

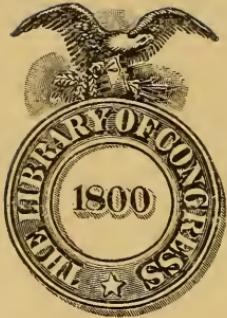
VETERINARY HANDBOOK
AND VISITING LIST

THOMAS B. ROGERS, D.V.S.

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VETERINARY HANDBOOK AND VISITING LIST

BY

THOMAS B. ROGERS, D.V.S.

LECTURER ON CONTAGIOUS DISEASES OF ANIMALS IN THE MEDICAL
DEPARTMENT OF TEMPLE UNIVERSITY, PHILADELPHIA, PA.



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PREFACE

No claims for originality can be made for the subject matter of this little book. My work as a practitioner of veterinary medicine, as a teacher, and as a member of a State Board of Veterinary Medical Examiners demonstrated to me the necessity of a compilation on the lines followed in the book, and, with a belief in its usefulness and under the advice of veterinary, medical, and pharmaceutical friends, I submit it to what I trust will be the favorable criticism of the veterinary and pharmaceutical professions.

I have great pleasure in acknowledging the help given to me by my colleagues, Dr. Chas. E. Vanderkleed, Professor of Analytical Chemistry in the Medico-Chirurgical College of Philadelphia, who furnished the résumé of the Harrison Anti-Narcotic Law, and Dr. F. E. Stewart, Professor of Materia Medica in the same institution.

THOMAS B. ROGERS, D.V.S.

WOODBURY, NEW JERSEY,
January, 1916.

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A Veterinary Handbook and Visiting List

FIRST LINES IN BACTERIAL THERAPY

Introduction.—For centuries the practice of medicine has been conducted empirically, *i.e.*, drugs have been given in certain cases of disease because their use appeared to be beneficial in prior cases. When, in the middle of the last century, the action of remedial agents on the animal body was made the subject of physiological experimentation, the hope arose that here was a path leading to exactitude in therapeutics. Unfortunately this hope has been but partly realized, and the administration of medicine is still in great measure empirical.

The fact that recovery from an attack of an infectious or contagious disease resulted in a more or less perfect immunity to subsequent attacks of the same disorder has long been common knowledge, but it remained for Jenner to apply this knowledge in the protection of the community against smallpox by vaccination with cowpox.

Pasteur, however, may well be termed the father of bacterial therapy, and the work done by him and his successors has placed in our hands diagnostic methods of absolute accuracy, protective methods

that have saved countless lives, and therapeutic procedures that give results absolutely unattainable by any other means whatever.

The Modes of Action of Bacterial Remedies.—These, however they may differ otherwise, *depend upon the utilization of the germ or its product in our conflict against it*, and the fact that bacterio-therapy has thus succeeded in turning the toxic properties of the disease-causing bacteria against themselves must be considered one of the marvels of modern science.

The conflict between the disease-producing germ and the invaded organism may end in the absolute triumph of the animal body and in such case not only are the invading germs destroyed, but the uninjured organism is always more or less immune to a subsequent invasion of like character.

It may end in a drawn battle, neither side being able to win while yet too powerful to lose, a condition characterized in the individual by diminished vital activity, in the germ by diminished virulence, or, lastly, the germ gaining the upper hand, may cause the death of the invaded organism.

A discussion at length of the defensive mechanism which the living body uses in its conflict with contagious disease is not allowable here; indeed, we can do no more than state that in the large it depends upon:

1. The power of the phagocytes (fighting cells) to encompass and destroy the invading germs.
2. The degree of activity possessed by the opsonins

(certain constituents of the blood-serum) whose function is to enfeeble the invaders and thus lead the way to their destruction by the phagocytes.

CLASSIFICATION OF BACTERIOLOGICAL PRODUCTS USED IN VETERINARY MEDICINE

- A. *Toxins.* Used principally as diagnostic agents.
Examples—tuberculin, mallein and abortin.
- B. *Antitoxins.* Neutralize toxins and give temporary passive immunity.
Examples—tetanus antitoxin, diphtheria antitoxin.
- C. *Bactericidal Sera.* Cause death of invading bacteria.
Examples—antistreptococcus serum, antipneumococcus serum.
- D. *True Vaccines.* Attenuated cultures of living bacteria.
Bio Vaccines.
Examples—anthrax vaccine, black-leg vaccine, give long-continued active immunity.
- E. *Bacterial Vaccines—Bacterins, Necro Vaccines.* Killed measured cultures of bacteria suspended in normal saline solution, give long-continued active immunity.
- F. Products of certain ultra microscopic disease-producing organisms.
 1. Hog-cholera serum gives temporary passive immunity.
 2. Rabies vaccine gives immunity if used shortly after the introduction of the virus.

Immunizing and curative sera consist of the blood-serum of animals (usually the horse) which have been highly immunized against the toxins of bacteria (example—tetanus antitoxin) or against the action

of living pathogenic bacteria (example—antistreptococcus serum). Some sera (example—antimeningococcic and antidysenteric) are produced by alternate injections of toxin and living germs, hence they are at once antitoxic and bactericidal.

The true antitoxic sera (examples—tetanus antitoxin, diphtheria antitoxin) have within themselves the necessary material for neutralizing toxins; they produce a passive immunity, *i.e.*, an immunity arising without effort on the part of the organism: an immunity from without, and this immunity is fleeting.

Bacterial vaccines (bacterins) increase the opsonins (Greek *Opsono*, I prepare for food); these are constituents of the bloom-serum which enfeeble the invading bacteria, and thus render them a more ready prey to the phagocytes (fighting cells). By stimulating the defensive organization of the animal body they increase its resistance, and thus enable it to combat the disease more readily and successfully.

The immunity they produce is active, *i.e.*, from within, and is much more prolonged than that produced by the use of the immunizing sera.

The diagnostic toxins usually produce three characteristic reactions:

1. A thermic reaction. Elevation of temperature.
2. A local reaction. More or less pronounced swelling at the point of injection.
3. A constitutional reaction. The patient is evidently unwell, chills or rigors may occur, the appetite

be diminished or lost, the hair stands the wrong way and the animal is listless and indifferent to his surroundings.

These reactions differ for different toxins and in different animals; thus, when using old tuberculin in making the usual subcutaneous test, the thermic reaction is usually the only one in evidence, although individual cattle may show swelling at the point of injection, or exhibit symptoms of general malaise, while "ophthalmic tuberculin" and "intradermal tuberculin" usually give rise to local reactions only.

Mallein usually causes all three reactions, the degree of swelling and the constitutional condition being perhaps of greater diagnostic value than the rise in temperature.

True Vaccines.—Examples—anthrax vaccine and black-leg vaccine. These furnish active immunity by giving the animal the disease in a mild form, the enfeebled germs increase the opsonizing powers of the blood-serum, thus rendering themselves a ready prey to the defensive cells of the body. In many cases this immunity is life-long, and one of the interesting questions to be answered in the future is *why* this induced active immunity persists for years.

As in naturally-acquired disease, the subjects of immunization by vaccines may present more or less evidences of sickness, although these are rarely well marked, and usually are not to be demonstrated by ordinary diagnostic methods.

The value of bacterial therapy will always be

augmented or diminished in proportion to the methods followed in its application. To ensure the greatest measure of success, we must, so far as possible, conform to the following conditions:

1. Only preparations of ascertained activity may be employed.
2. They must be administered in proper dosage.
3. They must be used early in the attack of disease, not as a last resort after other medication has failed.
4. Rigid antisepsis must be employed in their administration.
5. When protective agents such as anthrax or black-leg vaccines are given, the stock must be kept off infected pasture or premises until the process of immunization is completed.
6. Hog-cholera serum must be given in over-rather than under-dosage. No harm can accrue from an over-dose, while failure is invited if we attempt to limit the cost by cutting down the dose.
7. Unless conditions forbid, bacteriological remedies should be used by the only persons qualified to use them—physicians or veterinarians. To entrust their use to unskilled hands is always unwise, and usually unprofitable. The veterinarian should superintend their use, or, better, use them himself, and the druggist will serve his own and his customer's best interest by confining their use so far as may be to professional hands.

8. The druggist can, by acquiring a little knowledge of bacterial therapy, help his community and incidentally increase his business. Wounds of men or animals may become infected with tetanus bacilli, immunization with tetanus antitoxin is safe and certain. Treatment of established tetanus all too often ends in failure. It will therefore be evident that the druggist may do great service by suggesting the value of immunization against that disease whenever the opportunity arises

THE APPROXIMATE INCUBATIVE PERIOD OF THE MORE COMMON CONTAGIOUS AND INFECTIOUS DISEASES OF ANIMALS

	Authority
Anthrax.....	1-14 days.
Black Leg.....	3- 5 days.
Contagious Bovine Pleuro- pneumonia.....	7-30 days.
Distemper—Canine.....	2-15 days.
Dourine.....	15-30 days.
Foot-and-Mouth Disease..	2-11 days.
Fowl Cholera.....	$\frac{3}{4}$ - 2 days.
Glanders.....	3- 5 days.
Hemorrhagic Septicæmia..	$\frac{1}{4}$ - 2 days.
Hog Cholera.....	3-30 days.
Influenza (Pink Eye) Equine	3- 7 days.
Malignant Edema.....	None
Rabies:	
Dog.....	20-60 days.
Horse.....	30-60 days.
Cattle.....	15-60 days.
Swine.....	15-30 days.
Sheep.....	15-21 days.
Rinderpest.....	3- 9 days.
Strangles. Colt Distemper.	1- 8 days.
Swine Erysipelas.....	1- 7 days.
Tetanus.....	5-20 days.
Tuberculosis—Bovine.....	7-50 days.

It must always be kept in mind that while bacteriological remedies are adapted to the control of a specific ailment (examples—diphtheria antitoxin to diphtheria, tetanus antitoxin to tetanus, antistreptococcus serum to disease caused by streptococci) *they are not specific in the sense that they always cure the affections for which they are prescribed*, and prescriber and dispenser should take pains to educate the lay public on this matter.

They are the logical remedies to use, we can usually attain better results from them than by the use of any other therapeutic measures, but they will sometimes fail us when perhaps we have good reason to believe that success will follow their use. As they are, most of them, expensive, it is to the interest alike of druggist and veterinarian to make this point clear.

PRESCRIPTION WRITING

Medicines should always be formally prescribed and the ability to write a neat, intelligible and compatible prescription will be of considerable service to the young practitioner of veterinary medicine.

It will allow the dispensing druggist to say that, whatever other qualifications the veterinarian possesses, he has evidently been a diligent student of *materia medica* and *therapeutics*, and will impress the more intelligent portion of his clientèle with the idea that *their* veterinarian is a person of some general culture, even though his “little Latin and less

Greek" find sole expression in the correct setting down of the ingredients of a prescription.

It has often been suggested that the practice of writing prescriptions in a dead language (Latin) should be made unlawful, and the following are some of the reasons why, in the opinion of the sponsors of the suggestion, all orders on the druggist from the physician or veterinarian should be written in English:

1. That mistakes would be less likely to occur.
2. That the patient or the owner of an ailing animal should know what he or his was taking, and, inferentially, sit in judgment thereon.
3. That an order in English could be communicated verbally to the druggist, who would then furnish the ingredients at retail prices, the owner adding the necessary diluent—thus decreasing the cost of the remedy.

The first contention may be dismissed with a word: careless people will make errors alike in Latin and English, while errors on the part of the careful practitioner will be rare in whatever language he expresses his wants.

The second position is hardly tenable; indeed, it is usually better for an individual not to know what he is taking and it is unquestionably of no advantage to the owner of a sick animal to know even the names of the drugs prescribed by the attending veterinarian.

To the layman they are but names, and he is not concerned in the methods employed; the only way

he can judge of the propriety of their administration is by the results attained. He pays the doctor to do his thinking and it is the part of wisdom to let him do it without interference.

That English should be employed for the sole purpose of allowing the purchaser to plumb the depths of the difference in price between an ounce of castor oil bought on a verbal order over the counter, and the same amount of the drug included in a formal prescription, is nonsense.

Prescribing is a scientific function of the veterinarian; dispensing, of the druggist; each is engaged in the practice of a branch of the healing art and he is entitled to a pecuniary reward proportionate to the service rendered.

The advocates of prescription-writing in English should further remember that a prescription written in Latin can be dispensed in any part of the civilized world without the necessity of employing a linguist to interpret it. This alone should constitute a sufficient reason for the retention of the present method.

When writing a prescription we must determine the most suitable drug or drugs for the case before us, consider whether or no any of them have "side actions" of such character as to preclude their use, add to these principal ingredients other remedies that may increase their therapeutic activity or lessen undesirable effects, together with a suitable menstruum or diluent, consider their compatibility, and prescribe a proper dosage.

The properly trained practitioner will be careful to do all this according to certain rules of art and will divide his prescription into the necessary number of parts to form a harmonious whole.

These are: The superscription—the heading; the inscription—the names and quantities of the ingredients; the subscription—the directions to the druggist; the signa—the directions to the patient; and lastly the name of the prescriber.

To these necessities the careful prescriber will add the name of the patient and the date, and it is well to place the printed address of the practitioner on the prescription blank to facilitate reference to him if such be needed.

A prescription may consist of one or several ingredients, and while at the present day we discourage the writing of shotgun prescriptions, it is always well to ask ourselves whether a combination of drugs will give us better results than a single remedy. If nothing is to be gained by additions to the drug that most commends itself to our judgment, the employment of others constitutes a useless, if not detrimental, poly pharmacy. If, on the contrary, we prefer a combination of remedies, we must not be deterred from their use by any consideration of therapeutic fashion.

If, for example, we desire to prescribe a purgative bolus for Mr. Smith's horse, we proceed much as follows:

At the top of the prescription we write: For Mr. Smith's Bay Horse; below that at the left we place the superscription—the familiar crossed R. This may be translated as recipe—take—but it is really the ancient invocation to Jupiter, "O Jupiter, aid us," and its preservation to our day is an illustration of the conservatism of the practitioners of the healing art. Below this comes the inscription, and if the prescription consists of several ingredients we must be careful to place them in an accustomed sequence. First the base or most active ingredient; second the adjunct or aid to action; third, the corrigent or corrective deemed necessary to correct or qualify certain actions of the more active ingredients; and, lastly, the vehicle or diluent added to form them into a mass or liquid.

Next in order are directions to the compounder then the directions for administration, and, lastly, the prescriber's signature. Thus we write:

FOR MR. SMITH'S BAY HORSE

R

Aloe pulvis, ʒj	.....	Base
Hydrargyri chloride Mite, gr.X.	Adjuvant	
Zingiberis pulvis, ʒj	.....	Corrective
Alcoholis	.....	Vehicle
Aquæ āā q.s. ft. massa.		
M. ft. bolus No. j.		
Signa	.....	Give immediately
Jan. 1, 1915.		J. JONES, V.S.

**SOME LATIN PHRASES AND ABBREVIATIONS USED
IN PRESCRIPTIONS**

Word or Phrase.	Abbreviation.	Translation.
Ad.....		To, up to.
Ad libitum.....	Ad lib.....	At pleasure.
Agitato vase.....		The vial being shaken.
Alternis horis.....		Every other hour.
Ana.....	A or aa.....	Of each.
Aqua bulliens.....	Aq. bull.....	Boiling water.
Aqua fervens.....	Aq. ferv.....	Hot water.
Biduum.....		Two days.
Bis.....		Twice.
Bis in dies.....	Bis in d.....	Twice daily.
Cape capiat.....	Cap.....	Take, let him (or her) take.
Charta.....	Chart.....	A paper (medicated).
Chartula.....	Chart.....	A little paper for a powder.
Cibus.....	Cib.....	Food.
Cochleare amplum.....	Coch. amp.....	A tablespoonful.
Cochleare magnum.....	Coch. mag.....	A tablespoonful.
Cochleare modicum.....	Coch. mod.....	A dessertspoonful.
Cochleare parvum.....	Coch. parv.....	A teaspoonful.
Collyrium.....	Collyr.....	An eye wash.
Cras mane sumendus.....		To be taken to-morrow morning.
Cras nocte.....		To-morrow night.
Cras vespere.....		To-morrow evening.
Cujus; cujuslibet.....	Cuj.....	Of which; of any.
Cyatho theae.....		In a cup of tea.
Cyathus; cyathus vinarius.....	Cyath. c. vinar.....	A wineglass.
Da; detur.....	D. det.....	Give; let be given.
De die in diem.....	De d in d.....	From day to day.
Dimidius.....	Dim.....	One half.
Divide.....	D., Div.....	Divide (thou).
Donec alvus soluta fuerit.....		Until the bowels shall be moved (opened).
Durante dolore.....		While the pain lasts.
Ejusdem.....	Ejusd.....	The same.

SOME LATIN PHRASES AND ABBREVIATIONS USED
IN PRESCRIPTIONS—*Continued*

Word or Phrase.	Abbreviation.	Translation.
Et.....	F.	And.
Fiat lege artis.....	F. L. A.	Let it be made according to art.
Gradatim.....	.....	Gradually, by degrees.
Guttatim.....	Guttat.	Drop by drop.
Hora somni.....	H.S.	Just before retiring.
Idem.....	.....	The same.
In dies.....	In d.	Daily.
Injiciatur enema.....	.....	Let a clyster be given.
In pulmento.....	.....	In gruel.
Inter.....	.....	Between.
Mane primo.....	Mane pr.	Very early in the morning.
Misce.....	M.	Mix.
Mitte. mittatur.....	.....	Send, let it be sent.
Nox; noctis.....	.....	Night.
Nocte maneque.....	.....	At night and in the morning.
Oleum lini sine igne.	.....	Cold-drawn linseed oil.
Omni hora.....	Omn. hor.	Every hour.
Omni bihori.....	Omn. bih.	Every two hours.
Omni quadrante horæ	Omn. quad. hor.	Every quarter of an hour.
Omni mane.....	.....	Every morning.
Omni nocte.....	.....	Every night.
Partes æquales.....	P. æ.	Equal parts.
Per.....	.....	Through, by.
Per fistulam vitreum.	.....	Through a glass tube.
Phiala prius agitata.	P. P. A.	The bottle having first been shaken.
Poculum; pocillum.....	Pocul; pocill.	A cup; a little cup.
Pondus civile.....	.....	Civil. (Commercial or avoirdupois weight.)
Pondus medicinale.....	.....	Medicinal (Apothecaries') weight.
Primo mane.....	.....	Very early in the morning.
Pro.....	.....	For.

SOME LATIN PHRASES AND ABBREVIATIONS USED
IN PRESCRIPTIONS—*Continued*

Word or Phrase.	Abbreviation.	Translation.
Pro ratione ætatis		According to age.
Pro re nata	P. r. n.	According to circumstances, occasionally.
Quantum sufficiat or q. satis	Q. S.	As much as is sufficient.
Quaque hora	Q. H.	Every hour.
Quaque	Q. Q.	Each or every.
Quartus; quatuor		The fourth; four.
Quibus		From which.
Quinque; quintus		Five; the fifth.
Quorum	Quor.	Of which.
Quoti die		Daily.
Recens		Fresh.
Recipe	R.	Take.
Redigatur in pul- verem	Redig. in pulv.	Let it be reduced to powder.
Repetatur; repetan- tur	Rept.	Let it (them) be repeated.
Scatula	Scat.	A box.
Secundum artem		According to art.
Semissis or semis	Ss.	A half.
Semidrachma	Semidr.	A half dram.
Semihora	Semih.	A half hour.
Septem		Seven.
Septimana		A week.
Sic. Sic?		So. Is it so?
Signa	S. or sig.	Sign or mark (thou).
Signetur nomine pro- prio		Let it be labelled with its proper name.
Simul		Together.
Sine		Without.
Singulorum	Sing.	Of each.
Si opus sit		If necessary.
Si vires permittant	Si vir. perm.	If the strength will permit.

**SOME LATIN PHRASES AND ABBREVIATIONS USED
IN PRESCRIPTIONS—*Continued***

Word or Phrase.	Abbreviation.	Translation.
Statim.....	Stat.....	Immediately.
Stet. stent.....	.....	Let it (them) stand.
Sum at talem.....	.....	Let there be taken one like this.
Supra.....	.....	Above.
Tabella.....	Tabel.....	A tablet or lozenge.
Ter die, or ter in die.	T.d., or t.i.d..	Three times a day.
Tere simul.....	Ter sim.....	Rub together.
Trochischus.....	Troch.....	A troche.
Tussis.....	.....	A cough.
Ultimo præscriptus..	Ult. præsc.....	The last ordered.
Ut dictum.....	Ut. dict.....	As directed.
Utendum.....	Utend.....	To be used.
Vas vitreum.....	.....	A glass vessel.
Vehiculum.....	.....	A vehicle.
Vel.....	.....	Or.
Vitellus.....	Vit.....	The yolk (of an egg).
Vitello ovi solutus...	V. O. S.....	Dissolved in the yolk of an egg.
Vomitione urgente..	Vom urg.....	The vomiting being troublesome.

**STRENGTH OF U.S.P. TINCTURES COMMONLY USED
IN VETERINARY MEDICINE**

10 per cent.	20 per cent.	Other strengths.
Tinctura Aconiti Radicis	Tinctura Benzoinæ	Tinctura Opii Camphorata.
Tinctura Belladonnæ foliorium	Tinctura Calumbæ	$\frac{1}{16}$ of 1 per cent. powdered opium.
Tinctura Benzoini composita	Tinctura Cinchonæ	Tinctura Ferri Chloridi.
Tinctura Cannabis	Tinctura Cinnamomi	4.58 per cent. to 4.48 per cent. metallic iron.
Tinctura Cantharidis	Tinctura Guaiaci	Tinctura Iodi.
Tinctura Capsici	Tinctura Guaiaci Ammoniata	Not less than 6.75 gm. Not more than 7.25 gm. in 100 c.c.
Tinctura Cinchonæ Composita	Tinctura Hydrastis	Tinctura Lavandulæ Composita.
Tinctura Colchici Seminis	Tinctura Myrrhæ	Contains 8 parts per 1000 essential oil of lavender.
Tinctura Digitalis	Tinctura Quassiae	Tinctura Moschi, 5 per cent.
Tinctura Gelsemii	Tinctura Rhei	Tinctura Aurantii, Dulcis 5 per cent.
Tinctura Gentianæ Composita	Tinctura Rhei Aromaticæ	Tinctura Cardamomi, 15 per cent.
Tinctura Hyoscyami	Tinctura Tolentanti	
Tinctura Kino	Tinctura Valerianæ	
Tinctura Lobeliae	Tinctura Valerianæ Ammoniata	
Tinctura Nux Vomica	Tinctura Zingiberis	
Tinctura Opii		
Tinctura Physostigmatis		
Tinctura Sanguinariæ		
Tinctura Scillæ		
Tinctura Stramonii		
Tinctura Strophanthi		
Tinctura Veratrum Viride		

DOSE TABLE OF DRUGS COMMONLY USED IN VETERINARY MEDICINE CALCULATED FOR THE HORSE, COW, SHEEP, FOAL, CALF, PIG AND DOG

For the Cat the Smallest Dosage for the Dog will Usually be Appropriate

The doses herein laid down are safe, but the prescriber and dispenser must understand that many, indeed most, of the drugs may be given in much larger quantity without injury, indeed with benefit. The dose of any therapeutic agent may be defined as the amount that will give us the desired result in a given case, and it will, therefore, be apparent that a posological table can only help us by suggestion—it cannot be authoritative. If, for example, we would lower blood-pressure and select aconite as our therapeutic weapon, the dose will be the amount necessary to gain our end; whether we use more or less than the amount advised in a text-book is of no moment. Similarly, when giving morphia for the relief of pain, our endeavor must be to so feel our way as to relieve the symptom (pain) with the minimum possible amount of the remedy (morphia).

If we are timid we allow our patient to undergo unnecessary suffering; if over-bold, we may, while relieving his distress, leave him so deeply narcotized as to endanger his well-being. These illustrations might be indefinitely multiplied, but they will suffice to demonstrate that dosage is elastic. It must also be understood that the doses recommended pre-suppose drugs of standard quality, the official stand-

ards being those adopted by the Pharmacopœia of the United States and The National Formulary. To these we may add non-official standards adopted by certain manufacturers, whose work is necessarily somewhat ahead of even the latest editions of the official standards.

A single example will suffice: the Pharmacopœia of the United States requires Fluidextract of Belladonna Root to be of such strength that: 1 c.c. of finished product represents 1 Gm. of root; 100 c.c. of finished product contains 4 Gm. mydriatic alkaloids.

The first requirement ensures a determinate proportion between crude drug and finished product, but it will be seen that the therapeutic activity of the root is not passed upon; if the gramme of crude drug is weak the cubic centimetre of finished product is weak; if strong the fluidextract is strong, and as chemical analysis and physiological testing demonstrate that drugs vary in activity, the first requirement gives no assurance of value of the remedy. The Pharmacopœia removes this uncertainty by requiring a definite proportion of mydriatic alkaloids (active constituents of the drug) and the manufacturer can concentrate a weak product or dilute one too strong and supply a preparation of standard strength, a *standardized product*. Much therapeutic nihilism has resulted from the inferior quality of the crude drugs and galenical preparations employed and it is the duty alike of prescriber and dispenser to assure themselves of the quality of ingredients in prescriptions.

**DOSE TABLE OF DRUGS COMMONLY USED IN VETERINARY MEDICINE CALCULATED FOR THE HORSE,
COW, SHEEP, FOAL, CALF, PIG AND DOG.**

For the Cat the Smallest Dosage for the Dog will Usually be Appropriate.

Name of drug	Horse	Cow	Sheep, calf, foal	Pig	Dog	Notes
Acacia						May be given ad libitum to all animals.
Gum Arabic	3j-5ij	5j-5ij	3ss-5j		gr. iii-vii .2-.5 gm.	
Acetanilidum $C_6H_5NHCO_2H_3O$	4-8 gm.	4-8 gm.	2-4 gm.		gr. v-gr. x .3-.6 gm.	
Acetphenetidin Phenacetin	3ij-3ijj	3ij-3ijj	3j-3iss		gr. ¹ / ₁₀ -1/10 .002-.006gm	Antidotes: Lime Water, Salts of Iron & Mag- nesia.
$C_{10}H_{13}NO_2$	8-12 gm.	8-12 gm.	4-6 gm.		gr. v-xv .3-1 gm.	
Acid Arsenosum Arsinous Acid White Arsenic As_2O_3	gr. j-v .06-.3 gm.		gr. j-ij .06-.12 gm.			
Acidum Benzoicum Benzoic Acid Flowers of Benjamin $HC_7H_5O_2$	3ij-3iv	3ij-3iv	3ss-3j	3ss-3j	gr. v-xv .002-.006gm	
Acidum Boricum Boric Acid H_3BO_3	8-15 gm.	8-15 gm.	2-4 gm.	2-4 gm.	.3-1 gm.	
Acidum Carbolicum Carbolic Acid Phenol C_6H_5OH			gr. xx-5ss 1.3-2 gm.		gr. ss-j .3-.6 gm.	.03-.06 gm.
	gr. xv-xxx	gr. xv-xxx	gr. v-x	gr. v-x	gr. ss-j	
	1-2 gm.	1-2 gm.	.3-.6 gm.	.3-.6 gm.		

DOSE TABLE OF DRUGS

21

Name of drug	Horse	Cow	Sheep, calf, foal	Pig	Dog	Notes
Acidum Carbolicum Liquefactum Liquefied Carbolic Acid Acid Carbolic + 10% = H_2O						Dose a little larger than that of crystalline Carbolic Acid.
Acidum Citricum Citric Acid $H_3.C_6H_6.O_7$	3ij-3iv	3ij-5iv 8-15 gm.	3ss-3j 8-15 gm.	3ss-3j 2-4 gm.	gr. x-5ss .6-2 gm.	
Acidum Gallicum Gallic Acid	3ij-3iv 8-15 gm.	5ij-5iv 8-15 gm.	5ss-5j 2-4 gm.	gr. x-5ss .6-2 gm.	gr. v-xx .3-1.3 gm.	
Acidum Hydrochloricum Dilutum Dilute Hydrochloric Acid S. G. 1.050	5j-5ij 4-8 c.c.	5ij-5iv 8-15 c.c.	5ss-5j 2-4 c.c.	5ss-5j 2-4 c.c.	¶xx-xxx .6-2 c.c.	Diluted with water.
Acidum Hydrocyanicum Dilutum Dilute Hydrocyanic Acid Prussic Acid 2% solution HCN in H_2O	¶xx-xi 1.3-2.6 c.c.	¶xx-xi 1.3-2.6 c.c.	¶v-xv .3-I c.c.	¶ij-v .12-.3 c.c.	¶i-ij .06-.2 c.c.	Use cautiously.
Acidum Lacticum Lactic Acid $HC_3.H_6O_3$	5ij-5iv 8-15 c.c.		3ss-3j 2-4 c.c.		¶v-¶xv .3-I c.c.	
Acidum Nitricum Dilu- tum Dilute Nitric Acid S. G. 1.057	3j-3ij 4-8 c.c.	3ij-5iv 8-15 c.c.	3ss-3j 2-4 c.c.	3ss-3j 2-4 c.c.	¶x-5ss .6-2 c.c.	Diluted with water.

DOSE TABLE OF DRUGS

23

Name of drug	Horse	Cow	Sheep, calf, foal	Pig	Dog	Notes
Acidum Nitro-Hydro-chloricum Dilutum Dilute Nitro-Hydro-chloric Acid S. G. 1.05	5j-5ij	5ij-5iv	5ss-5j	5ss-5j	¶x-5ss	Diluted with water.
Acidum Phosphoricum Dilutum Dilute Phosphoric Acid S. G. 1.057	5j-5ij	5ij-5iv	5ss-5j	5ss-5j	.6-2 c.c.	Diluted with water.
Acidum Sulphuricum Dilutum Dilute Sulphuric Acid S. G. 1.070	5j-5ij	5ij-5iv	5ss-5j	5ss-5j	.6-2 c.c.	Diluted with water.
Acidum Sulphuricum Aromaticum Aromatic Sulphuric Acid Elixir of Vitriol	5ss-5j	5j-5ij	¶xv-5ss	¶xv-5ss	¶v-xv	Well diluted with water
Acidum Sulphurosum Sulphurous Acid H_2SO_3	5j-5ij	5j-5ij	5j-5ij	5j-5ij	.3-1 c.c.	Diluted with water.
Acidum Tannicum Tannic Acid Tannin	30-60 c.c.	30-60 c.c.	4-8 c.c.	4-8 c.c.	2-8 c.c.	
Acidum Tartarium Tartaric Acid $\text{H}_2\text{C}_4\text{H}_4\text{O}_6$	5ss-5ss	5ss-5ss	5ss-5j	gr. x-5ss	gr. j-xv	
	2-15 gm.	2-15 gm.	2-4 gm.	.6-2 gm.	.06-1 gm.	
	5ij-5iv	5ij-5iv	5ss-5j	5ss-5j	gr. x-5ss	
	8-15 gm.	8-15 gm.	2-4 gm.	2-4 gm.	.6-2 gm.	

DOSE TABLE OF DRUGS

25

Name of drug	Horse	Cow	Sheep, calf, foal	Pig	Dog	Notes
Aconitum Radix Aconite Roots	gr. iiij - xx	gr. iiij - xx			gr. 1/10-ij	
Monkshood	.2-I.3 gm.	.2-I.3 gm.			.006-.12 gm.	
Aconitina	gr. 1/30-1/15	gr. 1/30-1/15			gr. 1/200-1/100 .0003-.0006 gm.	
Aconitine	.002-.004 gm.	.002-.004 gm.				
Æther Ether	3j-3ij	3j-3ij	3ij-3iv	3ij-3iv	3x-3j	
Sulphuric Ether (C ₂ H ₅) ₂ O	30-60 c.c.	30-60 c.c.	8-15 c.c.	8-15 c.c.	.6-4 c.c.	
Alcohol Spirit of Wine	3j-3ij	3j-3ij	3ij-3iv	3ij-3iv	3j-3ij	Well diluted.
C ₂ H ₅ .OH	30-90 c.c.	30-90 c.c.	8-15 c.c.	8-15 c.c.	4-8 c.c.	
Ale, Beer	Oj-Oij	Oj-Oij				
Alcoholic Content 3% - 5%	480-1000 c.c.	480-1000 c.c.				
Alöe Aloes	3ss-3iss	3j-3ij	3ij-3vi	3ii-3iv	gr. x-3j	
The concrete juice of various species of aloes	15-45 gm.	30-60 gm.	8-24 gm.	8-15 gm.	.6-4 gm.	Aloes for veterinary use should be of Barbadoes type, i.e. should give a rose-red reaction with Tincture of Iodine in dilute aqueous solution
Aloinum	3ij-3ij				gr. ij-xx	
Aloin	8-12 gm.				.12-1.3 gm.	

DOSE TABLE OF DRUGS

27

Name of drug	Horse	Cow	Sheep, calf, foal	Pig	Dog	Notes
Althea						Ad libitum to all animals.
Marsh-mallow Root	5ij-5iv	gr.xx-5j	gr.v-x			
Alumen (Potash Alum)	8-15 gm.	1.3-4 gm.	.3-.6 gm.			
Al ₂ K ₂ (SO ₄) ₄ + 24H ₂ O	5ss-5j	5j-5ij	¶xx-xx			
Ammoniaæ Aqua, U.S.P. Ammonia Water Contains 10 per cent, by weight of gaseous NH ₃ in water	15-30 c.c.	30-60 c.c.	.6-1.3 c.c.			
Ammoniaæ Aqua Fortior, U.S.P. Stronger water of Am- monia (28 per cent, by weight of gaseous NH ₃ in water)	8-24 c.c.	8-24 c.c.	4 c.c.	.3-.6 c.c.		
Ammonii Benzoas Benzolate of Ammonia NH ₄ C ₇ H ₅ O ₂	5ij-5iv	5ss-5j	gr.v-xv			
Ammoniaæ Carbonas, U.S.P.	8-15 gm.	8-15 gm.	2-4 gm.	.3-1 gm.		
Carbonate of Ammonia	5j-5ij	5iji-5vj	gr.xv-xl	gr.ii-j-xx		
	4-8 gm.	12-24 gm.	1-2.6 gm.	1-2.6 gm.	.2-1.3 gm.	Full doses are emetic for dog.

DOSE TABLE OF DRUGS

29

Name of drug	Horse	Cow	Sheep, calf, foal	Pig	Dog	Notes
Ammonii Chloridum Chloride of Ammonium NH ₄ Cl	5ij-5iv 8-15 gm.	5ijj-5vj 12-24 gm.	gr. xv-xl 1-2.6 gm.	gr. xv-xl 1-2.6 gm.	gr. iij-x .2-.6 gm.	
Ammonii Valeras Valerianate of Ammonia NH ₄ .C ₆ H ₅ O ₂					gr. ij-v .12-.3 gm.	
Ammoniacum Ammoniac	5j-5ij 30-60 gm.	5j-5ij 30-60 gm.	5ij-5iv 8-15 gm.	5ij-5iv 8-15 gm.	gr. v-xxx .3-2 gm.	
Gum Ammoniac					mpii-v .12-.3 c.c.	By inhalation.
Amyl Nitris Nitrite of Amyl C ₅ H ₁₁ NO ₂	5ss-5j 2-4 c.c.					
Antipyrina Antipyrine	5ijj-5iv 12-15 gm.	5ijj-5iv 12-15 gm.	5ss-5j 2-4 gm.	5ss-5j 2-4 gm.	gr. v-xx .3- 1.3 gm.	
C ₅ H ₅ (CH ₃) ₂ C ₃ HN ₂ O					gr. 1/10-ij .24-.6 gm. Emetic	
Antimonii et Potassii Tartras Tartarized Antimony Tartar Emetic 2K(SbO)C ₄ H ₄ O ₆ +H ₂ O	5j-5ij 30-60 gm.	5j-5iv 8-15 gm.	5j-5iv 8-15 gm.	5j-5iv 4-15 gm.	.006-.12 gm. 4-15 gm.	Should be given very carefully to dogs, as it readily causes vom- iting in those animals.
Anisum Anise Seed					gr. x-xxx .16-2 gm.	

DOSE TABLE OF DRUGS

31

Name of drug	Horse	Cow	Sheep, calf, foal	Pig	Dog	Notes
Apomorphine Hydrochloridum $\text{C}_{17}.\text{H}_7\text{NO}_2\text{HCl}$				gr. $\frac{1}{30}$ - $\frac{1}{10}$ Subcutane- ously as an emetic		Much smaller doses are given to the dog as an expectorant.
Areca	3ss-3j		3j-3ij		gr. xv-3ij	Given to lambs in doses of 3j-4 gm.
Areca Nut	15-30 gm.		4-8 gm.		1-8 gm.	For Tapeworm.
Betel Nut	Tæniacide		Tæniacide		Tæniacide	
Argentum Nitras Nitrate of Silver Lunar Caustic $\text{Ag}.\text{NO}_3$	gr. v-x	gr. v-x	gr. j-ij	gr. j-ij	gr. 1/8-1/2	
Asafotidæ Asaetida	3ss-3j	.3-.6 gm.	.3-.6 gm.	.06-.12 gm.	.06-.12 gm.	
Aspidium Male Fern	15-30 gm.	15-30 gm.	3j-3ij	3j-3iv	gr. iii-xij	
Atropina Sulphas Sulphate of Atropia $(\text{C}_{17}.\text{H}_{23}\text{NO}_3)_2.\text{H}_2\text{SO}_4$	3v-3vj	3v-3vi	3ij-3vj	4-15 gm.	.18-.8 gm.	Tæniafuge.
Baccæ Juniperi Juniper Berries	150-180 gm.	150-180 gm.	60-180 gm.	15-30 gm.	15-30 gm.	
	gr. j-iss	gr. j-ii	gr. 1/15-1/12	gr. 1/15-1/12	1/120-1/30	
	.06-.09 gm.	.06-.12 gm.	.004-.005 gm	.004-.005 gm	.0005-.002 gm	
	3ss-3j	3ss-3j	3ij-3iv	3ij-3iv	8-15 gm.	
	15-30 gm.	15-30 gm.	8-15 gm.	8-15 gm.		

DOSE TABLE OF DRUGS

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Name of drug	Horse	Cow	Sheep, calf, foal	Pig	Dog	Notes
Balsam Peruvianum Peruvian Balsam Balsam of Peru					¶¶x-XXX .6-2 c.c.	
Balsam Tolutanum Balsam of Tolu					gr. x-XXX .6-2 gm.	
Bari Chloridum Chloride of Barium	5ij-5iv 8-15 gm. By mouth only, much diluted with water					For hypodermic injection for horse give 7-15 grains dissolved in 10 c.c. of water. This dose must be given intravenously (never under the skin) and must not be repeated.
Ba.Cl ₂	5ss-5j	5j-5iss 30-45 gm.			gr. j-v .06-.3 gm.	
Belladonna Folia Belladonna Leaves Deadly Nightshade	15-30 gm.					
Bismuth Subcarbonas Subcarbonate of Bismuth $(BiO)_2CO_3 + H_2O?$	5ij-5iv 8-15 gm.		5j-5iss 4-6 gm.		gr. x-XXX .6-2 gm.	
Bismuth Subnitras Subnitrate of Bismuth $BiO NO_3 + H_2O?$	8-15 gm.		5j-5iss 4-6 gm.		gr. v-x .6-2 gm.	
Bismuth Subsaliocylate Sub-salicylate of Bismuth					gr. v-x .3-.6 gm.	

DOSE TABLE OF DRUGS

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Name of drug	Horse	Cow	Sheep, calf, foal	Pig	Dog	Notes
Buchu Buchu Leaves	5j-5ij 30-60 gm.	5j-5ij 30-60 gm.	5j-5iv 4-15 gm.	5j-5ij 4-8 gm.	gr. xv-5ss 1-2 gm.	
Caffeina Citrata	gr.xv-5ss	5j-5iss			gr. i-vi .06-.36 gm	For hypodermic use Winslow recommends the following: <i>W</i> Caffeine, Sodii Benzoas aa gr. xv, Aquæ q. s.
Citrate of Caffeine	1-2 gm.	4-6 gm.			gr. v-xx	For the prevention or arrest of hemorrhage.
Calcii Chloridum Chloride of Calcium CaCl ₂	5iv-5j 15-30 gm.	5iv-5j 15-30 gm.			.3-1.3 gm	
Calcii Phosphatis Precipi- tatum Precipitated Phosphate of Lime Ca ₃ (PO ₄) ₂	5ij-5iv 8-15 gm.	5ij-5j 15-30 gm.	5j-5ij 4-8 gm.	5j-5ij 4-8 gm.	gr. v-xx .3-1.3 gm.	
Calcium Carbonate	5j-5ij 30-60 gm.	5ij-5iv 60-120 gm.	5ij-5iv 8-15 gm.	5ij-5iv 8-15 gm.	gr. x-5j .6-4 gm.	
Cambojii Gamboge	5ss-5j 15-30 gm.	5j-5iss 30-45 gm.			gr. v-x .3-.6 gm.	A very drastic cathartic sometimes given in milk fever of cattle or azoturia of the horse.
Camphora Camphor	5j-5iii 4-12 gm.	5ij-5iv 8-15 gm.	gr. xv-5j 1-4 gm.	gr. iiij-xx 1-4 gm.	gr. iiij-xx .18-1.3 gm.	
C ₁₀ H ₁₆ O						

DOSE TABLE OF DRUGS

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Name of drug	Horse	Cow	Sheep, calf, foal	Pig	Dog	Notes
Cantharis Cantharides	gr. v-xx	gr. v-xx	gr. iv-viij		gr. j-iij	
Spanish Fly	.3-1.3 gm.	.3-1.3 gm.	.25-.5 gm.		.06-.12 gm	
Capsicum Cayenne Pepper	gr. xx-3j	3j-3ij	gr. v-xv	gr. i-viij		
Red Pepper	1.3-4 gm.	4-8 gm.	.3-1 gm.	.3-1 gm.	.06-.5 gm.	
Carbo Animalis Animal Charcoal	3j-3ij	3j-3ij	3ij-3iv	3ij-3iv	gr. xx-3j	
Bone Black	30-60 gm.	30-60 gm.	8-15 gm.	8-15 gm.	1.3-4 gm.	
Carbo Ligni	3j-3ij	3j-3ij	3ij-3iv	3ij-3iv	gr. xxx-3j	Dose same as of animal Charcoal.
Wood Charcoal	30-60 gm.	30-60 gm.	8-15 gm.	8-15 gm.	1.3-4 gm.	
Catechu	3ss-3j	3j-3ij	3j-3ij	3j-3ij	gr. v-xxx	
Gum Catechu	15-30 gm.	30-60 gm.	4-8 gm.	4-8 gm.	.3-2 gm.	
Cerii Oxalas Oxalate of Cerium $Ce_2(C_2O_4)_3 + 10H_2O$					.18-.3 gm.	
Chloroformum Chloroform	3j-3ij	3j-3ij	3ss-3j	3ss-3j	3jii-xx	
CH.CL ₃	4-8 c.c.	4-8 c.c.	2-4 c.c.	2-4 c.c.	.12-I.3 c.c.	

DOSE TABLE OF DRUGS

39

Name of drug	Horse	Cow	Sheep, calf, foal	Pig	Dog	Notes
Chloralum Hydratum Hydrate of Chloral $\text{C}_2\text{HCl}_3\text{O} + \text{H}_2\text{O}$	3j-5ij	5j-5ij	5j-5ij	5j-5ij	gr. x-xx	Always give well diluted.
Cinchona Cortex Cinchona Bark	3ij-5iv	30-60 gm.	4-8 gm.	4-8 gm.	.6-.1.3 gm.	
Peruvian Bark	8-15 gm.	30-60 gm.	4-15 gm.	5j-5iv	gr. x-5j	
Cocainæ Hydrochloridum Hydrochloride of Cocaine $\text{Cn.H}_2\text{NO}_4\text{HCl}$	gr. v-x	.3-.6 gm.			.6-4 gm.	
Codeina, Codeine					gr. 1/8-3/4	
$\text{C}_{18}\text{H}_{21}\text{NO}_3 + \text{H}_2\text{O}$					.008-.048 gm.	
Colchici Cormus Colchicum	3ss-5ij	2-8 gm.	5ss-5ij	gr. v-xx	gr. ij-viij	This drug is a somewhat active poison for the herbivora.
Meadow Saffron				.6-1.3 gm.	.12-.5 gm.	
Colchici Semen Colchicum Seed						Dose about $1/3$ more than the dose of the corm.
Colocynthis Colocynth - Bitter Apple					gr. ij-iji .12-.18 gm.	
Calumba Calumba Root	3ss-5j	15-30 gm.	3ij-5j	3j-5ij	3j-5ij	4-8 gm.

DOSE TABLE OF DRUGS

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Name of drug	Horse	Cow	Sheep, calf, foal	Pig	Dog	Notes
Creolin A resinous emulsion of cresols	ʒss-ʒj	ʒj-ʒi	ʒss-ʒj	ʒss-ʒj	ʒi-iv	Single dose.
Creosotum Creosote	15-30 c.c.	15-30 c.c.	2-4 c.c.	2-4 c.c.	.06-.3	Well diluted.
Creta Präparata Prepared Chalk	ʒxv-xxx	ʒss-ʒj	ʒv-xv	ʒv-xv	ʒss-ij	Incompatible with sul- phates and acids.
CaCO ₃	1-2 c.c.	2-4 c.c.	.3-1 c.c.	.3-1 c.c.	.03-.12 c.c.	
Cupri Acetas Acetate of Copper Verdigris	ʒj-ʒij	ʒij-ʒiv	ʒij-ʒiv	ʒij-ʒiv	gr. x-ʒj	
Cusso, Kouoso Brayera	30-60 grn.	60-120 grn.	8-15 gm.	8-15 gm.	.6-4 gm.	Good vermifuge for horse.
Cupri Sulphas Sulphate of Copper Blue Stone CuSO ₄ + 5H ₂ O	gr. xv-xxx	gr. v-x	gr. v-x	gr. v-x	gr. j-ij	Emetic dose for dog: gr. vi-xx
	1-2 gm.	1-2 gm.	.3-6 gm.	.3-6 gm.	ʒss-ʒiv	.36- 1.3 gm.
Digitalis The leaves of digitalis purpurea Foxglove	gr. x-ʒj	ʒj-ʒij	gr. xx-xl	gr. xx-xl	2-15 gm.	Anthelmintic. Should be given at con- siderable intervals. This statement applies to all of its prepara- tions.
	.6-4 gm.	2-6 gm.	.3-1 gm.	.3-1 gm.	gr. ss-iii	

DOSE TABLE OF DRUGS

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Name of drug	Horse	Cow	Sheep, calf, foal	Pig	Dog	Notes
Elaterinum Elaterin					gr. 1/20-1/12	
C ₂₀ .H ₂₈ O ₆	5 ss- 5 j	5 ss- 5 j	5 j- 5 ij	5 j- 5 ij	.003-.005 gm.	
Ergota Ergot	15-30 gm.	15-30 gm.	4-8 gm.	4-8 gm.	2-4 gm.	
Eucaine Hydrochloras Hydrochlorate of Eucain C ₁₉ .H ₂₇ NO ₄ .HCl						Local anaesthetic, safer than cocaine, slightly antiseptic.
Extractum Aconiti Fluidum Fluid extract of aconite 100 c.c. = .4 gm. aconitine	¶viii-xx	¶v-3 ss	¶ij-v	¶ij-v	¶ 1/10-ij	
Extractum Belladonnae Foliorum Solid extract Belladonna Leaves	gr. x-xx	gr. xx-xxx	gr. ij-iv	gr. ij-iv	.12-.3 c.c.	.006-.12 c.c.
1.4 Mydriatic Alkaloids	.6-1.3 gm.	1.3-2 gm.	.12-.24 gm.	.12-.24 gm.	.008-.03 gm.	
Extractum Belladonnae Radix Fluidum Fluid Extract Belladonna Root	5 j- 5 ij	5 j- 5 ij	¶v-xv	¶v-xv	¶i-ij	
100 c.c. = 4 gm. mydriatic alkaloids	4-8 c.c.	8-12 c.c.	.6-1 c.c.	.6-1 c.c.	.06-.2 c.c.	
Extractum Buchu Fluidum Fluid Extract of Buchu	5 j- 5 ij 30-60 c.c.	5 j- 5 ij 30-60 c.c.	5 j- 5 iv 4-15 c.c.	5 j- 5 ij 4-8 c.c.	¶ii-iv .12-.24 c.c.	

DOSE TABLE OF DRUGS

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Name of drug	Horse	Cow	Sheep, calf, foal	Pig	Dog	Notes
Extractum Calumbæ Fluidum Fluid Extract of Calumba	ʒss-ʒj 15-30 c.c.	ʒss-ʒj 15-30 c.c.	ʒjj-ʒiv 8-15 c.c.	ʒj-ʒjj 4-8 c.c.	ʒss-ʒj 2-4 c.c.	
Extractum Cannabis In- diceæ Solid Extract of Indian Hemp	ʒj-ʒjj 4-8 gm.				gr. 1/4-i .015-.06 gm.	In veterinary practice African or American cannabis are substi- tuted for the very costly Indian drug.
Extractum Cannabis In- diceæ Fluidum Fluid Extract of Indian Hemp	ʒiv-ʒj 15-30 c.c.		ʒss-ʒj (Foal) 2-4 c.c.		ʒjj-x .12-.6 c.c.	
Extractum Capsici Fluidum Fluid Extract of Capsi- cum	ʒxx-ʒj 1.3-4 c.c.	ʒj-ʒjj 4-8 c.c.	ʒv-xv .3-1 c.c.	ʒv-xv .3-1 c.c.	ʒj-vii .06-.5 c.c.	
Extractum Cinchonæ Fluidum Fluid Extract of Cin- chona	ʒij-ʒiv 8-15 c.c.	ʒj-ʒjj 30-60 c.c.	ʒj-ʒiv 4-15 c.c.	ʒj-ʒiv 4-15 c.c.	ʒx-ʒj .6-4 c.c.	
Extractum Colchici Sem- inis Fluidum Fluid Extract of Colchi- cum Seed	ʒss-ʒjj 2-8 c.c.	ʒss-ʒjj 2-8 c.c.	ʒx-xx .6-1.2 c.c.		ʒii-vii .12-.5 c.c.	
Extractum Convallariaæ Fluidum Fluid Extract of Lily of the Valley	ʒj-ʒiv 4-15 c.c.	ʒj-ʒiv 4-15 c.c.	ʒx-xx .6-1.3 c.c.	ʒx-xv .6-1 c.c.	ʒv-x .3-.6 c.c.	

DOSE TABLE OF DRUGS

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Name of drug	Horse	Cow	Sheep, calf, foal	Pig	Dog	Notes
Extractum Ergotæ Solid Extract of Ergot	gr. xx-3j	gr. xx-5j	gr. x-xv	gr. v-x	gr. ij-x	
	1.3-4 gm.	1.3-4 gm.	.6-1 gm.	.3-.6 gm.	.12-.6 gm.	
Extractum Ergotæ Fluidum	3ss-3j	3ss-3j	5j-5ij	5j-5ij	5ss-5j	
Fluid Extract of Ergot	15-30 c.c.	15-30 c.c.	4-8 c.c.	4-8 c.c.	2-4 c.c.	
Extractum Eucalypti Fluidum	3ss-3j	3ss-3j	5j-5ij	5j-5ij	5ss-5j	
Fluid Extract of Eucalyptus	15-30 c.c.	15-30 c.c.	4-8 c.c.	4-8 c.c.	2-4 c.c.	
Extractum Geisemii Fluidum	3j-3ij				vv-xxx	
Fluid Extract of Yellow Jasmine	4-8 c.c.				.6-2 c.c.	
Extractum Gentianæ Fluidum	3ss-3j	3j-3ij	5j-5ij	5j-5ij	vv-xxx	
Fluid Extract of Gentian	15-30 c.c.	30-60 c.c.	4-8 c.c.	4-8 c.c.	4-8 c.c.	
Extractum Gossypii Rad- icis Fluidum	3ss-3j	3ss-3j	5ss-5j	5ss-5j	vv-xx	
Fluid Extract of Cotton Root Bark	15-30 c.c.	15-30 c.c.	2-4 c.c.	2-4 c.c.	.6-1.3 c.c.	
Extractum Hæmatoxylī Solid Extract of Logwood	5ss-5iv	5j-5vi	5ss-5j	5ss-5j	gr. v-vx	
	2-15 gm.	4-24 gm.	2-4 gm.	2-4 gm.	.3-1 gm.	

DOSE TABLE OF DRUGS

49

Name of drug	Horse	Cow	Sheep, calf, foal	Pig	Dog	Notes
Extractum Hamamelidis Foliorum Fluidum Fluid Extract of Witch Hazel	3j-3ij 30-60 c.c.			3ss-3ij 2-8 c.c.		
Extractum Hydrastis Fluidum Fluid Extract of Golden Seal	3ij-3j 8-30 c.c.		3j-3ij 4-8 c.c.	3j-3ij 4-8 c.c.	3v-3j .3-4 c.c.	Glycerite of Hydrastis U.S.P., same doses.
Extractum Hyoscyami Fluidum Fluid Extract of Henbane	3ss-3j 15-30 c.c.	3ss-3j 15-30 c.c.	3j-3ss 4-6 c.c.	3j-3ss 4-6 c.c.	3v-xx .3-1 c.c.	
Extractum Hyoscyami Solid Extract of Henbane	gr. xx-3j 1.3-4 gm.	3ss-3j 2-4 gm.	gr. v-x .3-6 gm.	gr. v-x .3-6 gm.	gr. ss-ij .03-.12 gm.	
Extractum Ipecacuanhae Fluidum Fluid Extract of Ipecac- uanha	3j-3ij 4-8 c.c.	3ij-3iv 8-15 c.c.	3ss-3j 2-4 c.c.	3ss-3j I-2 c.c.	3v-xxx I-2 c.c. Emetic	3v-xxx I-2 c.c. Emetic
Extractum Nucis Vomicae Fluidum Fluid Extract of Nux Vomica	3j-3ij 4-8 c.c.	3j-3ij 4-8 c.c.	3v-xx I-3-2 c.c.	3v-xx .6-I-3 c.c.	3v-ij .06-.12 c.c.	
Extractum Nucis Vomicae Solid Extract of Nux Vomica	gr. viij-xv .5-1 gm.	gr. viij-xv .5-1 gm.	gr. iiiss-v .15-.3 gm.	gr. j-ij .06-.12 gm.	gr. 1/8-1/4 .008-.016 gm.	

DOSE TABLE OF DRUGS

51

Name of drug	Horse	Cow	Sheep, calf, foal	Pig	Dog	Notes
Extractum Pilocarpini Fluidum Fluid Extract of Pilocarpus	ʒij-ʒiv 8-15 c.c.	ʒij-ʒiv 8-15 c.c.	ʒss-ʒj 2-4 c.c.	ʒss-ʒj 2-4 c.c.	ʒv-xxx .3-2 c.c.	
Extractum Quassiae Fluidum Fluid Extract of Quassia	ʒj-ʒij 30-60 c.c.	ʒj-ʒij 30-60 c.c.	ʒij-ʒiv 8-15 c.c.	ʒij-ʒij 4-8 c.c.	ʒss-ʒij 2-8 c.c.	
Extractum Rhei Fluidum Fluid Extract of Rhubarb	ʒj-ʒij 30-60 c.c.		ʒj-ʒij 4-8 c.c.	ʒj-ʒij 4-8 c.c.	ʒj-ʒij 4-8 c.c.	
Extractum Sabinae Fluidum Fluid Extract of Savine	ʒj-ʒij 30-60 c.c.	ʒj-ʒij 30-60 c.c.			ʒv-xv .3-1 c.c.	
Extractum Scillae Fluidum Fluid Extract of Squill	ʒj-ʒij 4-8 c.c.	ʒij-ʒiv 8-15 c.c.	ʒxv-xxx 1-2 c.c.	ʒxv-xxx .6-1 c.c.	ʒj-v .06-.3 c.c.	
Extractum Sennae Fluidum Fluid Extract of Senna	ʒiv-ʒv 120-150 c.c.	ʒiv-ʒv 120-150 c.c.	ʒj-ʒij 30-60 c.c.	ʒss-ʒj 15-30 c.c.	ʒj-ʒiv 4-15 c.c.	
Extractum Taraxaci Fluidum Fluid Extract of Dandelion	ʒj-ʒij 30-60 c.c.	ʒj-ʒij 30-60 c.c.	ʒij-ʒiv 8-15 c.c.	ʒj-ʒij 4-8 c.c.	ʒj-ʒij 4-8 c.c.	

DOSE TABLE OF DRUGS

53

Name of drug	Horse	Cow	Sheep, calf, foal	Pig	Dog	Notes
Extractum Valerianaæ Fluidum Fluid Extract of Valerian	ʒj-ʒij 30-60 c.c.	ʒj-ʒij 30-60 c.c.	ʒj-ʒij 4-8 c.c.	ʒj-ʒij 4-8 c.c.	ʒx-ʒj .6-4 c.c.	
Extractum Veratri Fluidum Fluid Extract of Ver- trum	ʒss-ʒj 2-4 c.c.	ʒj-ʒij 4-8 c.c.	ʒxx-xxx 1.3-2 c.c.	ʒx-xx .6-1.3 c.c.	ʒ 1/10-1 .006-.06 c.c.	
Extractum Zingiberis Fluidum Fluid Extract of Ginger	ʒij-ʒiv 8-15 c.c.	ʒj-ʒij 30-60 c.c.	ʒj-ʒij 4-8 c.c.	ʒj-ʒij 4-8 c.c.	ʒv-xv .3-I c.c.	
Fel Bovis			.		gr. v-xv	
Oxgall					.3-1 gm.	
FERRI Hydroxidum Cum Magnesii Oido Antidote for Arsenic						Given in any desired amount and repeated as needed for all ani- mals.
FERRI et Potassii Tartras Potassio Tartrate of Iron					gr. v-x	
FERRI et Quiniæ Citratis Citrato of Iron and Qui- nine					gr. v-x	.3-.6 gm.
						.3-.6 gm.

DOSE TABLE OF DRUGS

55

Name of drug	Horse	Cow	Sheep, calf, foal	Pig	Dog	Notes
Ferrum Redactum Reduced Iron	5j-5ij	5ij-5iv	gr. xx-xxx	gr. xxx-xxx	gr. j-v	
Quevennes Iron	4-8 gm.	8-15 gm.	1.3-2 gm.	1.3-2 gm.	.06-.3 gm.	
Perri Sulphas Sulphate of Iron Green Vitriol $\text{FeSO}_4 + 7\text{H}_2\text{O}$	5j-5ij	5ij-5iv	gr. xx-xxx	gr. xx-xxx	gr. i-v	
Foenugrecum	4-8 gm.	8-15 gm.	1.3-2 gm.	1.3-2 gm.	.06-.3 gm.	
Fenugreek	5j-5ij	5j-5ij	5ij-5iv			
Fenugreek	30-60 gm.	30-60 gm.	8-15 gm.			
Formalin						External use and as disinfectant.
Formaldehyde						
Frangula					3ss-3j	Fluid extract is given in same dose.
Buckthorn					2-4 gm.	
Gelsemium Radix	5j-5ij				gr. v-x	
Yellow Jasmine	4-8 gm.				.3-.6 gm.	
Gentiana	5ss-5j	5j-5ij	5j-5ij	5j-5ij	gr. v-xxx	
Gentian	15-30 gm.	30-60 gm.	4-8 gm.	4-8 gm.	.3-2 gm.	

DOSE TABLE OF DRUGS

57

Name of drug	Horse	Cow	Sheep, calf, foal	Pig	Dog	Notes
Glycerinum	ʒj-ʒjj	ʒjj-ʒiv	ʒss-ʒj	ʒij-ʒvj		
Glycerin	30-60 c.c.	60-120 c.c.	15-30 c.c.	15-30 c.c.	8-12 c.c.	May be used in same doses undiluted to produce rapid evacuation of the lower bowel in all animals.
Glycyrrhiza Radix	ʒj-ʒjj	ʒj-ʒiv	ʒss-ʒj			
Licorice Root	30-60 gm.	30-120 gm.	15-30 gm.			
Granatum				ʒss-ʒiss		Vermifuge for dog or cat.
Pomegranate					2-6 gm.	
Heroin					gr. 1/24-1/6	
Diacetylmorphine					.0025-.01 gm.	
Hydrastis	ʒij-ʒjj		ʒij-ʒjj	ʒij-ʒjj	gr. v-ʒjj	
Golden Seal	8-30 gm.		4-8 gm.	4-8 gm.	.3-4 gm.	
Hydrastin	gr. xv-ʒss				gr. ii-j-v	
Resin of Hydrastin	1-2 gm.				.18-.3 gm.	
Hydrastinæ Hydrochloridum	gr. i-ii				gr. 1/12-1/6	
Hydrochloride of Hydrastine						
Cu.HnNO ₂ HCl	.06-.12 gm.					.005-.01 gm.

DOSE TABLE OF DRUGS

59

Name of drug	Horse	Cow	Sheep, calf, foal	Pig	Dog	Notes
Hydragyrii Chloridum Corrosivum Corrosive Chloride of Mercury Bichloride of Mercury Corrosive Sublimate HgCl_2	gr. v-vij	gr. v-vij	gr. ij	gr. ij $1/30-1/8$	.002-.008 gm.	Should be given in very dilute aqueous solution only.
Hydragyrum Chloridum Mite Mild Chloride of Mercury Calomel HgCl	3ss-3j	3v-vi	gr. v-xv	gr. ss-v	gr. ss-ij	
Hydragyrum Cum Creta Mercury with Chalk Grey Powder	2-4 gm.	20-24 gm.	.3-1 gm.	.03-.3 gm.	.03-.12 gm.	
Hydragyrum Massa Blue Mass Blue Pill			gr. x-xv	gr. ij-x	gr. j-x	
Hydrogen Dioxide H_2O_2	3j-3ij 30-60 c.c.	3j-3ij 30-60 c.c.	3iv-3j 15-30 c.c.	3j-3ij 4-8 c.c.	3ss-3j 2-4 c.c.	
Hyoscyami Folia Hyoscyamus Leaves Henbane	3ss-3j 15-30 gm.				gr. v-xv .3-1 gm.	
Hyoscyaminæ Hydrobromidum Hydrobromide of Hyoscyanine $\text{C}_{17}\text{H}_{23}\text{NO}_3\text{HBr}$	gr. j-ij .06-.12 gm.				gr. 1/60-1/30 .001-.002 gm.	Hyoscyamine is isomeric with atropine.

DOSE TABLE OF DRUGS

61

Name of drug	Horse	Cow	Sheep, calf, foal	Pig	Dog	Notes
Hyoscyaminæ Sulphas Sulphate of Hyoscyamine $(C_{17}H_{23}NO_3)_2H_2SO_4$	gr. j-ij .06-.12 gm.				gr. 1/150-1/100 .0004-. .0006 gm.	Cerebral sedative, para- lyzes spinal cord.
Hyoscine Hydrobromi- dum Hydrobromide of Hyo- scine $C_{17}H_{21}NO_4.HBr+3H_2O$	gr. 1/6-1/4 .001-.015 gm.				gr. XV-XXX 1-2 gm. Emetic	
Ipecacuanha Ipecac	5j-5ij 4-8 gm.	5ij-5iv 8-15 gm.	5ss-5j 2-4 gm.		5j-5ij 4-8 gm.	One third dose for small dog, i.e., not over one dram for cat.
Jalapa					5j-5ij 4-8 gm.	Vermifuge.
Jalap						
Kamala						
Rottlera						
Kino	15-30 gm.				4-8 gm.	
Gum Kino	15-30 gm.	5ss-5j 30-60 gm.	5j-5ij 4-8 gm.	gr. v-XXX 4-8 gm.	.3-2 gm.	Dose ad libitum to the herbivora.
Linum Linseed Flax Seed						

DOSE TABLE OF DRUGS

63

Name of drug	Horse	Cow	Sheep, calf, foal	Pig	Dog	Notes
Liquor Ammonii Acetatis Solution of Acetate of Ammonia	ʒij-ʒiv	ʒij-ʒiv	ʒss-ʒj	ʒss-ʒj	ʒij-ʒj	Best dispensed freshly made. Incompatible with acids or alkalies.
Spt. Mindererus	60-120 c.c.	60-120 c.c.	15-30 c.c.	15-30 c.c.	8-30 c.c.	
Liquor Caloris	ʒiv-ʒvj	ʒiv-ʒvj	ʒj-ʒjj	ʒj-ʒjj	ʒj-ʒj	
Lime Water	120-180 c.c.	120-180 c.c.	30-60 c.c.	30-60 c.c.	4-30 c.c.	
Liquor Cresolis Comp. Lysol	ʒss-ʒj	ʒss-ʒj	ʒss-ʒjj	ʒss-ʒjj	ʒij-x	Well diluted.
A potash soap of cresols	15-30 c.c.	15-30 c.c.	2-8 c.c.	2-8 c.c.	.06-.6 c.c.	
Liquor Ferri Subsulphatis Solution of Subsulphate of Iron Monsell's Solution	ʒj-ʒij	ʒj-ʒij	ŋv-xv	ŋv-x	ŋij-v	Styptic especially for parenchymatous hemorrhage. Give well diluted.
Liquor Ferri Chloridi Solution of Chloride of Iron	4-8 c.c.	4-8 c.c.	.3-1 c.c.	.3-.12 c.c.	.12-.3 c.c.	
Liquor Iodi Compositus Compound Solution of Iodine Lugol's Solution	ʒij-ʒiv	ʒij-ʒiv	ŋv-xv	ŋv-x	ŋij-v	Well diluted.
Liquor Potassii Arsenitis Solution of Arsenite of Potash Fowler's Solution	8-30 c.c.	8-15 c.c.	.3-1 c.c.	.3-.12 c.c.	.12-.3 c.c.	Well diluted with water.
		ʒij-ʒiv	ʒss-ʒj	ʒss-ʒj	ŋij-x	
		8-15 c.c.	2-4 c.c.		.12-.6 c.c.	
	ʒij-ʒj	ʒj-ʒjj	ʒj-ʒjj	ʒj-ʒjj	ŋij-x	
	8-30 c.c.	4-8 c.c.	4-8 c.c.	4-8 c.c.	.12-.6 c.c.	

DOSE TABLE OF DRUGS

65

Name of drug	Horse	Cow	Sheep, calf, foal	Pig	Dog	Notes
Liquor Potassii Hydroxidi Solution of Hydroxide of Potash 5% - KOH	5ss-5j 15-30 c.c.	5ss-5j 15-30 c.c.	5ss-5j 2-8 c.c.	5ss-5j 2-4 c.c.		Well diluted with oil or water.
Liquor Sodaæ Chlorinatæ Solution of Chlorinated Soda Labarraque's Solution						Useful in diluted aque- ous solution for a dressing for wounds where dead or dying tissue is present.
Lithii Benzoas Benzoate of Lithium C ₆ H ₅ CO.OLi	5ij-5iv 8-15 gm.	5ij-5iv 8-15 gm.	5ss-5j 2-4 gm.	5ss-5j 2-4 gm.	gr. v-xv .3-1 gm.	
Lithii Citras Citrate of Lithium Li ₄ C ₆ H ₅ O ₇ +4H ₂ O					gr. v-xx .3-1.3 gm.	
Lithium Carbonate Li ₂ CO ₃					gr. iij-x .2-.6 gm.	
Magnesii Carbonas Carbonate of Magnesia (MgCO ₃) ₄ Mg(OH) ₂ + 5H ₂ O			5j-5ij 4-8 gm.	5j-5ij 4-8 gm.	gr. v-5j .3-4 gm.	
Magnesii Oxidum "Light Magnesia," MgO					gr. v-5j .3-4 gm.	

DOSE TABLE OF DRUGS

67

Name of drug	Horse	Cow	Sheep, calf, foal	Pig	Dog	Notes
Magnesii Oxidum Ponderosum "Heavy Magnesia" Mg.O			3j-3ij 4-8 gm.		gr. v-3j .3-4 gm.	
Magnesi Sulphas Sulphate of Magnesia Epsom Salts $MgSO_4 + 7H_2O$	3ij-3vij 3xvj-3xxxij		3ij-3vi 500-1000 gm.	3ij-3iv 60-120 gm.	3j-3iv 4-15 gm.	If purgative effect is desired give concentrated solution; dilute solution if for diuretic.
Mass Ferri Carbonatis Mass of Ferrous Carbonate Vallet's Mass	60-240 gm.				gr. j-v .06-.3 gm.	
Menthol Peppermint Camphor $C_{10}H_{19}OH$						
Misturæ Cretæ Chalk Mixture				3j-3ij 30-60 c.c.		5ij-5j 8-30 c.c.
Molasses	3vij-3xvj 500-1000 c.c.		3vij-3xvj 500-1000 c.c.	3ij-3vj 60-180 c.c.		
Morphinæ Sulphas Sulphate of Morphia $(C_{11}H_{19}NO_3)_2H_2SO_4 + 5H_2O$	gr. ii-j-x .2-.6 gm.	gr. iii-x .2-.6 gm.	gr. ss-ij .03-.12 gm.	gr. 1/10-1/2 .006-.03 gm.	gr. 1/8-1/2 .008-.03 gm.	

DOSE TABLE OF DRUGS

69

Name of drug	Horse	Cow	Sheep, calf, foal	Pig	Dog	Notes
Myrrha	ʒij-ʒiv	ʒij-ʒiv	ʒss-ʒj	ʒss-ʒj	gr. v-xxx	
Gum Myrrh	8-15 gm.	8-15 gm.	2-4 gm.	2-4 gm.	.3-2 gm.	
Naphthol Beta Naphthol	ʒij-ʒij				gr. j-x	Kills round and tape-worm. Give in capsules. 10% ointment useful for ringworm.
C ₁₀ H ₈ OH	8-12 gm.				.06-.6 gm.	
Naphthalenum Naphthalin	ʒij-ʒiv				gr. j-xx	Give in capsule.
C ₁₀ H ₈	8-15 gm.				.06-1.3 gm.	
Nucis Vomicae Pulvis Powdered Nux Vomica Poison Nut, Quaker Button, Dog Nut	ʒj-ʒjj	ʒj-ʒjj	gr.xx-x]	gr. x-xx	gr. j-ij	Should be substituted by its strichnia equivalent in the dog on account of the need of absolute accuracy of dosage of this drug in dogs.
Oleoresinæ Aspidii Oleoressin of Male Fern	ʒij-ʒvj	ʒij-ʒvj	I2-24 c.c.	I2-24 c.c.	4-8 c.c.	I-4 c.c.
Oleoressinæ Capsici Oleoressin of Capsicum	Ψx-xxx	ʒss-ʒj	2-4 c.c.	ŋj-vij		Ψ/4-j
Oleoressinæ Zingiberis Oleoressin of Ginger	.6-2 gm.	ʒss-ʒiss	ʒss-ʒiss	Ψx-xx		.015-.06 c.c.
	2-6 gm.	2-6 gm.	2-6 gm.		gr. j-v	gr. j-v
						.06-.3 gm.

DOSE TABLE OF DRUGS

71

Name of drug	Horse	Cow	Sheep, calf, foal	Pig	Dog	Notes
Oleum Anisi	¶XXX-XXX		¶IV-XV		¶i-v	
Oil of Anise	1-3-2 c.c.		.3-1 c.c.		.06-.3 c.c.	
Oleum Eucalypti	5j-5ij				¶ij-x	
Oil of Eucalyptus	4-8 c.c.				.12-.6 c.c.	
Oleum Gossypii Seminis	¶xvj-¶xxxij	¶xvj-¶xxxii	¶iv-¶viii	¶ss-¶ij		
Cotton Seed Oil	500-1000c.c.	500-1000c.c.	120-240 c.c.	120-240 c.c.	15-60 c.c.	
Oleum Juniperi	5j-5ij	5j-5ij	¶X-XX	¶ij-x		
Oil of Juniper	4-8 c.c.	4-8 c.c.	.6-1.3 c.c.	.6-1.3 c.c.	.12-.6 c.c.	
Oleum Lini	¶viji-¶xvj	¶xvj-¶xxxij	¶vj-¶xij	¶ss-¶ij		
Linseed Oil	250-500c.c.	500-1000c.c.	180-360c.c.		15-60 c.c.	
Oleum Menthae Piperitæ	¶¶XV-XXX	¶¶V-X	¶V-X	¶ij-v		
Oil of Peppermint	I-2 c.c.	I-2 c.c.	.3-.6 c.c.	.3-.6 c.c.	.06-.3 c.c.	
Oleum Morrhuae	¶ij-¶iv	¶ij-¶iv	¶ss-¶j	¶ij-¶ij		
Cod-Liver Oil	60-120 c.c.	60-120 c.c.	15-30 c.c.		4-12 c.c.	

DOSE TABLE OF DRUGS

73

Name of drug	Horse	Cow	Pig	Dog	Notes
Oleum Olivæ	ʒxvj-ʒxxxij	ʒxvj-ʒxxxij	ʒiv-ʒvij	ʒss-ʒij	
Olive Oil	500-1000 c.c.	500-1000 c.c.	120-240 c.c.	15-60 c.c.	
Oleum Ricini	ʒvij-ʒxvj	ʒxvj-ʒxxiv	ʒij-ʒiv	ʒss-ʒij	
Castor Oil	250-500 c.c.	500-750 c.c.	60-120 c.c.	15-60 c.c.	
Oleum Sabinæ	ʒij-ʒiv			ŋi-v	
Oil of Savine	8-15 c.c.			.06-.3 c.c.	
Oleum Terebinthæ	ʒss-ʒij	ʒss-ʒj	ʒj-ʒij	ŋv-xx	
Oil of Turpentine					
Spirit of Turpentine	15-60 c.c.	15-30 c.c.	4-12 c.c.	.4-8 c.c.	.3-.13 c.c.
Oleum Tiglii	ŋxv-ʒj	ʒss-ʒj	ŋv-x	ŋss-iij	
Croton Oil	1-4 c.c.	2-4 c.c.	.3-.6 c.c.	.3-.6 c.c.	.03-.18 c.c.
Opium The concrete juice of the opium poppy	ʒj-ʒij	ʒij-ʒiv	gr. x-xxx	gr. ss-iij	
Pancreatinum	4-8 gm.	8-15 gm.	.6-2 gm.	.3-1.3 gm.	.03-.2 gm.
Pancreatine				gr. v-xx	.3-1 gm.

DOSE TABLE OF DRUGS

75

Name of drug	Horse	Cow	Sheep, calf, foal	Pig	Dog	Notes
Petrolatum Vaseline Cosmoline						May be given ad libitum as a non-absorbable intestinal demulcent.
Pepsinum			gr. x-5j	.6-4 gm.	gr. ij-v .12-.3 gm.	
Pepsin					gr. 1/4-j .015-.06 gm.	
Physostigma	gr. xv-xxx				gr. 1/100-1/30	
Calabar Bean	I-2 gm.					
Physostigmine Salicylas	gr.iss-iii	gr.iss-iji				
Salicylate of Physostigmine	.09-.18 gm.	.09-.18 gm.				
Physostigmine Sulphas	gr.iss-iji	gr.iss-iji				
Sulphate of Physostigmine	.09-.18 gm.	.09-.18 gm.				
Pilocarpinæ Hydrochloridum	gr. ii-v	gr. v-x	gr. j		gr. 1/10-1/3	
Hydrochloride of Pilocarpine	.12-.3 gm.	.3-.6 gm.	.06 gm.		.006-.02 gm.	
Pilocarpinæ Nitras	gr. ij-v	gr. v-x	gr. j		gr. 1/10-1/3	
Nitrate of Pilocarpine	.12-.3 gm.	.3-.6 gm.	.06 gm.		.006-.02 gm.	
Pilocarpus Jaborandi (The Leaflets)	5ij-5iv 8-15 gm.	5ij-5iv 8-15 gm.	5ss-5j 2-4 gm.	5ss-5j 2-4 gm.	gr. v-5j .3-4 gm.	

DOSE TABLE OF DRUGS

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Name of drug	Horse	Cow	Sheep, calf, foal	Pig	Dog	Notes
Pix Burgundica	½j-½ij				gr. xxx-xl	
Burgundy Pitch	30-90 gm.				1-2 gm.	
Pix Liquida	½ss-½j		½j-½ij	½j-½ij	gr. xv-5j	
Tar						
Pine Tar	15-30 gm.	15-30 gm.	4-8 gm.	4-8 gm.	1-4 gm.	
Plumbi Acetas	½ss-½j	½ss-½j	gr. xv-xx	gr. xv-xx	gr. j-ij	
Acetate of Lead						
Sugar of Lead						
Pb(C ₂ H ₃ O ₂) ₂ +3H ₂ O	2-4 gm.	2-4 gm.	I-I.3 gm.	I-I.3 gm.	.06-.12 gm.	
Potassii Acetas	½ss-½j	½ss-½j	½ss-½j	½ss-½j	gr. v-xx	
Acetate of Potash						
KC ₂ H ₃ O ₂	15-30 gm.	15-30 gm.	2-4 gm.	2-4 gm.	.3-1.3 gm.	
Potassii Bicarbonas	½ss-½j	½ss-½j	½ss-½j	½ss-½j	gr. v-xx	
Bicarbonate of Potash						
KHCO ₃	15-30 gm.	15-30 gm.	2-4 gm.	2-4 gm.	.3-1.3 gm.	
Potassii Bromidi	½ss-½ij	½ss-½ij	½ss-½iv	½ss-½iv	gr. v-5j	
Bromide of Potassium						
KBr	15-60 gm.	15-60 gm.	2-15 gm.	2-15 gm.	.3-4 gm.	
Potassii Carbonatas	½ss-½j	½ss-½j	½ss-½j	½ss-½j	gr. v-xx	
Carbonate of Potash						
Salts of Tartar						
K ₂ CO ₃	15-30 gm.	15-30 gm.	2-4 gm.	2-4 gm.	.3-1.3 gm.	

The bromides of sodium, calcium, lithium and strontium may be given in the same doses.

Well diluted with oil or water.

DOSE TABLE OF DRUGS

79

Name of drug	Horse	Cow	Sheep, calf, foal	Pig	Dog	Notes
Potassii Citras Citrate of Potash $K_3C_6H_5O_7 + H_2O$	ʒss-ʒj 15-30 gm.	ʒss-ʒj 15-30 gm.	ʒss-ʒj 2-4 gm.	ʒss-ʒj 2-4 gm.	gr. v-xx .3-1.3 gm.	Well diluted with water.
Potassii Chloras Chlorate of Potash	ʒss-ʒj 15-30 gm.	ʒss-ʒj 15-30 gm.	ʒss-ʒj 2-4 gm.	ʒss-ʒj 2-4 gm.	gr. v-xx .3-1.3 gm.	
KClO ₃						
Potassii Cyanidum Cyanide of Potassium						Used in veterinary practice to destroy animals. Its action is hastened by giving a dilute acid after it.
Potassii Iodidum Iodide of Potash	ʒij-ʒiv 8-15 gm.	ʒij-ʒiv 8-15 gm.	gr. xv-xxx 1-2 gm.		gr. ij-x .12-.6 gm.	Sodium iodide and syrup of hydriodic acid are given in the same dosage.
KI					gr. v-xx .12-.6 gm.	Well diluted with water.
Potassii Nitratas Nitrate of Potash Saltpetre	ʒss-ʒj 15-30 gm.	ʒss-ʒj 15-30 gm.	ʒss-ʒj 2-4 gm.	ʒss-ʒj 2-4 gm.	gr. j-ij .3-1.3 gm.	
KNO ₃						
Potassii Permanganas Permanganate of Potassium $KMnO_4$	gr. xv-xx 1-1.3 gm.		gr. ii-v *.12-.3 gm.		gr. j-ij .06-.12 gm.	Give to horse in a pint of water, to dog in pill or tablet with kaolin excipient.
Potassii Sulphuretum Sulphuret of Potassium Liver of Sulphur	ʒij-ʒiv 8-15 gm.	ʒij-ʒiv 8-15 gm.	ʒss-ʒj 2-4 gm.	ʒss-ʒj 2-8 gm.	gr. ij-x .12-.6 gm.	Also used externally in eczema.

DOSE TABLE OF DRUGS

81

Name of drug	Horse	Cow	Pig	Dog	Notes
Pulvis Cretæ Compositus Compound Chalk Powder			Sheep, calf, foal 3j-3iv 4-15 gm.	gr. x-3j .6-4 gm.	
Pulvis Glycyrrhizæ Compositus Compound Licorice Powder			3j-3iss 4-6 gm.	gr. x-xxx .6-2 gm.	
Pulvis Jalapæ Compositus Compound Jalap Powder				gr. xv-5j 1-4 gm.	
Pulvis Kino Compositus Compound Kino Powder			3j-3iss 4-6 gm.	gr. x-xxx .6-2 gm.	
Pulvis Rhei Compositus Compound Rhubarb Powder Dr. Gregory's Powder			3ss-3j 15-30 gm.	3j-3ij 4-8 gm.	
Quassia Wood	3j-3ij 30-60 gm.		3ij-3iv 8-15 gm.	3j-3ij 4-8 gm.	Valuable anthelmintic for all animals.
Quercus Alba	3ss-3j	3j-3ij	3j-3ij 4-8 gm.	3j-3ij 4-8 gm.	gr. x-xxx
White Oak Bark	15-30 gm.	30-60 gm.	4-8 gm.	4-8 gm.	.6-2 gm.

DOSE TABLE OF DRUGS

83

Name of drug	Horse	Cow	Sheep, calf, foal	Pig	Dog	Notes
Resina Podophylli	5j-5ij	5j-5ij			gr. ij-ij	
Resin of Podophyllum	4-8 gm.	4-8 gm.			.06-.12 gm.	
Resina Resin	5ss-5j					
Rosin	15-30 gm.					
Resinæ Scammonii				5j-5ij	gr. v-5j	
Resin of Scammony				4-8 gm.	.3-4 gm.	
Resorcinol Resorcin	5j-5ij		5ss-5j	5ss-5j	gr. ij-v	
C ₆ H ₄ (OH ₂)	4-8 gm.		2-4 gm.	2-4 gm.	.12-.3 gm.	
Rhamnus Purshiana Cascara Sagrada California Buckthorn					gr. v-xxx	
Rheum	5j-5ij		5j-5ij		.3-2 gm.	
Rhubarb	30-60 gm.		4-8 gm.		5ss-5ij	
Saccharum Lactis	5j-5ij				2-8 gm.	
Milk Sugar	30-60 gm.				5j-5ij	Diuretic.
					4-8 gm.	

DOSE TABLE OF DRUGS

85

Name of drug	Horse	Cow	Sheep, calf, foal	Pig	Dog	Notes
Santoninum Santonin	gr.xv- $\frac{3}{4}$ iv				gr. $\frac{1}{4}$ - $\frac{1}{2}$.015-.03 gm. Puppies	
$C_{15}H_{18}O_3$	1-15 gm.				gr. I-v .06-.3 gm. Dogs	
Scammonium Scammony			$\frac{3}{4}$ ij- $\frac{3}{4}$ iv		$\frac{3}{4}$ ss- $\frac{3}{4}$ j	
Scilla Squill	$\frac{3}{4}$ j- $\frac{3}{4}$ ij	$\frac{3}{4}$ ij- $\frac{3}{4}$ iv	8-15 gm.		2-4 gm.	
	4-8 gm.	8-15 gm.			gr. j-v	
Senna Senna Leaves	$\frac{3}{4}$ ij- $\frac{3}{4}$ v	$\frac{3}{4}$ iv- $\frac{3}{4}$ v		$\frac{3}{4}$ ss- $\frac{3}{4}$ ij	.06-.3 gm.	
	60-150 c.c.	120-150 gm.	30-60 gm.	$\frac{3}{4}$ ss- $\frac{3}{4}$ iv	$\frac{3}{4}$ j- $\frac{3}{4}$ iv	
Sinapis Alba White Mustard	$\frac{3}{4}$ ij- $\frac{3}{4}$ iv	$\frac{3}{4}$ iv- $\frac{3}{4}$ j	$\frac{3}{4}$ j- $\frac{3}{4}$ ij	$\frac{3}{4}$ j- $\frac{3}{4}$ ij	4-15 gm.	
Sinapis Nigra Black Mustard	8-15 gm.	15-30 gm.	4-8 gm.	gr. x-xv	.6-1 gm.	
Sodii Benzoas Benzoate of Sodium	$\frac{3}{4}$ ij- $\frac{3}{4}$ iv	$\frac{3}{4}$ ij- $\frac{3}{4}$ iv	$\frac{3}{4}$ ss- $\frac{3}{4}$ j	$\frac{3}{4}$ ss- $\frac{3}{4}$ j	gr. v-xv	
$NaC_7H_5O_2$	8-15 gm.	8-15 gm.	2-4 gm.			
Sodii Bicarbonas Bicarbonate of Sodium	$\frac{3}{4}$ ss- $\frac{3}{4}$ ij	$\frac{3}{4}$ ss- $\frac{3}{4}$ ij	$\frac{3}{4}$ ss- $\frac{3}{4}$ ij		.3-I gm.	
$NaHCO_3$	15-60 gm.	15-60 gm.	2-8 c.c.	2-8 c.c.	gr. v-xxx	
					.3-2 gm.	

DOSE TABLE OF DRUGS

87

Name of drug	Horse	Cow	Sheep, calf, foal	Pig	Dog	Notes
Sodii Bisulphite Bisulphite of Sodium	5ss-5j	5j-5ij	5ss-5ij	5ss-5j	gr. v-xxx	
NaHSO ₃	15-30 gm.	30-60 gm.	2-8 gm.	2-4 gm.	.3-2 gm.	Mild alkaline antiseptic.
Sodii Boras Borax						
Na ₂ B ₄ O ₇ +10H ₂ O	5j-5ij	5iv-5vij	5ss-5j			
Sodii Chloridi Chloride of Sodium Common Salt NaCl	30-60 gm.	120-240 gm.	15-30 gm.			
Sodii Phosphas Phosphate of Sodium Na ₂ HPO ₄ +12H ₂ O	5ij-5iv	5xvi-5xxiv	5j-5iv			
Sodii Sulphas Sulphate of Sodium Glauber's Salts Na ₂ SO ₄ +10H ₂ O	60-120 gm.	500-750 gm.	30-120 gm.		4-8 gm.	
Sodii Sulphas Sulphite of Sodium Na ₂ SO ₃ +10H ₂ O	5iv-5vij	5xvij-5xxiv	5ij-5iv			
Sodii Sulphis Sulphite of Sodium Na ₂ SO ₃ +7H ₂ O	5ss-5j	5j-5ij	5ss-5ij	5ss-5ij	gr. v-xxx	
Sodii Thiosulphas Hyposulphite of Sodium Na ₂ S ₂ O ₃ +5H ₂ O	15-30 gm.	30-60 gm.	2-8 gm.	2-8 gm.	.3-2 gm.	gr. v-xxx
	5j-5ij	5ij-5iv	5ss-5ij	5ss-5ij		
	30-60 gm.	60-120 gm.	2-8 gm.	2-8 gm.	.3-2 gm.	

DOSE TABLE OF DRUGS

89

Name of drug	Horse	Cow	Sheep, calf, foal	Pig	Dog	Notes
Spiritus Aetheris Com- positus	5ss-5j	5ss-5j	5ij-5iv	5ij-5iv	5x-5j	
Compound Spirit of Ether	15-30 c.c.	15-30 c.c.	8-15 c.c.	8-15 c.c.	.6-4 c.c.	
Hoffman's Anodyne	5j-5jj	5j-5iv	5ij-5iv	5ij-5iv	5x-5j	
Spiritus Aetheris Nitrosi	30-60 c.c.	30-120c.c.	8-15 c.c.	8-15 c.c.	.6-4 c.c.	
Spirit of Nitrous Ether	5j-5jj	5j-5ij	5j-5iv	5j-5iv	5x-5j	
Sweet Spirit of Nitre	30-60 c.c.	30-60 c.c.	4-15 c.c.	4-15 c.c.	.6-4 c.c.	
Spiritus Camphorae	5j-5jj	5j-5ij	5ij-5iv	5ij-5iv	5xv-5j	
Spirit of Camphor	30-60 c.c.	30-60 c.c.	4-15 c.c.	4-15 c.c.	.6-4 c.c.	
Spiritus Chloroformi	5j-5jj	5j-5ij	5ij-5iv	5ij-5iv	5xv-5j	
Spirit of Chloroform	30-60 c.c.	30-60 c.c.	8-15 c.c.	8-15 c.c.	I-4 c.c.	
(Chloroform 60 parts, Alcohol 940 parts)	5j-5iv	5ij-5iv	5j-5ij	5j-5iv	Diluted.	
Spiritus Frumenti	60-120c.c.	60-120c.c.	30-60 c.c.	30-60 c.c.	4-15 c.c.	
Whiskey	5ss-5j				5j-ij	
50-58 per cent. alcohol by volume	2-4 c.c.				.06-.12 c.c.	
Spiritus Glycerilis Ni- tratis	5j-5iv	5ij-5iv	5j-5ij	5j-5iv	Diluted.	
One per cent. alcoholic solution of Nitroglyc- erin	60-120c.c.	60-120c.c.	30-60 c.c.	30-60 c.c.	4-15 c.c.	
Spiritus Juniperis Com- positus	5j-5iv	5j-5iv	5j-5ij	5j-5iv	Diluted.	
Gin						
About 50% alcohol						

DOSE TABLE OF DRUGS

91

Name of drug	Horse	Cow	Sheep, calf, foal	Pig	Dog	Notes
Spiritus Menthae Piperitæ	ʒij-ʒiv	ʒss-ʒj	ʒss-ʒj	ʒss-ʒj	ʒxv-xxx	Diluted.
Essence of Peppermint	8-15 c.c.	15-30 c.c.	2-4 c.c.	2-4 c.c.	1-2 c.c.	
Spiritus Vini Gallici Brandy	ʒij-ʒiv	ʒij-ʒiv	ʒj-ʒjj	ʒj-ʒjj	ʒj-ʒiv	Diluted.
About 46-50% alcohol						
Strychninae Sulphas Sulphate of Strychnia (C ₂₁ .H ₂₂ N ₂ O ₂) ₂ H ₂ SO ₄ + 5H ₂ O	60-120c.c.	60-120c.c.	30-60 c.c.	30-60 c.c.	4-15 c.c.	This is full dosage for the dog.
gr. ss-iss	gr. ss-iss	gr. 1/4-1/2			gr. 1/120-1/40	
.03-.09 gm.	.03-.09 gm.	.03-.09 gm.	.015-.03 gm.		.0005-.0015 gm.	
Sulphur Lotus	ʒij-ʒiv	ʒij-ʒiv	ʒj-ʒjj		ʒss-ʒiv	
Washed Sulphur	60-120 gm.	60-120 gm.	4-30 gm.		2-15 gm.	
Sulphur Precipitatum	ʒij-ʒiv	ʒij-ʒiv	ʒj-ʒjj		ʒss-ʒiv	
Precipitated Sulphur	60-120 gm.	60-120 gm.	4-30 gm.		2-15 gm.	
Sulphur Sublimatum	ʒij-ʒiv	ʒij-ʒiv	ʒj-ʒjj		ʒss-ʒiv	
Flowers of Sulphur	60-120 gm.	60-120 gm.	4-30 gm.		2-15 gm.	
Syrupus Calcis Lacto- phosphatis			ʒiv-ʒj		ʒj-ʒiv	
Syrup of the Lactophos- phate of Lime			15-30 c.c.		4-15 c.c.	

DOSE TABLE OF DRUGS

93

Name of drug	Horse	Cow	Sheep, calf, foal	Pig	Dog	Notes
Syrupus Calcis			5j-5ij		5ss-5j	
Syrup of Lime			4-8 c.c.		2-4 c.c.	
Syrupus Ferri Iodidi	5iv-5j				¶v-xxx	
Syrup of Iodide of Iron 5% by weight of Ferrous Iodide	15-30 c.c.				.3-2 c.c.	
Syrupus Ipecacuanhae				¶xv-5j		
Syrup of Ipecac				I-4 c.c.		
Syrupus Scillæ Compositus				¶v-xxx		
Compound Syrup of Squill					.3-2 c.c.	
Cox's Hive Syrup					5ss-5j	
Syrupus Scillæ					2-4 c.c.	
Syrup of Squill					5j-5iv	
Syrupus Tolutani					4-15 c.c.	
Syrup of Tolu						
Taraxacum	5j-5ij	5j-5ij	5j-5iv	5j-5ij	5j-5ij	4-8 gm.
Dandelion Root	30-60 gm.	30-60 gm.	8-15 gm.			4-8 gm.

DOSE TABLE OF DRUGS

95

Name of drug	Horse	Cow	Sheep, calf, foal	Pig	Dog	Notes
Terebenum Terebine	5ij-5vj	5ij-5vi	5ss-5j	5ss-5j	¶v-xv	
C ₁₀ .H ₁₆	8-24 c.c.	8-24 c.c.	2-4 c.c.	2-4 c.c.	.3-I c.c.	
Terebinthine Canadensis	5j-5iji				gr. xx-xl	
Canada Turpentine	30-90 gm.				1.3-2.6 gm.	
Terpin Hydras Terpine Hydrate	5ss-5ij	5ss-5ij	gr. xv-5j	gr. xv-5j	gr. v-xx	
C ₁₀ H ₈ (OH) ₂ + H ₂ O ₁	2-8 gm.	2-8 gm.	1-4 gm.	1-4 gm.	.3-1.3 gm.	
Thymol	5ss-5ij		5ss-5ij		gr. j-xv	
C ₁₀ .H ₁₄ O	2-8 gm.	2-8 gm.	2-8 gm.		.06-1 gm.	
Tinctura Aconiti Tincture of Aconite	¶xx-5j	5j-5iss	¶v-xx	¶v-xx	¶ij-x	
Wolf's Bane	I.3-4 c.c.	4-6 c.c.	.3-I.3 c.c.	.3-I.3 c.c.	.I.2-.6 c.c.	
Tinctura Aloes et Myrrhae Tincture of Aloes and Myrrh	5ij-5iv	5ss-5j	5ss-5j	5ss-5j	Largely used as a wound dressing in veterinary practice.	
Elixir Proprietatis	60-120c.c.	60-120c.c.	15-30 c.c.	15-30 c.c.	2-8 c.c.	
Tinctura Arnicae Tincture of Arnica Leopard's Bane						Rarely used internally; used externally as leg wash diluted with water.

DOSE TABLE OF DRUGS

97

Name of drug	Horse	Cow	Sheep, calf, foal	Pig	Dog	Notes
Tinctura Belladonnaæ Foliorum Tincture of Belladonna Leaves					¶V-XXX	
Deadly Nightshade					.3-2 c.c.	
Tinctura Benzoini Tincture of Benzoin Tincture of Benjamin	3ss-3j 15-30 c.c.	3ss-3j 15-30 c.c.	5ij-5iv 8-15 c.c.	5ij-5iv 8-15 c.c.	5ss-5j 2-4 c.c.	
Tinctura Benzoini Com- positus Compound Tincture of Benzoin						Used as a wound dress- ing in veterinary practice.
Friar's Balsam						
Tinctura Cannabis Indica Tincture of Indian Hemp					¶X-5ss .6-2 c.c.	
Tinctura Cantharidis Tincture of Cantharides Spanish Fly	5ij-5iv 8-15 c.c.	5ij-5iv 8-15 c.c.			¶ij-XV .12-1 c.c.	
Tinctura Capsici Tincture of Capsicum Cayenne Pepper	5ij-5iv 8-15 c.c.	3j-3ij 30-60 c.c.	¶v-5j .3-4 c.c.	¶v-5j .3-4 c.c.	¶v-5j .3-4 c.c.	In giving Tinct. Capsici to animals it is well to give a little oil with it and to dilute the tinct- ure with water.
Tinctura Catechu Tincture of Catechu	3ss-3j 15-30 c.c.	3j-3ij 30-60 c.c.	5ij-5j 8-30 c.c.	5ss-5j 15-30 c.c.	5ss-5j 2-8 c.c.	

DOSE TABLE OF DRUGS

99

Name of drug	Horse	Cow	Sheep, calf, foal	Pig	Dog	Notes
Tinctura Cinchona Com- positus Compound Tincture of Cinchona	3j-3ij				5ss-5ij	
Huxham's Tincture of Bark	30-60 c.c.				2-8 c.c.	
Tinctura Colchici Seminis Tincture of Colchicum Seed	3ij-3j				¶xx-xxx	
Meadow Saffron	8-30 c.c.				.6-2 c.c.	
Tinctura Gelsemii Tincture of Gelsemium Yellow Jasmine	3ss-3j				¶xxv-5j	
	15-30 c.c.				I-4 c.c.	
Tinctura Gentiana Com- positus Compound Tincture of Gentian	3j-3iv	3j-3iv	5ij-5iv	5ij-5iv	5j-5ij	
	30-120c.c.	30-120cc.	8-15 c.c.	8-15 c.c.	4-8 c.c.	
Tinctura Hyoscyami Tincture of Hyoscyamus Henbane					5j-5iv	4-15 c.c.
Tinctura Iodi						
Tincture of Iodine						
Tinctura Kino	3j-3ij	3ij-3iv	3ss-3j	3ss-3j	5ss-5ij	Rarely used internally.
Tincture of Kino	30-60 c.c.	60-120c.c.	15-30 c.c.	15-30 c.c.	2-8 c.c.	

DOSE TABLE OF DRUGS

101

Name of drug	Horse	Cow	Pig	Dog	Notes
Tinctura Myrrhae	3j-3ij	3ij-3ij	3ij-3vj	3ss-3j	
Tincture of Myrrh	30-60 c.c.	30-60 c.c.	12-24 c.c.	8-24 c.c.	2-4 c.c.
Tinctura Opii Camphoratae				3j-3iv	
Camphorated Tincture of Opium Paregoric Elixir					4-15 c.c.
Tinctura Opii	3j-3ij	3ij-3ij	3ij-3iv	3j-3ij	3ij-xx
Tincture of Opium (10% powdered opium) Laudanum	30-60 c.c.	60-90 c.c.	8-15 c.c.	4-8 c.c.	.2-1.3 c.c.
Tinctura Scillæ	3vj-3xii	3iss-3ij	3iss-3ij	3j-3ij	3ij-xxx
Tincture of Squill	24-45 c.c.	45-90 c.c.	6-12 c.c.		.3-2 c.c.
Tinctura Strophanthi	3j-3iv				3ij-x
Tincture of Strophanthus	4-15 c.c.				.12-.6 c.c.
Tinctura Veratri	3ss-3j	3ss-3j	3ij-3iv	3j-3iv	3ij-v-xv
Tincture of Veratrum Green Hellebore	15-30 c.c.	15-30 c.c.	8-15 c.c.	4-15 c.c.	.3-1 c.c.
Valeriana	3j-3ij	3j-3ij	3j-3ij	3j-3ij	gr. x-3j
Valerian Root	30-60 gm.	30-60 gm.	4-8 gm.	4-8 gm.	.6-4 gm.

DOSE TABLE OF DRUGS

103

Name of drug	Horse	Cow	Sheep, calf, foal	Pig	Dog	Notes
Veratrina Veratrine	gr. ss-ij .03-.12 gm.	gr. ss-ij .03-.12 gm.				
Veratrum Viride Green Hellebore	5 ss-5j 2-4 gm.	5 ss-5j 2-4 gm.	gr. xx-xxx 1.3-2 gm.	gr. x-xx .6-1.3 gm.	gr. 1/10-j .006-.06 gm.	
Vinum Antimonii					¶v-3j .3-4 c.c. Emetic	
Antimonial Wine					¶i-ii .06-.12 c.c. Medicinal	
Vinum Colchici Seminis Wine of Colchicum Seed	5 iij-5j 12-30 c.c.	5 iij-5j 12-30 c.c.			¶x-xxx .6-2 c.c.	
Vinum Ipecacuanhæ					¶xv-5j 1-4 c.c. Emetic	
Wine of Ipecac					¶i-ii .06-.12 c.c. Medicinal	
Vinum Wine Naturally fermented liquors mostly from fruits containing from 7%-20% alcohol						Given in dosage pro- portionate to its alco- hol strength. See whiskey.

DOSE TABLE OF DRUGS

105

Name of drug	Horse	Cow	Sheep, calf, foal	Pig	Dog	Notes
Zinci Acetas Acetate of Zinc	5j-5ij	5j-5ij			gr. ij-iji	
$Zn(C_2H_4O_2)_2 + 2H_2O$	4-8 gm.	4-8 gm.			.12-.2 gm.	
Zinci Oxidi Oxide of Zinc	5j-5ij	5j-5ij			gr. v-x	
ZnO	4-8 gm.	4-8 gm.			.3-.6 gm.	
Zinci Sulphas Sulphate of Zinc White Vitriol	5j-5ij	5j-5ij	gr. x-xx	gr. x-xx	gr. x-xv .6-1 gm. Emetic	
$ZnSO_4 + 7H_2O$	4-8 gm.	4-8 gm.	.6-1.3 gm.	.6-1.3 gm.	gr. ii-iji .12-.2 gm. Medicinal	
Zingiber Ginger	5ij-5j	5j-5iv	5j-5ij	5j-5ij	gr. v-xv 4-8 gm.	.3-1 gm.
	8-30 gm.	30-120 gm.				

DOSE TABLE OF DRUGS

107

POISONS AND THEIR ANTIDOTES

Poisonous Gases	
Sulphuretted Hydrogen	Chlorine cautiously inhaled.
Chlorine, Bromine.....	
Iodine Vapor.....	} Steam inhalation.
Ammonia Vapor.....	Vinegar vapor.
Carbon Monoxide.....	} Fresh air and artificial respiration; transfusion.
Nitrous Oxide.....	} Artificial respiration; tongue drawn forward; intermittent pressure over cardiac region if heart action failing.
Coal Gas.....	
Charcoal Fumes.....	
Carbonic Acid.....	
Marsh Gas.....	
Acids	
Sulphuric Acid.....	Alkalies; sodium or potassium bicarbonate.
Hydrochloric Acid.....	Magnesia: chalk, plaster.
Nitric Acid.....	Soap, milk, eggs whisked.
Phosphoric Acid.....	Olive or almond oils.
Oxalic Acid and Oxalates.	The alkalinity of the blood impaired by acids is restored by intravenous injection of sodium bicarbonate.
Tartaric Acid.....	
Acetic Acid.....	Chalk, whiting or wall plaster, with water.
Hydrocyanic Acid.....	Alternate cold and warm affusions.
Potassium Cyanide.....	Artificial respiration.
Alkalies	
Potassium Oxide and Carbonate.....	Atropine injection, repeated every half hour.
Sodium Oxide and Carbonate.....	Mixed proto and per salts of iron, magnesia.
Ammonium Solution.....	
Calcium Oxide.....	

POISONS AND THEIR ANTIDOTES—*Continued*

Vegetable Drugs, Alkaloids, Etc.	
Aconite.....	{ Spirits: ammonia. Digitalis; atropine; warmth.
Acorns; Oak Shoots. Fern	Oil: salines: laxative diet.
Alcohol.....	{ Strong coffee and cold douches to the head.
Anæsthetics.....	Artificial respiration.
Chloroform, ether, etc..	Cold douche to head and neck.
Antimony.....	{ In patients that do not vomit, wash out the stomach with tannic or gallic acids, followed by milk, white of egg, or other demulcents.
Arsenic.....	{ Wash out the stomach with large amount of warm water, introduced by stomach syphon or pump. Give dogs zinc sulphate or other emetic. Iron oxide, moist, made by precipitation of ferric chloride solution by sodium carbonate or ammonia.
Atropine:	Stimulants and coffee.
Belladonna.....	Caffeine, subcutaneously injected.
Hyoscyamus.....	Sustain action of motor centres by interrupted electric current, and occasionally moving the animal.
Stramonium.....	Artificial respiration, if needful. Physostygmine given cautiously.
Barium Salts.....	{ Epsom salt. Sulphuric acid diluted.
Calabar Bean:	Stimulants: chloral.
Physostygmine.....	{ Atropine, strychnine. Artificial respiration, if necessary.
Cantharides.....	{ Barley water, gruel, and other de- mulcents. Avoiding oils, and fats.
Carbolic Acid.....	
Creosote.....	{ Saccharated lime; stimulants.

POISONS AND THEIR ANTIDOTES—*Continued*

Chloral.....	{ Warmth. Keep patient moving. Strychnine and caffeine subcutaneously.
Colchicum.....	{ Tannic and gallic acids; demulcents. Stimulants.
Conium: coniine: Cicuta Virosa.....	{ Tannic acid. Strong coffee.
CEnanthe.....	{ Stimulants.
Croton Oil.....	{ Demulcents; stimulants. Artificial respiration.
Curare.....	{ If there be a wound, ligature, if possible, above it, and incise and suck strongly. Loosen ligature from time to time, but avoid letting too much poison into the blood at a time.
Digitalis: Digitalin.....	{ Tannin; stimulants. Aconite, subcutaneously.
Ergot.....	{ Perfect quiet. Tannin; stimulants.
Fungoid infested or mouldy fodder or grain.....	{ Substitute sound food: laxatives. Eucalyptol, menthol, other anti-septic volatile oils. Etheral stimulants; saline antiseptics.
Gelsemium.....	{ Atropine; stimulants. Artificial respiration.
Insects' Venomous Stings.....	{ Apply ammonia and oil.
Laburnum.....	{ Stimulants: coffee. Alternate hot and cold douches to chest.
Lobelia.....	{ Tannin; stimulants. Strychnine, hypodermically.
Lead Salts..... (see also Metallic Salts)	{ Epsom salt; dilute sulphuric acid. Potassium iodide; occasional dose of castor oil. White of egg in large amount. Subsequently wash out stomach.
Metallic Salts, as of Copper, Lead, Mercury ..	{ Give demulcents. Foment; poultice. Morphine, if needful.

POISONS AND THEIR ANTIDOTES—*Continued*

Morphine:	Empty stomach by syphon or pump. Warm coffee; ammonia.
Opium.....	Maintain activity of motor centres by keeping patient moving, and by electric shocks. Strychnine hypodermically sustains action of heart.
Other narcotics.....	Atropine in small doses subcutane- ously.
Nitro-Benzol.....	Artificial respiration, if needful.
Amyl-Nitrite.....	Alternate hot and cold douche. Stimulants.
Nitro-glycerine.....	Artificial respiration.
Phosphorus.....	Ergotin; atropine subcutaneously. Cold to head.
Picrotoxine:	Copper sulphate.
Cocculus Indicus.....	Oil of turpentine, old and oxidized. Avoid fats and fatty oils.
Pilocarpine:	Chloral; potassium bromide.
Jaborandi.....	Atropine.
Quinine.....	Tannic or gallic acids; coffee. Stimulants, artificial respiration.
Savin.....	Epsom salt; demulcents; ethereal stimulants.
Snake Bite.....	Ligature limb; excise wound, and sear with hot iron.
Strychnine:	Alcoholic stimulants; ammonia.
Brucine.....	Artificial respiration.
Nux Vomica.....	Chloroform; chloral. Potassium bromide; tannin.
Tobacco.....	Warm stimulants.
Turpentine Oil.....	Tannin; strychnine.
Veratrine:	Demulcents; Epsom salt.
White Hellebore.....	Stimulants; warm coffee. Perfect quiet.
Yew.....	Stimulants, laxatives. Demulcents.

DURATION OF PREGNANCY IN THE DOMESTICATED ANIMAL

	Authority
Mare.....	330-340 days...V. G. Kimball.
Cow.....	270-280 days...V. G. Kimball.
Sow.....	115-120 days...V. G. Kimball.
Bitch.....	58- 65 days...V. G. Kimball.
Ewe.....	145-155 days...V. G. Kimball.

RELATIVE VALUE OF APOTHECARIES' AND METRIC MEASURE

Minims	C.c.	Minims	C.c.	Fl. oz.	C.c.	Fl. oz.	C.c.
1 = 0.06		25 = 1.54		1 = 30.00*		21 = 621.00	
2 = 0.12		30 = 1.90		2 = 59.20		22 = 650.00	
3 = 0.18		35 = 2.16		3 = 89.00		24 = 710.00	
4 = 0.24		40 = 2.50		4 = 118.40		25 = 740.00	
5 = 0.30		45 = 2.80		5 = 148.00		26 = 769.00	
6 = 0.36		50 = 3.08		6 = 178.00		27 = 798.07	
7 = 0.42		55 = 3.40		7 = 207.00		28 = 828.80	
8 = 0.50		Fluid-drachms		8 = 236.00		30 = 887.25	
9 = 0.55				9 = 266.00		31 = 917.00	
10 = 0.60		1 = 3.75		10 = 295.70		32 = 946.00	
11 = 0.68		1 $\frac{1}{4}$ = 4.65		12 = 355.00		48 = 1419.00	
12 = 0.74		1 $\frac{1}{2}$ = 5.60		13 = 385.00		56 = 1655.00	
13 = 0.80		1 $\frac{3}{4}$ = 6.51		14 = 414.00		64 = 1892.00	
14 = 0.85		2 = 7.50		15 = 444.00		72 = 2128.00	
15 = 0.92		3 = 11.25		16 = 473.11		80 = 2365.00	
16 = 1.00		4 = 15.00		17 = 503.00		96 = 2839.00	
17 = 1.05		5 = 18.50		18 = 532.00		112 = 3312.00	
18 = 1.12		6 = 22.50		20 = 591.50		128 = 3785.00	
19 = 1.17		7 = 26.00					
20 = 1.25							

* The more accurate equivalent is 29.57 C.c.

RELATIVE VALUE OF METRIC AND APOTHECARIES' MEASURE

C.c.	Fl. oz.	C.c.	Fl. oz.	C.c.	Fl. drams	C.c.	Minims
1000 = 33.81		400 = 13.53		.25 = 6.76		4 = 64.8	
900 = 30.43		300 = 10.14		10 = 2.71		3 = 48.6	
800 = 27.05		200 = 6.76		9 = 2.43		2 = 32.4	
700 = 23.67		100 = 3.38		8 = 2.16		1 = 16.23	
600 = 20.29		75 = 2.53		7 = 1.89		0.5 = 8.11	
500 = 16.90		50 = 1.69		6 = 1.62		0.25 = 4.06	
473 = 16.00		30 = 1.01		5 = 1.35		0.06 = 1.00	

RELATIVE VALUE OF APOTHECARIES' AND METRIC WEIGHT

Grains	Gm.	Grains	Gm.	Grains	Gm.	Drams	Gm.
$\frac{1}{100} = 0.00065$	I = 0.0625	24 = 1.55		I =	3.9		
$\frac{1}{64} = 0.00101$	2 = 0.1300	25 = 1.62		2 =	7.8		
$\frac{1}{60} = 0.00108$	3 = 0.195	26 = 1.70		3 =	11.65		
$\frac{1}{50} = 0.00130$	4 = 0.260	27 = 1.75		4 =	15.50		
$\frac{1}{48} = 0.00135$	5 = 0.324	28 = 1.82		5 =	19.40		
$\frac{1}{40} = 0.00162$	6 = 0.400	30 = 1.95		6 =	23.30		
$\frac{1}{36} = 0.00180$	7 = 0.460	32 = 2.10		7 =	27.20		
$\frac{1}{32} = 0.00202$	8 = 0.520	33 = 2.16		Oz.			
$\frac{1}{30} = 0.00216$	9 = 0.600	34 = 2.20		I =	31.10		
$\frac{1}{25} = 0.00259$	10 = 0.650	35 = 2.25		2 =	62.20		
$\frac{1}{24} = 0.00270$	11 = 0.715	36 = 2.30		3 =	93.30		
$\frac{1}{20} = 0.00324$	12 = 0.780	38 = 2.47		4 =	124.40		
$\frac{1}{18} = 0.00360$	14 = 0.907	39 = 2.55		5 =	155.50		
$\frac{1}{16} = 0.00405$	15 = 0.972	40 = 2.73		6 =	186.60		
$\frac{1}{15} = 0.00432$	*15.5 = 1.000	44 = 2.86		7 =	217.70		
$\frac{1}{12} = 0.00540$	16 = 1.040	48 = 3.00		8 =	248.80		
$\frac{1}{10} = 0.00648$	18 = 1.160	50 = 3.25		9 =	280.00		
$\frac{1}{8} = 0.00810$	20 = 1.300	52 = 3.40		10 =	311.00		
$\frac{1}{4} = 0.01620$	21 = 1.360	56 = 3.65		48 =	1492.80		
$\frac{1}{2} = 0.03240$	22 = 1.425	58 = 3.75		100 =	3110.40		

* Or, more exactly, 15.432 grains = 1 gramme.

RELATIVE VALUE OF METRIC AND APOTHECARIES' WEIGHT

Gm.	Grains	Gm.	Grains	Gm.	Grains	Gm.	Grains
0.0010 = $\frac{1}{64}$	0.065 = 1.003	1 = 15.43	100 = 1543.23				
0.0020 = $\frac{1}{32}$	0.100 = 1.543	2 = 30.86	125 = 1929.04				
0.0040 = $\frac{1}{16}$	0.130 = 2.006	3 = 46.30	150 = 2314.85				
0.0065 = $\frac{1}{10}$	0.150 = 2.315	4 = 61.73	175 = 2700.65				
0.0081 = $\frac{1}{8}$	0.180 = 2.778	5 = 77.16	450 = 6944.55				
0.0108 = $\frac{1}{6}$	0.200 = 3.086	6 = 92.60	550 = 8487.78				
0.0162 = $\frac{1}{4}$	0.300 = 4.630	7 = 98.02	650 = 10031.01				
0.0324 = $\frac{1}{2}$	0.500 = 7.716	8 = 123.46	750 = 11574.26				
0.0486 = $\frac{3}{4}$	0.700 = 10.813	9 = 138.90	850 = 13117.49				
0.0567 = $\frac{7}{8}$	0.900 = 13.890	10 = 154.32	1000 = 15432.35				

TABLE TO ASSIST THE BEGINNER IN PRESCRIBING LIQUIDS

Having fixed upon the bulk of the liquid, remember that there are in

- 1 fluid ounce, 8 teaspoonfuls each 1 fluid dram.
- 2 fluid ounces, 16 teaspoonfuls each 1 fluid dram.
- 4 fluid ounces, 32 teaspoonfuls each 1 fluid dram.
- 4 fluid ounces, 16 dessertspoonfuls each 2 fluid drams.
- 6 fluid ounces, 24 dessertspoonfuls each 2 fluid drams.
- 6 fluid ounces, 12 tablespoonfuls each $\frac{1}{2}$ fluid ounce.
- 8 fluid ounces, 16 tablespoonfuls each $\frac{1}{2}$ fluid ounce.
- 1 pint, 32 tablespoonfuls each $\frac{1}{2}$ fluid ounce.
- 1 pint, 8 wineglassfuls each 2 fluid ounces.

APPROXIMATE MEASURES

- A drop = usually about 1 minim.
- A teaspoonful = 60 drops or 1 fluid dram.
- A dessertspoonful = 2 fluid drams.
- A tablespoonful = 4 fluid drams.
- A wineglassful = 2 fluid ounces.
- A teacupful = 4 fluid ounces.

**RULES FOR COMPARING THE CENTIGRADE
AND FAHRENHEIT SCALES**

The Centigrade scale has 100° of temperature between the freezing and boiling points, while the Fahrenheit scale has (212 - 32) 180°. Hence, 1° C. = 1.8° F. or 5° C. = 9° F.

Therefore, to convert Centigrade into Fahrenheit: Multiply 1.8 and add 32. To convert Fahrenheit into Centigrade: Subtract 32, divide the remainder by 9 and multiply by 5 (or subtract 32 and divide directly by 1.8).

THE HARRISON ANTI-NARCOTIC LAW

Of great importance in the practice of the veterinarian and the druggist is Public Act No. 223, H. R. No. 6282, popularly known as the Harrison Law, which went into effect March 1, 1915.

This Federal Narcotic Revenue Law describes the conditions under which veterinarians may purchase, use, dispense and prescribe, and druggists may purchase, dispense, and sell opium, coca leaves and all compounds, derivatives, alkaloids, salts, and preparations of these drugs.

The principal requirements of the Act as it affects the veterinarian and the retail druggist are the following:

1. He must make application to the Collector of Internal Revenue in the district in which he conducts his business or has his office, for registration under this Act and pay an annual special tax of \$1.00. No one who is not thus registered may buy, sell, use, dispense, prescribe, or even have in his possession, any of the drugs or preparations covered by the Act.

2. Having become registered and having been assigned a registration number he must purchase from the Collector of Internal Revenue official order forms bearing his name and number on which he must make out in duplicate all orders for the purchase of drugs under the Act. When purchasing such goods, the original order, which must state the quantity of narcotic drug present in each ounce or fluid ounce, or if in pill or tablet form the

amount of narcotic drug in each pill or tablet, must be signed by the registered party in person and be sent to the seller. The duplicate must be kept on file subject to inspection for two years. These forms or order blanks are sold by Collectors of Internal Revenue to those registered under the Act at the rate of \$1.00 per hundred.

3. The veterinarian must keep a record of the drugs and preparations under the Act which he dispenses or distributes, showing: first, the date on which such drug is dispensed or distributed; second, the kind and quantity dispensed or distributed; and third, the name and residence of the person to whom the drug or preparation was dispensed or distributed. This record must be kept two years subject to inspection. Veterinarians may, however, personally administer any such drug or preparation without keeping a record thereof.

4. Druggists may under no circumstances sell, exchange, dispense, or give away, any drug or preparation under the Act unless: (a) the order is received from a registered person, as for example, a veterinarian, on the official order blank described in paragraph 2, or (b) upon the prescription of a physician, dentist, or veterinarian registered under the Act.

No official form is provided for such a prescription, but it must bear the date upon which it was written, must be signed with the full name of the registered practitioner issuing the prescription, must bear the office address and registry number of the prescriber, and the name and address of the person for whom such prescription is written. The prescription must be filed for two years subject to inspection.

5. Collectors of Internal Revenue may demand at any time a sworn statement setting forth the quantity of drugs and preparations under the Act received during a period not to exceed three months immediately preceding the

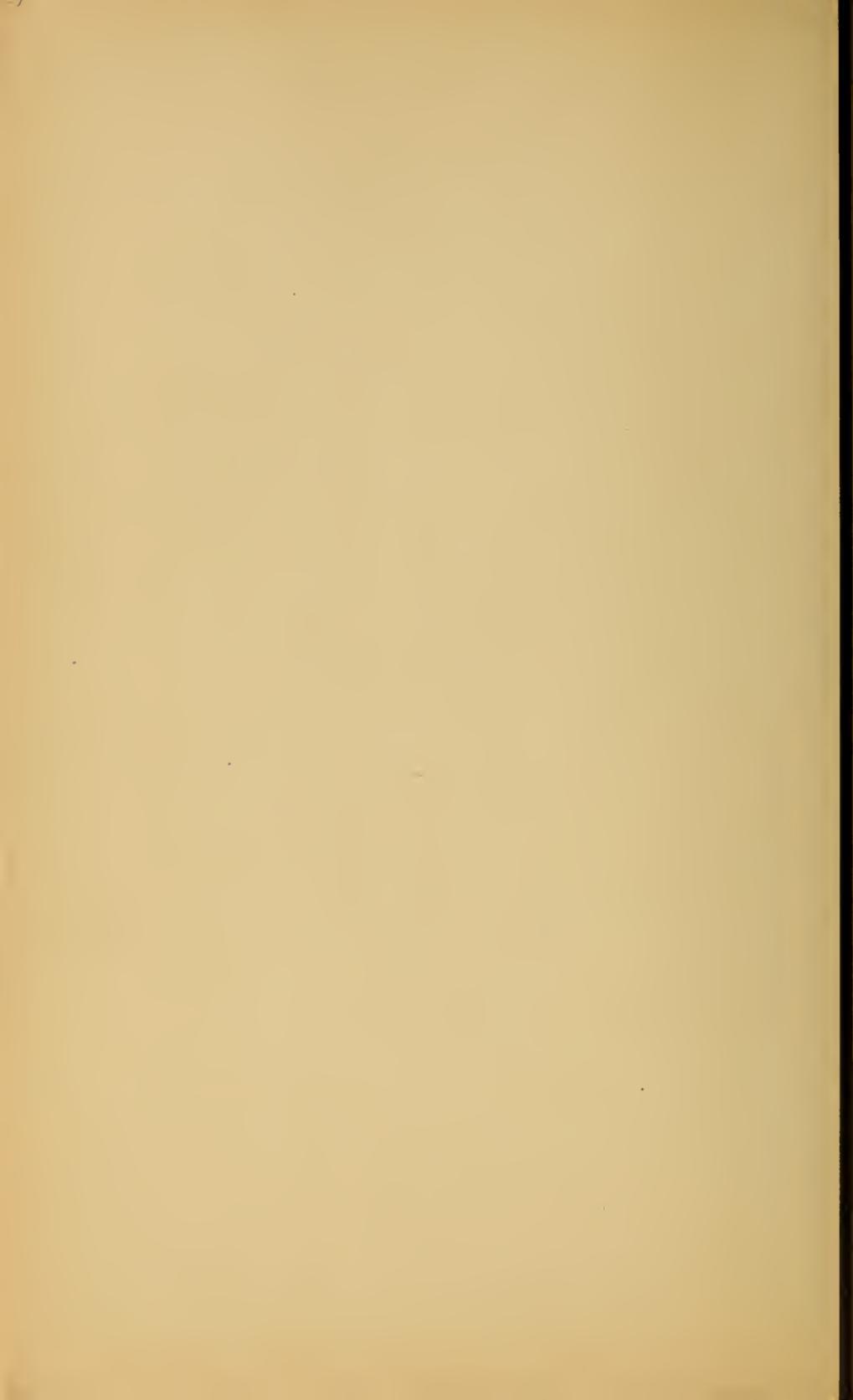
demand, said statement to include sources of said drugs and preparations, quantities in each instance and dates when received.

6. Although the law covers opium, coca leaves, and all preparations, derivatives, etc., of these drugs, certain exemptions are made for preparations containing only minute quantities of these drugs or their derivatives. Any preparation which does not contain more than 2 grains of opium per ounce or fluid ounce, $\frac{1}{4}$ grain of morphine per ounce or fluid ounce, $\frac{1}{8}$ grain of heroin per ounce or fluid ounce, or 1 grain of codeine per ounce or fluid ounce, is exempt from the provisions of this Act. In like manner, liniments and ointments, for external use only, are exempt unless they contain cocaine alpha- or beta-euaine or any derivative or synthetic substitute for them, and further provided that they contain other ingredients rendering them unfit for internal administration.

There are many other provisions of the Act which are not of special interest to veterinarians and retail druggists, such, for example, as those exempting from its requirements Government officials, institutions, etc. Of possible importance to them, however, is the provision that if a container becomes broken or destroyed through accident the registered owner must immediately make affidavit as to the kind and quantity of drug lost, and keep such affidavit on file with his order blanks. Again, if a veterinarian or druggist desires to return a drug or preparation under this Act to the registered manufacturer or dealer from whom it was purchased, he may not do so until he has received from such manufacturer or dealer an official order blank therefor, and the serial number of the order under which the goods are returned must be noted by the purchaser on the retained duplicate of his original order for the goods. Again, if any quantity of a drug or preparation is used by the registered pharmacist or

veterinarian in the manufacture of another preparation, a complete record of the quantity of such drug or preparation used must be kept on file subject to inspection. If a veterinarian maintains an office in more than one Internal Revenue district he must register separately in each district. If, however, he maintains only one office he may practice his profession in Internal Revenue districts other than the one in which he has registered without additional registration. On the other hand, pharmacists having more than one place of business must make application for registration in each such place whether or not they are in the same Internal Revenue district. Prescriptions may not be re-filled if they call for any proportions whatever of any of the drugs or preparations under this Act.

In conclusion it is important to note that the Harrison Act is a Revenue Law and in no way whatever affects or annuls any other State or municipal laws regulating the sale or dispensing of drugs and preparations covered by this law.



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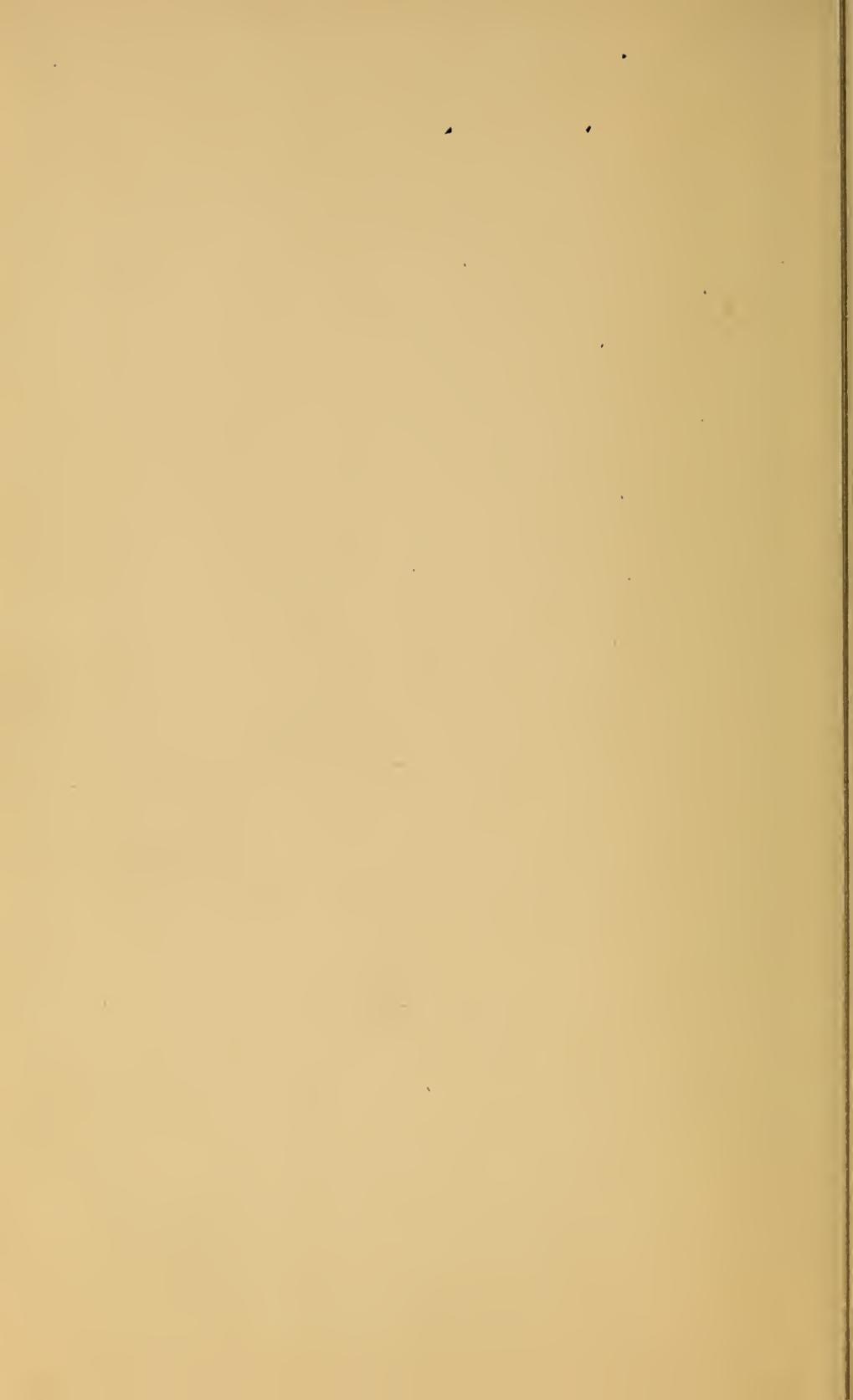
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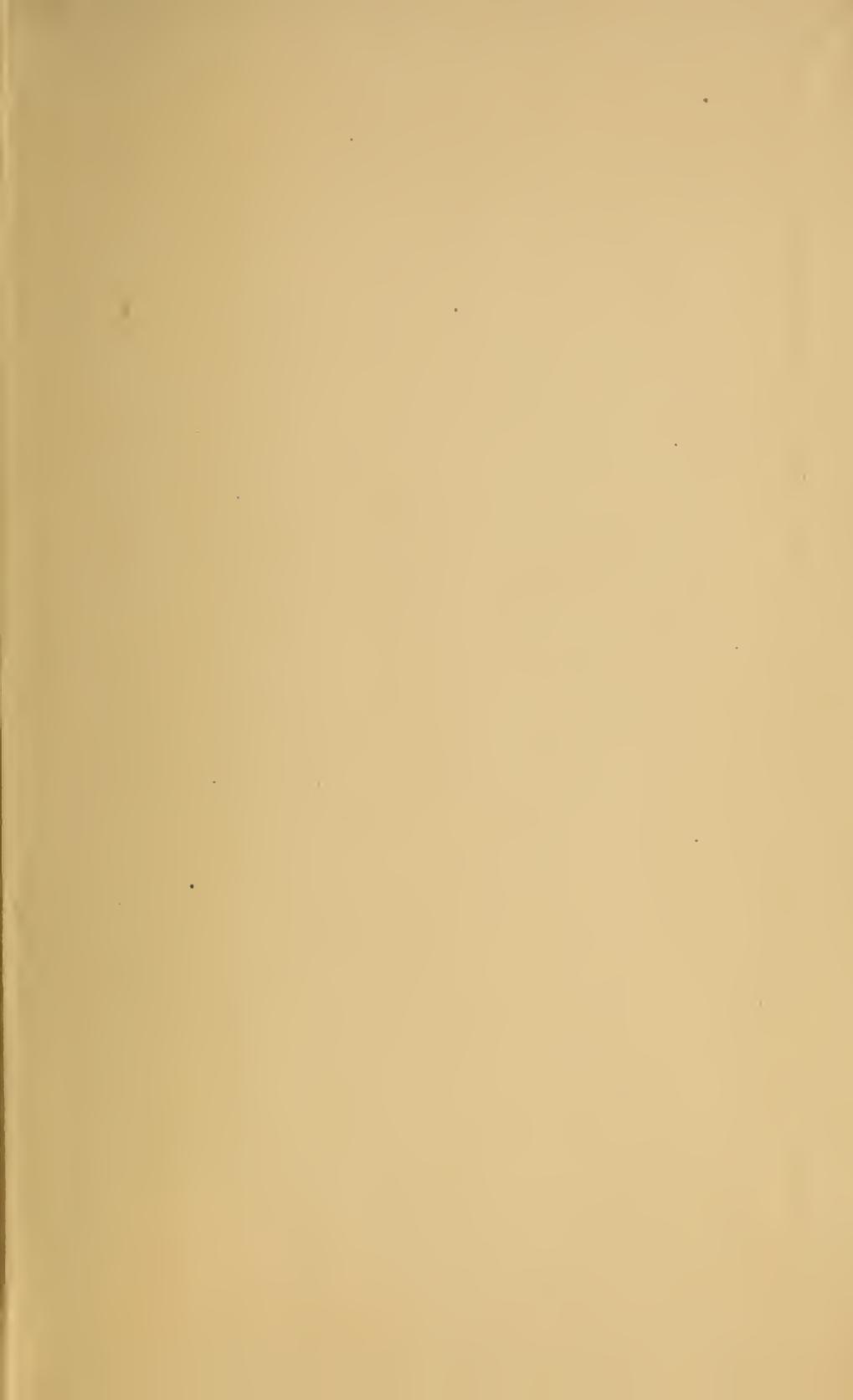
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