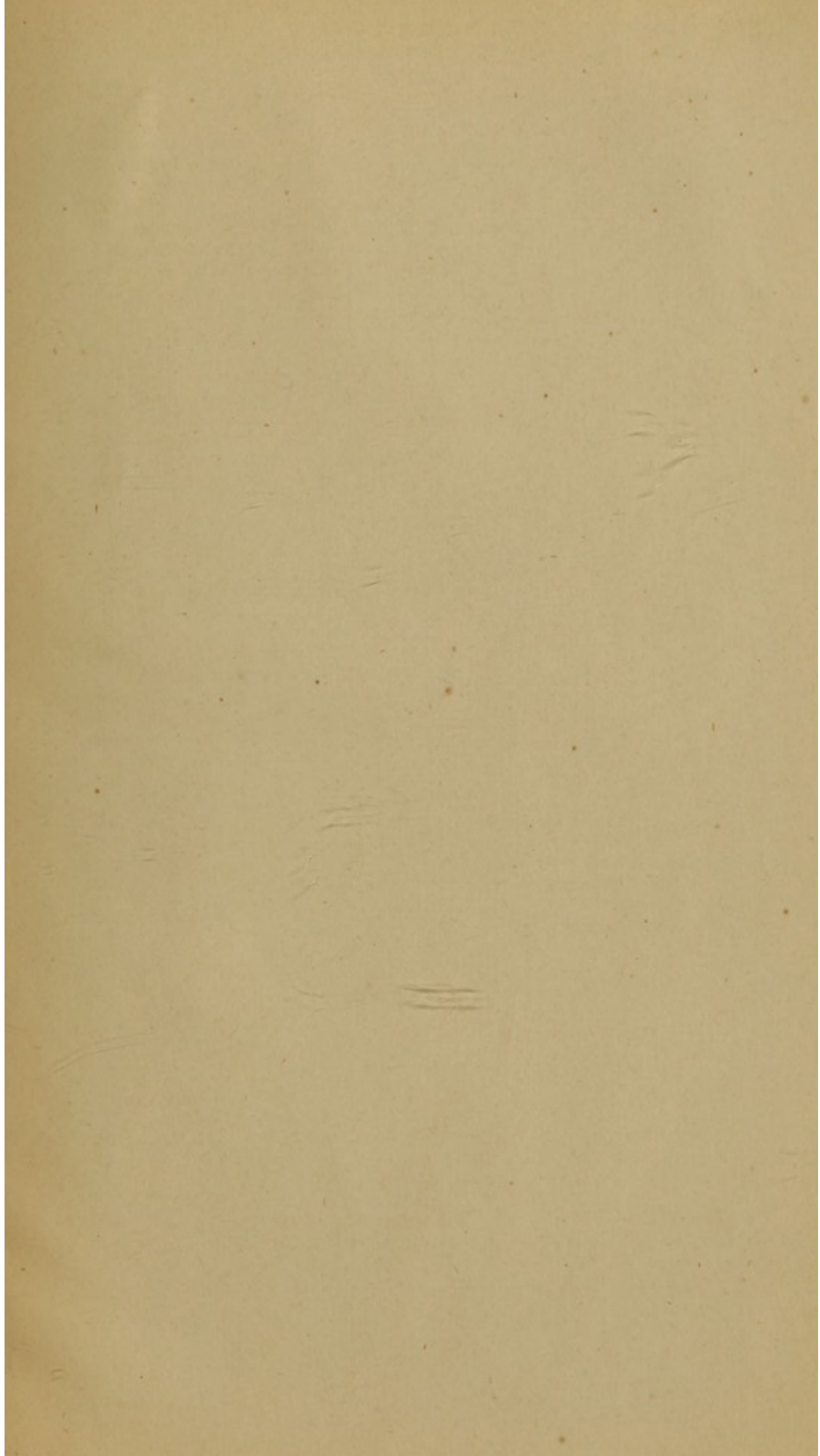
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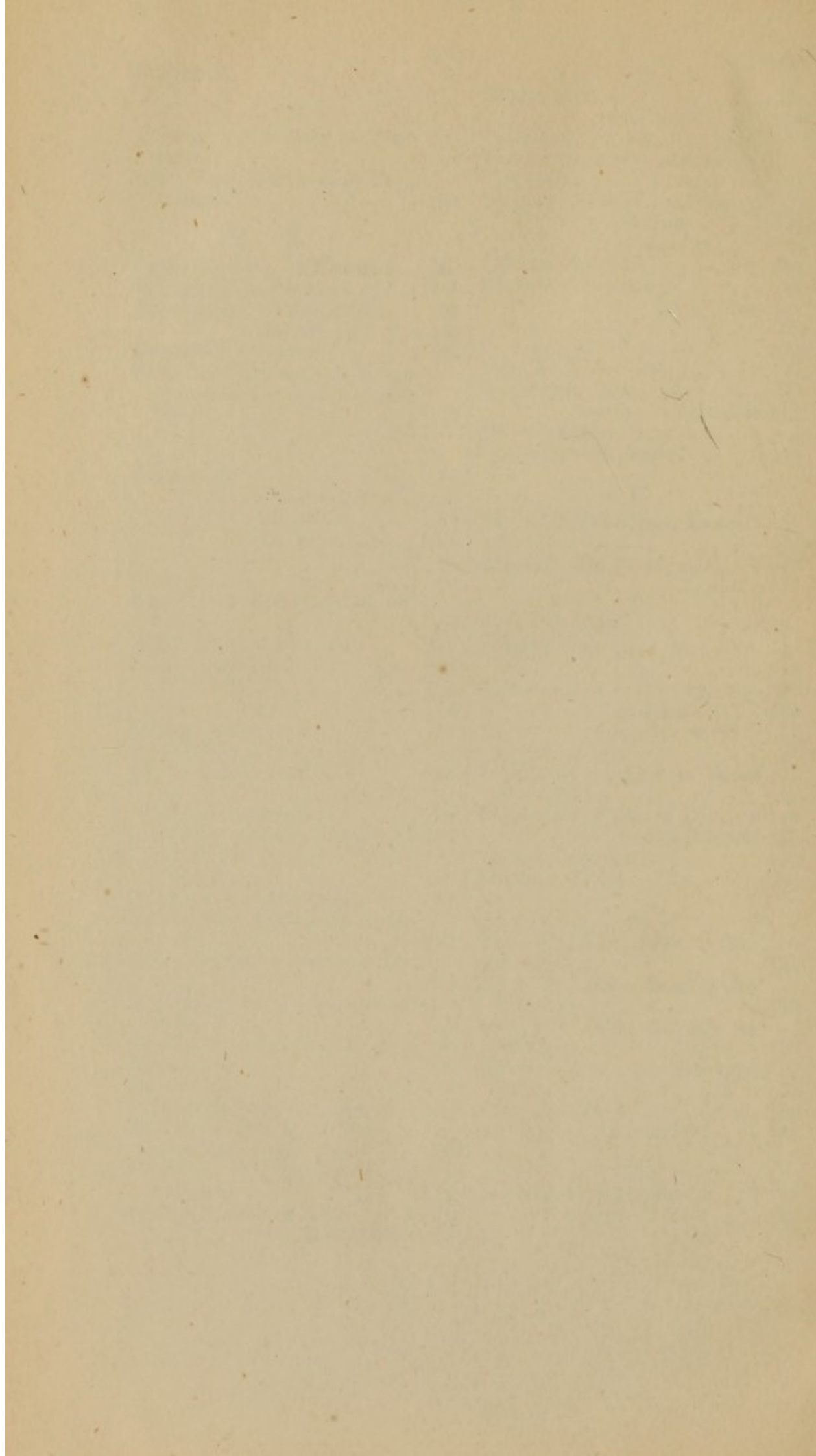
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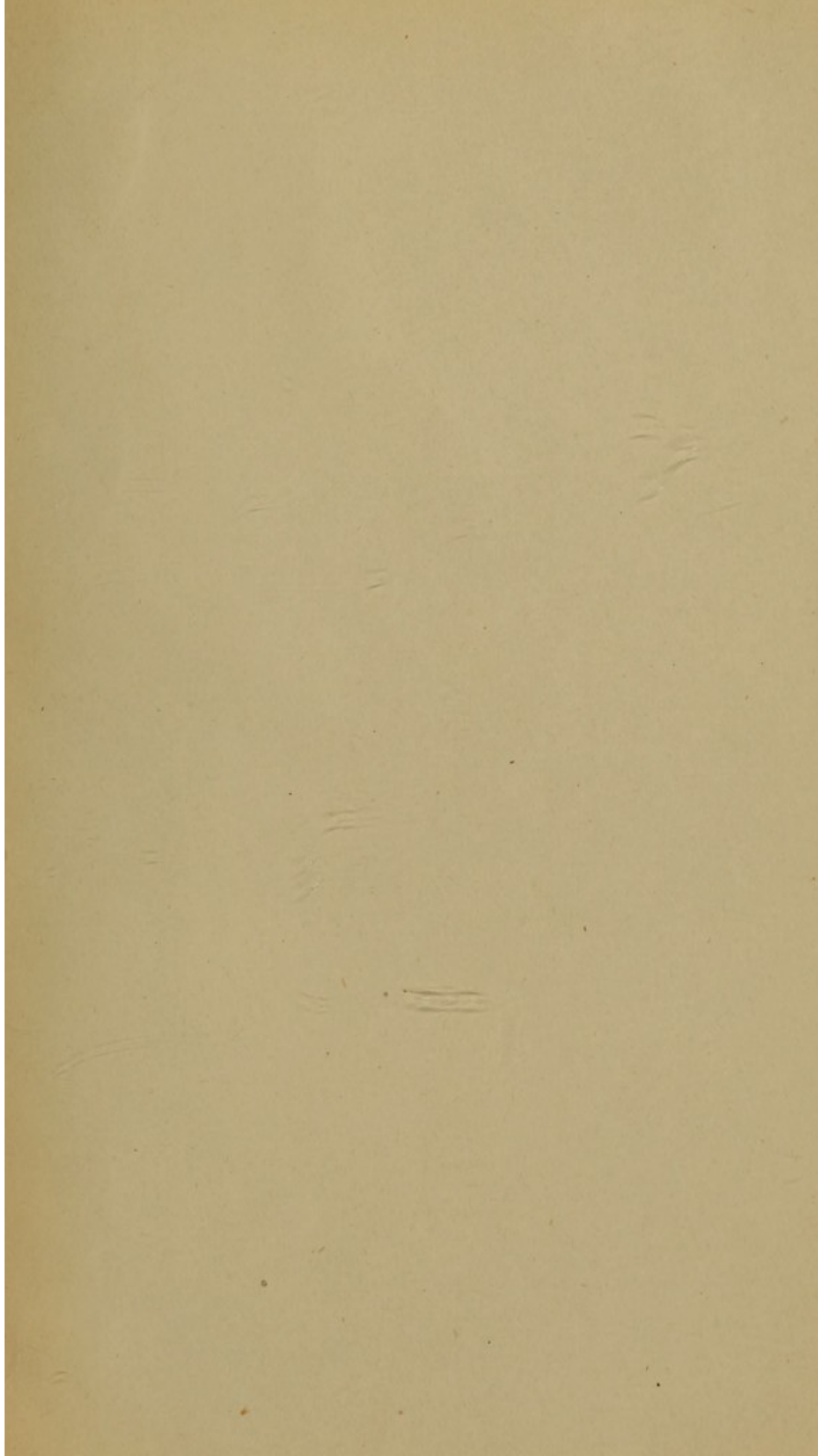
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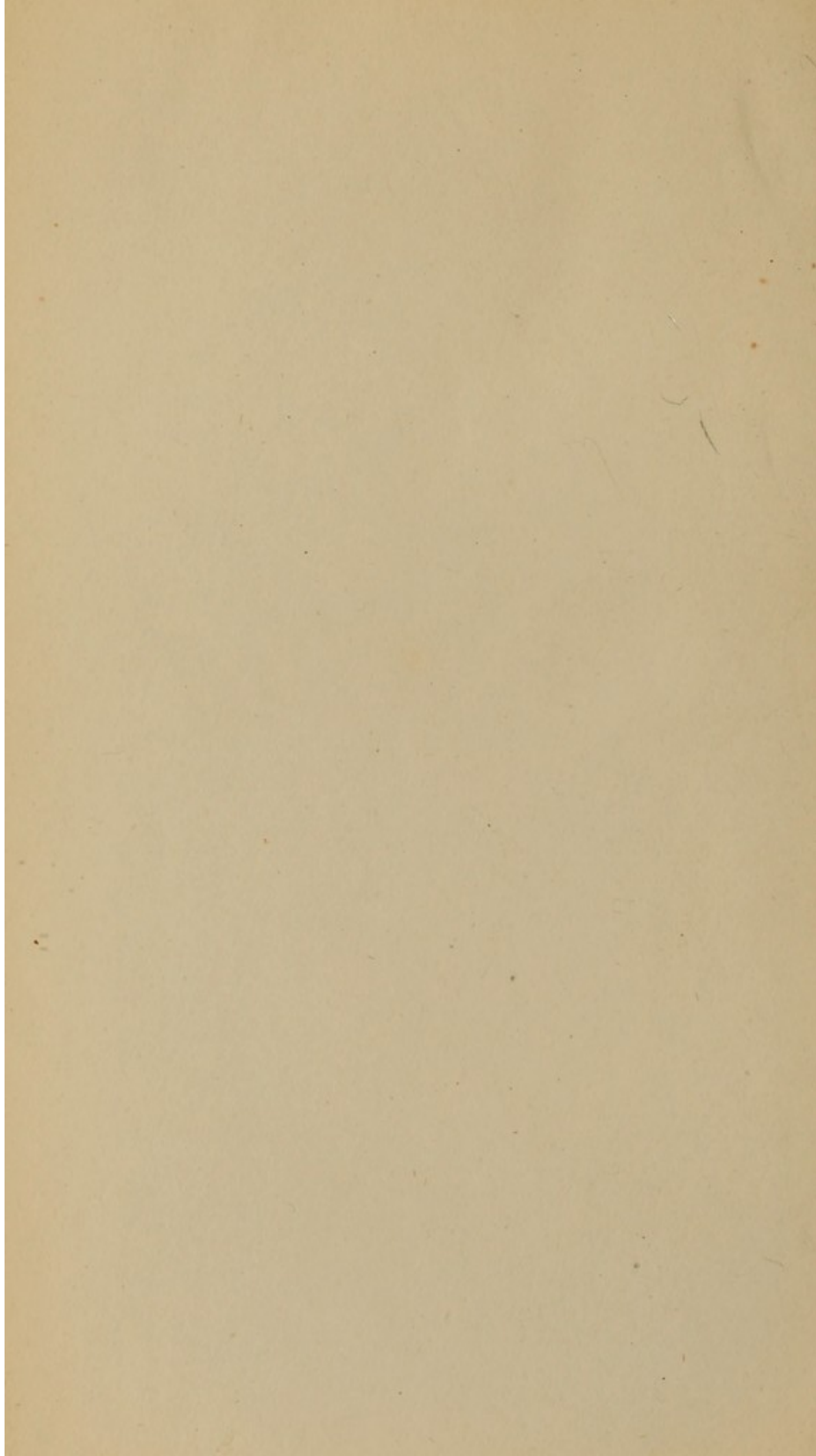
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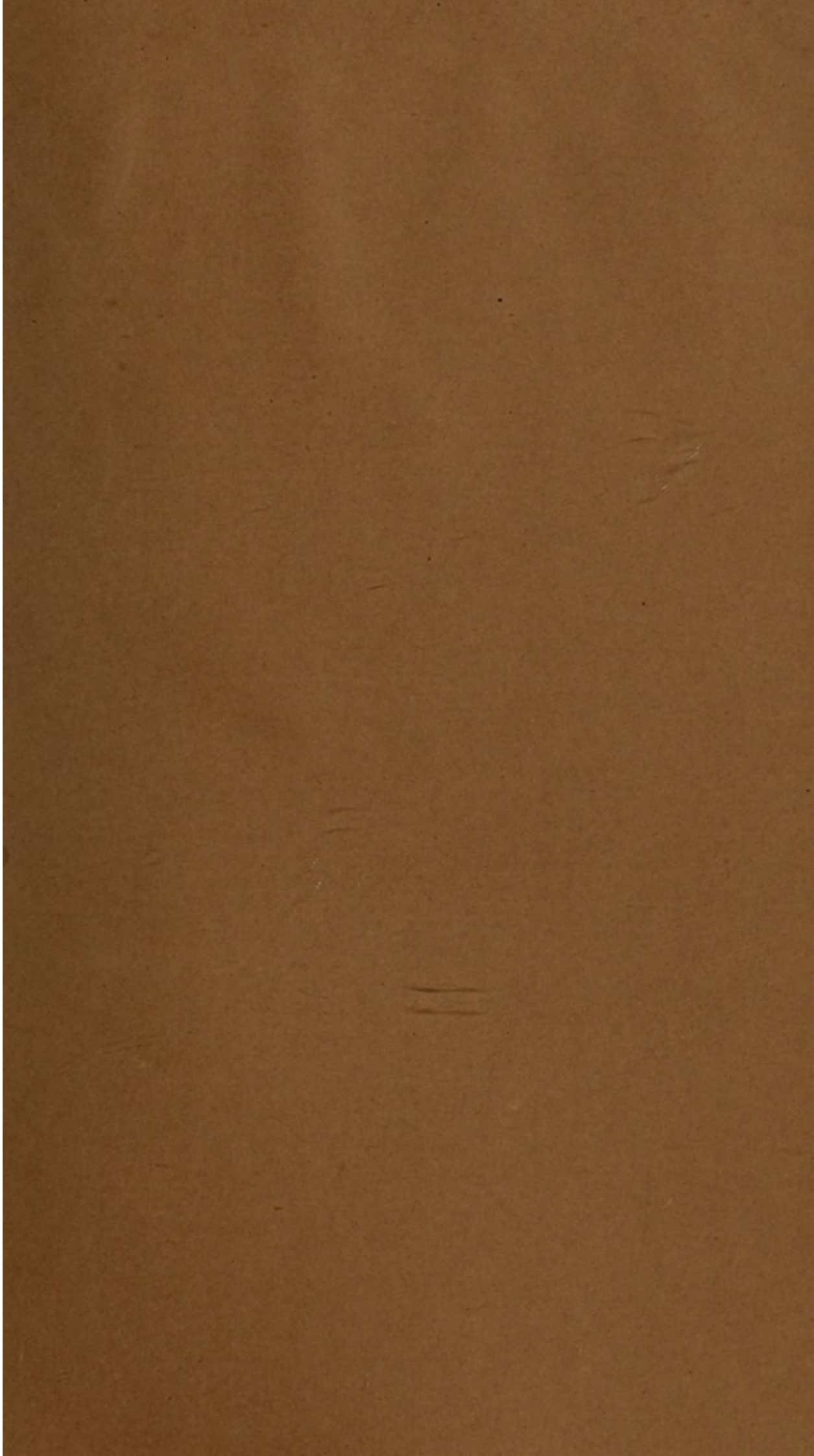
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