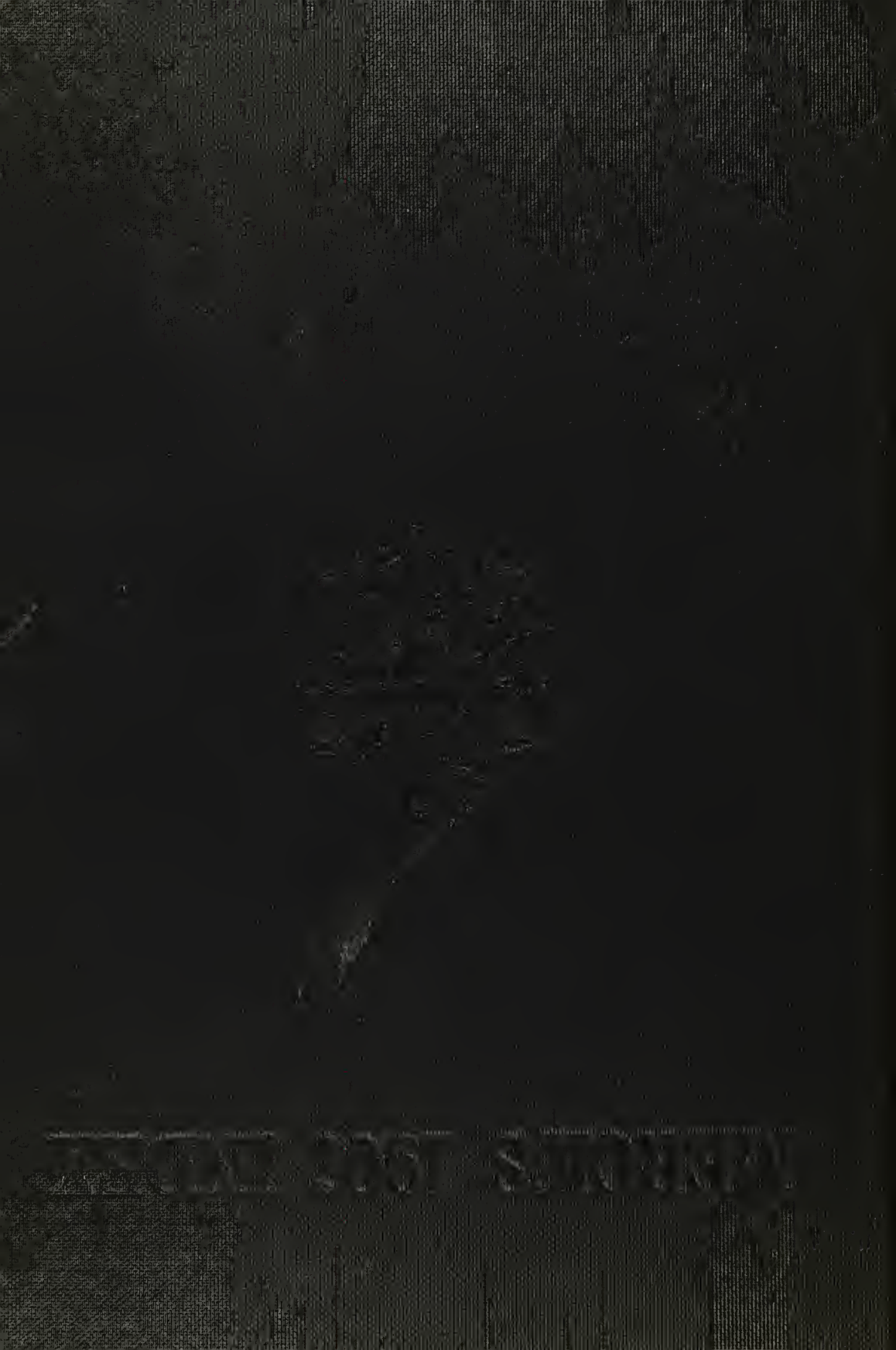

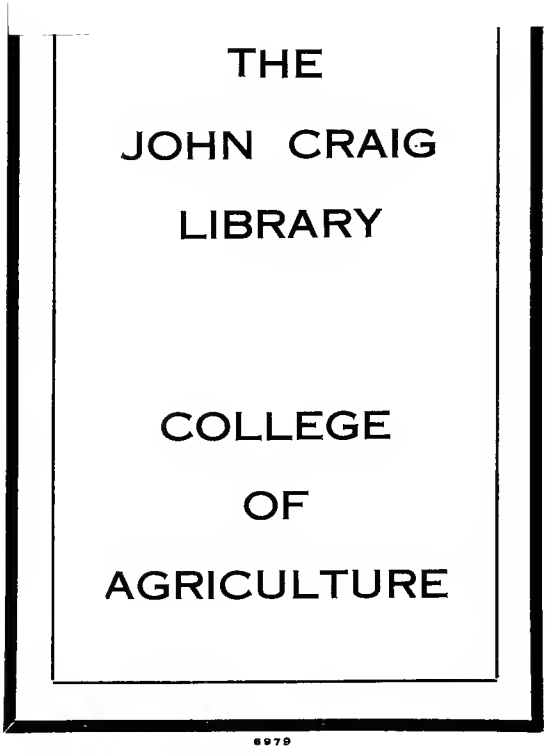

MERCK'S 1907 INDEX

MERCK'S 1907 INDEX

[THIRD EDITION]

AN ENCYCLOPEDIA FOR THE CHEMIST PHARMACIST AND PHYSICIAN

STATING THE

NAMES AND SYNONYMS; SOURCE OR ORIGIN; CHEMICAL NATURE AND FORMULAS; PHYSICAL FORM, APPEARANCE AND PROPERTIES; MELTING AND BOILING POINTS; SOLUBILITIES; SPECIFIC GRAVITIES AND METHODS OF TESTING; PHYSIOLOGICAL EFFECTS; THERAPEUTIC USES; MODES OF ADMINISTRATION AND APPLICATION; ORDINARY AND MAXIMUM DOSES; INCOMPATIBLES; ANTIDOTES; SPECIAL CAUTIONS; HINTS ON KEEPING AND HANDLING, ETC.

OF THE

CHEMICALS AND DRUGS USED IN CHEMISTRY MEDICINE AND THE ARTS

ST. LOUIS, MO.

MERCK & CO., NEW YORK
15 UNIVERSITY PLACE

RAHWAY, N. J.

PREFACE

In presenting *Merck's 1907 Index* we need but refer to the popularity of previous editions and to point to the title page of the work, which fully shows its scope and defines its field of usefulness to the *chemist*, the *pharmacist*, and the *physician*—in other words, to the users of drugs and fine chemical products.

In order to bring the Index up to date in this edition we have added the newest products, adopted the latest nomenclature, consulted the most modern authorities, and, for the Merck products, verified the data in our laboratories and our works.

Furthermore, we have added the crude drugs of commerce and have indicated under each drug the dose of its extracts, tinctures, fluid extracts, etc., instead of grouping all extracts, tinctures, etc., together as in the previous editions of the Index. We have given the specific gravities at 15° C.; in many cases, following the U. S. Pharmacopœia, we have also given them at 25° C.

As the Index is not intended to be a price-list we give no prices, but instead we give what may be called *comparative values*. That is to say, wherever possible we have placed a number opposite the name of the product, and if such a number is compared with the numbers at the foot of each left-hand page the comparative value of the article so numbered will be at once apparent. For instance, Duboisine Sulphate Merck bears the number 875, its value lies, therefore, between that of Gold Tribromide Merck (the comparative value of which is 570) and that of Eserine Sulphate Merck (the comparative value of which is 1111). Or again, if neither of these two products suggests anything very definite, 875 can be considered as approximately 4×225, or 16×55, or 20×44, or 35×25, or 80×11, or 175×5, or 220×4, or 300×3, or 400×2, or 900×1; and consequently the value of Duboisine Sulphate—bearing this number 875—is about 4 times that of Aconitine, 16 times that of Morphine Sulphate, 20 times that of Veratrine, 35 times that of Strychnine, 80 times that of Silver Nitrate, 175 times that of Iodoform,

220 times that of Potassium Iodide, 300 times that of Guaiacol, 400 times that of Salol, and 900 times that of such cheaper articles as Cerium Oxalate or Calcium Hypophosphite. Some of these products are familiar to every one and can, therefore, be used as an easy basis for comparison.

Another point to which we wish to draw attention, as we were questioned frequently in regard to it in connection with previous editions of the Index, is the means by which products may be known to be obtainable of the *Merck brand.* For that purpose we have put the designation **Merck** after the name of every product procurable of the *Merck brand.* On page 299, for instance, Nicotine and its salts ; Nigrosine ; Niobium and its compounds ; the various isomers of Nitraniline ; and Nitranisol (ortho), are to be had of the *Merck brand:* whereas Nigella Damascena, Nigella Sativa, Nikiforoff's Borax-Carmine, and Nirvanin are not. Merck's products being the standard, we cannot recommend too strongly for the sake of accuracy of results and uniformity of action, that when ordering such articles as bear this designation *Merck*, you should always

Specify MERCK'S on your orders.

JULY, 1907.

MERCK & CO.

ABBREVIATIONS

For economy of space some participles used in the descriptive matter of this work have been so abbreviated as to retain merely the root-form of the verb; as, color.=coloring, *etc. Other contractions of analogous character are also used, as,* solut's = solutions. *The meaning of such abbreviations is so apparent that they are not recorded in the table below.*

A

A	alcohol.
ab	about.
abn	abnormal.
abs.	absence, absolute.
absol.	absolutely.
absorp.	absorption.
abt.	about.
ac	acute.
acc.	according to.
accel.	accelerate.
acic.	acicular.
acidul.	acidulous, acidulate.
act.	active, action.
add.	adding, addition.
adm.	administer,
admin.	administration.
adv.	adventitious.
affect	affection, affections.
agre.	agreeable.
Ait.	Aiton.
albumin.	albuminous, albuminuria.
alc.	alcohol.
alcoh.	alcoholic.
alim.	alimentary.
alkal.	alkalies, alkaline.
alk'd.	alkaloid.
alm.	almost.
alter.	alterative.
amenor.	amenorrhea.
amm.	ammonia, ammonium
amorph.	amorphous.
am't.	amount.
anal	analysis, analytical.
analg.	analgesic.
anat.	anatomical.
Andr	Andrews.
anes. *or* anesth	anesthetic.
ang.	angular.
anhyd.	anhydrous.
anod.	anodyne.
antac.	antacid.
anthelm.	anthelmintic.
antiblennor.	antiblennorrhagic.
anticatar.	anticatarrhal.
anticrypt.	anticryptogamic.
antidiab.	antidiabetic.
antidip.	antidiphtheritic.
antiem.	antiemetic.
antiepil.	antiepileptic.
antiepilep.	
antihydr.	antihydrotic.
antihyst.	antihysteric.
antim.	antimony.
antineural.	antineuralgic.
antipar.	antiparasitic.
antiper.	antiperiodic.
antiphlog	antiphlogistic.
antiprur.	antipruritic.
antiputres.	antiputrescent.
antipyr.	antipyretic.
antirheum.	antirheumatic.
antiscor.	antiscorbutic.
antisep.	antiseptic.
antispasm.	antispasmodic.
antisud.	antisudorific.
antisyph.	antisyphilitic.
antituberc.	antitubercular.
antizym.	antizymotic.
aper.	aperient.
aphrod.	aphrodisiac.
app.	apparatus.
appl.	application.
approx.	approximates.
aq.	aqua.
aqu.	aqueous.
Arn.	Arnott.
arom.	aromatic.
ars.	arsenic.
artic.	articular.
artif.	artificial.
assimil.	assimilable, assimilation.
asth.	asthma.
astring.	astringent.
atm.	atmosphere, atmospheric.

B

B.	benzene (benzol).
b.	born.
b. p.	boiling point.
bacteric.	bactericide.
bacteriol.	bacteriological, bacteriology.
Bart.	Barton.
batt.	battery.
Bé.	Baumé.
bec.	becomes.
bef.	before.
Benth.	Bentham.
benz.	benzoate.
Berg.	Bergius.
bicarb.	bicarbonate.
bism.	bismuth.
bisulph.	bisulphide.
blennor.	blennorrhagia.
bot.	bottle.
botan.	botanical.
bot's.	bottles.
brill.	brilliant.
brit.	brittle.
bronch.	bronchial, bronchitis.
broncho.	bronchocele.
Burch.	Burchell.
Burm.	Burmann.

C

C. { carbon, centigrade, chloroform.
calc. calcium.
caps. capsules.
car. caries.
carcin. carcinoma.
card. cardiac, -itis.
caref. carefully.
carm., *or* carmin. carminative.
Casar. Casaretti.
cath. cathartic.
caut. { caution, cautious, cautiously.
Cav. Cavanilles.
Cc. cubic centimeter.
cellul. cellulitis.
cereb. cerebral.
cert. certain.
Cham. Chamisso.
charact. characteristic.
chem. chemical, chemistry.
chg. change.
chilbl. chilblains.
chlorof. chloroform.
choc. chocolate.
chol. inf. cholera infantum.
cicatr. { cicatrization, cicatrizant.
cloud. cloudiness.
Colebr. Colebrooke.
collod. collodion.
color. colorant, coloring.
colorl. colorless.
comb. combination, combined.
combust. { combustion, combustible.
com'l, comm'l. { commercial.
comp. composition, compound.
compl. completely.
compos. composition.
compress. compression.
conc. concentrated.
concent. concentration.
conch. conchoidal.
condens. condensation.
condit. condition.
condyl. condyloma, -mata.
confec. confection.
congest. congestion.
conglom. conglomerate, -ation.
constip. constipation.
constit. constituent.
consumpt. { consumption, consumptives.
cont. contain.
cont'g. containing.
conv. convert.
convalesc. { convalescence, convalescents.
convuls. convulsions.
corresp. corresponding.
corr., corros. { corrosive.
counterirrit. counterirritant.
cov. covered.
cruc. crucible.
cryst. { crystal, crystalline, crystallization.
cultiv. cultivated.
cumul. cumulative.
cutan. cutaneous.
cylind. cylindrical.
cyst. cystitis.

D

d. died.
debil. debility.
debilit. { debilitated, debilitating.
De C. De Candolle.
decoct. decoction.
decomp. { decomposed, decomposition.
decomp'g. decomposing.
decr. decrease.
defect. defective.
defin. definite.
deflag. deflagrate.
dehydr. dehydration.
deliq. deliquescent.
delir. delirious, delirium.
demulc. demulcent.
deodor. { deodorizant, deodorizing.
deoxidiz. deoxidizing.
depil. depilatory.
deriv. derivative.
Desf. Desfontaines.
desic. desiccated, desiccant.
destruct. destructive.
detect. detecting, detection.
determ. determination.
diab. diabetes.
dialyz. dialyzing.
diaph., *or* diaphor. diaphoretic.
diar. diarrhea.
diath. diathesis.
differ. difference, different.
different. differentiating.
diffic. difficult, difficulty.
diffus. diffusible, diffusion.
dil. dilute, diluted.
diox. dioxide.
diphth. diphtheria.
dis. disease.
disagre. disagreeable.
disap. disappearance.
disc. discoloration.
disch. discharge.
discov. discovering.
discut. discutient.
dis'd. diseased.
disinf. disinfectant
disp. dispense.
diss. { dissolves, dissolving.
distil. { distillate, distillation, distilling.
disulph. disulphide.
diur., diuret. { diuretic.
dress. dressing.

dysent. . . . . dysentery.
dysmenor. . . . . dysmenorrhea.
dyspep. . . . . dyspepsia.

E

E. . . . . ether, earths.
eara. . . . . earache.
eas. . . . . easily.
ecz. . . . . eczema.
eczemat. . . . . eczematous.
effervesc. . . . . effervescence, effervescent, effervescing.
effic. . . . . efficacious, efficient.
efflor. . . . . efflorescence, efflorescence, efflorescent.
effloresc. . . . . efflorescence, efflorescence, efflorescent.
effus. . . . . effusion.
elec. . . . . electric.
elim. . . . . eliminate.
emmen. . . . . emmenagogue.
emphys. . . . . emphysema.
emuls. . . . . emulsion.
Endl. . . . . Endlicher.
endometr. . . . . endometritis.
Engl. . . . . Engler.
enlargem. . . . . enlargement.
epid. . . . . epidermis.
epist. . . . . epistaxis.
epith. . . . . epithelium.
eq. . . . . equal.
eruct. . . . . eructation.
erupt. . . . . eruption.
erysip. . . . . erysipelas.
eryth. . . . . erythema.
eschar. . . . . escharotic.
essent. . . . . essential.
ether. . . . . ethereal.
evap. . . . . evaporate, evaporating, evaporation.
evol. . . . . evolution.
exc. . . . . excess.
exceed. . . . . exceedingly.
excit. . . . . excitant, excitation, excitement, exciting.
exhaust. . . . . exhaustion.
expector. . . . . expectorant.
expell. . . . . expelling.
expos. . . . . exposure.
expr. . . . . expressed.
extern. . . . . external, externally.
extr. . . . . extract.
ext'd. . . . . extracted.
exub. . . . . exuberant.
exud. . . . . exudation.

F

f. . . . . for.
Fabr. . . . . Fabricius.
fail. . . . . failure.
fbl. . . . . feeble.
febr. . . . . febrile.
febrif. . . . . febrifuge.
ferment. . . . . fermentation.
ferricy. . . . . ferricyanide.
ferrocy. . . . . ferrocyanide.
ferrug. . . . . ferruginous.
fev. . . . . fever.
fl. . . . . fluid.
flatul. . . . . flatulence, flatulent.
flavor. . . . . flavoring.
floc. . . . . flocculent.
flr. . . . . flower.
fluoresc. . . . . fluorescence.
F. Muell. . . . . Ferd. v. Mueller.
f'ntly. . . . . faintly.
fr. . . . . from.
Fr. . . . . Fries.
fract. . . . . fractional.
frag. . . . . fragile.
fragr. . . . . fragrant.
fum. . . . . fuming.
furunc. . . . . furuncular.
fus. . . . . fusing, fusion.

G

G. . . . . glycerin.
Gaert. . . . . Gaertner.
gangr. . . . . gangrene, gangrenous
gast. . . . . gastric.
gastr. . . . . gastritis.
gastral. . . . . gastralgia.
gastrod. . . . . gastrodynia.
gastroent. . . . . gastroenteritis.
gelat. . . . . gelatine, gelatinous.
gen. . . . . genito.
gen'l. . . . . general.
gen'ly. . . . . generally.
germic. . . . . germicide.
glac. . . . . glacial.
gland. . . . . glandular.
glist. . . . . glistening.
glitt. . . . . glittering.
glyc. . . . . glycerin.
Gm. . . . . gramme, -s.
gonor. . . . . gonorrhea.
grn. . . . . grain, -s.
grad'y. . . . . gradually.
gran. . . . . granules.
granul. . . . . granular, -ated, -ation.

H

h. . . . . heavy, high (temperature), hours.
H. B. K. . . . . Humboldt, Bonpland & Kunth.
hdkf. . . . . handkerchief.
heat. . . . . heating.
hemat. . . . . hematinic.
hematem. . . . . hematemesis.
hemopt. . . . . hemoptysis.
hemor. . . . . hemorrhage, hemorrhagic.
hemost. . . . . hemostatic.
hepat. . . . . hepatitis.
hexag. . . . . hexagonal.
hicc. . . . . hiccough.

h'ly.....highly.
hoarsen.....hoarseness.
Hoffm.....Hoffmann.
homogen.....homogeneous.
homol.....homologous.
Hook.....W. J. Hooker.
Hook. fil.....J. D. Hooker.
hosp.....hospital.
hr. *or* hrs.....hour *or* hours.
Humb.....Humboldt.
hydr.....hydrated.
hydrobr.....hydrobromic, -mide.
hydrochl.....hydrochloric, -ride.
hydrocy.....hydrocyanic, -nide.
hydropho.....hydrophobia.
hygr.....hygrometric.
hygros.....hygroscopic.
hypermenor.....hypermenorrhea.
hyperpl.....hyperplasia.
hypertr.....hypertrophy.
hypn.....hypnotic.
hypochond.....hypochondriasis.
hypoderm.....hypodermically.
hypophos.....hypophosphites.
hyst.....hysteria.

I

ident.....identical.
ignit.....ignition.
immed.....immediately.
impalp.....impalpable.
imperf.....imperfect.
imperv.....impervious.
impet.....impetigo.
import.....important.
impreg.....impregnate, impregnated.
incin.....incinerate.
incip.....incipient.
incomp.....incompatible.
incontin.....incontinence.
incr.....increase, increased.
ind.....indicated.
indic.....indication, indicator.
indig.....indigenous.
indol.....indolent.
indurat.....induration.
inf.....infantum.
infant.....infantile.
infec.....infectious.
infer.....inferior.
infl.....inflamed.
inflam.....inflammation, inflammatory.
inflam'ble.....inflammable.
infloresc.....inflorescence.
influ.....influenza.
infus.....infusible, infusion.
ingred.....ingredient.
inhal.....inhalation.
inj.....injection.
injur.....injuries, injurious.
insol.....insoluble.
insom.....insomnia.
inspis.....inspissated.
inst.....instead.
inst'ly.....instantly.
insuff.....insufflation.
insufflat.....insufflation.
intens.....intensely.
interm.....intermittent.
intern.....internally.
intest.....intestinal, intestines
iodof.....iodoform.
irreg.....irregular
iridesc.....iridescent.
irrit.....irritant, irritating.
irritabil.....irritability.
isom.....isomeric.

J

Jacq.....Jacquin.
jaund.....jaundice.

L

L.....Linnæus.
L. f. (or fil.).....Linnæus' Son.
Labill.....Labilliardière.
lamin.....laminate.
laryng.....laryngitis.
lax.....laxative.
lvs.....leaves.
Lem.....Lemaire.
leucor.....leucorrhea.
L'Hér.....L'Héritier.
liberat.....liberation.
Lindl.....Lindley.
linim.....liniment.
liq.....liquid.
lith.....lithium.
lithia.....lithiasis.
lusterl.....lusterless.
lustr.....lustrous.

M

M.....metals.
macerat.....maceration.
magnes.....magnesium.
mak.....making.
malar.....malarial.
malassimil.....malassimilation.
malign.....malignant,
mall.....malleable. malleability.
manf.....manufacture.
mangan.....manganese.
mania.....maniacal.
maras.....marasmus.
Mart.....Martius.
max.....maximum.
medic.....medicine.
melancho.....melancholia.
mell.....mellitus.
membr.....membrane.
mening.....meningitis.
menor.....menorrhagia.
menstr.....menstruation.
menstruat.....menstruation.
merc.....mercury.
met.....metal, metals.
metal.....metallic.
metror.....metrorrhagia.
Mich.....Michaux.

microbic . . . microbicide.
micros . . . microscopic, microscopy.
Mill . . . Miller.
min . . . mineral.
misc . . . miscible.
mixt . . . mixture.
mod . . . moderate.
moist'd . . . moistened.
molec . . . molecule, molecular.
monocl . . . monoclinic.
mord . . . mordant.
mount . . . mounting.
m. p . . . melting-point
muc . . . mucous, mucus.
Muell. Arg . . . Mueller of Argau.
myal . . . myalgia.
mydr . . . mydriatic.

N

N . . . normal.
nar, narc . . . narcotic.
nat . . . natural.
natur . . . naturalized.
Neck . . . Necker.
need . . . needle.
neopl . . . neoplasm.
nerv . . . nervine, nervous.
nervousn . . . nervousness.
neural . . . neuralgia, neuralgic.
neurasth . . . neurasthenia
neut . . . neutral.
neutral . . . neutralize.
N. F . . . National Formulary.
nitr . . . nitrous.
n'ly . . . nearly.
norm . . . normal.
nutr . . . nutrient.
nutrit . . . nutrition.
Nutt . . . Nuttall.

O

o . . . other.
obes . . . obesity.
obstin . . . obstinate.
obt . . . obtain, obtained.
occas . . . occasionally.
octah . . . octahedral, octahedron.
odorl . . . odorless
offens . . . offensive.
offic . . . official.
oint . . . ointment.
oophor . . . oophoritis
opal . . . opalescence, opalescent.
ophthal . . . ophthalmia, ophthalmic.
ophthalm . . . ophthalmology.
ord . . . ordinary.
org . . . organic.
orthophosph . . . orthophosphoric.
osteomal . . . osteomalacia.
otor . . . otorrhea.
ovar . . . ovarian.
oxal . . . oxalate.
oxid . . . oxidize.
oxid'g . . . oxidizing.
oxid'n . . . oxidation.
oxidiz . . . oxidizable.

P

p . . . pieces.
par . . . parasite.
paral . . . paralysis.
paras . . . parasitic.
part . . . partial.
partic . . . particular, particularly.
pecul . . . peculiar.
pell . . . pellucid.
penetr . . . penetrate, penetrating.
perf . . . perfect.
perf'ly . . . perfectly.
pericard . . . pericarditis.
perist . . . peristalsis, peristaltic.
periton . . . peritonitis.
perm't . . . permanent.
perm'tly . . . permanently.
perman . . . permanganate.
Pers . . . Persoon.
petrol . . . petroleum.
p'fully . . . powerfully.
pharyng . . . pharyngeal.
phlegmon . . . phlegmonous.
phosph . . . phosphoric, phosphorus.
photo., *or* photog . . . photography.
phth . . . phthisis.
phthis . . . phthisical.
phym . . . phymosis.
physiol . . . physiology.
pityria . . . pityriasis.
ph'phtal . . . phenolphtalein.
pleas . . . pleasant.
pneum . . . pneumonia.
poison . . . poisonous
potass . . . potassium.
powd . . . powder.
ppt, precip . . . precipitate.
pref . . . preferable.
pregn . . . pregnancy.
prep . . . prepared, preparation.
prep'g . . . preparing.
pres . . . presence.
preserv . . . preservative.
press . . . pressure.
prev . . . prevent.
prin . . . principle.
princ . . . principal.
princip . . . principally.
prism . . . prismatic.
prob'y . . . probably.
prod . . . product, produced, producing.
prop . . . proportion.
prophyl . . . prophylactic.
prost . . . prostate.
proteol . . . proteolytic.
prur . . . pruritis, pruritic.

psoria.....psoriasis.
pt.....part.
pts.....parts.
ptyal.....ptyalism.
puerp.....puerperal.
pulmon.....pulmonary.
pulv.....pulverulent.
pung.....pungent.
pur.....purity.
purg.....purgative.
purif.....purification.
purul.....purulent.
putref.....putrefaction.
pyrophos.....pyrophosphate

Q

quadr.....quadratic.
quant.....quantity.
quin.....quinine.

R

rach.....rachitis, rachitic.
Raf.....Rafinesque.
rap.....rapidly.
R. B.....Robert Brown.
react.....reaction.
read.....readily.
reag.....reagent.
recom.....recommended.
rectang.....rectangular.
redd.....redden, reddish.
rediss.....redissolves.
reduc.....reducing.
reduct.....reduction.
refract.....refractive.
reg.....regular.
regurgit.....regurgitation.
relax.....relaxation.
reliev.....relieving.
remed.....remedies.
remit.....remittent.
remov.....removing.
repres.....represents.
res.....residue.
resin.....resinous.
resolv.....resolvent.
respir.....respirable, respiration, respiratory.
rheum, rheumat.....rheumatism.
rhomb.....rhombic.
rhomboh.....rhombohedral.
Roxb.....Roxburgh.
R. & P.....Ruiz & Pavon.
rube.....rubefacient.

S

sacchar.....saccharated, saccharine.
saponif.....saponification, saponifying.
satur.....saturated.
scarlat.....scarlatina.
Schlecht.....Schlechtendal.
sciat.....sciatica.
scrof.....scrofula, scrofulous
sebor.....seborrhea.
sec.....second, -s.
second.....secondary.
sed.....sedative, sediment.
sensit.....sensitive, sensitiveness.
sep.....separate.
sev.....several.
sex.....sexual.
shapel.....shapeless.
shin.....shining.
sialag.....sialagogue.
sim.....similar.
sl, sl'y.....slightly.
sleepl.....sleeplessness.
sm.....small.
sod.....sodium.
sol.....soluble.
Soland.....Solander.
solidif.....solidifying.
solub.....solubility.
solut.....solution.
solv.....solvent.
somet.....sometimes.
somew.....somewhat.
Sonn.....Sonnerat.
sopor.....soporific.
sp.....species.
sp. gr.....specific gravity.
spasm.....spasmodic.
spermator.....spermatorrhea.
spir.....spirit, -s. spirituous.
Spreng.....Sprengel.
stim.....stimulant.
stimul.....stimulating.
stom.....stomach.
stomat.....stomachic.
str.....strong.
str'ly.....strongly.
styp.....styptic.
subcut.....subcutaneous.
subl.....sublimate, sublimes.
subseq.....subsequent.
substc.....substance
substit.....substitute, substituting, substitution.
succed.....succedaneum.
sud.....sudorific.
suffic.....sufficient
suffoc.....suffocating.
sugg.....suggested, suggestive.
sulph.....sulphate, sulphuretted.
sum.....summer.
sup.....superior.
supersat.....supersaturate.
supposit.....suppository.
suppur.....suppurative.
surf.....surface.

surg.....surgery, surgical.
sw.....sweat, sweet.
Sw.....Swartz.
sweet.....sweetened.
symp.....symptoms.
synth.....synthesis, synthetic.
syph.....syphilis, syphilitic.
syr.....syrup, syrupy.

T

tastel.....tasteless.
techn.....technical.
temp.....temperature.
tert.....tertiary.
tet.....tetanus.
tetrah.....tetrahedral, tetrahedron.
thr.....through.
Thunb.....Thunberg.
tinct.....tincture.
titr.....titrate.
titr'n.....titration.
tons.....tonsurans.
tonsil.....tonsillitis.
top.....topical.
toxicol.....toxicological.
transl.....translucent.
transmit.....transmitted.
transp.....transparent.
treatm.....treatment.
trem.....tremens.
Trevir.....Treviranus.
tricl.....triclinic.
trigem.....trigeminal, trigeminus.
trimet.....trimetric.
tritur.....triturated
turb.....turbid, turbidity.
tuberc.....tubercular.
turn.....turning.

U

ulc.....ulcer.
ulcerat.....ulceration.
ulcer'd.....ulcerated.
unct.....unctuous.
unnat.....unnatural.
unpleas.....unpleasant.
ureth.....urethral.
urin.....urinary.
U. S. P.....United States Pharmacopœia.
us'y.....usually.
uter.....uterine.

V

v.....very.
var.....variable, variety, various.
varic.....varicose.
veget.....vegetable, vegetation.
Vell.....Velloso.
vener.....venereal.
verm.....vermifuge.
vermil.....vermilion.
versic.....versicolor.
vesic.....vesicant.
vesicat.....vesicatory.
veter.....veterinary.
viol.....violent.
vitr.....vitreous.
vol.....volume, volumetric.
volat.....volatile, volatilize.
volatiliz.....volatilizable, volatilizing.
volum.....volumetric.

W

W.....water.
w.....with.
W. & A.....Wight & Arnott.
W.-b.....water-bath.
wghble.....weighable.
wh.....white.
whoop.....whooping.
Willd.....Willdenow.
wt.....weight.

Z

zym.....zymotic.

MERCK'S 1907 INDEX

AN ENCYCLOPEDIA FOR THE CHEMIST PHARMACIST AND PHYSICIAN

Abelmoschus

(Musk Mallow; Musk Seed; Amber Seed; Ambrette).—Seeds of Abelmoschus (Hibiscus) Moschatus, Moench. Malvaceæ.—*Habit.:* Egypt; India; tropical America.—*Etymol.:* Arabic "habb," seed, and "el-mosk," musk, *i.e.*, the seeds have an odor of musk.—*Constit.:* Odorous principles; mucilage; fixed oil.—Aphrodis.—*Uses: Techn.*, in manuf. perfumes, adulterating musk, and preserving woolens from moths.

Abietic Anhydride.—see **Rosin**

Abrastol (25

(Asaprol [see also]; Calcium Betanaphthol-alphamonosulphonate).— $Ca(C_{10}H_6[OH]SO_3)_2 + 3H_2O$.—Ident. w. asaprol, but somewh. less pure.—Gray powd.—*Sol.* W.; sl. A.—*Uses:* For plastering vines instead of gypsum (up to 10 Gm. per hectol.).

Abrin Merck (1500

Albuminoid (a vegetable agglutinin); act. prin. of seeds Abrus precatorius, L. (Jequirity).—Yellowish-white powd.—*Sol.*, solution sodium chloride.—Exceed. toxic.—*Uses:* Suggested by Kobert for prod. artif'l conjunctivitis.—Employed instead of infus. jequirity in 1:500,000 aqu. solut. for clearing pannous turbidities, in chron. conjunctivitis, etc.—See also Jequiritol and Jequiritol Serum.—*Caut.* Handle very carefully. Smallest particle may be fatal in slightest wound. Extremely dangerous in eye & nose.

Abrotanum.—see **Artemisia Abrotanum**

Abrus

(Jequirity; Indian Liquorice; Wild Liquorice; Prayer Beads; Crab's Eyes; Jumble Beads).—Seeds of Abrus precatorius, L. Papilionaceæ.—*Habit.:* Tropical and sub-tropical countries (East Indies; Brazil).—*Etymol.:* Grk. "abros," pretty. "Precatorius" fr. Lat. "precor," to pray, *i.e.*, the seeds are used as prayer beads. "Jequirity" fr. "jequiry," which in the language of the Tupis is the name of a species of acacia; or more probably, a corruption of the Lat. "liquiritia," because of the sweet taste of the root.—Seeds abt. $^1/_5$ in. long, sub-spherical, hard, and glossy scarlet color, with a black spot surrounding the hilum; odorless; taste somewhat resembling that of other beans.—*Constit.:* Abrin, a very toxic agglutinin; abric acid ($C_{12}H_{24}N_2O$).—*Uses:* In ophthalmology, in form of infusion in trachoma.—See also Jequiritol, and Jequiritol Serum.

Absinthin Merck (250

(Absinthiin; Absynthin [or -iin]).—Bitter prin. fr. Artemisia Absinthium, L. (Wormwood).—$C_{40}H_{50}O_8 + H_2O$ (Kromeyer), or, $C_{15}H_{20}O_4 + H_2O$ (Luck).—Yellowish-brown, amorph. powd.; very bitter.—*Sol.* A., C.; v. sl. E.; insol. W.—*Melt.* 120–125° C.—Bitter Tonic.—*Uses:* Anorexia, constip., chlorosis, &c.—*Dose* $1^1/_2$–3 grains (0.1–0.2 Gm.) in pill form, at each meal.

Absinthium

(Wormwood).—Leaves and tops of Artemisia Absinthium, L. Compositæ.—*Habit.:* Europe; Northern and Western Asia; Africa; cultiv. in U. S.—*Etymol.:* "Artemisia" fr. Grk. "Artemis," the goddess—the Roman Diana—to whom Artemisia Absinthium was dedicated. "Absinthium" fr. Grk. "a," without or not, and "psinthos," pleasure, because of the very bitter taste of the plant.—*Constit.:* Absinthin, $C_{15}H_{20}O_4 + H_2O$ (Luck), or, $C_{40}H_{56}O_8 + H_2O$ (Kromeyer); volat. oil (chiefly absinthol, $C_{10}H_{16}O$); succinic acid; tannin.—Bitter Stomachic; Stim.; Tonic; Febrif.; Anthelmintic.—*Uses:* Gen. debil., anorexia, rheumat., and cerebr. exhaust.—*Doses:* 15–60 grains (1–4 Gm.).—Fld. extract, 20–60 ♏ (1.3–4 Cc.).—Alcoh. extr., 5–20 grains (0.3–1.3 Gm.).—Aqueous extr., 5–10 grains (0.3–0.6 Gm.).

Absynthin.—see **Absinthin**

Abuhab Baguin

Source of bark doubtful, but most probably fr. a spec. of Argyreia or of Erycibe. Convolvulaceæ. Accord. to Dragendorff, Abuhad Baquin (?) is derived fr. an undetermined spec. of Combretaceæ.—*Habit.:* Philippine Islands.—*Etymol.*. "Abuhab" among the natives signifies "poison."—Used by the Negritos as a source of arrow poison.

Abuhab Cahoy

Bark and wood of Lophopetalum toxicum, Loher. Celastraceæ. Botan. source is still an open question.—*Habit.:* Philippine Islands.—*Etymol.:* Fr. Grk. "lophos," tuft or crest, and "petalon," leaf. "Abuhab," see preceding.—Used by the Negritos as source of arrow poison.

Abyssinin

Reddish-brown, liq. extr. fr. spec. of Bayamayo, probably Acocanthera Schimperi, Apocynaceæ; arom. odor; foams greatly; on being dried in exsiccator, loses 20% water, & then forms a syrupy liq.—Used by natives of German East Africa as an arrow poison.

Acacia.—*U. S. P.*

(Gum Arabic).—Gummy exudation fr. Acacia Senegal, Willd. (also A. Verek and other sp. of A.), Leguminosæ. Mimosæ.—*Habit.:* E. and W. Africa; Arabia; Senegal; Kordofan; Egypt; India; Nubia.—*Etymol.:* "Acacia" fr. Grk. "akakia," a thorny Egyptian tree, fr. Grk. "ake," a point. "Gum" fr. Lat. "gummi," derived fr. Grk. "kommi" through Egyptian "cama."—*Sol.* 2 W.; insol. A.—*Constit.:* Arabin (arabic acid; gummic acid), $C_{12}H_{22}O_{11}$, or, $C_{16}H_{18}O_9$ (?); pararabin.—Demulc.; Emoll.; Protective; Nutritive.—*Uses: Intern.,* Bronch. inflam., gastro-intest. irritation, dry fauces, etc.—*Techn.,* as mucilage; pill excip.; emulsionizer.—*Dose:* Ad libitum.

Acacia Flowers.—see **Prunus Spinosa**

Acenaphtene Merck (30

(Ethylenenaphthalene, 1.8-Ethenenaphthene; Naphtylene-ethylene).—Constit. of coal-tar.—$C_{12}H_{16}$, or, $C_{16}H_8.(CH_2)_2$.—Colorl. need.—*Sol.,* hot A.—*Melt.* 95° C.—*Boil.* 277° C.

Acerdol=Calcium Permanganate.—see **Calcium Permanganate**

Acetal Merck.—Pure (20

(Diethylacetal; Ethylidenediethylic Ether; Diethylaldehyde).—Prod. by imperf. oxid'n of alcohol.—$C_6H_{14}O_2$, or, $CH_3.CH(OC_2H_5)_2$.—Colorl., volat. liq.; agre. odor; nutty after-taste.—Sp. Gr. 0.831 at 20° C.—*Sol.* 18 W., 25 C.; all prop., A., E.—*Boil.* 103–104° C.—Hypn.; Sed.—*Uses:* Hypnotic, where chloral contra-ind.—*Dose* 2–3 fl. dr. (8–12 Cc.).

Acetaldehyde.—see **Aldehyde, Ethylic**

Acetaldehyde Oxim.—see **Acetaldoxim**

Acetaldoxim Merck (120

(Aldoxim; Acetaldehyde Oxim).—React.-prod. of aldehyde w. hydroxylamine.—C_2H_5NO, or, $CH_3.CH:N(OH)$.—Colorl. liq.—*Sol.* W., A., E.—*Boil.* 115° C.—Sp. Gr. 0.965 at 15° C.

Acetalphanaphtylamine.—see **Acetnaphthalide, Alpha-**

Acetamide Merck (15

(Acetic Acid Amide).—React.-prod. of ethyl acetate with $NH_4(OH)$.—C_2H_5NO, or, $CH_3.CO.NH_2$.—Colorl. cryst.; deliq.; mousy odor.—*Sol.* A., W.—*Melt.* 82–83° C.—*Boil.* 223° C.

Acetamidosalol.—see **Salophen**

Acetanilide Merck.—Cryst. or powder (1

(Phenylacetamide; Antifebrin).—Acetyl deriv. of aniline.—C_8H_9NO, or, $C_6H_5.NH(CO.CH_3)$.—Wh., shin., cryst. scales; odorl.; sl'y burn. taste.—*Sol.,* abt. 180 W. at 25° C., and 18 boil. W.; 2.5 A. at 25° C., and 0.4 boil. A.; 12 E.; 5 C. at 25° C. (*U. S. P.*)—*Melt.* 113° C.—Antipyr.; Analg.; Antirheum.; Sedat.; Anesth.; Cicatrizant; Antisep.—*Uses: Intern.,* fevers, rheumat., headache, alcoholism, delir., neural., sleeplessn. in children, &c.—*Extern.,* antisep., us'y in fine powd., inst. of iodoform; and as preservative of hypoderm. solut's.—*Incomp.,* nitrous ether (yellow, then red solut.); alkali bromides and iodides in aqu. solut. (insol. compounds formed); hydrated chloral, carbolic acid, resorcinol, and thymol (afford liquid or soft mass on trituration).—*Dose* 3–10 grains (0.2–0.6 Gm.).—*Max. D.* 15 grains (1 Gm.) single, and 60 grains (4 Gm.) daily.—*Caut.* Avoid large doses in fever!—*Antid.,* subcutan. inject. of camphor and ether; alkaline transfus. of sodium chlor.; stimulants; atropine; strychnine; oxygen.

Acetanilide, Monobromated.—see **Bromacetanilide, Mono-**

Acetanisidin.—see **Methacetin**

Acetethylanilide.—see **Ethylacetanilide**

Acetic Anhydride.—see **(Acid) Acetic Anhydride**

Acetic Carmine, Acid.—see **Frey-Schneider's Acetic Carmine, Acid**

Acetic Carmine, Neutral.—see **Hamann's Acetic Carmine, Neutral**

Acetic Oxide.—see **(Acid) Acetic Anhydride**

Acetin Blue.—see **Induline, Alcohol-Soluble**

Acetnaphthalide (Alpha-) Merck (12

(Acetalphanaphtylamine).—React.-prod. alpha-naphtylamine w. acetyl chloride.—$C_{12}H_{11}NO$, or, $C_2H_3O.NH(C_{10}H_7)$.—Colorl. or f'ntly reddish cryst.—*Sol.* A.; sl. in boil. W.—*Melt.* 159° C.

Acetnaphthalide (Beta-) (12

$C_{12}H_{11}NO$.—Long need. or plates.—*Sol.,* hot W.—*Melt.* 132° C.

Acetocinnamone.—see **Benzylideneacetone**

Acetolsalicylic Ether.—see **Salacetol**

Acetone Merck.—Highest Purity, Medicinal (2

(Dimethylketone; Dimethylketal; Ketopropane; Methylacetyl; Pyroacetic Ether).—Prod. by dry distil'n of acetates.—C_3H_6O, or, $CH_3.CO.CH_3$.—Clear, colorl. liq.; fragr. mint-like odor; sharp, biting taste.—Sp. Gr., when nearly anhyd., 0.790 at 25° C.—*Sol.,* all prop., W., A., E., C., & volat. oils.—*Boil.* 56–57° C.—*Uses: Intern.,* Mild Alter.; Anthelm.; Nerv.—*Extern.,* Top. Irrit.—*Dose* 5–15 drops in W. or A.—*Appl.* 10 to 15% solut.—*Caut.* Highly inflammable!

do. Merck.—From Acetone-sodium Bisulphite (12

do. Merck.—Technical (1

Uses: Techn., solvent for resins, fats, caoutchouc, pyroxylin, celluloid, etc.; manuf. of chloroform and synthetic indigo; storing acetylene gas, as it takes up abt. 24 times its volume of acetylene.

Acetone Merck.—Reagent (4

$CH_3.CO.CH_3$.—Clear, colorl. liq.—*Boil.* 56–57° C.—Sp. Gr. 0.797.—*Tests:* (*Res.*) evap. 25 Cc. –

none wghble.—(*Acids*) no act. on blue litmus paper.—(*Solub. in W.*) clearly misc. w. eq. vol. W.—(*Aldehydes*) heat 10 Cc. w. 5 Cc. ammon. solut. $AgNO_3$ 15 min. on steam-bath – no brown color.—(*Oxidiz. Substcs*) to 10 Cc. add 1 drop 0.1% solut. $KMnO_4$ – pink color not entirely disch. in 15 min. at 15° C.—(*H_2O*) mix w. eq. vol. petrol. ether (b. p. 40–70° C.); two layers must not form.—*Uses:* Chiefly as solvent for fats, resins, oils, collodion, etc.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Acetone, Monochlorated.—see **Chloracetone**

Acetone-chloroform.—see **Chloretone**

Acetone-resorcinol

Fr. resorcinol w. acetone, by fum. hydrochl. acid added hot.—$C_{15}H_{16}O_4 + H_2O$.—Sm., anhydrous prisms.—*Sol.*, alkal. solut.; insol. W., A., E., C.—*Melt.* 212–213° C.—Antiseptic.

Acetone-sodium Bisulphite Merck (12

Comp. of acetone & acid sodium sulphite.—$(CH_3)_2C.SO_3Na.OH$.—Colorl. cryst.—*Sol.* W.; sl. A.

Acetonitrile.—see **Methyl Cyanide**

Acetoparaiodanilide.—see **Iodacetanilide**

Acetophenonacetylpara-amidophenol Ester.—see **Hypnoacetin**

Acetophenone.—see **Hypnone**

Acetophenonephenetidin Citrate.—see **Malarin**

Acetopyrine.—see **Acopyrine**

Acetorthoamidotoluene (or, *-ol*).—see **Acetorthotoluide**

Acetorthotoluide Merck (12

(Acetorthoamidotoluene[or,-ol]; Orthotolylacetamide). — $C_6H_{11}NO$, or, $C_6H_4.CH_3.NHCOCH_3$.—Colorl. cryst.—*Sol.* A., E.; sl. W.—*Melt.* 107° C.—*Boil.* 296° C.—Antipyr.; less toxic than acetanilide.—*Dose* 8 grains (0.5 Gm.) single; 60 grains (4 Gm.) daily.

Acetozone (120

(Benzoylacetyl Peroxide; Benzozone).—C_6H_5-$CO.O.O.COCH_3$.—Colorl. cryst.—*Sol.* E., C., carbon tetrachloride, 20 oil; sl. A.; v. sl. W.—*Melt.*, abt. 37° C.—Marketed as 50% mixt. w. inert absorb. powd.; decomposes on contact w. moisture, or in warm place.—Germicide in diseases of bacterial character.—*Dose* 3–5 grains (0.2–0.3 Gm.) in gelat. caps.

Acetpara-amidotoluene.—see **Acetparatoluide**

Acetparatoluide Merck (15

(Acetpara-amidotoluene [or, -ol]; Paratolylacetamide).—$C_9H_{11}NO$, or, $C_6H_4.CH_3.NH.COCH_3$.—Colorl. cryst.—*Sol.*, sl. W.; mod. A.—*Melt.* 151° C.—Antipyr.—*Dose* 15–30 grains (1–2 Gm.).

Acetphenetidin Merck.—*U. S. P.* (2

(Para-acetphenetidin; Oxyethylacetanilide; Phenacetin).—$C_{10}H_{13}NO_2$, or, $C_6H_4(OC_2H_5)(NH.CH_3.CO)$[1:4].—Wh., tastel., cryst. powd.—*Sol.* 925 W., 12 A., 63 E., 20 C. at 25° C.; 70 boil. W.; 2 boil. A.—*Melt.* 134–135° C.—Antipyr.; Analges.; Antirheum.—*Uses: Intern.*, neural., rheum., pleurisy, whoop.-cough, polyuria, diabetes, chorea, influenza, tonsil., scarlat.—*Extern.*, painful ulc.; hastens healing of wounds. Effect lasts 8–10 hrs.; max. in 4 hrs. (Dujardin-Beaumetz).—*Dose: Antipyr.*, 8–10 grains (0.5–0.6 Gm.); *antineural.*, 15–24 grains (1–1.5 Gm.); children: $2^1/_2$–5 grains (0.15–0.3 Gm.).—*Caut.* Use cautiously in phth.

Acet-theocin-sodium (46

(Soluble Theocin [Theophylline]).—Wh., cryst. powd.—60% theophylline.—*Sol.*, abt. 25 W.; insol. A., E.—Diuret.—*Uses:* Cardiac & renal anasarca, etc.—*Dose* 3–5 grains (0.2–0.3 Gm.) 3–4 t. p. d. in solut. aft. meals.

Acetyl Bromide Merck (15

React.-prod. of acetic acid w. phosphorus pentabromide.—C_2H_3BrO, or, $CH_3.CO.Br$.—Colorl., fum. liq.; turns yellow in air.—*Boil.* 81° C.—*Uses:* Reag. in org. synth., & anal.—*Caut.* Fumes irritate the eyes. Reacts violently w. water!

Acetyl Chloride Merck (12

React.-product of acetic acid w. phosphorus trichloride.—C_2H_3ClO, or, $CH_3.CO.Cl$.—Colorl., h'ly refracting, fum. liq.—Sp. Gr. 1.1305 at 0° C.—*Boil.* 55° C.—*Uses:* Reag. in org. synth., & anal.—*Caut.* Fumes irritate the eyes. Reacts violently w. water!

Acetyl Iodide (120

React.-product of acetic acid with iodine & phosphorus.—C_2H_3IO, or, $CH_3.COI$.—Brown, transp., fum. liq.—Sp. Gr. 1.98 at 17° C.—*Boil.* 105–108° C.

Acetyl Oxide.—see **(Acid) Acetic Anhydride**

Acetylacetone Merck (60

$CH_3.CO.CH_2.CO.CH_3$.—Colorl. liq.—Sp. Gr. 0.987 at 15° C.—*Boil.* 136–137° C.

Acetylated Methylenediguaiacol.—see **Euguform**

Acetylbenzoylaconine.—see **Aconitine, Potent**

Acetylcresol (Ortho-) Merck (16

$CH_3.CO.C_6H_3.CH_3OH$.—Cryst.—*Sol.* A., E., hot W.—*Melt.* 104° C.

Acetylenecarbamide.—see **Acetyleneurea**

Acetylene Tetrabromide Merck (20

(Muthmann's Liquid).—$C_2H_2Br_4$.—Yellowish liq.—Sp. Gr. 2.98–3.00 at 15° C.—*Boil.*, abt. 137° C.—*Uses:* In microscopy, and for separating minerals by sp. gr.

Acetylene Tetrachloride Merck.—Pure (16

$C_2H_2Cl_4$.—Colorl. liq.—Sp. Gr. 1.602 at 15° C.—*Sol.* A.

do. Merck.—Commercial (15

Acetyleneurea Merck (800

(Acetylenecarbamide; Glycoluril). — React.-prod. of glyoxal & urea w. hydrochloric acid. —$C_4H_6N_4O_2$, or, $CO(NH)_2.(CH)_2.(NH)_2CO$.—Yellowish cryst.—*Sol.*, hot W.

Acetylparaethoxyphenylurethane.—see **Thermodin**

Acetylpara-amidosalol. } — see **Salophen**
Acetylparamidophenyl Salicylate. }

Acetylparaoxyphenylurethane.—see **Neurodin**

Acetylphenylenediamine. — see **Phenylenediamine, Para-**

Acetylphenylhydrazine Merck (40

(Hydracetin; Pyrodin; Acetylphenylhydrazide).—React.-prod. of phenylhydrazine w. acetic anhydride.—$C_8H_{10}N_2O$, or, $C_6H_5.(NH)_2.C_2H_3O$.—Colorl. cryst. powd.—*Sol.*, readily in A. and in hot W.; sl. in E.—*Melt.* 128° C.—Antipyr.; Analg.; Antiparasitic.—*Uses: Intern.*, reduc. fev. generally; rheumat.—*Extern.*, psoriasis & o. skin dis.—*Dose* $^1/_2$–3 grains (0.03–0.2 Gm.) per day.—*Appl.* 10% oint.

Acetylsalol.—see **Vesipyrine**

Acetyltannin.—see **Diacetyltannin**

Acetylthymol Merck (80

(Thymyl Acetate).—$C_{12}H_{16}O_2$, or, $C_{10}H_{13}O.C_2H_3O$.—Sl. yellowish liq.; pung. taste.—Sp. Gr. 1.009 at 0° C.—*Boil.* 244° C.—Antisep.

Acetyltropeine Merck (1200

$C_{10}H_{17}NO_2$, or, $C_8H_{14}NO.C_2H_3O$.—Syrupy liq.—*Sol.* W., A., E.—*Boil.* 235°–237° C.

Achillea.—see **Iva Flowers**

Achillea

(Milfoil; Thousand-Leaf; Yarrow).—Flowers and herb of Achillea millefolium, L. Compositæ.—*Habit.:* Europe; Asia; naturalized in U. S.—*Etymol.:* Fr. its reputed discoverer, Achilles, who is said to have healed Telephus with the plant. "Millefolium" fr. Lat. "mille," thousand, and "folium," leaf, *i.e.*, the leaf is divided into numerous, minute divisions.—*Constit.: Flowers:* Volat. oil; achillein, $C_{20}H_{38}N_2O_{15}$; aconitic (achilleic) acid; tannin.—*Flowers* are Stim.; Aperient; Tonic; Emmen.; *Herb* is, in addition, Hemostat. and Alterative.—*Uses:* Debility, amenorrh., dysmenorrh. and uterine diseases; domestic remedy in catarrh.—*Doses: Flowers:* 30–60 grains (2–4 Gm.) in infus.—Alcoh. extr., 5–20 grains (0.3–1.3 Gm.).—Aqueous extr., 5–20 grains (0.3–1.3 Gm.)—Fld. extr., 30–60 ♏ (2–4 Cc.).

Achillea Ptarmica.—see **Ptarmica**

Achillein

Purified extract fr. Achillea millefolium.—Brittle, brownish-red, amorph., bitter mass.—*Sol.* W.; diffic. A.; insol. E.

Achras Sapota.—see **Sapota**

Acid Abietic Merck (240

(Abietinic Acid).—By digest. colophony with weak alcohol.—$C_{44}H_{64}O_5$, or, $C_{19}H_{28}O_2$ (Maly).—Yellowish, resinous powd.—*Sol.* A., E., C., B.—*Melt.* 165° C. (Maly); 153–154° C. (Mach).

Acid Acetamidomethylsalicylic.—see **Benzacetin**

Acid Acetic Merck.—Glacial. — 99½%.—Highest Purity.—Dissolves Oil of Lemon in all proportions (1

(Crystallizable Acetic Acid; Methane-carboxylic Acid). — $C_2H_4O_2$, or, $CH_3.COOH$. — Strongly acid liq.; sharp acetic odor; crystallizes a few degrees below 15° C.—Sp. Gr. 1.0553–1.058 at 15° C.—*Boil.* 117°–118° C. (*U. S. P.*)—Indiff. to potass. permang.—*Misc.*, all prop., W., A.—*Uses:* Chiefly techn.—*Extern.*, caustic for warts or corns; vesicat.—*Antid.*, emetics, magnesia, chalk, soap, oil, &c.

do. Merck.—80%.—Pure (1

Misc., all prop., W., A.—Sp. Gr. 1.0748 = 10° Bé.—*Uses:* Techn. & medic. (caustic for warts).

do. Merck.—60%.—Pure (1

Sp. Gr. 1.068 at 15° C.—*Uses:* Techn.

do. Merck. — *U. S. P.* — Highest Purity, Medicinal.—36% (1

$C_2H_4O_2$ + aq., or, $CH_3.COOH$ + aq.—Sp. Gr., ab. 1.045 at 25° C.—*Uses:* Techn. & medic.—*Dose* 15–40 ♏ (1–2.6 Cc.), well diluted.

do. Merck.—30%.—Redistilled (1

"No. 8." Sp. Gr. 1.040 = 6° Bé. at 15° C.

do. Merck.—Diluted.—*U. S. P.*—6% (1

Sp. Gr. 1.008.—*Uses:* Instead of vinegar.—*Dose* 100–200 ♏ (6.5–13 Cc.).

Acid Acetic Merck.—Reagent.—Diluted (1

Colorl. liq.—Sp. Gr. 1.041.—Abt. 30% $CH_3.COOH$.—*Tests:* As under Acid Acetic, Reagent, Glacial, 96%, but using 30 Cc. 30% acid instead of 10 Cc. 96% acid.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

do. Merck.—Glacial.—Reagent.—99½% (2

$CH_3.COOH$.—Clear, colorl. liq.; strong acetic odor.—Sp. Gr., abt. 1.048 at 25° C.—*Misc.*, all prop. w. W. or A.—At least 99.5% $CH_3.COOH$.—*Solidif.*, at abt. 15.65° C.—*Tests: (Res., HCl,*

H_2SO_4, Heavy Met.) As under Acid Acetic, Reagent, Glacial, 96%.—In addition make the following: (*Formic & Sulphurous Acids*) 2 Cc.+ 8–10 Cc. NH_4OH+solut. $AgNO_3$–no dark deposit on boil. 2 min.—(*Subst'c's Reducing $KMnO_4$*) 2 Cc.+10 Cc. H_2O+0.1 Cc. decinorm. solut. $KMnO_4$–pink color not entirely changed to brown in 2 hrs.—(*Other Empyreumatic Subst'c's*) 10 Cc.+solut. KOH to alkalinity–no smoky odor.—(*Subst'c's Reduc. $K_2Cr_2O_7$*) 10 Cc.+10 Cc. conc. H_2SO_4 in which 0.02 Gm. $K_2Cr_2O_7$ is dissolved–no green color within half an hr.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Acid Acetic Merck.—Glacial.—Reagent.—96% (2

$CH_3.COOH$.—Clear, colorl. liq.; pung. odor; solidif. at abt. 10° C.—Sp. Gr. 1.064.—*Boil.* 117–118° C.—At least 96% $CH_3.COOH$.—*Tests:* (*Res.*) evap. 10 Cc.–none wghble.—(*HCl*) to 5 Cc.+50 Cc. H_2O+5 Cc. HNO_3 add $AgNO_3$–no turbid.—(*H_2SO_4*) 10 Cc.+150 Cc. H_2O; boil; add $BaCl_2$–no $BaSO_4$ should ppt. within 12 hrs.—(*Empyreuma*) 5 Cc.+15 Cc. H_2O+0.3 Cc. decinorm. $KMnO_4$–red color must not disappear within 15 min.—(*Heavy Met. & Earths*) *a:* 20 Cc. +100 Cc. H_2O–not ch'ng'd by H_2S; *b:* 10 Cc. +100 Cc. H_2O+excess NH_4OH–no green color on add. $(NH_4)HS$, & no turbid. or ppt. on add. $(NH_4)_2C_2O_4$.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

do. Merck.—Reagent.—90% (2

Colorl. liq.—Sp Gr. 1.0706.—At least 90% $CH_3.COOH$.—*Tests:* As under Acid Acetic, Glacial, Reagent, 96%.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

do. Merck.—Reagent.—36% (1

$CH_3.COOH$.—Clear, colorl. liq.—Sp Gr., abt. 1.048.—Abt. 36% $CH_3.COOH$.—*Tests:* As under Acid Acetic, Glacial, Reagent, 96%, but using 25 Gm. of 36% acid instead of 10 Gm. of 96% acid.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

(Acid) Acetic Anhydride Merck.—Highest Purity (5

(Acetic Anhydride; Acetyl Oxide; Acetic Oxide; so-called "Anhydrous Acetic Acid").—By distil. acetyl chloride w. an alkali acetate.—$C_4H_6O_3$, or, $O(CH_3.CO)_2$.—Colorl., v. mobile, str'ly refractive liq.; v. str. acetic odor.—Sp. Gr. 1.080 at 15° C.—Indiff. to potass. permang.—*Boil.* 137° C.—*Uses:* Techn.

(Acid) Acetic Anhydride Merck.—Pure (3

(Acid) Acetic Anhydride Merck.—Reagent (6

$(CH_3.CO)_2O$.—Colorl. liq.; pung. odor.—Sp. Gr. 1.08.—*Boil.* 137° C.—*Tests:* (*HCl*) 1 Cc.+ 50 Cc. H_2O+5 Cc. HNO_3 (sp. gr. 1.153)+$AgNO_3$–no reaact.—(*Res.*) evap. 10 Cc.–none wghble.—*Uses:* Exam. adeps lanæ, glycerin, volat. oils, resins, etc.; also in org. anal., & synth.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Acid Acetonic.—see **Acid Oxyisobutyric**

Acid Acetotrimethylcolchicinic.—see **Colchicein**

Acid Acetylcarbonic.—see **Acid Pyrouvic**

Acid Acetylsalicylic.—see **Aspirin**

Acid Achilleic.—see **Acid Aconitic**

Acid Aconitic Merck (60

(Equisetic, Citridic, or Achilleic, Acid).—Fr. lvs. & tubers of Aconitum Napellus, L., (Aconite), the calcium in which is comb. w. this acid; also fr. various spec. of Achillea and Equisetum. Also fr. citric acid by heat.—$C_6H_6O_6$, or, $COOH.CH_2.C(COOH):CH.COOH$.—Colorl. cryst.—*Sol.* W., A., E.—*Melt.* 186° C.

Acid Adipic Merck (1600

(Adipinic Acid).—Fr. animal & plant fats by oxid'n w. nitric acid, & fr. other sources.—$C_6H_{10}O_4$, or, $(CH_2)_4.(COOH)_2$.—Yellowish cryst. powd.—*Sol.* A., E., hot W.; sl. in W.—*Melt.* 148° C.—*Boil.* 265° C.

Acid Agaricic Merck (228

(Agaric, Laricic, or Agaricinic, Acid).—Fr. agaricin.—$C_{16}H_{30}O_6+H_2O$, or, $C_{14}H_{27}.OH.(COOH)_2+H_2O$.—Yellowish cryst. powd.; odorl.; alm. tastel.—*Sol.*, sl. W., E., and v. sl. in C.; in 130 cold & 10 boil. A.; also in boil. W.; in oil of turpentine, hot glacial acetic acid.—*Melt.* 140° C.—Antihidrotic.—*Uses:* Night-sweats of phth., & to check the sudorific effects of synthetic antipyretics.—*Dose* $^1/_6$–$^1/_2$ grain (0.01–0.03 Gm.) at night, in pills.—See also **Agaricin.**

Acid Alginic

$C_{76}H_{77}N_2O_{22}$.—Colloidal substc. fr. sea-weeds.—Nutrient.

Acid Allomaleic.—see **Acid Fumaric**

Acid Aloeresinic (200

Fr. aloe resin, by nitric acid.—$C_7H_3NO_6$(?).—Dark brown, amorph. powd.—*Sol.* W.

Acid Aloetic Merck (150

(Aloetinic, or Polychromic, Acid; Aloe Purple; Tetranitroanthraquinone).—Fr. aloes,

by nitric acid.—$C_{14}H_4(NO_2)_4O_2$.—Brownish-yellow to orange-yellow, amorphous powd.; explodes w. heat.—*Sol.* A.; sl. in W.

Acid Alpha-aminoisocaproic.—see **Leucine**

Acid Alpha-aminopropionic. — see **Alanin, Alpha-**

Acid Alphabetadioxypropionic. — see **Acid Glyceric**

Acid Alphacarbonaphtholic.—see **Acid Oxynaphtoic, Alpha-**

Acid Alphadicinnamic.—see **Acid Truxillic, Alpha-**

Acid Alphahydroxypropionic. — see **Acid Lactic**

Acid Alphamonobromobutyric. — see **Acid Monobromobutyric, Alpha-**

Acid Alphamonobromopropionic. — see **Acid Monobromopropionic**

Acid Alphanaphtholcarboxylic.—see **Acid Oxynaphtoic, Alpha-**

Acid Alphaoxyisobutyric.—see **Acid Oxyisobutyric**

Acid Alphaphenylacrylic.—see **Acid Atropic**

Acid Alphaphenylbetahydroxypropionic. — see **Acid Tropic**

Acid Alphapyridinecarbonic.—see **Acid Picolinic**

Acid Alphaluvic (or, *-luvylic*). — see **Acid Phenylacetic**

Acid Amidobenzoic (Meta-) Merck (80

(Benzaminic Acid).—Fr. metanitrobenzoic acid by reduct.—$C_7H_7NO_2$, or, $C_6H_4.NH_2.CO_2H$-[1:3].—Yellowish cryst.; sublime eas.; sweet taste; aqu. solut. turns brown in air.—*Sol.* 2 W., 4 A.—*Melt.* 173–174° C.

Acid Amidobenzoic (Ortho-) Merck.—Highest Purity (40

(Anthranilic Acid).—Fr. indigo, by boil. w. potassa.—$C_7H_7NO_2$, or, $C_6H_4.NH_2.CO_2H$ [1:2].—Yellowish cryst.—*Sol.* W., A.—*Melt.* 144–145° C.—Important intermediate product in the industrial manuf. of synthetic indigo.

do. Merck.—Techn. (12

Acid Amidobenzoic (Para-) Merck (100

(Amidodracylic Acid).—Fr. paranitrobenzoic acid by reduct.; or from acetylparatoluidine by oxid'n in boil. water w. potass. permang.—$C_7H_7NO_2$, or, $C_6H_4.NH_2.CO_2H$ [1:4].—Yellow cryst.; perman. in moist air.—*Sol.*, mod. in W.; eas. in A., E.—*Melt.* 186–187° C.

Acid Amidosalicylic (Hydrochloride) Merck (250

(Hydrochloride of Meta-aminosalicylic Acid).—By reduct. of nitrosalicylic acid.—$C_7H_7NO_3HCl$, or, $C_6H_3(COOH)(OH)(NH_2)$[1:2:5]-HCl.—The hydrochloride only is supplied, as solut. of the pure acid is very easily decomposable.—Grayish-white cryst.—*Sol.*, cold W.; hot A.—*Uses:* Manuf. of transfer paper.

Acid Amidosulphonic Merck (100

$NH_2.SO_3H$.—Colorl. cryst.—*Sol.* W.

Acid Aminoacetic.—see **Glycocoll**

Acid Aminobarbituric.—see **Uramil**

Acid Aminoethansulphonic.
Acid Aminoisethionic. } —see **Taurin**

Acid Aminosuccinamic.—see **Asparagin**

Acid Aminosuccinic.—see **Acid Asparaginic**

Acid Amygdalic Merck (15

(Phenylhydroxyacetic, Amygdalinic, Phenylglycolic, Benzoglycolic, or Paramandelic, Acid).—Fr. benzaldehyde & acetophenone dibromide.—$C_8H_8O_3$, or, $C_6H_5.CH(OH).COOH$.—Large, rhombic cryst.—*Sol.*, sl. W.; v. eas. in A., E.—*Melt.* 118° C.

Acid Anacardic Merck (300

Fr. Anacardium occidentale, L. (Cashew nut).—$C_{22}H_{32}O_3$.—Brown, cryst. mass.—*Sol.* A., E.—*Melt.* 26° C.—Anthelm.—*Uses:* Vermifuge, in form of ammonium anacardate.

Acid Anchoic.
Acid Anchoinic. } —see **Acid Azelaic**

Acid Anemonic Merck (600

Fr. anemonin (extr'd fr. cert. spec. of Anemone by steam), by baryta water.—$C_{10}H_{10}C_5$.—Yellowish powd.; insol. in W.

Acid Angelic

(Angelicic Acid).—Fr. root Angelica Archangelica, L., & fr. oil Anthemis nobilis, L.—$C_5H_8O_2$, or, CH_2:CH.CH(CH_3)COOH.—Monocl. prisms, or need.; spicy odor.—*Sol.* A., E., hot W.—*Melt.* 45° C.—*Boil.* 185° C.—Arom. tonic.

Acid Anilinesulphonic.—see **Acid Sulphanilic**

Acid Anilotic Merck (150

(Anilotinic, or Vicinal Metanitrosalicylic, Acid).—Fr. salicylic acid, or salicin, by oxid'n w. nitric acid.—$C_7H_5NO_5+H_2O$, or, $C_6H_3COOH.OH.NO_2$ [1:2:3]+H_2O.—Yellowish cryst.—*Sol.* A., E.; sl. W.—*Melt.* 125° C.

Acid Anisic Merck.—Perfectly white, cryst. (20

(Paramethoxybenzoic Acid; Methyoxylbenzoic Acid; identical w. Draconic Acid [Laurent], Umbellic Acid [Persoz]).—Fr. anethol or oil of anise by oxid'n.—$C_8H_8O_3$, or, C_6H_4-OCH_3COOH.—Wh. cryst.; odorl.; tastel.—*Sol.* A., E.; v. sl. cold, eas. in hot, W.—*Melt.* 184° C.—Antisep.; Analg.; Antipyr.—*Uses: Intern.*, inst. of salicylic acid in acute artic. rheumat.; fev., neuralg., diab. mell., chronic gastr., & intest. catarrhs, diarr., &c.; us'y in form of sodium anisate.—*Extern.*, oint. for

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

eczemat. erupt.; tooth powd.; & in powd. with starch, for fetor of feet.—*Dose* 5–15 grains (0.3–1 Gm.).—*Appl.*, in 1:10 oint. or alcoh. solut.—*Antid.*, digitalis.

Acid Anisolsulphonic
By treat. anisol w. sulphuric acid, both the ortho- & the para-compound being formed. —$C_7H_8SO_4$, or, $CH_3O.C_6H_4.SO_3H$.

Acid Anthranilic.—see **Acid Amidobenzoic, Ortho-**

(*Acid*) *Antimonic Anhydride.*—see **Antimony Oxide, Antimonic**

(*Acid*) *Antimonous Anhydride* or *Anhydrous.*—see **Antimony Oxide, Antimonous**

Acid Arabic (60
(Gummic Acid; Arabin).—From acacia.—$C_6H_{10}O_5+H_2O$.—Wh., amorph. powd.; str. acid react. in solut.; sour taste.—*Sol.*, in alkal. W.

Acid Arachic Merck (800
(Arachidic, or Arachinic, Acid).—Fr. oil of Arachis hypogæa, L. (Peanut).—$C_{20}H_{40}O_2$, or, $C_{19}H_{39}.COOH$.—Sm., shin. plates; pearly luster.—*Sol.* A., E.—*Melt.* 75° C.

Acid Arsenic Merck.—Pure (1
(*True*, or Ortho-, Arsenic Acid).—Fr. arsenic by digest. with nitric acid (12) & hydrochl. acid (1).—$2H_3AsO_4 + H_2O$.—Wh., transl. cryst.—*Sol.* W., A.—*Uses:* Chiefly techn. and in manuf. of arsenates; rarely medicinally, and then us'y only in form of sodium arsenate. —*Dose* $^1/_{12}$ grain (0.005 Gm.) max. single, and $^1/_6$ grain (0.01 Gm.) daily.—*Antid.*, emetics; stomach pump or siphon if seen immediately; hot milk & water w. zinc sulphate or mustard. After vomiting, give milk or eggs, & magnesia in milk. If saccharated oxide of iron or dialyzed iron is handy, use. If tincture of iron & ammonia water are within reach, precip. former with latter, collect precip. on a strainer, & give it moist. Always give antidotes, be the case ever so hopeless.—*Caut.* Highly poisonous!

do. Merck.—Highest Purity, dry.—Free from Sulphuric Acid (2

do. Merck.—Commercial, dry (1
Uses: Techn., chiefly in glass-making.

Acid Arsenous (or *-ious*).—see **Arsenic Trioxide**

Acid Aseptic Merck (5
Aqu. solut. boric and salicylous acids w. hydrogen peroxide, in variable proportions.—Colorl. liq. becoming brown on expos. to air. —Antiseptic and Hemostatic in 10–50% solut.—*Uses:* Techn., for preserv. eggs.

Acid Asparaginic Merck (100
(Asparagic, Aspartic, or Aminosuccinic, Acid). —Fr. asparagin by saponif. w. hydrochl. acid. —$C_4H_7NO_4$, or, $COOH.CH_2.CH(NH_2).COOH$. —Colorl. cryst.; odorl.—*Sol.*, hot W.; alkal. solut.—*Reag.*, prevents precip. of Cu by KOH.

Acid Atropic Merck (300
(Alphaphenylacrylic Acid).—Fr. atropine by baryta water, or by heat. w. hydrochl. acid. —$C_9H_8O_2$, or, $CH_2:C(C_6H_5)COOH$.—Colorl. cryst.; volat. w. steam.—*Sol.*, carbon disulphide, A., E.; sl. W.—*Melt.* 106–107° C.—*Boil.* 267° C., w. part. decomp.

Acid Atropic, Iso-; Alpha- & Beta-.—see **Acid Isatropic**

Acid Azelaic Merck (240
(Azelainic, Anchoic, Anchoinic, or Lepargylic, Acid).—Oxid'n. prod. of oleic acid, cocoanut oil, Chinese wax, or castor oil.—$C_9H_{16}O_4$, or, $C_7H_{14}(COOH)_2$.—Colorl. cryst.—*Sol.* W., A., E.—*Melt.* 106–107° C.—*Boil.* 360° C.

Acid Benzaminic.—see **Acid Amidobenzoic, Meta-**

Acid Benzaminoacetic.—see **Acid Hippuric**

Acid Benzenehexacarboxylic.—see **Acid Mellitic**

Acid Benzenesulphonic Merck (50
(Benzolsulphonic Acid).—$C_6H_5SO_3H.+^1/_2H_2O$. —Colorl., very deliquesc., cryst. mass.—*Sol.*, eas. W.

Acid Benzoboric.—see **Acid Borobenzoic**

Acid Benzoglycolic.—see **Acid Amygdalic**

Acid Benzoic Merck.—From Benzoin Resin.—Sublimed (3
(Phenylformic Acid).—$C_7H_8O_2$, or, $C_6H_5.COOH$.—Wh., or faintly yellowish pearly plates, or need.; agre., arom. odor & taste. —*Sol.* 1.8 A. at 25° C.; 15 boil. W., 1 boil. A. (U. S. P.); 3 E., 7 C., 10 G.; CS_2., at 15° C. (281 W. at 25° C.; also benzene, fixed & volat. oils; sl. petrol. benzin., *U. S. P.*). Borax or sodium phosphate incr. sol. in W.—*Melt.*, abt. 120° C.—*Boil.* 250° C.—Antisep.; Antipyr.; Expector.—*Uses: Intern.*, to acidify phosphatic urine; reduce acidity of uric-acid urine; control urin. incontin.; also in chr. bronch., pulmonary edema, & jaund.—*Extern.*, wound-dress. and in urticaria, &c. in 1%–10% oint. and in 1% hydro-alcoh. solut.—*Techn.*, very effective preserv. of fruit-juices, alkaloidal solut's, &c.—*Dose* 10–40 grains (0.6–2.6 Gm.) 6 t. p. d.; as expectorant, 2–8 grains (0.12–0.5 Gm.) several t. p. d.—*Incomp.*, corros. subl., lead acet., &c.—*Caut.* Darkens in light. Keep in amber bot's.

do. Merck.—From Toluene (Toluol) (1
By oxid'n w. nitric acid.—Gen'l propert. as of preced.—*Melt.*, abt. 121° C.—*Boil.* 250° C.—*Uses: Intern.*, same as acid fr. benzoin; though some clinicians reject it.—*Extern.*, in surg.—1000 Gm. absorb. gauze soaked in solut. of 50 Gm. toluene-benzoic acid, 20 Gm. castor oil, & 2430 Cc. methyl alcohol, produces an approx'ly 5% surg. gauze (Bruns). —*Techn.*, in printing fabrics, and in manuf. of aniline blue and other coal-tar colors.

Acid Benzoic Merck.—From Urine.—Resublimed, perf. white (6

Fr. urine of herbiv. anim.—Wh., lustr. cryst.; characteristic urine odor.—*Sol.* A., E., sl. W.—*Uses:* Techn.

(Acid) Benzoic Anhydride Merck (12

(Benzoyl Oxide; so-called "Anhydrous Benzoic Acid").—Fr. benzoyl chloride, by potass. oxalate.—$C_{14}H_{10}O_3$, or, $(C_6H_5.CO)_2O$.—Colorl. cryst.—*Sol.* A., E.—*Melt.* 42° C.—*Boil.* 360° C.—*Uses:* Disinf.—*Incomp.*, hot water, alkalies.

Acid Benzolsulphonic.—see **Acid Benzenesulphonic**

Acid Benzoylaminoacetic.—see **Acid Hippuric**

Acid Benzylacetic.—see **Acid Hydrocinnamic**

Acid Beta-acetylpropionic.—see **Acid Levulinic**

Acid Betacarbonaphtholic.—see **Acid Oxynaphtoic, Beta-**

Acid Betadithio-oxybenzoic.—see **Acid Dithiosalicylic**

Acid Betanaphtholcarboxylic.—see **Acid Oxynaphtoic, Beta-**

Acid Betaoxymethylbetapyridylpropionic.—see **Ecgonine**

Acid Betaphenylacrylic.—see **Acid Cinnamic**

Acid Betaphenylpropionic.—see **Acid Hydrocinnamic**

Acid Betapyridinecarboxylic.—see **Acid Nicotinic**

Acid Bichloracetic.—see **Acid Dichloracetic**

Acid Bismuthic Merck (70

Fr. bismuthic oxide, by water.—$Bi_2O_5.H_2O$.—Red powd.—Sp. Gr. 5.75 at 20° C.—*Insol.* W.

Acid Boric Merck.—Highest Purity, Medicinal, cryst. (1

(Boracic, or Orthoboric, Acid).—Fr. crude, native boric acid.—H_3BO_3.—Colorl. cryst.; pearly luster; sl. unct. to touch; odorl.; faint, bitterish-acid taste.—*Sol.* 18 W., 15.3 A., 4.6 G. at 25° C.; 3 boil. W. & 4.3 boil. A.—*Melt.* 160° C.; volat. at h. temp.—Antisep.; Preserv.—*Uses: Extern.*, dress. wounds & sores in 5–10% petrolatum oint., and in insufflat. in powd. form; eye lotions and nasal and aural washes, in 1–4% aqu. solut.; ringworm; eczema & o. skin dis.—*Intern.*, cystitis, tuberc., diar., diphtheria, and abnorm. gastric fermentations.—*Dose* 5–15 grains (0.3–1 Gm.) 3 t. p. d.—*Techn.*, preservative.—*Incomp.*, carbonates.

do. Merck.—Highest Purity, impalp. powder (1

Uses: Insufflat. in rhino-laryngological affect.

do. Merck.—Pure, cryst. or powder (1

Uses: Techn. Boric acid, as well as borax, is extensively used for rendering wood weatherproof; for bleaching; in manuf. of cements; in printing & dyeing; in manuf. of enamels, glass & plaster-of-Paris; in painting, optics, ceramics, & photography; in manuf. of leather, glue, carpets, linens, hats, soaps & artificial gems; refining petroleum; also as insecticide.

(Acid) Boric Anhydride Merck.—Pure, fused, lumps or powder (4

(Boron Oxide; so-called "Anhydrous Boric Acid").—Fr. true boric acid by str. heat.—B_2O_3.—Semi-transp., colorl. glassy, brittle solid, or wh. powd.; odorl.; volat. at h. temp.—*Sol.* W., A.—*Melt.* 577° C.—*Uses:* Blowpipe work; metallurgy.—*Caut.* Keep dry!

(Acid) Boric Anhydride Merck.—Reagent.—For silicate analysis, according to Jannasch (6

(Boric-Acid Glass; Fused Boric Acid).—B_2O_3.—Brittle, vitr., hygros. lumps.—*Tests:* (*SiO_2; Alkalies, etc.*) diss. 5 Gm. in 50 Cc. methyl alcohol freshly satur. w. HCl gas, in platin. dish; evap.; treat res. w. 25 Cc. meth. alcoh. + HCl, evap., & ignite—no wghble res.—*Uses:* Particularly in analysis of silicates to determine silica & alkalies.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Acid Borobenzoic Merck (8

(Benzoboric Acid).—Wh., microcryst. powd.—*Sol.*, hot W., & A.—Antiseptic.—*Uses:* In mouth washes & gargles. Exhibits the physiological action of boric & benzoic acids.

Acid Borocitric Merck (6

White powd.—Antiseptic; Uratolytic.—*Uses:* Urinary calculi, gout, &c. Solv. power for urates & phosphates is said to be exceedingly great; biborocitrates are the best forms for admin.—*Dose* 5–20 grains (0.3–1.3 Gm.) several times per day.

Acid Borohydrofluoric Merck (6

(Borofluorhydric, or Hydrofluoboric, Acid).—Fr. boron fluoride, by water.—HBF_4.—Clear, colorl. liq.; str. acid react.—*Boil.* 130° C.—*Misc.*, w. W.

Acid Borononotungstic.—see **Acid Borotungstic**

Acid Borophenylic Merck (10

(Phenylboric Acid).—Mixt. of phenyl borate ($C_6H_5BO_2$) and phenyl triborate ($C_6H_5B_3O_5$), obtained by act. of phosphorus oxychloride upon mixt. of boric acid & phenol.—Wh. or reddish cryst.—*Sol.* W.—*Melt.* 204° C.—Antisep.—*Uses:* Chiefly technical; preservative (in 1:5000 solut.). Fatal to lower forms of life, the higher being scarcely affected even by large quantities.

Acid Borosalicylic Merck (10

Comb. of boric & salicylic acids in molec. prop.; prob'y cont'g borodisalicylic acid, $BOH(OC_6H_4.CO_2H)_2$, a substc. not yet isol. —Wh. powd.—Antisep.—*Uses:* Extern., inst. of salicylic acid, us'y in form of sodium salt.

Acid Borotungstic Merck (30

(Borowolframic, or Borononotungstic, Acid). —$B_2O_3.(WO_3)_9.24H_2O$.—Yellowish liq.—Sp. Gr. abt. 3.0.—*Sol.* W.—*Uses:* Mineralogy.—*Caut.* Keep from air & light.

Acid Borowolframic.—see **Acid Borotungstic**

Acid Brassidinic

(Brassidic Acid).—Fr. erucic acid, by dil. nitric acid.—$C_{22}H_{42}O_2$.—Thin cryst. plates.—*Sol.*, mod. A., E.—*Melt.* 60° C.

Acid Bromacetic.—see **Acid Monobromacetic**

Acid Bromhydric.—see **Acid Hydrobromic**

Acid Bromic Merck.—Sp. Gr. 1.12=15.5° Bé.—Absol. free fr. Sulphuric Acid (4

Fr. barium bromate.—$HBrO_3$.—Colorl. or sl. yellowish liq., cont. abt. 10% absol. acid; bromine-like odor. Turns yellow rap. on expos.—Decomp. at h. temp.

Acid Bromosuccinic.—see **Acid Monobromosuccinic**

Acid Butylacetic Merck (100

(Isohexoic, or Isocaproic, Acid). — Fr. isoamyl cyanide by saponif.—$C_6H_{12}O_2$, or, $(CH_3)_2CH(CH_2)_2COOH$.—Liq.; rancid odor. —Sp. Gr. 0.925 at 20° C.—*Boil.* 198.6–199.8° C.

Acid Butyllactic.—see **Acid Oxyisobutyric**

Acid Butyric Merck.—Highest Purity, free from Caproic & Acetic Acids.—100% (3

(Normal or Fermentation Butyric, Propylformic, or Ethylacetic, Acid).—By act. of living ferment of putrid cheese on sugar solut. — $C_4H_8O_2$, or, $CH_3(CH_2)_2COOH$. — Colorless, limpid liq.; rancid odor; v. sour; solidif. at −19° C.—Sp. Gr. 0.958 at 15° C.—*Misc.*, all prop., W., A.—*Boil.* 163° C.—*Uses:* Techn.; some of its ethers serve as bases of artif. flavor. ingred. for certain liqueurs, soda-water syrups, candies, &c.

do. Merck.—Pure, 80%, 60%, & 50% (2

do. Merck.—Technical, absolute (2

Uses: Manuf. of butyrates, and the technically important esters.

(Acid) Butyric Anhydride (Normal) Merck (60

(Butyric Anhydride; Butyryl Oxide; so-called "Anhydrous Butyric Acid").—By act. of butyryl chloride on a dry alkali butyrate.—$C_8H_{14}O_3$, or, $(CH_3.CH_2.CH_2.CO)_2O$.—Sp. Gr. 0.978 at 15° C.—*Boil.* 191–193° C.

Acid Butyric (Iso-) Merck—Highest Purity (20

(Isopropylformic, or Dimethylacetic, Acid). —$C_4H_8O_2$, or, $(CH_3)_2CH.COOH$.—Colorl., limpid liquid; less disagre. odor than butyric acid.—Sp. Gr. 0.965 at 0° C.—*Sol.* A., W.—*Boil.* 154° C.

do. Merck.—Commercial (12

Acid Cacodylic Merck (80

(Dimethylarsenic, or Kakodylic, Acid).—Fr. cacodyl & mercurous oxide, in presence of W. — $AsO_2C_2H_7$, or, $AsO(CH_3)_2OH$. — Colorl. cryst.; odorl.; sl. sour.—*Sol.* W., A.—*Melt.* 200° C.—Alterat.; Hematinic.—*Uses:* Chiefly in obstin. psoriasis and leucocythemia. The cacodylates (which see) are now largely used instead of the alkali arsenites, as the former are far less toxic.—*Dose* 1–3 grains (0.06–0.2 Gm.), usually *subcut.* once daily or every other day.

Acid Caffetannic Merck (400

(Coffee-tannic Acid).—$C_{15}H_{18}O_8$.—Fr. Coffea arabica, L. (Coffee).—Brown mass or powd. —*Sol.* W., A.

Acid Caïncic

(Cahincic Acid; Caincin, Cahincin).—Fr. root of Chiococca anguifuga, & of C. racemosa, Jacq. (Caïnca root).—$C_{40}H_{64}O_{18}$.—Cryst. flakes; odorl.; bitter astring.—*Sol.* A., E.; v. sl. W.—Diur. & Cath. in sm. doses; Emetic in large.—*Uses:* Chiefly in dropsy.—*Doses:* Diur.-cath., 2–4 grains (0.12–0.25 Gm.); emetic, 8–15 grains (0.5–1 Gm.).—*Max. D.* 15 grains (1 Gm.).

Acid Camphoric Merck.—Highest Purity, Medicinal (12

By oxid'n of camphor w. nitric acid.—$C_{10}H_{16}O_4$, or, $C_2H_5.C_6H_9(COOH)_2$. — Colorl. need., or scales; odorl.; fbl. acid taste.—*Sol.* A., E., C.; in 10 boil. W.; 125 W. at 25° C.; in fats & oils. — *Melt.* 187° C. — Antihidr.; Antisep.; Astring.; Anticatar.—*Uses: Extern.*, 2–6% aqu. solut., w. 11% A. to each 1% acid, in ac. skin dis., or as paint; 0.5–2% solut. for gargle or spray in ac. & chr. affect. of respir. tract.—*Intern.*, phthis. night-sw., chr. bronch., pneum., gonor., anginas, chr. cystitis, &c.—*Doses:* 8–30 grains (0.5–2 Gm.), in powd. several t. p. d.; as an antihidrot., 15–23 grains (1–1.5 Gm.) 2 hrs. before sweating sets in.—*Max. D.* 60 grains (4 Gm.) per day.

(Acid) Camphoric Anhydride Merck (30

$C_{10}H_{14}O_3$.—Wh. cryst.—*Sol.*, eas. A., E.—*Melt.* 216–217° C.

Acid Camphoronic Merck (60

(Isopropylcarballylic Acid).—Fr. camphor or campholic acid by oxid'n. Found in mother liquor fr. which camphoric acid has been obt'd.—$C_9H_{14}O_6$, or, $C_6H_{11}(COOH)_3$.—Wh., hygrosc. cryst.—*Sol.*, eas. W., A., E.—*Melt.* 136–137° C.—Antisep.—*Caut.* Keep fr. moist air.

Acid Capric Merck.—Cryst. (700

(Caprinic, Rutic, Decylic, or Decoic, Acid).—Fr. oleic acid by distil'n.—$C_{10}H_{20}O_2$, or, $CH_3(CH_2)_8COOH$. — Colorl. cryst.; goat-like odor.—Sp. Gr. 0.93 at 37° C.—*Sol.* A., E.; alm. insol. in W.—*Melt.*, abt. 30° C.—*Boil.* 268–270° C.

Acid Caprilic.—see **Acid Caprylic**

Acid Caproic, Iso-.—see **Acid Butylacetic**

Acid Caproic (Normal) Merck (50

(Capronic, Hexylic, Hexoic, or Pentylformic, Acid).—Fr. crude butyric acid by fract. distil'n.—$C_6H_{12}O_2$, or, $C_5H_{11}COOH$.—Oily, colorl. liquid; fbl. odor of Limburg cheese.—*Sol.* A., E.—Sp. Gr. 0.94 at 0° C.—*Boil.* 205° C.—*Uses:* Chem.

do. Merck.—Fr. Capronitrile.—Pure (160

Synonyms, formula, etc., as preceding.

Acid Caprylic (Normal) Merck (160

(Normal Octylic, Octoic, or Caprilic, Acid).—Fr. cocoa-nut oil by saponif. & distil'n; or fr. normal octyl alcohol.—$C_8H_{16}O_2$, or, $C_7H_{15}COOH$.—Colorl. liq. at ord. temp.; needles below 17° C.—*Sol.*, in boil. W.—Sp. Gr. 0.911 at 20° C.—*Melt.* 17° C.—*Boil.* 235–237° C — *Uses:* Chem.

Acid Carbazotic.—see **Acid Picric**

Acid Carbolic Merck.—Colorl. cryst., fused.—"Silver Label" (1

(Phenol; Phenic, or Phenylic, Acid; Phenyl Hydroxide; Hydroxybenzene [or, -ol]).—Coal-tar constit., in fract. boil. bet. 170° & 230° C.—C_6H_6O, or, C_6H_5OH.—Colorl. cryst.; charact. odor; when h'ly dil., sweetish taste. Deliq. in moist air.—*Sol.* A., E., C., G.; abt. 20 W. at 25° C.; 2 olive oil.—*Melt.*, abt. 40° C.—*Boil.* 178–182° C.—Antisep.; Antipyr.; Caustic; Top. Anesth.—*Uses:* For disinf. solut's or mixt's. For solut's to abort boils or carbuncles; dress. wounds; keep flies fr. horses & cattle. In ulcers, inflam., vener. veget., nevi, hemorrhoids, toothache, whoop.-cough, diphth., &c. To prev. spread of zymotic dis.—*N. B.*—Dangerous to infants; poisoning occurs by absorption.—*Dose* $^1/_4$–2 grains (0.015–0.12 Gm.), h'ly diluted with W., or in pills, several t. p. d. in abnorm. gastric and intest. fermentations.—*Max. D.* 2 grains (0.12 Gm.) single, and 8 grains (0.5 Gm.) daily.—*Inj.*, in urethra or bladder 1 part in 500 to 1 in 1000.—*Appl.*, by spray, 1% aqu. solut.; as wash, 0.2–0.5% solut.; as caust., in substance, or conc. solut.; as disinf. 0.5–5% aqu. solut.; in carbolized gauze; for utensils and rooms, 1% aqu. solut.; mouth wash and gargle, 1% solut.; also employed as glycerite (20%), oint. (3%), or w. lanum and petrolatum (3%); carbolized glycerin (10%).—*Antid.*, any soluble non-toxic sulphate, after provoking vomiting with zinc sulphate; uncooked white of egg in abundance; milk-of-lime; saccharate of calcium; olive & castor oils with magnesia in suspension; ice; washing the stomach w. equal parts water and vinegar; give alcohol or whisky, or abt. 4 fl. oz. (100 Cc.) camphorated oil at one dose, & injections of stimulants to avoid collapse.—*Incomp.*, chloral; ferrous sulphate; triturated w. acetanilide, butyl-chloral hydrate, camphor, monobromated camphor, hydrated chloral, lead acetate, menthol, naphthalene, naphthol, pyrogallol, resorcinol, salol, sodium phosphate, thymol, urethane, chlorala nide, or terpin hydrate, it yields a liquid or soft mass; coagulates collodion.—*Caut.* Poisonous! External applications & injections have proved fatal, & therefore should be used with great caution. Keep in dark amber, well-stoppered bottles.

Note.—This grade of carbolic acid is a particularly stable one, and the acid is *guaranteed not to redden*, under the usual precautions of keeping.

Acid Carbolic Merck.—Highest Purity, Medicinal, loose cryst. (2

Wh. cryst.—*Melt.* abt. 40° C.—*Boil.* 182° C.—*Uses, Doses, &c.:* As of carbolic acid, colorl. cryst.

Note.—This acid is *guaranteed not to redden*, under the usual precautions of keeping.

do. Merck.—Fused (1

Wh., cryst. mass.—*Melt.* 35–37° C. — *Uses, Doses, &c.:* As of carbolic acid, colorl. cryst.

do. Merck.—*U. S. P.*—Liquid, Medicinal, 86.4% cryst. (1

Uses & Doses: As of carbolic acid, colorl. cryst.

do. Merck.—Synthetic.—Colorless, Highest Purity, cryst. or fused (3

Fr. aniline, by diazo-reaction.—C_6H_6O, or, C_6H_5OH.—*Melt.*, cryst., 41–42° C.—Properties, etc., as of carbolic acid, colorl. cryst.

do.—Crude.—90% (1

Fr. coal tar.—Mixture chiefly of cresol & phenol.—Dark, oily liq.; str. tar odor.—*Sol.*, partly W.—Disinf.—*Uses:* Gen'l disinf., either in solut. (1 in 50 to 200), or mixed w. chlorinated lime, slaked lime, &c., for urinals, toilets, stables, etc. Not adapted for wounds.

do.—Crude.—30% (1

Acid Carbolic Iodized Merck.—*N. F.* (30

(Iodized Phenol).—Solut. of 20 parts iodine in 20 parts glycerin & 60 parts carbolic acid.—Antisep.; Counter-irrit.; Eschar.—*Uses:* Uterine dilatation.—*Appl.*, by inj., pure.

Acid Carbonic, Liquefied (1

(Carbon Dioxide; Carbonic Anhydride).—Fr. carbonates (us'y marble dust) by acids, & subseq. compress. under cold.—CO_2.—H'ly

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

volat., colorl. liq.—*Sol.*, cold W.—*Uses:* Chiefly techn. Somet. extern., to prod. loc. anesth.—*Antid.*, fresh air, pure oxygen, cold douche, galvanism.

Acid Carmine, Alcoholic.—see **Grenacher's, or Mayer's, Acid Alcoholic Carmine**

Acid Carminic Merck (120

Glucosidal color. matter fr. Coccus cacti, L. (Cochineal). The essent. constit. of carmine. —$C_{22}H_{22}O_{13}$.—Dark, purplish-brown mass; or bright-red powd.—*Sol.* W., A., sl. E.; carbon disulph.; str. sulphuric acid; caustic alkalies. —*Decomp.*, at 136° C.—*Uses:* Techn.; micros. stain.

Acid Carminic Merck.—Reagent (500

$C_{22}H_{22}O_{13}$. — Purple-brown, amorph. masses; dark-red powd. on tritur.—*Sol.*, eas. W., A.; insol. B., C.—*Tests:* (*Solub.*) 1 Gm. compl. sol. in 2 Cc. W.; add 20 Cc. 90% A.–no apprec. ppt.—(*Sensit.*) add 1 drop 1% aqu. solut. to 5 Gm. NH_4Cl + 50 Cc. W.–color must be changed fr. yellowish-red to violet-red by 1 drop decinorm. KOH.—*Uses:* As stain in microscopy, & as indicator in acidimetry; also as reagent for albumin, for differentiating albumoses and peptones.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Acid Carthamic.—see **Carthamin**

Acid Caryophyllic.—see **Eugenol**

Acid Catechinic. } —see **Catechin**
Acid Catechuic. }

Acid Catechutannic Merck (60

Extr'd fr. Acacia Catechu, Willd., by water. —Reddish-brown powd.—*Sol.* A.; acetic ether, W.—Astring.—*Uses:* To check diar., hemorrhage, leucor. & o. abn. disch.; also in spongy, bleed. gums; ulcer'd nipples; bronch. secret.; hoarsen.; epistaxis.

"Acid Cathartic" Merck (12

(Cathartin; mixture of natural Ca, Mg, and K salts of Cathartic, or Cathartinic, Acid).—Active principle of Senna.—Brown, gran. powd.—*Sol.* W., dil. A.—Cathar.—*Uses:* Substit. for senna.—*Dose:* Adults, 4–6 grains (0.25–0.4 Gm.); children, 2–3 grains (0.12–0.2 Gm.).

Acid Cerotic Merck (1000

(Cerotinic Acid; Cerin).— Fr. beeswax, Carnauba & Chinese waxes; also prep. fr. ceryl alcohol. — $C_{27}H_{54}O_2$, or, $C_{26}H_{52}O_2$(?). — Wh. powd.—*Sol.* A.—*Melt.* 78–82° C.

Acid Cetraric.—see **Cetrarin**

Acid Cetylacetic.—see **Acid Stearic**

Acid Cetylic.—see **Acid Palmitic**

Acid Chenocholic Merck (1000

Fr. taurochenocholic acid of goose-bile by boil. w. baryta water.—$C_{27}H_{44}O_4$.—Yellowish powd.—*Sol.* A., E.

Acid Chinic.—see **Acid Quinic**

Acid Chinolic.—see **Acid Quinolic**

Acid Chinolinic.—see **Acid Quinolinic**

Acid Chinopicric.—see **Acid Quinopicric**

Acid Chinovic.—see **Acid Quinovic**

Acid Chloracetic Merck (8

Mixt. of chlorinated acetic acids.—Colorl. liq. —*Uses:* Eschar. for warts.

Acid Chloracetic, Urner's Liquid.—see **Acid Dichloracetic**

Acid Chlorazotic.—see **Acid Nitrohydrochloric**

Acid Chlorhydric.—see **Acid Hydrochloric**

Acid Chloric Merck (4

Fr. barium chlorate by decomp.—$HClO_3$ + aq. —Colorl. liq.; v. acid.—Sp. Gr. 1.12 = 15.5° Bé.; cont. abt. 15% absol. acid.—*Misc.* W.

(*Acid*) *Chlorochromic Anhydride.*—see **Chromium Oxychloride**

Acid Chlorocrotonic (Alpha-) Merck (160

Fr. trichlorobutyric aldehyde.—$C_4H_5ClO_2$, or, $CH_3.CH:CCl.COOH$. — Colorl., cryst. mass.—*Sol.*, sl. in cold, more read. in hot, W.; E., A. —*Melt.*, abt. 97° C.—*Boil.* 206–212° C.

Acid Chlorocrotonic (Iso-) Merck (120

(Chloroquartenylic Acid).—By act. of phosphorus pentachloride upon acetoacetic ether, & subseq. reduct.—$C_4H_5ClO_2$, or, $CH_3.CCl:CH.COOH$.—Colorl. cryst.—*Sol.*, sl. W.—*Melt.* 59° C.

Acid Chloronitrous.—see **Acid Nitrohydrochloric**

Acid Chloroplatinic.—see **Platinum Chloride, Platinic**

Acid Chloroquartenylic.—see **Acid Chlorocrotonic, Iso-**

Acid Cholalic Merck.—Amorphous (300

So-called "Cholic Acid" of Demarçay & others. (*Compare* Glycocholic Acid).—Prod. of hydrolysation of glyco- & tauro-cholic acids w. alkalies. — $C_{24}H_{40}O_5$. — Yellowish powd.—*Sol.* A., E.; diffic. W.

do. Merck.—Cryst. (400

$C_{24}H_{40}O_5 + 2\frac{1}{2}H_2O$.—Yellowish-white cryst.—*Sol.* A., E.; v. sl. W.

(*Acid*) *Cholalic Anhydride.*—see **Dyslysin**

Acid Choleic. }
Acid Choleinic. } —see **Acid Taurocholic**
Acid Choliaic. }

Acid Cholic.—see **Acid Cholalic; Acid Glycocholic**

Acid Choloidic Merck (240

(Choloidinic Acid).—Decomp. prod. of cholic acid.—(Acc. to Hoppe, a mixt. of cholic acid & dyslysin).—Yellowish powd.—*Sol.* A.—*Melts* in boil. W.

Acid Chromic. } —see **Chromium Trioxide**
Acid Chromic Anhydride. }

Acid Chromo-Acetic.—see **Flemming's Chromo-Acetic Acid**

Acid Chromo-Aceto-Osmic.—see **Flemming's Chromo-Aceto-Osmic Acid**

Acid Chromo-Formic.—see **Rabl's Chromo-Formic Acid**

Acid Chromo-Nitric.—see **Perenyi's Chromo-Nitric Acid**

Acid Chromo-Osmic.—see **Flesch's Chromo-Osmic Acid**

Acid Chrysamminic Merck (100

(Chrysammic Acid; Tetranitrochrysazin; Tetranitrodioxyanthraquinone).—By act. of nitric acid on aloes.—$C_{14}H_4(NO_2)_4O_4$.—Golden-yellow, shining, bitter laminæ.—*Sol.* A., E.—*Caut.* Salts explode when ignited.

Acid Chrysophanic, Medicinal.—see **Chrysarobin**

Acid Chrysophanic, True.—see **Rhein**

Acid Cinnamic Merck.—Highest Purity, Medicinal (6

(Betaphenylacrylic, or Cinnamylic, Acid).—Fr. storax, balsam tolu, oil of cinnamon, &c., or synthetically fr. benzoic aldehyde.—$C_9H_8O_2$, or, $C_6H_5.CH:CH.COOH$.—Wh., cryst. scales; odorl.; volat. in steam.—*Sol.* A., E.; v. sl. W.—*Melt.* 135° C.—*Boil.* 300-304° C.—Antituberc.; Antisep.—*Uses:* Treatm. of tuberculosis & lupus, parenchymatously & intravenously; also in phthisis, in combination w. arsenic and extract opium.—*Appl.*, in 5% emuls. or alcoh. solut. w. cocaine in lupus.—*Inj.* (intraven.) $^1/_4$-$^3/_4$ grain (0.015-0.05 Gm.), in 5% oily emuls., with 0.7% solut. sod. chloride, twice a week.

Note.—This acid is of a particularly high degree of purity, & is specially prepared with a view to its internal use.

Acid Cinnamylic.—see **Acid Cinnamic**

Acid Citraconic Merck.—Cryst. (8

Fr. dry distil'n citric acid.—$C_5H_6O_4$, or, $CH_3.C(COOH):CH(COOH)$.—Yellowish cryst.—Sp. Gr. 1.6.—*Sol.* A., E.; readily W.—*Melt.* 80° C.

Acid Citrazinic Merck (400

(Dioxypyridinecarboxylic Acid).—Fr. amide deriv. of citric acid.—$C_5H_5NO_4$, or, $COOH.\underline{C:CH.C(OH):N.C(OH):C}H$.—Grayish-yellow cryst. powd.—*Sol.*, in alkalies; n'ly insol. in hot W.—Carbonizes above 300° C. without melting.

Acid Citric Merck.—Gran., cryst., or powder (1

(Oxytricarballylic Acid).—Fr. fruit of genus Citrus (limes & lemons).—$C_6H_8O_7+H_2O$, or, $C_3H_4(OH)(COOH)_3+H_2O$.—Colorl., rhombic cryst., or wh. powd.; odorl.; v. acid; perman. in dry air at ord. temp.; efflor. in warm air, deliq. in moist.—*Sol.* W., A., E.—*Melt.* 152-153° C. when anhydr.—Antisep.; Antiscorb.; Refriger.—*Uses: Extern.*, post-partum hemorrhage; pruritus; agre. appl. in diphth., angina, or gangr. sore mouth; excessive sweating; inflam. of throat.—*Intern.*, cool. bev. to assuage fev. & cure scurvy.—*Dose:* 10-30 grains (0.6-2 Gm) several t. p. d. For paint. throat, 5-10% glycerin solut.; gargle, 1-2%; cool. drink, 80 grains (ab. 5 Gm.) to 1 quart (ab. 1 liter); also used for preparing lemonade, etc.—*Incomp.*, potass. tartrate; alkaline carbonates, acetates, and sulphides; mineral acids.

do. Merck.—Highest Purity, cryst. or powder (2

Note.—This is an exceptionally pure article, free from lead, & tartaric & oxalic acids. Only this grade should be prescribed or dispensed.

Acid Citric Merck.—Reagent (3

$C_6H_8O_7+H_2O$.—Colorl., odorl., rhomb. prisms; efflor. superfic. in warm air.—*Sol.* 0.75 cold, & 0.5 boil. W.; 1 A. (85%); 50 E.—*Tests:* (*Oxal. & Tartar. Acids*) 1 Gm.+2 Cc. W.; add 10 Cc. 1:2 solut. $KC_2H_3O_2$+5 Cc. A.-no turbid.—(*Tartar. Acid; Sugar*) 1 Gm.+10 Cc H_2SO_4-not more than slight yellow color; no brown color when heated in test tube for 1 hr. in boil. W.-bath.—(*H_2SO_4*) 20 Cc. 10% solut.+$BaCl_2$-no turbid.—(*Ca*) 20 Cc. 10% solut.+$(NH_4)_2$-C_2O_4-no turbid.—(*Pb*) 5 Gm.+10 Cc. W.+12 Cc. NH_4OH (sp. gr. 0.96)-no dark color on add. aqu. H_2S.—(*Res.*) ignite 1 Gm.-none wghble.—*Uses:* Determ. citrate-solub. phosphoric acid.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Acid Citric Saccharated.—*N. F.*

Mixt. of 625 citric acid & 375 powd. sugar.

Acid Citridic.—see **Acid Aconitic**

Acid Coffee-tannic.—see **Acid Caffetannic**

Acid Copaivic.—Amorphous (15

Variable comp.—Amorph., resinous, brownish lumps.—*Sol.* A., E., B.—*Uses:* Abn. disch of muc. membr., espec. of urethra.

Acid Cresotic Merck.—Crude (3

(Cresotinic Acid; Kresotic Acid).—Mixt. of ortho-, meta-, & para-, acids.—Wh. or reddish-wh., loose powd.—*Sol.* A., E.—*Uses:* Disinfect.

Acid Cresotic (Meta-) Merck.—Pure (5

(Metahomosalicylic, Metakresotic or Cresotinic, or Metaoxyparatoluic, Acid).—Fr. metacresol —$C_8H_8O_3$, or, $C_6H_3.COOH.OH.CH_3[1:2:4]$. —Reddish-wh. cryst.—*Sol.* A., E., C.—*Melt.* 174° C.

Acid Cresotic (Ortho-) Merck.—Pure (5

(Orthohomosalicylic, Orthokresotic or Cresotinic, or Ortho-oxymetatoluic, Acid).—Fr. orthocresol by react. w. sod. & carbon dioxide.—$C_8H_8O_3$, or, $C_6H_3.COOH.OH.CH_3[1:2:3]$.—Wh. or reddish cryst.—*Sol.* A., E., C.—*Melt.* 163–164° C.

Acid Cresotic (Para-) Merck.—Pure (12

(Parahomosalicylic, Parakresotic or Cresotinic, Paraoxymetatoluic, Acid [asymmetric]). —Fr. paracresol.—$C_8H_8O_3$, or, $C_6H_3.COOH.OH.CH_3[1:2:5]$.—Wh. or reddish cryst. powd.—*Sol.* A., E., C.—*Melt.* 151° C.—Child's Antipyr.; Intest. Antisep. — *Uses:* Febrile affections, gastro-intest. catarrh. Sodium salt gen'ly used.—*Doses:* Antipyr., 2–20 grains (0.12–1.3 Gm.) acc. to age, several t. p. d.; intest. antisep. (childr. dis.), $^1/_4$–1 grain (0.015–0.06 Gm.), in mixt.—*Max. D.* 60 grains (4 Gm.).

Acid Cresotinic.—see **Acid Cresotic, Crude**

Acid Cresylic.—see **Cresol**

Acid Crotonic (100

Fr. crude wood-vinegar, or synthetically.—$CH_3.CH:CH.CO_2H$. —Trimetric plates, or monocl. cryst.—*Sol.* W., ligroin.—*Melt.* 72° C.—*Boil.* 185° C.

Acid Crotonolic.—see **Acid Tiglic**

Acid Cuminic Merck.—Cryst. (200

(Isopropylbenzoic Acid).—By oxid'g cuminol w. potass. permang. in pres. of alkali.—$C_{10}H_{12}O_2$, or, $(CH_3)_2.CH.C_6H_4.COOH$.—Wh., prism., cryst.; volat. w. steam.—*Sol.* A., E.—*Melt.* 115–116° C.

Acid Cyanacetic Merck (70

Fr. ethyl chloracetate, by potass. cyanide with W. & heat.—$C_3H_3NO_2$, or, $CH_2.CN.COOH$.—Wh. cryst.; decomp. by heat into carbon dioxide & acetonitrile.—*Sol.*, readily in W. & A.—*Melt.* 65° C.

Acid Cyanhydric.—see **Acid Hydrocyanic**

Acid Cyanuric Merck.—Cryst. (100

(Tricarbimide; Isocyanuric, or Tricyanic, Acid). —Fr. urea.—$C_3H_3N_3O_3+2H_2O$, or, $(CN)_3(OH)_3+2H_2O$; or, $CO:(NH.CO)_2:NH+2H_2O$(?). — Wh. cryst.—*Sol* W., A.; hot mineral acids.—Decomp. by heat.

Acid Decoic. } —see **Acid Capric**
Acid Decylic. }

Acid Dehydracetic Merck (70

(Methylacetopyronone).—Fr. acetoacetic ether, by heat.—$C_8H_8O_4$, or, $C_7H_7O_2.CO.OH$.—Colorl. cryst.—*Sol.* A., E.; 1 W. at 0° C.—*Melt.* 108° C. —*Boil.* 269° C.

Acid Dextronic.—see **Acid Gluconic**

Acid Dextrotartaric.—see **Acid Tartaric**

Acid Diazobenzenesulphonic (Para-) Merck (40

(Paradiazobenzenesulphonic Acid).—From paraamidobenzenesulphonic acid. — $C_6H_4N_2SO_3$, or, $C_6H_4:N.SO_3:N$.—Wh. paste.—*Sol.* W. at 60° C.; insol. in A. & cold W.—*Uses:* In 1:60 aqu. solut. as Ehrlich's reagent in diagnosis of various diseases. On mixing equal parts of urine and the reagent & adding $^1/_8$ vol. ammonia, a red color develops in cases of typhoid, pneumonia, measles, etc.—*Caut.* May explode when heated.

Acid Diazo-oxybenzoic.—see **Acid Diazosalicylic**

Acid Diazosalicylic Merck (500

(Diazo-oxybenzoic Acid). — Fr. amidosalicylic hydrochloride by react. w. nitrogen trioxide.—$C_7H_4N_2O_3$, or, $C_6H_3.(OH).N:N.CO_2$.—Brownish-gray powd.—*Sol.* A.; decomp. by long boil. w. A.

Acid Dibromogallic.—see **Gallobromol**

Acid Dibromosuccinic Merck (90

Fr. succinic acid & bromine.—$C_4H_4Br_2O_4$, or, $COOH(CHBr)_2COOH$.—Colorl. cryst.—*Sol.* A., E.

Acid Dibromotrioxybenzoic.—see **Gallobromol**

Acid Dichloracetic Merck.—Pure (28

(Bichloracetic Acid; Urner's Liquid Chloracetic Acid).—Fr. hydrated chloral, by potass. cyanide. —$C_2H_2.Cl_2O_2$, or, $CHCl_2COOH$.—Colorl. liq.—Sp. Gr. 1.522 at 15° C.—*Sol.* W., A.—*Boil.* 189–191° C.—Caustic.—*Uses:* Eschar. in vener. & skin dis., & for warts, like trichloracetic acid.

Acid Diethylbarbituric.—see **Veronal**

Acid Digallic.—see **Acid Tannic**

Acid Diiodoparaphenolsulphonic.—see **Acid Sozoiodolic**

Acid Dilodosalicylic Merck (30

$C_7H_4I_2O_3$, or, $C_6H_2I_2(OH)COOH$.—Yellowish cryst.—*Sol.* A., E.—*Melt.* 220–230° C. w. decomp. —Antipyr.; Analg.; Antisep.—*Uses:* Rheumat., gout, &c.—*Dose* 8–20 grains (0.5–1.3 Gm.), 3 or 4 t. p. d. in wafers.—*Max. D.* 30 grains (2 Gm.).

Acid Dimethylacetic.—see **Acid Butyric, Iso-**

Acid Dimethylamidoazobenzenesulphonic. — see **Dimethylamidoazobenzene Sulphonate**

Acid Dimethylarsenic.—see **Acid Cacodylic**

Acid Dimethyloxalic. } —see **Acid Oxyisobu-**
Acid Dimethyloxyacetic. } **tyric**

Acid Dimethylprotocatechuic.—see **Acid Veratric**

Acid Dioxybenzoic.—see **Acid Protocatechuic**

Acid Dioxypropionic.—see **Acid Glyceric**

Acid Dioxypyridinecarboxylic.—see **Acid Citrazinic**

Acid Dioxystearic Merck (25

(Dioxystearinic Acid).—Fr. dibromide of isooleic acid & silver oxide.—$C_{18}H_{36}O_4$, or, $C_{11}H_{33}(OH)_2COOH$.—Wh. cryst.—*Sol.*, sl. A., E.; eas. in hot A.; insol. W.—*Melt.* 135° C.

Acid Dioxysuccinic.—see **Acid Tartaric**

Acid Dioxytriphenylmethanecarboxylic. — see **Phenolphtalin**

Acid Dipropylbarbituric.—see **Proponal**

Acid Dithiosalicylic Merck.—"II" (30

(Betadithio-oxybenzoic Acid).—Fr. salicylic acid & sulphur chloride at 150° C.—$C_{14}H_{10}S_2O_6$, or, $S_2(C_8H_3.OH.COOH)_2$.—Exists in 2 modif., differing by the solub. of their salts.—Yellowish powd.—*Sol.* W. (partly).—Antipyr.; Analg.; Antisep.—*Dose* 15–25 grains (1–1.6 Gm.) p. d.—Only lith. & sod. salts used in med.

Acid Dodecoic.—see **Acid Lauric**

Acid Draconic.—see **Acid Anisic**

Acid Elaïdic Merck (90

(Elaïdinic Acid).—By oxidation of oleic acid.—$C_{18}H_{34}O_2$, or, $C_{14}H_{29}.HC:CH.CH_2COOH$.—Wh. cryst.—*Sol.* A., B., C.—*Melt.* 44–45° C

Acid Ellagic.—see **Gallogen**

Acid Embelic Merck.—Cryst. (900

Fr. fruit Embelia Ribes, Burm.—$C_{18}H_{28}O_4$.—Orange, cryst. scales; odorl.; tastel.—*Sol.* A., E., C.—*Melt.* 140° C.—Anthelm.—*Uses:* Expel tape-worms, after neutraliz. w. ammonia & mix. w. honey or syrup. Castor oil given before & after.—*Dose* 3–6 grains (0.2–0.4 Gm.). The ammonium salt (which see) is usually used.

Acid Ennoic, Normal.—see **Acid Pelargonic**

Acid Equisetic.—see **Acid Aconitic**

Acid Ergotic Zweifel-Merck (1600

(Sclerotinic, Sclerotic, or Ergotinic, Acid).—Act. prin. of sclerotic acid of Dragendorff & Podwyssotzki, obt. fr. ergot of rye.—Light-brown, amorph. powd.; leaves an ash on combust.—*Sol.* W.; dil. A.—Hemostatic; no action on uterus.

Acid Ergotinic.—see **Acid Ergotic**

Acid Erucic (30

Fr. rape-seed oil after saponif.—$C_{22}H_{42}O_2$.—Long transp. need.—*Melt.* 34° C.

"Acid Erythric."—see **Alloxan**

Acid Erythric (140

(Erythrin).—Fr. lichen Rocella fuciformis, Ach., by macerat. w. milk-of-lime.—$C_{20}H_{22}O_{10}$, or, $C_4H_8O_4(C_8H_7O_3)_2$.—Colorl., cryst. powd.; becom. bright red by ammonia & air.—*Sol.* A., E., caustic alkalies; sl. in boil. W.—*Melt.* 137° C.—*Uses:* Indicator; dye.

Acid Esculinic.—see **Esculin**

Acid Ethanethiolic.—see **Acid Thioacetic**

Acid Ethylacetic.—see **Acid Butyric**

Acid Ethylcarbonic.—see **Acid Propionic**

Acid Ethylenedicarboxylic.—see **Acid Succinic**

Acid Ethylenehydrinsulphonic.—see **Acid Isethionic**

Acid Ethylenesuccinic.—see **Acid Succinic**

Acid Ethylidenelactic.—see **Acid Lactic**

Acid Ethylmalonic Merck (300

Fr. alphabromobutyric acid heated w. potass. mercuric cyanide, & decomp'g result. liquid w. KOH.—$C_5H_8O_4$, or, $CH_3.CH_2.CH(COOH)_2$.—Colorl. cryst.—*Sol.* W., A., E.—*Melt.* 111.5° C.

Acid Ethylsulphuric Merck (3

(Sulphethylic, or Sulphovinic, Acid; Monoethyl Sulphate).—By act. sulphuric acid on alcohol.—$C_2H_5HSO_4$.—Colorl., oily liq.; v. acid.—Sp. Gr. 1.316 at 16° C.—*Sol.*, readily W., A.—*Uses:* Medic. as salt (sodium, zinc, &c.); also for precipitating casein in milk.

Acid Ethylsulphurous

(Sulphovinous Acid).—By act. thionyl chloride on ethyl alcohol.—$C_2H_5HSO_3$.—Cryst., unstable mass.—*Sol.* E.

Acid Ethyltartaric Merck (8

$C_4H_5O_6.C_2H_5$.—Colorl. cryst.—*Sol.* W., A.—*Melt.* 90° C.—*Uses:* Printing with Indol Blue and Crystal Fast Blue on fustian, etc.

Acid Euchroic Merck (800

(Euchronic Acid).—Fr. euchrone by oxid'g its solut. in air.—$C_{12}H_4N_2O_8+2H_2O$, or, $C_8(C_2O_2NH)_2(COOH)_2+2H_2O$.—Yellowish cryst.—*Sol.* A., dil. HCl; v. sl. W.—*Melt.*, above 280° C., w. decomp.

Acid Eugenic.—see **Eugenol**

Acid Euxanthic Merck.—Purest (160

(Purreic, or Euxanthinic, Acid; Euxanthin).—Fr. purree or so-called "Indian yellow."—$C_{19}H_{16}O_{10}+3H_2O$.—Straw-yellow need.; sweet, w. bitter after-taste.—*Sol.* E., boil. A.; sl. W.—Decomp. on heat.

Acid Ferrocyanic.—see **Acid Ferrohydrocyanic**

Acid Ferrohydrocyanic Merck (5

(Ferrocyanic, or Hydroferrocyanic, Acid; Hydrogen Ferrocyanide).—Fr. potass. ferrocyanide by dil. hydrochloric acid.—$H_4Fe(CN)_6$.—Wh. cryst.; blue in moist air; gives off hydrocyanic acid; str. acid react.—*Sol.* A., W.—*Caut.* Keep fr. light & well stoppered.

Acid Filicic Merck.—Amorph. (400

Fr. rhizome of Dryopteris Filix-mas, Schott (Male fern).—$C_{35}H_{42}O_{13}$.—Yellowish, amorph. powd.; odorl.; tastel.—*Melt.* 125° C.—Anthelm.

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

—*Dose* 8–15 grains (0.5–1 Gm.), given w. calomel & powd. jalap.—*Caut.* Keep in amber bot.

Acid Filicic Merck.—Cryst. (450

(Filicinic Acid; Isobutyryloxynaphthoquinone).—Fr. rhizome of Dryopteris Filix-mas, Schott (Male fern).—$C_{14}H_{16}O_5$.—Yellowish cryst.—*Sol.* A., E., CS_2, oil turpentine, oils, & alkal. solut.—*Melt.* 185° C.—*Caut.* Keep dark.

Acid Filicinic.—see **Acid Filicic, Cryst.**

Acid Filimellissic Merck (300

Fr. filicic acid, by potassa (Luck).—Yellow powd.—*Sol.* E., C., hot A.

Acid Fluorhydric.—see **Acid Hydrofluoric**

Acid Formic Merck.—Sp. Gr. 1.22=26° Bé. (abt. 100%).—Pure, crystallizable (4

(Hydrogen Carboxylic Acid).—Fr. oxalic acid w. glycerin, by heat; & o. proc.—CH_2O_2, or, HCOOH.—Colorl. liq. above 8.3° C, but clear solid below; pungent odor; dangerously caustic.—*Misc.*, all prop. W., A., E., G.—*Boil.*, abt. 100.8° C. (Beilstein).—Caustic; Antisep.—*Caut.* Handle w. care. Great pain & ulceration by contact w. skin.

do. Merck.—Sp. Gr. 1.2=24° Bé.—Pure (3

Abt. 85% HCOOH.—*Boil.* 107.1° C.—Caustic; Antisep.

do. Merck.—Sp.Gr. 1.18=22° Bé.—Pure (2

Abt. 80% HCOOH.

do. Merck.—Sp.Gr. 1.15=19° Bé.—Pure (2

Abt. 65% HCOOH.

do. Merck.—Sp. Gr. 1.12=15.5° Bé.—Pure (2

Abt. 50% HCOOH.—*Uses:* Manuf. of salts and esters of formic acid, and in electroplating.

do. Merck.—Sp. Gr. 1.06=8.5° Bé.—Pure (1

Abt. 25% HCOOH.—Colorl. liq.—*Misc.*, all prop. W., A., G.—Diur.; Ton.; Antirheum.—*Uses:* Rheum., neuralg., diabetes, tremor, etc.—*Dose* 1–5 ♏ (0.06–0.3 Cc.).

Acid Fuchsine.—see **Ruby S**

Acid Fuchsine, Weigert's.—see **Weigert's Acid Fuchsine**

Acid Fumaric Merck (80

(Allomaleic Acid).—Fr. Fumaria officinalis, L., & o. plants, or by str'ly heat. malic acid.—$C_4H_4O_4$, or, $C_2H_2(COOH)_2$.—Wh. cryst.—*Sol.* W., A.—*Melt.* 200° C. w. part. fus. & decomp.

Acid Gallamic Merck (12

$(OH)_2.C_6H_2.CO.NH_2+H_2O$.—Yellowish cryst.—*Sol.* W., A.—*Melt.*, above 230° C., with decomp.

Acid Gallic Merck (1

(Trioxybenzoic, or Trihydroxybenzoic, Acid).—Us'ly fr. tannic acid.—$C_7H_6O_5+H_2O$, or, $C_6H_2(OH)_3COOH+H_2O$.—Colorl. or slightly yellowish, silky, interlaced need.; odorl.; astring., sl. acidul. taste; perm't in air.—*Sol.* 5 A., 40 E., 12 G., C., abt. 100 W.—*Melt.* 222–240° C. w. decomp.—Antisudor.; Hemost., & Antisep.—*Uses: Extern.*, gonor., epist., alopecia, purpura, menor., & hemorrhoids.—*Intern.*, hematem., hematuria, night-sw., pyrosis, & intest. hemorrhage. Pref. to tannin in action; no constip.—*Techn.*, in dyeing, manuf. ink, in photography, & in manuf. pyrogallol.—*Dose* 5–20 grains (0.3–1.3 Gm.) several t. p. d.—*Incomp.*, aqu. solut. decomp. in air; ferric salts (bluish-black precip.); potass. chlorate and permanganate; ammonia; lead acetate; opium in solut.; silver salts.—*Caut.* Keep dark & from contact w. vapors of ammonia.

Acid Gallic Merck.—Reagent (2

$C_6H_2(OH)_3.COOH+H_2O$.—Colorl. or sl. yellowish need. or prisms.—*Melt.* 220° C. w. decomp.—*Sol.* 130 cold & 3 boil. W.; 3 A.; 40 E.—*Tests:* (*Solub.*) 1 Gm. compl. sol. in 20 Cc. W. w. heat; solut. colorl. or only faintly yellowish.—(H_2O) dry 1 Gm. at 100° C. to const. wt.—loss not more than 0.1 Gm.—(H_2SO_4) 1 Gm.+50 Cc. W.+1 Cc. HCl+$BaCl_2$—no ppt. ($BaSO_4$) within half hr.—(*Inorgan. Impur.*) ignite 1 Gm.—no wghble res.—*Uses:* Detect. iron compounds & free mineral acids.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Acid Gallotannic.—see **Acid Tannic**

Acid Gallotartaric Merck (200

Mixt. of gallic and tartaric acids.—Yellowish powd.—*Sol.* W.

Acid Gamma-isatropic.—see **Acid Truxillic, Alpha-**

Acid Gentianic.—see **Gentisin**

Acid Gentianic, Crude.—see **Gentianin**

Acid Germanic.—see **Germanium Oxide**

Acid Gluconic Merck (120

(Dextronic, Maltonic, or Pentahydroxycaproic, Acid).—Oxidation prod. of glucose and cane sugar.—$OH.CH_2(CH.OH)_4.CO_2H$.—Colorl. to yellowish, syrupy mass.—*Sol.* W.; insol. A.—*Uses:* In diabetic coma in l'ge doses (13–18 dr. [50–70 Gm.]) togeth. w. sod. bicarb., suspended in water and given per os and per enema.

Acid Glutaric Merck (400

(Normal Pyrotartaric Acid).—Fr. oxyglutaric acid by heat. w. hydriodic acid; & o. ways.—$C_5H_8O_4$, or, $COOH.(CH_2)_3.COOH$.—Colorl. cryst.—*Sol.* W., A.—*Melt.* 97° C.—*Boil.*, above 290° C., w. decomp.

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add 5 Gm. HCl + 50 Cc. W. to 50 Cc. W. + 1 drop decinorm. I + few drops starch solut. – blue color not dischd.—(*Heavy Met.*) *a:* 20 Gm. + 200 Cc. W.; warm; pass in H_2S gas for 20 min. – no ppt. in 2 hrs.; *b:* 20 Cc. + 200 Cc. W. + 50 Cc. NH_4OH (sp. gr. 0.96) + few drops $(NH_4)HS$ – no dark color or ppt.; *c:* 5 Gm. + 20 Cc. W. + few drops KSCN – no reddish color.—(*Ca*) 20 Cc. + 20 Cc. W. + 50 Cc. NH_4OH (sp. gr. 0.96) + few Cc. $(NH_4)_2C_2O_4$ – no ppt. in 2 hrs.—(*As*) evap. 200 Gm. + 0.1 Gm. $KClO_3$ on W.-bath; start Marsh apparat. using 20 Gm. As-free gran. Zn + dil. (1:5) H_2SO_4; add evap'n resid. to contents of apparat. – after 1 hr. only hazy deposit at most, but no distinct As mirror.—*Uses:* Forensic investigations, &c.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Acid Hydrochloric Merck.—Reagent.—Sp. Gr. 1.050 (1

Clear, colorl. liq.—Sp. Gr., abt. 1.050.—Abt. 10% HCl.—*Tests:* As under Acid Hydrochloric, Fuming, Reagent, but using 35 Gm of the 10% acid instead of 10 Gm. of the fuming acid.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Acid Hydrocinnamic Merck (80

(Hydrocinnamylic, Benzylacetic, Betaphenylpropionic, or Homotoluylic, Acid).—Deriv. of cinnamic acid.—$C_9H_{10}O_2$, or, $C_6H_5.(CH_2)_2.COOH$. —Wh., acic. cryst.—*Sol.* 6 A.; E.; sl. W.—*Melt.* 48–49° C.—*Boil.* 280° C.—Antituberc.—*Uses:* Pulmonary tuberculosis.—*Dose* 10–20 ♏ (0.6–1.3 Cc.) of conc. alcoh. solut. (1:6) 3 t. p. d. in W.

Acid Hydrocinnamylic.—see **Acid Hydrocinnamic**

Acid Hydrocyanic.—10% (8

(Cyanhydric, or Prussic, Acid; Hydrogen Cyanide; Formonitrile).—Fr. potass. ferrocy., by sulphuric acid.—HCN + aq.—*Etymol.:* Fr. "cyanogen" (so named by Gay-Lussac in 1815), derived fr. Gr. "kyanos," blue, and "gennao," I make, referring to its being a constituent of Prussian blue.—Colorl. liq.; odor & taste of bitter almonds. Vapor is fatal, if breathed.—*Sol.* W., A., E.—*Uses:* Chem.—*Caut.* Extremely poisonous! Unstable & volatile. Keep cool, in the dark, & well stoppered.

do.—5% (5

Uses: Chem.

do. Merck.—Diluted.—2% (1

Colorl. liq.; odor & taste of bitter almonds.—*Misc.* W., A., E.—*Uses: Intern.*, allay pain & spasms, relieve nerv., cough, palpit. & painful affect. of stomach; vomiting, whoop.-cough.—*Extern.*, control itching of skin.—*Dose* 2–5 ♏ (0.12–0.3 Cc.) 3 or 4 t. p. d. in water after meals.—*Appl.*, abt. 30–60 ♏ (2–4 Cc.) in abt. 1 fl. oz. rose W. as lotion, where *skin is intact.*—*Max. D.* 10 ♏ (0.6 Cc.).—*Antid.:* Kobert recommends $^1/_{60}$ grain (0.001 Gm.), atropine hypoderm., peroxide of hydrogen intern., & artificial respiration; breathing ammonia or chlorine from chlorinated lime; ferrous sulphate followed by potass. carbonate, emetics, warmth.—*Incomp.*, alkalies, silver nitrate, metallic oxides, or carbonates, neutral solut. of morphine salts.—*Caut.* Poisonous! Keep cool, dark, & well stop'd.

N. B.—Dil. Hydrocyanic Acid is very liable to decomposition, by which it becomes more or less brown in color, & it is entirely unfit for use when thus discolored. No way of preventing this decomposition, without the addition of foreign substances (which is not recognized by the U. S. P.), has yet been discovered.

Acid Hydroferrocyanic.—see **Acid Ferrohydrocyanic**

Acid Hydrofluoboric.—see **Acid Borohydrofluoric**

Acid Hydrofluoric Fuming Merck.—40% (2

(Fluorhydric Acid; Hydrogen Fluoride).—Fr. calcium fluoride, by sulphuric acid.—HF.—*Etymol.:* Lat. "fluor," a flow, referring to the property of fluorspar, its source, to serve as a flux.—Clear, colorl., or sl'y colored, mobile, fum., corros. liq.—*Misc.*, all prop., W., A.—*Uses:* To arrest undesirable ferment. (Effront's method) in brewing (preventing the formation of pernicious quantities of lactic- and butyric-acid-yielding organisms), is used in proport. of 8–10 Gm. per hectol.; also employed in yeast manuf. for similar reasons, and in beet-sugar manuf. for the destruct. of Clostridium butyricum; preserv. anatomical specimens; etching glass and enamel.

do. Merck.—40%, Medicinal.—Free fr. Arsenic (2

Antituberc.; Antisep.—*Uses: Intern.*, inhal. in phth., in 15, 20, or 30% aqu. solut.—*Extern.*, highly dil., or better, neutral., forms good antisep. dress. for surg. use.—*Caut.* Handle with care. Makes serious ulcers on skin. Attacks glass, stoneware, &c. Keep in rubber, gutta-percha, leaden, or paraffin-paper, bottles.

do. Merck.—Highest Purity.—40% (3

do. Merck.—Conc.—55% (2

Sl'y colored, fum. liq.; very corros.—*Misc.*, all prop. W.—*Uses:* Etching glass.

Acid Hydrofluoric Merck.—Reagent.—Fuming (2

HF.—Colorl. or alm. colorl. liq.; 38–40% HF.—*Tests:* (*Res.*) evap. 20 Gm. in platin. dish & gently ignite – at most 0.001 Gm. res.—(H_2SO_4) evap. 2 Gm. in platin. dish; res. + 10 Cc. H_2O + few drops HNO_3 + solut. $Ba(NO_3)_2$ – no immed. turb., & at most only sl. opalesc. after some time.

—(*Ca*) 5 Gm. + 50 Cc. H_2O + excess NH_3 + solut. $(NH_4)_2C_2O_4$ – no immed. turb. — (*Mg*) 5 Gm. + 50 Cc. H_2O + NH_4OH to alkal. + solut. $(NH_4)_2HPO_4$ – no ppt. within 3 hrs—(*Heavy Met.*) *a:* 10 Gm. + 40 Cc. H_2O + aqu. H_2S – no yellow or dark-colored ppt.; *b:* 5 Gm. + 50 Cc. H_2O + NH_4OH to alkal. + $(NH_4)HS$ – no green color, or ppt.—(*HCl*) 2 Gm. + 50 Cc. H_2O + few drops HNO_3 + solut. $AgNO_3$ – at most only sl. opalesc.—(H_2SiF_6) 5 Gm. + 20 Cc. H_2O + 2 Cc. cold satur. aqu. solut. KCl + 40 Cc. 85-% A. – no turb. or ppt.—*Uses:* Analysis of silicates.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Acid Hydrofluosilicic.—see **Acid Hydrosilicofluoric**

Acid Hydrogen Carboxylic.—see **Acid Formic**

Acid Hydrosilicofluoric Merck.—Sp. Gr. 1.3 = 33° Bé. (3

(Hydrofluosilicic, or Silicofluoric, Acid).—Fr. silicon tetrafluoride by W.—H_2SiF_6 + aq.—Transp., colorl., fum. liq.; abt. 33%; volat. at 49° C., without residue; str'ly acid.—*Uses:* Preservat. of tanning liquors.

do. Merck.—Sp. Gr. 1.157 = 19.5° Bé. (2

Abt. 20%.—*Uses:* Anal.

do. Merck.—Sp. Gr. 1.06 = 8.5° Bé. (2

Abt. 8%.—*Uses:* Techn.

Acid Hydrosilicofluoric Merck.—Reagent (4

(Silicofluoric Acid).—H_2SiF_6.—Clear, colorl. liq.; 7.5% H_2SiF_6.—Sp. Gr., abt. 1.06.—*Tests:* (*Res.*) evap. 5 Gm. in platin. dish – none wghble.—(*Heavy Met.*) 5 Gm. + 10 Cc. H_2O + few drops HCl + 10 Cc. aqu. H_2S – no react.—(H_2SO_4) 5 Gm. + 10 Cc. H_2O + solut. $Sr(NO_3)_2$ free fr. Ba – no ppt. within 12 hrs.—*Uses:* Separation of calcium & barium.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Acid Hydrosulphuric. } —see **Hydrogen Sulphide Water**
Acid Hydrothionic. }

Acid Hydroxyacetic.—see **Acid Glycolic**

Acid Hydroxyethylenesulphonic. — see **Acid Isethionic**

Acid Hyocholic Merck (500

(Hyocholalic Acid).—Deriv. of hyoglycocholic acid.—$C_{25}H_{40}O_4$.—Yellow powd.—*Sol.* A., E.

Acid Hyoglycocholic Merck (200

Fr. hog bile.—$C_{27}H_{43}NO_5$.—Yellowish-brown powd.—*Sol.* W., A., in solut. of alkalies or alkali carbonates.—*Melt.* 100° C.

Acid Hypophosphorous Merck.—Sp. Gr. 1.274 = 31° Bé. (3

H_3PO_2 + aq., or, $HP(OH)_2$ + aq.—50%.—Clear, colorl. liq.; odorl.; sour.—*Misc.*, all prop. W.—Decomp. at h. temp.—Stim.; Tonic.—*Uses:* Wasting & nerv. dis.—*Dose* 2–10 ♏ (0.12–0.6 Cc.) well diluted.—*Caut.* Keep dark & well stoppered.

do. Merck.—Sp. Gr., 1.15 = 19° Bé.—abt. 35% (2

do. Merck.—30% (2

Sp. Gr., abt. 1.130 at 25° C.

do. Merck.—Diluted.—Sp. Gr. 1.046 = 6.5° Bé. (1

10%.—Stim.; Tonic.—*Uses:* Wasting & nerv. dis.—*Dose* 10–60 ♏ (0.6–4 Cc.).

Acid Indigosulphonic Merck (60

(Indigosulphuric, Indigotindisulphonic, Sulphindigotic, or Sulphindylic, Acid; Soluble Indigo Blue).—Fr. indigo & fum. sulphuric acid.—$C_{16}H_{10}S_2N_2O_8$, or, $C_{16}H_8(HSO_3)_2N_2O_2$.—Amorph., blue solid, or paste.—*Sol.* W., A.—*Uses:* Techn., reagent, dyeing, &c.

Acid Indigosulphuric. } —see **Acid Indigosulphonic**
Acid Indigotindisulphonic. }

Acid Iodic Merck.—Pure, cryst. (20

Fr. iodine by oxid'n.—HIO_3.—Colorl., cryst. powd.—*Sol.* W.; alm. insol. A., E., G.—Caustic: Astring.; Antisep.; Hemost.; Antiemet.—*Uses: Intern.*, as succedaneum for potass. iodide.—*Extern.*, in ophthalmol. in form of pencils cont. 15% HIO_3, or as 1–3% aqu. solut. in trachoma, pannus, indolent corneal ulcers, keratitis, etc.—*Techn.*, oxidizer.—*Appl.*, in gonor. 10% solut. or oint.—*Dose* $1^1/_2$–3 grains (0.1–0.2 Gm.) well dil., 3 t. p. d. Usually used in medicine in form of its salts.

Acid Iodic Merck.—Reagent.—Cryst. (30

HIO_3.—Colorl., rhomb. cryst., or wh., cryst. powd.—*Sol.* 1 W.; diffic. A.—Aqu. solut. first reddens blue litmus paper, then bleaches it.—*Tests:* (*Res.*) heat 2 Gm. – none wghble.—(*Solub.*) 1 Gm. compl. solub. in 1 W.; solut. colorl.—*Uses:* Oxidizer, test for morphine & o. alkaloids, & prepar. volumetric soluts.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

(Acid) Iodic Anhydride Merck (30

(Iodine Pentoxide; so-called "Anhydrous Iodic Acid").—Fr. iodic acid by heat.—I_2O_5.—Wh. powd.—*Sol.* W.—Decomp., without melt., at 300° C.—*Uses: Intern.*, gastric hemorrhage, vomiting.—*Extern.*, surgery, naso-laryngeal affect., gonor., &c.—*Techn.*, powerful oxidizer.

(Acid) Iodic Anhydride Merck.—Reagent (40
I_2O_5.—Wh., cryst. powd.—*Sol.* W. (w. form. of HIO_3); insol. absol. A., E., CS_2.—*Tests & Uses:* As of iodic acid.
Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Acid Iodopropionic (Beta-) Merck (90
Deriv. of glyceric acid.—$C_3H_5IO_2$, or, $CH_2.I.CH_2.COOH$.—Yellowish cryst.—*Sol.* A., E., & hot W., C.; sl. cold W.—*Melt.* 82° C.

Acid Iodosobenzoic Merck (200
$C_6H_4(IO)COOH$, or, $C_6H_4.IOH.O.CO$.—Wh. cryst.—*Sol.*, sl. W., A., E.—*Melt.* 244° C.—Antiseptic, like iodoform.

Acid Iodotannic (Solution) Merck (2
(Iodotannin).—Alcoholic solut. tannin to which iodine is added.—Dark-brown liq.—*Uses:* Inject. in gonor. in 1–2% aqu. solut.

Acid Isatic (Anhydride). } —see **Isatin**
Acid Isatic, Lactime. }

Acid Isatropic (Alpha-) Merck (1000
Fr. atropic acid, by heat.—$C_{18}H_{16}O_4$, or, $C_6H_5.C(COOH)CH_2.C_6H_4.CH(COOH)CH_2$.—White cryst.—*Sol.* A., glacial acetic acid; sl. W.—*Melt.* 237–238° C.

Acid Isatropic (Beta-) Merck (1000
Fr. atropic acid, by heat.—$C_{18}H_{16}O_4$.—Cryst.—*Sol.* A., glacial acetic acid; boil. W.—*Melt.* 206° C.

Acid Isethionic Merck.—50% Solution (80
(Ethylenehydrinsulphonic, Hydroxyethylenesulphonic, or Oxyethylsulphonic, Acid).—Fr. abs. alc., by sulphuric anhydride.—$C_2H_6SO_4$, or, $C_2H_4OH.SO_2OH$.—Syrupy liq.—*Misc.*, all prop. W.

Acid Isocaproic.—see **Acid Butylacetic**

Acid Isocyanuric.—see **Acid Cyanuric**

Acid Isodioxybehenic Merck (100
Fr. erucic acid & alkal. solut. potass. permang.—$C_{22}H_{42}(OH)_2O_2$.—Yellowish cryst.—*Sol.*, hot A.—*Melt.* 99° C.

Acid Isohexoic.—see **Acid Caproic, Iso-**

Acid Isonaphtoic.—see **Acid Naphtoic, Beta-**

Acid Isopentoic.—see **Acid Valeric, Iso-, from Valerian Root**

Acid Isophtalic.—see **Acid Phtalic, Iso-**

Acid Isopropylacetic.—see **Acid Valeric, Iso-, from Valerian Root**

Acid Isopropylbenzoic.—see **Acid Cuminic**

Acid Isopropylcarballylic.—see **Acid Camphoronic**

Acid Isopropylformic.—see **Acid Butyric, Iso-**

Acid Isotartaric.—see **Acid Metatartaric**

Acid Isotrioxystearic Merck (60
Formed w. ricinolic acid by oxid'g castor oil w. alkal. solut. potass. permang.—$C_{18}H_{36}O_5$, or, $C_{18}H_{33}(OH)_3O_2$.—Wh. cryst.—*Sol.* A., E; insol. W.—*Melt.* 111° C.

Acid Isotropic.—see **Acid Tropic**

Acid Isovaleric.—see **Acid Valeric, Iso-, from Valerian Root**

Acid Itaconic Merck (100
Fr. citric acid by dry distil.—$C_5H_6O_4$, or, $C_3H_4(COOH)_2$.—Trimet., octah. cryst.; str'ly acid.—*Sol.* W., A., E.—*Melt.* 161° C.

Acid Kakodylic.—see **Acid Cacodylic**

Acid Kinic.—see **Acid Quinic**

Acid Kresotic.—see **Acid Cresotic**

Acid Kresylic.—see **Cresol**

Acid Lactic Merck.—*U. S. P.*—**Sp. Gr. 1.206 at 25° C.= 25° Bé.—Highest Purity, Medicinal** (1
(Alphahydroxypropionic, or Ethylidenelactic, Acid).—Fr. milk- or grape-sugar by lactic ferment.—$C_3H_6O_3$, or, $CH_3.CH(OH).COOH$.—Colorl., thick liquid; odorl.; acid; absorbs moisture from damp air; 75%.—*Misc.* E.; all prop., W., A.; insol. C., carbon disulphide, petrol. benzin.—Caustic; Astring.; Digestive; Antidiab.—*Uses:* Dyspep., diar., croup, cholera, carcin.; solv. of false membr.—*Dose* 15–30 ♏ (1–2 Cc.) several t. p. d., well dil.—*Appl.*, in 50–80% solut. as caustic, in tuberculous affections of mouth, esophagus, and larynx, in lupus and alopecia, in dentistry for removing tartar fr. the teeth, and also in purulent ear discharge.

do. Merck.—Sp. Gr. 1.16=20° Bé.—60% (1

do. Merck.—Diluted, B. P. 1885 (1

do. Merck.—Technical, 50% (1
Yellow liq.—*Sol.* A., W.—*Uses:* Techn., instead of tartar bath in dyeing, as mordant in printing woolen goods; solvent for water-insolub. dyes (alcohol-soluble induline, nigrosine, spirit-blue); reducer of chromic acid in mordanting wool; in brewing for acidulating worts; prepar'g yeast for remov. Clostridium butyricum; in tanning as mordant & decalcifier of hides.

Acid Lævulinic.—see **Acid Levulinic**

Acid Laricic.—see **Acid Agaricic**

Acid Lauric Merck (70
(Laurinic, Laurostearic, or Dodecoic, Acid).—Fr. bayberry & o. oils by saponif.—$C_{12}H_{24}O_2$, or, $C_{11}H_{23}COOH$.—Yellowish cryst.—*Sol.* A., E.—*Melt.*, abt. 43° C.—*Boil.* 225° C.

Acid Lepargylic.—see **Acid Azelaic**

Acid Levulinic Merck.—Colorless, cryst. (50
(Lævulinic, or Beta-acetylpropionic, Acid).—Fr. cane sugar, starch, etc., by boil. w. v. dil. H_2SO_4.—$C_5H_8O_3$, or, $CH_3.CO.(CH_2)_2.COOH$.—Colorl. cryst.—*Sol.* W., A., E.—*Melt.* 33° C.—*Boil.* 239° C.—*Caut.* Keep well stoppered.

Acid Lithic.—see **Acid Uric**

Acid Magenta.—see **Ruby S**

Acid Maleic Merck (120
(Maleinic Acid).—Fr. malic acid by distil.—$C_4H_4O_4$, or, $COOH.(CH)_2.COOH$.—Colorl. cryst.—*Sol.* W., A., E.—*Melt.* 136–137° C.—*Boil.* 160° C.

Acid Malic Merck.—Pure, cryst. (25
(Oxysuccinic, or Apple, Acid).—Fr. unripe fruits; us'y of Pyrus aucuparia, Gaertner (Mountain ash).—$C_4H_6O_5$, or, $COOH.CH_2CH(OH).COOH$.—Colorl. cryst.; agre. sour taste.—*Sol.* W.—*Melt.* 100° C.—Antiscor.; Antipyr.—*Appl.*, in 5% aqu. solut. as inhalat. in croup & diphth.

Acid Malonic Merck (25
(Methanedicarbonic Acid).—Fr. monochloracetic acid, by potass. cyanide.—$C_3H_4O_4$, or, $CH_2(COOH)_2$.—Wh. cryst.—*Sol.* W., A., E.—*Melt.* 132–134° C.

Acid Maltonic.—see **Acid Gluconic**

Acid Mandelic.—see **Acid Amygdalic**

Acid Margaric (40
(Margarinic, or Heptadecoic, Acid).—By boil. cetyl cyanide & alcoh. potash.—$C_{17}H_{34}O_2$, or, $C_{16}H_{33}COOH$.—Wh., transp. cryst., or wh., amorph. pwd.—*Melt.* 59–60° C.—*Boil.* 277° C. at 100 Mm.

Acid Meconic Merck.—Cryst. (40
Fr. opium.—$C_7H_4O_7+3H_2O$, or, $OH.C_5HO_2(COOH)_2+3H_2O$.—Wh. cryst.; acid; non-poisonous.—*Sol.*, hot W. & hot A.; sl. cold W.; v. sl. cold A.—*Uses:* Effecting solutions of insolub. opium alkaloids.

Acid Meconinic Anhydride.—see **Meconin**

Acid Mellic.—see **Acid Mellitic**

Acid Mellitic Merck (1000
(Mellic, or Benzenehexacarboxylic, Acid).—Fr. mellite (honey-stone).—$C_{12}H_6O_{12}$, or, $C_6(COOH)_6$.—Wh., cryst. powd.—*Sol.* W., A.

Acid Menaphtoxylic.—see **Acid Naphtoic, Alpha-**

Acid Mesaconic Merck (100
Fr. citraconic anhydride, by oxid'n w. nitric acid.—$C_5H_6O_4$, or, $CH_3.C(COOH):CH.COOH$.—Colorl., cryst. powd.—*Sol.* A., E., W.—*Melt.* 200–202° C.

Acid Meta-amidosalicylic, Hydrochloride.—see **Acid Amidosalicylic (Hydrochloride)**

Acid Metacetonic.—see **Acid Propionic**

Acid Metacopaivic.—see **Acid Copaivic**

Acid Metacresotinic.—see **Acid Cresotic, Para-**

Acid Metacresylic.—see **Cresol, Meta-**

Acid Metagummic.—see **Cerasin from Gum**

Acid Metahomosalicylic.—see **Acid Cresotic, Meta-**

Acid Metaiodo-ortho-oxyquinolinesulphonic.—see **Loretin**

Acid Metakresotic.—see **Acid Cresotic, Meta-**

Acid Metanitrohydroxybenzoic.—see **Acid Nitrosalicylic, Meta-**

Acid Metanitrosalicylic, Vicinal.—see **Acid Anilotic**

Acid Metaoxyparatoluic.—see **Acid Cresotic, Meta-**

Acid Metaphosphoric.—see **Acid Phosphoric, Meta-**

Acid Metaphtalic.—see **Acid Phtalic, Iso-**

Acid Metapyridinecarboxylic.—see **Acid Nicotinic**

Acid Metarabic.—see **Cerasin from Gum**

Acid Metatartaric Merck (240
(Isotartaric Acid).—Fr. natural or dextrotartaric acid by fusion at 135° C.—$C_4H_6O_6$, or, $C_2H_4O_2(COOH)_2$.—Amorph., yellowish-white mass; sour taste.—*Sol.* W.

Acid Metatitanic.—see **Acid Titanic**

Acid Metatoluylic.—see **Acid Toluic, Meta-**

Acid Methanecarboxylic.—see **Acid Acetic**

Acid Methanedicarboxylic.—see **Acid Malonic**

Acid Methene-(or *methylene*)*protocatechuic.*—see **Acid Piperonylic**

Acid Methoxylbenzoic.—see **Acid Anisic**

Acid Methylacetic.—see **Acid Propionic**

Acid Methylaminoacetic.—see **Sarcosin**

Acid Methylaminocaproic., *Acid Methylaminopentoic.*—see **Leucine**

Acid Methylbenzoic.—see **Acid Toluic, Ortho-**

Acid Methylcrotonic.—see **Acid Tiglic**

Acid Methylenedigallic Merck (120
$CH_2(C_6H[OH]_3COOH)_2$.—Wh., cryst. powd.—Insol. W.

Acid Methylenehippuric.—see **Hippol**

Acid Methylguanidineacetic.—see **Creatin**

Acid Methylparaoxybenzoic.—see **Acid Anisic**

Acid Methylphenylformic.—see **Acid Toluic, Ortho-**

Acid Methylprotocatechuic.—see **Acid Vanillic**

Acid Methylsuccinic.—see **Acid Pyrotartaric**

Acid Methyltartaric Merck (10
$C_4H_5O_6.CH_3$.—Colorl., viscid liq.—*Sol.* W., A.

Acid Molybdic Merck.—Reagent (3
H_2MoO_4.—Wh., or sl. yellowish powd.; abt. 85% MoO_3.—*Tests:* (*Solub. in NH_4OH; Heavy Met.*) 2 Gm.+10 Cc. H_2O+5 Cc. NH_4OH (sp. gr. 0.91)—compl. solub., & clear solut.; add aqu. H_2S – sl. yellow color, but no green color, or ppt.—(*H_3PO_4*) as under molybdic anhydride.—*Uses:* Determ. phosphoric acid, Pb, Bi, &c.; Froehde's reagent; reagent for H_2O_2.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

(Acid) Molybdic Anhydride Merck.—Abt. 100%.—Highest Purity (5
(Molybdic Anhydride; Molybdenum Trioxide).—MoO_3.—Yellowish-green to wh. powd.—*Sol.*, acids, alkalies & potass.-bitart. solut.; v. sl. W.

do. Merck.—Pure (3
Yellowish-green to wh., heavy powd.—*Sol.*, acids.—*Uses:* Dyeing silk; manuf. of dyes.

do. Merck.—Fused (25
Steel-gray, tabular pieces.

do. Merck.—Sublimed (100

(Acid) Molybdic Anhydride Merck.—Reagent.—Free fr. Ammonia & Nitric Acid (6
MoO_3.—Sl. yellowish powd.; often exhibits bluish tint (presence of Mo_2O_3).—Abt. 100% MoO_3.—*Tests:* (*Alkal.*) heat 1 Gm. in test-tube—particles adher. to heated portion begin to fuse at red heat; cryst. sublimed anhydride depos. in upper cooler part of tube; if alkalies present, whole melts to dark-colored mass (the melt.-point is low).—(*NH_4 Salts*) heat 1 Gm.+solut. NaOH to boil—no NH_4OH evolved (test w. moist litmus paper).—(*Solub. in NH_4OH; Heavy Met.*) 2 Gm.+10 Cc. H_2O+5 Cc. NH_4OH (sp. gr. 0.91); heat gently—compl. solub. & clear solut.; add aqu. H_2S – sl. yellow color, but no darker color within 10 min., & no ppt.—(*H_3PO_4*) 10 Gm.+25 Cc. H_2O+15 Cc. NH_4OH (sp. gr. 0.91) +150 Cc. HNO_3 (sp. gr. 1.153); let stand at abt. 40° C.—no yellow ppt. within 2 hrs.—(*HNO_3*) 1 Gm.+10 Cc. H_2O; shake; add fragment NaCl + 1 drop 1:1000 solut. indigo + 10 Cc. conc. H_2SO_4—blue color should not disappear.—*Uses:* Determ. phosphoric acid, Pb, Bi, &c.; Froehde's reagent; reagent for H_2O_2.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Acid Monobromacetic Merck (15
(Bromacetic Acid).—By heat. acetic acid w. bromine.—$C_2H_3BrO_2$, or, $CH_2Br.COOH$.—Colorl., deliq. cryst.—*Sol.*, hot W.—*Melt.* 51° C.—*Boil.* 208° C. w. part. decomp.—Eschar.; Antisep.—*Caut.* Keep fr. air & moisture.

Acid Monobromobenzoic (Para-) Merck (150
(Monoparabromobenzoic Acid).—From parabromotoluene by oxid'n.—$C_7H_5BrO_2$, or, C_6H_4-Br.COOH.—Colorl. or reddish cryst.—*Sol.* A., E.; v. sl. in W.—*Melt.* 251° C.

Acid Monobromobutyric (Alpha-) Merck (60
Fr. butyric acid & bromine by heat. at 140° C.—$C_4H_7BrO_2$, or, $CH_3.CH_2.CHBr.COOH$.—Oily liq.—Sp. Gr. 1.54 at 15° C.—*Misc.* A., E.—*Boil.* 214–217° C.

Acid Monobromopropionic Merck (120
(Alphamonobromopropionic Acid).—By heat. propionic acid w. bromine.—$C_3H_5BrO_2$, or, $CH_3.CHBr.COOH$.—Colorl. liq.—*Sol.* W., A., E.—Sp. Gr., abt. 1.69 at 15° C.

Acid Monobromosuccinic Merck (100
(Bromosuccinic Acid).—By heat. succinic acid w. bromine.—$C_4H_5BrO_4$, or, $C_2H_3Br(COOH)_2$.—Colorl. cryst.—*Sol.* W.—*Melt.* 159–160° C.

Acid Monochloracetic Merck.—Pure, crystallized (6
By pass. chlorine into boiling acetic acid cont'g sulphur or iodine.—$C_2H_3ClO_2$, or, $CH_2Cl.COOH$.—Very deliq., colorl., cryst. mass.—Sp. Gr. 1.366 at 73° C.—*Sol.* W.—*Melt.* 63° C.—*Boil.* 186° C.—Caustic; Vesic.—*Uses:* Warts, corns, &c.—*Appl.*, in conc. solut.—*Caut.* Handls carefully!

do. Merck.—Techn. (2

Acid Monoiodo-orthohydroxybenzoic.—see **Acid Monoiodosalicylic**

Acid Monoiodosalicylic Merck (60
(Monoiodo-orthohydroxybenzoic Acid).—Fr. salicylic acid & iodine, by boil. w. alc.—$C_7H_5IO_3$, or, $C_6H_3.CO_2H.OH.I$ [1:2:3].—Colorl. cryst.—*Sol.* A., E.; v. sl. W.—*Melt.* 198° C.—Antirheum.—*Uses:* Ac. artic. rheumat.—*Dose* 15–45 grains (1–3 Gm.) per day.

Acid Monoparabromobenzoic.—see **Acid Monobromobenzoic, Para-**

Acid Mori(or *-in*)*lannic.*—see **Maclurin**

Acid Mucic Merck.—Pure (12
(Saccharolactic Acid).—By oxid'g lactose w. nitric acid.—$C_6H_{10}O_8$.—Wh., cryst. powd.—*Sol.*, in hot W.—*Melt.* 213° C.

Acid Muriatic.—see **Acid Hydrochloric**

Acid Myristic Merck (80

Fr. nutmegs. — $C_{14}H_{28}O_2$, or, $C_{13}H_{27}.COOH$.—Colorl. cryst.—*Sol.* A., E.—*Melt.* 54° C.—*Boil.* 248° C. at 100 Mm.

Acid Naphtalic.—see **Acid Phtalic**

Acid Naphthalenealphacarboxylic. — see **Acid Naphtoic, Alpha-**

Acid Naphtionic.—see **Acid Naphtylaminesulphonic, Alpha-**

Acid Naphtoic (Alpha-) Merck (160

(Naphthalenealphacarboxylic, or Menaphtoxylic, Acid).—By saponifying alphanaphtonitrile.—$C_{11}H_9O_2$, or, $C_{10}H_7COOH$.—Colorl. cryst.—*Sol.* A., E.; v. sl. W.—*Melt.* 160° C.—*Boil.* 300° C.—*Uses: Medic.*, as antisep.—*Techn.*, in manuf. of aniline dyes.

Acid Naphtoic (Beta-) Merck (160

(Isonaphtoic Acid).—By saponif. betanaphtonitrile. — $C_{11}H_8O_2$, or, $C_{10}H_7COOH$. — Yellow cryst.—*Sol.* A., E.—*Melt.* 182° C.—*Boil.*, above 300° C.—*Uses:* Techn., like alphanaphtoic acid.

Acid Naphtylaminesulphonic (Alpha-) Merck.—Highest Purity (12

(Naphtionic, or Alphanaphtylamine-alphasulphonic, or Sulphonaphtylaminic, Acid).—Fr. alphanaphtylamine sulphate by heat.—$C_{10}H_9NSO_3$, or, $C_{10}H_8(NH_2)(SO_3H)$.—Wh. cryst. or powd.; solutions fluoresce deep reddish-blue.—*Sol.*, v. sl. in W. and A.—Carbonizes at h. temp. without melt.—*Uses:* Techn., manufacture of azo dyes.

do. Merck.—Commercial (8

Acid Naphtylaminesulphonic (Alpha-) Merck.—Reagent (15

(Alphanaphtylaminesulphonic Acid; Naphtionic Acid).—$C_{10}H_5(NH)_2[1].(SO_3H)[4]+{}^1/_2H_2O$.—Wh. powd., or sm., lustr., colorl. need. (when cryst. fr. hot W.); carbonize on heat., without melt.—*Sol.*, abt. 4000 cold W.; more read. hot W.; sl. A.; insol. E.—Solut. in NH_4OH exhibits violet fluoresc. — *Uses:* detect. & colorimetr. determ. minute quant. HNO_2.

Note. — For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Acid Naphtylaminesulphonic (Beta-) Merck (3

(Brönner's Acid).—$C_{10}H_9NSO_3+H_2O$.—Wh. to sl. pink, silky leaflets.—*Sol.* 25,000 cold W.—Aqu. solut. fluorescent.

Acid Nicotinic Merck (1000

(Metapyridinecarboxylic, or Betapyridinecarboxylic, Acid).—Fr. quinolinic & hydrochloric acids. — $C_6H_5NO_2$, or, $C_5H_4N.COOH$. — Colorl. cryst.—*Sol.*, hot W., hot A.; v. sl. cold W. or E.—*Melt.* 228° C.

(Acid) Niobic Anhydride Merck (600

(Niobium Pentoxide).—Nb_2O_5.—Wh., microcryst. powd.; becomes yellow on being heated. —*Sol.*, in HF; sl. in hot, insol. in cold, HCl & H_2SO_4.

Acid Nitric.—Pure.—"C. P." (1

(Hydrogen Nitrate; Aqua Fortis).—68% abs. acid.—HNO_3+aq.—*Etymol.:* Fr. Lat. "nitrogenium," niter maker, the name given by Chaptal to the gas.—Transp.; colorl.; fum.; suffoc., caustic, corros. liq.; str'ly acid; volat. with heat. —*Misc.*, all prop. W.—Decomp. A. w. violence. —Sp. Gr. 1.403 at 25° C.—*Boil.* 120.5° C.—*Uses:* In pharm. & chem.—*Extern.*, as an eschar.—*Antid.*, chalk or magnesia & water, sodium, or potassium carbonate, wall plaster, mucilaginous and alkal. drinks, ice, &c.—*Caut.* Keep in dark amber, glass-stoppered bottle!

do.—Sp. Gr. 1.42 = 43.5° Bé. (1

do.—Sp. Gr. 1.32 = 36.5° Bé.—Crude (1

do.—Sp. Gr. 1.153 = 19.25° Bé. (1

do. — Diluted.—*U. S. P.*—Sp. Gr. 1.054 at 25° C. = 7.50° Bé. (1

10% abs. acid.—Transp., colorl. liq.; str'ly acid. —*Misc.*, all prop. W.—Antiper.; Antipyr.; Alter. —*Uses: Intern.*, interm. fever, dysent., bronch., syph., diab., whoop.-cough, & febrile dis.—*Extern.*, in irritant foot-baths, and as applic. to chilblains.—*Dose* 5–30 ♏ (0.3–2 Cc.) dil. w. W.

Acid Nitric Merck.—Reagent.—Sp. Gr. 1.40 (2

HNO_3.—Clear, colorl. liq.—Sp. Gr. 1.40–1.42.—Abt. 68% by wt. HNO_3.—*Tests:* As under Acid Nitric, Reagent, Sp. Gr. 1.20, but using 4 Cc. of 1.40 acid instead of 10 Cc. of 1.20 acid.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

do. Merck.—Reagent.—Sp. Gr. 1.30 (2

Clear, color. liq.; abt. 47% HNO_3.—*Tests:* As of following, but take 7.5 Cc. 1.30 acid instead of 10 Cc. 1.20 acid.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

do. Merck.—Reagent.—Sp. Gr. 1.20 (2

HNO_3.—Clear, colorl. liq.; abt. 33% HNO_3.—*Tests:* (*Res.*) evap. 10 Cc. – none wghble.—(H_2SO_4) 10 Cc. + 90 Cc. H_2O + solut. $BaCl_2$ – no ppt. ($BaSO_4$) within 12 hrs.—(*HCl; HBr; HI*) 10 Cc. + 90 Cc. H_2O + solut. $AgNO_3$ – no turb.—(*Heavy Met.; Earths*) 20 Cc. + 80 Cc. H_2O + NH_4OH to weak alkalinity + few drops $(NH_4)HS$ + $(NH_4)_2C_2O_4$ – no dark color or turb. —(IO_3; *I*) 5 Cc. + 10 Cc. H_2O + sm. piece metal. Zn; shake w. sm. quant. $CHCl_3$ – $CHCl_3$ not colored violet.—*Uses:* Oxidizing sulphur & its compounds; determ. Cl, Br, I, &c.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Acid Nitric Merck.—Reagent.—Sp. Gr. 1.153 (2

Clear, colorl. liq.; aht. 25% HNO_3.—*Tests:* As of acid of sp. gr. 1.20, but take 13 Cc. 1.153 acid instead of 10 Cc. 1.20 acid.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

do. Merck.—Reagent.—Crude (2

Clear, colorl. or sl. yellowish liq.; at least 61% HNO_3.—Sp. Gr. 1.38–1.40.—*Tests:* (*Res.*) evap. 5 Cc.–none wghble.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Acid Nitric Fuming Merck.—Sp. Gr. 1.52 (1

(Nitrosonitric Acid).—Yellow to reddish-yellow, str'ly fum. & corros. liq.—*Sol.* W.—Eschar.—*Uses:* Chiefly techn.—*Antid.*, carbonates in water in all cases not hopeless; apply oil to burns caused by acid.—*Caut.* Handle w. care!

Acid Nitric Fuming Merck.—Reagent (2

Yellow, or reddish-yellow, clear liq.; at least 86% HNO_3.—Sp. Gr. 1.486–1.500.—*Tests:* As of acid nitric sp. gr. 1.20, but taking 5 Cc. fuming acid instead of 10 Cc. 1.20 acid.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Acid Nitrobenzoic (Meta-) Merck (30

Nitro-derivative of benzoic acid.—$C_7H_5NO_4$, or, $C_6H_4(NO_2)COOH$ [3:1].—Yellowish-wh. cryst.—*Sol.* A., E.—*Melt.*, when dry, 141° C.

Acid Nitrobenzoic (Ortho-) Merck (40

Nitro-derivative of benzoic acid.—$C_7H_5NO_4$, or, $C_6H_4(NO_2)COOH$ [2:1].—Yellowish-wh. cryst.—*Sol.* A., E.—*Melt.* 147° C.

Acid Nitrobenzoic (Para-) Merck (45

(Nitrodracylic Acid).—Nitro-deriv. of benzoic acid.—$C_7H_5NO_4$, or, $C_6H_4(NO_2)COOH$ [4:1].—Yellowish-wh. cryst.—*Sol.* A., E.—*Melt.* 238° C.

Acid Nitrodracylic.—see **Acid Nitrobenzoic, Para-**

Acid Nitrohydrochloric.—*U. S. P.* (1

(Aqua Regia; Nitromuriatic, Chloronitrous, or Chlorazotic, Acid).—Prep. fr. 18 pts. pure nitric & 82 pts. pure hydrochloric acids.—Fum., yellow, corros., suffoc., volat. liq.; str'ly acid; diss. gold leaf.—*Misc.*, all prop. W.—*Uses:* See Acid Nitrohydrochl. Dil.—*Antid.*, same as other mineral acids.—*Caut.* Keep cool in amber bot.!

do.—Diluted.—*U. S. P.* (1

Abt. $^1/_5$ the strength of the preceding.—Colorl., or pale straw-colored liq.; faint chlorine odor; str'ly acid.—*Misc.*, all prop. W.—Antipyr.; Alter.; Digest.—*Uses:* Jaund., dyspep., biliary calculi, chronic rheumat., & fevers.—*Dose* 5–20 ♏ (0.3–1.3 Cc.), dil. w. water.—*Appl.*, dil. to sourness of vinegar, as sponge-, foot-, or general bath, daily or 2–3 t. p. week.—*Antid.*, same as other mineral acids.—*Caut.* Keep in amber bot.!

Acid Nitromuriatic.—see **Acid Nitrohydrochloric**

Acid Nitro-opianic Merck (240

Nitro-deriv. fr. opianic acid.—$C_{10}H_9NO_7$.—Yellow cryst.—*Melt.* 166° C.—*Sol.*, sl. in W. & A.

Acid Nitrophenisic.—see **Acid Picric**

Acid Nitrosalicylic (Meta-) Merck.—Asymmetric (150

(Asymmetric Metanitrohydroxybenzoic Acid).—Nitro-deriv. of salicylic acid.—$C_7H_5NO_5$, or, $C_6H_3.COOH.OH.NO_2$ [1:2:5].—Yellowish cryst.—*Sol.* A., hot W.—*Melt.* 235° C.

Acid Nitrosalicylic, Vicinal.—see **Acid Anilotic**

Acid Nitrosonitric.—see **Acid Nitric Fuming**

Acid Nitroxanthic.—see **Acid Picric**

Acid Nonoic, Normal. } —see **Acid Pelargonic**
Acid Nonylic. }

Acid Noropiandimethylester.—see **Acid Opianic**

Acid Nucleinic Merck.—Fr. Yeast (50

$C_{40}H_{54}N_{14}O_{27}P_4$.—Wh. or grayish-wh. powd. *Sol.*, in alkalies.—Tonic; Nervine; Solvent for uric acid.—*Dose* $^3/_4$ grain (0.05 Gm.) 4–10 t. p. d.

do. Merck.—Fr. Animal Cell Nuclei (50

Acid Nucleotinphosphoric.—see **Solurol**

Acid Octoic. } —see **Acid Caprylic**
Acid Octylic. }

Acid Oenanthic Merck (90

(Normal Heptoic, Heptylic, or Oenanthylic, Acid).—Fr. oenanthol by oxid'n w. warm solut. potass. dichromate & sulphuric acid.—$C_7H_{14}O_2$, or, $CH_3(CH_2)_5COOH$.—Clear, oily liq. at ord. temp.; unpleas. odor.—Sp. Gr. 0.931 at 0° C.—*Sol.* A., E.—*Melt.* 10.5° C.—*Boil.* 223° C.

Acid Oenanthylic.—see **Acid Oenanthic**

Acid Oleic Merck.—Highest Purity, Medicinal.—Free fr. Linolic Acid (16

(Oleinic Acid).—Fr. pure barium oleate.—$C_{18}H_{34}O_2$, or, $C_8H_{17}CH:CH(CH_2)_7COOH$.—Above 14° C., a clear, colorl., oily liq.; when cold, wh., gran. mass.—*Sol.* A., C., B., fixed & volat. oils.—Sp. Gr., abt. 0.898 at 15° C.—*Uses:* Instead of olive oil in biliary colic.—*Doses:* 15 ♏ (1 Cc.) in gelat. caps. morn. and eve.; as prophyl. in biliary colic, 8–15 ♏ (0.5–1 Cc.) for 10 consecutive days during a month.

Acid Oleic Merck.—Pure (5

Fr. commercial oleic acid by cooling to abt. 5° C. —$C_{18}H_{34}O_2$.—Yellowish, oily liq.—Sp. Gr. abt. 0.895 at 25° C.—*Sol.* A., E., C., B., oils, carbon disulph., &c.—*Uses:* Chiefly for prep. oleates.—*Incomp.*, nitrous or nitric acids.—*Caut.* Darkens & decomp. on expos. to air. Keep cool, well corked.

do. Merck.—Commercial, light-colored (1

Uses: Techn., chiefly in polishing compounds, and in manuf. of soaps.

Acid Oleosulphonic.—see **Acid Sulpholeic**

Acid Opianic Merck.—Highest Purity, cryst. (100

(Noropiandimethylester Acid).—Fr. narcotine by oxid'n.—$C_{10}H_{10}O_5$, or, $C_6H_2(CH_3O)_2(CHO).COOH$.—Wh. cryst.—*Sol.* A., E., hot W.—*Melt.* 145° C.

Acid Orthoaminobenzoylformic.—see **Isatin**

Acid Orthoboric.—see **Acid Boric**

Acid Orthocresotinic.—see **Acid Cresotic, Ortho-**

Acid Orthocresylic.—see **Cresol, Ortho-**

Acid Orthohomosalicylic. } —see **Acid Cresotic, Ortho-**
Acid Orthokresotic. }

Acid Ortho-oxybenzoic.—see **Acid Salicylic**

Acid Ortho-oxydiphenylcarbonic.—see **Acid Phenylsalicylic**

Acid Ortho-oxymetatoluic.—see **Acid Cresotic, Ortho-**

Acid Ortho-oxymethylbenzoic, Anhydride.—see **Phtalide**

Acid Ortho-oxyquinolinemetasulphonic.—see **Diaphtol**

Acid Orthophenolsulphonic.—see **Aseptol**

Acid Orthophtalic.—see **Acid Phtalic**

Acid Orthopyridinecarbonic.—see **Acid Picolinic**

Acid Orthosulphocarbolic.—see **Aseptol**

(Acid) Osmic Anhydride Merck (1425

(Osmium Tetroxide; Perosmic Anhydride; so-called "Perosmic" Acid).—Fr. finely powd. osmium by heating in oxygen.—OsO_4.—Yellowish cryst.; v. pungent, disagr. odor.—*Sol.* W., A., E.—*Melt.* 40° C.—*Boil.*, abt. 100° C.—Antineur.; Discut.; Anti-epilep.—*Uses: Intern.*, musc. rheumat., neural.—*Extern.*, remove tumors.—*Dose* $^1/_{60}$ grain (0.001 Gm.) several t. p. d.—*Inj.* $^1/_{20}$–$^1/_6$ grain (0.003–0.01 Gm.) as 1% solut. in W. 60, G. 40.—*Max. D.* $^1/_6$ grain (0.01 Gm.) single; $^1/_3$ grain (0.02 Gm.) daily.—*Micros.*, reagent for fatty subst'c. and nerve subst'c.—*Techn.*, in photog.—*Antid.*, hydrogen sulphide gas.—*Incomp.*, organic substances, phosphorus, ferrous sulphate, iodides, &c.—*Caut.* Vapor exceed. irrit. to the air-passages. Handle carefully!

Acid Oxalic Merck.—Highest Purity, Medicinal, cryst. & powd. (1

Fr. cellulose (saw-dust).—$H_2C_2O_4+2H_2O$, or, $(COOH)_2+2H_2O$.—Transp., colorl. cryst.; v. acid taste.—*Sol.* W., A.; sl. in E.—*Melt.*, abt. 100° C.—Emmen.; Expector.; Sed.—*Uses: Intern.*, funct. amenor., ac. cystitis, bronchitis, and asthma.—*Dose* $^1/_2$–1 grain (0.03–0.06 Gm.) every 4 hrs., in sweet W. as emmen.; $2^1/_2$ grains (0.15 Gm.) ev. hour w. infus. tea in asthma and bronchitis.—*Max. D.* 8 grains (0.5 Gm.) single, and 24 grains (1.5 Gm.) p. d.—*Antid.*, calcium saccharate, chalk, lime-water, magnesia.—*Incomp.*, iron, & salts; calcium salts, alkalies, arsenates.—*Caut.* Poisonous!

do. Merck.—Highest Purity, anhydrous (4

Fr. cryst. oxalic acid.—$H_2C_2O_4$, or, $(COOH)_2$.—*Subl.*, at 187° C.

do. Merck.—Highest Purity, Sublimed (15

$H_2C_2O_4$, or, $(COOH)_2$.—*Melt.* 187° C.

do. Merck.—Commercial, cryst. & powder (1

Uses: Calico printing, dyeing, tanning, bleaching straw (hats), removing rust and ink stains, manuf. of ink, dehydrating agent in condensations (Anschütz), and in chem. analysis.

Acid Oxalic Merck.—Reagent (1

$H_2C_2O_4+2H_2O$.—Colorl., odorl. cryst., free fr. effloresc.—99.8–100% pure.—*Sol.* 10 cold, 3 boil. W.; 2.5 A.; abt. 100 E.—*Melt.* 98° C. in its water of cryst.; when anhydrous, melts at 187° C.—Rendered anhydr. at 70° C.—*Subl.*, at abt. 100° C.—*Tests:* (*Res.*) dry 3 Gm. & ignite in platin. crucib.—none wghble.—(H_2SO_4) 5 Gm.+100 Cc. H_2O+1 Cc. HCl (sp. gr. 1.124)+solut. $BaCl_2$—no ppt. within 12 hrs.—(*Cl*) 5 Gm.+50 Cc. H_2O+15 Cc. HNO_3 (sp. gr. 1.153)+few drops solut. $AgNO_3$—at most only sl. opalesc. turb.—(*Heavy Met.*) aqu. 1:10 solut. perf. clear; 30 Cc. solut.+aqu. H_2S—no react.; add now NH_4OH till alkal.—no green or brown color & no ppt.—(*NH_4 Compounds*) *a:* 5 Gm.+30 Cc. solut. NaOH; boil.—no NH_3 evolved (test w. moist litmus paper); *b:* 2.5 Gm.+5 Gm. KOH+30 Cc. H_2O+15 drops Nessler's reag.—only sl. yellow color at most, but no brownish-red.—(HNO_3) overlay 10 Cc.1:10 solut. on solut. diphenylamine in conc. H_2SO_4—no blue color zone.—*Uses:* Prep. volumetric soluts.; separation of alkalies, magnesium & the rarer earths (Ce, Zr, Th, &c.); detect. & determ. Ca.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Acid Oxalic Merck.—Reagent.—Sublimed (20
$H_2C_2O_4$.—Wh., cryst., exceed. hygrosc. powd.; at least 99.5% anhydr. oxal. acid.—*Melt.* 187° C.—*Tests:* (*Res.*) ignite 10 Gm.—none wghble.—Other tests as preceding.—*Uses:* Chiefly as starting material for prep. volumetric soluts.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Acid Oxalmolybdic Merck.—Pure, cryst. (12
(Oxalmolybdenic Acid).—$2(C_2O_4HMoO_3).2H_2O$.—Colorl. cryst.—*Sol.* W.—*Uses:* For sympathetic ink.

Acid Oxamic Merck.—Pure (70
(Oxaminic Acid).—Fr. acid ammonium oxalate, by heat.—$C_2H_3NO_3$, or, $CO(NH_2)COOH$.—Colorl. cryst.—*Sol.* W.

Acid Oxyacetic.—see **Acid Glycolic**

Acid Oxybenzoic (Meta-) Merck (90
Fr. meta-amidobenzoic acid, by nitrous acid.—$C_7H_6O_3$, or, $C_6H_4(OH)COOH$.—Colorl. cryst.—*Sol.* A.—*Melt.* 200° C.

Acid Oxybenzoic (Para-) Merck (6
Fr. para-amidobenzoic acid, by nitrous acid.—$C_7H_6O_3+H_2O$, or, $C_6H_4(OH)COOH+H_2O$.—Colorl. cryst.—*Sol.* A., E.—*Melt.* 210° C.

Acid Oxybutyric (Beta-) Merck (240
Us'y fr. acetoacetic acid by reduct. w. sod. amalgam.—$C_4H_8O_3$, or, $CH_3.CH(OH).CH_2.COOH$.—Viscid, yellow mass.—*Sol.* W.

Acid Oxyethylsulphonic.—see **Acid Isethionic**

Acid Oxyisobutyric Merck (120
(Alphaoxyisobutyric, Acetonic, Dimethyloxalic, Dimethyloxyacetic, or Butyllactic, Acid).—Fr. acetone, by hydrocyanic w. dil. HCl.—$C_4H_8O_3$, or, $(CH_3)_2C(OH).COOH$.—Colorl. cryst.—*Sol.* W., A., E.—*Subl.*, at 50° C.; volat. w. steam.—*Melt.* 79° C.—*Boil.* 212° C.

Acid Oxymalonic.—see **Acid Tartronic**

Acid Oxynaphtoic (Alpha-) Merck.—Pure (10
(Alphanaphtholcarboxylic, or Alphacarbonaphtholic, Acid).—Fr. sodium-alphanaphthol, by CO_2 w. heat.—$C_{11}H_8O_3$, or, $C_{10}H_6.OH.COOH$.—Wh. cryst.; odorl.; sternutatory.—*Sol.* A., C., B., oils, aqu. solut's of alkalies & alkali carbonates; sl. in W.—*Melt.* 186° C.—Antiparasitic; Antizym.; Antipyr.—*Uses: Intern.*, disinf. intest. tract (reported 5 times as efficient as salicylic acid).—*Extern.*, in parasitic skin dis. (in 10% oint.), coryza, &c.—*Dose* $1^1/_2$–3 grains (0.1–0.2 Gm.).

do. Merck.—Commercial (3
Uses: Antiseptic.

Acid Oxynaphtoic (Beta-) Merck (4
(Betanaphtholcarboxylic, or Betacarbonaphtholic, Acid).—Fr. sod. betanaphthol, by carbon dioxide w. heat.—$C_{11}H_8O_3$, or, $C_{10}H_6.OH.COOH$.—Yellow cryst.—*Sol.* A., E., C.—*Melt.* 156° C.—Antisep.—*Uses:* Surg. antisep.

Acid Oxynaphtylorlho-oxytoluylic.—see **Epicarin**

Acid Oxyphenic.—see **Pyrocatechin**

Acid Oxysuccinic.—see **Acid Malic**

Acid Oxytricarballylic.—see **Acid Citric**

Acid Palmitic Merck.—Pure (12
(Palmitinic, or Cetylic, Acid).—Fr. spermaceti by saponif.—$C_{16}H_{32}O_2$, or, $C_{15}H_{31}COOH$.—Wh. cryst.—*Sol.* A., E.—*Melt.* 60° C.—*Boil.* 268° C. at 100 Mm.

do. Merck.—Crude (1
Yellow, amorph. powder or wax-like mass.

Acid Para-aminobenzene(or *-zol)sulphonic.* / *Acid Para-anilinesulphonic.* —see **Acid Sulphanilic**

Acid Parabanic Merck.—Cryst. (100
(Oxalylurea; Ethanedioxylureid).—From uric acid, by mod. strong nitric acid.—$C_3H_2N_2O_3$, or, $CONH.CO.CONH$.—Colorl. cryst.—*Sol.* W., A.

Acid Paracresolinic.—see **Acid Cresotic, Para-**

Acid Paracresylic.—see **Cresol, Para-**

Acid Parahomosalicylic. / *Acid Parakresotic.* —see **Acid Cresotic, Para-**

Acid Paramandelic.—see **Acid Amygdalic**

Acid Paramethoxy(or *-oxyl)benzoic.*—see **Acid Anisic**

Acid Paraoxymetatoluic.—see **Acid Cresotic, Para-**

Acid Paraoxyphenylalpha-amidopropionic.—see **Tyrosine**

Acid Paraphtalic.—see **Acid Terephtalic**

Acid Pararosolic.—see **Acid Rosolic**

Acid Parasorbic Merck (240
Fr. berries of Sorbus Aucuparia.—$C_6H_{10}O_2$.—Yellow liq.—Sp. Gr. 1.063 at 21° C.—*Sol.* A., E.

Acid Paratartaric.—see **Acid Racemic**

Acid Paratoluylic.—see **Acid Toluic, Para-**

Acid Parillinic.—see **Smilacin**

Acid Pelargonic Merck (140
(Normal Ennoic, Nonylic, or Normal Nonoic, Acid).—Fr. oil of Ruta graveolens, L. (Rue).—$C_8H_{17}COOH$.—Oily, yellowish liq. at normal temp.—Sp. Gr. 0.9103 at 15° C.—*Sol.* A., E., C.—*Melt.* 12.5° C.—*Boil.* 254° C.

Acid Pentahydroxycaproic.—see **Acid Gluconic**

Acid Pentoic, Primary.—see **Acid Valeric, Iso-**

Acid Pentylformic.—see **Acid Caproic, Normal**

Acid Perchloric Merck.—Pure (8

(Fraude's Reagent).—Fr. potass. perchlorate by sulphuric acid.—$HClO_4$+aq.—Aqu. solut. of perchloric acid.—Abt. 20% acid.—Sp. Gr. 1.12=16° Bé.—*Misc.* W.—*Boil.* 140–200° C.; non-distillable.—Caustic.—*Uses:* Powerful oxidizer; also as test for alkaloids, w. which it affords color reactions on boiling, *e.g.*, aspidospermine. — *Caut.* Poison! Deflagrates w. readily oxidizable substances.

Acid Perchloric Merck.—Reagent (12

$HClO_4$.—Colorl liq.; abt. 20% $HClO_4$.—Sp. Gr. 1.12.—*Tests:* (*Res.*) evap. & ignite 10 Gm.–none wghble.—(*H_2SO_4*) 5 Cc.+100 Cc. H_2O+5 Cc. HCl (sp. gr. 1.124)+solut. $BaCl_2$–no ppt. within 12 hrs.—(*HCl*) 5 Cc.+25 Cc. H_2O+3 Cc. HNO_3 (sp. gr. 1.153)+solut. $AgNO_3$–at most sl. opalesc. turb.—(*Ba*) 10 Cc.+50 Cc. H_2O+dil. H_2SO_4–no turb. within 5 min.—(*Heavy Met.*) 10 Cc.+40 Cc. H_2O+aqu. H_2S–no react.; add 10 Cc. NH_4OH (sp. gr. 0.96)+few drops (NH_4)-HS–no green or brown color, & no ppt.—*Uses:* Detect. & determ. K; alkaloidal reagent; destroying organic matter in forensic analysis.

Note. — For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Acid Periodic Merck (70

Fr. iodine, by concentrated perchloric acid.—HIO_4+2H_2O.—Wh. cryst.—*Sol.* W., A.—*Melt.* 130–133° C.—*Uses:* Powerful oxidizer.

Acid Perosmic.—see **(Acid) Osmic Anhydride**

Acid Phenic.—see **Acid Carbolic; Phenol**

Acid Phenoldisulphonic

Fr. phenol, by sulphuric acid w. sulphurous anhydride.—$C_6H_6S_2O_7$, or, $C_6H_3OH.(SO_3H)_2$.—Deliq., colorl. need.—*Sol.* W., A.

Acid Phenolsulphonic.—see **Aseptol**

Acid Phenolsulphonic Merck.—Commercial (2

(Sulphocarbolic Acid).—Yellowish liq., becoming brown on exposure to air.—Mixt. of ortho- and paraphenolsulphonic acids.—*Sol.* W., A.

Acid Phenolsulphoricinic.—see **Phenol Sulphoricinate**

Acid Phenylacetic Merck (16

(Alphatoluic [or -ylic] Acid).—Fr. benzyl cyanide w. alkali.—$C_8H_8O_2$, or, $C_6H_5.CH_2.COOH$.—Shin., wh. plates.—*Sol.* A., E., hot W.—*Melt.* 76° C.—*Boil.* 262–265°. C.—Antisep.; Antituberc.—*Uses: Intern.*, in typh. fever & pulmon. phth.—*Dose* 10–20 ♏ of 1:6 alcoh. solut. 3 t. p. d., with W.

Acid Phenylboric.—see **Acid Borophenylic**

Acid Phenylformic.—see **Acid Benzoic**

Acid Phenylglycolic.—see **Acid Amygdalic**

Acid Phenylhydracrylic.—see **Acid Tropic**

Acid Phenylhydrazinelevulinic.—see **Antithermin**

Acid Phenylhydroxyacetic.—see **Acid Amygdalic**

Acid Phenylic.—see **Acid Carbolic; Phenol**

Acid Phenylortho-oxybenzoic.—see **Acid Phenylsalicylic**

Acid Phenylpropiolic (120

$C_9H_6O_2$, or, $C_6H_5.C{:}C.COOH$.—Colorl. needl.—*Sol.*, eas. A., E., & in solut. Na_2CO_3; insol. cold W.—*Melt.* 136–137° C.—Used in form of sodium phenylpropiolate (which see).—*Caut.* Keep dark.

Acid Phenylpropionic.—see **Acid Hydrocinnamic**

Acid Phenylsalicylic Merck (800

(Phenylortho-oxybenzoic, or Ortho-oxydiphenylcarbonic, Acid).—$C_{13}H_{10}O_3$, or, $C_6H_5.C_6H_3.OH.COOH$.—Wh. powd.—*Sol.* A., E., G.; v. sl. W.—*Melt.* 113° C.—Antisep.—*Uses: Extern.*, wounds, inst. of iodoform.

Acid Phlorclic.—see **Phloretin**

Acid Phocenic.—see **Acid Valeric, Iso-, from Valerian Root**

Acid Phosphoantimonic Merck (5

Wh., cryst. powd.

do. Merck.—Solution (3

Fr. antimony pentachloride, by conc. aqu. solut. sod. phosphate.—Sp. Gr. 1.2 = 24° Bé.—*Uses:* Alkaloid reagent.

Acid Phosphomolybdic Merck.—Cryst. (20

$H_3PO_4.12MoO_3$+aq.—Yellowish cryst.—*Sol.* W., E., & A.—*Uses:* In aqu. solut. as alkaloidal reag. (Sonnenschein's Reagent).

Acid Phosphomolybdic Merck.—Reagent

$H_3PO_4.12MoO_3+xH_2O$.—Lustr. cryst.—*Sol.*, eas. & compl. in W.—*Tests:* (*Solub.; Heavy Metals; Earths*) 1 Gm. compl. solub. in 10 Cc. H_2O; add to solut. 2–3 drops NH_4OH–yellow ppt., solub. on add. 5 Cc. NH_4OH (sp. gr. 0.96); now add $(NH_4)HS+(NH_4)_2C_2O_4$ solut.–no react.—*Uses:* Reagent for alkaloids, & salts of potassium, ammoninm, rubidium, caesium, & thallium.

Note. — For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

do. Merck.—Reagent.—10% Solution (4

Acid Phosphoric Merck.—Cryst. (2

(Orthophosphoric Acid).—Fr. phosphorus by oxid'n.—H_3PO_4.—Transp., deliq., colorl. prisms; odorl.; v. acid taste.—*Sol.*, all prop. W.—*Uses:* Chem., pharm.—*Caut.* Stopper well.

Acid Phosphoric Merck.—Syrupy (1

H_3PO_4 + aq.—Colorl., syrupy liq.; odorl.; intens. acid taste; 85% abs. orthophosph. acid.—Sp. Gr. 1.725 at 15° C.; (1.707 at 25° C., U. S. P.) = 60.5° Bé.—*Sol.*, all prop., W., A.—Above 200° C., changes to pyrophosph. acid.—Astring.; Stim.; Antipyr.; Refrig.—*Uses: Intern.*, dyspep., scrofula, caries, phth., nightsweats, disturbances in tooth nutrition, etc.—*Techn.*, in chem. & pharm., and for improving color of sugar.—*Dose* 2–6 ♏ (0.12–0.36 Cc.) well diluted w. W.—*Antid.*, alkalies & alkaline earths & their carbonates & bicarbonates.—*Incomp.*, lead acetate, ferric chloride, silver nitrate, solut. iron phosphate or pyrophosphate, &c.

do. Merck.—Sp. Gr. 1.347.—50% (1

do. Merck.—Diluted.—*U. S. P.* (1

10%.—Sp. Gr. 1.057 at 25° C. (U. S. P.).—Tonic; Refrig.—*Uses:* Dyspep., scrof., caries, catar. affect., dis. of bones, phth. nightsw &c.—*Dose* 20–60 ♏ (1.3–4 Cc.).

Acid Phosphoric Merck.—Reagent.—Sp. Gr. 1.7 (2

H_3PO_4. — Clear, colorl., odorl., syrupy liq.; abt. 85% orthophosphoric acid.—*Tests:* (*Volat. Acids*) 30 Cc. + 50 Cc. H_2O; distil. off 50 Cc.; titrate distillate w. decinorm. KOH (methyl orange indic.) – not more than 0.1 Cc. KOH solut. should be required to change color to yellow. — (*HNO_3*) 2 Cc. + conc. H_2SO_4; overlay w. 1 Cc. solut. $FeSO_4$ – no color zone.—(*HCl; HBr; HI; H_3PO_3*) 2 Cc. + 18 Cc. H_2O + solut. $AgNO_3$ – no react., even on warm.—(*H_2SO_4*) 20 Cc. dil. (1:10) acid + solut. $BaCl_2$ – no ppt. ($BaSO_4$) within 2–3 hrs.—(*Metaphosph. Acid*) drop dil. (1:10) acid into dil. solut. albumin – no turb. —(*Heavy Met.; Earths, &c.*) *a:* 20 Cc. dil. (1:10) acid + aqu. H_2S – no react.; *b:* 20 Cc. dil. (1:10) acid + 10 Cc. NH_4OH (sp. gr. 0.96) + solut. $(NH_4)_2C_2O_4$ (& $[NH_4]HS$) – no ppt.; *c:* 5 Cc. + 20 Cc. absol. A. – perf. clear solut.—(*Oxidizable Substcs*) 5 Cc. + 5 Cc. dil. H_2SO_4 + 5 drops decinorm. $KMnO_4$; heat 5 min. at 100° C. – red color should not disapp.—(*As*) 3 Cc. + 20 Cc. H_2O; introd. in sm. quant. into Marsh apparat. started w. 20 Gm. As-free gran. Zn + dil. (1:5) H_2SO_4 – no deposit in reduct. tube within 2 hrs. —*Uses:* Determining acetic acid, boric acid, &c.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

do. Merck.—Reagent.—Sp. Gr. 1.12 (1

Clear, colorl., odorl. liq.; abt. 20% H_3PO_4.—*Tests:* As of preceding, using 4 Cc. 1.12 acid, however, instead of 1 Cc. 1.7 acid.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Acid Phosphoric Merck. — Reagent.— Sp. Gr. 1.057 (1

H_3PO_4.—Clear, colorl., odorl. liq.—Sp. Gr. abt. 1.057.—Abt. 10% H_3PO_4. — *Tests:* As under Acid Phosphoric, Reagent, Sp. Gr. 1.7, but using 10 Cc. 1.057 acid instead of 1 Cc. 1.7 acid.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

(Acid) Phosphoric Anhydride Merck (2

(Phosphorus Pentoxide; so-called "Anhydrous Phosphoric Acid"; Phosphoric Oxide).—Fr. phosphorus by compl. combust.—P_2O_5.—Bulky, light, wh., deliq. powd.—With W. forms metaphosph. acid & evolves heat.—*Sol.*, all prop., W. —*Uses:* Chem.; drying agent; incandesc. light.

(Acid) Phosphoric Anhydride Merck.—Reagent (3

P_2O_5.—Wh., amorph., colorl., bulky powd.—*Sol.* W. (forms metaphosphoric acid).—Compl. volat. on heat. in test-tube.—*Tests:* (*As*) diss. 1 Gm. in sm. portions at a time in 20 Cc. H_2O, & pass H_2S gas into solut., while warming – no yellow color or ppt.—*Uses:* Dehydrating agent in organic synthesis, & drying agent for gases.

Note. — For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Acid Phosphoric (Meta-) Merck.—Small Lumps or Sticks (1

(Glacial Phosphoric Acid). — Fr. H_3PO_4 by heat. — HPO_3. — Transp., h'ly deliq., colorl., glassy mass; str'ly acid react.—*Sol.* W., A.—*Uses:* Detect albumin in urine.

do.—Diluted.—*N. F.*

10 Gm. glac. phosph. acid & dist. W. to 100 Cc.

Acid Phosphoric (Meta-) Merck.—Reagent (3

(Glacial Phosphoric Acid). — HPO_3. — Colorl., transp., vitr. lumps or sticks; deliquesc. in moist air.—*Sol.*, v. eas. W.—*Melts* to clear liq. on heat.—*Tests:* (*HNO_3*) diss. 1 Gm. in 2 Cc. H_2O, add conc. H_2SO_4, & overlay w. 1 Cc. solut. $FeSO_4$ – no color zone.—(*H_2SO_4*) 1 Gm. + 20 Cc. H_2O + 5 Cc. HCl + solut. $BaCl_2$ – no immed. turb.—(HCl; HBr; HI, etc.) 1 Gm. + 20 Cc. H_2O + 5 Cc. HNO_3 (sp. gr. 1.153) + solut. $AgNO_3$ – no turb. — (*Heavy Metals; Earths, &c.*) *a:* 1 Gm. + 20 Cc. H_2O + aqu. H_2S – no react.; *b:* 1 Gm. + 20 Cc. H_2O + 5 Cc. NH_4OH (sp. gr. 0.96) + $(NH_4)_2C_2O_4$ & $(NH_4)HS$ – no ppt.—(*As*) 1 Gm. + 1 Cc. H_2O + 5 Cc. solut. $SnCl_2$ – no dark color on stand. 1 hr. — (*Oxidizable Substcs*) 1 Gm. + 10 Cc. H_2O + 5 Cc. dil. H_2SO_4 (sp. gr. 1.11) + 0.1 Cc. decinorm. $KMnO_4$, & heat 5 minutes at 100° C. – red color should not disapp.—*Uses:* Detect. albumin; prepar. dental cements.

Note. — For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co.; New York. This reagent conforms to the standard therein given.

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Acid Phosphorous Merck.—Cryst. (20

Fr. phosphorus trichloride by W.—H_3PO_3.—Wh. to yellowish cryst. mass, readily absorb. oxygen & form. phosphoric acid.—*Sol.* W.—*Melt.* 70° C.—*Uses:* Reduc. agent.—*Caut.* Stopper tight.

do. Merck.—Solution.—Sp. Gr. 1.12 (6

Acid Phosphotungstic Merck.—Cryst. (7

(Phosphowolframic Acid).—$H_3PO_4.12WO_3$+aq.—Heavy, greenish cryst.—*Sol.* W.—*Uses:* Reag. for alkaloids.

Acid Phosphotungstic Merck.—Reagent.—Absol. free from NH_3 & N_2O_5 (10

($P_2O_5.20WO_3.11H_2O$)+$16H_2O$.—Sm., wh., or sl. yellowish-green cryst.—*Sol.*, eas. W.—*Tests:* (*HNO_3*) diss. 1 Gm. in 10 Cc. H_2O w. a granule NaCl, add 1 drop 1:1000 indigo solut. & 10 Cc. conc. H_2SO_4 – blue color must not disappear within 10 minutes.—(*NH_4 Salts*) heat solut. 1 Gm. in 10 Cc. H_2O w. 5 Cc. solut. NaOH (sp. gr. 1.3) – no NH_3 evolved (test w. moist litmus paper).—*Uses:* Precip. alkaloids, organic bases, albumoses, & peptones.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Acid Phosphowolframic.—see **Acid Phosphotungstic**

Acid Phtalic Merck.—Pure, cryst. (6

(Orthophtalic, or Naphthalic, Acid).—Fr. naphthalene tetrachloride by oxid'n.—$C_6H_6O_4$, or, $C_6H_4(COOH)_2$ [1:2].—Colorl. cryst.—*Sol.*, hot W., A., E.—*Melt.* 213°.—*Uses:* Chem.

(Acid) Phtalic Anhydride Merck.—Sublimed (3

(So-called "Anhydrous Phtalic Acid").—Fr. orthophtalic acid, by distil.—$C_8H_4O_3$, or, $C_6H_4(CO)_2O$.—Wh. need.—*Sol.*, hot W., A., E.—*Melt.* 128° C.—*Boil.* 284° C.

Acid Phtalic (Iso-) Merck (110

(Metaphtalic Acid).—Fr. iso- & meta-xylenes, by oxid'n.—$C_8H_6O_4$, or, $C_6H_4(COOH)_2$ [1:3].—Wh. cryst.—*Sol.* A.—*Melt.*, above 300° C.

Acid Picolinic Merck (1000

(Alphapyridinecarbonic, or Orthopyridinecarbonic, Acid).—Derivative of alphapicoline.—$C_6H_6NO_2$, or, $C_6H_4N.COOH$ [1:2].—Wh. cryst.—*Subl.*, without melt.—*Sol.*, hot W.

Acid Picramic Merck.—Cryst. (30

(Picraminic Acid; Dinitroamidophenol).—$C_6H_5N_3O_6$, or, $C_6H_2.OH.NH_2NO_2NO_2$[1:2:4:6].—Dark red cryst.—*Sol.* A.—*Melt.* 165° C.

Acid Picric Merck (1

(Trinitrophenol; Picronitric, Picrinic, Carbazotic, Nitroxanthic, or Nitrophenisic, Acid).—Fr. phenol by nitration.—$C_6H_3N_3O_7$, or, $C_6H_2.OH.NO_2.NO_2.NO_2$[1:2:4:6].—Yellow, lustr. cryst.; odorl.; intens. bitter.—*Sol.* 10 A., 6.5 E., C., B.; 170 W.—*Melt.* 122.5 C.—Antisep.; Oxidiz.—*Uses: Intern.*, in malaria, trichiniasis, &c.—*Extern.*, 2 to 6% hydro-alcoh. solut. in hemorrh., erysip., lymphang., burns, ecz. & eryth; 1.5% solut. as inject. in gonorrh. (500 Cc. 2–5:1000 solut. 3 t. p. d.); 0.1% solut. in fissured nipples, &c.—*Techn.*, dyeing, explosives, & in leather industry.—*Chem.*, reag. for albumen & peptone. The solut. 1 part of picric acid in 100 pts. water (U. S. P.) serves for detection of albumen, glucose, & alkaloids.—*Dose* 1/2–2 grains (0.03–0.12 Gm.), in alcoh. solut.—*Max. D.* 5 grains (0.3 Gm.).—*Antid.*, albumen; hypodermoclysis; transfusion of alkal. sod.-chloride solut.; sod. sulphate.—*Incomp.*, all oxidizable substances; gelatin, albumin, alkaloids.—*Caut.* Dangerously explosive with sulphur, phosphorus, &c. Poisonous! Do not apply in substance or in oint., as then toxic effects are caused.

Acid Picric Merck.—Reagent (18

(Picronitric Acid; Trinitrophenol).—$C_6H_2(OH)(NO_2)_3$.—Pale-yellow, glist. cryst.—*Sol.*, abt. 90 cold, & abt. 30 boil., W.; eas. in A., B., E.—*Melt.* 122.5° C.—*Tests:* (*Resins; Substcs Insol. in H_2O*) 1 Gm. compl. solub. in & affords clear solut. w. 100 Cc. H_2O. Add to solut. 1–2 drops dil. H_2SO_4 – no ppt. within 12 hrs.; filter – no resin on filter.—(*Substcs Insol. in B.* [*Picrates of K, Na, & NH_4*]) 1 Gm. compl. solub. in & affords clear solut. w. 20 Cc. B.—(*$H_2C_2O_4$*) 1 Gm.+100 Cc. H_2O+solut. $CaCl_2$ – no ppt. of CaC_2O_4 within 2 hrs.—(*H_2SO_4, free & combined*) 2 Gm.+10 Cc. HNO_3 (sp. gr. 1.4), evap. to dryness on W.-bath, diss. res. in 100 Cc. boil. H_2O w. 5 Cc. HNO_3 (sp. gr. 1.153), cool, filter, & add solut. $Ba(NO_3)_2$ to filtrate – no immed. turb.—(*Ash*) cautiously incin. 1 Gm. in open platin. dish – res. should not weigh more than 0.001 Gm.—*Uses:* Precip. alkaloids, albumen, gelatin; testing for glucose, creatinin, guanin, benzene, & benzin.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Acid Picronitric.—see **Acid Picric**

Acid Piperic Merck (70

By decomp. piperine w. boil. alcoh. KOH.—$C_{12}H_{10}O_4$, or, $CH_2:O_2:C_6H_3.CH_2.CH:C:CH.COOH$.—Yellowish cryst.—*Sol.* A., E.—*Melt.* 216–217° C.

Acid Piperonylic Merck (200

(Methene-[or methylene-]protocatechuic Acid).—Fr. piperonal by oxidation.—$C_8H_6O_4$, or, $C_6H_3(O_2CH_2)COOH$.—Yellowish cryst.—*Sol.*, hot A.—*Melt.* 228° C.

Acid Pipitzahoic (800

(Perezon; Perezol).—$C_{15}H_{20}O_3$.—Fr. roots of Perezia adnata (Pipitzahoac).—Golden-yellow, shining scales.—*Sol.*, eas. A., E., C.—Mild

Cathartic.—*Uses:* Chiefly as indicator in volum. analysis (acids = light-yellow; alkalies = red). —*Dose* 3–5 grains (0.2–0.3 Gm.).

Acid Plumbic, Anhydrous.—see **Lead Oxide, Brown**

Acid Polychromic.—see **Acid Aloetic**

Acid Polygalic.—see **Senegin**

Acid Propionic Merck.—Pure (14

(Methylacetic, Metacetonic, or Ethylcarbonic, Acid).—Fr. propylic alc. by oxid'n.—$C_3H_6O_2$, or, C_2H_5COOH.—Clear, colorl. liq.; odor like that of acetic & butyric acids.—Sp. Gr. 1.013 at 0° C.—*Misc.*, all prop. W.—*Boil.* 141° C.

do. Merck.—Fr. Ethyl Cyanide (100

(Acid) Propionic Anhydride Merck (100

$(C_2H_5CO)_2O$.—Colorl. liq.—Sp. Gr. 1.0169 at 15° C.—*Boil.* 163° C.

Acid Propionylsalicylic

$COOH.C_6H_4.OC:(O).(CH_2.CH_3)$. — Obt. by action of propionic anhydride on salicylic acid.—Colorl., lustrous scales.—*Sol.* A., B., E., C.; diffic. W.—*Melt.* 95° C.—Antipodagr.; Antirheum.—*Dose* 10–20 grains (0.6–1.3 Gm.).

Acid Propylacetic, Normal.—see **Acid Valeric, Normal**

Acid Propylformic.—see **Acid Butyric**

Acid Protocatechuic Merck (200

(Dioxybenzoic Acid).—By fusing East-Indian kino w. NaOH.—$C_7H_6O_4$, or, $C_6H_3(OH)_2COOH$ [1:3:4].—Reddish cryst.—*Sol.* A., E.—*Melt.* 199–200° C.—Astringent.

Acid Prussic.—see **Acid Hydrocyanic**

Acid Purreic.—see **Acid Euxanthic**

Acid Pyridinedicarboxylic, Alphabeta-. — see **Acid Quinolinic**

Acid Pyroboric.—see **Acid Tetraboric**

Acid Pyrocatechuic.—see **Pyrocatechin**

Acid Pyrogallic Merck.—Resublimed (3

(Pyrogallol).—Fr. gallic acid by heat.—$C_6H_6O_3$, or, $C_6H_3(OH)_3$ [1:2:3].—Wh., lustr. cryst.; bitter.—*Sol.* 1.6 W., 1 A., & 1.1 E. at 25° C.; v. sol. boil. W. & boil. A. (U. S. P.).—*Melt.* 131° C.—*Boil.* 210° C.—*Uses: Extern.*, in psori. & o. skin. dis.; oint. (1 in 10).—*Techn.*, this grade has long enjoyed preeminence as an exceedingly satisfactory & efficient developer in photography; also in cosmetics, in manuf. of gallein, &c.—*Caut.* Poisonous! Keep fr. light.

Note.—The resublimation adapts this preparation particularly for photographic uses, as well as for medicinal purposes.

do. Merck.—Crystallized (3

Sm., colorl., heavy cryst.—Chem. & physical properties, uses, etc., as of preceding.

Acid Pyrogallic Merck.—Reagent (4

(Pyrogallol).—$C_6H_3(OH)_3$.—Wh., lustr. need., or scales.—*Sol.* 1.7 W., 1 A., 1.2 E.; diffic. B., C., CS_2.—*Tests:* (*Res.*) 1 Gm. volat. without wghble res.—(*Gallic Acid*) 2 Gm. compl. solub. in & affords clear solut. w. 5 Cc. E. (sp. gr. 0.72). —*Uses:* Gas analysis; determ. nitric & nitrous acids; detect. propeptone, cell membrane, & sulfonal.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Acid Pyrogallic, Oxidized.—see **Pyrogallol, Oxidized**

Acid Pyroligneous Merck.—Purified (1

(Wood, or Pyroligneous, Vinegar).—Acetic acid & homologues.—Fr. wood by destruct. distil.—Yellowish liquid; str. odor of furfural; v. acid.—7% of acetic acid.—Sp. Gr. 1.018–1.030.—*Sol.* W., A.—*Uses:* Disinf. in mouthwashes and gargles in 5–10% solut.—*Dose* 8–15 ♏ (0.5–1 Cc.) w. much water, in noma.

do. Merck.—Crude (1

Brown liq.—*Uses:* Veterinary medicine, and for disinf. stables in epidemic diseases.—*Techn.*, smoking meats; in microscopy, for imbedding.

Acid Pyromucic Merck (100

Fr. mucic acid at 180° C., or by oxid'g furfural. —$C_5H_4O_3$, or, $C_4H_3O.COOH$.—Yellowish cryst. —*Sol.* 4 W. at 100° C.; 28 W. at 15° C.—*Subl.* 100° C.—*Melt.* 134° C.

Acid Pyrophosphoric Merck (3

Fr. phosphoric acid, at 215° C.—$H_4P_2O_7$.—Wh. cryst. mass; or liquid.—*Sol.* W.

Acid Pyroracemic.—see **Acid Pyrouvic**

Acid Pyrotartaric Merck.—Cryst. (70

(Methylsuccinic Acid).—By distil. tartaric acid or isomers.—$C_5H_8O_4$, or, $COOH.\underline{CH(CH_3).CH_2}.COOH$.—White or yellowish cryst.—*Sol.* A., E.; 1.5 W. at 20° C.—*Melt.* 112° C.

Acid Pyrotartaric, Normal.—see **Acid Glutaric**

Acid Pyrouvic Merck (60

(Pyroracemic, or Acetylcarbonic, Acid).—Fr. tartaric or uvic acid by distil.—$C_3H_4O_3$, or, $CH_3.CO.COOH$.—Yellowish liq.—Sp. Gr. 1.288 at 18° C.—*Boil.* 165° C.—*Sol.* W., A., E.

Acid Quercetinic.—see **Quercetin**

Acid Quercitannic Merck (240

(Quercitannin).—Fr. oak bark, mainly fr. Quercus Robur, L.—$C_{17}H_{16}O_9$(?).—Reddish-wh. powd.—*Sol.* W., A.—*Uses:* Tanning.

Acid Quercitrinic.—see **Quercitrin**

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Acid Quillaic Merck (2000

Fr. inner bark of Quillaja Saponaria, Molina (Soap bark). — $C_{10}H_{30}O_{10}$. — Reddish - white, amorph. powd. — *Sol.* A., W. — Expector. — *Uses:* Violent protoplasmic poison, sugg. for pulmonary dis. Reag. f. urine albumin.

Acid Quinic Merck.—Cryst. (25

(Chinic, or Kinic, Acid).—Fr. cinchona bark.—$C_7H_{12}O_6+H_2O$, or, $C_6H_7(OH)_4COOH+H_2O$.—Wh., transp. prisms; v. acid taste.—*Sol.* W., A.—*Melt.* 160° C.—*Uses:* Uric-acid diathesis, usually in form of salts, *e.g.*, lithium quinate (urosin), piperazine quinate (sidonal), urotropin quinate (chinotropin), urea quinate (urol), etc.

Acid Quinolic Merck (320

(Chinolic Acid; Nitrodioxyquinoline).—$C_9H_4N.NO_2(OH)_2$. — Oxidation prod. of cinchonine. —Yellowish cryst.—Alm. insol. W., A., & E.

Acid Quinolinic Merck (200

(Chinolinic, or Alphabetapyridinedicarboxylic, Acid).—Fr. quinoline by oxid'n.—$C_7H_5NO_4$, or, $C_5H_3N(COOH)_2$[1:2:3].—Yellowish cryst.—*Sol.*, sl. W. & A.; v. sl. E.—*Melt.* 231° C.

Acid Quinopicric Merck (65

(Chinopicric Acid).—Mixt. of quinine & cinchonine picrates (Horn.).—Yellowish-brown powd. —*Sol.* W.

Acid Quinovic Merck (40

(Chinovic Acid).—Deriv. of quinovin(chinovin). —$C_{24}H_{38}O_4$ (Hlasiwetz & Gilm).—Yellowish cryst. powd.; tastcl.—Dextrorotatory.—*Sol.* E., C.; sl. A.; insol. W.

Acid Racemic Merck.—Inactive (60

(Paratartaric, Inactive Tartaric, or Uvic, Acid). —By-prod. of tartaric acid manuf.—$C_2H_4O_2-(COOH)_2+H_2O$.—Transp., colorl., tricl. cryst. —*Sol.* W., A.—*Melt.* 205–206° C., when anhydrous.

Acid Resorcinoldisulphonic Merck (12

Fr. resorcinol by sulphuric acid.—$C_6H_6S_2O_8+2H_2O$, or, $C_6H_2(OH)_2(SO_3H)_2+2H_2O$.—Deliq., wh. cryst.—*Sol.* W., A.—Decomp. at 100° C. without melting.

Acid Rheic.—see **Rhein**

Acid Ricinoleic Merck (13

Yellowish, viscid liq.—Sp. Gr. 0.945 at 15° C. —*Sol.* A., E., C.

Acid Roseine.—see **Ruby S**

Acid Rosolic Merck (6

(Pararosolic Acid; Commercial Rosolic Acid; Aurin Red).—Mixture aurin $(C_6H_4OH)_2.C_6H_4-CO$, and pseudorosolic acid, oxidized aurin, and methylaurin.—Fr. phenol by oxalic acid w. conc. sulphuric acid. — Red lumps w. green reflection and fracture.—*Sol.* A.—*Uses:* Coloring for spirit varnishes and lacquers.

Acid Rosolic Merck.—Reagent (8

(Corallin). — Brittle, amorph., reddish-brown pieces; metallic luster.—*Sol.*, eas. A.; insol. W. —*Tests:* (*Sensitiveness*) 2–3 drops solut. (0.5 Gm. in 50 Cc. 85% A.+50 Cc. W.)+100 Cc. H_2O+0.05 Cc. decinorm. KOH – pale-yellow color should change to rose-red; on further add. 0.05 decinorm. HCl, pale-yellow color restored.—*Uses:* Indicator (alkalies = violet-red; acids = yellow).

Note. — For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D.Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Acid Rubine.—see **Ruby S**

Acid Rufigallic Merck (32

(Rufigallol; Hexaoxyanthraquinone).—Fr. gallic, or tannic acids, by str. H_2SO_4.—$C_{14}H_8O_8+2H_2O$, or, $(OH)_2C_6H(CO)_2.C_6H(OH)_3+2H_2O$. —Reddish-brown cryst. *Sol.* E.; insol. W.

Acid Rutic.—see **Acid Capric**

Acid Saccharolactic.—see **Acid Mucic**

Acid Salicylic Merck.—Pure, Amorph. (1

(Ortho-oxybenzoic Acid).—Fr. carbolic acid, by caustic soda w. carbon dioxide.—$C_7H_6O_3$, or, $C_6H_4(OH)COOH$ [1:2].—Light, fine, wh., cryst. powd.; sweet taste & acrid after-taste.—Sp. Gr. 1.443–1.457.—*Sol.* 2 E., 2.4 A., 60 G., 80 C., 450 W. at 15° C.; (308 W., 2 A. at 25° C.; 14 boil. W.; v. sol. boil. A., U. S. P.). — *Melt.* 156–157° C. Volat. at h. temp.—Antisep.; Antipruritic; Antirheum.; Antipyr.; Antihidr.—*Uses: Extern.*, wounds, skin dis., & infl. surfaces; corns.—*Intern.*, rheum., migraine, neural., influenza, pericard., scar. fev., pleurisy, &c.—*Dose* 10–20 grains (0.6–1.3 Gm.), in wafers, or powd.—*Appl.*, in 2–5% hydro-alcoh. solut.; in 5–% admixture w. talcum in excessive perspiration.—*Techn.*, admittedly the safest & most efficient preservative of fruit, wine, beer, meat, & in fact *all* food products.

Note.—Being free from the customary poisonous phenolic impurities, this preparation is especially adapted for medicinal purposes.

do. Merck.—*U. S. P.*—**Cryst.** (1

do. Merck.—Natural.—Fr. Oil of Wintergreen (7

Fr. essential oil of wintergreen, Gaultheria procumbens, L.; or oil of sweet birch, Betula lenta, L.—Colorl. cryst.; mostly w. character. odor. —*Melt.* 150–157° C.

Acid Salicylous Merck (12

(Salicylic Aldehyde; Ortho-oxybenzaldehyde). Fr. phenol, by potassa w. chloroform.—$C_7H_6O_2$, or, $C_6H_4.OH.COH$.—Yellow oil; aromat. odor. —Sp. Gr. 1.165–1.172 at 15° C.—*Sol.*, v. sl. W.; all prop., A., E.—*Boil.* 196° C.—*Uses:* Detect. acetone in urine.

do. Merck.—Natural (120

Fr. flowers of Spiræa Ulmaria, L. (Queen of the

Meadow).—*Uses:* Disinfect. in 0.1 to 0.25% solut.—*Techn.*, in perfumery.

Acid Salicylsulphonic. } —see **Acid Sulphosalicylic**
Acid Salicylsulphuric. }

Acid Santalic Merck.—Pure (140

(Santalinic Acid). — $C_{15}H_{14}O_5$.— Brownish-red powd.—*Sol.* A., E., alkalies.

Acid Santalic, Crude.—see **Santalin**

Acid Santonic Merck (10

By boil. santonin w. baryta water.—Isomeric, not identical, w. santoninic acid.—$C_{15}H_{20}O_4$.—Wh. cryst.—*Sol.* W., A., E., C.—*Melt.* 161–163° C.

Acid Santoninic Merck.—Cryst. (220

(Miscalled "Santonic Acid").—By heat. santonin w. solut. NaOH or KOH.—$C_{15}H_{20}O_4$, or, $C_{14}H_{19}O_2.COOH$.—Colorl. cryst.—*Sol.*, eas. A., C.; sl. W., E.—Decomp. at 120° C. into santonin & W.—Anthelm.—*Uses:* Intest. worms, us'y as sod. santoninate.—*Dose* 1–5 grains (0.06–0.3 Gm.).

Acid Santoninic, Anhydrous.—see **Santonin**

Acid Sativic.—see **Acid Tetraoxystearic**

Acid Sclerotic (or *-inic*).—see **Acid Ergotic**

Acid Sclerotic Dragendorff-Merck (90

(Sclerotinic Acid).—Fr. sclerotium of Claviceps purpurea, Tulasne (Ergot of rye).—Amorph., brown powd.—*Sol.* W.—Hemost.; Antiepil.—*Dose* 1 grain (0.06 Gm.) once or twice daily, per os, or by inj. in 1:1000 aqu. solut. thymol.—*Max. D.*, daily, 5 grains (0.3 Gm.).—*Caut.* The solutions are readily decomp., hence only suff. for 2 or 3 days should be prepared. Keep well stoppered. See also Acid, Ergotic.

do. Podwyssotzki-Merck (120

Fr. sclerotium of Claviceps purpurea, Tulasne (Ergot of rye).—$C_{12}H_{19}NO_9$(?). — Amorph., brown powd.—*Sol.* W.; sl. A.—Oxytocic; Hemostat.; Antiepil.—*Uses:* Epilepsy, & intern. hemorrhage.—*Dose* $^1/_2$ grain (0.03 Gm.).—*Inj.*, $^2/_3$–$^3/_4$ grain (0.04–0.05 Gm.). — *Max. D.*, 5 grains (0.3 Gm.) p. d.—*Caut.* Keep dry.

Acid Sebacic Merck.—Cryst. (10

(Sebacinic, or Sebacylic, Acid).—Fr. fats cont'g olein by heat. w. alkalies.—$C_{10}H_{18}O_4$, or, $C_8H_{16}(COOH)_2$.— Wh. cryst.—*Sol.* A., E., C.; sl. in W.—*Melt.* 127–128° C.

Acid Sebacylic.—see **Acid Sebacic**

Acid Selenic Merck.—Sp. Gr. 1.40 = 42° Bé.—Pure (110

(Selenic Hydroxide).—Fr. selenous hydroxide & chlorine- or bromine water.—H_2SeO_4.—Colorl., corros. liq.; str'ly acid.—*Misc.*, all prop. W.—Decomp. 280° C.

Acid Selenous Merck.—Sublimed (200

(SeleniousAcid).—Fr. selenium, by hot nitric acid.—H_2SeO_3.—Transp., colorl. cryst.—*Sol.*, h. W.—*Uses:* w. H_2SO_4 as alkaloidal reagent.

(Acid) Silicic Anhydride Merck.—Pure, wet process (2

(Precipitated Silica).—Fr. sol. silicates, by mineral acid.—SiO_2.—Snow-wh., bulky, amorph. powd.—*Sol.*, hot alkal. solut.

do. Merck.—Pure, natural (2

(Quartz; Flint; Sand; Chalcedony; Opal; Agate; Infusorial Earth, &c.).—SiO_2.—Transp., colorl. cryst.; odorl.; tastel.; harder than glass or steel.—*Sol.* HF; partially in hot alkalies.

Acid Silicofluorhydric. } —see **Acid Hydrosilicofluoric**
Acid Silicofluoric. }

Acid Silicotungstic Merck (30

(Silicowolframic Acid). — $4H_2O.SiO_2.12WO_3 + 22H_2O$.—Wh. to yellowish-wh. cryst.—*Sol.* A., W.—*Uses:* As alkaloidal reagent, and as mordant for basic aniline dyes.

Acid Silicowolframic.—see **Acid Silicotungstic**

Acid Silvic.—see **Acid Sylvic**

Acid Sorbic Merck.—Cryst. (400

(Sorbinic Acid).—Fr. berries Pyrus aucuparia, Gaertner (Mountain Ash).—$C_6H_8O_2$, or, CH_3-$CH:CH.CH:CH.COOH$.—Yellowish-wh. cryst.—*Sol.* W., A.—*Melt.* 134° C.

Acid Sozoiodolic (30

(Diiodoparaphenolsulphonic Acid). — $C_6H_2I_2$-$OH.SO_3H + 1^1/_2H_2O$.—Cryst.—*Sol.*, eas. W., A., & G.—*Uses:* As vulnerary in 2–3% aqueous solution.

Acid Sozolic.—see **Aseptol**

Acid Stearic Merck (12

(Stearinic, Cetylacetic, or Stearophanic, Acid).—Fr. solid animal fats, by saponif.—$C_{18}H_{36}O_2$, or, $C_{17}H_{36}COOH$.—Solid, wh., hard, glossy mass; odorl.; tastel.—Wh. cryst.—*Sol.* B.; abt. 16.6 A. at 25° C.; eas. boil. A., E.; insol. W. (U. S. P.)—*Melt.* 69.2° C. (U. S. P.).—*Boil.* 287° C. at 100 Mm.

Acid Stearophanic.—see **Acid Stearic**

(Acid) Stibic Anhydride.—see **Antimony Oxide, Antimonic**

(Acid) Stibious Anhydride.—see **Antimony Oxide, Antimonous**

Acid Suberic Merck (300

Fr. cork, castor oil, &c., by HNO_3.—$C_8H_{14}O_4$, or, $C_6H_{12}(COOH)_2$.—Wh. cryst.—Subl., at h. temp.—*Sol.* A., E.—*Melt.* 140° C.

Acid Succinic Merck.—Pure, cryst. (9

(Ethylenesuccinic, or Ethylenedicarboxylic, Acid).—Fr. amber by distil'n, or fr. calcium

malate w. casein by ferment.—$C_4H_6O_4$, or, $C_2H_4(COOH)_2$.—Colorl. cryst.; odorl.; acrid taste. —*Sol.* 5 W., A.; sl. E.; insol. C. & B.—*Boil.* 235° C.—*Melt.* 182° C.—Antispasm.; Diuret. —*Uses:* Us'y as solut. of amm. succinate for cramps, hyst., delir. trem., etc.—*Dose* 5–15 grains (0.3–1 Gm.) several t. p. d.

Acid Succinic Merck.—Purified (8

do. Merck.—Crude (7

Brownish-yellow cryst. cont'g succinic anhydride.—*Sol.* A.; partly in W.

Acid Succinic Merck.—Reagent (16

$C_4H_6O_4$.—Colorl., monoclin. prisms.—*Sol.* 20 cold, & abt. 2 boil. W.; 10 A.; 80 E.—*Melt.* 182° C.—*Boil.* 235° C. w. decomp.—*Tests:* (*Res.*) heat 1 Gm. in platin. dish–no wghble res., & no charring.—($H_2C_2O_4$) 1 Gm.+20 Cc. H_2O+solut. $CaCl_2$–no react.—(*Tartaric Acid; Sulphates*) 1 Gm.+20 Cc. H_2O+solut. $KC_2H_3O_2$ or $Ba(NO_3)_2$ –no ppt. on stand. 12 hrs.—(*Cl*) 1 Gm.+20 Cc. H_2O+2–3 Cc. HNO_3 (sp. gr. 1.153)+solut. $AgNO_3$–not more than sl. opalesc. turb.—(NH_4 *Salts*) heat 1 Gm. w. 10 Cc. solut. NaOH (sp. gr. 1.13)–no NH_3 evolved (test w. moist litmus paper).—(*Heavy Metals*) 1 Gm.+20 Cc. H_2O+aqu. H_2S.–no react.—*Uses:* Separating iron & manganese; reagent for albumin.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

(Acid) Succinic Anhydride Merck (50

(Succinic Anhydride; Succinyl Oxide; so-called "Anhydrous Succinic Acid").—Fr. hydrated succinic acid & succinyl chloride by distil'n.—$C_4H_4O_3$, or, $CO\overset{CH_2.O.CH_2}{\underset{\_\_\_\_\_}{}}CO$.—Wh. to yellowish cryst.—*Sol.* A.—*Melt.* 119° C.

Acid Sulphanilic Merck.—Cryst., white (4

(Para-aminobenzenesulphonic, or Para-anilinesulphonic, Acid).—By heat. aniline w. fum. H_2SO_4.—$NH_2.C_6H_4.SO_3H+2H_2O$.—Colorl. cryst. —*Sol.*, sl. W.; insol. A., E.—Anti-catarrhal; Analg.—*Uses: Intern.*, coryza, catarrh. laryng., &c.—*Dose* 10–20 grains (0.6–1.3 Gm.) 1 or 2 t. p. d. in aqu. solut. w. sod. bicarb.

Acid Sulphanilic Merck.—Reagent (5

$C_6H_4(NH_2)[1].(HSO_3)[4]+2H_2O$.—Colorl., acic., effloresc. cryst.—*Sol.*, diffic. cold W. (abt. 150); more read. hot W.; insol. A., E., B.—Does not melt; carbonizes on heat. to 280–300° C.—*Tests:* (*Res.*) ignite 1 Gm.–none wghble.—(H_2SO_4[*Aniline Sulphate*]) 1 Gm.+25 Cc. boil. H_2O+solut. $BaCl_2$–no turb.—(*HCl* [*Aniline Hydrochloride*]) shake 1 Gm. w. 20 Cc. H_2O, filter, & add a few drops HNO_3 & $AgNO_3$ solut. to filtrate–at most only sl. opalesc. turb.—*Uses:* Detect. nitrites & bile pigments, & in Ehrlich's test for typhoid fever.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Acid Sulphethylic.—see **Acid Ethylsulphuric**

Acid Sulphindigotic. } —see **Acid Indigosulphonic**
Acid Sulphindylic. }

Acid Sulphocarbolic.—see **Aseptol; Acid Phenolsulphonic, Commercial**

Acid Sulphocholeic.—see **Acid Taurocholic**

Acid Sulpholeic Merck (80

(Sulpholeinic, or Oleosulphonic, Acid).—Fr. fixed oils, by sulphuric acid.—$C_{18}H_{36}O_7S$, or, $C_{16}H_{32}(COOH)_2.SO_3H$.—*Sol.*, oils.

Acid Sulphomolybdic Merck (12

$MoO_3.SO_3(MoO_2.SO_4)$. — Violet-brown, cryst. powd.—*Sol.* W.

Acid Sulphonaphthylaminic.—see **Acid Naphthylaminesulphonic, Alpha-**

Acid Sulphoricinic (6

(Sulphoricinoleic Acid).—Fr. castor oil, by sulphuric acid.—Oily liq.—Sp. Gr. 1.015–1.02 at 17° C.—*Sol.* W., A.—Antisep.; Irrit.; Deodor. —*Uses: Extern.*, ozena, ulcerat. & skin dis., diphth., tuberc. troubles of muc. membr.—*Chem.*, solv. for sulphur, phenol, iodine, &c.

Acid Sulphosalicylic Merck (8

(Salicylsulphuric, or Salicylsulphonic, Acid).——Fr. salicylic acid, by sulphuric anhydride.—$C_7H_6SO_6$, or, $C_6H_3.SO_3H.(OH.)COOH$.—Wh. cryst.—*Sol.* W., A.—*Melt.* 120° C.—*Uses:* As delicate&exceedingly sharp urine-albumin test.

Acid Sulphotumenolic.—see **Tumenol Powder**

Acid Sulphovinic.—see **Acid Ethylsulphuric**

Acid Sulphovinous.—see **Acid Ethylsulphurous**

Acid Sulphuric.—Pure.—"C. P."—Sp. Gr. 1.840 = 66° Bé. (1

(Oil of Vitriol; Dihydrogen Sulphate).—Fr. sulphur dioxide by oxid'n.—H_2SO_4+aq.—Abt. 96% acid.—Str'ly corros., dense, oily liq.—*Misc.*, all prop., W., A., w. evolution of heat. —*Boil.* 338° C.—*Uses:* Techn., prepar. o. acids; salts; purif. organic & inorganic substances; drying agent; exciting liquid in electric batteries, &c.

do.—*U. S. P.*—Sp. Gr. 1.826 at 25° C. (1

92.5% H_2SO_4.

do.—Diluted.—*U. S. P.* (1

10%H_2SO_4.—Sp. Gr. abt. 1.067 at 25° C.—*Uses: Intern.*, gastro-intest. disorders, phthisical sweats, exophthalmic goiter; solvent for quinine and o. alkaloids.—*Dose* 15–30 ♏ (1–2 Cc.) well diluted (conc. acid not used medicinally).—*Antid.*, magnesia; soda lye, a drop or two at a time; small pieces of ice; oil; soap shavings followed by water; use stomach pump w. great caution, to avoid danger from perforation.

do.—Sp. Gr. 1.848 = 66° Bé.—Crude (1

Acid Sulphuric Merck.—Reagent.—Sp. Gr. 1.84 (2 H_2SO_4.—Clear, colorl., oily liq.; 95–96% H_2SO_4. —*Tests:* (*Res.*) evap. 10 Cc. – none wghble.—(*HNO_3*) 1 Cc.+9 Cc. H_2O, & overlay on 5 Cc. solut. diphenylamine – no blue zone at place of contact of liquids.—(*Se*) overlay 2 Cc. w. 2 Cc. HCl (sp. gr. 1.124) cont. a granule Na_2SO_3 dissolved – no red zone, or red ppt. on warm.—(*Substcs Oxidiz. by $KMnO_4$ [HNO_2; SO_2]*) 15 Cc. +60 Cc. H_2O+1 drop decinorm. $KMnO_4$ – pink color should not disapp. within 10 minutes.—(*HCl; HBr; HI*) 2 Cc.+30 Cc. H_2O+solut. $AgNO_3$ – no react.—(*Pb*) 10 Cc.+50 Cc. 85% alcoh. (cautiously) – no turb., & no ppt. ($PbSO_4$) within 2 hrs.—(*Heavy Metals & Ca*) *a:* 10 Cc.+ 50 Cc. H_2O+NH_4OH in excess+few drops $(NH_4)HS$ & $(NH_4)_2C_2O_4$ – no green color or turb.; *b:* 20 Cc.+100 Cc. H_2O, & pass in H_2S gas – no brown color, or brown flocks on long stand. (Sn.) —(*NH_4Salts*) 2 Cc.+30 Cc. W.+1:6 solut. KOH to alkalinity+10–15 drops Nessler's reag. – at most a light-yellow, but no brownish-red, ppt. may form.—(*As*) start Marsh appar. using 20 Gm. As-free gran. Zn & As-free dil. (1:5) H_2SO_4; when air expelled, heat reduct. tube to redness, run in cooled mixt. 10 Cc. acid to be tested w. 50 Cc. H_2O – no As should deposit in reduct. tube within half an hour.—*Uses:* Detect. arsenic, especially in forensic analysis; determ. Pb, Ba, & N; gas-, oil-, & microscop. analysis, &c.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

do. Merck.— Reagent.—Sp. Gr. 1.110—1.114 (1

Colorl. liq.; 15.7–16.3% H_2SO_4.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

do. Merck.—Reagent.—Sp. Gr. 1.070 (1 H_2SO_4.—Colorl. liq.—Sp. Gr. abt. 1.070.—Abt. 10% H_2SO_4.—*Tests:* As under Acid Sulphuric, Reagent, Sp. Gr. 1.84, but using 15 Cc. of 1.070 acid instead of 1 Cc. of 1.84 acid.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Acid Sulphuric with Phosphoric Anhydride Merck.—Reagent; abt. 9.8% P_2O_5, 15% P_2O_5, or 20% P_2O_5.—For Kjeldahl Nitrogen Determination

Tests: (*HNO_3*) 1 Cc.+9 Cc. H_2O, & overlay on 5 Cc. solut. diphenylamine – no blue zone.—(*NH_4 Salts*) 2 Cc.+30 Cc. H_2O+solut. (1:6) KOH to alkalin.+10–15 drops Nessler's reag. – at most only faint yellow, but no brownish-red, color, or ppt.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

(Acid) Sulphuric Anhydride Merck (8 (Sulphur Trioxide; so-called "Anhydrous Sulphuric Acid").—Fr. fum. H_2SO_4 by distil'n. —SO_3.—Solid, transp. prisms, evolv. heat on contact with W.— *Melt.* 16° C.— *Boil.* 46° C. —*Uses:* Absorbent of water; manuf. of explosives & dyes (indigo); purif. petroleum, &c.

(Acid) Sulphuric Anhydride Merck.—Reagent (9 SO_3.—Long, transp., colorl. prisms.—*Melt.* 15° C. to oily liq.—*Boil.* 46° C.—On long keeping below 25° C., polymerizes to a modific. forming long, silky, felted need. melt. above 50° C., & which at greater heat bec. converted into gaseous trioxide boil. at 46° C., & solidif. at 15° C. —*Uses:* Fortifying ordinary H_2SO_4.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Acid Sulphuric Aromatic.—*U. S. P.*

(Elixir of Vitriol).—Sulphuric acid w. alc., tinct. of ginger & oil of cinnamon.—Straw-colored liq.; pecul. arom. odor; pleas. acid taste when dil.—Tonic; Astring.—*Uses:* Phth. night sw.; relaxed condit. of muc. memb. of intest.—*Dose* 10–20 ♏ (0.6–1.3 Cc.) 3 t. p. d., with W.

Acid Sulphuric Fuming Merck.—Reagent (1 $xH_2SO_4+ySO_3$.—Colorl., oily liq.; fumes in air; 8–10% free SO_3 (=83.1–83.5% total SO_3).—*Tests:* (*Res.*) evap. & ignite 3 Cc. – none wghble. —(*HNO_3*) 1 Cc.+9 Cc. H_2O, & overlay on solut. diphenylamine – no blue zone.—(*NH_4 Salts*) 2 Cc.+30 Cc. H_2O+1:6 solut. KOH to alkalinity +15 drops Nessler's reagent – at most pale-yellow, but no brownish-red, ppt. may form.—(*Halogens*) 1 Cc.+30 Cc. H_2O+solut. $AgNO_3$ – not more than sl. opalesc. turb.—(*Pb*) 10 Cc.+ 50 Cc. 85% A. (cautiously) – clear liq., & no ppt. of $PbSO_4$ within 2 hrs.—(*As*) start Marsh appar. w. 20 Gm. As-free gran. Zn & As-free dil. (1:5) H_2SO_4; when air expelled, heat reduct. tube to redness; introduce cooled mixt. 10 Cc. acid to be tested w. 90 Cc. H_2O – no deposit of As in reduct. tube within half an hour.—*Uses:* Oxidizer; gas analysis; organ. synthesis.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

do. Merck.—Reagent.—For Kjeldahl Nitrogen Determination (2

Oily liq.; somet. sl. colored, & often not perfect. clear; fumes in air; 8–10% free SO_3.—*Tests:* (*N*) dil. 30 Cc. w. 200 Cc. H_2O in a retort; when cold, add N-free solut. NaOH (sp. gr. 1.3) till strongly alkaline, & 3 Gm. Zn-dust; distil. off abt. 50 Cc. & collect in a U-tube receiver cont.

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

abt. 10 Cc. H_2O+2–3 Cc. fifth-norm. HCl. Titrate w. fifth-norm. KOH (methyl orange indic.) – quant. of KOH used should not be more than 0.2 Cc. less than the fifth-norm. HCl taken.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Acid Sulphuric Fuming, with Phosphoric Anhydride Merck.—Reagent; 5% P_2O_5, 10% P_2O_5, 15% P_2O_5, 20% P_2O_5, or 25% P_2O_5. —For Kjeldahl Nitrogen Determination

Tests: (*N*) see Acid Sulphuric, Fuming, Reagent.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Acid Sulphurous Merck.—Solution.—*U. S. P.* (1

(Solution Sulphur Dioxide).—Fr. sulphuric acid by reduct.—Abt. 6% SO_2.—Colorl., acid liq.; suffoc. sulphur odor.—Sp. Gr., abt. 1.028 at 25° C.—*Misc.*, all prop. W.—Antisep.—*Uses: Intern.*, flatulent dysp., typhoid fev., &c.—*Extern.*, diphth., sloughing wounds, chilbl., skin dis., &c. Inhal. in bronch. affect., whoop.-cough, &c.—*Techn.*, preserv.; also as antichlor. in paper manuf., in extracting copper fr. certain ores, in manuf. of Scott's cement, for dissolving auriferous & argentiferous pig-iron, in brewing, bleaching animal substances and wicker ware, in dyeing & printing, &c.—*Appl.* 10–25% solut.—*Dose* 15–60 ♏ (1–4 Cc.).—*Antid.*, mustard plaster on chest; narcotics; expectorants.

Acid Sulphurous Merck.—Reagent (1

SO_2+aq.—Clear, colorl. liq.—Abt. 6% SO_2.—Sp. Gr. 1.0297–1.035.—*Tests:* (*Res.*) none wghble on evap. 10 Cc.—*Uses:* Reducer; determ. Cu.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

do. Merck.—Reagent.—Cubes

Cube-like pieces, yielding at least 20% SO_2 when acidified.—*Uses:* Rapid & easy prep. of SO_2.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Acid Sulphydric.—see **Hydrogen Sulphide Water**

Acid Sylvic Merck (20

(Silvic, or Sylvinic, Acid).—Fr. colophony.—$C_{20}H_{30}O_2$.—Yellowish cryst.—*Melt.* 135° C.—*Sol.* A.

Acid Tannic Merck (2

(Gallotannic, or Digallic, Acid; Tannin).—Organic acid fr. nutgalls.—$C_{14}H_{10}O_9$.—Lustr., faintly yellowish, amorph., bulky powd., or spongy masses; odorl.; astring. taste.—*Sol.* 0.6 A., 1 W., 3 G. at 15° C.; (very soluble in W. & A. at 25° C.; v. sol. boil. W. & boil. A., & in 1 G. w. heat; freely sol. dil. A., moderately in absol. A.; alm. insol. E., C., B.–U. S. P.)—Astring.; Internal Hemostatic; Antisep.—*Uses: Intern.*, hemorrhages, diar., dysent., dis. of serous membr., such as pleurisy, peritonitis, enteritis, &c., diab., Bright's dis. & night sw. of phth.; also in poisoning by alkaloids and metals.—*Extern.*, as styptic for bleeding; in 1- to 10-% solut., as gargle, inj., spray, mouth-wash, inhalat., enemas, etc.; & in weaker solut. as a collyrium. An ethereal tincture containing 2 or 3% is brushed over burns 2 or 3 times a day.—*Techn.*, purific. of water; improving wine; manufacture of ink.—*Dose* 1–10 grains (0.06–0.6 Gm.).—*Incomp.*, salts of antimony, copper, iron, lead, mercury and silver; iodine; iodoform; permanganates, chlorates, and other oxidizers; spt. nitrous ether; lime water, alkaloids, albumin, gelatin, starch.—*Caut.* Keep dark & well stoppered.

Acid Tannic Merck.—Highest Purity, Medicinal, light, clearly soluble (3

do. Technical (1

Yellowish powd.—*Sol.* W., A.—*Uses: Techn.*, mordant in dyeing w. aniline and alizarine dyes; dyeing black; manuf. of ink; sizing silk; printing fabrics; in combin. w. gelatin (or glue) and albumin for manuf. imitat. horn and tortoise-shell; tanning, etc.

Acid Tannic Merck.—Reagent (4

(Tannin). — $C_{14}H_{10}O_9$. — Yellowish powd., or cryst.-like, lustr. scales.—*Sol.* 5 W., 2 A. (85%), 8 G.; alm. insol. E.—*Tests:* (*Res.*) ignite 1 Gm.–wt. of res. should not exceed 0.002 Gm.—(*Sugar; Dextrin*) mix 10 Cc. aqu. (1:5) solut. w. 10 Cc. 85% A. – mixt. should remain clear for 1 hr.; no turb. on further add. 5 Cc. E.—(*H_2O*) dry at 100° C. – should not lose more than 12% of its weight.—*Uses:* Detect. iron, alkaloids, & albuminates.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Acid Tantalic Merck (320

(Tantalum Pentoxide; Tantalic Anhydride).—Ta_2O_5.—Wh., microcryst. powd.—*Sol.*, in conc. HF; insol. HCl and H_2SO_4.—*Uses: Techn.*, manuf. of incandescent lights.

Acid Tartaric, Inactive.—see **Acid Racemic**

Acid Tartaric Merck.—Cryst. or powder (1

(Dioxysuccinic, or Ordinary Dextrotartaric, Acid).—Fr. argols.—$C_4H_6O_6$, or, $(CH)_2(OH)_2(COOH)_2$.—Colorl., transp., rhombic cryst., or wh. powd.; str'ly acid taste.—Sp. Gr. 1.739–1.764.—*Sol.*, abt. 1 W., 3 A., 5 G., sl. E.; (0.71

W., 1.67 A. at 25° C.; 0.5 boil. W.; abt. 0.2 boil. A.; 250 E.; alm. insol. C., B.-U.S.P.)—*Melt.* 168–170° C.—Refrig.; Antiscor.—*Uses:* Seidlitz powd., baking powd., cool. drinks, &c.—*Extern.*, Hyperidrosis.—*Techn.*, chem. industry; dyeing; printing.—*Dose* 10–30 grains (0.6–2 Gm.).

Acid Tartaric Merck.—Highest Purity, cryst. or powder (1–2

Note.—Whenever tartaric acid is prescribed, an acid of this grade exclusively should be dispensed, because of its freedom from the poisons, lead, & sulphuric & oxalic acids.

do.—Saccharated.—*N. F.*

Powd. tart. acid 675, & powd. sugar 325.

Acid Tartaric Merck.—Reagent (2

$C_4H_6O_6$.—Colorl., prism. cryst., or cryst. crusts.—*Sol.* 0.8 W., 2.5 A. (85%).—*Tests:* (*H_2SO_4; $H_2C_2O_4$; Ca*) treat separate portions of 20 Cc. each of 1:10 solut. w. *a:* $BaCl_2$ – no turb.; *b:* $(NH_4)_2C_2O_4$ – no turb.; *c:* add NH_4OH until only faintly acid, then solut. $CaSO_4$ – no ppt.—(*Pb & o. Metals*) *a:* 5 Gm. + 20 Cc. H_2O + 12 Cc. NH_4OH (sp. gr. 0.96) + aqu. H_2S. – no brown color; *b:* 20 Cc. aqu. 1:10 solut. + aqu. H_2S – no reaction.—(*Res.*) ignite 1 Gm. – no wghble res.—*Uses:* Forensic analysis, detect. potassium, assistant in dissolving minerals, separation of some heavy metals, & estim. iron.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Acid Tartronic Merck.—Cryst. (900

(Oxymalonic Acid).—Fr. mesoxalic acid, by sod. amalgam.—$C_3H_4O_5$, or, $CH(OH)(COOH)_2$.—Wh. or yellowish cryst.—*Sol.* W., A.—*Melt.* 184° C.

Acid Taurocholic Merck (1200

("Choleic," or "Choleinic," Acid of Strecker & Demarçay; Choliaic, or Sulphocholeic, Acid).—Fr. bile.—$C_{26}H_{45}NSO_7$.—Yellowish, cryst. mass.—*Sol.* W., A.—Antisep.; Proteid precip.

Acid Telluric Merck (1100

(Trihydrated Telluric Oxide; Dihydrated Telluric Hydroxide; Hydrogen Tellurate).—Fr. barium tellurate, by sulphuric acid.—$H_2TeO_4 + 2H_2O$.—Wh., monoclin. cryst.—*Sol.*, boil. W.—*Uses:* Reagent for solanine.

Acid Tellurous Merck (560

(Hydrated Tellurous Oxide; Tellurous Hydroxide).—By add. dil. nitric solut. tellurium to W.—H_2TeO_3.—Wh., cryst. powd.—*Sol.*, alkalies.

Acid Terebic Merck (400

(Terebinic Acid; Diaterebinic Anhydride).—Fr. oil of turpentine, by boil. nitric acid.—$C_7H_{10}O_4$, or, $C_5H_9(CO.O)COOH$.—Wh. cryst.—*Sol.*, hot W., A.—*Melt.* 174° C.

Acid Terephtalic Merck (120

(Paraphtalic Acid).—From hydrocarbons, by oxid'n with chromic acid.—$C_8H_6O_4$, or, $C_6H_4(COOH)_2$ [1:4].—Wh. cryst.—*Sol.*, hot W.—Subl. without melting.

Acid Terpenolic.—see **Acid Terpenylic** (400

Acid Terpenylic Merck.—Dried

(Terpenolic Acid; Diaterpenic Anhydride).—Fr. terpenes, by oxid'n w. potass. chlorate & sulphuric acid.—$C_8H_{12}O_4$.—Wh. to yellowish cryst.—*Sol.* W.—*Melt.* 90° C.

Acid Tetraboric Merck (3

(Pyroboric Acid).—$H_2B_4O_7$.—Vitreous mass.—*Sol.* W., A.

Acid Tetraoxystearic Merck (200

(Tetraoxystearinic, or Sativic, Acid).—Fr. linoleic acid, by oxid'n w. alkaline potass. permang.—$C_{18}H_{36}O_6$, or, $C_{17}H_{31}(OH)_4COOH$.—Long, cryst. prisms.—*Melt.* 159–161° C.

Acid Thioacetic Merck (30

(Thiacetic, or Ethanethiolic, Acid; Schiff's Reagent).—Fr. glacial acetic acid & phosphorus pentasulphide.—C_2H_4OS, or, $CH_3.CO.SH$.—Clear liquid; pung. acetic, & hydrogen-sulphide odor.—Sp. Gr. 1.074 at 10° C.—*Boil.* 93° C.—*Caut.* Reacts violently w. conc. nitric acid.

Acid Thioacetic Merck.—Reagent (6

$CH_3.CO.SH$.—Yellow liq.; penetr. odor.—*Sol.* 16 W.; eas. A.—Sp. Gr. 1.070.—*Boil.* 92–97° C.—6% solut. used inst. of H_2S in chem. anal.—*Tests:* (*Res.*) evap. 10 Cc. & ignite – none wghble.—(*H_2SO_4*) 5 Cc. + 100 Cc. H_2O + solut. $BaCl_2$ – no turb. or ppt.—*Uses:* Schiff & Tarugi substit. it for hydrogen sulphide in chem. anal.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Acid Thiolinic.—see **Oil Linseed Sulphurated**

Acid Thymic.—see **Thymol**

Acid Thyminic.—see **Solurol**

Acid Thymolsulphonic Merck (45

(Alphathymolsulphonic Acid).—Fr. thymol, by sulphuric acid.—$C_{10}H_{12}.OH.SO_3H + H_2O$.—Colorl. cryst.—*Sol.* W., A.—*Melt.* 91–92° C.

Acid Tiglic Merck (80

(Methylcrotonic Acid; Crotonolic Acid).—Fr. fixed oil of Croton Tiglium, L. (Croton oil).—$CH_3.CH:C(CH_3).CO_2H$.—Thick, syrupy liq.—Vesic.—*Uses:* Blistering agent.—*Antid.*, milk, oils or mucilage; stim. & opium.—*Caut.* Very poisonous!

Acid Titanic Merck.—Highest Purity (10

(Titanic Hydroxide; Metatitanic Acid; Hydrated Titanium Dioxide).—H_2TiO_3.—Wh.

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

powd.—*Sol.*, mineral acids.—*Uses:* W. oxalic acid as mordant in textile industries.

(Acid) Titanic Anhydride Merck.—Highest Purity (16

(Titanium Oxide, or Dioxide; Anhydrous Titanic Acid).—TiO_2.—Wh. powd.; when gently heated is lemon-yellow, when str'ly heated, brown or black.—*Sol.*, mineral acids.

Acid Toluic (Meta-) Merck (100

(Metatoluylic Acid).—Fr. metaxylene, by oxid'n w. nitric acid.—$C_8H_8O_2$, or, $C_6H_4.CH_3.(COOH)$.—Wh. to yellowish cryst.—*Sol.* W., A., E.—*Melt.* 108–109° C.—Subl. readily.

Acid Toluic (Ortho-) Merck (80

(Toluylic, Methylphenylformic, or Methylbenzoic, Acid).—Fr. orthoxylene, by oxid'n w. dil. nitric acid.—$C_8H_8O_2$, or, $C_6H_4.CH_3.(COOH)$.—Wh. cryst.—*Sol.* W., A.—*Melt.* 102° C.

Acid Toluic (Para-) Merck (80

(Paratoluylic Acid).—Fr. cymene or turpentine, by oxid'n w. nitric acid.—$C_8H_8O_2$, or, $C_6H_4.CH_3(COOH)$.—Transp. need.—*Sol.* A., E.—*Melt.* 180° C.—*Boil.* 274–275° C.; volat. in steam.

Acid Toluylic.—see **Acid Toluic, Ortho-**

Acid Tribromacetic Merck (80

Fr. bromal, by oxid'n w. nitric acid.—$C_2HBr_3O_2$, or, $CBr_3(COOH)$.—Colorl. cryst.—*Sol.* W., A.—*Melt.* 135° C.—*Boil.* 245–250° C.

Acid Tricarballylic (140

By-prod. in manuf. of beet sugar.—$C_6H_8O_6$, or, $C_3H_5(COOH)_3$.—Colorl., rhombic prisms.—*Sol.* W., A., E.—*Melt.* 116° C.

Acid Trichloracetic Merck.—Pure, cryst. (5

Fr. glacial acetic acid, by act. chlorine & sunlight; by oxid'n of chloral.—$C_2HCl_3O_2$, or, $CCl_3(COOH)$.—Deliq., colorl. cryst.; pung., suffoc. odor; caustic.—*Sol.*, freely in W., A., E.—*Melt.* 52–55° C.—*Boil.* 195° C.—Eschar.; Astring.; Hemostat. Best remedy for removing warts and similar growths, particularly from the nose and throat.—*Uses:* Vener. & cutan. warts, papillomata, vascular nevi, pigment patches, corns, nose-bleed, obstinate gleet, gonor., nasopharyng. affect., & indol. ulc.; sensit. urine-albumin test (in substc. or 33% solut.).—*Appl.*, eschar. for corns, warts, etc., pure, or in conc. solut.; astring. & hemost., 1–3% solut.—*Caut.* Keep in glass-stp. bot.; solutions decompose.

Acid Trichlorobutyric Merck (80

Fr. butylchloral, by fum. nitric acid.—$C_4H_5Cl_3O_2$, or, $CH_3.CHCl.CCl_2.COOH$.—Colorl. need.—*Sol.*, sl. in W.—*Melt.*, above 60° C.—*Boil.* 235–238° C.

Acid Trichlorolactic Merck (30

Fr. chloral hydrocyanate, by conc. hydrochloric acid.—$C_3H_3Cl_3O_3$, or, $CCl_3.CH(OH).COOH$.—Syr. liq., or thin cryst. mass.—*Sol.* E.—*Melt.* 105–110° C.

Acid Trichloromethylsulphurous.—see **Trichloromethyl Sulphite**

Acid Tricyanic.—see **Acid Cyanuric**

Acid Trihydroxybenzoic. } —see **Acid Gallic**
Acid Trioxybenzoic. }

Acid Tropic Merck (600

(Alphaphenylbetahydroxypropionic, Isotropic, or Phenylhydracrylic, Acid).—Fr. atropine, by baryta water.—$C_9H_{10}O_3$, or, $C_6H_5.CH(CH_2.OH).COOH$.—Wh. cryst.—*Sol.* A., E., & hot W.—*Melt.* 117–118° C.

Acid Truxillic (Alpha-) Merck (400

(Alphadicinnamic, or Gammaisatropic, Acid).—Formed w. betatruxillic acid fr. isatropylcocaine, by boil., w. dil. HCl.—$C_{16}H_{16}O_4$.—Wh. need.—*Sol.* A.; hot acetic acid.—*Melt.* 274° C.

Acid Tumenolsulphonic.—see **Tumenol Powder**

Acid Tungstic Merck (4

(Wolframic, or Orthotungstic, Acid).—Fr. tungstates, by hot mineral acid.—$H_2WO_4.WO_3$, or, $W_2O_5(OH)_2$.—Yellow powd.—*Sol.*, hydrofluoric acid, and alkalies.—*Uses:* Mordant in dyeing w. aniline colors.

do. Merck.—Highest Purity (7

(Acid) Tungstic Anhydride

(Tungsten Trioxide; so-called "Anhydrous Wolframic Acid").—By burning powd. tungsten in oxygen.—WO_3.—Heavy, canary-yellow powd.; orange-colored if hot.

Acid Ulmic Merck (40

(Ulminic Acid).—Fr. decomp. veget. matter.—$C_{40}H_{30}O_{13}$(?).—Brown, amorph. mass.—*Sol.*, in alkal. solut.

Acid Umbellic.—see **Acid Anisic**

Acid Undecylenic Merck (60

$CH_2.CH(CH_2)_6COOH$.—Sm. cryst.; odor of caproic acid.—*Sol.* A.—*Melt.* 25° C.—*Boil.* 212° C.

Acid Uranic.—see **Uranium Oxide, Red**

Acid Ureous.—see **Xanthine**

Acid Uric Merck.—Pure (12

(Lithic Acid; Uric Oxide).—Fr. urine or bird excrement.—$C_5H_4N_4O_3$, or, $CO(NH)_2.CO.C_2.CO(NH)_2$.—Wh. cryst.—*Sol.*, hot conc. sulphuric acid; G.; v. sl. in W.; insol. A., E.—Decomp. by heat without fus.

Acid Uvic.—see **Acid Racemic**

Acid Valeric Anhydrous, Inactive, or *Iso-.*—see **Acid Valeric, Iso-**

Acid Valeric Hydrous.—see **Acid Valeric, Iso-, Trihydrated**

Acid Valeric, Inactive.—see **Acid Valeric, Iso-, from Valerian Root**

Acid Valeric (Iso-) Merck (3

(Monohydrated Valerianic, Primary Pentoic, Valeric, Isovaleric, Inactive Valeric, or so-called "Anhydrous" Valeric, Acid; Isobutylcarboxyl). —By oxid'g amyl alcohol, or directly fr. oil valerian.—$C_5H_{10}O_2$, or, $(CH_3)_2.CH.CH_2.COOH$. —Transp., colorl., oily liq.; valerian & rancid cheese odor.; burn. taste.—Sp. Gr. 0.937 at 15° C.—*Sol.* 30 W.; all prop., A., E., C.—*Boil.* 175° C.—*Uses:* Nerv. affect., inst. of valerian.—*Dose* 2–10 ♏ (0.12–0.6 Cc.) in sweet'd water.—*Max. D.* 10 ♏ (0.6 Cc.) single; 40 ♏ (2.6 Cc.) p. d.

do. Merck.—From Valerian Root

(Isopropylacetic, Isovaleric, Phocenic, Inactive Valeric, or Isopentoic, Acid).—By distil. fr. root Valeriana officinalis, L., &c.—$C_5H_{10}O_2$, or, $(CH_3)_2.CH.CH_2.COOH$. — Oily liq.; odor of valerian & old cheese; str'ly acid taste.—Sp. Gr. 0.931 at 20° C.—*Sol.* W.—*Boil.* 173–175° C.—*Uses:* Hyst., mania, nervousn., &c.—*Dose* 4–5 ♏ (0.25–0.3 Cc.) several t. p. d. in sweet W.

Acid Valeric (Iso-) Trihydrated Merck (3

(Hydrous Valeric Acid).—Fr. amyl. alc. by oxid'n.—$C_5H_{10}O_2$ + aq.—Colorl., oily liq.; rancid odor; bitter, burn. taste.—Sp. Gr. 0.935–0.950. —*Sol.* W., A., E.—*Boil.* 165° C.—Nerv.

Acid Valeric (Normal) Merck (170

(Normal Propylacetic Acid).—Occurs in crude wood-vinegar.—$CH_3.(CH_2)_3COOH$.—Clear liquid; odor of butyric acid.—Sp. Gr. 0.9562 (Zander).—*Boil.* 186° C.

(Acid) Vanadic Anhydride Merck (60

(Vanadium Pentoxide).—V_2O_5.—Brown powd. —*Sol.*, mineral acids, and w. part. reduct. in alkalies.—*Uses: Medic.*, in diseases due to defective metabolism, and chiefly in tuberculosis.—*Techn.*, in photography, as developer.

do. Merck.—Fused (320

Radiating-crystalline, brown pieces w. violet reflection.

do. Merck.—Technical (32

Brown powd.—*Sol.*, acids and alkalies.—*Uses:* In form of its salts (ammonium) and chloride as mordants in dyeing and printing fabrics.

Acid Vanillic Merck (80

(Methylprotocatechuic, or Vanillinic, Acid).—Fr. vanillin, by oxidation.—$C_6H_8O_4$, or, $C_6H_3.OH.OCH_3.COOH$.—Colorl., cryst. needles.—*Sol.* W., A., E.—*Melt.* 207° C.

Acid Veratric Merck.—Cryst. (800

(Dimethylprotocatechuic Acid).—Fr. seeds of Asagræa officinalis, Lindl.(Sabadilla).—$C_9H_{10}O_4$, or, $C_6H_3(OCH_3)_2COOH$. — Colorl. or yellowish cryst.—*Sol.* A., E.; v. sl. W.—*Melt.* 182° C.

Acid Violet.—see **Methyl Violet 7 B**

Acid Wolframic.—see **Acid Tungstic**

Acid Yellow D.—see **Diphenylamine Orange; Tropæoline 00**

Acid Yellow S.—see **Naphthol Yellow S**

Acidol = Betaine Hydrochloride.—see **Betaine Hydrochloride**

Acme Yellow.—see **Yellow T**

Acocanthera

Wood of Acokanthera Deflersii, Schweinfurth. Apocynaceæ.—*Habit.:* East Africa; Erythrea; Yemen.—*Constit.:* Ouabain (amorph. glucoside).—*Uses:* As arrow poison by the aborigines.

Acoin (60

(Dipara-anisylmonophenetylguanidine Hydrochloride). — $2(NHC_6H_4O\ [CH_3])$: $C : NC_6H_4O-(C_2H_5).HCl$.—Wh., cryst. powd.—*Sol.* W.—*Melt.* 176° C.—*Uses:* Anesthetic, recommended for infiltration-anesthesia by Schleich in 1 : 1000 solut. containing 0.8% sod. chloride.—*Appl.*, in 1% solut. in subconjunctival inject.; in veterin. practice, as 2% aqu. solut. subcut. as local anesthet.—*Caut.* Keep fr. light.

Aconite.—*U. S. P.*

(Aconite Root; Monkshood; Wolfsbane; Friar's Cowl; Mouse-bane). — Dried tuber (lvs. also, though not official in U. S. P.) of Aconitum Napellus, L. Ranunculaceæ.—*Habit.:* Mountainous regions of Europe, Asia, and North America.—*Etymol.:* Fr. Grk. "a" without, and "konis," dust, dirt, *i.e.* the plant grows on stony ground, "en akonais." "Napellus" fr. Lat. "napus," turnip, referring to the shape of the root.—*Constit.:* Aconitine (cryst.), $C_{34}H_{47}NO_{11}$; aconine, $C_{25}H_{41}NO_9$; napelline (isoaconitine; pseudaconitine), $C_{33}H_{45}NO_{12}$; picraconitine, $C_{32}H_{45}NO_{10}$; aconitic acid, $H_3C_6H_3O_6$; resin; fat; sugar.—Sedat.; Anodyne; Diaphor.; Antipyret.; Myotic.—*Uses:* Chiefly in rheumatism, gout, and neuralgias.—*Doses: Tuber:* 1–2 grains (0.06–0.12 Gm.). Alcoh. extr., $^1/_6$–$^1/_2$ grain (0.01–0.03 Gm.); *Max. D.* $1^1/_2$ grains (0.1 Gm.) single; 6 grains (0.36 Gm.) daily. Fld. extr., $^1/_4$–1 ♏ (0.015–0.06 Cc.); *Max. D.*, 2 ♏ (0.12 Cc.) single; 10 ♏ (0.6 Cc.) daily. Tinct., 3–10 ♏ (0.2–0.6 Cc.).—*Lvs.:* 1–3 grains (0.06–0.2 Gm.).—Alcoh. extr., $^1/_2$–2 grains (0.03–0.12 Gm.); *Max. D.* 2 grains (0.12 Gm.) single; 20 grains (1.3 Gm.) daily.—Fld. extr., $^1/_2$–3 ♏ (0.03–0.2 Cc.); *Max. D.* 3 ♏ (0.2 Cc.) single; 15 ♏ (1 Cc.) daily.—*Antid.*, heart stimulants (whisky, ether, alcohol, ammonia); digitalis; tannin; artificial respir.; amyl nitrite; atropine; strychnine (hypod.).

Aconitin (Resinoid) (20

Mixed alkaloids & o. prin. fr. Aconitum Napellus, L.—Brown powd. or resin-like mass.—*Sol.* A.—*Uses:* By the Eclectics, for fever & to relieve pain.—*Dose* $^1/_{20}$–$^1/_{12}$ grain (0.003–0.005 Gm.),

3 or 4 t. p. d.—*Caut.* Do not confound w. alkaloid aconitine. The dose prescribed should be carefully scrutinized.

Aconitine (Alkaloid) Potent Merck.—Cryst. (225

(Acetylbenzoylaconine; Napelline; not "Napelline" of Dunstan & Ince).—Fr. root genus Aconitum, us'y Aconitum Napellus, L.—$C_{34}H_{47}NO_{11}$ (Freund & Beck); $C_{33}H_{45}NO_{12}$ (Dunstan & Ince); $C_{33}H_{43}NO_{11}$ (Ehrenberg, Purfürst).—Identical with "Duquesnel's" aconitine.—White cryst.; feebly bitter taste; intensely poisonous.—*Sol.* A., E., C.—*Melt.*, abt. 190° C.—Antineural.; Diur.; Sud.; Anesth. (extern.).—*Uses: Intern.*, neural., acute or chronic rheumat., gout, pleur., pneum., pericard., tonsil., nerv. toothache, &c.—*Extern.*, as oint. & linim. in rheumat. & o. pains. Never on abraded surfaces. Danger of absorption!—*Dose* $^1/_{600}$–$^1/_{200}$ grain (0.0001–0.0003 Gm.) several t. p. d. in pill or solut., with caution.—*Max. D.* $^1/_{60}$ grain (0.001 Gm.) single; $^1/_{20}$ grain (0.003 Gm.) p. day.—*Appl.*, 1:2000–500 pts. lard, *not on abraded surf.*—*Antid.*, small repeated doses of stimulants; artif. respiration. Atropine & digitalis sugg., but action doubtful; 3 grains (0.2 Gm.) tannin every $^1/_2$ hr.; chlorof. inhalat. in spasms.—*Incomp.: Physiol.*, atropine, morphine, digitalis, ammonia; *Chem.*, alkalies, tannin, merc. salts.—*Caut.* Highly poisonous! 10 times as toxic as the "mild, amorph." below!

Note.—This is the highly purified & potent article of the U. S. P.; the prescriber can fully rely on it to afford prompt & satisfactory effects.

Aconitine Mild Merck.—Amorph. (225

Mixt. of amorph. alkaloids fr. Aconitum Napellus, L.—Yellowish-wh., amorph. powd.—*Sol.* A., E., C.—Antineur.; Diur.; Sud.—*Uses:* As aconitine, potent, cryst., above, but in larger doses; less poisonous.—*Dose* $^1/_{60}$–$^1/_{20}$ grain (0.001–0.003 Gm.), v. carefully increased.—*Max. D.* $^1/_{15}$ grain (0.004 Gm.) single.—*Appl.*, 0.25–2% oint. or solut.—*Antid.*, as aconitine, potent, cryst. above.

Aconitine Merck fr. Aconitum Ferox (1200

(Paeudo-aconitine; Nepaul, or British, Aconitine; Veratroylaconine).—Fr. roots Aconitum ferox, Wall. (Indian aconite).—$C_{36}H_{46}NO_{12}$ (Wright).—Yellowish, amorph. powd.—*Sol.* A., E., C.—*Uses: Extern.*, in neural.—*Intern.*, twice as powerful as aconitine, potent, cryst.—*Dose* $^1/_{1200}$–$^1/_{400}$ grain (0.00005–0.00015 Gm.).—*Appl.: Extern.*, 0.1–0.15:10 of alcohol or fat.—*Caut.:* Never put on sores or muc. memb.!

Aconitine Merck from Japanese Aconite.—Cryst., or amorph. (600

(Japaconitine).—Fr. Japanese Aconite root.—Wh: cryst. (or amorph. powd.).—$C_{34}H_{49}NO_{11}$.—*Sol.* A., E.—*Uses:* As of aconitine, potent, cryst., but much more poison. & irritating than cryst. aconitine (Langgaard).—*Dose* $^1/_5$ less than of aconitine, potent, cryst.—*Caut.* Highly poisonous! Great care!

Aconitine Arsenate Merck.—Cryst. (225

Fr. cryst. aconitine, fr. Aconitum Napellus, L.—Wh. cryst.—*Sol.* W., A.—*Dose:* As of aconitine, potent, cryst.

do. Merck.—Amorph. (225

Fr. amorph. aconitine, fr. Aconitum Napellus, L.—Yellowish-wh. powd.—*Sol.* W., A.—*Dose:* As of aconitine, mild, amorph.

Aconitine Hydrobromide Merck.—Cryst. (225

(Aconitine Hydrobromate).—Fr. cryst. aconitine fr. Aconitum Napellus, L.—$C_{34}H_{47}NO_{11}.HBr + 2^1/_2H_2O$.—Wh. to yellowish cryst.—*Sol.* W., A.—*Melt.* 163° C.—*Dose:* As of aconitine, potent, cryst.

do. Merck.—Amorph. (225

Fr. amorph. aconitine fr. Aconitum Napellus, L.—Yellowish-wh., amorph. powd.—*Sol.* W., A.—*Dose:* As of aconitine, mild, amorph.

Aconitine Hydrochloride Merck.—Cryst. (225

(Aconitine Hydrochlorate, or Chlorhydrate).—Fr. cryst. aconitine fr. Aconitum Napellus, L.—$C_{34}H_{47}NO_{11}.HCl + 3H_2O$.—Wh. cryst.—*Sol.* W., A.—*Dose:* As of aconitine, potent, cryst.

do. Merck.—Amorph. (225

Fr. amorph. aconitine fr. Aconitum Napellus, L.—Yellowish, amorph. powd.—*Sol.* W., A.—*Dose:* As of aconitine, mild, amorph.

Aconitine Nitrate Merck.—Cryst. (225

Fr. cryst. aconitine fr. Aconitum Napellus, L.—$C_{34}H_{47}NO_{11}.HNO_3$.—Wh. cryst.—*Sol.* A.; sl. W.; v. in W. cont'g carbon dioxide.—*Uses:* Most used of all aconitine salts. Espec. in cephalal., trigem. neural., & ac. rheumat.—*Dose:* As of aconitine, potent, cryst.—*Caut.* Highly poisonous!

do. Merck.—Amorph. (225

Fr. amorph. aconitine fr. Aconitum Napellus, L.—Yellowish powd.—*Sol.* W., A.—*Dose:* As of aconitine, mild, amorph.

Aconitine Oleate.—*N. F.*

Fr. 2 pts. cryst. aconitine & 98 pts. oleic acid.—Yellowish-brown to dark-brown liq.—*Sol.* E.—*Uses: Extern.*, painful joints & neural.—*Caut.* Use reservedly, & *not* on abraded surfaces.

Aconitine Phosphate Merck.—Cryst. (225

Fr. cryst. aconitine fr. Aconitum Napellus, L.—Wh., cryst. powd.—*Sol.* W., A.—*Dose:* As of aconitine, potent, cryst.

Aconitine Salicylate Merck.—Cryst. (225

Fr. cryst. aconitine fr. Aconitum Napellus, L.—Wh., cryst. powd.—*Sol.* W., A.—*Dose:* As of aconitine, potent, cryst.

do. Merck.—Amorph. (225

Fr. amorph. aconitine fr. Aconitum Napellus, L.—Yellowish-wh., amorph. powd.—*Sol.* W., A.—*Dose:* As of aconitine, mild, amorph.

Aconitine Sulphate Merck.—Cryst. (225

Fr. cryst. aconitine fr. Aconitum Napellus, L.—$(C_{34}H_{47}NO_{11})_2.H_2SO_4$.—Wh. cryst.—*Sol.* W., A.—*Dose:* As of aconitine, potent, cryst. Somet. subcutaneous.

do. Merck.—Amorph. (225

Fr. amorph. aconitine fr. Aconitum Napellus, L.—Yellowish, amorph. powd.—*Sol.* W. A.—*Dose:* As of aconitine, mild, amorph.

Aconitum Ferox

(Indian Aconite; Bish; Visha; Bishma; Bikh-root).—Tuber of Aconitum Ferox, Wallich. Ranunculaceæ.—*Habit.:* India; Nepaul; Himalaya Mountains.—*Etymol.:* See Aconite. "Ferox," Lat. wild, fierce.—*Constit.*. Pseudaconitine (feraconitine), $C_{36}H_{49}NO_{12}$. — *Uses:* Most powerful of all the aconites, and is used like A. Napellus.—*Techn.*, as source of pseudaconitine.

Aconitum Lycoctonum

(Great Yellow Wolfsbane; Badger's Bane; Beast Bane).—Tubers of Aconitum Lycoctonum, L. Ranunculaceæ.—*Habit.:* Europe; Northern Asia.—*Etymol.:* See Aconite. "Lycoctonum" fr. the Grk. "lykos," wolf, and "kteinein," to kill, *i.e.* the plant was used to kill wolves.—*Constit.:* Lycaconitine, $C_{27}H_{34}N_2O_6.2H_2O$; myoctonine, $C_{27}H_{30}N_2O_8.5H_2O$; acolyctine(?).—*Uses:* As source of alkaloids just mentioned.

Acopyrine

(Antipyrine Salicylacetate or Acetylsalicylate; Acetopyrine).—Wh., cryst. powd.—*Sol.*, diffic. cold W.; 20 boil. W.; A., C.; diffic. E.—*Melt.* 63–64° C.—Antipyr.; Antirheum.; Sedative.— *Uses:* Headache, neuralgia, sciatica, etc.—*Dose* 5–10 grains (0.3–0.6 Gm.).

Acorn

(Oak Acorns; Jove's Nuts; Glandes Quercus).—Acorns fr. Quercus Robur, L. (Q. pedunculata, Ehrh.). Cupuliferæ.—*Habit.:* Europe; Western Asia.—*Etymol.:* Fr. Celtic "quer," handsome, & "cuez," tree; and Lat. "robur," strength, vigor.—*Constit.:* Quercite, $C_6H_7(OH)_5$; fixed oil; tannin.—Tonic; Astring.—*Uses:* In roasted form as surrogate for coffee, and as an astring. nutrient; formerly used to check hemorrhage, & in scrofula & indigestion.

Acorn Sugar.—see **Quercit**

Acorus.—see **Calamus**

Acridine Merck (140

Fr. gas-tar oils.—$C_{13}H_9N$, or, $C_6H_4.\overline{CH.C_6H_4.N}$.—Colorl. cryst.; pung. odor; burn., acrid taste; irritating to skin & muc. memb.—*Sol.* A., E., B., & carbon disulph.; sl. W.—*Melt.* 107–111° C.—Subl., fr. 100° C. upward.—*Boil.* 360° C.

Actæa.—see **Cimicifuga**

Actol (26

(Silver Lactate). — $AgC_3H_6O_3+H_2O$. — Wh. powd.—*Sol.* W. & albuminous liquids 1:15.—*Uses:* Antisep. in surgery (introduced by Credé); severe infect., as by anthrax, erysipelas, etc.—*Appl.*, 1:4000–8000 solut. as wash for cavities; in 1:100–2000 solut. for making silver thread and drains; 1:500 solut. in dentistry as wash for root abscesses; 1:1000 solut. in veterinary medicine.—See also Silver Lactate.

Adderwort.—see **Bistorta**

Adeps.—see **Lard**

Adeps Lanæ.—see **Lanum**

Adhatoda

(Malabar Nut; Arusa; Adulsa; Vasaca; Adhatodai).—Leaves of Adhatoda Vasica, Nees. Acanthaceæ.—*Habit.:* East India.—*Etymol.:* "Adhatoda" is the Ceylonese name of the plant, & signifies" abortifacient," *i.e.*, the seeds are forcibly expelled from the capsules. "Vasica" fr. the Sanskrit "vasaca."—*Constit.:* Adhatodic Acid; vasicine.—Antispasm. and Expector.—*Uses:* Respiratory diseases; in asthma like stramonium (by smoking); coughs, colds, phthisis, cholera, and diphth.; also as insecticide.—*Dose:* Tinct. 30–60 ♏ (2–4 Cc.); fld. extr., 15–60 ♏ (1–4 Cc.).

Adiantum

(Maidenhair).—Whole plant of Adiantum capillus-Veneris, L. Polypodiaceæ.—*Habit.:* Mediterranean region; natur. in Southern U. S.—*Etymol.:* Fr. Grk. "a" without, and "diainein" to make wet, *i.e.*, the plant is not easily made wet. "Capillus-veneris," Venus' hair, referring to the fineness of the pinnæ.—*Constit.:* Volat. oil; bitter principle; tannin.—Refrig.; Expector.; Tonic; Subastring.—*Uses:* In syrup form and tea in pectoral affections.

Adonidin Merck (85

(Adonin; Adonine).—Glucoside fr. root of Adonis vernalis, L., & o. spec. Adonis.—Light-brown., v. hygros., readily conglutinating, odorl. powd.: intens. bitter.—*Sol.* W., A., fusel oil; insol. E., C.—Cardiac Stimulant; mild Diur.—*Uses:* Heart dis., inst. of digitalis; also in nicotine intoxication, and in chron. diffuse nephritis. Espec. useful in mitral & aortic regurgit. & to relieve precordial pain & dyspnea.—*Dose* $^1/_{15}$–$^1/_4$ grain (0.004–0.015 Gm.) 4 t. p. d., in pill, or solut. in chlorof. water w. amm. carbonate.—*Max. D.* $^1/_2$ grain (0.03 Gm.) single; $1^1/_2$ grains (0.1 Gm.) p. d.—*Inj.* 1–2 Cc. subcut. of 0.5% solut.—*Antid.*, emetics, stomach pump, tannin, nitroglycerin, morphine, alcoholic stimulants, camphor, mustard cataplasms.—*Caut.* Keep well stoppered.

Adonin.—see **Adonidin**

Adonis Æstivalis

(Pheasant's Eye).—Herb of Adonis æstivalis, L. Ranunculaceæ.—*Habit.:* Europe; Asia.—*Etymol.:* Fr. "Adonis" the Grk. god, from whose blood the plant is fabled to have sprung, according

to Ovid.—Alm. glabrous annual, with bitter, acrid taste, but scarcely any odor.—*Constit.:* Adonidin.—Cardiac Tonic; Diuret.—*Uses:* Chiefly as an anti-fat; also in valvular insufficiency.—*Dose:* Tinct., 10–30 ♏ (0.6–2 Cc.) after meals in lithia water.

Adonis Vernalis

(False Hellebore; Vernal Pheasant's Eye; Bird's Eye).—Herb of Adonis vernalis, L. Ranunculaceæ.—*Habit.:* Europe; Asia; Labrador.—*Etymol.:* See Adonis æstivalis.—*Constit.:* Adonidin (adonin); aconitic acid; adonite, $C_5H_7(OH)_5$.—Cardiac Stim. (like digitalis); Diuret.—*Uses:* Dropsy.—*Doses:* 4 fl. dr. (15 Cc.) of infus. (4–8:200); *Max. D.*, of powd., 8 grains (0.5 Gm.) single; 24 grains (1.5 Gm.) daily.—Aqu. and alcoh. extr., $^1/_{10}$–1 grain (0.006–0.06 Gm.); *Max. D.* 15 grains (1 Gm.) daily.—Fld. extr., $^1/_2$–5 ♏ (0.03–0.3 Cc.) sev. t. p. d.—Tinct., 3–10 ♏ (0.2–0.6 Cc.).—*Antid.*, stomach pump; emetics; tannin; alcohol; opium; brandy.

Adonite Merck.—Cryst. (200

Sugar fr. Adonis vernalis, L.—$C_5H_7(OH)_5$.—Wh. cryst.—*Sol.* W., and dil. A.—*Melt.* 102° C.

Adrenal

Cryst. base fr. suprarenal capsules.—$C_{10}H_{15}NO_3$.—*Sol.*, diffic. W.; the salts are eas. sol.—Vasoconstrictor.—*Uses:* Hemor., inflam. of mucous surfaces.—*Appl.* 1:1000–10,000 solut.—*Dose* 5–10 ♏ (0.3–0.6 Cc.) of 1:1000 solut. 3 t. p. d.

Adrenalin (7650

Blood-pressure-raising principle of suprarenal gland.—Hemostatic; Astringent.—*Uses:* 1:1000 solut. (as chloride) in hay fever, inflammation of tonsils, larynx, &c., & in conjunctivitis, iritis, urethritis, &c.; in minor surgic. operations to prevent bleeding, &c.—*Dose* 5–30 ♏ (0.3–2 Cc.) of 1:1000 solut. as cardiac stimulant and vasoconstrictor.

Adrin (6500

(Epinephrin Hydrate).—$2C_{10}H_{13}NO_3.H_2O$.—Active principle of suprarenal gland.—Hemostatic; Astringent.—*Uses:* Minor surgic. operations to prevent bleeding; conjunctivitis, urethritis, etc.

Adrue.—see **Cyperus**

Aegle.—see **Bael Fruit**

Aescorcin.—see **Escorcin**

Aesculetin.—see **Esculetin**

Aesculin.—see **Esculin**

Æsculus Glabra

(Ohio Buckeye; Fetid Buckeye; American Horse-chestnut).—Bark of Æsculus glabra, Willd. Hippocastanaceæ.—*Habit.:* U. S. (Michigan to Alabama; west to Ind. Territ.).—*Etymol.:* "Æsculus" is the Lat. name for the Italian oak. "Glabra," fr. Lat. "glaber," smooth, hairless (referring to the leaves).—Tonic; Astring.; Antiperiod.—*Uses:* Diarrh., and in malar. affect.—*Dose:* Fld. extr., 10–20 ♏ (0.6–1.3 Cc.).

Æsculus Hippocastanum

(Hippocastanum; Horse-chestnut).—Bark and flower of Æsculus Hippocastanum, L. Hippocastaneæ.—*Habit.:* Asia (Persia and Northern India); cultivated in Europe and U. S.—*Etymol.:* Fr. Grk. "hippos," horse, and "kastanos," chestnut tree, derived from the name of the Thessalian city, Kastanon. "Æsculus" is the Lat. name for the Italian oak.—Extern., grayish to grayish-brown; inner surface whitish and smooth; internally brownish; odorl.; rough, bitter taste; tough, fibrous fract.—*Constit.:* Esculin, $C_{15}H_{16}O_9+1^1/_2H_2O$; esculetin, $C_9H_6O_4$; tannin. Flowers contain quercitrin.—Febrif.; Astring.; Tonic; Narcotic.—*Uses: Intern.*, in interm. and remit. fevers, diarrh., hemorrhoids.—*Extern.*, in rheumat., neuralg., prurigo, frostbite, etc.—*Dose* 30–120 grains (2–8 Gm.) in powd.—Fld. extr., 20–60 ♏ (1.3–4 Cc.).—Fld. extr. of seeds, 10–30 ♏ (0.6–2 Cc.).

Aethacol = Guaiacol-ethyl.—see **Guaethol**

Agar-Agar (2

(Japan Agar; Japan, Bengal, Ceylon, or Chinese Isinglass or Gelatin; Layor-Carang).—Thallus of various sp. of Gelidium and Eucheuma, Rhodophyceæ (Algæ); and Sphærococcus, Gigartineæ.—*Habit.:* Pacific and Indian Oceans, and Japan Sea.—*Etymol.:* "Agar-agar" is the East-Indian name for the sea-weed.—Long, transp. strips resembling goose-quill pith; also quadrang., transl. cakes of abt. 10 Gm. each.—*Constit.:* Pectin; gelose (para-arabin $[C_6H_{10}O_5]_x$).—*Sol.*, hot W. to a viscid, tastel., odorl. jelly.—*Uses: Medic.*, in pectoral affect.; in glyc. jelly for chapped hands, &c.; and in surg. protheses.—*Techn.*, as nutrient media for bacterial cultures; sizing for silks; adhesives; and substitute for gelatin, isinglass, etc., in confectionery.

Agaric

(Larch Agaric; White Agaric; Male Agaric; Purging Agaric; Amadou; German Tinder).—Fungus, Polyporus officinalis, Fries, Hymenomycetes (Boletus Laricis, Jacquin; B. purgans, Persoon).—*Habit.:* European and Asiatic Russia.—*Etymol.:* "Agaricus," from the Greek "Agaria," a Sarmatian province, where this agaric was frequently found.—Light, whitish, reddish-gray, or yellowish, spongy, friable, more or less hoof-shaped masses of fungus of varying size; feeble odor, and bitter, acrid, yet somewh. sweetish taste.—*Constit.:* Agaric acid (agaricin) $C_{16}H_{30}O_5+H_2O$; agaricol; phytosterin; ricinoleic acid; cetyl alcohol; resin.—*Uses: Medic.*, purg. and antihidr. in colliquative night-sweats of phthisis.—*Techn.*,

in manuf. of liquors. — *Dose* 30–60 grains (2–4 Gm.) as purg.; larger doses emetic; 3–10 grains (0.2–0.6 Gm.) as antihidrotic.

Agaricin Merck (18

(Laricin).—Active constit. of Polyporus officinalis, Fries.—Yellowish powd.—*Sol.*, hot A., hot W., & alkalies.—Efficient Antihidr.—*Uses:* In phthisical & other enervating night-sweats, & sweating fr. antifebrin, antipyrine, exalgin, resorcinol, phenacetin, & salicylates.—*Dose* $^1/_4$–1 grain (0.015–0.06 Gm.).—*Max. D.* $1^1/_2$ grains (0.1 Gm.).

Agathin (65

(Salicylalphamethylphenylhydrazone). — Fr. alphamethylphenylhydrazine by salicylic aldehyde.—$C_6H_5.N(CH_3).N:CH.C_6H_4.OH$. — Yellowish cryst.—*Sol.* A., E., B.; insol. W.—*Melt.* 74° C.—Antineural.; Antirheum.— *Uses:* In neural. & rheumat.—*Dose* 2–8 grains (0.12–0.5 Gm.) 2 or 3 t. p. d.

Agnin. } = *Adeps Lanæ.*—see **Lanum, Anhydrous**
Agnolin. }

Agrimony

(Cockleburr; Stickwort).—Herb of Agrimonia Eupatorium, L. Rosaceæ.—*Habit.:* Europe.—*Etymol.:* Fr. Grk. "agros," field, and "monos," alone, *i.e.*, where it grows.—*Constit.:* Volat. oil; bitter principle; tannin.—Mild Tonic; Alterative; Astring.—*Uses:* In diseases of liver and stomach. Also in gargles, cutaneous affections, dropsy, gonorrhea, sore throat, fever, diarrhea, and hemorrhages.—*Dose* 60–120 grains (4–8 Gm.).—Fld. extr. 30–60 ♏ (2–4 Cc.).

Agropyrum Repens.—see **Triticum**

Agurin (34

(Theobromine-Sodium & Sodium Acetate). — $C_7H_7N_4O_2Na + NaC_2H_3O_2$.—Wh. hygrosc. powd.; distinct alkal. reaction.—*Sol.*, easily W.; sl. cold A., more eas. hot A.—Diuret., without action on heart.—*Uses:* Dropsy.—*Dose* 5–15 grains (0.3–1 Gm.) sev. t. p. d.

Ailanthus

(Tree of Heaven; Chinese Sumach; Ailanto).—Bark of Ailanthus glandulosa, Desf. Simarubaceæ.—*Habit.:* China; cultiv. in U. S. and Europe as shade tree.—*Etymol.:* Fr. Chinese "ailanto," tree of heaven. — *Constit.:* Resin; volat. oil; tannin; albumin; quassiin(?).—Purg. & Vermif.—*Uses:* Dysentery.—*Dose:* Fld. extr., 10–30 ♏ (0.6–2 Cc.).

Ailanto.—see **Ailanthus**

Airol (20

(Bismuth Oxyiodogallate).—$C_6H_2(OH)_4COO$-BiI.—Grayish-green, bulky powd.—*Sol.*, alkal. solut.; dil. mineral acids. Decomp. by W.—Antiseptic.—*Uses: Extern.*, dust.-powd. on wounds, ulc., chancres, &c.; also oint.

Ajakol = Guaiacol-ethyl.—see **Guaethol**

Ajava or *Ajouan.*—see **Ajowan**

Ajowan

(Ajava; Ajouan).—Seed of Carum copticum, Benth. (Ptychotis Coptica, D. C.) Umbelliferæ.—*Habit.:* Mediterranean region to India.—*Etymol.:* "Ajowan" is the Hindustani name for the plant.—*Constit.:* Thymol.—Carmin.; Antisep.; Astring. — *Uses:* Cholera and dipsomania.—*Dose:* Fld. extr., 10–30 ♏ (0.6–2 Cc.).

Aker Tuba.—see **Derris**

Alanin (Alpha-) Merck (70

(Propionic Glycocoll; Alpha-aminopropionic Acid).—Fr. aldehyde-ammonia, by hydrocyanic w. hydrochloric acids.—$C_3H_7NO_2$, or, CH_3-$CH(NH_2)COOH$.—Wh. cryst.—*Sol.* A., W.

Alanin Mercury.—see **Mercury Aminopropionate**

Alant Camphor.—see **Helenin**

Alant Starch.—see **Inulin, White**

Alantin.—see **Inulin, Kiliani**

Alantol Merck (160

(Pinguin).—Fr. root Inula Helenium, L. (Elecampane), by distil. w. W.—$C_{10}H_{16}O$.—Yellow to brownish-yellow liq.; odor & taste like that of peppermint.—*Sol.* A., C., E.—*Boil.* 200° C.—Intern. Antisep.; Anticatar.—*Uses:* Inst. of turpentine, in pulmon. tuberculosis.—*Dose* $^1/_6$ ♏ (0.01 Cc.) 10 t. p. d., in pill, powder or alcoh. solut.

Alantolactone.—see **Helenin**

Alapurin = Adeps Lanæ.—see **Lanum, Anhydrous**

Albargin (22

(Gelatose-Silver).—Fr. silver nitrate & gelatose obtained fr. gelatin by dialysis.—Voluminous, light-yellow powd.; 15% Ag.—*Sol.*, v. eas. W.—Astringent; Bactericide; Antiseptic.—*Uses:* Gonorrhea, ophthalmoblennorrhea, diseases of large intestines, etc.—*Appl.* 0.1–0.2% solut.; in intestin. affect., enemas of 0.16% solut.; in eye diseases, 10–20% solut. w. 20% glycerin.—*Caut.* Keep in amber bot.

Alboferrin

Iron-albumin comp.; 0.68% Fe; 0.324 P; 90.14% albumin.—Light-brown, alm. tastel. & odorl. powd.—*Sol.*, eas. W.—Hematinic.

Albumin Merck.—Fr. Blood.—Scales (2

Fr. blood serum.—Brownish-yellow scales; trace of ash.—*Sol.* W.—*Uses:* Techn. in dyeing & in leather industry.—*Caut.* Keep dry.

do. Merck.—Fr. Blood.—Powder (2

do. Merck.—Fr. Blood.—Highest Purity (8

do. Merck.—Fr. Eggs.—Scales, odorless (2

(Dried White of Egg).—Pale yellow, transl. scales.—*Sol.*, in 8 W., yielding easily filterable solut.; easier in pres. of alkal. salt, and sat. solut. NaCl + $MgSO_4$.—*Uses:* Chiefly techn.

for clarifying and refining liquids; manuf. of cements (with lime); in photography for manuf. albumin paper; sizing printing fabrics; leather manuf., etc.—*Incomp.*, corros. subl., alum, tannic acid, &c.—*Caut.* Keep dry.

Albumin Merck.—Fr. Eggs.—Impalp. powder (2

Fine, yellowish-wh., amorph. powd.—*Sol.* W.—*Uses:* Techn.—*Caut.* Keep dry.

do. Merck.—Fr. Plants (200

(Vegetable Albumin; Alcohol-insoluble Gluten).—Proteid fr. grain.—Yellowish-wh. powd.—*Sol.* W.; insol. in 80% A.—*Uses:* Mord.

Albumin, Iodized.—see **Iodine Albuminate**

Alcannin.—see **Extract Alkanet**

Alchemilla

(Lady's Mantle).—Herb of Alchemilla vulgaris, L. Rosaceæ.—*Habit.:* Europe; naturalized in U. S.—*Etymol.:* Fr. "alkemelyeh," the Arabic name of the plant.—*Constit.:* Bitter principle; tannin.—Astring.; Blood Purifier; Diuret.; Vulnerary.

Alcohol Merck.—*U. S. P.*—Sp. Gr., abt. 0.816 at 15.6° C., or 0.809 at 25° C. = 39° Bé. (1

(Ethyl Alcohol; Spirit Wine).—$C_2H_5.OH$.—Fr. grain, starch or sugar, by ferment. w. Torula cerevisiæ.—Colorl., volat., inflam. liq.; penetrat., agre. odor; burn. taste; 92.3% by wt. or 94.9% by vol. abs. A.—*Misc.*, all prop., W., E., C.—*Boil.*, abt. 78.5° C.—Stim.; Irrit.—*Uses: Intern.*, dil., low fevers, debility fr. ac. dis., aid digestion, warm the chilled, check nausea of sea-sick., & as antidote to poisoning by carbolic acid.—*Extern.*, liniments, harden. skin, remov. desicc. epith., antisep. wash for wounds. Also techn.—*Dose* 60–240 ♏ (4–15 Cc.)., in 2–6 times its volume of W.—*Antid.*, in ac. poisoning, siphon the stomach or give emetic. Maintain respiration w. atropine or belladonna, & bodily heat w. hot-water bags to hands and feet, applic. of ice to head, irritants, cold douche, inhal. of ammonia, fresh air.—*Incomp.*, acacia, albumin, bromine, chlorine, chromic acid, permanganates.—*Caut.* Do not mix suddenly w. nitric acid. Keep from flame!

do.—Diluted.—*U. S. P.*—Sp.Gr., abt. 0.937 at 15° C. = 19° Bé. (1

Cont. abt. 41.5% by wt., or abt. 48.9% by volume, abs. A.—*Uses:* Chem. & pharm.

Alcohol Merck.—Reagent.—95% (2

$C_2H_5.OH$.—Clear, colorl liq.—Sp. Gr., abt. 0.816 at 15.6° C.—Abt. 95% by vol. $C_2H_5.OH$.—*Boil.* 78° C.—*Misc.*, all prop. W.—Does not change color of moist. litmus paper.—*Tests:* (*Res.*) evap. 5 Cc. slowly—none wghble.—(*Fusel Oil*) 10 Cc.+5 Cc. H_2O+1 Cc. glycerin; w. mixture saturate piece of clean, odorl. blotting paper & allow to evap. spontan.—no foreign odor.—(*Aldehyde; Tannin*) 10 Cc. +5 Cc. 5% solut. KOH—no immediate yellow color.—(*Organ. Impurities; Aldehyde, &c.* 20 Cc.+1 Cc. decinorm. solut. $AgNO_3$—not more than faint opalescence, & not more than faint brownish tint after 6 hrs. exposure to diffused daylight.—(*Furfural*) 10 Cc.+10 drops aniline+2 to 3 drops HCl—no pinkish-red color.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Alcohol Merck.—Reagent.—86% (2

85.6–87.2% $C_2H_5.OH$ by wt.—Sp. Gr. 0.830–0.834.—Conforms otherwise to requirem. of Absolute Alcohol.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Alcohol Absolute Merck.—Sp. Gr., abt. 0.797 at 15.6° C., or 0.790 at 25° C.= 46° Bé. (2

(Ethyl Hydroxide, Anhydrous Alcohol).—Dehydr. pure alc.; not over 1% W.—C_2H_6O, or, $C_2H_5.OH$.—Transp., colorl., v. limpid, mobile inflam. liq.; pleas. spir. odor; burning taste.—*Misc.*, all prop. E., C., W.—Stim.—*Uses:* Chiefly solvent.—Absorbs W. rap. fr. air.—*Caut.* Keep well stoppered, cool, & fr. flame!

Alcohol Absolute Merck.—Reagent (2

$C_2H_5.OH$.—Clear, colorl. liq.; 99–99.6% $C_2H_5.OH$ by wt.—Sp. Gr. 0.796–0.800.—*Tests:* (*Res.*) evap. 50 Cc.—none.—(*Fusel Oil*) *a:* 10 Cc.+30 Cc. H_2O—no turb. or color, & no foreign odor; *b:* 10 Cc.+0.2 Cc. 15% solut. KOH, evap. to 1 Cc., & add excess dil. H_2SO_4—no odor of fusel oil; *c:* rub a few drops betw. hands—no unpleasant odor.—(*Molasses-Alcohol*) overlay 5 Cc. on 15 Cc. conc. H_2SO_4—no rose-red zone.—(*Aldehyde*) heat 10 Cc.+5 drops solut. $AgNO_3$+1 Cc. H_2O for 10 minutes on W.-bath (70–80° C.)—no turb. or ppt.—(*Organic Impur.*) 10 Cc.+1 drop 1:1000 solut. $KMnO_4$—pink color should not pass into yellow within 20 minutes.—(*Metals; Tannin*) 10 Cc.+1 Cc. NH_4OH (sp. gr. 0.96) or aqu. H_2S—no color.—*Uses:* Forensic analysis, &c.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Alcohol.—Deodorized (1

(Perfumer's Alcohol; Cologne Spirits).—Com'l alc. free fr. fusel oil & purified.—Cont. 95.1% by vol. abs. A.—Colorl., limpid, inflam. liq.; pure ethylic alc. odor.—*Misc.*, all prop., A., E., C.—Sp. Gr., abt. 0.816.—*Uses:* Perfume & comp. spirits.—*Caut.* Keep well stopp'd, cool, fr. flame!

Alcohol Allylic Merck (20

(Allyl Alcohol).—By distil. glycerin. w. oxalic acid.—C_3H_6O, or, $CH_2:CH.CH_2OH$.—Limpid

liq.; pung., character. odor.—*Misc.* W., A., E. —*Boil.* 96° C.—Sp. Gr. 0.865 at 15° C.

Alcohol Amylic Merck.—Highest Purity (1

(Primary Isoamylic, Inactive Amylic, or Isopentylic, Alcohol; Isobutylcarbinol). — Fr. fusel oil.—$C_5H_{12}O$, or, $(CH_3)_2CH.CH_2.CH_2OH$.—Colorl., neut., v. diffusive, inflam. liq.; character., disagr. odor.—*Sol.* A., E., 40 W.—*Boil.* 131° C.—Sp. Gr. 0.814 at 15° C.—*Uses:* Artif. fruit essences & as solv. for alkaloids.

do. Merck.—Pure (1

(Pure Fusel Oil).—Mixture of higher alcohols fr. ferment. starch or sugar.—$C_5H_{12}O$.—Colorl., neut. liq.; disagr. odor.—*Sol.* A., E., 40 W.—*Boil.* 128–130° C.—*Uses:* As solvent.

do. Merck (1

(Fusel, Grain, or Potato-spirit, Oil; Amyl Hydrate).—Mixture of higher alc., chiefly isobutylcarbinol.—Colorl. or yellowish, v. diffus. liq.; unpleas. odor.—*Sol.* W., A., E.—*Boil.* 128–130° C.—Sp. Gr., abt. 0.833 at 15° C.—*Uses:* Chiefly as solv.; also in manuf. chem. and pharm. preparations (*e.g.* mercury fulminate, pyroxylin, artif. silk, pegamoid, in perfum. and lacquer manuf., in photography, etc.).

Alcohol Amylic Merck.—Reagent (3

$C_5H_{11}.OH$.—Clear, colorl., neutr. liq.—*Misc.* A., E., benzin; sl. W.—Sp. Gr. 0.814.—*Boil.* 131° C.—*Tests:* (*Res.*) evap. 10 Gm. on W.-bath – none wghble.—(*Organ. Impur.* [*Furfural, &c.*]) *a:* shake 5 Cc. + 5 Cc. conc. H_2SO_4 – not more than faint yellow or reddish color; *b:* shake 5 Cc. + 5 Cc. solut. KOH – no color.—*Uses:* Forensic analysis; solvent for alkaloids, partic. morphine.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

do. Merck.—Reagent.—For fat determination by Gerber's method (2

Colorl. liq.—Sp. Gr. 0.815.—*Boil.* 128–130° C. —*Test:* shake 1 Cc. + 10 Cc. conc. H_2SO_4 + 11 Cc. H_2O in a Gerber butyrometer, centrifuge 2–3 min., & let stand 24 hrs. – no oily ppt.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Alcohol Benzylic Merck (60

(Benzyl Alcohol).—Fr. essential oil bitter almonds, or fr. benzaldehyde, by potass. hydroxide.—C_7H_8O, or, $C_6H_5.CH_2.OH$.—Colorl. liq.; faint arom. odor.—*Sol.* E., methyl A.; 25 W.—*Boil.* 200–207° C.—Sp. Gr. 1.05 at 15° C.

do. Merck.—Fr. Toluene (16

Fr. benzoic acid, toluene, or balsam Tolu or Peru, by potass. hydroxide.

Alcohol Butylic (Iso-) Merck (1

(Isopropylcarbinol; Isobutyl Alcohol).—Fr. fusel oil.—$C_4H_{10}O$, or, $(CH_3)_2.CH.CH_2OH$.—Colorl., mobile liq.—Sp. Gr. 0.806 at 15° C.—*Sol.* A., 10 W.—*Boil.*, abt. 106° C.

Alcohol Butylic (Primary, Normal) Merck (120

(Propylcarbinol; Butyric, or Normal Primary Butyl, Alcohol).—Fr. normal butyl aldehyde, by reduct.—$C_4H_{10}O$, or, $C_2H_5.CH_2.CH_2OH$.—Limpid, colorl., h'ly refract. liq.; agre., vinous odor.—Sp. Gr. 0.811 at 15° C.—*Sol.* A., 12 W. —*Boil.* 115–117.5° C.

Alcohol Butylic (Secondary) Merck (400

(Methylethylcarbinol; Butylene Hydrate).—Fr. secondary butyl iodide, by silver acetate followed by saponif. w. potassa.—$C_4H_{10}O$, or, $CH_3.CH_2.CHOH.CH_3$.—Limpid colorl. liq.; str. pleas. odor; burning taste.—*Sol.* A.; sl. in W. —*Boil.* 100° C.

Alcohol Butylic (Tertiary, Pseudo) Merck (80

(Trimethylcarbinol).—Fr. liq. isobutylene, by sulphuric acid with W.—$C_4H_{10}O$, or, $(CH_3)_3.COH$.—Wh. cryst.; camphor odor.—*Sol.* A.—*Melt.* 25–25.5° C.—*Boil.* 82° C.—*Caut.* Keep well stoppered.

Alcohol Butyric.—see **Alcohol Butylic, Primary, Normal**

Alcohol Caprylic Merck (20

(Capryl, Secondary Octylic, or Octoic, Alcohol).—Fr. acetyl ether of normal octylic alcohol fr. essent. oil Heracleum Sphondylium, L. (Cow Parsnip).—$C_8H_{18}O$, or, $CH_3(CH_2)_5CHOH.CH_3$.—Colorl., oily, pung., arom. liq.—Sp. Gr. 0.823 at 15° C.—*Sol.* A., E., C.—*Boil.*, abt. 179° C.

do. Merck.—Free fr. Ketones (40

do. Merck.—From Castor Oil (20

Alcohol Cetylic Merck (60

(Ethal; Ethol; Cetyl, or Hecdecatylic, Alcohol; Normal Primary Hexadecyl Alcohol; Palmityl Alcohol).—Fr. spermaceti, by saponif. w. KOH.—$C_{16}H_{34}O$, or, $C_{16}H_{33}.OH$.—Wh. cryst. —*Sol.* A., E., C.—*Melt.* 50° C.—*Boil.* 344° C.—Renders the skin smooth and slippery.—*Uses:* Chapped hands, weeping ecz., & prurigo.

Alcohol Cinnamic (or, *-ylic*).—see **Styrone**

Alcohol Cumic Merck (200

(Paraisopropylbenzyl Alcohol).—Fr. cuminic aldehyde, by alcoholic KOH.—$C_{10}H_{14}O$, or, $C_3H_7.C_6H_4.CH_2OH$.—Colorl. liq.; burn. taste.—Sp. Gr. 0.977 at 15° C.—*Misc.*, all prop., A., E. —*Boil.* 246° C.

Alcohol Dibromopropylic Merck (30

(Alphabetadibromopropyl Alcohol; Betadibromhydrin).—Fr. allyl alcohol, by bromine.—$C_3H_6Br_2O$, or, $CH_2Br.CHBr.CH_2.OH$.—Colorl. liq.—*Boil.* 219° C.

Alcohol Ethylene.—see **Ethylene Glycol**

Alcohol Ethylic.—see **Alcohol**

Alcohol Glycyl.—see **Glycerin**

Alcohol Hecdecatylic.—see **Alcohol Cetylic**

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Alcohol Heptylic Merck (200

(Normal Heptyl Alcohol).—Fr. œnanthol by reduct.—$C_7H_{16}O$, or, $CH_3(CH_2)_5OH$.—Colorl., fragr. liq.—Sp. Gr. 0.830 at 15° C.—*Boil.* 175° C.

Alcohol Hexadecyl.—see **Alcohol Cetylic**

Alcohol Isobutyl.—see **Alcohol Butylic, Iso-**

Alcohol Isopentylic.—see **Alcohol Amylic**

Alcohol Methylic Merck.—Highest Purity (2

(Methyl Hydroxide or Hydrate; Wood Alcohol, Spirit, or Naphtha).—Prod. of destruct. distil'n of wood.—CH_4O, or, CH_3OH.—Colorl., clear liq.; charact. odor.—Sp. Gr. 0.796 at 15° C.—*Misc.*, all prop., W., A., E.—*Boil.* 65° C.—Sed.; Nar.; Antiem.—*Uses:* Diar., dysent.; for fever & cough of consumpt.—*Dose* 10–40 ♏ (0.6–2.6 Cc.).—*Caut.* Handle carefully. Keep fr. flame!

do. Merck.—Free fr. Acetone (2

do. Merck (1

95% CH_3OH.—*Uses:* Techn., instead of alcohol as fuel; in polishes, lacquers, varnishes, manuf. aniline dyes, & for denaturing alcohol, &c.

Alcohol Methylic Merck.—Reagent (2

$CH_3.OH$.—Colorl., mobile liq.—*Misc.*, all prop. W., A., E., fixed & volat. oils.—Sp. Gr. 0.796.—*Boil.* 65–66° C.—*Tests:* (*Res.*) evap. 30 Cc. on W.-bath – none wghble.—(*Acetone; $C_2H_5.OH$*) 5 Cc. + 50 Cc. double-norm. NaOH + 25 Cc. double-norm. I, shake repeatedly – no turb. or floccul. ppt., & no odor of iodof.—(*Empyreum. Substcs*) *a:* 1 Cc. + 10 Cc. H_2O – no turb.; *b:* 5 Cc. + 5 Cc. conc. H_2SO_4 by drops while cooled – not more than sl. yellow color.—(*Aldehyde*) 10 Cc. + 10 Cc. solut. NaOH (sp. gr. 1.3) & shake – no color.—(*Oxidiz. Substcs*) 10 Cc. + 1 drop decinorm. $KMnO_4$ – red color should not disapp. within 10 minutes.—*Uses:* Detect. salicylic acid, determ. boric acid, prep. grape sugar, & as substit. for ethyl alcohol.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Alcohol Monochlorethyl.—see **Ethylene Chlorhydrin**

Alcohol Octoic.—see **Alcohol Caprylic**

Alcohol Octylic (Normal) Merck (200

Fr. the ethereal oil of Pastinaca sativa, L.—$CH_3(CH_2)_5CH_2OH$.—Colorl. liq.—Sp. Gr. 0.831 at 15° C.—*Sol.* A., E., C.—*Boil.* 195° C.

Alcohol Octylic, Secondary.—see **Alcohol Caprylic**

Alcohol Palmityl.—see **Alcohol Cetylic**

Alcohol Paraisopropylbenzyl.—see **Alcohol Cumic**

Alcohol Phenylallylic.—see **Styrone**

Alcohol Propenyl.—see **Glycerin**

Alcohol Propylic (Iso-) Merck (60

(Secondary Propyl, or Pseudopropyl, Alcohol).—Fr. isopropyl iodide, by lead hydroxide.—C_3H_8O, or, $(CH_3)_2CHOH$.—Colorl., clear, mobile liq.; spir. odor.—Sp. Gr. 0.810 at 15° C.—*Misc.*, all prop., W., A., E.—*Boil.* 82–83° C.

Alcohol Propylic (Normal) Merck (10

(Primary Propyl Alcohol).—Fr. fusel oil.—C_3H_8O, or, $CH_3(CH_2)_2OH$.—Colorl. liq.; odor like that of ord. alc.—Sp. Gr. 0.8066 at 15° C.—*Misc.*, all prop. W.—*Boil.* 96–98° C.

do. Merck.—Com'l.—Boil. 96-99° C. (2

Alcohol Pseudobutyl.—see **Alcohol Butylic, Tertiary**

Alcohol Pseudopropyl.—see **Alcohol Propylic, Iso-**

Alcohol Styrylic.—see **Styrone**

Alcohol Trichloramidoethylic.—see **Chloralammonia**

Alcohol, Wood.—see **Alcohol Methylic**

Alcohol-Acetic Acid.—see **Carnoy's Alcohol-Acetic Acid**

Alcornoco

(Alcornoque; Alchornoco; Chabarro).—Bark of Bowdichia virgilioïdes, H. B. K. Leguminosæ. Papilionaceæ. (Source also ascribed to Alchornea latifolia. Euphorbiaceæ).—*Habit.:* Venezuela; Brazil, etc.—*Etymol.:* "Alcornoco" and "alcornoque" are the Venezuelan names of the drug.—Long, flat, dull red-brown pieces of fibrous bark; moss-like odor, bitter and astring. taste.—*Constit.:* Alcornin; tannin.—Bitter Tonic; Febrif.—*Uses:* Phthisis.—*Dose* 30 grains (2 Gm.) in powd. or infus. is emetic.

Aldehyde.
Aldehyde Acetic. } —see **Aldehyde Ethylic**

Aldehyde Anisic Merck (10

(Anisaldehyde; Paramethoxybenzaldehyde; Aubépine).—Fr. anethol, by oxid'n.—$C_8H_8O_2$, or, $C_6H_4(O.CH_3).CHO$.—Colorl. liq. w. aromat. odor.—*Sol.* A., E.—*Boil.* 245–246° C.—Sp. Gr. 1.126 at 15° C.—*Uses:* Perfumery; odor resembles that of hawthorn, but the aldehyde must be mixed w. other odorous substc's to yield an agreeable odor.

Aldehyde Butylic (Iso-) Merck (70

(Isobutyryl Aldehyde).—Fr. isobutyl alc., by oxid'n w. chromic acid.—C_4H_8O, or, $(CH_3)_2CH.CHO$.—Transp., colorl., h'ly refract., pung. liq.—Sp. Gr. 0.797 at 15° C.—*Misc.*, w. A.—*Boil.* 61° C.

Aldehyde Caprylic Merck (80

(Octoic Aldehyde; Methylhexylketone).—By distil. sodium ricinoleate & NaOH.—$C_8H_{16}O$, or, $C_7H_{15}CHO$, if aldehyde; $CH_3.CO.C_6H_{13}$, if methylhexylketone.—Colorl. liq.; pung. odor.—Sp. Gr. 0.819 at 20° C.—*Boil.* 171° C.

Aldehyde Cinnamic Merck (10

(Cinnamaldehyde; Cinnamyl Aldehyde).—Aldehyde fr. oils of Ceylon & Chinese cinnamon.—C_9H_8O, or, $C_6H_5.CH:CH.CHO$.—Yellowish oil; cinnamon odor.—Sp. Gr. 1.050 at 20° C.—*Sol.* A., E., C.—*Boil.* 128–130° C. at 20 Mm., and at abt. 245° C. at atmosph. pressure, w. part decomp.—Decomp. on distil.—*Caut.* Keep well stoppered.

Aldehyde Cinnamyl.—see **Aldehyde Cinnamic**

Aldehyde Cuminic.—see **Cuminol**

Aldehyde Ethylic Merck.—Absolute (5

(Aldehyde; Ethylaldehyde; Acetic Aldehyde; Acetaldehyde).—By oxid'g ethyl alcohol w. chromic acid.—C_2H_4O, or, $CH_3.CHO$.—Colorl., light, inflam. liq.; pung., suffoc. odor.—Sp. Gr. 0.790 at 15° C.—*Misc.*, all prop., W., A., E.—*Boil.* 22° C.—*Uses:* Manuf. paraldehyde & aldehyde green.

do. Merck.—Highly concentr. (2

do. Merck.—Concentr. (2

Aldehyde Furfuranecarboxylic.—see **Furfural**

Aldehyde Heptoic (or, *-ylic*).—see **Oenanthol**

Aldehyde Isobutyryl.—see **Aldehyde Butylic, Iso-**

Alcohol Isopentylic.—see **Alcohol Amylic**

Aldehyde Isovaleric.—see **Aldehyde Valeric, Iso-**

Aldehyde Octoic.—see **Aldehyde Caprylic**

Aldehyde Paracuminic.—see **Cuminol**

Aldehyde Paraisopropylbenzoic.—see **Cuminol**

Aldehyde Propionic.—see **Aldehyde Propylic**

Aldehyde Propylic Merck (90

(Propionic, or Propyl, Aldehyde).—Fr. normal propyl alcohol by oxid'n.—C_3H_6O, or, $CH_3.CH_2.CHO$.—Colorl. liq. w. suffoc. odor.—*Sol.* W.—*Boil.* 48° C.—Sp. Gr. 0.807 at 20° C.

Aldehyde Pyromucic.—see **Furfural**

Aldehyde Salicylic.—see **Acid Salicylous**

Aldehyde Valeric (Iso-) Merck (50

(Isovaleral; Isovaleric Aldehyde).—Fr. oxid'n of amyl alc., or fr. distil. of isovalerates.—$C_5H_{10}O$, or, $(CH_3)_2CH.CH_2.CHO$.—Colorl. liq.; pung., apple-like odor.—*Misc.* A., E.—*Boil.* 92° C.—Sp. Gr. 0.804 at 15° C.—*Uses:* Artif. flavor and perfum.

Aldehyde-ammonia Merck.—Pure, cryst. (15

(Ammoniated Ethylic Aldehyde).—Fr. aldehyde, by dry NH_3.—C_2H_7NO, or, $C_2H_4O.NH_3$, or, $CH_3.CH(HO)NH_2$.—Colorl. cryst.; turn brown in air.—*Sol.* W.; sl. in E.—*Melt.* 70–80° C.—*Boil.* 100° C.—*Uses:* Prep'g pure aldehyde.—*Caut.* Keep fr. light & air.

Alder; American-, Black-, Common-, Smooth-, or *Tag-.*—see **Alnus Serrulata**

Aldoxim.—see **Acetaldoxim**

Alembroth Salt.—see **Mercury & Ammonium Bichloride**

Aletrin (10

Powd. concentration fr. root Aletris farinosa (Star Grass).—Dark-brown powd., intens. bitter.—*Sol.* A.—Tonic; Cath.; Emetic.—*Uses:* By Eclectics in colic, dropsy, & chronic rheumat.—*Dose* 1–3 grains (0.06–0.2 Gm.) daily, in pills.

Aletris

(Star Grass; Starwort; False Unicorn Root; Blazing Star; Colic Root).—Rhizome of Aletris farinosa, L. Liliaceæ (Aletroïdeæ).—*Habit.:* Ontario; Eastern U. S.—*Etymol.:* Grk. "aletreuin," to mill, referring to the mealy pubescence—*i.e.*, the flowers are white, & as though dusted with meal. "Farinosa" fr. Lat. "farinosus," floury.—Rhizome is abt. 1 in. long, $^1/_8$ in. thick; upper side flattened; root whitish; taste amylaceous and bitter.—*Constit.:* Starch; bitter principle.—Tonic; Diuret.; Vermif.; Lax.; Emet.—*Uses:* Amenor.; dysmenor.; leucorrh.; dropsy, colic, rheumat., etc.—*Dose* 5–10 grains (0.3–0.6 Gm.) in infus., decoct., or tinct.—Alcoh. extr. $^1/_2$–3 grains (0.03–0.2 Gm.).—Fld. extr. 30–60 ♏ (2–4 Cc.).

Aleuronat (1

Aleuronat flour is a plant albumin, used as a nutrient.—Yellowish-wh., tastel. powd.—*Uses:* In manuf. of bread for diabetics, and also in surgery, because of its chemotactic action on leucocytes, for filling spaces where the continuity of tissue is broken, and for effecting union of adjacent tissues.

Algaroth Powder.—see **Antimony Oxychloride**

Alginoid Antimony, Arsenic, Bismuth, Iron, Magnesium, & Mercury.—see **Antimony, Arsenic, Bismuth, &c., Alginate**

Alizarin Merck.—Dry (16

(Orthodihydroxyanthraquinone; Dioxyanthraquinone, α-β; Dihydroxyanthraquinone).—Fr. anthracene.—$C_{14}H_8O_4$, or, $C_6H_4(CO)_2.C_6H_2(OH)_2$.—Yellow cryst.—*Sol.* A., E., B.—*Melt.* 282° C.—*Uses:* Dye.

do. Merck.—Paste (3

Prep. of alizarin cont'g 20%.—*Sol.*, solut. sod. carbonate.—*Uses:* Dye. With metallic oxides (*e.g.* of aluminum) it yields colored lakes, hence its applic. in dyeing & printing calicoes.

do.—Solution (1

1% solut. Alizarin S. (Alizarin Blue, Soluble, the sodium-bisulphite comp. of dioxyanthraquinonequinoline, $C_{17}H_{11}NO_{10}S_2Na_2$) in physiological-salt solut.—*Uses:* Staining cell nuclei and cytoplasm blue.

Alizarin Carmine.—see **Sodium Alizarinsulphonate**

Alizarin Green.—see **Coerulein**

Alizarin Red

Brownish-yellow powd.—*Sol.* W. & A., w. yellow color; in alkalies w. red color.

Alizarin Yellow.—see **Gallacetophenone**

Alkali-Albuminate Deycke-Merck (40

Powd. of alkaline reaction.—*Sol.*, eas. W.—*Uses:* As culture medium for obtaining pure cultures of cholera and diphtheria bacilli.

Alkali Blue 5 B (Also **3 B** & **2 B**) **Merck** (10

do. B (Also **R**) **Merck** (8

Commercial varieties of blue dyes occurring in the form of a blue powder usually soluble in cold or hot water, and consisting of the sodium salt of triphenylpararosanilinemonosulphonic acid, or of mixtures of the sodium salt and the free acid.—*Uses:* Dyeing wool blue.

Alkanet.—see **Alkanna**

Alkanin.—see **Extract Alkanet**

Alkanin Paper

(Anchusin Paper; Boettger's Paper).—Wh. paper charged w. 3% alcoh. solut. alkanin & dried.—*Uses:* Indicator (alkalies = green or blue; acids = red).

Alkanna

(Alkanet; Orcanette; Dyer's Alkanet; Anchusa).—Root of Alkanna (Anchusa) tinctoria, Tausch. Boraginaceæ.—*Habit.:* Mediterranean region; Hungary; Western Asia.—*Etymol.:* Arabic "alhenneh."—*Constit.:* Alkanin, $C_{15}H_{14}O_4$; tannin.—*Uses:* Astring.—*Techn.*, in dyeing.—The tincture is used for coloring oils a bright red.—Alcoh. extr. is solub. in A., E., B., and oils, and is used for coloring oils, fats, etc.

Alkannin.—see **Extract Alkanet**

Alkekengi

(Winter Cherry; Strawberry Tomato; Bladder Herb).—Fruit (berry) of Physalis Alkekengi, L. Solanaceæ.—*Habit.:* Mediterranean eastward to Japan.—*Etymol.:* "Alkekengi" is the Arabian name of the plant. "Physalis," fr. Grk. "physa," bladder, referring to the puffed-up appearance of the pericarp.—A round red berry, abt. as large as a cherry; contains numerous flat, kidney-shaped seeds; very juicy when fresh; acidulous, bitterish taste; on drying they shrink, and become brownish-red.—*Constit.:* Physalin, $C_{14}H_{16}O_5$; citric acid; sugar.—Diur.; Febrif.; Antipodagr.; Aperient.—*Dose* 6–12 berries.—Alcoh. extr., 5–8 grains (0.3–0.5 Gm.).

Allantoin Merck (160

(Glyoxyldiureïd).—Fr. amniotic and allantoic fluids.—$C_4H_6N_4O_3$, or, $CO.(NH)_2.CO.CH.NH.CO.NH_2$.—Wh. cryst.—*Sol.*, hot W.—Decomp. w. heat.

Allium

(Garlic).—Bulb of Allium sativum, L. Liliaceæ (Allioïdeæ).—*Habit.:* Central Asia; Southern Europe.—*Etymol.:* "Allium," according to Pliny, is our garlic, and is possibly derived fr. "halare," to give off an odor; or, fr. Celtic "all," hot, burning, on account of its pungent taste. Lat. "sativum," cultivated.—*Constit.:* Volat. oil; mucilage; albumin.—Diaphor.; Diuret.; Anthelm.; Rubefac.; Expector.—*Uses:* Bronch., pneum., and infant. convuls. Also in cookery.—*Dose* 30–60 grains (2–4 Gm.), usually as syrup of garlic.—Fld. extr., 30–60 ♏ (2–4 Cc.).

Allium Victoriale

(Allerman's Root; Radix Victorialis).—Root of Allium Victorialis, L. Liliaceæ (Allioïdeæ).—*Habit.:* Central Europe; Asia.—*Etymol.:* "Victorialis," in reference to the frequent occurrence of the plant on Mount St. Victoire, in Provence; or, fr. the use of the root as a talisman in battle, for insuring victory.—Diuret.; Vermif.; Stimulant.

Allophanamide.—see **Biuret**

Alloxan Merck (50

(Mesoxalylurea; "Erythric Acid").—Fr. uric acid, by oxid'n.—$CO(NH.CO)_2CO + H_2O$.—Colorl. cryst.—*Sol.* W., A. Aqu. solut. colorl., but imparts a fine pink color to the skin, hence at one time used as cosmetic like rouge.—Decomp. by heat.—*Caut.* Keep in gl.-stp. bot.

Alloxantin Merck (80

(Uroxin).—Fr. uric acid, by oxidation w. warm dil. nitric acid.—$C_8H_4N_4O_7 + 3H_2O$.—Sm., wh. cryst.—*Sol.*, warm W.

Allspice.—see **Pimenta**

Allyl Alcohol.—see **Alcohol Allylic**

Allyl Bromide Merck (40

(Monobromopropylene).—Fr. allyl alcohol, by Br w. P.—C_3H_5Br, or, $CH_2:CH.CH_2Br$.—Colorl. liq.; pung. odor.—Sp. Gr. 1.436 at 15° C.—*Sol.* A., E.—*Boil.* 70–71° C.

Allyl Chloride Merck (40

Fr. allyl alcohol, by phosphorus trichloride.—C_3H_5Cl, or, $CH_2:CH.CH_2Cl$.—Colorl. liq.—Sp. Gr. 0.937 at 20° C.—*Boil.* 44–46° C.

Allyl Iodide Merck (40

React.-prod. of phosphorus, iodine, & allyl alcohol.—C_3H_5I, or, $CH_2:CH.CH_2I$.—Yellowish liq.—Sp. Gr. 1.785 at 15° C.—*Sol.* A.—*Boil.* 100–102° C.

Allyl Isothiocyanide.—see **Oil Mustard, Artificial**

Allyl Oxide (70

(Diallyl Oxide; Propenyl Oxide; Glycerinic or Glycerin Ether).—By-prod. of allyl alc. fr. glycerin & oxalic acid.—$C_6H_{10}O_3$, or, $(C_3H_5)_2O_3$.—Yellow liq.—Sp. Gr. 1.16 at 15° C.—*Sol.* W., A., C.—*Boil.* 171–172° C.

Allyl Sulphide Merck (140

(Diallyl Sulphide; Thioallylic Ether; "Oil of Garlic").—React.-prod. of alcoholic potass. sul-

phide & allyl iodide; or fr. garlic, leeks, onions, &c., by distil'n.—$C_6H_{10}S$, or, $(C_3H_5)_2S$.—Yellowish oil; garlic odor.—*Sol.* A.; sl. in W.—*Boil.* 138° C.—Antidiar.; Stomachic; Nerv.—*Uses:* Cholera, tuberc., indigest., hyst., &c.—*Doses:* 1 or 2 ♏ (0.06–0.12 Cc.) well diluted & flav. w. pepperm. oil. In tuberculosis, inject. of 15–30 ♏ (1–2 Cc.) of a mixt. of 3 ♏ (0.2 Cc.) allyl sulphide and 25 ♏ (1.6 Cc.) olive oil; in cholera, intestinal irrigat. of a 1:1000 aqu. solut. warmed to 36° C., 3 t. p. d., and internally, $^1/_3$–$^1/_2$ ♏ (0.02–0.03 Cc.) ev. half hr. in mixture.

Allyl Sulphocarbamide.—see **Thiosinamine**

Allyl Sulphocyamide.—see **Oil Mustard, Artificial**

Allyl Sulphourea. } —see **Thiosinamine**
Allyl Thiocarbamide. }

Allyl Thiocyanate (or, *-ide*).—see **Oil Mustard, Artificial**

Allyl Thiourea.—see **Thiosinamine**

Allyl Tribromide Merck (30

(Tribromhydrin; 1. 2. 3. Tribrompropane; Tribrompropylene; Propargyl Tribromide).—Fr. allyl iodide, by bromine.—$C_3H_5Br_3$, or, $CH_2Br.CHBr.CH_2Br$.—Colorl. liq.; cryst. mass when cooled.—*Melt.*, abt. 20° C.—Sp. Gr. 2.430 at 15° C.—*Sol.* A., E.—*Boil.* 219–221° C.—Sed.; Antispasm.—*Uses:* Hyst., asthma, whoop.-cough, &c.—*Dose* 5–10 ♏ (0.3–0.6 Cc.) 2 or 3 t. p. d., in capsule.—*Inj.* 2 or 3 ♏ (0.12–0.2 Cc.) in 20 ♏ (1.3 Cc.) of ether.

Allylamine Merck (160

Fr. allyl cyanate, or oil of mustard.—C_3H_7N, or, $CH_2:CH.CH_2.NH_2$.—Colorl. liq.; pung. odor of ammonia.—Sp. Gr. 0.864 at 15° C.—*Misc.* E., C.; sol. A., W.—*Boil.* 56–58° C.

Almatein

Condens. prod. hematoxylin & formaldehyde.—$CH_2O_2:(C_{16}H_{12}O_5)_2:CH_2$.—Light, tastel., odorl., bright-red or brownish-red powd. — *Sol.* A., acetic ether, acetone, alkalies, & eas. G.; insol. W.—Antisep.; Intest. Disinf.; Vulner.— *Uses:* Intest. affect. (diarrh. & dysentery), urticar., &c.—*Dose* 3–10 grains (0.2–0.6 Gm.) single; 75 grains (5 Gm.) p.d.—*Appl.*, as dust.-powd. pure or w. inert powd., or in G. solut.

Almén's Reagent.—For blood (8

(Almén-Schoenbein's Reagent).—Mixt. of tinct. guaiac and oil turpentine.—If blood present, a blue color develops on shaking reagent vigorously and then allowing liquid to be tested to run in carefully.

Almond, Bitter.—*U. S. P.*

Ripe seed of Prunus Amygdalus Stokes (Amygdalus communis, L.), var. amara, D. C. Rosaceæ (Amygdaleæ).—*Habit.:* Italy, Spain, and Southern France.—*Etymol.:* Lat. "prunum," from Grk. "prounos," plum tree; and Grk. "amygdalos," almond tree, fr. Syriac "ab-mygdala," handsome tree.—*Constit.:* Fixed oil; amygdalin, $C_{20}H_{27}NO_{11}$; proteids; emulsin (synaptase); sugar.—*Uses:* Preparation of amygdalin, essential and expressed oils almond, and bitter-almond water; as flavor for foods and candies; in perfumery, and in manuf. of liqueurs and cocoanut-oil soap.

Almond Meal (1

The residue left on expressing the oil from almonds.—*Uses:* As cosmetic, and for manf. bitter-almond water.

Almond, Sweet.—*U. S. P.*

Ripe seed of Prunus Amygdalus Stokes (Amygdalus communis, L.), var. dulcis, D. C. Rosaceæ (Amygdaleæ).—*Habit.:* Italy, Spain, and Southern France.—*Etymol.:* See bitter almond above.—*Constit.:* Fixed oil (chiefly); proteids; emulsin.—*Uses:* In perfumery and sweetmeats; in prep. expressed oil almond, almond milk, almond meal, etc.

Alnuin

Dried, powd. extr. bark Alnus serrulata, Willd. (American Alder).—Brown powd.—*Sol.* A.—Antipyr.; Antisep.; Astring.—*Uses:* By the Eclectics in interm. fever, & as hemost.—*Dose* 2–10 grains (0.12–0.6 Gm.).

Alnus Serrulata

(Smooth-, American-, Tag-, Red-, Black-, or Common, Alder). — Bark of Alnus serrulata, Willd. Betulaceæ.—*Habit.:* U. S.—*Etymol.:* Fr. Celtic "al," near, and "lan," a river bank, *i.e.*, the plant grows near the border of streams. "Serrulata" fr. Lat. "serrulatus," diminutive of "serratus," saw-like, referring to the serrate leaves.—*Constit.:* Resin; oils; tannin; alnuin(?).—*Dose:* Fld. extr. 30–60 ♏ (2–4 Cc.).

Aloe-Purple Merck (50

(Impure Aloetic Acid).—Orange-yellow powd.—*Sol.* W., and alkalies, affording purple solutions.—*Uses:* Dyeing silk, wool, and cotton.—See also Aloetic Acid.

Aloes, Barbadoes (1

(Curaçao Aloes).—Inspis. juice of lvs. of Aloe vulgaris, Lam., A. vera L., A. chinensis, Baker, A. Perryi, Baker, and other A. species. Liliaceæ.—*Habit.:* West Indies (Barbadoes and Jamaica).—*Etymol.:* See Aloes, Socotrine.—Orange-brown to blackish-brown, opaque, resin-like masses; saffron-like odor; strongly-bitter taste.—*Constit.:* Ethereal oil; resin; barbaloin; isobarbaloin; emodin.—*Sol.* W., A.—*Uses, Doses & Incomp.:* As of Aloes, Socotrine.

Aloes, Cape (1

Inspis. juice fr. lvs, of various sp. aloe, chiefly A. ferox, Miller, A. africana, Lamarck, and A. spicata, Thunb. Liliaceæ.—*Habit.:* Southern Africa, near Cape of Good Hope.—*Etymol.:* See Aloes, Socotrine.—Olive-colored lumps or deep-brown masses with greenish tint; shining,

smooth surface; resinous fract.; thin splinters, transp. and reddish-brown; disagre. odor and charact., bitter taste.—*Constit.:* Ethereal oil; resin; barbaloin (capaloin); emodin.—*Uses:* As of Aloes, Socotrine; also techn., in dyeing & in manuf. brown dyes.—*Doses & Incomp.:* As of Aloes, Socotrine.

Aloes, Hepatic (Curaçao) (1

Inspis. juice of lvs. of Aloe vulgaris, Lam., A. chinensis, Baker, and other A. species. Liliaceæ.—*Habit.:* Dutch West Indies (Curaçao, Bonaire, and Aruba).—*Etymol.:* See Aloes, Socotrine.—Orange to blackish-brown opaque masses, transl. in thin pieces; uneven, waxy, somewhat resinous fracture; unpleas. odor and naus. bitter taste.—*Constit.:* (Curaçaloin); ethereal oil; resin acids, barbaloin, and isobarbaloin.—*Uses, Doses, & Incomp.:* As of Aloes, Socotrine.

Aloes, Purified (1

From com'l Socotrine aloes.—Dull-brown or reddish-brown, brittle pieces; charact. arom. odor of Socotrine aloes, and bitter taste.—*Sol.*, alm. entirely in A.; sl. W.—Cath.; Emmen.; Lax.—*Uses:* Usually with other drugs; acts mostly on lower bowel.—*Doses:* $^1/_2$–10 grains (0.03–0.6 Gm.).—Tinct. 5–10 ♏ (0.3–0.6 Cc.).—*Incomp.:* As of Aloes, Socotrine.

Aloes, Socotrine (1

Inspis. juice of lvs. of Aloe Perryi, Baker (and probably other A. species), Liliaceæ.—*Habit.:* Island of Socotra (in straits of Bab-el-Mandeb).—*Etymol.:* Arabic, "alloeh"; Hebrew, "halal," shining, bitter; Grk, "aloe."—Yellowish-brown, orange-brown, or dark, ruby-red masses, not greenish; transl. on edges; resinous, somewhat conch. fracture; saffron-like odor; strongly-bitter taste; powd. yellowish-brown.—*Constit.:* Barbaloin, isobarbaloin (socaloin); resin; emodin; ethereal oil.—*Sol.*, alm. entirely in A., and in 4 pts. boil. W.—Bitter Tonic; Lax.; Purg.; Emmen.—*Uses:* Hemorrhoids, constip., amenorrh., jaundice, and chlorosis.—*Doses:* Tonic, $^1/_2$–2 grains (0.03–0.12 Gm.); lax., 2–10 grains (0.12–0.6 Gm.); cath., 10–20 grains (0.6–1.3 Gm.).—Aqu. extr., 1–6 grains (0.06–0.36 Gm.).—Fld. extr., 10–30 ♏ (0.6–2 Cc.).—*Incomp.:* Mercury nitrate; silver nitrate.

Aloin Merck (1

(Barbaloin).—Active prin. of Barbadoes aloes (the aloin of the U. S. P. is prepared chiefly fr. Curaçao aloes).—$C_{16}H_{16}O_7 + 3H_2O$.—Yellow cryst.; bitter taste.—*Sol.*, formamide, hot W., A.—Cath.—*Uses:* Chronic constip., espec. when complicated w. hemorrhoids.—*Dose* $^1/_2$–2 grains (0.03–0.12 Gm.).—*Inj.* $^3/_4$ grain (0.05 Gm.) diss. in formamide.—*Max. D.* 4 grains (0.25 Gm.) single; 10 grains (0.6 Gm.) p. day.

Alphachloralose.—see **Chloralose**

Alphadiaminotoluene (or *-ol*). — see **Toluylenediamine**

Alphadibromanthracene.—see **Dibromanthracene**

Alphadichlorethane.—see **Ethylidene Chloride**

Alphadimethylglyoxime.—see **Dimethylglyoxime**

Alphadinitrophenol.—see **Dinitrophenol**

Alphadiphenylenemethane.—see **Fluorene**

Alpha-Eucaine.—see **Eucaine A**

Alphamethylpyridine.—see **Picoline**

Alphamethylquinoline.—see **Quinaldine**

Alphamononitronaphthalene.—see **Nitronaphthalene, Alpha-**

Alphanaphthol Merck.—Recryst., Medicinal (6

Constit. of coal-tar; also obt. artificially.—$C_{10}H_8O$, or, $C_{10}H_7.OH$.—Colorl. prisms or powd.; disagre. taste.—*Sol.* A., E.; sl. in W.—*Melt.* 94° C.—*Boil.* 278–280° C.—Antisep.; Antiferment.—*Uses:* Recom. diar., dysent., cholera, typhoid fever, gout, oxalurea, hepatic cirrhosis, influenza, measles, smallpox, scarlet fever, & summer complaints. 0.1–0.25 : 1000 prevents the development of the spores of the tubercle bacilli. Reported 3 times as strong as betanaphthol.—*Doses: Intern.*, as antiferment., 30 grains (2 Gm.) in 1 fl. oz. (30 Cc.) castor oil, given in two portions within 2 hrs.; in typhoid fever, 45–90 grains (3–6 Gm.) per day.—*Extern.*, in erysipelas, smallpox, scarlet fever, & tuberculous laryngitis, in 10–20% oily solut.

do.—Purified (2

Alphanaphthol Merck.—Reagent.—Recryst. (7

$C_{10}H_7.OH$.—Colorl., lustr. need.; phenol. odor.—*Sol.*, eas. A., B., C., E.; diffic. cold, more read. in hot, W.—*Tests:* (*Res.*) ignite 1 Gm. on platin. foil – none wghble.—(*Organ. Acids*) shake 1 Gm. + 100 Cc. H_2O, & filter – filtrate should not redden litmus.—*Uses:* Detect. sugar, hydrated chloral, chloroform, nitrous acid, free acids & acid salts, carbohydrates in urine, salts of chromic acid, & as reagent for free HCl in gastric contents.

Note. — For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Alphanaphtholbenzeïn Merck (40

$C_{54}H_{38}O_5$, or, $(C_6H_5).C(C_{10}H_5.OH)_2.O.(C_6H_5)C(C_{10}H_6.OH)_2$.–Reddish-brown powd.—*Sol.* A., E., B., glacial acetic acid; insol. W.—*Uses:* In 1% alcoh. solut. as indicator (alkalies = green; acids = reddish-yellow). Very sensit. to CO_2.

Alphanaphthol Orange.—see **Tropæoline 000 No. 1**

Alphanaphthol Salicylate.—see **Alphol**

Alphanaphtoquinone.—see **Naphtoquinone, Alpha-**

Alphanaphtylamine.—see **Naphtylamine, Alpha-**

Alphanaphtylhydrazine Hydrochloride. — see **Naphtylhydrazine (Alpha-) Hydrochloride**

Alphanitrosobetanaphthol.—see **Nitrosobetanaphthol**

Alphapicoline.—see **Picoline**

Alphapropenylchlorhydrin.—see **Monochlorhydrin**

Alphapropenyldichlorhydrin.—see **Dichlorhydrin, Alpha-**

Alphol Merck (20

(Salicylic Ester of Alphanaphthol; Alphanaphthol Salicylate).—Fr. salicylic acid & alphanaphthol. —$C_{17}H_{12}O_3$, or, $C_6H_4(OH)COO.C_{10}H_7$.—Reddish-wh., cryst. powd.—*Sol.* A., E., fatty oils; insol. W. —*Melt.* 83° C.—Intern. Antisep.; Antirheum.—*Uses:* Gonor., cystitis, summer dis. of children, typh. fever; rheumat. affec.—*Dose* 8–15 grains (0.5–1 Gm.) 3 t. p. d., in wafers or powd.

Alphozone (90

(Succinyl Peroxide).—$(COOH.CH_2.CH_2CO)_2O$. —Wh. powd.—*Sol.* 30 W.—Germicide; Antisep. —*Uses: Intern.*, typhoid fever, infect. diarrh., abnorm. ferment. intestinal processes.—*Extern.*, wounds, ulcers, tonsilitis, leucorrh., etc.

Alsol.—see **Aluminum Acetotartrate**

Alstonia

(Australian Fever Bark; Australian Native Quinine; Fever Bark; Bitter Bark).—Bark of Alstonia constricta, F. v. M. Apocynaceæ.—*Habit.:* Australia (Queensland and New South Wales).—*Etymol.:* After Chas. Alston, a Scotch botanist (1683–1760). — Semicirc. pieces 6 in. to 2 feet long, $^1/_2$ in. to 3 in. thick, and 2 to 4 in. wide; grayish-brown extern.; yellow intern.; affords a dingy yellow powd.; faint, not unpleas. odor, and persist., purely bitter taste.—*Constit.:* Alstonine (chlorogenine), $C_{21}H_{20}N_2O_4+3^1/_2H_2O(?)$; alstonicine; porphyrine, $C_{21}H_{25}N_3O_2(?)$; alstonidine; porphyrosine.—Inner bark is Antiperiodic; outer bark Antirheumatic.—*Uses:* Malarial fever.—*Doses:* 2–8 grains (0.12–0.5 Gm.) as febrif.; 1 grain (0.06 Gm.) as tonic.—Fld. extr., 30–60 ♏ (2–4 Cc.).

Alstonine.—see **Chlorogenine**

Althæa.—*U. S. P.*

(Marshmallow).—Dried root of Althæa officinalis, L. Malvaceæ, fr. plants of second year's growth, and deprived of periderm.—*Habit.:* Europe; Western and Northern Asia; nat. in Eastern U. S.—*Etymol.:* Grk. "althein" to heal, to cure, referring to its medicinal qualities (Dioscorides).—*Constit.:* Asparagin, $C_4H_8N_2O_3+H_2O$; mucilage; sugar; betaine; starch.—Demulc.; Emoll.; Protective.—*Uses:* Coughs, colds, & in bronch. affect. & inflam. condit. of urinary passages.—*Dose* 30–60 grains (2–4 Gm.).—Fld. extr., 30–60 ♏ (2–4 Cc.).

Althæa Flowers and Leaves

Flowers and lvs. of Althæa officinalis, L., Malvaceæ.—*Habit.:* Europe; Western and Northern Asia; naturalized in New England; New York; Australia.—*Etymol.:* See Althæa, above.—*Constit.:* Flowers: Asparagin; pectin; mucilage; sugar.—Lvs. contain mucilage.—Emollient; Demulc.—*Uses:* Chiefly as cataplasm.

Althæa Rosea

(Althea Rose; Flores Malvæ arboreæ; Hollyhock).—Flowers of Althæa rosea, Cav. Malvaceæ. —*Habit.:* Levant; Europe; cultiv. in gardens. —*Etymol.:* "Malva," fr. Grk. "malakos," soft, mild, *i.e.* because of the emollient properties of the plant. "Althea," fr. Grk. "althein," to cure, to heal.—*Constit.:* Pectin; tannin; coloring matter.—*Uses:* Emoll., Demulc.; also as dye. Paper impregnated with the coloring matter is used as an indicator in volumetric analysis.

Althein.—see **Asparagin**

Alum.—see **Aluminum & Potassium Sulphate**

Alum, Ammonia.—see **Aluminum & Ammonium Sulphate**

Alum, Caesium.—see **Aluminum & Caesium Sulphate**

Alum, Caesium-Rubidium.—see **Aluminum & Caesium & Rubidium Sulphate**

Alum-Carmine.—see **Grenacher's Alum-Carmine**

Alum-Carmine, Acetic.—see **Henneguy's Acetic Alum-Carmine**

Alum, Chrome.—see **Chromium & Potassium Sulphate**

Alum-Cochineal.—see **Czokor's Alum-Cochineal**

Alum, Manganous Ammonium.—see **Manganese & Ammonium Sulphate**

Alum Root.—see **Geranium**

Alum, Rubidium.—see **Aluminum & Rubidium Sulphate**

Alum, Sodium.—see **Aluminum & Sodium Sulphate**

Alumina, Hydrated.—see **Aluminum Hydroxide**

Aluminium.—see **Aluminum**

Aluminum Merck.—In thin bands, bars, thick and thin sheets, thick and thin wire, and leaf (2

(Aluminium).—*Etymol.:* Fr. Lat. "alumen," alum, a name already known to Pliny for the mineral in which a characteristic oxide, alumina, was found.—Metal prod. fr. double fluoride of sodium & aluminum in electric furnace.—Al.—Tin-wh., mall., duct. metal capable of taking brill. polish.—*Sol.*, mineral acids & strong alkali solut.—*Fuses* at 700° C.—*Uses:* Techn. and industr. in form of pure metal, and as alloy (magnalium) for utensils, parts of machines, electrical conductors instead of copper; the

coarse powd. is used in aluminothermics; the fine powd. as flash-light in photography; and in manuf. of steel for absorbing occluded gases.

Aluminum Merck.—Fine powder (3

Uses: For photo. flash-lights.

do. Merck.—Coarse powder (3

Aluminum Acetate.—see **Lenicet**

Aluminum Acetate Merck.—Basic (2

Fr. aluminum acetate solut., by rap. drying on glass at a low temp.—$Al_2O.4C_2H_3O_2+4H_2O$.—Wh. cryst. or amorph. powd.—Insol. in W.—Antisep.—*Uses:* Chiefly as mordant, and as disinfect. by embalmers.—*Intern.*, diar. & dysent.—*Dose* 5–10 grains (0.3–0.6 Gm.) 3 t. p. d.

do. Merck.—8% Solution (1

8% basic aluminum acetate.—Clear, colorl. liq.—Sp. Gr. 1.044–1.048 at 15° C.—*Misc.* W.—Antisep.; Astring.—*Uses: Intern.*, diar. & dysent.—*Extern.*, as lotion for putrid wounds & in skin affect.; inj., in gonorrh.; as mouth wash & for fetid breath. Also as embalming fluid.—*Dose* 3–15 ♏ (0.2–1 Cc.) in sweetened W.—*Appl.: Extern.*, 1:15; as mouth wash, 1–3:100; & as enema, 1:150.

do. Merck.—5% Solution (1

5% basic aluminum acetate.—*Doses & Appl.:* One-half more than the 8% & for sim. purposes.

Aluminum Acetoborate Merck (4

Wh. powd.—Antisep.; Disinf.

Aluminum Acetoglycerinate Merck (2

(Glycerolate or Glycerite of Aluminum Acetate).—Antisep.

Aluminum Acetotartrate Merck.—Dry (2

(Alsol).—Colorl. cryst.—*Sol.*, compl. but slowly in W.; insol. A., E., G.—Energetic non-poison. Disinf. & Astring.—*Uses:* Chiefly in dis. of the air passages.—*Appl.*, in 0.5–2% solutions as nasal douche; or as snuff, with twice its weight of powdered boric acid. Conc. aqu. solut. for chilbl.; dil. 1–3% solut. used instead of solut. aluminum acetate and Burow's solut.

do. Merck.—Dry, soluble powder (2

do.—Solution.—*N. F.*

Colorl. liq.—50% so-called "aluminum aceticotartrate."—Antisep.; Astring.—*Uses:* Skin dis. & as disinf.

Aluminum Arsenate Merck (4

$Al_2(AsO_4)_2$.—Wh. powd.—*Sol.*, acids; sl. W.

Aluminum Benzoate Merck (10

$Al_2(C_7H_5O_2)_6$.—Wh. cryst. powd.—*Sol.*, v. sl. W.

Aluminum Bichromate.—see **Aluminum Dichromate**

Aluminum Bifluoride Merck (7

$3(Al_2F_6).4HF+10H_2O$.—Wh., cryst. powd.—*Sol.*, v. sl. W.

Aluminum Borate Merck (4

$2Al_2O_3.B_2O_3+3H_2O$.—Wh. granular powd.—*Sol.* W.—*Uses: Techn.*, in glass industry.

Aluminum Boroformate Merck (8

Wh. cryst.; sweet, faintly astring. taste.—*Sol.* W., dil. A.—Disinf. & Astring., like aluminum acetotartrate.—*Uses:* In throat dis. of children, in form of gargle.

Aluminum Borolannate.—see **Cutal**

Aluminum Borotannotartrate.—see **Cutal, Soluble**

Aluminum Borotartrate.—see **Boral**

Aluminum Bromide Merck.—Pure (5

$Al_2Br_6+12H_2O$.—Wh. to yellowish, deliquesc. cryst.—*Sol.* W., A., CS_2.

do. Merck.—Anhydrous (80

Wh. to yellowish cryst. scales; fumes strongly in air.—*Uses:* In organic chemical synthesis.

Aluminum Carbide

Fr. aluminum salts w. carbon in electric furnace.—Al_4C_3.—Greenish-gray, pulv. mass; decomp. w. water, with liberation of methane.—*Sol.*, hot. conc. nitric acid.

Aluminum Carbonate (8

$Al_2(CO_3)_2$.—Chalky-wh., eas. pulveriz., tastel. lumps.—Mild Stypt.; Astring.—*Uses:* Ocular affect., croup, diarrh., hemoptysis, cutan. erupt., hyperidrosis, &c.

Aluminum Chloride Merck.—Pure, cryst. (1

$Al_2Cl_6+12H_2O$.—Yellowish-wh., gran., cryst. powd.—*Sol.* W., A., E.—*Uses:* Locomotor ataxia; also as disinfect.—*Dose* $1^1/_2$–4 grains (0.1–0.25 Gm.) sev. t. p. d.—*Caut.* Keep dry & from moist air.

do. Merck.—Sublimed, anhydrous.—For synthesis (4

Al_2Cl_6.—Yellowish, cryst. mass.—*Sol.* W., A., E.—*Melt.* 180–185° C.—*Uses: Techn.*, for synthesis of organic compounds, accord. to Friedel and Crafts.—*Caut.* Keep dry and fr. moist air.

Aluminum Citrate Merck (4

$Al(C_6H_5O_7)+aq$.—Wh. powd.—*Sol.* W.

Aluminum Dichromate Merck (8

$Al_2(Cr_2O_7)_3$.—Red cryst.—*Sol.* W.

Aluminum Diiodoparaphenolsulphonate.—see **Sozoiodole-Aluminum**

Aluminum Fluoride Merck.—Pure (4

React.-prod. alumina, fluorspar, & hydrochl. acid gas at h. temp.—Al_2F_6.—Wh. powd.—Insol. W.—*Uses: Techn.*, in glass industry.

Aluminum Gallate.—see **Gallal**

Aluminum Hydroxide Merck (1

(Aluminum Hydrate; Hydrated Alumina; Precipitated Aluminum Oxide; Aluminum Tri-

hydrate).—Fr. alum by precip. w. ammonia or alkali carbonates. — $Al_2(OH)_6$. — Wh., tastel., odorl., amorph. powd.; free fr. alkali.—*Sol.*, acids & alkalies.—Astring.—*Uses: Extern.*, for inflam. affect. of skin.—*Techn.*, in manuf. of lakes with organic dyes.—*Dose* 1–10 grains (0.06–0.6 Gm.).

Aluminum Hydroxide Merck.—Pure (2

do. Merck. — Highest Purity, free fr. Alkali (3

Aluminum Hypophosphite Merck (20

$Al_2(PO_2H_2)_6$.—Wh. powd.—*Sol.* W.

Aluminum Iodide Merck.—Anhydrous (70

React.-prod. of aluminum & iodine at h. temp. in sealed tubes.—Al_2I_6.—Brown, cryst. pieces. —*Sol.*, eas. W.; A., carbon disulph.—Antisep. —*Uses:* Chem. organic syntheses.

Aluminum Naphtholdisulphonate.—see **Alumnol**

Aluminum Nitrate Merck.—Pure, cryst. (1

$Al_2(NO_3)_6 + 18H_2O$.—Colorl., deliq. cryst.—Decomp. at 150° C.—*Sol.* W.

do. Merck.—Pure, dried (3

Uses: Techn., in leather industries.

do. Merck.—II (1

Aluminum Oleate Merck (3

$Al_2(C_{18}H_{33}O_2)_6$.—Wh. to yellowish, tenacious mass.—*Sol.* A., E., B., oleic acid.—Antisep.—*Uses: Extern.*, skin dis.

Aluminum Oxalate Merck.—Pure (3

$Al_2(C_2O_4)_3 + H_2O$.—Wh. powd.—*Sol.*, in strong acids; insol. W., A.

Aluminum Oxide, Precipitated.—see **Aluminum Hydroxide**

Aluminum Oxide Merck.—Reagent.—For tannin determination by Wislicenus' method (20

Al_2O_3.—Wh., v. bulky, hygrosc. powd.—*Tests:* (*Hg; Al*) moisten w. H_2O – no gray color; no glob. of Hg or particles of Al should be visible under microscope.—*Uses:* Partic. adapted for determ. tannin without hide powd.

Note. — For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Aluminum Palmitate Merck.—Pure (2

$Al_2(C_{16}H_{31}O_2)_6$. — Yellowish-wh., gran. masses w. unct. touch.—*Sol.*, oil turpent., & petroleum, but only when *freshly made;* insol. W., A.

do. Merck.—Crude (1

Uses: Techn., for thickening lubricants, waterproofing fabrics, etc.

Aluminum Paraphenolsulphonate.—see **Aluminum Phenolsulphonate; Sozal**

Aluminum Phenolsulphonate Merck (5

(Aluminum Paraphenolsulphonate, or Sulphocarbolate). — $Al_2(C_6H_4HSO_4)_6$. — Reddish-wh. powd.; weak phenol odor; str'ly astring. taste. —*Sol.* W., A., G.—Antisep.— *Uses:* Inst. of iodof. Espec. recom. in cystitis & suppur. sores.

Aluminum Phosphate Merck (3

$Al_2(PO_4)_2$.—Wh. powd.—*Sol.*, acids.—*Uses:* As cement in admixt. w. plaster-of-Paris and sodium (or potassium) silicate.

Aluminum Rhodanide.—see **Aluminum Sulphocyanate**

Aluminum Salicylate Merck (6

$Al(C_6H_4OHCOO)_3$.—Reddish-wh. powd.—*Sol.*, ammonia and alkalies; insol. W. & A.—Antisep. —*Uses:* Dust. powd.: nasal & pharyngeal catarrh & ozena.

Aluminum Salicylate Ammoniated

Yellowish-wh. powd.—*Sol.* 9 W.—Astring.; Antisep.—*Uses:* Inflam. of nose & throat; insufflation; paint w. 20% solut. in equ. parts G. & W.

Aluminum Silicate Merck.—Pure (3

$Al_2Si_3O_9$.—Wh. mass.—Insol. W.; acids.—*Uses:* Techn., in glass industry.

Aluminum Silicofluoride Merck.—Pure (8

$Al_2F_6.3SiF_4$.—Wh. powd.—*Uses:* Techn., in glass industry, in manuf. of enamels and artif. gems.

Aluminum Sozoiodolate.—see **Sozoiodole-Aluminum**

Aluminum Stearate Merck.—Pure (4

$Al(C_{18}H_{36}O_2)_3$.—Wh. or grayish-wh. powd.—*Sol.*, warm A., oil turpentine, B., hot W.

Aluminum Sulphate Merck.—Highest Purity, Medicinal, cryst. (1

$Al_2(SO_4)_3 + 18H_2O$.—Wh. cryst.—*Sol.* 1.2 W.—*Uses:* As of alum.

do. Merck.—Pure (1

Wh. cryst.; odorl.; sw., astring. taste.—*Sol.* 1.2 W.—Extern. Antisep.; Caustic; Astring.—*Uses:* Fetid ulc. & fetid discharges; enlarged tonsils, scrof. & cancer. ulc.; endometr.; nasal polypi, &c.—*Appl.* 1–5% solut.; or conc. solut.

do. Merck.—Double refined, free fr. Iron (1

Yellowish-wh. to bluish-wh., cryst. mass.—*Uses:* Techn., in leather industry, and paper manuf.—*Caut.* Keep dry.

do. Merck.—Commercial (1

Aluminum Sulphide Merck (10

Fr. heating aluminum in presence of sulphur. —Al_2S_3.—Yellow cryst.; bitter taste.—Decomp. by water.

Aluminum Sulphocarbolate. — see **Aluminum Phenolsulphonate; Sozal**

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Aluminum Sulphocyanate Merck (6
(Aluminum Sulphocyanide; Aluminum Rhodanide).—$Al_2(CNS)_6$.—Yellowish powd.—*Sol.*, v. sl. W.—*Uses:* Techn., in textile industry.—*Caut.* Keep dry & fr. air.

Aluminum Tannate Merck (4
Light brown powd.—Antiseptic; Styptic; Astringent.

Aluminum Tannotartrate Merck (20
Yellowish-wh. lamellæ or powd.; str. astring. taste.—*Sol.* 2 W.—Astring.; Antisep.—*Uses:* Rhinolaryngological practice, for catarrhal troubles. Can be insufflated plain or mixed; or applied in a gargle.

Aluminum Tartrate Merck.—Pure (7
Wh. powd.—*Sol.*, ammonia and acids; insol. W.

Aluminum Trihydrate.—see **Aluminum Hydroxide**

Aluminum & Ammonium Chloride Merck (10
Double salt, fr. aluminum chloride by act. dry ammonia followed by heat. in stream of hydrogen.—$Al_2Cl_6.2NH_4Cl$.—Wh. cryst.—*Sol.* W.

Aluminum & Ammonium Sulphate Merck (1
(Ammonia Alum).—$Al_2(NH_4)_2(SO_4)_4+24H_2O$.—Wh., transp., regular cryst.; pecul. styp., sweet taste.—*Sol.* W.—*Melt.* 92° C.—Astring.; Emet.; Purg.; Styp.; Diuret.—*Uses:* Purifying drinking-water.—*Techn.*, in baking powders, galvanostegia, etc.—*Incomp.*, iron, zinc, alkalies.

Aluminum & Caesium Sulphate Merck (80
(Caesium Alum).—$Al_2Cs_2(SO_4)_4+24H_2O$.—Colorl. cryst.—*Sol.* W.

Aluminum & Caesium & Rubidium Sulphate Merck (40
(Caesium-Rubidium Alum).—$Al_2CsRb(SO_4)_4+24H_2O$.—Colorl. cryst.—*Sol.* W.

Aluminum & Potassium Chloride Merck (5
$Al_2Cl_6.2KCl$.—Wh., cryst. powd.—*Sol.* W.

Aluminum & Potassium Paraphenolsulphonate Merck (5
Combination of paraphenolsulphonic acid w. potass. aluminate.—$Al_2K_2(C_6H_4OHSO_3)_8$.—Wh. to reddish cryst.—*Sol.* W.—Antisep.; Astring.; Styptic.—*Uses:* Indol. ulcers and in mouth-washes.—*Appl.*, in 5–20% solut.

Aluminum & Potassium Salicylate.—see **Potassium & Aluminum Salicylate**

Aluminum & Potassium Sulphate Merck.—Highest Purity, Medicinal, cryst. or powd. (1
(Alum [*U. S. P.*]; Potassium, Alum).—$Al_2K_2(SO_4)_4+24H_2O$.—Large, colorl., octah., or cubic cryst., or v. fine, wh. powd.; astring. taste; acid react.—*Sol.* G., 9 W. at 25° C.; 0.3 boil. W.; insol. A.—*Melt.* 92° C.—Astring.; Irrit.; Emetic; Styp.—*Uses: Intern.*, night sw., diar., painters' colic, nerv. colic; somet. as emetic.—*Extern.*, hemorrhage, gleet, gonor., epist.—*Dose* 5–15 grains (0.3–1 Gm.) 3 to 4 t. p. d., in water; emetic, 1–2 teaspoonfuls.—*Appl.*, in substc., conc. solut., or 1–5% solut.—*Incomp.*, alkalies, lead acetate, &c.

Aluminum & Potassium Sulphate Merck.—Powder or cryst. (1
Uses: In dyeing, printing fabrics, manuf. dyes, manuf. paper, vegetable glue, marble cement, porcelain cement, & in tanning, &c.

do. Merck.— Dried (Burnt) (1
Dehydr., cryst. potassium alum.—$Al_2K_2(SO_4)_4$.—Wh., granular, powd.; odorl.; attracts moist. fr. air.—*Sol.* 20 W. at 15° C.—Eschar.; Astring., &c.—*Uses:* Destroy exub. granul., & as alum, cryst.—*Caut.* Keep well stoppered, & from air.

do. Merck.—Pencils
Uses: Remov. exub. granulations.

do. Merck.—Pencils mounted in wood

Aluminum & Potassium Sulphocarbolate.—see **Aluminum & Potassium Phenolsulphonate**

Aluminum & Rubidium Sulphate Merck (10
(Rubidium Alum).—$Al_2Rb_2(SO_4)_4+24H_2O$.—Colorl. cryst.—*Sol.*, hot W.

Aluminum & Sodium Chloride Merck (4
By fusing aluminum and sodium chlorides.—$Al_2Cl_6.2NaCl$.—Wh. to yellowish, cryst., hygros. mass.—*Sol.*, readily in W.—*Uses:* Techn., in leather industry.

Aluminum & Sodium Silicate (6
Fr. adding aluminum hydroxide to boil. solut. of sod. silicate & hydroxide.—$Na_2SiO_3.Al_4(SiO_4)_3$.—*Uses:* Surg. dress., spinal jackets, splints, &c.

Aluminum & Sodium Sulphate Merck.—Pure, cryst. (1
(Sodium Alum).—$Al_2Na_2(SO_4)_4+24H_2O$.—Colorl., transp., octah. cryst.—*Sol.* W.

Aluminum & Zinc Sulphate Merck (2
(Zinc Alum).—$Al_2(SO_4)_3ZnSO_4$.—Wh., cryst. powd.—*Sol.* W.—*Uses:* Caustic.

do. Merck.—Sticks (2

Alumnol (10
(Aluminum Naphtholdisulphonate).—React. prod. betanaphthol-bariumdisulphonate & aluminum sulph. in molec. prop.—$Al_2(C_{10}H_5.OH.[SO_3]_2)_3$.—Wh. powd.; solut. fluoresces blue; darkens on expos.—*Sol.* W., G.; sl. in A.—Astring.; Antisep.—*Uses: Extern.*, 0.5–2% solut. for dress. suppur. wounds & absc.; 4% solut. in ac. blennor.; 0.25–1% solut. as gargle; 1% inj. for gonor.; also in gynecol. practice; 10–20% solut. as caustic.—*Incomp.*, alkalies.

Alveloz
Inspis. juice Euphorbia heterodoxa, Muell. Arg.—Fibrin-solvent & Mild Caust.—*Uses:* Cancer & syph. ulc.

Alypin (80

(Benzoyltetramethyldiaminoethylisopropylalcohol Hydrochloride). — $C_2H_5.(CH_2.N:[CH_3]_2)CO.(CH_2.N:[CH_3]_2.HCl).CO.C_2H_5$.—Wh., cryst., bitter powd.—*Sol.* A., W.—*Melt.* 169° C.(when dried at 100° C.).—Loc. Anesth.—*Uses:* Laryngology, ophthalmology, dentistry, &c. Soluts. neutral, & may be sterilized.—*Appl.* 2–10% solut.

Alypin Nitrate (80

Alypin salt intended for use where the simultaneous exhibition of silver nitrate is desired.

Amadou.—see **Polyporus**

Amalgams.—see under **Copper, Sodium, Zinc, Tin, & Zinc-Tin**

Amaniline.—see **Choline**

Amapa-Milk

Milky sap of the bitter bark of Plumeria fallax, Müll. Arg. Apocynaceæ.—*Habit.:* Brazil (Para and Amazonas).—*Etymol.:* "Amapa" is the Brazilian name of the plant.—*Uses:* Antimalarial; Vermif.—*Dose:* Children, 2 ♏ (0.12 Cc.) for each year of age.—*Extern.*, in cancerous sores.

Amarine Merck.—Cryst. (75

(Triphenyldihydroglyoxalin; Isohydrobenzamide).—$C_{21}H_{18}N_2$, or $(C_6H_5.C.NH)_2CH.C_6H_5$.—Lustr., wh. cryst.; tastel. w. bitter after-taste.—*Sol.* A., E.—*Melt.* 113° C.—*Caut.* Poison!

Ambergris (200–600

Morbid(?) concretion fr. intest. tract of the sperm whale, Physeter (Catodon) macrocephalus, L. Cetaceæ.—*Habit.:* Tropical seas or sea shores.—*Etymol.:* Fr. "anbar" the Arabic name for the drug.—Irreg. gray or grayish-brown (or black), streaked or mottled, waxy, opaque masses; pecul. odor; sl't. taste.—Sp. Gr. 0.8–0.92.—*Melt.*, 60–62.5° C.; inflam'ble; alm. compl. volat. on heat.—*Sol.* E., C., hot A., fats, volat. oils; insol. solut. KOH.—*Constit.:* Fatty oil; ambrein (cholesterin, abt. 80–85%); benzoic acid.—Antihyst.; Aphrod.; Antispasm., & Stim.—*Uses:* Chiefly in perfumery as tincture and essence for fixing delicate odors.—*Doses:* 5–20 grains (0.3–1.3 Gm.).—Tinct., 10–30 ♏ (0.6–2 Cc.).

Amber Seed., *Ambrelle.* } —see **Abelmoschus**

American Alder.—see **Alnus Serrulata**

American Hellebore.—see **Veratrum**

American Ipecac.—see **Gillenia**

American Ivy.—see **Ampelopsis**

American Larch.—see **Larix**

American Spikenard.—see **Aralia**

American Veratrum.—see **Veratrum**

Amianthus.—see **Asbestos**

Amidin.—see **Holocaine Hydrochloride**

Amidoacetanilide, Para-.—see **Phenylenediamine, Para-**

Amidoazobenzene Merck (50

(Aniline Yellow; Paramidoazobenzene; Paraamidodiphenylimide).—Intermed. product obtained in manuf. of Acid Yellow and indulin.—$C_{12}H_{11}N_3$, or, $C_6H_5N_2.C_6H_4.NH_2[1:4]$.—Yellow. cryst.—*Sol.* A., E.—*Melt.* 126° C.—*Boil.* 360° C.

Amidoazobenzene Hydrochloride Merck (20

(Spirit Yellow). — $C_{12}H_{11}N_3HCl$. — Steel-blue cryst.—*Sol.*, sl. W. w. yellow color.—*Uses:* Coloring lacquers.

Amidoazobenzeneazobetanaphthol.—see **Sudan Red III, Fat Dye**

Amidoazotoluene (Ortho-) Merck (80

(Toluazotoluidine).—Fr. orthotoluidine by nitrous acid.—$C_{14}H_{15}N_3$, or, $CH_3.C_6H_4.N:N.C_6H_3(CH_3).NH_2$.—Red cryst.—*Sol.* A.—*Melt.* 100° C.

Amidobenzene (or, *-ol*).—see **Aniline**

Amidocresol (Para-) Hydrochloride Merck (80

Deriv. of cresol, combined with hydrochl. acid. — C_7H_9ON, or, $C_6H_3(CH_3)OH(NH_2)[1:2:6]$.— Wh. to grayish-wh. cryst.—*Sol.* W., A., E.—*Melt.* 159–161° C.

Amidoethane.—see **Ethylamine**

Amidol = Diaminophenol Hydrochloride.—see **Diaminophenol Hydrochloride**

Amidomercuric Chloride.—see **Mercury Ammoniated**

Amidomethane.—see **Methylamine**

Amidophenol (Ortho-) Hydrochloride Merck (30

(Oxaniline Hydrochloride).—C_6H_6NOCl, or, $C_6H_4(NH_2)(OH)HCl$.—Redd. cryst.—*Sol.* A., W.

Amidophenol (Para-) Merck.—Purest, cryst. (10

(Para-amidophenol).—Fr. paranitrophenol by reduct.—C_6H_7NO, or, $C_6H_4(NH_2)(OH)[1:4]$.—Cryst. powd.—*Sol.* W., A.; darkens on expos.—*Melt.* 184° C.—*Uses:* Textile dyeing; and in photography as a developer.

do. Merck.—Technical, cryst. (4

Amidophenol (Para-) Hydrobromide Merck (100

C_6H_6NOBr, or, $C_6H_4(NH_2)(OH)HBr$.—Cryst.—*Sol.* W., A.

Amidophenol (Para-) Hydrochloride Merck (4

C_6H_8NOCl, or, $C_6H_4(NH_2)(OH)HCl$.—Cryst.—*Sol.* W., A.

do. Merck.—Highest Purity (12

Amidophenol (Para-) Salicylate Merck (75

$C_{13}H_{13}NO_4$, or, $C_6H_4(NH_2)(OH)C_7H_6O_3$.—Wh. powd.—*Sol.* A.

Amidotetramethyldiamidodiphenylmethane Hydrochloride.—see **Auramine Yellow**

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Amidourea Hydrochloride.—see **Semicarbazide Hydrochloride**

Aminoacetophenetidine.—see **Phenocoll**

Aminoalphatrimethylbenzene. — see **Cumidine, Pseudo-**

Aminoazobenzeneazobetanaphthol. — see **Sudan Red III, Fat Dye**

Aminodimethylbenzene (or, *-ol*).—see **Xylidine**

Aminoethane.—see **Ethylamine**

Aminoform.—see **Hexamethylenamine**

Aminomalonylurea.—see **Uramil**

Aminoxylene (or, *-ol*).—see **Xylidine**

Ammonia Alum.—see **Aluminum & Ammonium Sulphate**

Ammonia Anhydrous.—Liquid (1

Ammonia gas liquefied by cold & pressure.—NH_3.—Liq., produc. great cold by its own evap. All properties of amm. intensified.—*Boil.* 38.5° C. at 760 Mm.—*Uses:* Techn., for freezing purposes, &c.—Sold in str. iron cylinders.—*Caut.* Great care in storing or opening.

Ammonia-Carmine. — see **Beale's Ammonia-Carmine**

Ammonia Water.—see **Water Ammonia**

Ammoniac (1

(Gum Ammoniac).—Gum-resin from Dorema Ammoniacum, Don. Umbelliferæ. — *Habit.:* Persia and Northern India; also Southern Siberia.—*Etymol.:* "Ammoniacum," Lat., prob'y corruption of the Lat. "armeniacum," indigenous to Armenia.—Irreg., rounded tears, yellowish outside and whitish within, opaque, brittle when cold, but soft when warm; also masses, darker in color and less homogen.; peculiar odor; sl. sweetish, bitter, somew. acrid taste.—Sp. Gr. 1.207.—*Constit.:* Volat. oil; resin; salicylic acid; resinotannol (Tschirch); gum; ferulic acid.—*Sol.*, partly in W., A., E., vinegar, and alkal. solut.; forms emuls. with W.—Stim.; Expector.; Diur.; Diaph.; Emmen.—*Uses: Intern.*, chronic catarrh, asthma, colds, etc.—*Extern.*, indol. tumors & white swelling of joints; also as plaster. — *Techn.*, ingred. in porcel. cements.—*Dose* 5–15 grains (0.3–1 Gm.) in pill or emuls.

Ammoniated Iron.—see **Ammonium Chloride, Ferrated**

Ammoniated Mercury.—see **Mercury Ammoniated**

Ammonio-cupric Salts.—see **Copper & Ammonium** Salts

Ammonio-ferric Alum.—see **Iron & Ammonium Sulphate, Ferric**

Ammonio-ferrous Sulphate.—see **Iron & Ammonium Sulphate, Ferrous**

Ammonium Acetate Merck.—Cryst. (1

Fr. glacial acetic acid satur. w. dry amm. gas.—*Etymol.:* Ammonium, fr. "sal ammoniacum," *i.e.*, salt of Ammon, because this was first discovered in the camel's dung at the temple of Jupiter Ammon in Lybia. According to others derived fr. "sal armeniacum" because first introduced into commerce by Armenian merchants.—$NH_4C_2H_3O_2$, or, $CH_3.COONH_4$.—Wh. cryst.—*Sol.*, all prop. W.—Diaph.; Refrig.; Antipyr.—*Uses:* Scarlet fever, cyst.; in febr. dis., w. carbonic acid water; alcoh. pois'ng; also as antid. to formaldehyde intoxication.—*Dose* 15–30 grains (1–2 Gm.) 6 or 8 t. p. d., in sweet. carbonic-acid W.—*Caut.* Keep well stoppered.

Ammonium Acetate.—Solution.—*U. S. P.* (1

(Spirit of Mindererus).—Not less than 7% of the salt.—Colorl., neutral, or faintly acid, liq.—Diaph.; Antipyr.; Diur.— *Uses: Intern.*, fevers, dysmenor., mumps, scarlat., &c.—*Extern.*, as collyrium w. laudanum in chronic ophthalmia, & as lotion on contusions, porrigo, & o. skin dis.—*Dose* 60–720 ♏ (4–45 Cc.).

do.—Concentrated Solution.—*N. F.* (1

Abt. 3 times strength of the U. S. P. solut.—*Dose* $^1/_3$ that of preceding.

Ammonium Acetate Merck.—Reagent (2

$CH_3.COONH_4$.—Wh., hygrosc., cryst. mass.—*Sol.*, eas. A., W.—*Tests:* (*Res.*) ignite 3 Gm.—none wghble.—(*Cl*) 1 Gm.+20 Cc. H_2O+5 Cc. HNO_3 (sp. gr. 1.153)+solut. $AgNO_3$ – no turb.—(H_2SO_4) 1 Gm.+20 Cc. H_2O+1 Cc. HCl+ solut. $BaCl_2$ – no ppt. ($BaSO_4$) within 12 hrs.—(*Heavy Metals*; *Earths*) 5 Gm.+100 Cc. H_2O+ aqu. H_2S – no react.; add NH_4OH (sp. gr. 0.96) & solut. $(NH_4)_2C_2O_4$ – no color or turb.—*Uses:* Determ. Pb & Fe.

Note. — For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Ammonium Anacardate Merck ('75

(Acid Ammonium Anacardate).—Amm. compound of beta & delta resinous acids of Anacardium occidentale, L. (Cashew nut).—Brown, viscid mass.—*Sol.* A.—Decomp. by heat w. liberat. of amm.—*Uses:* Hair dye.

Ammonium Anacardate, Acid.—see **Ammonium Anacardate**

Ammonium Arsenate Merck.—Cryst. (4

$(NH_4)_2HAsO_4$.—Wh. cryst.—*Sol.* W.—Alter.—*Uses:* Chiefly in skin dis.—*Dose* $^1/_{20}$ grain (0.003 Gm.) grad'y increased, 3 t. p. d., in much water.

Ammonium Arsenite Merck (4

NH_4AsO_2.—Wh. powd.—*Sol.* W.

Ammonium Benzoate Merck.—Fr. Natural Benzoic Acid (4

$NH_4C_7H_5O_2$.—Wh. cryst.; somet. slight benzoin odor; saline, bitter taste.—*Sol.* 5 W., 28 A.—Expector.; Antisep.; Antipyr.; Diur.; Alter.—*Uses:* Bronch., asthma, &c.; gastro-intest. dis.;

rheumat., gout, nephritis, &c.—*Dose* 10–30 grains (0.6–2 Gm.) 3 or 4 t. p. d., in syrup or W.—*Caut.* Keep well stop. Loses amm. on expos.

Ammonium Benzoate Merck.—Fr. Toluene-benzoic Acid (2

Wh. cryst. or scales.

do. Merck.—Fr. Urine-benzoic Acid (9

Ammonium Biborate.—see **Ammonium Borate**

Ammonium Bicarbonate Merck.—Pure, cryst. (1

(Acid Ammonium Carbonate; Ammonium Hydrogen Carbonate).—NH_4HCO_3.—Large, transp., trimet. cryst.—*Sol.* W., A.—Decomp. at 60° C.—Antacid; Stim.—*Uses:* Acid ferment. of stom.; stim. in depressed condit.—*Dose* 5–15 grains (0.3–1 Gm.).

Ammonium Bichromate.—see **Ammonium Dichromate**

Ammonium Bifluoride Merck (3

(Hydrogen Ammonium Fluoride; Acid Ammonium Fluoride).—$NH_4F.HF$.—Colorl. cryst.—*Sol.* W.—*Uses:* In chem. analysis for decompos. silicates.—*Caut.* Keep well closed.

do. Merck.—Free fr. Arsenic (1

$NH_4F.HF$.—*Uses:* Etch. glass; improperly inst. of Pasteurizing for prevent. second. fermentation & cloudiness in export-beer and wine in quant. of 2 Gm. per hectoliter; purifying and cleansing various parts of beer-testing apparatus, tubes, etc., in 0.4% aqu. solut.

Ammonium Bimalate Merck.—Cryst. (40

$NH_4HC_4H_4O_5$.—Wh. cryst.—*Sol.* W.

Ammonium Binoxalate Merck.—Highest Purity (2

(Ammonium Bioxalate; Acid Ammonium, or Ammonium Hydrogen, Oxalate).—$NH_4HC_2O_4 + H_2O$.—Colorl., trimet. cryst.—*Sol.* W.—*Uses:* Remov. ink stains & ecchymotic spots on face.

do. Merck.—Technical (1

Wh., cryst. powd.

Ammonium Biphosphate Merck.—Pure (2

(Ammonium Phosphate, Monobasic; Acid Ammonium Phosphate).—$(NH_4)H_2PO_4$.—Wh., transp., monocl. prisms.—*Sol.* W.—*Uses:* As baking powd. in admixt. w. sod. bicarbonate.

Ammonium Bisulphate Merck.—Pure, cryst. (1

(Ammonium Hydrogen Sulphate; Acid Ammonium Sulphate).—NH_4HSO_4.—Colorl. cryst.—*Sol.* W.—*Dose* 10–30 grains (0.6–2 Gm.).

Ammonium Bisulphite Merck (6

NH_4HSO_3.—Wh., cryst.—*Sol.* W.—Antisep.—*Uses: Intern.*, ferment. dyspep.—*Extern.*, wash in sore mouth & skin affect.—*Dose* 10–30 grains (0.6–2 Gm.).

Ammonium Bitartrate Merck (4

(Acid Ammonium Tartrate).—$NH_4HC_4H_4O_6$.—Wh. cryst.—*Sol.* W.—*Uses:* Baking powd.

Ammonium Borate Merck.—Cryst. (4

(So-called "Ammon. Biborate").—$(NH_4.HB_4O_7) + 3H_2O$.—Wh. cryst.—*Sol.* 12 W.—*Uses:* Renal colic, chron. cyst., &c.; w. codeine in pulm. tuberc.—*Dose* 10–20 grains (0.6–1.3 Gm.) every hour in W. with licorice.—*Caut.* Stopper well.

Ammonium Borocitrate Merck (4

Wh., cryst. powd.—*Sol.* W.—*Uses:* As of ammonium borate.

Ammonium Bromide Merck (1

NH_4Br.—Wh., cryst. powd., or colorl. cryst.; pung., saline taste.—*Sol.* W., A.—Volat. h. temp. without melting.—Nerve Sed.—*Uses:* Epilepsy, delir. trem., nerv. headache, &c.; in photography for making silver bromide.—*Dose* 15–30 grains (1–2 Gm.) several t. p. d., in dil. solut.—*Incomp.*, acids, acid salts, spirit of nitrous ether.

Ammonium Camphorate Merck (35

(Acid Ammonium, or Ammonium Hydrogen, Camphorate; Ammonium Bicamphorate).—$NH_4HC_{10}H_{14}O_4 + 3H_2O$.—Wh., cryst. powd.—*Sol.* W.—Stim., Nerve Sed.—*Dose* 1–3 grains (0.06–0.2 Gm.).

Ammonium Carbamate Merck (20

("Anhydride" of Ammonium Carbonate; Ammonium Carbaminate).—React.-prod. carbon dioxide & ammonia gas.—$NH_4NH_2CO_2$.—Wh., v. volat. cryst. powd.—*Sol.* W.—Stim.

Ammonium Carbaminate.—see **Ammonium Carbamate**

Ammonium Carbazotate.—see **Ammonium Picrate**

Ammonium Carbolate.—see **Ammonium Phenate**

Ammonium Carbonate Merck.—Lumps, cubes, or powd. (1

("Hartshorn").—React.-prod. of heated amm. salts & chalk.—Mixt. of acid amm. carbonate, $CO(OH)ONH_4$, & amm. carbamate, $CO(NH_2)ONH_4$.—Wh., hard, transl., striated masses; str. amm. odor; sharp, saline taste; efflor. in air.—*Sol.* 5 W. at 15° C., & in 4 W. at 25° C.; partly A.; 5 G.; decomp. by hot W.—Volat. compl. w. heat.—Rubef.; Card. Stim.; Expector., &c.—*Uses: Intern.*, syncope, heart fail., pneum., phth., & hyst.—*Extern.*, rubefacient.—*Techn.*, in separation of cacao constituents, baking powders, washing woolens, dyeing, manuf. of rubber articles, etc.—*Dose* 5 grains (0.3 Gm.) ev. 2 hrs.—*Incomp.*, acids & acid salts.—*Caut.* Keep well stoppered.

Ammonium Carbonate Merck.—Reagent (2

$(NH_4)HCO_3.(NH_4)NH_2CO_2$.—Mixt. ammonium acid carbonate & ammon. carbamate.—Cryst., wh., transl. mass; effloresc. & bec. opaque.—*Tests:* (*Res.*) ignite 5 Gm. – none wghble.—(H_2SO_4) 5 Gm. + 100 Cc. H_2O + 10 Cc. HCl (sp gr. 1.124), boil, & add solut. $BaCl_2$ – no ppt. ($BaSO_4$) within 12 hrs.—(*Cl*; $H_2S_2O_3$) 2 Gm.

+50 Cc. H_2O+10 Cc. HNO_3 (sp. gr. 1.153)+ solut. $AgNO_3$–no turb.—(*Heavy Metals*) 5 Gm. +30 Cc. H_2O+30 Cc. dil. $C_2H_4O_2$+NH_4OH (sp. gr. 0.96)+few drops aqu. $(NH_4)HS$–no ppt., & no green or brown color.—(*$NH_4.SCN$*) 1 Gm. +20 Cc. H_2O+2 Cc. HCl (sp. gr. 1.124)+1 drop solut. $FeCl_3$–no red color.—(*Tar Bases*) 1 Gm.+5 Cc. HNO_3, & evap. on W.-bath to dryness–residue must be pure white.—*Uses:* Separ. earths fr. Mg, As fr. Sb, &c.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Ammonium Carbonate, "Anhydride."—see **Ammonium Carbamate**

Ammonium Carminate Merck (75

Mixt. of carmine and ammonia.—*Uses:* Dyeing microscopic specimens.—See also Hoyer's Ammonium Carminate.

Ammonium Chloride Merck.—Pure, granular or powd. (1

(Muriate of Ammonia; Sal Ammoniac).—NH_4Cl. —Wh., cryst. powd.; odorl.; cool saline taste.—*Sol.* 3 W., 5 G. at 15° C.; (in 3 W., 80 A., & 5 G., at 25° C.; 1 boil. W.–U. S. P.).—Sublimes completely.—Stim.; Expector.; Antineur.—*Uses:* Bronch. affect., hepatic congest., pelvic cellul., musc. rheumat., neural., chronic gland. enlarg., hemicrania, senile gangr., dysmenor., leucor., &c.—*Dose* 5–30 grains (0.3–2 Gm.) sev. t. p. d.

Note.—Being free fr. all objectionable impurities, this salt is to be preferred for internal use.

do. Merck.—Purified, lumps or powd. (1

Wh. or greenish-wh., transl., tough, fibr., cryst. mass, or fine powd.; pung., saline taste.—*Uses:* Techn., in dyeing, printing fabrics, soldering, tinning, galvanizing iron, electric batteries, preparing o. ammonium salts, etc.

do. Merck.—Semipurified (1

Ammonium Chloride Merck.—Reagent (1

NH_4Cl.—Wh., cryst. powd.—*Sol.*, eas. W.—*Tests:* (*Res.*) gently ignite 3 Gm.–none wghble. —(*Phosphate; Arsenate*) 5 Gm.+20 Cc. H_2O+3 Cc. magnesia mixt.+10 Cc. NH_4OH (sp. gr. 0.96)–no ppt. within 12 hrs.—(*Heavy Metals; Earths*) treat 20 Cc. each of 1:20 aqu. solut. w. *a:* aqu. H_2S; *b:* NH_4OH; *c:* aqu. $(NH_4)HS$; *d:* $(NH_4)_2C_2O_4$–no visible change in any case.—(*H_2SO_4*) 10 Cc. of 1:10 solut.+few drops HCl+ solut. $BaCl_2$–no ppt. ($BaSO_4$) within 12 hrs. —(*$NH_4.SCN$*) 1 Gm.+10 Cc. H_2O+few drops HCl+1 drop solut. $FeCl_3$–no red color.—(*Tar Bases*) evap. 1 Gm.+5 Cc. HNO_3 (sp. gr. 1.153) on W.-bath to dryness–res. pure white.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Ammonium Chloride Ferrated Merck (1

(Ammoniated Iron; Ammonio-chloride of Iron). —2.5% ferric chloride & 97.5% amm. chloride. —Reddish-yellow powd.—*Sol.* W., diluted A.—Aper.; Chalyb.—*Uses:* Rachitis, amenor., scrof., chlor., epilepsy, catarrh, &c.—*Dose* 4–12 grains (0.25–0.75 Gm.)—*Caut.* Keep well stoppered.

Ammonium Chromate Merck.—Neutral, pure (3

$(NH_4)_2CrO_4$.—Yellow need.; evolve amm. in air. —*Sol.* W.

Ammonium Citrate Merck (2

(Neutral Ammonium Citrate).—$(NH_4)_3C_6H_5O_7$. —Wh. powd.—*Sol.* W.—*Caut.* Keep from air.

do.—Solution, stronger.—*N. F.*

Abt. 66% of the salt.—Colorl., transp. liq.—Diaph.; Antipyr.; Diur.—*Uses:* Fevers, cystitis, & lithiasis. Add. of 4 vol. W. makes solut. of amm. citrate of the B. P.—*Dose* 60–480 ♏ (4–30 Cc.).

Ammonium Citrate Merck.—Reagent.—Solution. —According to P. Wagner for determining citrate-soluble H_3PO_4 in Thomas slag (1

Clear, colorl. liq.; 150 Gm. citric acid & 23 Gm. NH_3-nitrogen (=27.93 Gm. NH_3) per liter.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Ammonium Citrate with Iron Phosphate.—see **Iron Phosphate with Ammonium Citrate**

Ammonium Citrate with Iron Pyrophosphate.—see **Iron Pyrophosphate with Ammonium Citrate**

Ammonium Dichromate Merck.—Highest Purity, cryst. (1

$(NH_4)_2Cr_2O_7$.—Orange cryst.—*Sol.* W.—*Uses:* Reag.

do. Merck.—Technical (1

Uses: Pyrotechn., electrotechn., glass industry, and manuf. of ink and leather.

Ammonium Diiodoparaphenolsulphonate.—see **Sozoiodole-Ammonium**

Ammonium Dithiocarbamate Merck (40

(Normal Ammonium Dithiocarbaminate).—React.-prod. of ammonia & CS_2.—$CH_6N_2S_2$, or, $NH_2.CS.SHNH_3$.—Yellow, hygros. prisms.—*Sol.* A.

Ammonium Dithiocarbonate Merck.—Reagent.—Solution (2

$CO(SNH_4)_2$+aq.—Yellow liq.; ammon. odor; abt. 10–12% $CO(SNH_4)_2$+abt. 8% NH_4Cl+sm. quant. $NH_4.SCN$ & $(NH_4)HS$.—*Tests:* (*Res.*) evap. 10 Cc. & ignite–none wghble.—(*Ammon. Carb.*) 10 Cc.+3 Cc. solut. $CaCl_2$–no ppt., even on heat.—*Uses:* Substit. for H_2S & $(NH_4)HS$.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Ammonium Embelate Merck (800

$NH_4C_9H_{12}O_2$.—Grayish-violet powd.—*Sol.*, dil. A.—*Uses:* Teniafuge.—*Dose:* Children, 3 grains (0.2 Gm.); adults, 6 grains (0.4 Gm.), in syrup or honey, or in wafers, on empty stomach, & followed by castor oil. The treatment is preceded by a milk diet for 3 days.

Ammonium Ethylsulphate Merck (15

(Ammonium Sulphethylate, or Sulphovinate). —React.-prod. of barium ethylsulphate & ammonium sulphate.—$NH_4C_2H_5SO_4$.—Colorl.cryst. —*Sol.* W.—*Melt.* 99° C.

Ammonium Ferricyanide Merck (25

$(NH_4)_3Fe(CN)_6+3H_2O$.—Red, shining, monoclinic prisms.—*Sol.* W.

Ammonium Ferrocyanide Merck (8

$(NH_4)_4Fe(CN)_6+6H_2O$. — Yellow or greenish cryst.; turn blue in air.—*Sol.* W.—*Caut.* Keep dark; stopper tight.

Ammonium Fluoride Merck.—Highest Purity (3

NH_4F.—Sm., deliq., colorl., hexag., flat cryst.; str. saline taste.—*Sol.* W.; sl. A.—Antiper.; Alter.—*Uses:* Hypertr. of spleen & in goiter.—*Techn.*, anal., & etch. glass.—*Dose* 5–20 ♏ (0.3–1.3 Cc.) of a 0.75% solut.—*Caut.* Keep in guttapercha bottles.

do. Merck.—Free fr. Arsenic.—see **Ammonium Bifluoride, free fr. Arsenic**

Ammonium Fluoride Merck.—Reagent (6

NH_4F.—Wh. cryst.—*Sol.*, eas.W.—*Tests:* (*Res.*) ignite 10 Gm.–none wghble.—(*Cl*) 5 Gm.+25 Cc. H_2O+few drops HNO_3+solut. $AgNO_3$–no turb.—(*H_2SO_4; H_2SiF_6*) 5 Gm.+25 Cc. HCl (sp. gr. 1.124)+solut. $BaCl_2$, in platin. dish–no turb.—(*Heavy Metals*) 5 Gm.+25 Cc. H_2O+ few drops HCl+10 Cc. aqu. H_2S–no change; add NH_4OH until alkal., then aqu. $(NH_4)HS$ –at most sl. greenish color, but no ppt.—*Uses:* Analysis of silicates.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Ammonium Fluoride, Acid.—see **Ammonium Bifluoride**

Ammonium Formate Merck.—Pure (5

NH_4CHO_2.—Transp., colorl., monocl. cryst.; cool. pung. taste.—*Sol.* W.—*Uses:* Chronic paral., palsy of sensat. or motion; the aqu. solut. is used as an antisep. in inhalations in affect. of the nose, throat, and fauces.—*Dose* 5 grains (0.3 Gm.).

Ammonium Gallate Merck.—Neutral (20

$NH_4C_7H_5O_5+H_2O$.— Yellow, cryst. powder.— *Sol.* W.

Ammonium Glycerinophosphate Merck.—50% (10

$(NH_4)_2PO_4.C_3H_5(OH)_2$+aq.—Colorl.liq.—Sp.Gr. 1.250 at 15° C.—*Sol.* W.—*Uses:* Deficient nerve nutrition, neurasthenia, Addison's dis., phosphaturia, convalesc. fr. influenza, &c.—*Dose* 5–10 ♏ (0.3–0.6 Cc.) several t. p. d.

Ammonium Hippurate Merck (35

(Acid Ammonium Hippurate).—$NH_4H(C_9H_8NO_3)_2+H_2O$.—Colorl. cryst.—*Sol.* W., A.

Ammonium Hydrosulphide.—see **Ammonium Sulphydrate**

Ammonium Hypophosphite Merck (2

$NH_4PH_2O_2$.—Wh., lamin. cryst.—*Sol.* W.—*Uses:* Phth., all dis. w. loss of nerve power.—*Dose* 10–30 grains (0.6–2 Gm.) 3 t. p. d.

Ammonium Hyposulphite.—see **Ammonium Thiosulphate**

Ammonium "Ichthyolsulphonate."—see **Ichthyol**

Ammonium Iodide Merck (6

NH_4I.—Wh. to yellowish-wh., hygrosc., cryst. powd.; odorl.; sharp, saline taste; unstable.—*Sol.* 0.6 W., & 9 A. at 25° C.; 0.43 boil. W., & 3.7 boil. A.—Decomp. & volat. h. temp. without melt.—Alter.; Resolv.—*Uses: Intern.*, syph., rheumat., scrof., phth., &c.—*Extern.*, lepra, psoria.—*Techn.*, in photography for preparing sensitive collodion (celloidin-collodion).—*Dose* 3–5 grains (0.2–0.3 Gm.) 6 or 8 t. p. d.—*Caut.* Keep tight & fr. light.

Ammonium Iridibromide.—see **Iridium & Ammonium Bromide**

Ammonium Lactate Merck (5

$NH_4C_3H_5O_3$.—Clear, colorl., syrupy, neut. liq.—*Sol.* W., A.—*Caut.* Keep cool. Decomposes when warm.

Ammonium Mellitate Merck.—Cryst. (200

By boil. powd. mellite (honey-stone) in amm. solut. amm. carbonate.—$C_6(COONH_4)_6+9H_2O$. —Wh. cryst.—*Sol.* W.

Ammonium Metavanadate.—see **Ammonium Vanadate**

Ammonium Molybdate Merck (4

$(NH_4)_6Mo_7O_{24}+4H_2O$.—Greenish-wh. cryst.—*Sol.*, dil. solut. amm. chloride.—*Uses:* Determining phosphoric acid, and as reagent for alkaloids.—*Techn.*, for producing patina on zinc, manuf. a blue dye, &c.

Ammonium Molybdate Merck.—Reagent (5

$(NH_4)_6Mo_7O_{24}+4H_2O$.—Large, colorless, or sl. greenish cryst.; liberate NH_3 & H_2O on heat. —*Sol.* W.—*Tests:* (*H_3PO_4*) 10 Gm.+25 Cc. H_2O +15 Cc. NH_4OH (sp. gr. 0.91)–clear solut.; add 150 Cc. HNO_3 (sp. gr. 1.20)–no yellow ppt. on stand. 2 hrs. at 40° C.—(*Heavy Metals*) 2 Gm. +5 Cc. H_2O+5 Cc. NH_4OH (sp. gr. 0.96)+10 Cc. aqu. H_2S–no green color or ppt.—(*H_2SO_4*) 1 Gm.+10 Cc. H_2O, acidul. w. HNO_3, & add solut. $Ba(NO_3)_2$–no turb.—(*Cl*) acidul. 20 Cc. 1:10 aqu. solut. w. HNO_3, & add solut. $AgNO_3$ –no turb.—*Uses:* Detect. H_3PO_4; determ. P, Pb,

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

& Bi; reagent for alkaloids, H_2O_2, tannin, free mineral acids, & tartaric acid.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Ammonium Mucate Merck (20

(Normal Ammonium Mucate).—$(NH_4)_2C_6H_8O_8$.—Wh. cryst.—*Sol.* W.

Ammonium Muriate.—see **Ammonium Chloride**

Ammonium Nitrate Merck.—Highest Purity, cryst. (1

$NH_4.NO_3$.—Colorl. cryst., us'y long, thin, rhombic prisms; deliq.; odorl.; sharp, bitter taste.—*Sol.* 0.5 W.; 20 A.—*Melt.* 152° C.—*Uses:* Laughing gas (nitrogen monoxide), freezing-mixtures, & explosives.—*Caut.* Keep well stoppered.

do. Merck.—Pure, fused (1

do. Merck.—Cryst. or gran. (1

Uses: As of preceding.

Ammonium Nitrate Merck.—Reagent (2

$NH_4.NO_3$.—Colorl. cryst.—*Sol.*, eas. W.—*Tests:* Same as for ammonium chloride, but the following in addition: (*Cl*) 1 Gm.+10 Cc. H_2O+a few drops HNO_3+solut. $AgNO_3$–no turb.—(*HNO_2*) 1 Gm.+20 Cc. H_2O+1 Cc. dil. H_2SO_4+1 Cc. fresh. prep. colorl. solut. (0.5:100) metaphenylenediamine hydrochlor.–no yellow or yellowish-brown color.—*Uses:* Aid to combustion; determ. S in coke & phosphoric acid; freezing mixtures.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Ammonium Nitrite (2

NH_4NO_2.—Clear, yellow liq.; peculiar charact. odor.—*Sol.* W.—Decomp. heat.

Ammonium Oleate Merck (3

(Ammonia Soap).—$NH_4C_{18}H_{33}O_2$.—Gelat. mass; liquefies w. heat.—*Sol.* A., E.—*Uses:* Detergent.

Ammonium Oxalate Merck.—Highest Purity (1

(Diammonium, or Normal Ammonium, Oxalate).—$(NH_4)_2C_2O_4+H_2O$.—Colorl. cryst.—*Sol.* W.—*Uses:* Chem.

do. Merck.—Pure (1

Ammonium Oxalate Merck.—Reagent (2

$(NH_4.COO)_2+H_2O$.—Colorl. cryst.—*Sol.* 25 cold W.—*Tests:* (*Res.*) ignite 3 Gm.–none wghble.—(*H_2SO_4*) 5 Gm.+200 Cc. H_2O, heat, add 10 Cc. HCl (sp. gr. 1.124) & solut. $BaCl_2$–no ppt. (*$BaSO_4$*) within 12 hrs.—(*Cl*) 1 Gm.+25 Cc. H_2O+10 Cc. HNO_3 (sp. gr. 1.153)+a few drops solut. $AgNO_3$–no turb.—(*Heavy Metals*) 1 Gm.+25 Cc. H_2O+aqu. H_2S – no react.; add 5 Cc. NH_4OH (sp. gr. 0.96) – no ppt. or green color.—*Uses:* Detect. & determ. Ca & the rarer metals (Ce, Th, Zr, &c.).

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Ammonium Oxalate, Acid.—see **Ammonium Binoxalate**

Ammonium Oxalurate Merck (75

(Ammonium Uro-oxalate).—Fr. amm. parabanate, by hot W.—$NH_4C_3H_3N_2O_4$.—Wh. to yellowish cryst.—*Sol.*, hot W.

Ammonium Oxaminate Merck (30

Fr. ammonia w. alcoholic solut. ethyl oxalate.—$CONH_2COONH_4$.—Colorl. cryst.—*Sol.* W.

Ammonium Palmitate Merck (15

(Acid Ammonium Palmitate).—$NH_4.C_{16}H_{31}O_2.C_{16}H_{32}O_2$.—Hard, wh., soapy mass.—*Sol.*, hot A., E.; insol. cold W. Decomp. by much water.—*Uses:* Techn.

Ammonium Perchlorate Merck (30

NH_4ClO_4.—Colorl., transp., rhomboh. cryst.—*Sol.* W.—*Uses:* Explosives.

Ammonium Persulphate Merck (2

$(NH_4)_2S_2O_8$.—Colorless cryst.—*Sol.* W., with turbid.; aqu. solut. evolves O. on heat.—Disinfect.; Deodor.—*Uses: Extern.*, succedaneum for potass. permang. (as in mouth washes).—*Techn.*, preserv. & deodoriz. victuals, in 0.5–2% solut.; also as reagent for albumin and indican in urine, as reducer and restrainer in photography, oxidizer for copper, etching zinc, and removing pyrogallol stains.

Ammonium Phenate Merck (3

(Ammonium Phenylate; Ammonium Carbolate).—$C_6H_5O.NH_4$.—Cryst. masses.—Sol. W.—Antisep.; Antipyr.—*Dose* 2–6 grains (0.12–0.36 Gm.).

Ammonium Phenolsulphonate Merck (2

(Ammonium Sulphocarbolate, Sulphophenate, or Sulphophenylate).—$C_6H_4OHSO_3.NH_4$.—Wh., cryst.—*Sol.* W.—Antisep.—*Dose* 1–5 grains (0.06–0.3 Gm.) sev. t. p. d.

Ammonium Phenylate.—see **Ammonium Phenate**

Ammonium Phosphate, Acid.—see **Ammonium Biphosphate**

Ammonium Phosphate Merck.—Dibasic.—Highest Purity, Medicinal (1

(Hydrogen Diammonium Phosphate; Diammonium Orthophosphate).—$(NH_4)_2HPO_4$.—Colorl., transl., monocl. prisms; odorl.; cooling, saline taste.—*Sol.* 4 W.—*Uses:* Rheum., gout.—*Dose* 5–20 grains (0.3–1.3 Gm.) 3 or 4 t. p. d. in $^1/_2$ oz. W.—*Caut.* Keep well stoppered.

do. Merck.—Pure (1

do. Merck.—Purified, cryst. (1

Ammonium Phosphate Merck.—Reagent (2
$(NH_4)_2HPO_4$.—Colorl., cryst., or white, cryst. powd.—*Sol.* 4 cold, & 0.5 boil., W.—*Tests:* (*Alkalies*) 2 Gm.+100 Cc. H_2O+excess solut. $Pb(C_2H_3O_2)_2$; filter; treat filtrate w. H_2S to remove excess Pb; filter; evap., filtrate to dryness & ignite – no alkal. res. sol. in W.—(*As*) 1 Gm.+3 Cc. solut. $SnCl_2$; shake – no darker color within 1 hr.—(*CO_2; H_2SO_4*) 1 Gm.+20 Cc. H_2O+HCl – no effervesc.; add solut. $BaCl_2$ – no ppt. ($BaSO_4$) within 12 hrs.—(*Cl*) 1 Gm.+20 Cc. H_2O+5 Cc. HNO_3 (sp. gr. 1.153)+solut. $AgNO_3$ – not more than sl. opalesc.—(*HNO_3*) 2 Gm.+10 Cc. H_2O+1 drop 1:1000 solut. indigo+10 Cc. conc. H_2SO_4 – blue color must persist for 1 hr.—(*Heavy Metals*) 2 Gm.+20 Cc. H_2O+HCl (to acidul.)+aqu. H_2S – no change; add NH_4OH until alkal. & a few drops solut. $(NH_4)HS$ – no ppt. or green color.—*Uses:* Detect. & determ. Mg, Ni, Zn, & U.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Ammonium Phosphate, Monobasic.—see **Ammonium Biphosphate**

Ammonium Phosphate Merck.—Tribasic (4
$(NH_4)_3PO_4+3H_2O$.—Colorl. cryst.—*Sol.* W.—*Uses:* In culture media.—*Caut.* Keep well stoppered; changes rap. to hydrogen diamm. phosphate.

Ammonium Phosphite Merck (15
$(NH_4)_2HPO_3+H_2O$.—Colorl., deliq. cryst.—*Sol.* W.—*Uses:* Reducing agent.

Ammonium Phosphomolybdate Merck (25
Fr. amm. molybdate & phosphoric, w. nitric, acid.—$2(NH_4)_3PO_4+24MoO_3+12H_2O$. (Formula variable).—Yellow, cryst. powd.—*Sol.*, alkalies, aqua regia.—*Uses:* Reagent for alkaloids.

Ammonium Phosphotungstate Merck (15
(Ammonium Phosphowolframate).—$24WO_3 \cdot 2(NH_4)_3PO_4+xH_2O$.—Composition variable.—Wh. powd.—*Sol.* W.

Ammonium Phosphowolframate.—see **Ammonium Phosphotungstate**

Ammonium Phtalate Merck (12
$(NH_4)_2(COO)_2C_6H_4$.—Wh. cryst.—*Sol.* W.

Ammonium Picramate Merck (100
$NH_4C_6H_4N_3O_5$, or, $NH_4.O.NH_2(NO_2)_2C_6H_2$.—Dark, orange-red, rhomboh. cryst.—*Sol.* W.

Ammonium Picrate (3
(Ammonium Picronitrate, or Carbazotate).—$NH_4C_6H_2(NO_2)_3O$.—Bright yellow scales, or prisms.—*Sol.* W.—Antipyr.; Antiper.—*Uses: Intern.*, malarial neural., periodic fevers & headache.—*Techn.*, explosives, fireworks.—*Dose* 1/4–1 1/2 grains (0.015–0.1 Gm.) 3 t. p. d., in pills.

Ammonium Picrocarminate (25
Dark red powd.—*Sol.* W.—*Uses:* Microscopy.

Ammonium Picronitrate.—see **Ammonium Picrate**

Ammonium Purpurate, Acid.—see **Murexid**

Ammonium Pyrophosphate Merck (8
$(NH_4)_4P_2O_7$.—Colorl. cryst.—*Sol.* W.

Ammonium Rhodanide.—see **Ammonium Sulphocyanate**

Ammonium Salicylate Merck.—Cryst. (2
$NH_4C_7H_5O_3$, or, $C_6H_4(OH)COONH_4$.—Colorl. cryst.—*Sol.* 0.9 W., & 2.3 A. at 25° C.; freely in boil. W., & 1 boil. A.—Antirheum.; Antipyr.; Germic.; Expector.—*Uses:* In febrile conditions, bronchitis, artic. rheumat., &c.—*Dose* 2–20 grains (0.12–1.3 Gm.), in wafers.

do. Merck.—Fr. Oil Wintergreen (18
Wh. powd.—*Sol.* W.—*Uses:* As preceding; said to act better.

Ammonium Selenate Merck (180
NH_4HSeO_4.—Colorl. cryst.—*Sol.* W.

Ammonium Selenite Merck (150
$(NH_4)_2SeO_3$.—Colorl. cryst.—*Sol.* W.—*Uses:* Test. alkaloids; also in glass industry.—*Caut.* Keep fr. light.

Ammonium Silicofluoride Merck (7
$2NH_4F.SiF_4$.—Wh., cryst. powd., or cryst.—*Sol.* W.—Antisep.

Ammonium Sozoiodolate.—see **Sozoiodole-Ammonium**

Ammonium Stearate Merck (12
$NH_4C_{18}H_{35}O_2$.—Wh., soapy mass.—*Sol.*, hot A.; insol. cold W. Decomp. by much water.

Ammonium Succinate Merck.—Pure, cryst. (18
$(NH_4)_2C_4H_4O_4$.—Transp., colorl. cryst. Lose ammonia on expos.—*Sol.* W.—*Uses: Intern.*, (usually as liquor ammonii succinatis) in spasmodic pains, partic. in spastic contractions of os uteri.—*Dose* 2–2 1/2 grains (0.12–0.15 Gm.) in aqu. solut. ev. 15 minutes.—*Caut.* Keep well stoppered.

Ammonium Sulphate Merck.—Highest Purity (1
$(NH_4)_2SO_4$.—Colorl., transp. cryst.—*Sol.* W.—*Uses:* Mostly techn., and chiefly in manuf. artif. manure.

do. Merck.—Pure (1

Ammonium Sulphate Merck.—Reagent (2
$(NH_4)_2SO_4$.—Colorl. cryst.—*Sol.* 2 cold, 1 boil. W.; insol. A.—*Tests:* (*Res.*) ignite 3 Gm. – none wghble.—(*Cl*) 2 Gm.+20 Cc. H_2O+HNO_3+solut. $AgNO_3$ – no turb.—(*Heavy Met.*) 2 Gm.+20 Cc. H_2O+H_2S (or NH_3+$[NH_4]HS$) – no react. in either case.—(*$NH_4.SCN$*) 1 Gm.+10 Cc. H_2O+few drops HCl+1 drop solut. $FeCl_3$ – no red color.—(*H_3PO_4; H_3AsO_4*) 5 Gm.+20 Cc.

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

H_2O+3 Cc. magnes. mixture+10 Cc. NH_4OH (sp. gr. 0.96) – no ppt. within 12 hrs.—(HNO_3) 2 Gm.+10 Cc. H_2O+1 drop 1:1000 solut. indigo +10 Cc. conc. H_2SO_4 – blue color should persist for 1 hr.—*Uses:* Prep. ferrous ammon. sulphate; precip. albuminoids; standardizing soluts.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Ammonium Sulphate, Acid.—see **Ammonium Bisulphate**

Ammonium Sulphethylate.—see **Ammonium Ethylsulphate**

Ammonium Sulphide.—see **Ammonium Sulphydrate**

Ammonium Sulphite Merck.—Pure, cryst. (3

$(NH_4)_2SO_3+H_2O$.—Colorl., cryst.; acrid, sulphur. taste; deliq.—*Sol.* W.—Subl. h. temp.—Antisep.—*Uses:* Fermentat. dyspep. & skin dis.—*Dose* 5–20 grains (0.3–1.3 Gm.).—*Appl.* 5–10% solut.—*Caut.* Keep well stoppered.

Ammonium Sulphocarbolate.—see **Ammonium Phenolsulphonate**

Ammonium Sulphocarbonate Merck.—10% Solution (1

(Ammonium Thiocarbonate).—Fr. ammonium carbonate and carbon disulphide.—$(NH_4)_2CS_3$.—*Uses:* In 10% solut. as insecticide on plants.

Ammonium Sulphocyanate Merck.—Pure cryst. (1

(Ammonium Sulphocyanide, Thiocyanate, or Rhodanide).—React.-prod. fr. carbon disulph., str. alc. & concentr. ammonia water.—(NH_4).SCN.—Colorl., deliq. cryst.—*Sol.* W., A.—*Uses:* Chem.—*Caut.* Keep well stoppered.

do. Merck.—Purified (1

do. Merck.—Technical (1

Uses: In double staining, and in dyeing fabrics.

Ammonium Sulphocyanate Merck.—Reagent (4

(NH_4).SCN.—Colorl. cryst.—*Sol.*, eas. W., & A.—*Tests:* (*Res.*) ignite 2 Gm. – none wghble.—(*Impur. Insol. in Alcoh.*) 1 Gm.+10 Cc. absol. alcoh. – perfectly solub., & clear solut.—(H_2SO_4) 1 Gm.+20 Cc. H_2O+few drops HCl+solut. $BaCl_2$ – no turb. within 5 min.—(*Heavy Met.*) 1 Gm.+20 Cc. H_2O+few drops $(NH_4)HS$ – no ppt., & no brown color.—(*Fe*) 1 Gm.+20 Cc. H_2O+0.5 Cc. HCl (sp. gr. 1.124) – colorl. solut.—*Uses:* Detect. Fe; reagent, partic. in forensic analysis in separation & volumetric determination of small quantities of arsenic, antimony, mercury, silver, copper, halogens, & mustard oil.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Ammonium Sulphocyanide.—see **Ammonium Sulphocyanate**

Ammonium "Sulphoichthyolate."—see **Ichthyol**

Ammonium Sulphophenate. } —see **Ammonium**
Ammonium Sulphophenylate. } **Phenolsulphonate**

Ammonium Sulphoricinate Merck (100

Brown, oint.-like masses; solut. foams.—*Sol.* A.; all prop. W.—Antisep.; Deodor.—*Uses: Extern.*, skin dis., tuberc. or o. ulcerat. muc. memb.—*Appl.* 20% solut.

Ammonium Sulphovinate.—see **Ammonium Ethylsulphate**

Ammonium Sulphydrate Merck (10

(Ammonium Sulphide; Ammonium Hydrogen Sulphide; Ammonium Hydrosulphide).—(NH_4)-HS.—Colorl., cryst. masses; turn rapidly yellow on expos.; subl. ord. temp.—*Sol.* W.—*Uses:* Group reagent in solut.; also techn., for denitrating nitrocellulose.—*Caut.* Keep well stoppered.

do. Merck.—Solution (1

Fr. satur. solut. hydrogen sulphide in 3 pts. amm., by adding 2 pts. amm.—*Uses:* Obsolete remedy for catarrhal and asthmatic affections, diabetes, etc.—*Dose* 5–10 ♏ (0.3–0.6 Cc.).—*Caut.* Keep in sm. amber bottles in a dark place.

Ammonium Sulphydrate Merck.—Reagent.—Solution (1

Solut. H_2S in NH_4.OH.—Colorl. or sl. yellow liq.; strongly alkal.—*Tests:* (*As; Sb; Sn*) 50 Cc. +HCl to acidity – copious evol. H_2S gas, but no colored ppt.—(*Res.*) evap. 10 Cc. & ignite in porcel. dish – none wghble.—(*Ammon. Carbon.*) 10 Cc.+3 Cc. solut. $CaCl_2$ – no ppt. even on heat.—*Uses:* Detect. HCN in forensic analysis; group reagent; detect. heavy metals.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Ammonium Sylvinate Merck (500

$NH_4C_{20}H_{29}O_2$.—Yellowish-wh. cryst. powd.—*Sol.*, sl. W. & A.

Ammonium Tartrate Merck.—Neutral, cryst. (2

$(NH_4)_2C_4H_4O_6$.—Colorl. cryst.—*Sol.* W.—Expector.—*Dose* 5–30 grains (0.3–2 Gm.).

Ammonium Tartrate, Acid.—see **Ammonium Bitartrate**

Ammonium Tartrate with Iron & Potassium Tartrate.—see **Iron & Potassium Tartrate with Ammonium Tartrate**

Ammonium Tellurate Merck (1200

$(NH_4)_2TeO_4$.—Wh., amorph. powd.—*Sol.*, dil. acid.—*Uses:* Reagent for various alkaloids & glucosides.

Ammonium Thioacetate Merck.—Reagent.—Solution (15

(Schiff's Reagent).—$CH_3.CO.S(NH)_4$+aq.—Clear, yellowish solut.; faint odor of ammon. sulphydrate.—Abt. 30% $CH_3.CO.S(NH)_4$.—*Tests:* (*Res.*) evap. 10 Cc. & ignite–none wghble.—(*Ammon. Carbon.*) 10 Cc.+3 Cc. solut. $CaCl_2$–no ppt., even on heat.—(H_2SO_4) 10 Cc. +10 Cc. dil. $C_2H_4O_2$+solut. BaCl–no immed. turb.—*Caut.* Reag. soon bec. turb., hence best to prepare solut. fresh.—*Uses:* Instead of H_2S as an absolutely arsenic-free substit. for ammon. sulphide & H_2S, especially in organic & forensic analyses, for pptng. metals as sulphides.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Ammonium Thiocarbonate.—see **Ammonium Sulphocarbonate**

Ammonium Thiocyanate.—see **Ammonium Sulphocyanate**

Ammonium Thionurate Merck (45

React.-prod., by boil. alloxan w. amm. carbonate & sulphite.—$(NH_4)_2C_4H_3N_3SO_6+H_2O$.—Wh. cryst.—*Sol.* W.

Ammonium Thiosulphate Merck.—Pure, cryst. (3

(Ammonium Hyposulphite).—$(NH_4)_2S_2O_3$.—Colorl. cryst.—*Sol.* W.—Antisep.—*Dose* 5–30 grains (0.3–2 Gm.) in water.—*Incomp.*, acids.

Ammonium Triborate Merck (1

$NH_4.BO_2HBO_2+1^1/_2H_2O$.—Wh. cryst.—*Sol.* W.

Ammonium Tungstate Merck.—Pure (8

(Ammonium Wolframate).—Compos. variable. —Wh. cryst.—*Sol.* W.

Ammonium Uranate Merck (18

(So-called "Uranium Oxide, Hydrated"; also "Uranium Yellow").—Sodium Uranate is the true Uranium Yellow.—React.-prod. fr. sodium uranate by ammonium chloride or sulphate. —$(NH_4)U_2O_7$+aq.—Reddish-yellow, amorph. powd.—*Sol.*, acids.—*Uses:* Techn., for painting (black) on porcelain.

Ammonium Urate Merck (20

(Acid Ammonium Urate).—$(NH_4)C_5H_2N_4O_3$.—Wh., cryst. powd.—*Sol.*, sl. in W.—Antisep.—*Uses:* Chronic eczema & o. dermic affect.—*Appl.* 4% oint.

Ammonium Urate, Acid.—see **Ammonium Urate**

Ammonium Uro-oxalate.—see **Ammonium Oxalurate**

Ammonium Valerate Merck.—White, cryst. (2

(Ammonium Valerianate).—$NH_4C_5H_9O_2+2C_5H_{10}O_2$.—Colorl., deliq. plates; valerian odor; sharp, sweet taste.—*Sol.* W., A., E.—Nerve Tonic.—*Uses:* Nerv. headache or insom., hyst. —*Dose* 2–8 grains (0.12–0.5 Gm.), several t. p. d. in pills or solut.—*Caut.* Keep well stoppered.

Ammonium Vanadate Merck.—Pure (30

(Ammonium Metavanadate).—NH_4VO_3.—Wh. powd.—*Sol.*, diffic. in W.—*Uses:* Techn., in printing on woolens, manuf. vanadium black, manuf. "indelible ink," dyeing wood black, and for producing the vanadium luster on pottery.

Ammonium Wolframate.—see **Ammonium Tungstate**

Ammonium & Iron Tartrate.—see **Iron & Ammonium Tartrate**

Ammonium & Osmium Chloride.—see **Osmium & Ammonium Chloride**

Ammonium & Platinum Salts.—see **Platinum & Ammonium** Salts

Ammonium & Potassium Bimalate Merck.—Pure (50

$NH_4K(C_4H_5O_5)_2$.—Wh., cryst. masses.—*Sol.* W.

Ammonium & Potassium Chromate Merck (3

$NH_4KCrO_4+H_2O$.—Yellow cryst.—*Sol.* W.

Ammonium & Potassium Citrate Merck (5

$NH_4K_2C_6H_5O_8$.—Wh. cryst.—*Sol.* W.

Ammonium & Potassium Fluoride Merck.—Pure (3

$NH_4F.KF$.—Wh., cryst. powd.—*Sol.* W.

Ammonium & Potassium Salts.—see **Potassium & Ammonium** Salts

Ammonium & Sodium Arsenate Merck.—Cryst. (3

$NH_4NaHAsO_4$+aq.—Wh. cryst.—*Sol.* W.

Amomum Melegueta

(Grains of Paradise; Guinea Grains; Melegueta Pepper; Paradise Seed).—Seed of Amomum Melegueta, Roscoe. Zingiberaceæ.—*Habit.:* Ceylon; tropical western coast of Africa.—*Etymol.:* Grk. "a," without, and "momos," fault, *i.e.*, a faultless spice.—*Constit.:* Volat. oil; fixed oil; acrid resin; paradol; tannin.—*Uses:* Spice; also in veterinary practice.

Ampelopsin (Eclectic) (30

Fr. bark & twigs Ampelopsis quinquefolia, Mich. (Virginia creeper).—*Sol.* W., A.—Alter.; Tonic; Expector.—*Uses:* Colds, syph., dropsy, &c.—*Dose* 2–4 grains (0.12–0.25 Gm.).

Ampelopsis

(Virginia Creeper; American Ivy; Woodbine; False Grape).—Bark and twigs of Ampelopsis quinquefolia, Mich. (Vitis hederacea Ehrh.). Vitaceæ.—*Habit.:* U. S.—*Etymol.:* Fr. Grk. "ampelos," grapevine, and "opsis," resembling, referring to its climbing habit. "Quinquefolia," fr. Lat. "quinque," five, and "folium," leaf, *i.e.*, it has five leaflets together.—*Constit.:* Albumin; pyrocatechin; sugar; tartaric acid; calcium and potassium tartrates; glycolic acid; pectin.—

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Alterative; Tonic; Diur.—*Uses:* Dropsy, syphilis, bronchitis, etc.—*Dose:* Fld. extr., 5–10 ♏ (0.3–0.6 Cc.) alter.; 10–20 ♏ (0.6–1.3 Cc.) diuret.

Amygdalin Merck (30

Fr. seeds Amygdalaceæ, Drupaceæ, & Pomaceæ, princip. fr. almonds.—$C_{20}H_{27}NO_{11}+3H_2O$.—Wh., sl'y bitter cryst.—*Sol.* W.; sl. in A.—*Melt.* 200° C. w. decompos.—Expector.; Demulc.—*Max. D.* $^1/_2$ grain (0.03 Gm.) single; $1^1/_2$ grains (0.1 Gm.) per day.—*Caut.* Keep well stoppered.

Amygdophenin

(Phenetidin Amygdalate).—$C_6H_4.OC_2H_5.NH.CO.CH.OH.C_6H_5$.—Wh. leaflets.—*Sol.*, eas. A.; diffic. W.—*Melt.* 140.5° C.—Antineuralgic.—*Uses:* Artic. rheumat.—*Dose* 15 grains (1 Gm.) sev. t. p. d.

Amyl Acetate Merck.—Pure (1

(Amylacetic Ester; Isoamyl Acetate).—React.-prod., amyl alc. w. sulphuric & acetic acids.—$C_7H_{14}O_2$, or, $C_5H_{11}.C_2H_3O_2$.—Colorl., transp. liq.; arom., ether. odor.—Sp. Gr. 0.876 at 15° C.—*Sol.*, all prop., A., E.—*Boil.*, abt. 140° C.—*Uses:* Perfumery, manuf. mineral waters and syrups, as burning fluid in Hefner lamp as a standard light unit.

do. Merck.—Technical (1

(Pear Oil).—*Uses:* As solvent, etc.

Amyl Alcohol, Tertiary.—see **Amylene Hydrate**

Amyl Amidoformate.—see **Amyl Carbamate**

Amyl Benzoate Merck (6

(Isoamylbenzoic Ester).—React.-prod., ethyl benzoate & isoamyl alc.—$C_{12}H_{16}O_2$, or, $C_5H_{11}.C_7H_5O_2$.—Transp. liq.—Sp. Gr. 1.004 at 0° C.—*Sol.* A.—*Boil.* 260° C.

Amyl Bromide Merck (8

(Isoamyl Bromide).—Fr. isoamylic alc., by bromine, w. phosphorus.—$C_5H_{11}Br$.—Clear, colorl. liq.—Sp. Gr. 1.219 at 15° C.—*Sol.* A.—*Boil.* 120° C.—Germic.; Antisep.

Amyl Butyrate Merck (4

(Isoamylbutyric Ester).—React.-prod. of amyl alcohol, butyric & sulphuric acids.—$C_9H_{18}O_2$, or, $C_5H_{11}.C_4H_7O_2$.—Colorl. liq.—Sp. Gr. 0.882 at 0° C.—*Sol.* A.—*Boil.* 178° C.—*Uses:* Flavoring for liqueurs & bonbons.

do. Merck.—Highest Purity (30

Amyl Carbamate Merck (40

(Amyl Amidoformate; Amyl Urethane; Isoamylcarbamic Ester).—React.-prod. of cyanic acid & amyl alc.—$C_6H_{13}NO_2$, or, $C_5H_{11}.NH_2CO_2$.—Wh. cryst.—*Sol.* A., E.—*Melt.* 60° C.—*Boil.* 220° C.

Amyl Carbolate.—see **Amyl Phenate**

Amyl Chloride Merck (10

(Isoamyl Chloride).—Fr. isoamyl & hydrochl. acid.—$C_5H_{11}Cl$.—Colorl. liq.—Sp. Gr. 0.880 at 15° C.—*Sol.* A.—*Boil.* 100° C.

Amyl Cyanide Merck (100

(Isoamyl Cyanide; Hexoic-acid Nitrile; Capronitrile).—Fr. heptoic acid amide & bromine in NaOH solut.—$C_6H_{11}N$, or, $(CH_3)_2CH.(CH_2)_2CN$.—Colorl. liq.—*Sol.* A. *Boil.* 150–155° C.

Amyl (or *Amylic*) *Ether* or *Ester.*—see **Amyl Oxide**

Amyl Formate Merck (4

(Isoamyl Formate).—React.-prod., glyc., oxal. acid, & fusel oil.—$C_5H_{12}O_2$, or, $C_5H_{11}.CHO_2$.—Colorl. liq.—Sp. Gr. 0.868 at 15° C.—*Sol.* A.—*Boil.* 123° C.—*Uses:* Artif. fruit syrups.

Amyl Hydrate.—see **Alcohol Amylic**

Amyl Hydride.—see **Pentane**

Amyl Iodide Merck (20

(Isoamyl Iodide; Iodamyl).—React.- prod., isoamylic alc., iodine, & phosphorus.—$C_5H_{11}I$.—Yellowish liq.—Sp. Gr. 1.48–1.50 at 15° C.—*Sol.* A.—*Boil.* 140–148° C.—Sed.; Antisep.—*Uses:* Inhal. dyspnea & heart affect.

Amyl Nitrate Merck (6

(Isoamyl Nitrate).—React.-prod., isoamyl alc., urea nitrate & nitric acid.—$C_5H_{11}NO_3$.—Colorl. liq.—Sp. Gr. 0.999 at 20° C.—*Sol.* A.—*Boil.* 148° C.—*Uses:* Formerly in neuralgia of trigeminus nerve; also in malaria.

(*N. B.*—Often ordered or written by mistake, when *Amyl Nitrite* is intended. Therefore, be careful when intending the Nitrate to state that the Nitrite is not meant.)

Amyl Nitrite Merck (3

(Isoamyl Nitrite).—Fr. isoamyl alcohol, by nitrous acid.—$C_5H_{11}NO_2$.—Yellowish, transp., v. diffusive, unstable liq.; penetr. odor, orange vapor.—Sp. Gr. 0.870–0.880 at 15° C.; or, 0.865–0.875 at 25° C. (*U. S. P.*).—*Sol.* C.; all prop. A., E.; insol. W.—*Boil.*, abt. 97–99° C.—Antispasm.; Depressomotor; Vasodilat.—*Uses:* Angina pectoris, asthma, tetanus, epilepsy, syncope, dyspnea of Bright's dis., convuls., chloroform asphyxia. Antid. to cocaine.—*Dose* 2–4 drops in brandy, or 1–3 drops by inhal. fr. hdkf.; in biliary colic 4–8 ♏ (0.25–0.5 Gm.) in capsules, ev. 30 min.—*Incomp.*, alcohol, antipyrine, potassa.—*Antid.*, atropine, ergotin, or strychnine, hypoderm.—*Caut.* Must be used w. caution, as it causes violent congestions and heart-beating; keep in dark amber bot.; keep fr. fire & light!—Often miscalled "Amyl Nitrate."

N. B.—Amyl Nitrite is so very volatile that it is practically impossible to so stopper bottles that they will carry it without loss, especially in warm weather. Ordered in cool weather and kept in a cool place, the loss is not material, but if kept in a warm place, or if agitated much so as to keep up any pressure of the vapor within the bottle, the loss will be considerable.

Amyl Oxide Merck (30

(Amyl, Amylic, or Diamyl, Ether).—Fr. amyl alc. & iodide w. heat.—$C_{10}H_{22}O$, or, $C_5H_{11}.O.C_5H_{11}$.—Colorl. liq.; unpleas. odor.—Sp. Gr. 0.799 at 0° C.—*Boil.* 170–175° C.—*Uses:* Solvent in chem. and techn. processes.

Amyl Phenate Merck (40

(Amyl Carbolate; Phenylamyl Ester).—$C_{11}H_{16}O$, or, $C_5H_{11}.OC_6H_5$.—Colorl. cryst.—*Sol.* A.—*Melt.* 90–95° C.—*Boil.* 220° C.

Amyl Propionate Merck (10

(Isoamyl Propionate).—$C_8H_{16}O_2$, or, $C_5H_{11}.C_3H_5O_2$:—Colorl. liq.—Sp. Gr. 0.887 at 0° C.—*Sol.* A.—*Boil.* 160° C.

Amyl Rhodanide.—see **Amyl Sulphocyanate**

Amyl Salicylate Merck (7

$C_6H_4.OH.CO_2C_5H_{11}$.—Colorl. to yellowish liq.—Sp. Gr. 1.055–1.065 at 15° C.—*Boil.* 250° C.—*Sol.* A., E., C.; insol. W.—Antirheum.—*Appl.*, painted on affected parts, which are to be then covered to prevent too rapid evaporation.—*Dose* 10 caps., each containing 3 ♏ (0.2 Cc.), per day.

Amyl Sulphide Merck (120

(Isoamyl Sulphide).—React.-prod., amyl chloride & alcoh. potass. sulphide.—$(C_5H_{11})_2S$.—Clear liq.; onion-like odor.—Sp. Gr. 0.843 at 20° C.—*Boil.* 213–216° C.

Amyl Sulphocyanate Merck (200

(Amyl Rhodanide).—React.-prod., potass. amylsulphate & potass. sulphocyanate.—$C_5H_{11}CNS$.—Clear liq.—Sp. Gr. 0.905 at 20° C.—*Boil.* 197° C.

Amyl Sulphydrate Merck (150

(Isoamyl Mercaptan).—$C_5H_{12}S$, or, $C_5H_{11}SH$.—Clear liq.; repulsive odor.—Sp. Gr. 0.835 at 21° C.—*Boil.*, abt. 120° C.

Amyl Urethane.—see **Amyl Carbamate**

Amyl Valerate Merck.—Pure (6

(Isoamyl Ester of Isovaleric Acid; Amyl Valerianate).—React.-prod. of amyl alc., w. sulphuric & valeric acids.—$C_{10}H_{20}O_2$, or, $C_5H_{11}.C_5H_9O_2$.—Clear liq.—Sp. Gr. 0.858 at 15° C.—*Sol.* A., E.—*Boil.* 188–190° C.—Sedat.—*Uses: Intern.*, biliary colic.—*Techn.*, flavor.: "Apple Essence."—*Dose* 3–6 ♏ (0.2–0.36 Cc.) ev. half hr. in caps.

do. Merck.—Technical (3

(Apple Oil).—*Uses:* Techn., for flavoring liquors and candy.

Amylacetic Ether.—see **Amyl Acetate**

Amylamine Merck (170

(Isoamylamine).—By distil. amylamine hydrochlor. w. lime.—$C_5H_{13}N$, or, $(CH_3)_2.CH(CH_2)_2NH_2$.—Colorl. liq.—Sp. Gr. 0.750 at 18° C.—*Sol.* A.; all prop., W.—*Boil.* 95° C.

Amylamine Hydrochloride Merck (140

React.-prod., amyl cyanate, potass. hydroxide & hydrochl. acid.—$C_5H_{14}NCl$, or, $C_5H_{11}.NH_2HCl$.—Wh. cryst.—*Sol.* W.—Antipyr.—*Uses:* Fever; lowers force & frequency of pulse.—*Dose* 7–15 grains (0.4–1 Gm.).

Amylcarbamide, Tertiary

(Tertiary Amylurea; Isoamylurea).—React.-prod., amylcarbimide & amm.—$C_6H_{14}N_2O$, or, $C_5H_{11}.CO(NH_2)NH$.—Need.—*Sol.*, sl. W.—*Melt.*, abt. 151° C.

Amylene Merck (18

(Betaisoamylene; Trimethylethylene).—React.-prod. of amylic alcohol & conc. solut. of zinc chloride.—C_5H_{10}, or, $(CH_3)_2C:CH(CH_3)$.—Colorl., v. mobile liq.; disagr. odor.—Sp. Gr. 0.666 at 15° C.—*Sol.*, all prop., A., E.—*Boil.* 35–38° C.—*Uses:* As dental anesth. in quantities of 2½–3 fl. dr. (10–12 Cc.), *cautiously* employed. See also "Pental."—*Caut.* Highly inflammable!

Amylene Bromide.—see **Bromamylene**

Amylene Hydrate Merck.—Pure.—Ph. G. iv (9

(Tertiary Amyl Alcohol; Dimethylethylcarbinol).—React.-prod. ice-cold amylene, water & sulphuric acid.—$C_5H_{12}O$, or, $(CH_3)_2C(C_2H_5)OH$.—Colorl., oily liq.; ether., camphor. odor and taste.—Sp. Gr. 0.815–0.820 at 15° C.—*Sol.* W., A., E., C., B., G.—*Boil.* 99–103° C.—Hypn.; Sed.; without effect on heart.—*Uses:* Insomnia, alcoh. excitement, epil., whoop.-cough, diabet. insip., &c.—*Dose:* Hypn., 45–90 ♏ (3–6 Cc.); sed., 15–30 ♏ (1–2 Cc.); in beer, wine, brandy, syrup, &c., or in capsules.—*Caut.* Keep in well-stoppered, amber bot.

Amylene Iodide.—see **Iodamylene**

Amylenechloral.—see **Dormiol**

Amylodextrin.—see **Starch, Soluble**

Amyloform (10

Condensation prod. of formaldehyde & starch.—Wh., odorl. powd.—Insol. in ordinary solvents.—Antiseptic.—*Uses:* As of iodoform.

Amylurea.—see **Amylcarbamide**

Anacahuite

Wood of Cordia Boissieri, D. C. Boraginaceæ (Cordiaceæ).—*Habit.:* Mexico.—*Etymol.:* "Anacahuite" is the Central-American name of the drug.—*Constit.:* Tannin.—*Uses:* Phthisis.—*Dose:* Decoct. of 60–150 grains (4–10 Gm.) in 3¼ fl. oz. (abt. 100 Cc.) water.

Anacardium

(Cashew Nut; West Indian Cashew).—Fruit of Anacardium occidentale, L. Anacardiaceæ. See also "Semecarpus."—*Habit.:* West Indies, and tropical America; cultivated in Africa and India.—*Etymol.:* Grk. "ana," like or up, and "kardia," the heart, *i.e.*, the fruit resembles a dried heart.—Kidney-shaped nut inclosing a

large kernel of mild, pleasant, oily taste while fresh.—*Constit.:* Cardol; anacardic acid; tannin; resin; gum. Seed contains fixed oil.—Pericarp is rubefac., epispas., and caust. (fr. presence of cardol).—*Uses:* Formerly used in toothache by susp. nut from neck by cord.—*Techn.*, dyeing.

Anacardium Orientale.—see **Semecarpus**

Anacyclus Officinarum

(German Pellitory).—Root of Anacyclus officinarum, Hayne. Compositæ.—*Habit.:* Germany.—*Etymol.:* Fr. "ananthocyclus," old generic name fr. Grk. "a," not, "anthos," flower, and "kyklos," a circle, *i.e.*, the outer circlet of ovaries is without flowers. "Officinarum" fr. Lat. "officina," shop, *i.e.*, of or pertaining to the shop or store.—*Constit.:* Volat. oil; pyrethrin.—*Uses:* Masticatory; also in toothache.

Anacyclus Pyrethrum.—see **Pyrethrum**

Anaesthesin (20

(Paramidobenzoic-acid Ethylester).—$C_9H_{11}O_2N$, or, $COOC_2H_5[1].C_6H_4.NH_2[4]$.—Fr. paranitrobenzoic-acid ethylester by reduct. w. tin & HCl. — Wh., odorl., tastel. powd. — *Sol.*, eas. A., B., C., E., 2–3 olive oil; alm. insol. cold W.; diffic. sol. in hot W.—*Melt.* 90–91° C.—Loc. Anesthetic.—*Uses: Intern.*, gastric ulcer, nervous dyspepsia, vomiting of pregnancy, gastric hyperesthesia.—*Extern.*, in nose & throat catarrh, whoop.-cough, tuberc. & syphil. laryngeal ulcers, urethritis, hemorrhoids, burns, intertrigo, pruritus, eczema, etc.—*Dose* 5–8 grains (0.3–0.5 Gm.) 2 or 3 t. p. d.—*Appl.*, in rhinolaryngol., in 3% spray, and paint (1:2 susp. in mucil. acacia); in supposit. ea. cont. 3 grains (0.2 Gm.); in vaginal supposit. ea. cont. 5 grains (0.3 Gm.); 4–10% oint.; & in 10% dust. powd.

Anagallis

(Red Pimpernel; Red Chickweed; Scarlet Pimpernel).—Whole herb of Anagallis arvensis, L. Primulaceæ.—*Habit.:* Europe; naturalized in U. S. and elsewhere.—*Etymol.:* Fr. Grk. "anagelaein," to laugh, *i.e.*, remedy for inducing hilarity.—*Constit.:* Saponin (cyclamin); bitter principle; tannin; volat. oil.—*Uses:* Domestic remedy in rabies; also in mania, epilepsy, and dropsy; also as poultice for ulcers.—*Dose* 2–10 grains (0.12–0.6 Gm.) in powd. or tinct.

Anagyrine Hydrobromide Merck (2000

Salt of alkaloid fr. Anagyris fœtida, L.—$C_{14}H_{18}N_2O_2.HBr$.—Colorl. or faintly-yellow cryst.—*Sol.* W., A.—*Melt.* 265–266° C.—Heart poison.—*Uses:* Cardiac tonic.—*Caut.* Keep in the dark.

Anagyrine Hydrochloride

Salt of alkaloid fr. Anagyris fœtida, L.—$C_{14}H_{16}N_2O_2.HCl$.—*Sol.* W.

Anagyris

(Bois Puant).—Seeds of Anagyris fœtida, L. Papilionaceæ.—*Habit.:* Mediterranean region.—*Etymol.:* Grk. "ana," backwards, and "gyros," ring, referring to the form of the capsule.—*Constit.:* Anagyrine and cytisine (alkaloids); resin; acrid oil.—*Uses:* Emet.; Purg.

Analgen (26

(Quinalgen; Chinalgen; Labordin; Orthoethoxyanamonobenzoylamidoquinoline; Benzanalgen).—Deriv. of ortho-oxy quinoline.—$C_{18}H_{16}N_2O_2$, or, $C_9H_5.(OC_2H_5).NH.(CO.C_6H_5)N$. — Colorl., tastel. cryst.—*Sol.*, hot A., dil. mineral acids; insol. W.—*Melt.* 208° C.—Antipyr.; Analg.; Antirheum.—*Uses:* Neural., rheum., febrile dis.—*Dose* 8–15 grains (0.5–1 Gm.) several t. p. d.—*Max. D.* 15 grains (1 Gm.) single; 45 grains (3 Gm.) daily.

Analgesine.—see **Antipyrine**

Anamirta Cocculus.—see **Cocculus Indicus**

Ananin

Bark of an undetermined plant.—*Habit.:* Brazil.—*Uses:* Purg.—*Extern.*, as Escharotic.

Anarcotine.—see **Narcotine**

Anchieta

(Anchietea; Cipo (or Sipo) Suma; Cipo Carneiro; Pirageia; Vegetable Mercury).—Bark of the root of Anchietea salutaris, St. Hil. Violaceæ.—*Habit.:* Brazil.—*Etymol.:* Named for the Portugese Jesuit José de Anchieta (1533–1597).—*Constit.:* Root contains Anchietine (0.4%); tannin; resin; gum; starch; sugar (according to Peckoldt).—*Uses:* In scrofula, erysipelas, diseases of larynx and throat, eczema, herpes, whooping-cough, and as vulnerary; root is also emetic and cathartic, and causes salivation.—*Dose*, small gobletful of decoct. (30:500) morning and evening. 2 drams of powd. drug are aperient; 3 drams are emetic.

Anchusa.—see **Alkanna**

Anchusa Officinalis

(Ox-tongue; Garden Alkanet; Bugloss).—Lvs. and tops of Anchusa officinalis, L. Boragineæ.—*Habit.:* Europe.—*Etymol.:* "Anchousa" is the Grk. name for alkanet. Officinalis fr. Lat. "officina," a shop. Grk. "bous," ox, and "glossa," tongue, because of the roughness of the leaves.—*Constit.:* Pectin; cynoglossine.—Emoll.; Expector.; Aperient; Diuret.; Diaphor.

Anchusin.—see **Extract Alkanet**

Anda Assu.—see **Joannesia**

Andira

(Worm Bark; Jamaica Cabbage Tree; Cabbage Tree). — Bark of Andira inermis, H. B. K. (Geoffroya inermis, Swartz; G. jamaicensis, Wright). Papilionaceæ (Leguminosæ).—*Habit.:* West Indies (especially Jamaica); Mexico.—*Etymol.:* "Andira" is the West-Indian name of the drug.—Bark in pieces of various sizes, thick, whitish or grayish-brown extern., yellowish-brown intern.; resinous fract.; nauseous

odor; mucilaginous and sweetish taste; powder resembles jalap powder.—*Constit.:* Surinamine; berberine.—Emetic; Purgative; Anthelmintic.—*Dose* 10–30 grains (0.6–2 Gm.) of the powd., or in form of decoct., syr., or extr.

Andropogon Ivarancusa.—see **Ivarancusa**

Anemone.—see **Pulsatilla**

Anemone Camphor.—see **Anemonin**

Anemonin Merck (2280

(Anemone, or Pulsatilla, Camphor).—Fr. Anemone Pulsatilla, L., & o. Ranunculaceæ.—$C_{10}H_8O_4$ (Beckurts).—Yellowish-wh. cryst.—*Sol.*, hot A., C.; insol. W.—*Melt.* 152° C.—Antispasm.; Sed.; Anod.—*Uses:* Asthma, bronch., whoop.-cough, dysmenor., orchitis, oöphor. & o. painful affect. of female pelvis.—*Dose* $^1/_4$–$^3/_4$ grain (0.015–0.05 Gm.) 2 t. p. d.—*Max. D.* $1^1/_2$ grains (0.1 Gm.) single, 3 grains (0.2 Gm.) daily.

Anesin, or *Aneson.*—see **Chloretone**

Anethol Merck (15

(Anise Camphor; Paramethoxypropenylbenzene; Parallylphenylmethylic Ester).—Crystallizable constit. of anise and fennel oils.—$C_{10}H_{12}O$, or, $C_3H_5.C_6H_4(OCH_3)$.—Colorl., cryst. mass; liq. at ord. temp.—*Sol.* A., E., sl. in W.—*Melt.* 21–22° C.—*Boil.* 232–234° C.—*Uses:* Inst. oil anise, especially in southern climates; also for manuf. of anisaldehyde, as imbedding material in microscopy, and for perfuming soap.

Anetholquinine.—see **Quinine Anisate**

Anethum

(Garden Dill; Dill Seed).—Fruit of Anethum graveolens, L. Umbelliferæ.—*Habit.:* Asia Minor; cultiv. in Europe.—*Etymol.:* Fr. Grk. "ana," above, through, and "aïthein," to burn, referring to the pungent taste of the fruit.—Seeds oval or ovoid, seldom longer than $^1/_5$ in.; convex or flattish on one side, convex on dorsum; arom. odor and taste.—*Constit.:* Volat. and fixed oils.—Carmin.; Galactagogue; Stim.; Stomachic; used also as spice.—*Dose* 10–30 grains (0.6–2 Gm.).

Angelica

(Garden Angelica).—Herb, root, and seed of Archangelica officinalis, Hoffm. Umbelliferæ.—*Habit.:* Europe; Asia.—*Etymol.:* Fr. Grk. "angelos," angel, because of its supposed magical curative properties.—Root is 2–4 in. long, abt. 1–2 in. thick; annulate, fusiform, & juicy; aromat. odor; sweetish, pungent, bitter taste; pale brownish-gray extern.; internally nearly white.—*Constit.: Root:* Volat. oil; angelic acid; resin; valeric acid; hydrocarotin (angelicin); acetic acid; starch.—*Seed:* Volat. oil; bitter substance; resin.—*Herb:* Tonic; Stomachic.—*Root:* Nervine; Aromat.; Stim.; Carmin.; Diaphor.; Expector.; Diuret.; Emmen.—*Seeds:* Tonic; Stomachic; Diuret.; Diaphor.—*Uses:* Dyspep., bronchitis, and flatulence.—*Doses: Root*, 30–60 grains (2–4 Gm.); Alcoh. extr., 5–15 grains (0.3–1 Gm.); Aqu. extr., 5–15 grains (0.3–1 Gm.); Fld. extr., 30–60 ♏ (2–4 Cc.).—*Seed*, fld. extr. 30–60 ♏ (2–4 Cc.).

Angostura

(Cusparia; Carony Bark).—Bark of Cusparia trifoliata (C. febrifuga, Humb.; Galipea Cusparia, St. Hil; G. officinalis, Hancock). Rutaceæ (Cuspariæ).—*Habit.:* Northern South America and West Indies.—*Etymol.:* "Angostura" is the name of the town in Venezuela where the drug is obtained.—Flat, curved, or quilled pieces, 2–8 in. long, 1–2 in. wide, and $^1/_{12}$–$^1/_6$ in. thick; outer surface grayish-yellow; inner surface dull brown; intern., reddish-brown; smooth, resinous fract.; unpleas. odor and intensely bitter, arom. acrid taste.—*Constit.:* Angosturin $(C_9H_{12}O_5)_x$; cusparine, $C_{20}H_{19}NO_3$; cusparidine, $C_{19}H_{17}NO_3$; galipeïne, $C_{20}H_{21}NO_3$; galipedine, $C_{19}H_{19}NO_3$; ethereal oil (0.5–1.5%); resin; a glucoside.—Bitter Tonic and Febrifuge; large doses Emetic and Cathartic.—*Uses:* Diarrhea, dysentery, dyspepsia, etc.; used also as bitters.—*Doses:* 10–30 grains (0.6–2 Gm.) as non-astring. tonic; 20–60 grains (1.3–4 Gm.) emet. and cath.—Fld. extr., 10–30 ♏ (0.6–2 Cc.).

Anhalonidine Hydrochloride Merck (20000

$C_{12}H_{15}NO_3.HCl$.—Salt of alkaloid fr. mescal buttons & isomeric w. anhalonine.—Colorl. cryst.—*Sol.*, eas. hot W.; diffic. in cold W.

Anhalonine Hydrochloride Merck.—Cryst. (5000

Salt of alkaloid fr. Anhalonium Lewinii, Henning (Mescal Buttons), a Mex. cactus.—$C_{12}H_{15}NO_3.HCl$.—Wh., cryst. powd.—*Sol.* W.; diffic. in A., E., C.—*Melt.*, above 230° C. w. decomp.; (alkaloid melts at 85° C.).—Cardiac & Respirat. Stim.—*Uses:* Angina pect., asthm. dyspnea. Like strychnine, 3 grains (0.2 Gm.) per 35 oz. (kilo) of body weight constitutes the lethal dose for rabbits.

Anhalonium

(Mescal Buttons; Pellote).—Seed of Anhalonium Lewinii, Henning. (Lophophora Lewinii.) Cactaceæ.—*Habit.:* Mexico, and Southern U. S.—*Etymol.:* Grk. "lophos," a crest or tuft, and "pherein," to bear, *i.e.*, tufted or crested. "Mescale" is the Mexican name for the plant.—The mescal button is top-shaped, and bears a ring of lvs. bent around a tuft of short yellowish-white filaments or hairs $^1/_2$–1 in. in diam. The "button" is 1–$1^1/_2$ in. in diam., $^1/_4$ in. thick, with convex under-surface, brittle and hard when dry, but soft when moist; very bitter, disagr. taste and pecul. disagr. odor.—*Constit.:* Anhalonine, $C_{12}H_{15}NO_3$; mescaline, $C_{11}H_{17}NO_3$; anhalonidine, $C_{12}H_{15}NO_3$; and lophophorine, $C_{13}H_{17}NO_3$.—Card. and Respir. Stim.—*Uses:* Neurasth., hyster., insomn., angina pect., and asthmatic dyspnea.—On being chewed, the "buttons" cause a form of intoxication accompanied by most wonderful visions, remarkably beautiful and varied

kaleidoscopic changes, and a sensation of increased physical ability, the physical and psychical functions, however, remaining unimpaired.—*Doses:* 10–15 grains (0.6–1 Gm.) of substc.; 10–15 ♏ (0.6–1 Cc.) of fld. extr.; and 60–120 ♏ (4–8 Cc.) of 1:10 tinct.

Anhydroecgonine Hydrochloride Merck (400

Derivative of ecgonine.—$C_9H_{13}NO_2HCl$.—Wh. cryst.—*Sol.* A.—*Melt.* 241° C.

Anhydroglucochloral.—see **Chloralose**

Anilidophenylsafranine Hydrochloride. — see **Fast Blue B, Alcohol-soluble**

Aniline Merck.—Pure (1

(Aniline Oil; Phenylamine; Amidobenzene [or, -cl]).—Org. base fr. nitrobenzene by reduct.—C_6H_7N, or, $C_6H_5.NH_2$.—Thin, colorl. liq. which soon darkens, somet. to reddish-brown; arom. odor.—*Sol.*, all prop., A., E., methyl A., acetone, carbon disulph., oils.—*Melt., minus* 8° C.—*Boil.* abt. 180° C.—Antisep.—*Uses:* Microscopy, but chiefly in manuf. dyes. — *Antid.*, stomach siphon, cold affusion, ammonia, stim , fresh air, alkal. sod.-chloride transfusions, venesection, sodium sulphate, mucilaginous liquids.—*Incomp.*, oxidizers, albumen, solut. of iron, zinc, aluminum, acids, & alkal.—*Max. D.* 3 ♏ (0.2 Cc.) single; 6 ♏ (0.4 Cc.) daily.—*Caut.* Keep dark, in well-stoppered bots.

Aniline Merck.—Reagent (2

$C_6H_5.NH_2$.—Colorl., oily, strongly refract. liq.; bec. rapidly brown on expos. to light & air.—*Sol.*, abt. 35 W.—*Solidif.* in freez. mixt., then melts at −8° C.—Sp. Gr. 1.027.—*Boil.* 183° C.—*Tests: (Hydrocarbons; Nitrobenzene)* 5 Cc.+ 10 Cc. HCl (sp. gr. 1.124) – clear liq.; dil. w. 15 Cc. H_2O – no cloudiness on cooling.—*Uses:* Various analyt. operations; in microscopy; detect. woody fiber, nitrates, chlorates, aldehydes, chloral, chloroform, & furfural.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Aniline Acetate Merck (4

$C_6H_{11}NO_2$, or, $C_6H_5NH_2.C_2H_4O_2$.—Oily liquid; solidif. in cold.—*Sol.* W., A.

Aniline Blue.—see **Pure Blue**

Aniline Blue, Alcohol-Soluble.—see **Fast Blue B, Alcohol-soluble**

Aniline Bromide.—see **Aniline Hydrobromide**

Aniline Brown.—see **Bismarck Brown**

Aniline Camphorate Merck (15

$(C_6H_5NH_2)_2C_{10}H_{16}O_4$.—Yellow cryst. — *Sol.*, eas. A., E.; dil. A.; diffic. W. and G.; decomp. in C., CS_2, fatty oils.—Antispasmodic.—Clinical data lacking.

Aniline Chloride.—see **Aniline Hydrochloride**

Aniline Dyes.—see under proper names, as below:

Black.—see **Brilliant Black B, Induline, Nigrosine, & Palatin Black**

Blue.—see **Alkali Blue, Aniline Blue, Cyanine, Fast Blue, Gentian Blue, Marine Blue, Methyl Blue, Methylene Blue, Pure Blue, Reddish Blue, Toluidine Blue, Victoria Blue, & Water Blue;** also **Induline Blue, fat dye**

Brown.—see **Bismarck Brown & Vesuvine**

Green.—see **Acid Green, Brilliant Green, Coeruleine, Iodine Green, Malachite Green, Methyl Green, Methylene Green, & Naphthol Green;** also **Aniline Green, fat dye**

Orange.—see **Chrysoidine, Diphenylamine Orange, Methyl Orange, Orange G G, Orange T, Tropæoline (OO, OOO, etc.), & Victoria Orange**

Red.—see **Alizarin Red, Aurin, Benzopurpurine, Biebrich Scarlet, Bordeaux Red, Brilliant Crocein, Cerise, Congo Red, Corallin, Eosine Bluish, Eosine Yellowish, Erythrosine, Fuchsine, Iodeosine, Magdala Red, Methyleosine, Neutral Red, Phloxin, Ponceau, Purpurine (Dry & Paste), Rose Bengal, Ruby S, Safranine, & Scarlet Red;** also **Sudan III, fat dye**

Violet.—see **Gentian Violet, Hofmann's Violet, Methyl Violet, Methylene Violet, & Parme Violet;** also **Gallocyanine, fat dye**

Yellow.—see **Amidoazobenzene, Auramine, Azoflavin, Chrysaniline, Martius Yellow, Naphthol Yellow, Primuline, Quinoline Yellow, Sudan Yellow, & Yellow T;** also **Sudan Yellow G, fat dye**

Aniline Fluoride.—see **Aniline Hydrofluoride**

Aniline Green.—Fat dye

Stearate of a not fully defined, green, basic, aniline dye.—*Uses:* Coloring oils and fats.

Aniline Hydrobromide Merck (10

(Aniline Bromide).—C_6H_8NBr, or, $C_6H_5NH_2.HBr$.—Grayish-wh. to yellowish cryst.—*Sol.* W., A.

Aniline Hydrochloride Merck.—Pure, cryst. (2

("Aniline Salt"; Aniline Chloride).—C_6H_6NCl, or, $C_6H_5NH_2.HCl$.—Alm. colorl. cryst.—*Sol.* W., A.—*Melt.* 190–192° C.

Aniline Hydrofluoride Merck (3

(Aniline Fluoride).—$C_6H_5NH_2.HF$.—Alm. colorl. cryst.—*Sol.* W.

Aniline Hydrosilicofluoride Merck (18

(Aniline Silicofluoride).—React.-prod., water & aniline silicofluoride.—$(C_6H_5NH_2)_2H_2SiF_6$.—Wh. to grayish-wh. cryst. powd.—*Sol.*, v. sl. W. & A.

Aniline Nitrate Merck (5

$C_6H_8N_2O_3$, or, $C_6H_5NH_2.HNO_3$.—Colorl. to yellowish cryst.—*Sol.* W., A.—Decomp. at 190° C.

Aniline Oil.—see **Aniline**

Aniline Orange.—see **Victoria Orange**

Aniline Oxalate Merck (6

$(C_6H_5NH_2)_2.C_2H_2O_4$.—Wh. cryst.—*Sol.* W.—*Caut.* Keep in dark amber bot.

Aniline Pink.—see **Safranine**

Aniline Red.—see **Fuchsine**

Aniline Rose.—see **Safranine**

Aniline Salt.—see **Aniline Hydrochloride**

Aniline Silicofluoride.—see **Aniline Hydrosilicofluoride**

Aniline Sulphate Merck (2

$(C_6H_5NH_2)_2.H_2SO_4$.—Wh. cryst.—*Sol.* W., A.—Nervine.—*Uses:* Chorea, epilepsy.—*Dose,* $^3/_4$–$1^1/_2$ grains (0.05–0.1 Gm.).—*Max. D.* 3 grains (0.2 Gm.) single; 6 grains (0.36 Gm.) daily.—*Caut.* Keep in amber bot.

Aniline Tribromide.—see **Tribromaniline**

Aniline Yellow.—see **Amidoazobenzene**

Anilineazobetanaphthol.—see **Sudan Yellow**

Anilineazoresorcinol.—see **Sudan Yellow G**

Anilpyrine

By fusing together 188 parts antipyrine and 135 parts acetanilide.—Wh., cryst. powd.—*Melt.* 75° C.—*Sol.*, eas. W.—Antipyr.; Antineuralg.—*Uses:* Influenza and in artic. rheumat.—*Dose* 8 grains (0.5 Gm.) single; 15–30 grains (1–2 Gm.) daily.

Animé.—see **Copal**

Anisaldehyde.—see **Aldehyde Anisic**

Anise.—*U. S. P.*

(Aniseed).—Fruit of Pimpinella Anisum, L. Umbelliferæ, fr. cultivated plants.—*Habit.:* Western Asia; Egypt; cultiv. in Southern Europe, India, and U. S.—*Etymol.:* "Pimpinella," fr. "bipinnella," *i.e.*, twice-pinnate leaves—literally, "two-winged little plant." "Anisum," fr. Grk. "anison," "anethon," fr. Arabic "anisum," classic name of anise.—*Constit.*. Volat. oil; resin; fixed oil.—Aromat.; Carminat.; Expector.; Stim.; Stomachic.—*Uses:* Colic; increasing milk secretion; quieting babies.—*Techn.*, in manuf. of volat. oil; condiment & flavor.—*Dose:* Fld. extr., 30–60 ♏ (2–4 Cc.).

Anise Camphor.—see **Anethol, solid**

Anisidine (Ortho-) Merck (10

(Orthomethylaminophenol).—Fr. orthonitroanisol by reduct.—C_7H_9NO, or, $C_6H_4(NH_2)OCH_3$.—Yellowish to brownish-red liq.—*Boil.* 228° C.

Anisol Merck (20

(Anisoïl; Methylphenylester).—Fr. anisic acid, by baryta.—C_7H_8O, or, $C_6H_5OCH_3$.—Colorl., ether. liq.—Sp. Gr. 0.997 at 15° C.—*Sol.* A.—*Boil.* 150–156° C.

Anisol Orthoiodide.—see **Iodanisol**

Anisoyl Peroxide

Obt. by act. H_2O_2 on anisoyl chloride in acetone solut.—$OCH_3.C_6H_4.CO.O.O.OC.C_6H_4.OCH_3$.—Gran., wh., tastel., odorl. powd.—*Melt.* 128° C.

Annatto

(Arnotta; Annotta).—Fr. seeds Bixa Orellana, L.—*Sol.* A., E., & oils.—*Uses:* Colors silk orange in hot soap bath.

Annidalin.—see **Thymol Iodide**

Annotta.—see **Annatto**

Anodynine.—see **Antipyrine**

Antacidin.—see **Calcium Saccharate**

Anthemis.—*U. S. P.*

(Roman Chamomile; Ground Apple; Chamomile; Garden Chamomile).—Dried flower heads of Anthemis nobilis, L. Compositæ, fr. cultivated plants.—*Habit.:* Southern and Western Europe; cult. in Germany, Great Britain, France, Belgium; somewh. naturalized in the U. S.—*Etymol.:* "Chamomile," fr. Grk. "chamai," on the ground, and "melon," apple, *i.e.*, earth-apple—the small round buds smell like apples; also Grk. "anthemis," fr. "anthos," flower, *i.e.*, its numerous flowers. "Nobilis," famous, noble, *i.e.*, its handsome yellow flowers.—*Constit.:* Volat. oil; bitter principle (anthemic acid); anthemene (anthemidin), $C_{18}H_{36}$; resin; tannin.—Antispasm.; Diaphor.; Stim.; Tonic; Carmin.; Emmenag.; warm infus. is Emetic.—*Uses:* Colds, fevers, worms, etc.—*Doses:* 15–60 grains (1–4 Gm.).—Aqu. extr., 5–15 grains (0.3–1 Gm.).—Fld. extr., 30–60 ♏ (2–4 Cc.).

Anthion.—see **Potassium Persulphate**

Anthocyanin Paper.—see **Dahlia Paper**

Anthophylli

(Mother-cloves; Clove Fruit).—Almost or quite ripe fruit of Caryophyllus aromaticus, L. Myrtaceæ.—*Habit.:* Molucca Islands.—*Etymol.:* Grk. "anthos," a flower, and "phyllon," a leaf.—Fruit resembles cloves, but is 3–4 times larger, being thicker, lighter, and somewhat longer; odor weaker.—*Constit.:* Ethereal oil; eugenol, $C_{10}H_{12}O_2$.—*Uses:* As spice and condiment.

Anthracene Merck.—Purified, sublimed (4

(Paranaphthalene).—Fr. coal tar.—$C_{14}H_{10}$, or, $C_6H_4(CH)_2C_6H_4$.—Yellow cryst.; fluoresce blue; change in sun to para-anthracene.—*Sol.* A., E., C.; benzene, carbon disulph.—*Melt.* 213° C.—*Boil.* 363° C.—*Uses:* Manuf. alizarin & alizarin dyes.—*Caut.* Keep fr. light.

Anthragallol Merck (75

(Trioxyanthraquinone [1:2:3]).—React.-prod. of benzoic, gallic, & sulphuric acids.—$C_{14}H_8O_5$, or, $C_{14}H_5(OH)_3O_2$.—Brown powd.—*Sol.* A.—*Subl.* 290° C.—*Uses:* Dyeing.

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Anthraglucorhamnin Tschirch-Merck (30
Glucosidal substance fr. Rhamnus frangula, L. —Brown powd.—*Sol.* A.—Cathartic.

Anthraglucorhein Tschirch-Merck (250
Glucosidal substance fr. var. spec. of rhubarb. —Dark-brown powd.—*Sol.* A.—Cathartic.

Anthraglucosagradin Tschirch-Merck (85
Glucosidal substance fr. Cascara sagrada.—Brown powd.—*Sol.* A.—Cathartic.

Anthraglucosennin Tschirch-Merck (225
Glucosidal substance fr. Cassia angustifolia, Vahl.—Dark-brown powd.—*Sol.* A.—Cathartic.

Anthrapurpurine.—see **Purpurine Red**

Anthrapurpurine Diacetate.—see **Purgatin**

Anthraquinone Merck.—Pure (8
By oxid'g glacial-acetic-acid solut. anthracene w. potass. dichrom.—$C_{14}H_8O_2$, or, $C_6H_4(CO)_2C_6H_4$. —Yellow need.—*Sol.* A., sl. in B.—*Melt.* 273° C. Subl. at higher temp.—*Uses:* Manuf. alizarin, & dyes; *techn.*, as reag. for detect. water in alcoh.

do. Merck.—Highest Purity, sublimed (15

Anthrarobin Merck (15
(Dioxyanthranol; Desoxy- or Leuco- alizarin; Anthroarobin). — Fr. alizarin by reduct.—Cryst. prin. of madder.—$C_{14}H_{10}O_3$, or, C_6H_4-$C(OH)CH.C_6H_2.(OH)_2$.—Granular powd.—*Sol.*, weak alkal. solutions; sl. in C. & E.; hot A.—Deoxidiz.; Antisep.—*Uses: Extern.*, Instead of chrysarobin in skin dis. espec. psoria., tinea tons., pityria. versic., & herpes.—*Appl.* 10 to 20% oint. or alcoh. solut.

Anthrasol (11
"Purified, colorl. tar."—Thin, light-yellow, oily liq.—*Misc.*, absol. A., acetone, oils, petrolatum, & o. fats; insol. W.—Dermic.—*Uses:* Herpes, eczem., pruritus, & var. chron. & parasitic skin diseases.—*Appl.*, pure; or in mixt. w. alcoh., oils, or oints. (5–20%).

Anthriscus
(Chervil; Beaked Parsley; Herba Cerefolii).—Dried plant Anthriscus cerefolium, Hoffm. Umbelliferæ.—*Habit.:* Europe; sparingly natur. in eastern U. S.—*Etymol.:* "Anthriscus" is the Grk. name for chervil. "Cerefolium," modified fr. "Chærophyllum," fr. Grk. "chairein," to rejoice, and "phyllon," leaf, *i.e.*, the leaves are numerous.—*Constit.:* Volat. oil.—Antiscorbutic; Diuret.; Emmen.; Deobstruent. — *Uses: Extern.*, appl. to bruises, local tumefactions, etc. Also in cookery as addition to soups, etc.

Anthyllis
(Staunchwort; Woundwort). — Flowers of Anthyllis vulneraria, L. Papilionaceæ. — *Habit.:* Europe; Western Asia; Northern Africa. — *Etymol.:* Fr. Grk. "anthos," flower, and "julos," beard, *i.e.*, the calyx is hairy.—Vulnerary; Styp.

Antiarthrin (32
Condensation product of tannin and saligenin. —Chocolate-brown, cryst. powd.—Diuret.; Antipyr.; Analg.; Uratolytic, & Antiarthritic.—*Sol.* A., and alkalies.—*Dose* 90–150 grains (6–10 Gm.) daily in powd. or pill.

Antichlor.—see **Sodium Thiosulphate**

Antichloren
By act. of HgI_2 on peptone in pres. of $HgCl_2$.—*Uses:* Syph.—*Dose* $^1/_6$ grain (0.01 Gm.) p. d. in pill; or hypoderm. in 2% solut.

Antidiphtherin Klebs
"Ten-fold concentration" of a protein solut. obt. fr. cultures of diphtheria bacilli on fluid culture media.—*Uses:* In pharyngeal and laryngeal diphtheria, by painting on affected parts.

Antiemetic Root.—see **Cyperus**

Antifebrin Kalle (4
(Phenylacetamide).—C_8H_9NO, or, $C_6H_5.NH.CO.CH_3$.—Wh., micaceous, odorl., neutral, permanent laminæ; sl'y burning taste.—Antipyr.; Analg.; Antirheum.; Sedat.; Antisep.—*Uses: Intern.*, febrile affect., rheum., headaches, neural., &c.—*Extern.*, in fine powd., inst. of iodoform.—*Dose* 3–10 grains (0.2–0.6 Gm.).—*Max. D.* 15 grains (1 Gm.) single; 60 grains (4 Gm.) daily.—*Incomp.*, nitrous ether; alkali bromides & iodides in aqu. solut.; hydrated chloral; carbolic acid; resorcinol; thymol.

Antifebrin Salicylate.—see **Salifebrin**

Antifungin.—see **Magnesium Borate**

Antihypo.—see **Potassium Percarbonate**

Antimonial Glass.—see **Antimony Sulphide, Vitreous**

Antimonial Powder.—see **Calcium Phosphate, Antimoniated**

Antimonial Saffron. — see **Antimony Oxide, Brown**

Antimony Merck.—Cryst. & powd. (1
(Stibium; Regulus of Antimony).—*Etymol.:* Fr. Grk. "anti," against, and "monachon," the monk, *i.e.*, antimony was used in leprosy, which was a frequent affection among unclean monks and hermits. "Stibium," fr. Grk. "stibi" or "stimmi," antimony sulphide.—Metal. element. —Sb.—Silver-wh., lustr., hard, brittle metal; scale-like cryst. struct.—*Melt.* 425° C.—*Uses:* Rarely medicinally.—*Techn.*, in manuf. alloys (Britannia metal, hard lead, white metal, bearing metal); manuf. thermoelectric piles; blackening iron; coating metals, etc.—*Antid.*, vomiting or stomach siphon, strong decoct. oak bark or nutgalls, ice pills, mucilag. drinks, opium.

do. Merck.—Highest Purity (3

Antimony Alginate
(Alginoid Antimony).—Fr. sod. alginate & anti-

mony chloride; 4.5% Sb.—Wh. powd.—*Sol.*, ammonia (solut. is misc. w. W.).

Antimony Anhydride.—see **Antimony Oxide, Antimonic**

Antimony Arsenate Merck (5

Mixt. of antimonic oxide with 20% arsenic acid.—Heavy, wh. powd.—*Uses:* Syph. skin erupt.—*Dose* $^1/_{100}$–$^1/_{30}$ grain (0.0006–0.002 Gm.) 2–3 t. p. d.—*Max. D.* $^1/_{30}$ grain (0.002 Gm.) single; $^1/_3$ grain (0.02 Gm.) daily.

Antimony Arsenite Merck (5

Mixt. eq. parts antimonic oxide and arsenous acid.—Fine wh. powd.—*Uses:* Heart affections, var. neuroses, asthma, and skin diseases.—*Dose* $^1/_{100}$–$^1/_{30}$ grain (0.0006–0.002 Gm.) 2–3 t. p. d.—*Max. D.* $^1/_{30}$ grain (0.002 Gm.) single; $^1/_3$ grain (0.02 Gm.) daily.

Antimony Bromide Merck (8

(Antimony Tribromide).—$SbBr_3$.—Deliq. yellow cryst. mass.—*Sol.*, carbon disulph.—*Melt.* 90–94° C.—*Caut.* Keep well stoppered.

Antimony Chloride Merck.—Antimonic (5

(Antimony Pentachloride, or Perchloride).—$SbCl_5$.—Reddish-yellow, oily, caustic liq.; offensive odor; fum. in moist air; solidifies by absorp. of moisture; decomp. by much water into antimonic acid and hydrochloric acid.

Antimony Chloride Merck.—Antimonous.—Pure, cryst. (2

(Antimony Trichloride). — $SbCl_3$. — Colorl., transl., cryst. mass.—*Sol.* A., carbon disulph.—*Melt.* 72° C.—*Boil.* 230° C.—*Uses: Extern.*, caustic; also pharm. & techn.

do. — Solution (1

(Butter of Antimony).—Cont. $SbCl_3$.—Clear, oily, str. caustic liq.—Sp. Gr. 1.35 = 38° Bé.—Caustic.—*Uses: Extern.*, snake bites, poisoned wounds, syphil. ulcers, indol. ulc., fungous flesh, warts, & excrescences.—*Techn.*, bronzing iron (specially gun barrels), mordant for patent leather, coloring zinc black, mordant for silver, & manuf. lakes (particularly fr. dye woods).

Antimony Chloride, Basic.—see **Antimony Oxychloride**

Antimony, Diaphoretic.—see **Potassium Antimonate, Purified**

Antimony Fluoride Merck.—Dry (5

SbF_3.—Grayish-wh. cryst.—*Sol.* W.—*Uses:* Dyeing, in form of double salt, antimony fluoride and ammonium sulphide.

Antimony Iodide Merck (18

(Antimony Triiodide).—SbI_3.—Red cryst.; decomp. by water w. liberation of oxyiodide; volat. at h. temp.—*Sol.*, carbon disulph.—*Melt.* 165° C.—Alter.—*Uses:* Chron. bronchial catarrh.—*Extern.*, in pustular eruptions, in 1:5–10 oint.—*Dose* $^1/_6$–$^1/_4$ grain (0.01–0.015 Gm.), in pills.

Antimony Oxalate Merck (2

$Sb_2O(C_2O_4)_2 + H_2O$.—Wh. powd.—*Sol.*, acids.—*Uses:* Mordant in dyeing and printing, particularly in form of double salt, potassium and antimony oxalate.

Antimony Oxide Merck.—Antimonic (2

(Antimony Pentoxide; Antimonic, or Stibic, Anhydride).—Sb_2O_5.—Wh. powd.—*Sol.*, sl. in hydrochl. acid and W.—*Uses:* Formerly used medicinally like golden sulphide antimony, and tartar emetic; now obsolete.

Antimony Oxide Merck.—Antimonous (2

(Antimony Trioxide; Anhydrous Antimonous, or Stibious, Acid).—Sb_2O_3.—Wh., cryst. powd.; yellow when hot.—*Sol.*, warm sat. solut. of tartaric acid and alkali tartrates; dil. hydrochl. acid; conc. solut. alkalies; insol. W.—*Melt.*, at dark-red heat; cryst. on cool. — Expector.; Emetic.—*Uses:* Chiefly pharm. & techn.; powerful reducing agent. Source of tartar emetic.—*Dose* 3 grains (0.2 Gm.) 5 or 6 t. p. d.

Antimony Oxide Merck.— Antimonous.— Reagent (8

Sb_2O_3.—Wh. powd.—*Sol.* HCl, & soluts. tartaric acid, alkali bitartrates, KOH, & NaOH; insol. W.—*Tests:* (*As*) 1 Gm. + 3 Cc. HCl (sp. gr. 1.19) + 3 Cc. solut. $SnCl_2$ – no darker color within 1 hr.—(*Heavy Met.*) 1 Gm. + 30 Cc. solut. NaOH (sp. gr. 1.3) and heat + 20 Cc. H_2O + aqu. H_2S – no white or brownish-black ppt.—(*Cl*) 1 Gm. + 30 Cc. solut. NaOH (sp. gr. 1.3) & heat + 70 Cc. HNO_3 (sp. gr. 1.153), filter, & add solut. $AgNO_3$ – at most only sl. turb., but no ppt.—*Uses:* Reducer; detect. alkaloids & phenols.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Antimony Oxide Brown Merck (2

(Antimonial Saffron; Crocus of Antimony; Crocus Metallorum).—Consists chiefly of antimony oxysulphide, $Sb_2O_3 + Sb_2OS_2$.—Grayish-brown powd.—*Sol.*, hydrochloric acid.

Antimony Oxide White.—see **Potassium Antimonate, Purified**

Antimony Oxychloride Merck (5

(Powder of Algaroth; Basic Antimony Chloride; Mercurius Vitæ).—SbOCl.—Wh., cryst. powd.—*Sol.*, acids; insol. W.—*Uses:* Emetic, even in small dose, but now obsolete. Chiefly used now as source of tartar emetic.

Antimony Oxyiodide Merck (50

$(SbOI)_2Sb_2O_3$.—Light-yellow cryst. powd.—Insol. W.

Antimony Oxysulphide.—see **Antimony Sulphurated**

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Antimony Penta-(or *per-*)*chloride.*—see **Antimony Chloride, Antimonic**

Antimony Penta(or *per-*)*sulphide.*—see **Antimony Sulphide, Golden**

Antimony Pentoxide.—see **Antimony Oxide, Antimonic**

Antimony Sulphate Merck (3

(Antimonous Sulphate; Antimony Trisulphate).—$Sb_2(SO_4)_3$.—Wh. powd.—*Sol.*, acids.

Antimony Sulphide Black Merck.— Pure.—(Purif., *U. S. P.* 1890) (1

(Antimonous Sulphide; Antimony Trisulphide; Black Antimony).—Sb_2S_3.—Gray.-black powd., or steel-gray, metal-like masses, w. striped, cryst. fracture.—*Sol.*, hydrochl. acid.—*Melt.*, below red heat.—Diaphor.; Alter.—*Uses:* Scrof., chr. rheum., gland. obstruct., & cutan. dis.—*Techn.*, in pyrotech. in Bengal fires.—*Dose* 5–15 grains (0.3–1 Gm.), in powd. or bolus. In veterin. medicine, 8–45 grains (0.5–3 Gm.) to small animals, and 120–240 grains (8–15 Gm.) to larger animals.

Antimony Sulphide Golden I Merck (2

(Antimonic Sulphide; Penta- or Per-sulphide).—By decomp. sodium thioantimonate w. dil. sulphuric acid.—Sb_2S_5.—Fine, orange-yellow powd.; odorl.—*Sol.*, dil. solutions of alkalies, alkal. carbonates & sulphides.—Alter.; Diaphor.; Emetic.; Expector.—*Uses:* Cutan. erup., bronch. catarrh, syph., scrof., rheumat., gout.—*Dose* $^1/_6$–$1^1/_2$ grains (0.01–0.1 Gm.) 2–3 t. p. d., usually in powd.—*Incomp.*, acids, sour food, acid syrups, metal. salts.—*Caut.* Keep fr. light.

Antimony Sulphide Golden II Merck (1

Uses: Veter., as Expector.; Galactag.—*Dose*, horses and cattle, $2^1/_2$–6 drams (10–25 Gm.); sheep and pigs, 30–75 grains (2–5 Gm.); dogs, 1–10 grains (0.06–0.6 Gm.); cats and fowl, $^1/_6$–1 grain (0.01–0.06 Gm.).

Antimony Sulphide Golden III Merck (1

Uses: Color. rubber goods.

Antimony Sulphide, Red.—see **Antimony, Sulphurated**

Antimony Sulphide, Vitreous (1

(Vitreous Antimony; Antimonial Glass).—By roasting antimony sulphide, then fusing the product w. antimony sulphide.—Transp., dark, ruby-red mass.—*Uses:* Tinting glass & porcelain yellow; formerly used medicinally also, but now obsolete.

Antimony Sulphurated Merck (2

(Kermes Mineral; Red Antimony; Red Antimony Sulphide; Antimonous Oxysulphide).—React.-prod., antimony sulphide, alkaline carbonates & dil. sulphuric acid.—Sb_2S_3 & Sb_2O_3 mixed.—Amorph., red powd., lighter on expos. to light; odorl.; tastel.—*Sol.*, hydrochl. acid; insol. W., A.—Alter.; Diaphor.; Emetic.—*Uses:* Cutaneous dis., diseases of respiratory passages, & syph.; alterative generally.—*Dose* 1–2 grains (0.06–0.12 Gm.) 2 t. p. d., in pill. As emetic 5–20 grains (0.3–1.3 Gm.).—*Incomp.*, acids & acid drinks or food.—*Caut.* Keep fr. light.

Antimony Sulphurated Cluzel-Merck (4

Prepared accord. to a special formula by Cluzel.—Fine reddish-brown powd.

Antimony Tannate Merck (4

Gray to brown powd.—*Sol.*, acids.

Antimony Tartrate

$(SbO)_2C_4H_4O_6+H_2O$.—Wh., cryst. powd.—*Uses: Intern.*, inst. of arsenic, in skin dis.—*Dose* $^1/_{10}$ grain (0.006 Gm.) 3–5 t. p. d.

Antimony Tribromide.—see **Antimony Bromide**

Antimony Trichloride.—see **Antimony Chloride, Antimonous**

Antimony Triiodide.—see **Antimony Iodide**

Antimony Trioxide.—see **Antimony Oxide, Antimonous**

Antimony Trisulphate.—see **Antimony Sulphate**

Antimony Trisulphide.—see **Antimony Sulphide, Black**

Antimony & Potassium Oxalate Merck (6

$SbK_3(C_2O_4)_3+6H_2O$.—Wh. powd.—*Sol.* W.—*Uses:* Dyeing and printing; substitute for tartar emetic as mordant.

Antimony & Potassium, Sulphurated.—see **Potassium & Antimony, Sulphurated**

Antimony & Potassium Tartrate Merck.—Highest Purity, Medicinal, cryst. or powd. (1

(Tartar Emetic; Tartrated Antimony).—$2K(SbO)C_4H_4O_6.+H_2O$.—Transparent crystals, turning white & opaque on exposure, or fine wh. powd.; odorless; sweetish metallic taste.—*Sol.* 17 W., 20 G. at 15° C. (15.5 W. at 25° C., and 3 boil. W.–U. S. P.); insol. A.—Loses water of cryst. at 110° C.—Alter.; Diaphor.; Expector.; Emetic; Counter-irrit.—*Uses: Intern.*, as expector. in acute bronch. catarrh, bronchial & pulmon. affec., &c.—*Extern.*, mening., &c.—Also pharm.—*Doses:* Alter. $^1/_{30}$–$^1/_{15}$ grain (0.002–0.004 Gm.); diaphor. & expector. $^1/_{12}$–$^1/_6$ grain (0.005–0.01 Gm.); emet. $^1/_2$–1 grain (0.03–0.06 Gm.) every 10–15 min. as required.—*Max. D.* 3 grains (0.2 Gm.) single; 10 grains (0.6 Gm.) daily.—*Appl.*, in certain cutan. dis., as alopecia, acne rosacea, psoriasis, in 1:4 oint.; in gonorrh., in 0.1–0.2:100 inject.; in corneal opacities in 0.05–0.1:10 oint.—*Antid.*, tannic acid in solut., freely stimulants & demulcents; ice; opium; stomach pump.—*Caut.* Keep well stoppered. Poison!

Antimony & Sodium, Sulphurated.—see **Sodium & Antimony, Sulphurated**

Antinonnin (2

(Sodium Orthodinitrocresylate).—Yellow, odorl., non-volat. paste.—*Sol.* W.—Antisep.; Anticrypt.; Bacteric.—*Uses:* Wood-preservative & insecticide in 1% solut.

Antinosin (42

(Nosophen-Sodium; Sodium Tetraiodophenolphtalein). — $(C_6H_2I_2ONa)_2C.O.C_6H_4O$. — Blue powd.— *Sol.* W.— Antisep.—*Uses:* Succedan. for iodoform as surgic. antisep. in 0.1–0.5% solut.; in affect. of mouth, nose, & throat, particularly diphtheria, as wash in 0.1–0.5% solut.; in cystitis in 0.1–0.5% solut.

Antipyonin

(So-called "Neutral Sodium Tetraborate").—Eq. parts boric acid & horax fused together.—Fine powd.—*Uses:* Insuffl. in inflam. of cornea and conjunctiva, and in otitis.

Antipyreticum.—see **Antipyrine**

Antipyrine Merck (5

(Dimethyloxyquinizine; Phenazone; Phenyldimethylpyrazole; Analgesine; Metozine; Parodyne; Phenylone; Anodynine; Phenylene; Antipyreticum; Oxydimethylquinizine; Pyrazine; Pyrazoline; Sedatine).—Organic base fr. oxyphenylmethylpyrazole.—$C_{11}H_{12}N_2O$, or, $(CH_3)\underline{N.C(CH_3)}:CH.CO.\underline{N}(C_6H_5)$.—Fine, wh., cryst. powd.—*Sol.* C.; 1 W.; 2 A.; 50 E.; (2 C. at 15° C., or, in less than 1 W., in 1 A., 1 C., & 30 E., at 25° C.–U. S. P.).—*Melt.* 112–113° C.—Antipyr.; Analg.; Sed.; Styp.; Antisep.—*Uses:* Locomotor ataxia, rheumat., diab., cephalal., lumbago, sciat., gout, hay fever, infant. convuls., nerv. urticaria, nocturn. emis., chorea, whoop.-cough, epilepsy, pleurisy, influenza, &c.; epistaxis.—*Doses:* 5–15 grains (0.3–1 Gm.) in solut., w. syrup or elixir, 4 or 5 t. p. d.; children, as many decigrammes (0.1 Gm. = $1^1/_2$ grains) as years old, & as many centigrammes (0.01 Gm. = $^1/_6$ grain) as months old, 2–5 t. p. d. As enema, in double the dose per os. *Subcutan.*, 15–30 ♏ (1–2 Cc.) of a 1:1 aqu. solut. in neuralg., myalg., renal & biliary colic, over seat of pain.—*Max. D.* 30–60 grains (2–4 Gm.).—*Appl.* 5% solut. or pure, as styptic; as 2:15 oint. in hemorrhoids.—*Antid.*, castor oil, strychn., atropine, digitalis; oxygen in cyanosis; maintain body heat.—*Incomp.*, acids; alkalies; alum; ammonia water; amyl nitrite; benzoates; betanaphthol; bromine; carbolic acid; calomel; hydrated chloral; copper sulphate; chromic acid; cinchona alkaloids; euphorin; ferric chloride; ferrous sulphate; hydrocyanic acid; iodides; iodine; lead subacetate; mercuric chloride; orthoform; potassium permanganate; pyrocatechin; pyrogallol; resorcinol; sodium bicarbonate; sodium salicylate (in powder); solution arsenic and mercury iodides; spirit nitrous ether (unless prescribed with sodium bicarbonate); syrup ferrous iodide; tartar emetic; tannic acid; thymol; urethane; infusions of catechu, cinchona, rose leaves, and uva ursi; tinctures of catechu, ferric chloride, cinchona, hamamelis, iodine, kino, and rhubarb.—*React.* Solut's colored deep red by ferric chloride; bluish-green by nitrous acid.

Antipyrine Acetylsalicylate.—see **Acopyrine; Pyrosal**

Antipyrine Amygdalate.—see **Tussol**

Antipyrine Carbolate.—see **Phenopyrine**

Antipyrine Iodide.—see **Iodopyrine**

Antipyrine Mandelate.—see **Tussol**

Antipyrine Para-amidobenzenesulphonate.—see **Sulfopyrine**

Antipyrine Phenate.—see **Phenopyrine**

Antipyrine Resorcylate.—see **Resalgin**

Antipyrine Salicylacetate.—see **Acopyrine; Pyrosal**

Antipyrine Salicylate.—see **Salipyrine**

Antipyrine-quinine.—see **Quinopyrine**

Antisepsin.—see **Bromacetanilide, Mono-**

Antiseptol.—see **Cinchonine Iodosulphate**

Antispasmin Merck (5

(Narceine-sodium & Sodium Salicylate).—$C_{23}H_{25}NO_8Na + 3NaC_7H_5O_3$.— Wh., sl. hygros. powd.; 50% pure narceine.—*Sol.* W.—Antispasm.; Sed.; Hypn.—*Uses:* In children's dis.; whoop.-cough, laryng. stridulus, irrit. coughs, &c.—*Dose*, of 5% solut. in sweetened W. or in cherry-laurel water, 3–4 t. p. d.: under $^1/_2$ yr. 3–5 drops, $^1/_2$ yr. 5–8 drops, 1 yr. 8–10 drops, 2 yrs. 10–12 drops, 3 yrs. 15–20 drops; older children take 10–20 drops of 10% solut.—*Caut.* Keep dry & fr. air.

Antithermin

(Phenylhydrazinelevulinic Acid). — Colorl., odorl., tastel., cryst. leaflets.—*Sol.* A., E., dil. acids; v. diffic. cold W., more read. hot W.—Antipyr.; Antisep.—*Dose* 3–6 grains (0.2–0.36 Gm.).

Antithyroidin Merck (75

A "thyroid serum" obt. fr. blood serum of sheep fr. which the thyroid glands have been removed, & preserved by the addition of 0.5% carbolic acid.—*Uses:* Exophthalmic goiter (Graves' disease).—*Dose* 8 ♏ (0.5 Cc.) to begin with, 3 t. p. d., increas. the dose by 8 ♏ (0.5 Cc.) ea. day until the dose reaches 60 ♏ (4 Cc.) single, & 180 ♏ (12 Cc.) p. d., & then in similar manner reducing to the original dose.

Antitoxin, Antistreptococcic.—see **Serum, Antistreptococcic**

Antitussin (12

5% difluordiphenyl oint.—Light-yellow oint.; intense, but pleas. odor.—Antispasm.; Sedat.—

Uses: Whoop.-cough, bronch., &c.—*Appl.*, by inunction (60–75 grains [4–5 Gm.]) rubbed into neck, chest, or back.

Anusol

Supposit. cont'g bism. iodoresorcinolsulphonate, zinc oxide & bals. Peru.—*Uses:* Hemorrhoids, anal fissures, &c.

Apiin Merck (120

Glucoside fr. Apium Petroselinum, L. (Parsley). —$C_{27}H_{32}O_{16}$.—Yellowish cryst. powd.—*Sol.*, hot W., A.; sl. in cold W.; insol. E.

Apiol Merck.—Cryst., white (60

(Parsley Camphor).—Stearoptene fr. oil of Petroselinum sativum, Hoffm. (Parsley).—$C_{12}H_{14}O_4$.—Wh. cryst.; faint parsley odor.—*Sol.* A., E., oils; alm. insol. W.—*Melt.* 30° C.—*Boil.* 294° C.—Emmen.; Antiper.—*Uses:* Dysmenor. & malaria.—*Doses:* Emmen. 3–5 grains (0.2–0.3 Gm.) 2–3 t. p. d., in caps.; as antiper., 4–15 grains (0.25–1 Gm.).—*Inj.*, subcut., 15 ♏ (1 Cc.) daily of 20% oily solut.—*Max. D.* 15 grains (1 Gm.) single; 60 grains (4 Gm.) p. d.

do. Merck.—Distilled (60

Volat. oil fr. Petroselinum sativum, Hoffm. (Parsley).—Yellow liq.—*Sol.* A., E.—Sp. Gr. 1.125–1.135 at 15° C.

do. Merck.—Fluid, green (6

Crude ether. oil of Petroselinum sativum, Hoffm. (Parsley).—Greenish, oily liq.—*Sol.* A., E.—Sp. Gr. abt. 1.08 at 15° C.—Emmen.; Antiper.—*Uses:* Dysmenor., malar.—*Doses:* 5–10 ♏ (0.3–0.6 Cc.) 2 or 3 t. p. d., in caps.; in malar. 15 ♏ (1 Cc.); in dysmenor. & amenor., 5 ♏ (0.3 Cc.), best in caps.—*Max. D.* 15 ♏ (1 Cc.) single; 30 ♏ (2 Cc.) daily.

Apiolin Merck (100

Fr. Apiol, green.—Yellow liq.—*Sol.* A.—Sp. Gr. 1.125–1.135 at 15° C.—*Boil.* 280–300° C.—*Uses:* Dysmenor. without lesions of the pelvic organs, for regul. menstruation.—*Dose* 3 ♏ (0.2 Cc.) in caps. 3 t. p. d., 3 days before mensual period.

Apium

(Celery).—Root and seeds of Apium graveolens, L. Umbelliferæ.—*Habit.*. Southern Europe; cult. everywhere.—*Etymol.:* Grk. "apion" fr. Celtic "apon," water, referring to its habit. —Root is fusiform, white, and poisonous when wild; under cultivation, harmless.—Seeds are abt. $^1/_{25}$ in. long, ovate, flattened, brown & smooth.—*Constit.: Root:* Mannite; inosite; mucilage; fat; volat. oil; apiol; sugar.—*Seeds:* Volat. oil; fixed oil.—Aper.; Diuret.; Antirheumat.; Nerve Tonic.—*Uses: Extern.*, as stim. anodyne poultice.—*Intern.*, in dropsy, Bright's dis. & intermit. fevers.—*Doses:* 15–30 grains (1–2 Gm.).—Alcoh. extr., 10–20 grains (0.6–1.3 Gm.).—Fld. extr., 1–2 fl. dr. (4–8 Cc.).

Aplopappus.—see **Baylahuen**

Apoatropine Merck.—Pure, cryst. (4000

(Atropamine).—Fr. atropine, by splitting off water.—$C_{17}H_{21}NO_2$, or, $C_6H_5C.CH_2.CO.C_8H_{14}NO$. —Wh., cryst. mass.—*Sol.* A., E., C.; sl. in W.—*Melt.* 60–62° C.

Apoatropine Hydrochloride Merck.—Cryst. (3200

$C_{17}H_{21}NO_2.HCl$.—Wh. cryst.—*Sol.* W., A.—*Melt.* 237–239° C.

Apoatropine Sulphate Merck.—Cryst. (3200

$(C_{17}H_{21}NO_2)_2.H_2SO_4+5H_2O$.—Wh. cryst.—*Sol.*, sl. in W.

Apocodeine Hydrochloride Merck (1425

$C_{18}H_{19}NO_2.HCl$.—Yellow-gray to greenish-gray, hygros. powd.—*Sol.* W.—Expector.; Sed.; Hypn.; Laxat.—*Uses:* Chron. bronch., & o. bronch. affect. Acts like codeine, but weaker; prod. large secret. of saliva, & accel. perist. action of bowel.—*Dose:* Sedat., subcut. or per os, $^1/_3$–1 grain (0.02–0.06 Gm.).—*Inj.:* Lax., 30 ♏ (2 Cc.) of a 1% aqu. solut.—*Caut.* Keep fr. air & light.

Apocynin Merck.—Cryst. (5000

Non-glucosidal, prin. fr. Apocynum cannabinum, L. (Canadian hemp).—Wh. cryst.—*Sol.* A.

do. — Amorphous (24

Resinous substc. fr. Apocynum cannabinum, L. (Canadian hemp).—Amorph., resinous mass; or wh. to yellowish-wh. powd.—*Sol.* A., E., C.—Emetic; Expector.

Apocynum.—*U. S. P.*

(Canadian Hemp; American Indian Hemp; Black Indian Hemp; Indian Physic; Dogbane). —Dried rhizome of Apocynum cannabinum, L. Apocynaceæ.—*Habit.:* U. S.—*Etymol.:* Grk. "apo," away, from, & "kyon," dog, *i.e.*, it kills or drives away dogs.—*Constit.:* Apocynin; apocynein (glucoside); resin; tannin; bitter extractive; starch.—Emeto-Cathart.; Diuret.; Cardio-Tonic; Expector.; Alterat.; Antiperiod.; Diaphor.; Antisyphil.; Sudorific.—*Uses:* Dropsy, Bright's disease, uremia, pleuritic exud., & in various cardiac affect. The action is said to be very prompt, hence Apocynum is believed to be well adapted as a succedaneum for digitalis.—*Doses:* Antiperiod. and diuret., 2–5 grains (0.12–0.3 Gm.); emetic, 15–30 grains (1–2 Gm.).—Alcoh. extr., 1–4 grains (0.06–0.25 Gm.).—Fld. extr., 5–20 ♏ (0.3–1.3 Cc.); *Max. D.* 30 ♏ (2 Cc.) single, 90 ♏ (6 Cc.) daily.—Tinct., 5–60 ♏ (0.3–4 Cc.).

Apocynum Androsæmifolium

(Dogbane; Spreading Dogbane; Bitter Root; Milk Ipecac; Wild Ipecac; Rheumatism Weed). —Root of Apocynum androsæmifolium, L. Apocynaceæ.—*Habit.:* North America.—*Etymol.:* "Apocynum," see preceding. "Androsæmifolium," fr. Grk. "aner," man, "haima," blood, & "folium," leaf, *i.e.*, the leaves contain a red coloring matter.—Root is contorted, shrivelled longitudinally, often marked by

transverse fissures; bark, dark-brown extern., whitish intern., and bitter.—*Constit.:* Apocynin; apocynein (glucoside); volat. oil; bitter extractive. — Diaphor.; Diuret.; Cathart. — *Uses:* Chronic constip. & dropsical conditions.—*Dose:* Fld. extr., 5–30 ♏ (0.3–2 Cc.).

Apolysin (13

(Monophenetidin, or, Monoparaphenetidin Citrate; Monocitrylparaphenetidin). — $C_6H_4.OC_2H_5.NH(C_6H_7O_5)$.—Wh. powd.; acid taste.—*Sol.* W., A., G.—*Melt.* 72° C.—Antipyr.; Antisep.; Antineural.—*Uses:* As of acetphenetidin.—*Doses:* 8–25 grains (0.5–1.6 Gm.) single; 90 grains (6 Gm.) daily.

Apomorphine Hydrochloride Merck.—Cryst. (150

Salt of artificial alkaloid fr. morphine.—$C_{17}H_{17}NO_2.HCl$.—Minute, grayish-white, shin., acic. cryst.; fhl. bitter taste; green on expos. to light.—*Sol.*, abt. 50 W.; 50 A.; 100 G.; alm. insol. C., E.; (39.5 W., 38.2 A., 1864 E., & 3800 C., at 25° C.; & in 16 W. at 80° C., & 30 A. at 60° C., U.S.P.).—Decomp. bet. 200° & 210° C., U.S.P.—Emetic; Expector.; Hypnotic; Cardiac Depressant.—*Uses:* Emetic in poison., suffoc., catarrh, &c.; dislodge foreign bodies fr. esophagus. Use fresh solut. only, or alarming symptoms may occur; contraindicated in weak or fatty heart.—*Doses:* Expector. $^1/_{60}$–$^1/_{20}$ grain (0.001–0.003 Gm.) in syrup; emetic $^1/_{20}$–$^1/_3$ grain (0.003–0.008 Gm.); hypnotic, $^1/_{30}$ grain (0.002 Gm.) subcut.—*Inj.*, emet. $^1/_{15}$–$^1/_{10}$ grain (0.004–0.006 Gm.).—*Max D.* $^1/_3$ grain (0.02 Gm.) single; 1 grain (0.06 Gm.) daily.—*Appl.*, in skin dis. of infants, in 0.2% oint.—*Antid.*, strychnine, $^1/_{10}$–$^1/_9$ grain (0.006–0.007 Gm.), hydrated chloral, chlorof., ice, ether injections.—*Incomp.*, alkalies, potass. iodide, ferric chloride, picric acid, tannic acid, silver nitrate. Physiol. antid. to hydrated chloral & chlorof.—*Caut.* Keep dark and well stoppered.

Note.—The Merck brand does not deteriorate as readily as the article ordinarily found on the market; where uniformly reliable results are desired, it should hence be used to the exclusion of the more unstable ones.

do. Merck.—Amorphous (56

Gray, amorph. powd.—*Sol.* A., more sol. in W. than cryst. form.—*Uses:* As preceding.—Acc. to Guinard cryst. apomorphine differs fr. the amorph. physiologically in that with the former the stimulating action predominates, whereas the amorph. exhibits purely narcotic properties. In pica in cattle equal parts of the cryst. & amorph. apomorph. are injected subcut., in doses of $1^1/_2$–3 grains (0.1–0.2 Gm.) of each, for 3 consecutive days.—*Caut.* Keep in well-stopp. amber bot.

Apomorphine Methylbromide.—see **Euporphin**

Aporetin Merck (160

Resinous substc. fr. Rheum officinale, & but little investigated.—Grayish-brown powd.—*Sol.*, alkalies w. dark-brown color; insol. E.

Apple Oil.—see **Amyl Valerate**

Apyonine.—see **Pyoktanin Yellow**

Aqua Ammonia.—see **Water Ammonia**

Aqua Fortis.—see **Acid Nitric**

Aqua Regia.—see **Acid Nitrohydrochloric**

Aquilegia

(Columbine).—Seeds of Aquilegia vulgaris, L. Ranunculaceæ. — *Habit.:* Europe; advent. in U. S.; Northern Asia.—*Etymol.:* Lat. "aquila," eagle, *i.e.*, the nectaries are bent into the form of an eagle's beak.—*Constit.:* Fatty & acrid resins.—*Uses:* Antiscorbutic; Diuret.; Diaphor.

Arabin.—see **Acid Arabic**

Arabinose Merck.—Cryst. (320

(Pectinose; Pectin Sugar).—A pentose fr. beet gum, by sulphuric acid.—$C_5H_{10}O_5$.—Wh. cryst.—*Sol.* W.—*Melt.* 160° C.

Araça

(Araça Iba; Araça Mirim).—Fruit, leaves & root of Psidium Araça Raddi (Psidium piriferum Vell.). Myrtaceæ.—*Habit.:* Brazil; Uruguay.—*Etymol.:* Fr. Grk. "psidion," pomegranate peel, fr. the resemblance one bears to the other. "Araça" is the Brazilian name of the plant.—*Constit.:* Volat. oil; fixed oil; araçin; tannin.—*Uses:* Astring. in diarrhea; root also in menorrhag.—*Dose:* Root, 30 grains (2 Gm.) in infusion.

Aralia Hispida

(Dwarf Elder; Wild Elder; Bristle-stem Sarsaparilla; Pigeon Berry).—Root of Aralia hispida, Ventenat. Araliaceæ.—*Habit.:* U. S. fr. New England to Virginia.—*Etymol.:* "Aralia" is the Canadian name of the plant. "Hispida" refers to the sharp, stiff bristles with which the low stem is beset.—Diuret.—*Uses:* Dropsy.—*Dose:* Fld. extr., 30–60 ♏ (2–4 Cc.).

Aralia Racemosa

(Spikenard; American Spikenard; Spignet; Petty-morrel; Spiceberry).—Root of Aralia racemosa, L. Araliaceæ.—*Habit.:* Northeastern U. S.—*Etymol.:* "Aralia" is the Canadian name of the plant.—Root is 4–8 in. long & several inches thick; light-brown extern., whitish within; marked by scars or cavities an inch or more wide; pleas. spicy and balsamic taste; odor agre. arom.—*Constit.:* Starch; pectin; sugar; resin; volat. oil (trace).—Alter.; Diaphor.; Stim.—*Uses:* Pulmonary affections, syphilis, skin diseases & rheumat.—*Extern.*, decoction used as wash in indolent ulcers.—*Dose:* Fld. extr., 30–60 ♏ (2–4 Cc.).

Arara.—see **Joannesia**

Arariba Alba

(Arariba Branca. Must not be confounded w. Araroba, which is also known as "Arariba").—Bark of Sickingia viridiflora, R. Schum.

Rubiaceæ.—*Habit.:* Brazil.—*Etymol.:* "Arariba branca" is the Brazilian or Portuguese name of the drug.—*Constit.:* Tannin.—Febrifuge.

Arariba Rubra

(Arariba vermelha; Arariba rosea. Must not be confounded with Araroba, which is also known as "Arariba").—Bark of Sickingia rubra, R. Schum. Rubiaceæ.—*Habit.:* Brazil; Japan.—*Etymol.:* "Arariba vermelha" is the Brazilian or Portuguese name of the drug.—*Constit.:* Aribine (alkaloid), $C_{23}H_{20}N_4$ & tannin.—Febrifuge.

Araroba

(Goa Powder; Pao de Bahia; Crude Chrysarobin; Brazil Powder; Ringworm Powder; "Arariba" so-called [see above]).—Found in cavities in the trunk of Andira Araroba, Aguiar, (Vouacapoua Araroba Lyons). Papilionaceæ.—*Habit.:* Brazil; Bahia; in damp forests.—*Etymol.* Lat. "Araroba" fr. E. Indian name, "ar(ar)-oba," as applied to the bark; & "Andira," Lat. reprod. of its Brazilian name. "Vouacapoua," fr. Cent. American (Caribbean) "voicapou."—Light-yellow powd. wh. fresh, but brownish on exposure; slightly cryst.; rough; inod.; bitter.—*Constit.:* Chrysarobin (crude chrysophanic acid); gum; resin; bitter extractive; and woody fiber.—*Uses:* Chiefly as source of chrysophanic acid; also ext. in skin diseases, like chrysophanic acid.

Arbor Vitæ.—see **Thuja**

Arbutin Merck.—White, cryst. (23

Glucoside fr. lvs. Arctostaphylos Uva-ursi, Spr. (Bearberry).—$C_{12}H_{16}O_7$.—Wh. cryst.; bitter.—*Sol.* A., boil. W.; sl. in cold W.—Diur.—*Uses:* In Bright's dis., inst. of uva-ursi.—*Dose* $2^1/_2$–5 grains (0.15–0.3 Gm.) 3 or 4 t. p. d.—*Max. D.* 15 grains (1 Gm.) single; 60 grains (4 Gm.) p. day.

Arcanum Duplicatum.—see **Potassium Sulphate**

Archangelica.—see **Angelica**

Archil.—see **Orchil**

Arctostaphylos Glauca

(Great-berried Manzanita).—Lvs. of Actostaphylos glauca, Lindley. Ericaceæ.—*Habit.:* U. S. (California).—*Etymol.:* Grk. "arktos," bear, & "staphylos," bunch of grapes, *i.e.*, the fruit is rough, & occurs in clusters like grapes. "Glauca" fr. Grk. "glaukos," sea-green, & refers to the light-green color of the lvs.—*Constit.:* Arbutin; tannin.—Astring.; Tonic.—*Uses:* Gleet, vesical catarrh, incontin. of urine, &c.—*Dose:* Fld. extr., 20–60 ♏ (1.3–4 Cc.).

Areca

(Betel; Pinang).—Fruit of Areca Catechu, L. Palmæ.—*Habit.:* East Indies.—*Etymol.:* Fr. "areec," the Malabar name of the plant.—Seeds are hard & heavy; round-conical; depressed at base; extern. brown, mottled with fawn color; intern. brownish-red with whitish veins; fresh seed has a faint cheese-like odor; astring. sub-acrid taste.—*Constit.:* Arecoline, $C_8H_{13}NO_2$; arecaine, $C_7H_{11}NO_2+H_2O$; arecaidine, $C_7H_{11}NO_2+H_2O$ (isomer of arecaine); guvacine, $C_6H_9NO_2$. — Masticatory; Astring.; Teniacide.—*Dose* 2–3 dr. (8–12 Gm.) as teniacide.—Fld. extr., 45–120 ♏ (3–8 Cc.).

Arecaidinethylester.—see **Homoarecoline**

Arecoline Hydrobromide Merck.—Cryst. (1425

Salt of alkaloid, fr. fruit of Areca Catechu, L. (Betel nut).—$C_8H_{13}NO_2.HBr$.—Wh. cryst.—*Sol.* W., A.—*Melt.*, abt. 167° C.—Cath. & Anthelm. (veter.).—Also Myotic (luman). Acts on the heart like muscarine.—*Doses:* Anthelm., $^1/_{15}$–$^1/_{10}$ grain (0.004–0.006 Gm.); as cathart. in colic of horses, like physostigmine, $1^1/_3$ grains (0.08 Gm.) subcut.—*Max. D.* $1^1/_2$ grains (0.1 Gm.).—*Appl.*, myotic, few drops of 1% aqu. solut.

Arecoline Hydrochloride Merck.—Cryst. (2000

$C_8H_{13}NO_2.HCl$.—Wh. cryst.—*Sol.* W., A.—*Melt.* 157–158° C.—*Uses & Doses:* As of the hydrobromide.

Arecoline-Eserine Merck (1600

Mixt. of equal parts arecoline hydrobromide & physostigmine sulphate.—Exhibits the combined therapeutic properties of its components.—*Uses:* Myotic; cathart. (subcut. in colic of horses).—*Dose* $^3/_4$–$1^1/_2$ grains (0.05–0.1 Gm.) subcut. for horses.

Arenaria

(Spergularia; Sand Spurrey; Red Sandwort).—Herb of Arenaria (Spergularia) rubra, L. Caryophyllaceæ.—*Habit.:* Algiers; Southern Europe.—*Etymol.:* Fr. Lat. "arena," sand, referring to location where it grows.—*Constit.:* Chlorides & carbonates; stearopten; aromatic resin.—*Uses:* In acute & chronic vesical catarrh & renal calculi; & in gravel.—*Doses:* 15 grains (1 Gm.).—Aqu. extr., 30 grains (2 Gm.) every 3 hrs. w. sweetened water.—Fld. extr., 150 ♏ (10 Cc.).

Argenol (20

A silver albuminoid.—Brown crystals.—*Sol.*, eas. W., G.—10% Ag organically combined.—Antisep.; Bactericide; Alterative.—*Uses:* Urethritis, ulcers, & affect. of eye, nose, & throat.

Argentamine (15

8% solut. silver phosphate in 15% aqu. solut. ethylenediamine.—Colorl., alkaline liq., turn. yellow on expos.; coagulates albumin but slightly.—*Misc.* W.—Antisep.; Astring.—*Uses: Extern.*, inst. of silver nitrate, or corros. sublimate.—*Appl.*, like silver nitrate, or corros. sublimate (in gonor., in 1:10,000–4,000 solut.).

Argentol

(Silver Quinaseptolate).—$C_9H_6N.OH.SO_3Ag$.—Comp. of silver & oxyquinoline.—Yellow powd.—*Sol.*, diffic. W.—Antisep.—*Uses:* Skin dis., syph., gonor., &c.—*Appl.: Inj.*, 1:1000–300 solut., or 1:100–50 oint.—*Dose* 15 grains (1 Gm.) p. d.

Argentose (35

Soluble compound of silver & a nucleo-proteid. —30% Ag.—Astring.; Germ.—*Uses:* Like silver nitrate in gonor., vaginitis, catarrhal conjunctivitis, otitis, rhinitis, &c.; also prophylact. in ophthalmoblennorrhea.

Argentum Credé.—see **Collargol**

Argilla.—see **Kaolin**

Argonin (13

Soluble silver-casein salt, fr. sodium-casein w. silver nitrate & alc.—Fine, wh. powd.—15 Gm. argonin contain as much Ag as 1 Gm. silver nitrate.—*Sol.*, hot W.; NH_3 increases solubility. —Non-irritant Antisep., like argentamine; does not coagulate albumin of the tissues.—*Appl.* 1–2% solut. (gonor.); also in blennor. neonatorum in 3% solut.—*Caut.* Keep dark.

Argyrol (30

(Silver Vitellin).—Antisep.—*Uses:* As of silver nitrate in dis. of eye, throat, nose, ear, & genito-urinary organs.—*Appl.*, as irrigation in endometritis, gonor., &c., in 1–4:1000 solut.; as inj. in gonor., in 3–5% solut.

Arhovin (18

$C_{10}H_{13}.C_6H_4(COO.C_2H_5)(C_6H_5)_2NH$. — Addition prod. of diphenylamine & thymylbenzoic-acid ester.—Oily liq.; aromat. odor; cooling, yet burning taste.—*Sol.* A., E., C., oils; insol. W. —Antigonorrhoic.—*Uses:* Gonor., cystitis, uric-acid diathesis, gonor. rheum., &c.—*Dose* 4 ♏ (0.25 Cc.) in gelat. caps. 3–6 t. p. d.—*Appl.* 1–2% solut. in oil on tampons in vagina; in suppos. (each $^3/_4$ grain [0.05 Gm.] w. 15–30 grains [1–2 Gm.] oil theobroma).

Aristochin (45

(Diquinine Carbonic Ether; Aristoquin).—$CO(C_{20}H_{23}N_2O_2)_2$.—Wh., tastel. powd.—96.1% quinine.—*Sol.*, diffic. cold A.; more read. hot A.; alm. insol. E.; insol. W.—Antimalarial, like quinine.—*Doses:* Children under 1 yr., $^3/_4$–$1^1/_2$ grains (0.05–0.1 Gm.); older children, up to 5 grains (0.3 Gm.) 3 t. p. d.; adults, 8–15 grains (0.5–1 Gm.) several t. p. d.

Aristol (36

(Thymol Iodide; Diiodothymol; Annidalin; Dithymoldiiodide; Thymotol; Iodistol; Iodohydromol; Iodosol; Iodothymol; Iosol; Iothymol; Thymiode; Thymiodol; Thymodin).—Fr. thymol, by alkal. w. iodine in solut. KI.—$C_{20}H_{24}O_2I_2$, or, $(C_6H_2.CH_3.OI.C_3H_7)_2$. — Red-brown powd.—45% of iodine.—*Sol.* E., C., oils; sl. A.; insol. W. or G.—Succedaneum for iodoform.—Germic. & Antisep.—*Uses: Extern.*, rhus poisoning, psori., syph. ulc., syph. neopl.; carcinoma; burns; cicatr. wounds, as dust. powd., solut. or oint.; in supposit. in chr. dysent.—*Appl.* 10% solut. w. oils, oint., collodion, or ether. In prep'g solut. avoid heat.—*Incomp.*, acids, alcohol, ammonia, corros. sublimate, metal. oxides, starch, alkalies, & alkali carbonates.—*Caut.* Sensitive to light, hence keep in amber bot., away fr. light.

Aristolochia Clematis

Herb of Aristolochia Clematitis, L. Aristolochiaceæ.—*Habit.:* Europe.—*Etymol.:* "Aristolochia," see following. "Clematis" fr. Grk. "klema," vine.—*Constit.:* Bitter prin.; resin. —*Uses:* Tonic in wounds fr. bites.—*Extern.*, as vulnerary.

Aristolochia Cymbifera

(Raiz Milhomens; Guaco; Raiz de Farinha).—Root of Aristolochia cymbifera, Mart. & Zucc. Aristolochiaceæ.—*Habit.:* Brazil; Paraguay.—*Etymol.:* Grk. "aristos," very good, or best, & "locheia," childbirth, *i.e.*, the plant was believed to favor parturition.—Root is cylindrical, 1 to $1^1/_2$ in. in diam., yellowish color; strong odor. —*Constit.:* Blackish resins; aristolochine (alkaloid?); cassuvin.—Stim.; Emmen.—*Uses:* Snake bite & typhoid fever.

Aristolochia Rotunda

(Round Birthwort; Somerwort).—Root of Aristolochia rotunda, L. Aristolochiaceæ.—*Habit.:* Southern Europe.—*Etymol.*. "Aristolochia," see preceding.—*Constit.:* Aristolochine, $C_{32}H_{22}N_2O_{13}$ (Pohl), or, $C_{17}H_{11}NO_7$ (Hesse).—*Uses:* Stim., in affect. due to atony of the sympathetic nerve; also in debility, snake bite, & malignant sores.

Aristolochia Serpentaria.—see **Serpentaria**

Aristoquin.—see **Aristochin**

Armoracia

(Horseradish).—Fresh root of Cochlearia Armoracia, L. Cruciferæ. — *Habit.:* Europe; cultivated & naturalized in U. S.—*Etymol.:* Fr. Grk. "kochlearion," spoon, referring to the shape of the leaves. "Armorachia" is the Grk. name for horseradish.—*Constit.:* Volat. oil; bitter resin; sugar; gum; myrosine; potassium myronate.—Rubef.; Alter.; Tonic; Diuret.—*Uses:* Rheumat., hoarseness, dropsy, debil., &c. —*Dose*, fld. extr., 10–30 ♏ (0.6–2 Cc.).

Arnaudon's Green.—see **Chromium Phosphate**

Arnica Flowers.—*U. S. P.*

(Leopard's Bane; Wolf's Bane; Mountain Tobacco).—Dried flower & heads of Arnica montana, L. Compositæ.—*Habit.:* Northern Europe; Asia; North America.—*Etymol.:* Variously, fr. Grk. "ptarmikos," sternutatory, fr. its power of causing sneezing; or, "arnakis," a sheep's skin, *i.e.*, resemblance of hairy stem & leaves; or, most probably, fr. "arrhen," strong, vigorous. —*Constit.:* Volat. oil; arnicin, $C_{20}H_{30}O_4$ (Walz); arnicine, $C_{12}H_{22}O_2$; fat; resin.—Leaves contain volat. oil and arnicin.—Febrif.; Vulner.; Tonic; Stim.; Diur.; Nervine; Rubef.; Emmenag.; Sternutatory. — *Uses:* Paralysis, hemorrhages, chronic rheumat., mening., chron. catarrh of

aged, dysentery, malaria, amenorrh., diarrh., dropsy, nephritis, &c.—*Extern.*, in bruises & o. injuries.—*Doses:* 5–20 grains (0.3–1.3 Gm.), usually in tinct.; chiefly used extern. as lotion.—Alcoh. extr., 3–10 grains (0.2–0.6 Gm.).—Aqu. extr., 3–10 grains (0.2–0.6 Gm.).—Fl. extr., 5–20 ♏ (0.3–1.3 Cc.).—Tinct., 10–30 ♏ (0.6–2 Cc.).

Arnica Root

(Leopard's Bane; Wolf's Bane; Mountain Tobacco).—Rhizome & roots of Arnica montana, L. Compositæ.—*Habit.:* Northern Europe; Asia; North America.—*Etymol.:* See Arnica Flowers.—*Constit.:* Arnicine, $C_{12}H_{22}O_2$; arnicin, $C_{20}H_{30}O_4$ (Walz); volat. oil; resin.—Tonic; Alter.; Antisep.; Antipyr.—*Uses: Intern.*, in diar., & as febrif.—*Extern.*, as vulnerary.—*Doses:* 5–20 grains (0.3–1.3 Gm.) as decoct.—Alcoh. extr., $1^1/_2$–5 grains (0.1–0.3 Gm.).—Fld. extr., 5–15 ♏ (0.3–1 Cc.).—Tinct., 5–30 ♏ (0.3–2 Cc.).

Arnicin Merck (1200

Bitter substance fr. root Arnica montana, L.—$C_{20}H_{30}O_4$ (Walz).—Brown, viscid mass; odorl.; bitter.—*Sol.* A., E., amm. & alkal.—Antisep.

Arnold's Reagent.—For acetoacetic acid

(*a*) solut. 1 Gm. paramidoacetophenone & 2 Gm. conc. HCl in 100 Cc. W.; (*b*) solut. 1 Gm. sodium nitrite in 100 Cc. W.—In use, 2 vol. of solut. *a* are mixed w. 1 vol. solut. *b*.—On adding amm. to a mixt. equal vol's liq. (*e.g.* urine), & reagent, a brownish-red color or ppt. forms if acetoacetic acid present; on then add. excess conc. HCl, color changes to purplish-violet.

Arnotta.—see **Annatto**

Arrhenal=Sodium Melhylarsenate.—see **Sodium Methylarsenate**

Arrowroot.—see **Starch, Arrowroot**

Arsen-Ferratose (2

(Syrup Ferratin, Arsenated).—Liq. prep. of ferratin & arsenic; 0.3% Fe; 0.003% As.—*Uses:* As of ferratin.

Arsen-hemol.—see **Hemol, Arsen-**

Arsenic Merck.—Cryst. or powder (1

(Arsenicum; Arsenium).—Native metal.—As.—*Etymol.:* Fr. Grk. "arsenikon," which name, however, is used at the present time to designate yellow arsenic sulphide, auripigment (Dioscorides).—Steel-gray, brittle, lustr., metal-like, cryst. mass, or heavy, black powd.; odorl.; tastel.—Volat. above 100° C.—*Uses:* Techn. in alloys, in manuf. realgar, extraction of nickel, manuf. yellow arsenic sulphide, fly poison, &c.—*Antid.*, same as for arsenic trioxide.

Arsenic-acid Anilide.—see **Atoxyl**

Arsenic Alginate

(Alginoid Arsenic).—Fr. sod. alginate & arsenic chloride.—Wh. powd.—*Sol.*, ammonia (solut. misc. w. W.).—Arsenical.—Decomp. in intest.

Arsenic Bromide Merck (4

(Arsenous, or Arsenious, Bromide; Arsenic Tribromide).—$AsBr_3$.—Yellowish-wh. cryst.—*Sol.* W.—*Melt.* 20–25° C.—*Boil.* 220° C. Volat. unchanged.—Alter.—*Uses:* Diab.—*Dose* $^1/_{60}$–$^1/_{15}$ grain (0.001–0.004 Gm.).—*Max. D.* $^1/_6$ grain (0.01 Gm.), single.—*Antid.*, same as for arsenic trioxide.—*Caut.* Keep well stoppered. Poisonous!

Arsenic Chloride Merck (8

(Arsenous, or Arsenious, Chloride; Butter of Arsenic; Caustic Arsenic Chloride; Arsenic Trichloride).—$AsCl_3$.—Yellowish, oily liq.—Sp. Gr. 2.205 at 0° C.—*Sol.* W., A., E., oils.—*Boil.* 130° C.—Alter.—*Uses:* Skin diseases.—*Dose* $^1/_{60}$–$^1/_{15}$ grain (0.001–0.004 Gm.).—*Antid.*, same as for arsenic trioxide.—*Caut.* Poisonous!

Arsenic Disulphide. } —see **Arsenic Sulphide, Red**
Arsenic Glass, Red. }

Arsenic Iodide Merck.—Cryst. (7

(Arsenous, or Arsenious, Iodide; Arsenic Triiodide).—AsI_3.—Orange-red, lustrous cryst. masses; or orange-red, shin., cryst. scales; iodine odor & taste.—*Sol.* E., carbon. disulph.; abt. 10 W.; 30 A.; grad. decomp. by W.—*Melt.* 146° C.—*Boil.* 394–414° C.—Alter.; Antisep.—*Uses: Intern.*, cancer, scrofula, lepra & skin dis.—*Extern.*, psoria., lupus, lepra, &c.—*Doses:* $^1/_{60}$–$^1/_{15}$ grain (0.001–0.004 Gm.) several t. p. d., in pills; in scrofula, 1–10 drops of a 1% solut. 1–2 t. p. d., very gradually increased; also given in form of Donovan's Solut. (Arsen. iod. 10, mercuric iod. 10, & water to make 1000).—*Max. D.* $^1/_6$ grain (0.01 Gm.) single; $^1/_2$ grain (0.03 Gm.) daily.—*Antid.*, same as for arsenic trioxide.—*Incomp.*, water.—*Caut.* Handle w. care; keep fr. air & light. Poisonous!

do. Merck.—*U. S. P.* (8

Arsenic Phosphide Merck (25

AsP.—Reddish-brown, dark, combust. fragments.—*Sol.*, carbon disulph.—Decomp. by heat.

Arsenic, Ruby.—see **Arsenic Sulphide, Red**

Arsenic Sulphide Red Merck.—Lumps or powder (1

(Arsenic Disulphide; Realgar; Red Orpiment; Ruby Arsenic; Red Arsenic Glass).—Native.—As_2S_2.—Brownish-red powd., or amorph. masses.—*Sol.*, alkalies, their sulphides & carbonates.—Ignites at h. temp.; burns w. blue flame.—*Uses:* Techn., as pigment in painting; in fireworks for giving an intense white flame; manuf. of shot; in calico-printing and dyeing; in tanning.

Arsenic Sulphide Yellow Merck.—Lumps or powder (1

(Arsenic Trisulphide; Arsenous Sulphide; Orpiment; King's Yellow).—As_2S_3.—Yellow or orange powd., or lumps w. conch. fracture.—*Sol.*, alkalies, their sulphides & carbonates.—

Uses: Pigment; reduc. agent; depil.; in veter. medicine for remov. warts fr. horses.—*Techn.*, in painting.

Arsenic Sulphide Yellow Merck.—Precip. (3

(Precipitated Orpiment; Precip. Arsenic Trisulphide, &c.).—Very fine yellow powd.—*Sol.*, alkal., their carbonates, & sulphides.—*Uses:* Depil. & caustic; also techn.

Arsenic Tribromide.—see **Arsenic Bromide**

Arsenic Trichloride.—see **Arsenic Chloride**

Arsenic Triiodide.—see **Arsenic Iodide**

Arsenic Trioxide Merck.—Highest Purity, powder (1

(Arsenious Acid; White Arsenic; Arsenous Oxide or Anhydride).—Fr. comm'l wh. arsenic. —As_2O_3.— Wh., amorphous powder; odorl.; tastel.—*Sol.*, hydrochloric acid; v. sl. A.; slowly in cold W.; freely in solut. alkalies & alkali carbonates; abt. 5 G.—*Subl.* 137° C.—Antiper.; Antisep.; Alter.—*Uses: Intern.*, malar. fev., skin dis., chorea, neural., gastralgia, uterine disord., diab., bronch.—*Extern.*, remov. warts, cancers, &c.—*Dose* $^1/_{60}$–$^1/_{30}$ grain (0.001–0.002 Gm.) 3 or 4 t. p. d.—*Appl.*, on neoplasms large amounts should be used, to get *quick results;* otherwise it is dangerous. Must be kept from healthy tissues when topically applied, or dangerous absorption will occur.—*Max. D.*, abt. $^1/_{12}$ grain (0.005 Gm.) single; abt. $^1/_6$ grain (0.01 Gm.) p. day.—*Antid.*, emetics; stomach pump or siphon if seen immediately; hot milk & water w. zinc sulphate or mustard. After vomiting, give milk or eggs, & magnesia in milk. If saccharated oxide of iron or dialyzed iron is handy, use. If tincture of iron & ammonia water are within reach, precip. former with latter, collect precip. on a strainer, & give it moist. Always give antidotes, be the case never so hopeless.—*Incomp.*, taunic acid, infusion cinchona, salts of iron, magnesium, &c.—*Caut.* Keep with every care against mistake or accident. Highly poisonous!

do. Merck.—Highest Purity, lumps (1

As_2O_3.—Heavy, amorph. masses; at first transl. & glass-like, but slowly becom. wh. & opaque. —Sp. Gr., abt. 3.7.—*Sol.*, hydrochl. acid.—*Uses & Doses:* As of preceding.

do.— Commercial, lumps or powder (1

By-product in working cobalt, nickel, silver, zinc, & tin, ores.—As_2O_3.—Heavy, amorph. transl., or wh. opaque masses; or wh. powder.—*Uses:* Techn., both lumps & powd. are used in paints, in manuf. of glass, in leather industries, as preserv. of hides, as antisep., for killing rodents, manuf. of shot & bullets, & in manuf. of arsenic acid.—*Caut.* Highly poisonous!

do.— Solution.—*U. S. P.*

Aqu. solut. cont. 1% As_2O_3.—Alter.; Antiper.—*Uses:* Lepra & o. skin dis. & in interm. or remit. fevers.—*Dose* 2–8 ♏ (0.12–0.5 Cc.) in solut.

Arsenic Trioxide Merck.—Reagent (1

(Arsenous Acid, or Anhydride).—As_2O_3.—Wh., vitr., or porcelain-like pieces or wh. powd.—*Sol.* 15 boil. W.—*Tests:* (*Res.*) heat 1 Gm. in porcel. dish – none wghble.—(*$BaSO_4$; Talc; $CaSO_4$, &c.*) 0.5 Gm. perf. solub. in 5 Cc. H_2O+ 5 Cc. NH_4OH (sp. gr. 0.96); solut. clear.—(*Sulphide*) dissolve 5 Gm. in 15 Cc. H_2O+5 Cc. NaOH solut.; add 2 drops solut. lead acetate – no color react.—*Uses:* Prepar. volumetric soluts.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Arsenic Trisulphide.—see **Arsenic Sulphide, Yellow**

Arsenic, White. } —see **Arsenic Trioxide**
Arsen(i)ous Anhydride. }

Arsen(i)ous Bromide.—see **Arsenic Bromide**

Arsen(i)ous Chloride.—see **Arsenic Chloride**

Arsen(i)ous Iodide.—see **Arsenic Iodide**

Arsen(i)ous Oxide).—see **Arsenic Trioxide**

Arsen(i)ous Sulphide.—see **Arsenic Sulphide, Yellow**

Artemisia.—see **Absinthium; Santonica**

Artemisia Abrotanum

(Southernwood).—Lvs. of Artemisia abrotanum, L. Compositæ. — *Habit.:* Southern Europe; Western Asia; cultiv. in U. S.—*Etymol.:* "Artemisia," fr. Grk. "Artemis," the goddess —the Roman Diana to whom Artemisia Absinthium was dedicated. "Abrotanum," fr. Grk. "abrotos," god-like, undying, because of the curative properties of the plant.—*Constit.:* Volat. oil; abrotine, $C_{21}H_{22}N_2O$.—*Uses:* Tonic; Deobstruent; Anthelm.; also in arom. baths & poultices.—*Dose:* Fld. extr., 30–60 ♏ (2–4 Cc.).

Artemisia Frigida

(Sierra Salvia; Sage Bush; Mountain Sage; Wormwood Sage).—Herb of Artemisia frigida, Willd. Compositæ.—*Habit.:* U. S. (Minnesota to Idaho, south to Texas; Colorado).—*Etymol.:* See preceding.—*Constit.:* Bitter prin. (glucoside?).—Diuret.; Nerve Stim.—*Uses:* Periodic fevers, rheumat., scarlet fever, diphth., &c.—*Dose:* Fld. extr., 1–2 fl. dr. (4–8 Cc.).

Artemisia Mutellina

(Silky Wormwood).—Artemisia mutellina, Vill. Compositæ.—*Habit.:* Swiss Alps; Central Europe.—*Etymol.:* See Artemisia Abrotanum. —*Constit.:* Volat. oil; bitter prin.—Bitter Stomachic; Stim.; Tonic.—*Uses:* Prepar. absinthe.

Artemisia Pontica

(Roman Wormwood).—Artemisia pontica, L. Compositæ. — *Habit.:* Southern Europe to Central Asia.—*Etymol.:* See Artemisia Abrotanum.—*Constit.:* Volat. oil; bitter prin.—*Uses:* Bitter stomachic like absinthium.

Artemisia Vulgaris

(Mugwort; Mugweed).—Herb & root of Artemisia vulgaris, L. Compositæ. — *Habit.:* Europe; Northern Africa; Asia; natur. in U. S.— *Etymol.:* See Artemisia Abrotanum.—*Constit.: Herb:* Volat. oil; tannin.—*Root:* Volat. oil; tannin; resin.—*Herb:* Aromat.; Emmen.; Antispasm. —*Root:* Tonic, particularly in epilepsy; Emmen. —*Uses:* Eclampsia, gastric debil., febrile conditions, & tapeworm.—*Doses:* Alcoh. extr., 2–10 grains (0.12–0.6 Gm.).—Fld. extr., 30–60 ♏ (2–4 Cc.).

Artemisin Merck (200

(Oxysantonin?).—Fr. seeds of Artemisia maritima (Wormseed), in which it is found with santonin, & which may be regarded as oxysantonin.—$C_{15}H_{18}O_4$.—Wh. cryst.—*Sol.* C.; hot A., & hot W.—*Melt.* 200° C.—Excellent stimulant of appetite in conjunction w. quassin & iron oxalate.

Arum

(Spotted Arum; Adder's Root).—Root of Arum maculatum, L. Araceæ. — *Habit.:* Middle & Southern Europe.—*Etymol.:* Grk. "aros," to be useful, referring to its application.—*Constit.:* Saponin; starch.—Stoma. & Tonic in chlorosis.

Asafetida.—*U. S. P.*

(Devil's Dung; Food of the Gods; Asafœtida).— Gum-resin fr. root of Ferula fœtida (Bunge) Regel; F. Scorodosma, B. & H.; & F. Narthex, Boissier. Umbelliferæ (Peucedaneæ).—*Habit.:* Persia; Turkestan; Afghanistan.—*Etymol.:* Persian "aza," mastic or gum, & Lat. "fœtida," stinking.—Irreg. masses of whitish tears imbedded in a yellowish-gray or brownish-gray, sticky mass. Partly sol. in E.; sol. (at least 50%) in A.; yields a milky emulsion when triturated with W.—*Constit.:* Ethereal oil; resin; ester of asaresinotannol & ferulaic acid; gum; vanillin; free ferulic (ferulaic) acid.—*Uses:* Nervine in hysteria, hypochondriasis, asthma, catarrh, flatul. constip., convulsions, spasms, whoop.-cough, &c. Used in India, Persia, &c., as condiment and flavoring for foods.—*Doses:* 5–20 grains (0.3–1.3 Gm.) in pill or powd.—Fld. extr., 5–20 ♏ (0.3–1.3 Cc.).—Tinct., 10–40 ♏ (0.6–2.6 Cc.).

Asagræa Officinalis.—see **Sabadilla**

Asana.—see **Pterocarpus Pallidus**

Asaprol (25

(Calcium Betanaphtholalphamonosulphonate; Abrastol).—Fr. betanaphthol, by sulphuric acid. —$CaC_{20}H_{14}S_2O_8+3H_2O$, or, $Ca(OH.C_{10}.H_8.SO_3)_2 +3H_2O$.—Reddish-wh. powd.; odorl.; sl. bitter, then sweet, taste.—*Sol.* 1.5 W.; 3 A.—Decomp. near 50° C.—Analg.; Antisep.; Antirheum.; Antipyr.—*Uses:* Tubercul. rheumat., pharyngitis, gout, typh. fever, diphtheria, whoop.-cough, sciatica, &c. Also used as a chem. reagent for albumin in presence of albumoses & peptone.—*Dose* 8–15 grains (0.5–1 Gm.), several t. p. d.—*Max. D.* 15 grains (1 Gm.), single; 60 grains (4 Gm.) p. day.—*Appl.* 2–5% solut.—*Incomp.*, antipyrine & quinine.— See also Abrastol.

Asarabacca.—see **Asarum Europæum**

Asarabacca Camphor.
Asarin.—see **Asaron**

Asaron Merck.—Cryst. (280

(Asarin; Asarum Camphor; Asarabacca Camphor).—Fr. root Asarum europæum, L. (Asarabacca).—$C_{12}H_{16}O_3$, or, $(CH_3O)_3.C_6H_2.(CH)_2.CH_3$. —Wh. to yellowish cryst.; faint, biting taste.— *Sol.* A., E., glacial acetic acid; sl. in hot W.— *Melt.* 59° C.—*Boil.* 296° C.—Tonic; Antisep.

Asarum Camphor.—see **Asaron**

Asarum Canadense

(Wild Ginger; Canada Snakeroot; Indian Ginger).—Rhizome & rootlets of Asarum canadense, L. Aristolochiaceæ.—*Habit.:* Canada to N. Carolina & Kansas.—*Etymol.:* Grk. "a," not, & "saroein," to decorate, *i.e.*, the ancients forbade the use of the flowers (of A. europæum) for garlands.—*Constit.:* Acrid resin, arom. volat. oil, methyl-eugenol, gum, chlorophyll, &c.— Aromat.; Stim.; Diaphoret.—*Uses:* Colic, & to sweeten the breath.—*Dose:* Fld. extr., 15–60 ♏ (1–4 Cc.).

Asarum Europæum

(Asarabacca; Hazelwort; Wild Nard; European Snakeroot).—Root of Asarum europæum, L. Aristolochiaceæ.—*Habit.:* Europe.—*Etymol.:* See preceding—*Constit.:* Volat. oil; methyl-eugenol; asarum camphor (asaron), $C_{12}H_{16}O_3$; asarite(?); tannin; resin; bitter prin.—*Uses:* Emet.; Sternut.; Cath.; Errhine.—*Doses:* 30–60 grains (2–4 Gm.) as emet. & cath.; 1–2 grains (0.06–0.12 Gm.) as errhine.

Asbestos (1

(Amianthus).—Native calcium & magnesium silicate.—Fine, slender, flaxy fibers; resist fire & most solvents.—*Uses:* Chiefly techn. In laborat. to make filters for resist. str. acids; close combustion tubes; acts w. sulphuric acid as drier for gases; in milk analysis; Gooch filters, &c.

Asbestos-Copper Merck (10

Uses: Determ. sugar accord. to Allihn.

Asbestos Platinized Merck (700

20% & 25% platinum.

Asclepias Curassavica

(Blood Flower; Bastard Ipecac; Blood Weed; Red-head).—Lvs. & tops of Asclepias curassavica, L. Asclepiadaceæ.—*Habit.:* West Indies; South America.—*Etymol.:* Fr. "Æsculapius," god of medicine, in whose honor the species was named.—*Constit.:* Asclepiadin (glucoside)?— Hemostat.; Astring.; Styptic; Vermif.; also,

Alterative & Emetic.—*Uses:* Chronic gonor., worms, & leucor.—*Dose:* Fld. extr., 60–120 ♏ (4–8 Cc.).

Asclepias Incarnata

(White Indian Hemp).—Root of Asclepias incarnata, L. Asclepiadaceæ.—*Habit.:* Canada to Tennessee & Kansas.—*Etymol.:* "Æsculapius," see preceding. Lat. "incarnata," flesh-colored, referring to the color of the corollas.—*Constit.:* Asclepiadin; two acrid resins; fixed & volat. oils; pectin; albumin.—Expector.; Diuret.; Alter.—*Uses:* Bronch., pneumon., rheumat., &c., and also as anthelm.—*Doses:* Fld. extr., 30–60 ♏ (2–4 Cc.); 10–20 grains (0.6–1.3 Gm.) powd. root is given as anthelm. 3 t. p. d.

Asclepias Syriaca

(Milkweed; Silkweed; Wild Cotton).—Root of Asclepias syriaca, L. (A. Cornuti, Decaisne). Asclepiadaceæ.—*Habit.:* Canada to N. Carolina & Kansas.—*Etymol.:* "Æsculapius," see Asclepias Curassavica.—*Constit.:* Asclepiadin (glucoside)?; tannin; volat. oil; bitter prin.; starch.—Alterative; Anodyne.—*Uses:* Scrofula, asthma, amenor., dropsy, dyspnea, worms, rheumat., &c.—*Dose:* Fld. extr., 30–60 ♏ (2–4 Cc.).

Asclepin (Eclectic) (25

Resinous extr. fr. root of Asclepias tuberosa, L. (Butterfly weed).—Diaphor.; Expector.; Cath.; Tonic.—*Uses:* Pleurisy, pneum., catarrh, consumpt., &c.—*Dose* 1–2 grains (0.06–0.12 Gm.) 3 or 4 t. p. d.

Asepsin.—see **Bromacetanilide, Bromo-**

Aseptol Merck (4

(Sozolic Acid; Orthophenolsulphonic Acid; Orthosulphocarbolic Acid).—$33\frac{1}{3}\%$ solut. orthophenolsulphonic acid.—$C_6H_6O_4S$, or, $C_6H_4(OH)SO_3H$ [1:2].—Clear, yellow to yellowish-brown liq.; odor carbolic acid.—Sp. Gr. 1.155 at 15° C.—*Sol.* A., G., all prop. W.—Antisep.—*Uses:* Disinf.; claimed free fr. toxic effects, yet more effic. than carbolic acid.—*Extern.*, in dis. of bladder, eye, skin, & in diphth., laryng., gingivitis, &c.—Efficient reagent for albumin; also for detect. biliary pigments in urine.—*Dose:* 10–20 grains (0.6–1.3 Gm.).—*Appl.* 1 to 10% solut.—*Caut.* Keep fr. light.

Aseptolin=Pilocarpine Phenate.—see **Pilocarpine Phenate**

Ash, European.—see **Fraxinus**

Asparagin Merck (25

(Aminosuccinamic Acid; Althein; Asparagine; Asparamide).—Amido-deriv. of succinic acid fr. most young plants, espec. Leguminosæ.—$C_4H_8N_2O_3+H_2O$, or, $CONH_2.CH_2CH(NH_2).CO-OH+H_2O$.—Transp., lustr., rhombic prisms.—Sp. Gr. 1.519.—*Sol.* 47 W. at 20° C., acids, alkalies.—Physiologically inactive.—*Uses:* Formerly in cardiac dis.—*Dose* 5–10 grains (0.3–0.6 Gm.).

Asparagin-Mercury.—see **Mercury Asparaginate**

Asparagin Sulphate Merck.—Amorph. (60

$C_4H_8N_2O_3.H_2SO_4$.—Wh. powd. *Sol.* W.

Asparagus

Root of Asparagus officinalis, L. Liliaceæ, Convallariaceæ (Asparagoideæ).—*Habit.:* Europe; cultiv. everywhere. *Etymol.:* Fr. "asparagos," the ancient Grk. name, of Persian origin.—*Constit.:* Asparagin ($C_4H_8N_2O_3.H_2O$); fat; sugar.—Aper.; Alter.; Diuret.—*Uses:* Domestic practice & eclectics. Medicinal value problematical.—*Dose:* Fld. extr., 30–60 ♏ (2–4 Cc.).

Asparamide.—see **Asparagin**

Asperula

(Sweet Woodruff; Sweet-grass; Hay-plant).—Lvs. & tops of Asperula odorata, L. Rubiaceæ.—*Habit.:* Europe; U. S.—*Etymol.:* Fr. Lat. "asper," rough ("asperulus" is the diminutive), *i.e.*, the leaves are hairy.—*Constit.:* Cumarin; tannin; volat. oil.—Aromat.; Hepat.; Stim.; Deobstruent.—*Uses:* Pectoral teas & spiced wines.

Asphaltum

(Asphalt; Mineral Pitch; Judean Pitch; Bitumen).—Fossil, bituminous substance resulting from petroleum by evap. of lighter hydrocarbons, & partial oxid'n of the residue.—*Habit.:* West Indies (chiefly Trinidad); Venezuela; Dead Sea; Switzerland, &c.—*Etymol.:* Grk. "asphalton," bitumen. The name, signifying "earth-resin," or "earth-pitch," was already in use at the time of Aristotle, Strabo, & Dioscorides.—The "Syriac" asphalt (from the Dead Sea) forms deep-black, shining brittle masses; conch. fracture; faint, pitch-like odor.—*Constit.:* Hydrocarbons, w. some O, S, & N.—*Sol.*, oil turp., petroleum, CS_2, C., acetone, & E.; insol. acids, alkalies, W., & A.—*Uses: Medic.*, Antispasm.; & fumig. in rheumat.—*Techn.*, roof-covering; street pavements; calking ships; insulators; lutes; lacquers & varnishes; cell-making in microscopy; etching in photog.

Asphodelus

Root of Asphodelus ramosus, L. Liliaceæ. (Asphodeleæ).—*Habit.:* Mediterranean region.—*Etymol.:* Grk. "a," not, & "sphallein," to want, to need; the ancients planted it on graves in order that the dead should not suffer fr. want.—*Constit.:* Starch; mucilage; sugar; bitter extractive; asphodelin?—Emmen.; Diuret.—*Uses: Extern.*, in cutaneous eruptions.

Aspidium.—*U. S. P.*

(Male Fern; Male Shield-fern; Filix-Mas).—Dried rhizome of Dryopteris (Aspidium) Filix-mas (L.) Schott (Swartz), & of Dryopteris (Aspidium) marginalis (L.) Asa Gray. Filices. (Polypodiaceæ).—*Habit.:* North America; Northern Asia; Europe; Northern Africa.—*Etymol.:* Grk. "aspidion," a little shield, fr. "aspis," shield, referring to the form of the indusium. The designation "filix-mas" was ap-

plied by Linnæus to this species, and is probably derived fr. "filix," fern, fr. Lat. "filum," thread, because of the root-threads; or, fr. Grk. "ptylon," wing, because of the form of the flabellum. "Mas" designates "male" or "masculine," & refers to the asexual fructification. "Marginalis" fr. Lat. "margino, marginis," margin, *i.e.*, the fruit dots are near the edge of the frond. "Dryopteris" fr. Grk. "dryos," the oak, & "pteris," wing, *i.e.*, referring to the favorite place of growth of the fern.—*Constit.:* Filicic acid, $C_{14}H_{16}O_5$; volat. oil; filicin; filmaron; filitannic acid; filix red; resin.—*Uses:* Teniafuge. —*Doses:* 30–120 grains (2–8 Gm.). Usually exhibited in form of oleoresin.—Fld. extr., 30–90 ♏ (2–6 Cc.).

Aspidium Athamanticum.—see **Pannum**

Aspidium Spinulosum

(Common Wood Fern).—Rhizome of Dryopteris (Aspidium) spinulosum, Kze. Polypodiaceæ.—*Habit.:* Northern Europe; Asia; North America.—*Etymol.:* See Aspidium, above. —*Constit.*. Polystichin; polystichalbin; polystichnin; polystichocitrin; polystichoflavin.—*Uses:* Teniafuge.

Aspidosamine Hesse-Merck (8000

Alkaloid fr. bark Aspidosperma Quebracho-blanco, Schlecht.— $C_{22}H_{28}N_2O_2$. — Yellowish-brown powd.; darkens in air.—*Sol.* A., E., C., B.—*Melt.*, abt. 100° C.

Aspidosamine Hydrochloride Hesse-Merck (8000

$C_{22}H_{28}N_2O_2HCl$.—Brown powd.—*Sol.* W., A.

Aspidosperma

(Quebracho).—Bark of Aspidosperma Quebracho-blanco, Schlecht. Apocynaceæ. —*Habit.:* Argentine Republic.—*Etymol.:* Fr. Grk. "aspis," shield, & "sperma," seed; "quebracho," fr. Portug. "quebrahacho," axe-breaker, *i.e.*, the wood is exceedingly hard.—Nearly flat pieces abt. $^2/_5$–1 in. (1–3 Cm.) thick; extern. yellowish-gray or brownish; inner surface yellowish- or reddish-brown; inodor.; very bitter, sl. aromat. taste.—*Constit.:* Aspidospermine, $C_{22}H_{30}N_2O$; aspidospermatine, $C_{22}H_{28}N_2O_2$; aspidosamine, $C_{22}H_{28}N_2O_2$; quebrachine, $C_{21}H_{26}N_2O_3$; quebrachamine; hypoquebrachine, $C_{21}H_{22}N_2O_2$; quebrachol, $C_{20}H_{24}O.xH_2O$; quebrachit, $C_5H_{11}(OCH_3)O_5$; tannin.—Febrif.; Tonic; Antispasm.—*Uses:* Asthma & dyspnea, emphysema, malaria, & dysentery.—*Extern.*, in endometr. & ulcerat. cervix.—*Doses:* 15–60 grains (1–4 Gm.) in powd.—Alcoh. extr., 2–5 grains (0.12–0.3 Gm.).—Aqu. extr., 2–5 grains (0.12–0.3 Gm.).—Fld. extr., 15–60 ♏ (1–4 Cc.).—Tinct. (of bark or wood) 30–60 ♏ (2–4 Cc.).

Aspidospermine Merck.—Amorph. (570

Fr. bark Aspidosperma Quebracho-blanco, Schlecht.—Essentially a mixt. of the amorph. quebracho bases.—Amorph., brownish-yellow powd.; bitter taste; alkal. react.—*Sol.* A., E., C., B.—Respiratory poison.—*Uses:* Dyspnea, asthma, spasm. croup, &c. "The digitalis of the lungs."—*Dose* 1–$1^1/_2$ grains (0.06–0 1 Gm.), several t. p. d., in pills.

Aspidospermine Fraude-Merck.—Cryst. (1850

Fr. Aspidosperma Quebracho-blanco, Schlecht. —$C_{22}H_{30}N_2O_2$.—Wh. need., or pointed prisms. —*Sol.* A., E., C., B.—*Melt.* 206° C.—*Uses:* As of preceding, us'y in form of readily solub. sulphate.—*Dose* $^1/_{60}$–$^1/_{30}$ grain (0.001–0.002 Gm.).

Aspidospermine Citrate Merck.—Amorph. (1000

Faintly reddish-yellow amorph. powd.—*Sol.* W., A.

Aspidospermine Hydrochloride Merck.—Amorphous (1000

Yellowish-brown powd.—*Sol.* W., A.

Aspidospermine Sulphate Merck.—Amorphous (1000

Yellowish-brown powd.—*Sol.* W., A.

do. Fraude-Merck.—Cryst. (1850

$(C_{22}H_{30}N_2O_2)_2.H_2SO_4$.—Wh. cryst.—*Sol.* W., A. —*Uses:* In typhoid, when quinine fails to lower temperat.—*Dose* $^1/_{60}$–$^1/_{30}$ grain (0.001–0.002 Gm.) subcut.

Aspirin (9

(Acetylsalicylic Acid).—$C_6H_4.O.COCH_3.COOH$. —Colorl. cryst.—*Sol.* A., E.; sl. W.—*Melt.* 135° C.—Antipyr. & Antirheumat. as succedan. for salicylic acid & salicylates.—*Dose* 5–15 grains (0.3–1 Gm.) 3 to 4 t. p. d.

Asplenium Ruta-Muraria.—see **Ruta-Muraria**

Asterol (15

(Mercury - Paraphenolsulphonate Ammonium-Tartrate). — $C_{12}H_{10}O_6S_2Hg.4(C_4H_4O_6[NH_4]_2)+8H_2O$.—Brown powd.—10.41% Hg.— Antisep. —*Uses:* Instead of carbolic acid & corros. sublim. in 0.2–0.4% solut.

Athamanta.—see **Oreoselinum**

Atherospermine

Fr. bark Atherosperma moschatum, Labill. (Australian sassafras).—$C_{30}H_{20}NO_5$ (Zeyer).— Wh., amorph. powd., or wh. lumps; bitter taste. —*Sol.* A., acids; sl. in W.—*Melt.* 128° C.— Diaphor.; Diuret.

Atoxyl (60

(Arsenic-acid Anilide).—$C_6H_5.NHAsO_2$.—Wh., cryst., odorl. powd.—37.7% As.—*Sol.* W.— *Uses:* As of o. arsenicals.—*Dose* $^3/_4$–3 grains (0.05–0.2 Gm.) p. d. subcut.

Atropamine.—see **Apoatropine**

Atropia.—see **Atropine**

Atropin (Resinoid).—(*Not* the Alkaloid Atropine!) (80

Resinous extr. fr. Atropa Belladonna, L., containing atropine.—Brown powd.; bitter taste.— *Sol.* A.—Mydr.; Sed.; Analg.—*Uses:* To relieve pain, & in spasmodic dis.—*Dose* $^1/_{20}$–$^1/_{12}$ grain (0.003–0.005 Gm.) 3 or 4 t. p. d. in pill or powd.

Atropine Merck.—Alkaloid.—Cryst. (130

(Atropia).—Alkaloid fr. lvs. & roots Atropa Belladonna, L.—$C_{17}H_{23}NO_3$.—Wh., acic. cryst.; bitter, acrid taste.—*Sol.* 450 W., 1.46 A., 16.6 E., & 1.56 C. at 25° C.—*Melt.* 112–113° C.—Antispasm.; Analg.; Mydr.; Respir. & Card. Stim.; Antisialag. & Antihidr.—*Uses: Intern.,* Antidote to pilocarpine, chloral, chloroform, hydrocyanic acid, fungus poison, & morphine; in angina pectoris, shock, colliquat. sw., ptyal., gastric ulcer, &c.—*Extern.,* oint. (1%), or oleate is used, as analg.; as mydr., 0.5% solut.—*Dose* $^1/_{120}$–$^1/_{60}$ grain (0.0005–0.001 Gm.).—*Max. D.* $^1/_{60}$ grain (0.001 Gm.), single; $^1/_{20}$ grain (0.003 Gm.) daily.—*Antid.,* emetics, stomach tube, pilocarpine ($^1/_3$–1 grain [0.02–0.06 Gm.]), muscarine nitrate, or $^1/_{10}$–$^1/_5$ grain (0.005–0.01 Gm.) morphine, hypoderm.; tannin, or charcoal before absorp.—*Incomp.: Chem.,* alkalies, tannin, salts of merc.—*Physiol.,* morphine, pilocarpine, muscarine, aconitine, & physostigmine.—*Caut.* Keep fr. air & light, in well-stp. amber vials. Very poisonous! Handle with care.

Note.—The uniformly high purity of Atropine Merck insures uniformly perfect physiological results.

Atropine Arsenate Merck (300

$(C_{17}H_{23}NO_3)_2.H_3AsO_4$.—Wh., cryst. powd. cont. 19.7% arsenic acid & 80% of atropine.—*Sol.* W., A.—*Caut.* Very poisonous!

Atropine Borate Merck (300

$(C_{17}H_{23}NO_3)_2B_4O_7$.—Wh. cryst.—*Sol.* W., A.—*Uses:* Ophthalmic practice.

Atropine Hydrobromide Merck (300

$C_{17}H_{23}NO_3HBr$.—Wh. cryst.—*Sol.* W., A.—Mydriatic.—*Uses, &c.:* As of atropine.

Atropine Hydrochloride Merck (300

$C_{17}H_{23}NO_3.HCl$.—Wh. cryst.—*Sol.* W., A.; sl. E.—Mydr., &c.—*Uses, Antid., Incomp., & Caut.:* As of atropine.—*Dose* $^1/_{100}$–$^1/_{60}$ grain (0.0006–0.001 Gm.).

Atropine Methylbromide Merck (600

(Methylatropine Bromide).—$C_{18}H_{26}NO_3Br$.—20.84% Br.—Wh. cryst.—*Sol.* W.; dil. A.; sparingly in absol. A., C.—Efficient Mydriatic; Antihidrotic.—*Uses:* Ophthalmology instead of atropine, & to check excessive sweating in phth. Also in migraine, cephalalgia, cutan. dis., tuberc., bronch., laryng., keratitis, cystitis, insomnia, neurasth., hysteria, tussis & pertussis, epil., myocarditis, dyspep., &c.—*Dose: Intern.,* $^1/_{20}$ grain (0.002 Gm.) 2 t. daily; *subcutan.,* $^1/_4$ to 1 syringeful of a 0.5% solut. in cherry-laurel water; *extern.,* in ophthalm. surgery in 0.03% solut. or 0.1% oint.

Atropine Nitrate Merck (300

$C_{17}H_{23}NO_3.HNO_3$.—Wh. cryst.—*Sol.* A., W.—*Uses, &c.:* As of atropine.

Atropine Oleate

2% solut. atropine in oleic acid.—*Sol.* E., B., C., & oils.—Mydr.; Sed.; Anod.—*Uses:* Inunction in whoop.-cough, shock, & spasm where medic. cannot be properly given by mouth.

Atropine Salicylate Merck (275

$C_{17}H_{23}NO_3.C_7H_6O_2$.—Wh. cryst.—*Sol.* W., A., C.—*Uses, &c.:* As of atropine. Claimed preferable to sulphate or alkaloid.

Atropine Santonate (*Not* Santoninate)

Wh., non-hygros., amorph. powd.—*Sol.* W.—*Uses:* Non-irritating solut's of atropine.—*Caut.* Keep in dark amber bot. to prevent formation of photo-santonic acid.

Atropine Santoninate (*Not* Santonate)

$C_{17}H_{23}NO_3.C_{15}H_{20}O_4$.—Wh. powd.—*Sol.* W.—*Melt.* 113–115° C.—*Uses:* Ophthalmic practice in preference to o. atropine salts as it keeps better.—*Caut.* Keep in dark bot.

Atropine Sulphate Merck (109

$(C_{17}H_{23}NO_3)_2.H_2SO_4$.—Wh., perfectly neutral, cryst.; absol. free fr. acid or alkali; alm. inactive.—*Sol.,* abt. 0.4 W., 3.7 A., 2140 E., & 620 C. at 25° C. (U. S. P.).—*Melt.,* abt. 189.9° C.—*Uses, Antid., Incomp. & Caut.:* As of atropine.—*Dose* $^1/_{100}$–$^1/_{50}$ grain (0.0006–0.0012 Gm.).

Note.—Atropine Sulphate Merck is prepared from the highly pure alkaloid, & affords uniformly perfect physiological results.

do. Merck.—Natural, cryst. (109

Mixt. of hyoscyamine sulphate & atropine sulphate.—Wh. cryst.—*Sol.* W., A.—*Melt.* 190–193° C.

Atropine Valerate Merck (325

$(C_{17}H_{23}NO_3.C_5H_{10}O_2)_2+H_2O$.—Wh., transp. cryst.—*Sol.* W., A., E.—*Uses, &c.:* As of atropine.—*Max. D.* $^1/_{60}$ grain (0.001 Gm.) single; $^1/_{20}$ grain (0.003 Gm.) daily.

Atroscine Merck (3200

Inactive form of hyoscine.—$C_{17}H_{21}NO_4+H_2O$.—Transp., colorl. cryst.—*Sol.* A., E., C.; v. sl'y W.—*Melt.* 50–52° C.—*Uses:* Myotic in 1% solut. in castor oil.—*Intern.,* sedat. & hypnot., like hyoscyamine & scopolamine.

Atroscine Hydrobromide Merck (2000

$C_{17}H_{21}NO_4.HBr+3H_2O$.—Rhomb. cryst.—*Sol.,* eas. W., A.—*Melt.,* abt. 180° C. (when anhydrous).

Aubépine.—see **Aldehyde Anisic**

Auramine, Medicinal.—see **Pyoktanin Yellow**

Auramine Yellow Merck (12

(Amidotetramethyldiamidodiphenylmethane Hydrochloride).—Sulphur-yellow powd.—*Sol.* A., W., E.—*Uses: Techn.,* for improving appearance of sugar; & dyeing cotton, wool, silk, leather, & paper.

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Aurantium.—see **Orange**

Aureoline.—see **Primuline Yellow**

Auric & Aurous Salts.—see under **Gold**

Aurin Red Merck (8

Mixt. aurin (or pararosolic-acid-trioxytriphenylcarbhydride), methylaurin, & corallin-phtalin. —Yellowish-brown lumps; greenish fracture.— —*Sol.* A.; insol. W.—*Uses:* Coloring spirit varnishes & lacquers, & manuf. tapestries & colored paper; indicator f. alkalies.—See also Rosolic Acid.

Aurine R.—see **Coralline**

Australene.—see **Pinene, Dextrogyrate**

Austrian Cinnabar.—see **Lead Chromate, Basic**

Ava-Ava.—see **Kava-Kava**

Avena

(Common Oat).—The seed of Avena sativa, L. Graminaceæ; also a farina or meal prepared therefrom.—*Habit.:* All temperate zones.—*Etymol.:* Lat. "avena," oat (Plinius).—*Constit.:* Starch; proteids (chiefly avenin); fixed oil; gum; cellulose; sugar.—*Uses:* Meal is demulc., Lax.; Dietet.; Nutr. in form of gruel, & soup; also in enemata, as vehicle for irritant remedies. Also considered as nerve tonic, stim., & antispasm.—*Dose* 10–30 ♏ (0.6–2 Cc.) of conc. alcoh. tinct., w. hot W., as nerve tonic, stim., & antispasm.

Avenin Merck (20

(Legumin).—Albuminoid fr. Avena sativa, L. (Oats), prob'y ident. w. gluten casein.—Yellow to yellowish-wh. powd.

Avens.—see **Geum**

Axungia Porci.—see **Lard**

Axwort.—see **Coronilla**

Azaleine.—see **Fuchsine**

Azedarach

(Pride of India; Common Bead Tree; Margosa Bark).—Bark of root of Melia Azedarach, L. Meliaceæ.—*Habit.:* China to India; widely cultiv. & natur. in tropical countries.—*Etymol.:* Fr. Persian "âzâd," free, & "dirakht," a tree. Grk. "melia," the ash tree, *i.e.*, the tree resembles the ash.—*Constit.:* Bitter resin.—*Uses:* Anthelm.—*Dose:* Fld. extr., 10–30 ♏ (0.6–2 Cc.).

Azin Blue.—see **Indulin, Alcohol-soluble**

Azo-acid Yellow C.—see **Azoflavin 2**

Azobenzene Merck.—Pure (10

(Azobenzol; Azobenzide; Benzeneazobenzene). —Fr. nitrobenzene, by act. sodium stannite.— $C_{12}H_{10}N_2$, or, $C_6H_5.N_2.C_5H_5$.—Yellow scales, or plates.—*Sol.* 20 A., E.—*Melt.* 68° C.—*Boil.* 293° C.

do. Merck.—Commercial (5

Azobenzide.
Azobenzol. } —see **Azobenzene**

Azoflavin 2 Merck (7

(Azo-acid Yellow C.; Indian Yellow).—Mixt. of nitrated diphenylamine orange & nitrodiphenylamines.—Ochre-yellow powd.—*Sol.*, hot W.—*Uses:* Dyeing wool & silk acid-fast.

Azolitmin Merck (100

Principal coloring matter litmus.—$C_7H_7NO_4$.—Blackish-violet powd. or scales.—*Sol.* W.; insol. A., E.; w. alkalies forms blue sol. salts.

Azolitmin Merck.—Reagent (110

Partic. pure litmus color. matter.—Blackish-violet scales.—Indicator solut.: 1 Gm. + 80 Cc. H_2O & heat. + 20 Cc. alcoh., & filter when cold. —*Tests:* (*Sensit.*) 0.1 Cc. solut. + 50 Cc. H_2O free fr. alkali & CO_2 – bluish-red color changed to red by at most 0.05 Cc. decinorm. HCl, & changed to bluish-violet by at most 0.05 Cc. decinorm. KOH.—*Uses:* Indicator, replacing solut. litmus.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Azolitmin Paper

Wh. paper charged w. azolitmin.—*Uses:* Indicator; reddish-violet color of paper changed to blue by alkalies, & to red by acids.

B

Babirung.—see **Embelia**

Baccharis

(Groundsel; Mio-Mio).—Lvs. & tops of Baccharis cordifoliæ, D. C. Compositæ.—*Habit.:* Argentine Republic; Brazil; Uruguay.—*Etymol.:* Fr. Grk. "Bacchos," the god of wine in whose honor Baccharis halimifolia was named because of its pleas. odor. "Cordifolia," heart-shaped, referring to shape of lvs.—*Constit.:* Baccharine (toxic alkaloid).

Badger's Bane.—see **Aconitum Lycoctonum**

Bael

(Bela; Bengal Quince; Indian Quince; Bèl; Indian Bael; Aegle).—Unripe or half-ripe fruit of Aegle Marmelos, Correa. Rutaceæ.—*Habit.:* East India; Hindustan.—*Etymol.:* "Bèl" is the East Indian name of the plant. "Aegle" is the name of one of the Hesperides, whose duty it was to guard an orchard bearing golden apples (bael fruit resembles an apple in shape & color). "Marmelo" is the Portuguese for quince, *i.e.*, the fruit was formerly called "marmelos de Benguala," Bengal quince. — Round, size of large orange; extern., yellowish-brown, smooth, slightly gran. & hard; contains 10–15 seeds imbedded in a transp. yellowish or reddish pulp; agre. arom. odor & taste.—*Constit.:* Tannin; mucilage; sugar; volat. oil.—*Uses:*

Astring. in diarrh & dysent.—*Doses:* 15–30 grains (1–2 Gm.).—Alcoh. extr., 30–60 grains (2–4 Gm.).—Fld. extr., 1–2 fl. dr. (4–8 Cc.).

Baking Soda.—see **Sodium Bicarbonate**

Ballota

(Wooly Motherwort).—Lvs. & tops of Ballota (Leonurus) lanata, L. Labiatæ. — *Habit.:* Central & Northern Asia.—*Etymol.:* Fr. Grk. "ballein," to reject, because of the repugnant odor of B. nigra. "Lanatus" fr. Lat. "lana," wool, *i.e.*, wooly.—*Constit.:* Volat. oil; bitter prin.; tannin. — *Uses:* Antirheumat.; Antipodagr.; Diuret.; Stim.

Balm.—see **Melissa**

Balm Gilead.—see **Balsam Canada**

Balmony.—see **Chelone**

Balsam Canada (Canada Turpentine) (1

(Balsam of Fir; Balm of Gilead [improperly]).—Liq. oleoresin fr. Abies balsamica, (L.) Miller (Balm-of-Gilead Fir). Coniferæ. — *Habit.:* Canada, & Northern U. S. to Va., west to Minnesota.—Yellowish, transp., visc. liq.; agre., pine-like odor; bitter taste.—*Sol.* E., C., benzin, xylene, oil turp., oils; dries on expos. to a transp. solid mass.—*Constit.:* Pinene; bornyl acetate; resin; ethereal oil.—*Uses:* Domestic practice, abrasions & sl. wounds.—*Intern.*, in dis. of bronch. & urethral. muc. membr.—*Extern.*, in plasters.—*Micros.*, for mounting.—*Dose* 5–20 grains (0.3–1.3 Gm.) in pills.

Balsam Cannabis Indica Denzel-Merck (60

Fr. Cannabis indica.—*Uses:* Like other Cannabis indica extr. Very uncertain in effects, as even doses of $^1/_6$ grain (0.01 Gm.) sometimes produce toxic symptoms.

Balsam Capivi.
Balsam Copaiba. } —see **Copaiba**

Balsam Fir.—see **Balsam Canada**

Balsam Gurjun (1

(Wood-Oil; "East Indian Copaiba").—Oleoresin fr. Dipterocarpus turbinatus, Gaertner, Dipterocarpeæ, & other sp. of D.—*Habit.:* Eastern India & Burmah.—*Etymol.:* Grk. "dipteros," two-winged, & "carpos," fruit.—Transp., pale-yellow to dark-red, fluoresc., viscid liq.—*Sol.* E., C., CS_2, & ethereal oils; partly in absol. A., E., & B.—Sp. Gr. 0.947–0.964 (Flückiger); hardens with alkaline earths like copaiba.—*Constit.:* Ethereal oil; gurjunic acid, $C_{22}H_{34}O_4$; resin.—Antisep.; Diuret.; Lax.—*Uses:* Dis. of muc. memb., lepra, & syph., like copaiba.—*Extern.*, in oint. & plaster in skin dis.—*Dose* 10–60 grains (0.6–4 Gm.) 2–4 t. p. d. in pills, emuls., or capsules.

Balsam Peru.—*U. S. P.* (3

(Peruvian Balsam; Indian Balsam; China Oil; Black Balsam).—Fr. Toluifera Pereiræ, (Royle) Bail. (Myroxylon Pereiræ Klotzsch). Leguminosæ.—*Habit.:* Central America (San Salvador) in forests near Pacific coast.—*Etymol.:* Fr. Lat. "tolu" & "fero," bearing tolu or an allied balsam; & "Pereiræ," in memory of Jonathan Pereira (1804–1853). "Peru," fr. "T. Perufifera," fr. which the balsam was formerly erroneously believed to be obtained.—Dark, molasses-like liq.; pleas., arom. odor; warm, bitter taste & persistent after-taste.—*Misc.*, acetone, absol. A., C., glac. acetic acid; partly sol. in E. & benzin.—Sp. Gr. 1.140–1.150.—*Constit.:* Cinnamein (60%); benzoic and cinnamic acids; resin; styracin; vanillin; peruresino-tannol esterified w. cinnamic acid.—Expector.; Stim.; Stomachic; Antisep.—*Uses: Intern.*, chron. catar., gonor., leucor., palsy, rheumat., amenor., asthma, phth., &c.—*Extern.*, tubercul. affect. of bone, skin, &c.; chron. indol. ulcers, scabies, sore nipples, chilbl., lice, &c.—*Techn.*, perfumery & chocolate manuf.; also for masking odor of iodoform.—*Dose* 5–30 ♏ (0.3–2 Cc.) 4 to 8 t. p. d. in caps.—*Incomp.*, ferric salts; iodoform; hydrogen dioxide.

Balsam, Storax.—see **Storax**

Balsam, Sulphur.—see **Oil Linseed Sulphurated**

Balsam Tolu.—*U. S. P.* (1

(Thomas Balsam; Opobalsam; Resin Tolu).—Fr. Toluifera Balsamum, L. (Myroxylon toluiferum H. B. K.). Leguminosæ.—*Habit.:* South America (Venezuela, Colombia, Peru) on elevated plains & mountains.—*Etymol.:* Fr. "Tolu," a seaport on the Caribbean Sea; & Lat. "balsamum," fr. Grk. "balsamon," the secretion of the balsam tree.—Yellowish-brown, semi-fluid or nearly solid resinous mass; arom. odor & taste; brittle wh. cold.—*Sol.* A., E., C., acetone & solut. potassa; insol. W., B.; partly in CS_2.—Sp. Gr. 1.200.—*Melt.* 60–65° C.—*Constit.:* Benzoic & cinnamic acids; cinnamein; styracin; vanillin; toluresinotannol esterified w. cinnamic acid.—Expector.; Antisep.—*Uses:* Tubercul., chron. bronch. catar., coughs, &c.—*Dose* 10–30 grains (0.6–2 Gm.) 4–8 t. p. d. in caps. or pastilles.—Tinct. (1:10), 20–40 ♏ (1.3–2.6 Cc.).

Balsam Traumatic.—*N. F.*

(Friar's Balsam; Turlington's Balsam).—Alcoh. tinct. fr. benzoin, storax, balsams Tolu & Peru, aloes, myrrh, & angelica.—*Etymol.:* Fr. Grk. "traumatikos," pertaining to or caused by a wound or injury.—Antisep.—*Uses: Intern.*, antisep. in bowel & stomach affect.—*Extern.*, inflam., wounds, bruises, & sores.—*Dose* 30–60 ♏ (2–4 Cc.).

Baptisia

(Wild Indigo; Indigo Weed; False Indigo; Yellow Indigo).—Root of Baptisia tinctoria, Robert Brown. Papilionaceæ.—*Habit.:* North America.—*Etymol.:* Grk. "baptein," to dye, *i.e.*, the wood dyes red.—*Constit.:* Baptin (a purgative glucoside); baptisin (bitter glucoside); baptitoxine (baptisine), an alkaloid.—Small

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

doses mildly laxative; large doses Emeto-Cathartic; Antisep.; Astring.—*Uses:* Typhoid & scarlet fevers, & diphth.—*Extern.*, in diphth. & scarlat. sore throat, indol. ulcers, gangren. sores, &c.—*Doses:* 5–15 grains (0.3–1 Gm.).—Fld. extr., 5–30 ♏ (0.3–2 Cc.).—Tinct., 10–60 ♏ (0.6–4 Cc.).

Baptisin Merck.—Pure (60

Fr. Baptisia tinctoria, R. Brown. (Wild Indigo plant).—Brownish mass.—Emet. large doses; Laxat., Tonic & Astring. in small doses.—*Uses:* Scar. fever, chron. dysent., &c.—*Dose* $^1/_2$–5 grains (0.03–0.3 Gm.), in powd. or pills.

Baptisin (Eclectic) (15

Precipitated extr. fr. Baptisia tinctoria, R. Brown (Wild indigo plant).—Dark brown powd.—*Sol.* A.—Tonic; Astring.—*Uses, &c.:* As of pure Baptisin.—*Dose* 1–8 grains (0.06–0.5 Gm.).

Baptitoxine.—see **Cytisine**

Barabang.—see **Embelia**

Barbaloin.—see **Aloin**

Barbatimaô

(Barbimao; Astringent Bark; Cortex Adstringens Brasiliensis).—Bark of Stryphnodendron Barbatimaô (Polyphyllum) Mart.; or, of Acacia adstringens Reise. Mimosaceæ. Leguminosæ.—*Habit.:* Brazil.—*Etymol.:* Fr. Grk. "stryphnos," astringent, & "dendron," tree.—*Constit.:* Pectin & tannin.—*Uses:* Astring.

Barberry, Holly-leaved.—see **Berberis Aquifolium**

Bardana.—see **Lappa**

Barff's Boroglycerin

Satur. solut. boric acid in glycerin.—*Uses:* As preservative for animal & vegetable specimens.

Barfoed's Reagent.—For glucose

Aqu. solut. cupric acetate acidulated w. acetic acid.—Reduced by glucose at ord. temp.

Barium.—By electrolysis (10000

Etymol.: Grk. "baros," heavy, because of the high sp. gr. of the barium compounds.—Metallic element.—Ba.—Golden yellow, sl. lustrous, somewh. malleable.

do. Merck.—Fr. Amalgam (2000

Fr. barium amalgam by heat. in hydrogen.

Barium Acetate Merck.—Highest Purity, cryst. (2

$Ba(C_2H_3O_2)_2+H_2O$.—Wh. prisms.—*Sol.* W.—*Antid.*, for all barium salts: Sod. or magnesium sulph.; emetics; stomach siphon.

do. Merck.—Highest Purity, dry (2

do. Merck.—Pure, cryst. (1

Barium Acetate Merck.—Reagent (4

$Ba(CH_3.COO)_2+H_2O$.—Wh., cryst. powd.—*Sol.* 2 W.; abt. 100 A.—*Tests:* (*Cl*) 1 Gm.+20 Cc. H_2O+HNO_3+solut. $AgNO_3$–no turb.—(*Ca; Alkalies*) 5 Gm.+ 200 Cc. H_2O+2 Cc. HCl (sp. gr. 1.124), heat to boil., add 15 Cc. dil. H_2SO_4, let stand 12 hrs. & filter. Mix filtrate w. 85% A.–not more than faint opalesc.; evap. in platin. dish & ignite–not more than 0.004 Gm. res.—(*Heavy Met.*) 20 Cc. 1:20 aqu. solut.+*a:* aqu. H_2S; &, *b:* $NH_4OH+(NH_4)HS$–no dark color, or ppt. in either case.—(HNO_3) 1 Gm.+10 Cc. H_2O+1 drop 1:1000 indigo solut.+10 Cc. conc. H_2SO_4–blue color should not disappear.—*Uses:* Determ. Ca, alkalies, & H_2SO_4.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Barium Amylsulphate Merck (8

$Ba(C_5H_{11}SO_4)_2+2H_2O$.—Colorl. cryst.—*Sol.* W., A.

Barium Benzenesulphate Merck (6

(Barium Benzolsulphate).—$Ba(C_6H_5.SO_3)_2+H_2O$.—Wh. cryst.—*Sol.* A., W.

Barium Benzoate Merck (10

$Ba(C_7H_5O_2)_2+2H_2O$.—Sm., colorl. laminæ.—*Sol.* W.—*Uses:* Heart stim. inst. of digitalis, in varicose veins & aneurisms.

Barium Benzolsulphate.—see **Barium Benzenesulphate**

Barium Bichromate.—see **Barium Dichromate**

Barium Binoxalate Merck (2

(Acid Barium Oxalate).—$Ba(HC_2O_4)_2+2H_2O$.—Wh. cryst.—*Sol.*, sl. W.

Barium Borate Merck (2

$BaB_2O_4+10H_2O$ (?).—Wh. powd.—*Sol.* W.

Barium Borotungstate Merck (25

(Barium Borowolframate).—$2BaO.B_2O_3.9WO_3+18H_2O$.—Quadratic octah. cryst.—*Sol.* W.

Barium Borowolframate.—see **Barium Borotungstate**

Barium Bromate Merck (5

$Ba(BrO_3)_2+H_2O$.—Wh., cryst. powd.—*Sol.* A.; hot W.; sl'y cold W.

Barium Bromide Merck.—Cryst. (6

$BaBr_2+2H_2O$.—Colorl. cryst.—*Sol.* W., A.

Barium Carbonate Merck.—Highest Purity, precipitated (2

$BaCO_3$.—Wh. powd.—*Sol.*, acids; solut. amm. chloride, nitrate, or succinate.—*Uses:* Prepar. o. barium salts.—*Caut.* Poison!

do. Merck.—Pure, precip. (1

do. Merck.—Precip. (1

Uses: Rat poison, paper manuf., &c.

Barium Carbonate Merck.—Reagent (4

$BaCO_3$.—Wh. powd.; alm. insol. W.—*Tests:* (*Impur. Insol. in HCl*) 5 Gm. compl. solub. in 10 Cc. HCl (sp. gr. 1.124)+50 Cc. H_2O.—(*Ca; Alkalies*) 5 Gm.+10 Cc. HCl (sp. gr. 1.124)+200 Cc. H_2O, heat to boil., add 15 Cc. dil. H_2SO_4,

let stand 12 hrs., & filter. Mix filtrate w. 85% A. – at most only faint opalesc.; evap. in platin. dish & ignite – not more than 0.003 Gm. res.—(*Heavy Met.*) *a:* 1 Gm. + 5 Cc. HCl (sp. gr. 1.124) + 15 Cc. H_2O + *a:* aqu. H_2S; & *b:* NH_4OH + $(NH_4)HS$ – no dark color or ppt. in either case.—(*Cl*) 1 Gm. + 5 Cc. HNO_3 (sp. gr. 1.153) + 15 Cc. H_2O (heat if rapid solut. desired) + $AgNO_3$ – no turb.—(*HNO_3*) 1 Gm. + 10 Cc. dil. $C_2H_4O_2$ + 1 drop 1:1000 indigo solut. + 10 Cc. conc. H_2SO_4 – blue color should not disappear.—*Uses:* Separ. of iron, & Al fr. Zn, Mn, &c.; prepar. other salts.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Barium Chlorate Merck.—Cryst. or powder (1

$Ba(ClO_3)_2 + H_2O$.—Colorl., monocl. prisms or wh. powd.—*Sol.* W.—*Uses:* Pyrotechn.; dyeing.

do. Merck.—Pure cryst. (1

Barium Chloride Merck.—Highest Purity, cryst. & powd.—Indifferent to Potass. Permang. (1

$BaCl_2 + 2H_2O$.—Colorl., flat, four-sided cryst.; bitter, salty taste.—*Sol.* $2\frac{1}{2}$ W., alm. insol. A.—Cardiac Tonic & Alter.—*Uses: Intern.*, arter. sclerosis & atherom. degen., syph., scrofula, &c.; also in veter. med. in colic of horses.—*Extern.*, eye-wash in 1:60–100 solut. Also anal. & techn.—*Dose* $\frac{1}{2}$–$1\frac{1}{2}$ grains (0.03–0.1 Gm.) 3–4 t. p. d., in 1% sweet., arom. solut.—*Inj.*, intraven., in horse colic, 6–20 grains (0.36–1.3 Gm.) in aqu. solut.—Per os, 150–180 grains (10–12 Gm.).—*Max. D.*, for man, 3 grains (0.2 Gm.) single; 10 grains (0.6 Gm.) daily.

do. Merck.—Purified (1

do. Merck.—Impalpable powder (1

Uses: Prepar. other barium salts, *e.g.* barium white; preventing boiler incrustations; rat & mouse poison.

Barium Chloride Merck.—Reagent (2

$BaCl_2 + 2H_2O$.—Colorl. cryst.—*Sol.* 2.5 cold, & 1.5 hot W.; insol. A.—*Tests:* (*Alkalies*) 3 Gm. + 100 Cc. H_2O + 2 Cc. HCl (sp. gr. 1.124), heat to boil., add 10 Cc. dil. H_2SO_4, let stand 12 hrs., & filter; evap. filtrate in platin. dish, & ignite – not more than 0.001 Gm. res.—(*$CaCl_2$; $SrCl_2$*) shake 1 Gm. + 20 Cc. absol. A. 5 minutes, filter, evap. filtrate, & ignite – no wghble res.—(*Heavy Met.*) 20 Cc. 1:2 aqu. solut. + *a:* aqu. H_2S; & *b:* NH_4OH + $(NH_4)HS$ – no dark color or ppt. in either case.—(*HNO_3*) 1 Gm. + 10 Cc. H_2O + 1 drop 1:1000 solut. indigo + 10 Cc. conc. H_2SO_4 – blue color must not disapp.—(*$HClO_3$*) heat 2 Gm. powd. + 10 Cc. conc. HCl in test-tube – neither cryst. nor solut. should exhibit yellow color, and no chlorine odor should be percept.—*Uses:* Determ. H_2SO_4.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Barium Chromate Merck.—Highest Purity (2

$BaCrO_4$.—Heavy, yellow, cryst. powd.

do. Merck.—II (1

$BaCrO_4$.—Heavy, yellow, cryst. powd.—*Sol.*, acids; insol W.—*Uses:* Yellow paint; Swedish matches.

Barium Citrate Merck (6

(Normal Barium Citrate).—$Ba_3(C_6H_5O_7)_2 + 7H_2O$.—Wh., amorph. powd.—*Sol.* W.

Barium Cyanate Merck (30

$Ba(CNO)_2$.—Wh., cryst. powd.—*Sol.*, sl. W.

Barium Dichromate Merck.—Pure, cryst. (5

(Barium Bichromate).—$BaCr_2O_7 + 2H_2O$.—Brown, cryst. masses.—*Sol.* W. cont'g chromic acid.

Barium Dioxide Merck.—Pure, anhydrous (2

(Barium Peroxide).—Fr. barium oxide by heat. in oxygen, or fr. barium nitrate by heat.—BaO_2.—Grayish-wh. powd.

do. Merck.—Techn., anhydrous (1

BaO_2.—Heavy, grayish-wh. powd., decomp. on expos.—*Sol.*, dil. acids.—*Uses:* Making solut. hydrogen peroxide; oxygen (Brin process); bleaching animal substances & vegetable fibers; glass industry, &c.

Barium Dioxide Merck.—Reagent (2

(Barium Peroxide or Superoxide).—BaO_2.—Wh. or grayish-wh. powd., at least 82% BaO_2.—*Sol.*, cold dil. HCl w. decomp.; insol. W.—*Uses:* Prepar. oxygen & H_2O_2; bleaching.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Barium Dioxide Hydrated Merck.—Pure (2

(Hydrated Barium Peroxide).—$BaO_2 + 8H_2O$.—Wh. cryst.—*Sol.*, sl. W.; insol. A., E.

do. Merck.—Technical (1

Wh. powd.

Barium Diphosphate.—see **Barium Phosphate**

Barium Dithionate.—see **Barium Hyposulphate**

Barium Diuranate.—see **Uranium & Barium Oxide**

Barium Ethylsulphate Merck.—Cryst. (5

(Barium Sulphovinate).—$Ba(C_2H_5SO_4)_2 + 2H_2O$.—Colorl. cryst.—*Sol.* W., A.

Barium Ferrocyanide Merck.—Cryst. (10

$Ba_2Fe(CN)_6 + 6H_2O$.—Yellowish cryst.—*Sol.*, sl. hot W.

Barium Fluoride Merck.—Pure (2

BaF_2.—Wh. powd.—Insol. W.—*Melt.*, abt. 908° C.—Powerful antisep.

do. Merck.—Arsenic-free (1

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Barium Formate Merck (6

$Ba(CO_2H)_2$.—Colorl., transp., rhombic prisms. —*Sol.* W.

Barium Hydroxide Merck.—Highest Purity, cryst. (1

(Barium Hydrate; Caustic Baryta).—$Ba(OH)_2 + 8H_2O$.—Wh., quadratic tablets; absorb. carbonic acid fr. air. — *Sol.* 20 W. at 15° C. — Caustic.—*Uses:* Chem.—*Caut.* Keep well stoppered.

do. Merck.—Highest Purity, dried (1

$Ba(OH)_2 + H_2O$.—Wh. powd.—*Caut.* Keep well stoppered.

do. Merck.—Highest Purity, cryst., free fr. Iron (3

do. Merck.—Pure, cryst. or dried (1

Uses: Techn., anal.

do. Merck.—Technical (1

Barium Hydroxide Merck.—Reagent (2

(Barium Hydrate). — $Ba(OH)_2 + 8H_2O$. — Wh. cryst.—*Sol.* 20 cold, & 3 boil., W.—*Tests:* (*Cl*) 1 Gm. + 5 Cc. HNO_3 (sp. gr. 1.153) + 15 Cc. H_2O + $AgNO_3$ – no turb.—(*Ca; Alkalies*) 3 Gm. + 100 Cc. H_2O + 5 HCl (sp. gr. 1.124), heat to boil., add 10 Cc. dil. H_2SO_4, let stand 12 hrs., filter, evap. filtrate in platin. dish, & ignite – not more than 0.002 Gm. res.—(*Heavy Met.*) 20 Cc. 1:20 solut. + HCl + *a:* aqu. H_2S; & *b:* $NH_4OH + (NH_4)$-HS – no dark color, or ppt. in either case.—(*Sulphide*) Aqu. 1:20 solut. + HCl – no odor of H_2S; on add. solut. Pb $(C_2H_3O_2)_2$ – no dark color.—*Uses:* Precip. Mg; in fusion of silicates; saponifying fats.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

do. Merck.—Reagent.—Solution (1

(Baryta Water).—Clear, colorl. liq.; strong alkal. react.; 3.3% cryst. $Ba(OH)_2$.—*Tests:* As of preceding, but use 30 Cc. solut. inst. of 1 Gm. cryst.—*Uses:* Reagent for CO_2; also for testing creosote.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Barium Hypophosphite Merck (6

$Ba(PH_2O_2)_2 + H_2O$.—Wh. cryst.—*Sol.* W.

Barium Hyposulphate Merck (10

(Barium Dithionate).—$BaS_2O_6 + 2H_2O$.—Transp., colorl., glist., rhombic cryst.—*Sol.* W.

Barium Hyposulphite.—see **Barium Thiosulphate**

Barium Iodate Merck (12

$Ba(IO_3)_2$.—Wh. cryst.—*Sol.*, hot W.

Barium Iodide Merck (10

$BaI_2 + 2H_2O$.—Colorl. cryst. Decomp. & redden on expos.—*Sol.* W., A.—Alter. — *Uses:* Scrof. affect., morb. growths. — *Dose* $^1/_{10}$–$^1/_2$ grain (0.006–0.03 Gm.) 3 t. p. d.—*Appl.*, in 1% oint. in hypertrophic glands.—*Caut.* Keep well stoppered.

Barium Lactate Merck (5

$Ba(C_3H_5O_3)_2 + 4H_2O$.—White cryst.— *Sol.* W.; dil. A.

Barium Manganate Merck (5

(Manganese, Cassel's, or Rosenstiehl's, Green).—$BaMnO_4$.—Emerald-green powd.—*Uses:* Techn., as pigment inst. of Scheele's green (not so poisonous).

Barium Methylsulphate Merck.—Pure, cryst. (6

$Ba(CH_3SO_4)_2 + 2H_2O$.—Colorl. cryst.—*Sol.* W., A.—*Caut.* Keep well stoppered.

Barium Molybdate Merck (12

$BaMoO_4$.—Cryst., wh. powd.—*Sol.*, diffic. in acids.

Barium Monosulphide.—see **Barium Sulphide**

Barium Monoxide.—see **Barium Oxide**

Barium Nitrate Merck.—Highest Purity, cryst. or powder (1

$Ba(NO_3)_2$.—Lustr., colorl. cryst., or wh. powd.—*Sol.* W.—*Uses: Medic.*, like barium chloride.—*Téchn.*, pyrotechn. & analysis.—*Max. D.* 3 grains (0.2 Gm.) single; 10 grains (0.6 Gm.) daily.

do. Merck.—Cryst. or powder (1

Wh. powd.

do. Merck.—Fused (2

Wh. masses.

Barium Nitrate Merck.—Reagent (2

$Ba(NO_3)_2$.—Colorl. cryst.—*Sol.* 20 cold, 2.8 boil., W.; insol. absol. A.—*Tests:* (*Cl*) 1:20 aqu. solut. + HNO_3 + solut. $AgNO_3$ – no turb.—(*Alkalies; Heavy Met.*) same as for $BaCl_2$.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Barium Nitrite Merck (15

$Ba(NO_2)_2 + H_2O$.—Wh., to yellowish, cryst. powd. —*Sol.* W., A.

Barium Oleate Merck (6

$Ba(C_{18}H_{33}O_2)_2$.—Wh., granul. masses.—*Sol.* A., E.

Barium Oxalate Merck.—Pure (2

$BaC_2O_4 + H_2O$.—Wh. powd.—*Sol.*, v. sl. W.

do. Merck.—Technical (1

Barium Oxalate, Acid.—see **Barium Binoxalate**

Barium Oxide Merck.—Pure (2

(Barium Monoxide; Barium Protoxide; Calcined Baryta).—BaO.—Wh. to yellowish-wh. powd.;

forms barium hydroxide w. W.—*Sol.* W.; dil. acids.—*Uses:* Glass indust.—*Caut.* Poison! Keep well stoppered.

do. Merck.—Technical (1

Barium Oxide, Hydrated.—see **Barium Dioxide, Hydrated**

Barium Perchlorate Merck (25

$Ba(ClO_4)_2 + 4H_2O$.—Colorl. cryst.—*Sol.* W., A.

Barium Permanganate Merck.—Cryst. (40

$Ba(MnO_4)_2$.—Brownish-violet cryst.—*Sol.* W.—*Uses:* Prepar. other pure permanganates.

Barium Peroxide.—see **Barium Dioxide**

Barium Peroxide, Hydrated.—see **Barium Dioxide, Hydrated**

Barium Phenolsulphonate Merck (2

(Barium Sulphophenylate, or Sulphocarbolate).—$Ba(C_6H_5SO_4)_2$.—Colorl. cryst.—*Sol.* W.—Antisep.

Barium Phosphate Merck.—Pure (3

$BaHPO_4$.—Fine, wh. powd.—*Sol.*, v. sl. W.; more so in W. cont'g amm. salts; phosphoric & dil. nitric acids.

Barium Phosphide Merck (10

BaP_2.—Gray mass.; decomp. w. W.

Barium Phosphite Merck.—Precip., white (12

$2BaHPO_3 + H_2O$.—Soft., wh. powd.—*Sol.*, boil. W.

Barium Platinochloride.—see **Platinum & Barium Chloride**

Barium Platinocyanide.—see **Platinum & Barium Cyanide**

Barium Platinosulphocyanide.—see **Platinum & Barium Sulphocyanate**

Barium Propionate Merck (40

$Ba(C_3H_5O_2)_2$.—Wh. powd.—*Sol.* W.

Barium Protoxide.—see **Barium Oxide**

Barium Rhodanide.—see **Barium Sulphocyanate**

Barium Saccharate Merck (15

Wh. powd., or scales.—*Sol.* W.

Barium Salicylate Merck (8

$Ba(C_7H_5O_3)_2 + H_2O$.—Wh., stellate, silky need.—*Sol.* W.

Barium Selenate Merck (150

$BaSeO_4$.—Heavy, wh. powd.—Decomp. in HCl.

Barium Sozoiodolate.—see **Soziodole-Barium**

Barium Succinate Merck (45

$BaC_4H_4O_4$.—Wh., cryst. powd.—*Sol.*, sl. W.; insol. A.

Barium Sulphate Merck.—Pure, precip. (1

(Synthetic Barytes; Artificial Heavy Spar).—Heavy, wh. powd.—*Sol.*, ammonium-nitrate solut.; insol. W. & acids.—*Uses:* Chiefly techn. under the designations "Blanc fixe," & "Permanent white," as a water-color pigment for colored paper, in wall-paper, as a size, &c.

Barium Sulphide Merck.—Pure (1

(Barium Monosulphide).—By fusing caustic baryta w. sulphur.—BaS.—Yellowish-green or greenish, amorph. powd. or friable lumps.—Alter.—*Uses:* Syph. & scrof. affect.; depil. w. flour.—*Dose* $^1/_2$–1 grain (0.03–0.06 Gm.) in keratin-coated pills.—*Caut.* Keep well stoppered.

do. Merck.—Technical (1

Barium Sulphide Merck.—Reagent (3

Gray, hard, amorph. pieces; on contact w. dil. HCl, H_2S evolved.—*Tests:* (*As*) grad. add 10 Gm. in quant. of 0.2–0.3 Gm. at a time to 100 Cc. HNO_3 (sp. gr. 1.3) heated to 70–80° C. in a porcel. dish; when all added, boil, add 100 Cc. As-free dil. H_2SO_4 (1:5), & evap. on sand-bath, till H_2SO_4 vapors evolved, then mix res. w. 100 Cc. H_2O, & introduce, in sm. quant. at a time, into a Marsh appar., previously set in operat. w. 20 Gm. As-free, gran. Zn & dil. (1:5) H_2SO_4 – no deposit of As in reduction tube within 2 hrs.—*Uses:* Partic. adapted for prep. As-free H_2S.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

do. Otto-Merck.—Reagent.—Cubes (3

For generating arsenic-free H_2S.

do. Winkler-Merck.—Reagent.—Cubes (2

For generating arsenic-free H_2S.

Barium Sulphite Merck (2

$BaSO_3$.—Wh. powd.—*Sol.*, warm H_2SO_3.

Barium Sulphocarbolate.—see **Barium Phenolsulphonate**

Barium Sulphocyanate Merck.—Pure (3

(Barium Rhodanide; Barium Sulphocyanide).—$Ba(SCN)_2$.—Colorl. cryst.—*Sol.* W., A.—*Uses:* Dyeing, & photogr.—*Caut.* Keep well stop'd.

do. Merck.—Technical (1

Barium Sulphocyanide.—see **Barium Sulphocyanate**

Barium Sulphophenylate.—see **Barium Phenolsulphonate**

Barium Sulphovinate.—see **Barium Ethylsulphate**

Barium Sulphydrate Merck (12

$Ba(SH)_2$.—Yellow cryst.—*Sol.* W.—*Caut.* Keep well stoppered.

Barium Tannate Merck (75

Yellowish powd.—*Sol.* W.

Barium Tartrate Merck.—Pure (6

$BaC_4H_4O_6$.—Wh., granul. powd.—*Sol.* W.

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Barium Thiosulphate Merck (3

(Barium Hyposulphite).—$BaS_2O_3+H_2O$.—Wh., cryst. powd.—*Sol.* W.

Barium Tungstate Merck.—Pure (5

(Normal Barium Wolframate).—$BaWO_4$.—Wh. powd., or lustr., colorl. cryst.—*Uses:* Pigment, "Wolfram white."

Barium Wolframate.—see **Barium Tungstate**

Barium & Potassium Chlorate Merck (3

$Ba(ClO_3)_2+KClO_3$.—Wh. cryst.—*Sol.* W.

Barosma.—see **Buchu**

Barosmin (Eclectic) (50

(Buchu Resin).—Fr. lvs. genus Barosma (Buchu).—Brown, arom. powd.; pung., bitter taste.—*Sol.* A.—Diuret.; Antisep.—*Uses:* Genito-urinary dis.—*Dose* 2–4 grains (0.12–0.25 Gm.).

Barreswill's Reagent.—For glucose

Identical w. Fehling's reagent, but contains KOH instead of NaOH.

Barutin

Double salt of theobromine-barium & sodium salicylate.—Wh., amorph. powd.; sweetish, alkaline taste; 1 Gm.=0.17 Gm. $BaCl_2$ & 0.25 Gm. theobromine.—*Sol.*, abt. 20 W.—Diuret.—*Dose* 3 grains (0.2 Gm.) caut. & grad. incr. to 8 grains (0.5 Gm.) in 1:80 solut.—*Caut.* Eas. affected by CO_2, hence keep well stop'd.

Baryta, Calcined.—see **Barium Oxide**

Baryta, Caustic.—see **Barium Hydroxide**

Barytes, Synthetic.—see **Barium Sulphate**

Basil.—see **Ocimum**

Bauhinia Cæsalpinia.—see **Jabuti Matumata**

Bay.—see **Laurus**

Bayberry.—see **Laurus; Myrica Cerifera**

Baycuru

(Buaycura; Guaycuru; Biacuru). — Root of Statice brasiliensis, Boiss. Plumbaginaceæ.—*Habit.:* South America (Brazil & Paraguay).—*Etymol.:* "Baycuru" is the Brazilian name of the drug.—*Constit.:* Baycurine (alkaloid); tannin; resin; volat. oils.—*Uses:* Astring. in glandular swellings.

Baylahuen

(Hysterionica; Aplopappus; Haplopappus).—Lvs. & stems of Haplopappus (Aplopappus) Baylahuen Remy. Compositæ.—*Habit.:* Chili.—*Etymol.:* "Baylahuen" is the Chilian name of drug.—*Constit.:* Tannin; resin; volat. & fixed oils.—Digest. Stim.; Intest. Astring.; Emmen.; resin is Cathart.; volat. oil acts on respir. organs like terebinthinates.—*Uses:* Phthisis, diarrh., chron. hemorrh. of bowels, chron. dysent., flat. dyspep. & catarrh.—*Doses:* 5–25 ♏ (0.3–1.6 Cc.) of 1:5 alcoh. tinct. w. mucil. vehicle in bronchial & vesical catarrh; a 1:150 infus. or decoct. is used in diarrh. & acute & chron. dysent. in phthisis; small doses stimulate digestion.—Fld. extr., 8–15 ♏ (0.5–1 Cc.). *Appl.*, in form of tinct., to ulcers, wounds, &c., as stim. & protect.

Bead Tree.—see **Azedarach**

Beale's Ammonia-Carmine

1 Gm. carmine, 5 Cc. amm., 110 Cc. W., 80 Cc. glycerin, & 30 Cc. absol. A. — *Uses:* Staining nerve & bone tissue.

Bear's Foot.—see **Polymnia**

Bearwort.—see **Meum**

Bebeerine Merck.—Pure (40

(Bebirine; Bibirine; supposed identical w. Buxine & Pelosine).—Fr. bark Nectandra Rodiæi, Schomb., or Pareira brava.—$C_{19}H_{21}NO_3$.—Yellowish-brown, amorph. powd.; bitter; odorl.—*Sol.* 5 abs. A., 13 E., 6000 cold & 1800 hot W., dil. acids.—Antipyr. & Tonic, like quinine.—*Uses:* Intermit. fever. — *Doses:* $^1/_2$–3 grains (0.03–0.2 Gm.) 3 or 4 t. p. d., as a tonic; as a febrif., 3–15 grains (0.2–1 Gm.).

Bebeerine Hydrochloride Merck (29

$C_{19}H_{21}NO_3.HCl$. — Reddish-brown scales. — *Sol.* W.—Antipyr.; Tonic.—*Uses & Doses:* As of preceding.

Bebeerine Sulphate Merck (29

$(C_{19}H_{21}NO_3)_2.H_2SO_4$. — Reddish-brown scales. — *Sol.* W.—Tonic; Febrifuge.—*Uses & Doses:* As of bebeerine.

Bebirine.—see **Bebeerine**

Beccabunga

(Brooklime; Horse Well-grass).—Lvs. & tops of Veronica Beccabunga, L. Scrophulariaceæ.—*Habit.:* Europe; Asia; U. S.—*Etymol.:* "Beccabunga," Latinized form of the German name "bachbunge," *i.e.*, the plant grows in small streams & near water-courses. "Veronica" fr. Grk. "pherein," to bear, & "nike," victory; or Lat. "vera," true, & Grk. "eikon," image, *i.e.*, the flower was named for St. Veronica.—*Constit.:* Bitter prin.; tannin.—*Uses:* Antiscrof.; Depur.; Aperient; Diuret.; Febrif.; Emmen.

Bedeguar

(Fungus Rosarum; Fungus Cynosbati).—An excrescence produced by the puncture of Cynips rosæ on sweetbrier & other species of Rose.—*Habit.:* Germany.—Roundish or irreg. bodies abt. 1 in. diam., & made up of cavities each cont'g a larva; feebly astring.; alm. odorl.—*Constit.:* Tannin, & an acrid substance resembling cantharidin.—*Uses:* The alcoholic extract under the name "Tinctura Fungorum Cynosbati" was formerly employed by Rademacher in urinary diseases. Formerly regarded as anthelm., lithontriptic, & diuret.; a number of the fungi were formerly placed beneath the pillows of children in order to induce sleep.—*Dose* 10–40 grains (0.6–2.5 Gm.).

Beeswax.—see **Wax, White & Yellow**

Behrens' Zinc Chloro-iodide.—For cellulose

Aqu. solut. zinc chloride, potass. iodide, & iodine. —*Uses:* In botanical microscopy for detecting cellulose.

Beilschmidia

(Queensland Sassafras).—Bark of Beilschmidia obtusifolia, Müll. (B. oppositifolia, Benth.). Lauricæ.—*Habit.:* New South Wales; Queensland. —*Etymol.:* Named for C. T. Beilschmied, apoth. & botanist at Schmiedeberg (i. Schl.); died 1845.—Bark resembles cassia & sassafras barks structurally; str'ly arom. odor; pleasantly astring. taste.—*Constit.:* Saffrol (2%)(?); Tannin (?).—*Uses:* Perfumery. Native Australians use the bark to flavor their tea. Employed also in diarrh. & dysent.

Belladonna Leaves.—*U. S. P.*

(Deadly Nightshade; Death's Herb; Banewort; Dwale; Poison Black Cherry).—Dried lvs. of Atropa Belladonna, L. Solanaceæ, & yielding not less than **0.3%** mydriatic alkaloids by assay.—*Habit.:* Southern & Central Europe; Asia Minor; Algeria; cultiv. in N. America.—*Etymol.:* "Atropa," fr. Grk. "atropos," fr. "a," not, & "trepein," to turn, *i.e.*, inflexible. One of the three Fates, in mythology, whose office it was to cut the thread of life. "Belladonna," fr. Italian "bella," handsome, & "donna," lady, *i.e.*, the berries were used by the Italian ladies as a cosmetic, & to dilate the pupils of the eyes & render them more brilliant & handsome.—*Constit.*. Atropine; hyoscyamine; choline (bilineurin); asparagin; chrysatropic acid (scopoletin); succinic acid; chlorophyll; nitrates; belladonnine, $C_{17}H_2NO_2$; atrosin (fluorescent red coloring matter); atropamine. — Diuret.; Nervine; Mydriatic; Narcotic; Sedat.; Antispasm.; Anodyne.—*Uses:* Pain, asthma, nervous cough, incont. urine, night sweats; antid. to morphine or opium.—*Extern.*, rigid os uteri, neuralg., rheumat., &c.—*Techn.*, for manuf. atropine & hyoscyamine.—*Doses:* $^1/_2$–2 grains (0.03–0.12 Gm.).—Alcoh. extr., $^1/_6$–$^1/_2$ grain (0.01–0.03 Gm.); *Max. D.* 1 grain (0.06 Gm.) single, 3 grains (0.2 Gm.) daily; *Extern.*, in rheumat. neuralg., &c., in 1:5–10 oint.; in tenesmus, $^1/_3$–1 grain (0.02–0.06 Gm.) in suppository; as enema, $^1/_3$–1 grain (0.02–0.06 Gm.) in abt. $3^1/_3$ fl. oz. (100 Cc.) water.—Aqu. extr., $^1/_4$–1 grain (0.015–0.06 Gm.).—Fld. extr., 1–3 ♏ (0.06–0.2 Cc.).—Tinct., 8–30 ♏ (0.5–2 Cc.).—*Antid.*, emetics; stimulants; morphine; pilocarpine; physostigmine; tannin. — *Caut.* Poison!

Belladonna Juice Merck (2

Fr. fresh lvs. of Atropa Belladonna, L., preserv. w. alc.—Sherry-colored liq.; about three times strength of 1:20 tincture.—*Uses:* Asthma, cough, spasms, incontin. of urine, opium poison., irrit. bladder, nervousn., &c.—*Dose* 3–10 ♏ (0.2–0.6 Cc.).—*Antid.*, emetics, stomach siphon, tannin, animal charcoal, opium, pilocarpine hypoderm., artif. respiration.—*Caut.* Poison! Keep cool.

Belladonna Root.—*U. S. P.*

Dried root of Atropa Belladonna, L. Solanaceæ, & yielding not less than 0.45% mydriatic alkaloids by assay.—*Habit. & Etymol.*, see Belladonna Leaves.—*Constit.:* Atropine; chrysatropic acid, leucatropic acid; hyoscyamine; hyoscine (scopolamine); atrosin (fluorescent red coloring matter).—*Uses:* Narcot.; Mydriatic; Sedat.; Antispasm.; Anod.—*Doses:* $^1/_{12}$–2 grains (0.03–0.12 Gm.).—*Max. D.* $2^1/_2$ grains (0.15 Gm.) single, & 8 grains (0.5 Gm.) daily.—Alcoh. extr., $^1/_{12}$–$^1/_4$ grain (0.005–0.015 Gm.).—Fld. extr., 1–2 ♏ (0.06–0.12 Cc.); *Max. D.* 3 ♏ (0.2 Cc. single, 10 ♏ (0.6 Cc.) daily.—*Antid.*, same as for belladonna leaves.—*Caut.* Powerful poison!

Belladonnine Merck (500

Fr. mother-liquor of atropine cryst.—$C_{17}H_{21}NO_2$ (Merling).—Amorph., brown, varnish-like mass. —*Sol.* C.; sl. in W.—Mydr.

Bellis

(Garden Daisy; Daisy).—Flowers of Bellis perennis, L. Compositæ. — *Habit.*. Europe; Asia; U. S.—*Etymol.:* Fr. Lat. "bellus," pretty; & "perennis," perennial.—*Constit.:* Volat. & fixed oils; bitter extractive; tannin. — *Uses:* As pectoral tea.—*Extern.*, as vulnerary.

Benzacetin

(Acetamidomethylsalicylic Acid). — $C_6H_3(OC_2H_5)(NH.COCH_3)COOH$.—Wh. cryst.—*Sol.* A.; sl. sol. W.—*Melt.* 205° C.—Antineural.; Sedat.; Anod.—*Dose* 8–15 grains (0.5–1 Gm.).

Benzal Chloride.—see **Benzyl Dichloride**

Benzal Green.—see **Malachite Green**

Benzalacetone.—see **Benzylideneacetone**

Benzaldehyde Merck.—Highest Purity, free from Chlorine (6

(Benzoic Aldehyde; Artificial Essential Oil of Almond; Benzoyl Hydride).—Fr. benzyl chloride, by W. & lead nitrate.—C_7H_6O, or, $C_6H_5.COH$.—Colorl., fragr., volat. oil, free fr. chlorine & hydrocy. acid; hydrocyanic-acid-like odor.—Sp. Gr. 1.0504 at 15° C.—*Boil.* 180° C. —Not poisonous.—*Uses:* Flavors, & techn. in manuf. of dyes.

do. Merck.—Pure (2

Uses: As of preceding.

Benzaldehyde Green.—see **Malachite Green**

Benzamide Merck (25

Fr. benzoyl chloride, by solid amm. carbonate. —C_7H_7ON, or, $C_6H_5.CONH_2$.—Colorl., transp., monocl. tablets.—*Sol.* A., E., ammonia; sl. in W. —*Melt.* 128° C.—*Boil.* 286–290° C.

Benzanalgen.—see **Analgen**

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles

Benzanilide Merck (20

(Benzoylanilide; Phenylbenzamide).—Fr. benzoic anhydride & aniline w. caustic soda.—$C_{13}H_{11}NO$, or, $C_6H_5.NH(CO.C_6H_5)$.—Wh. to reddish-wh. cryst.—*Sol.* 58 cold & 7 hot A.; sl. in E.; alm. insol. W.—*Melt.* 160–162° C.—Antipyr., especially for children.—*Uses:* Zymotic dis.—*Doses:* Children, $1^1/_2$–6 grains (0.1–0.36 Gm.), acc. to age, several t. p. d.; Adults, 10–15 grains (0.6–1 Gm.).—*Max. Adult D.*, 45 grains (3 Gm.) p. day.

Benzene Merck.—From Benzoic Acid (20

Fr. benzoic acid, by lime or vapor over red-hot iron.—C_6H_6.

do. Merck. — From Coal Tar. — Highest Purity, crystallizable, free fr. Thiophene (1

(Phenyl Hydride; Benzol; Coal Naphtha).—Fr. coal tar.—C_6H_6.—Colorl., mobile, h'ly refract. liq.; below 6° C., colorl., trimet., pyramidal cryst.—Sp. Gr. 0.883–0.885 at 15° C.—*Sol.* A., E., acetone, C., glac. acetic acid, oils.—*Melt.* 6° C.—*Boil.* 80–81° C.—Antispasm. & Anticatarrh.—*Uses:* Whoop.-cough, influenza, &c.—*Techn.*, in manuf. dyes, as solvent, in electrotechn., photogr., rubber manuf., &c.—*Dose* 2–10 ♏ (0.12–0.6 Cc.) every 3 hrs. in emulsion, or on sugar or in caps.—*Max. D.* 45 ♏ (3 Cc.) single; 180 ♏ (12 Cc.) daily.

Benzene Merck.—Reagent (3

(Benzol).—C_6H_6.—Clear, colorl. liq.; charact. odor.—*Sol.*, eas. A., E.; insol. W.—*Solidif.* at 0° C. to rhomb. cryst. scales melt. at 4° C.—Sp. Gr. 0.883.—*Boil.* 80.5° C.—*Tests:* (*Thiophene*) shake 50 Cc. + 20 Cc. conc. H_2SO_4 – acid should remain colorl.; add a cryst. of isatin, shake, let stand for 1 hr. – acid must not exhibit a green or blue color.—(CS_2) mix 50 Cc. + 50 Gm. alcoh. solut. KOH (11 Gm. KOH in 90 Gm. absol. A.), let stand sev. hrs. at abt. 20° C., shake w. abt. 100 Cc. H_2O, remove aqu. layer, neutralize latter w. $C_2H_4O_2$, & add solut. $CuSO_4$ – no ppt.—*Uses:* Solvent of fats, alkaloids, resins; forensic analysis, &c.

Note. — For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Benzene Alphahexachloride.—see **Benzene Hexachloride**

Benzene Dibromo- (Para-) Merck (25

(Paradibromobenzene [or, -ol]).—Fr. benzene, by excess of bromine.—$C_6H_4Br_2$.—Colorl. cryst.—*Melt.* 89° C.—*Boil.* 219° C.

Benzene Dichloro- (Para-) Merck (35

(Paradichlorobenzene [or, -ol]).—Fr. benzene, by chlorine.—$C_6H_4Cl_2$.—Colorl. cryst.; pleas. odor.—*Sol.* A., E., B.—*Melt.* 56° C.—*Boil.* 173.2° C.

Benzene Hexachloride Merck (100

(Benzene Alphahexachloride—not a substitution-, but an addition-, product).—Fr. benzene, by chlorine, in sunlight or w. heat.—$C_6H_6Cl_6$.—Colorl., monocl. cryst.—*Melt.* 157° C.—*Boil.* 288° C.—*Sol.* B., C

Benzene Iodo- Merck (50

(Monoiodobenzene [or, -ol]). — Fr. benzene, by iodine chloride w. aluminum chloride.—C_6H_5I.—Colorl., transp. liq.—Sp. Gr. 1.833 at 15° C.—*Sol.* A.—*Boil.* 187–188° C.—*Caut.* Keep dark.

Benzene Monobromo- Merck (10

(Monobromobenzol).—Fr. benzene by bromine w. iodine.—C_6H_5Br.—Clear, colorl. liq.—Sp. Gr. 1.5 at 15° C.—*Sol.* A., B.—*Boil.* 154–155° C.—Recommended in albuminuria.

Benzene Monochloro- Merck (6

(Monochlorobenzene [or, -ol]; "Phenyl Chloride").—Fr. benzene, by chlorine.—C_6H_5Cl.—Clear, colorl. liq.; sweet odor.—Sp. Gr. 1.110 at 15° C.—*Boil.* 132° C.

Benzene Perchloro- Merck (80

(Hexachlorobenzene [or, -ol]; Julin's Carbon Chloride). — C_6Cl_6.—Wh. need.—*Sol.*, boil. A., B.; v. sl. E.—*Melt.* 226° C.—*Boil.* 326° C.

Benzene Sulphochloride Merck (60

(Benzol Sulphochloride).—Fr. aqu. solut. of benzenesulphonic acid, by chlorine.—$C_6H_5SO_2Cl$.—Oily liq.; slowly solidif. at 0° C. to cryst.—*Sol.* A., E.—*Boil.* 247° C.

Benzene Tribromo- Merck (50

(Symmetrical Tribromobenzene [or, -ol]).—$C_6H_3Br_3$[1:3:5].—Colorl. need.—*Sol.*, hot A., B.—*Melt.* 120° C.—*Boil.* 275–278° C.

Benzene Trichloro- (200

(Asymmetrical Trichlorobenzene [or, -ol]).—$C_6H_3Cl_3$[1:2:4].—Transp. colorl., rhombic cryst.—*Melt.* 16° C.—*Boil.* 213° C.

Benzeneazobenzene.—see **Azobenzene**

Benzenyl Trichloride.—see **Benzotrichloride**

Benzenylaminothiophenol Merck (110

$C_{13}H_9NS$, or, $C_6H_5.C:N.C_6H_4.S$.—Yellow need.; pleas. odor of tea roses and geranium.—*Melt.* 115° C.—*Boil.* 360° C.—*Sol.* A., E., carbon disulphide, dil. HCl.—*Uses:* Perfumery.

Benzidine Merck.—Highest Purity (30

(Paradiaminodiphenyl).—Fr. azobenzene, by reduct.—$C_{12}H_{12}N_2$, or, $NH_2.C_6H_4.C_6H_4.NH_2$.—Grayish-yellow, cryst. powd.—*Sol.*, boil. W., A., E.—*Melt.* 122° C.

do. Merck.—Base (3

Benzidine Merck.—Reagent (40

(Paradiaminodiphenyl). — $(C_6H_4)_2.(NH_2)_2$. — Grayish-yellow, cryst. powd.—*Sol.*, diffic. cold W.; more read. boil. W., & in A., & E.—*Melt.*

122° C.—*Tests:* (H_2SO_4) mix 5 Gm. + 5 anhydr. Na_2CO_3 + 2 Gm. KNO_3, & caut'y incin. in platin. crucib.; when cold, diss. melt in 50 Cc. H_2O, filter, add to filtrate 20 Cc. HCl (sp. gr. 1.124), boil, & add solut. $BaCl_2$ – no ppt. ($BaSO_4$) within 12 hrs.—*Uses:* Determ. sulphates, partic. in water analysis.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Benzidine Sulphate Merck.—Highest Purity (20

(Paradiaminodiphenyl Sulphate).—$C_{12}H_{12}N_2 \cdot H_2SO_4$.—Wh., cryst. powd.—*Sol.* A.

do. Merck (5

Benzile Merck (35

(Benzil; Dibenzoyl).—Fr. benzoin, by oxid. w. nitric acid.—$C_{14}H_{10}O_2$, or, $C_6H_5.(CO)_2.C_6H_5$.—Yellow need.—*Sol.* E., hot A.—*Melt.* 90–92° C.—*Boil.* 340–348° C.

Benzin Merck.—Fr. Petroleum (1

(Petroleum Ether; Naphtha; Petroleum Naphtha).—Fr. petroleum distil'n.—Light, transp., colorl., volat. liq.; princip. hydrocarbons of marsh gas series & homol. comp.; colorl., v. volat. liq.—*Sol.* E., oils, C., carbon disulphide.—Sp. Gr. 0.64–0.67 at 15° C.; (0.638–0.660 at 25° C.–U. S. P.).—*Boil.* 50–75° C. (45–60° C.–U. S. P.).—Counter-irrit. & Parasiticide.—*Uses:* Chiefly in domestic practice (bronch. troubles, worms, itch, &c.).—*Techn.*, solvent; detergent; insecticide; also in photography & dental techn.—*Dose* 5–15 ♏ (0.3–1 Cc.) in mucilage or caps.—*Max. D.* 75 ♏ (5 Cc.) daily.—*Appl.*, in rheumat.; mixt. of 4 vol. benzin w. 1 vol. ether as loc. anesth.—*Antid.*, excitants; stimulants; stomach siphon.—*Caut.* Highly inflammable!

do. Merck.—Boil. abt. 40° C. (1

For fat determinations.

do.—Purified.—*U. S. P.*

Petroleum benzin purified by treatment w. potass. permangan, NaOH, H_2SO_4, & water.

Benzin Merck.—Reagent (2

(Petroleum Ether or Benzin).—Colorl., inflamm. liq.; strong, not unpleas. odor.—Sp. Gr. 0.640–0.670.—Distils bet. 40–75° C.; does not solidify at 0° C.—*Tests:* (*Non-volat. Impur.; Heavy Oils*) warm 20 Gm. on W.-bath – no res. Drop on paper & evap. – no fatty spot.—(*Sulphur Compounds; Reducing Substcs*) 1 Cc. + 5 Cc. solut. $AgNO_3$ in alcoholic ammonia, & immerse mixt. in H_2O at 50° C. – no brown color.—*Uses:* Solvent for fats, alkaloids, resins; forensic analysis, &c.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Benzoazurine G

(Sodium Dianisidindisazobi-1.naphthol-4.sulphonate).—Bluish-black powd.—*Sol.* W.—*Uses:* Dyeing cotton blue in soap bath.

Benzocotoïn.—see **Hydrocotoïn**

Benzoeugenol Merck (12

(Benzoyleugenol; Eugenol Benzoate).—Fr. eugenol benzoyl chloride.—$C_{17}H_{16}O_3$, or, $C_9H_6(OCH_3)O.C_6H_5.CO$.—Wh. cryst.—*Sol.* A., E., C., acetone.—*Melt.* 68–70° C.—*Uses:* Tuberculosis; neuralg. headaches.—*Dose* 8–15 grains (0.5–1 Gm.).

Benzoic Aldehyde.—see **Benzaldehyde**

Benzoic Trichloride.—see **Benzotrichloride**

Benzoïn Merck.—(*Not* **Gum Benzoin**).—**Cryst.** (30

(Phenylbenzoylcarbinol; Bitter-Almond-Oil Camphor; Oxyphenylbenzylketone).—React.-prod. benzoic aldehyde (200) potass. cyanide (20) & 50% alc. (800).—$C_{14}H_{12}O_2$, or, $C_6H_5.CH(OH).CO.C_6H_5$.—Colorl. cryst.—*Sol.*, hot W. & A.—*Melt.* 135–137° C.—Antisep.—*Uses: Extern.*, ulc. & varic. veins.—*Appl.* 20% oint.

Benzoin.—Penang

(Sumatra-Penang Benzoin; "Sumatra" Benzoin).—Balsamic resin fr. Styrax subdenticulata, Miq. Styraceæ.—*Habit.:* Sumatra & Java.—*Etymol.:* See Benzoin, Siam.—Grayish-brown porous masses; many white imbedded tears; storax-like odor.—*Sol.*, partly in CS_2; alm. compl. in A.—*Constit.:* Cinnamic & a little (or no) benzoic acid; resin.—*Uses, Dose & Incomp.*, as of Benzoin, Siam.

Benzoin.—Siam.—*U. S. P.*

(Gum Benzoin; Gum Benjamin; Resin Benzoin).—Balsamic resin fr. Styrax Benzoin, Dryander. Styraceæ; & other unidentified sp. of S.—*Habit.:* Siam; Cambodia, & Cochin China (also fr. Sumatra & Java).—*Etymol.*. Fr. Hebrew "ben," branch, & "zoa," secretion; or, fr. Arab. "luban, jawa" (lu + ban + join), "incense of Java."—Grk. "styrax," fr. Arab. "assthirak," a tree yielding gum.—Almond-shaped tears, pale reddish-brown extern.; waxy & white intern.; or, as reddish-brown mass of tears imbedded in a reddish resin; agre. vanilla-like odor; bitter taste.—*Sol.*, alm. whol. in CS_2, & 5 warm A.—Sp. Gr. 1.17–1.235.—*Melt.*, tears, 75° C.—*Constit.:* Ethereal oil; benzoic acid; vanillin; resin (a mixt. of benzoresinol, $C_{16}H_{26}O_2$, & siaresinotannol, $C_{12}H_{14}O_3$) esterified w. benzoic acid.—Expector.; Stim.; Antisep.—*Uses: Intern.*, in chron. catarrh & as expector. constit. of cough mixt.; also as tinct. w. hot W. for inhalations.—*Extern.*, as dress. for wounds (in form of tinct.).—*Techn.*, preserv. oints.; prep. benzoic acid; cosmetics; fumig. pastilles; stove lacquer; varnishes; perfumery; chocolate coating.—*Doses:* 5–30 grains (0.3–2 Gm.).—Tinct., 10–40 ♏ (0.6–2.6 Cc.).—Comp. tinct.

(benzoin, aloes, storax, & bals. Tolu), 15–60 ♏ (1–4 Cc.) as stim. expector.—*Incomp.*, acids, alkalies, water.

Benzoin.—Sumatra.—*U. S. P.*

—Balsamic resin fr. Styrax Benzoin, Dryander, Styraceæ.—*Habit.:* Sumatra & Java.—*Etymol.:* See Benzoin, Siam.—Cubical blocks consisting of whitish-yellow tears imbedded in a grayish-brown resin; odor unlike that of Siam & less agre.—*Melt.*, tears, at 85° C., the mass at 95° C.—*Sol.*, partly in CS_2; alm. compl. in A.—*Constit.:* Benzoic & cinnamic acids; vanillin; resin (benzoresinol, $C_{19}H_{26}O_2$, & benzoresinotannol, $C_{18}H_{20}O_4$, esterified w. cinnamic acid); styrol; styracin, benzaldehyde.—*Uses, Dose, & Incomp.*, as of Benzoin, Siam.

Benzoiodhydrin Merck (1000

(Chloriodobenzoic-acid Glycerin Ester).—$C_3H_5.CH.C_7H_5O_2$.—Brownish-yellow, fatty mass.—*Sol.* A., E., petrol. ether.

Benzoiodhydrin Saccharated Merck (60

Mixt. of benzoiodhydrin (abt. 32.5%) & sugar.—*Uses:* As succedaneum for iodides.—*Dose* 1–4 teaspoonfuls daily.

Benzol.—see **Benzene**

Benzolazoaniline.—see **Diazoamidobenzene**

Benzonaphthol.—see **Betanaphthol Benzoate**

Benzonitrile Merck (60

(Phenyl Cyanide).—Fr. benzoic acid, by lead sulphocyanate.—C_7H_5N, or, $C_6H_5.CN$.—Transp., colorl. oil; odor essent. oil almonds.—Sp. Gr. 1.023 at 0° C.—*Misc.*, all prop., A., E.—*Boil.* 190° C.

Benzophenone Merck (50

(Diphenylketone).—Fr. calc. benzoate by dry distil'n.—$C_{13}H_{10}O$, or, $C_6H_5.CO.C_6H_5$.—Colorl. prisms.—*Sol.* A., E.—*Melt.* 48° C.—*Boil.* 306° C.

Benzopurpurine Merck (10

(Eclipse; Fast Scarlet; Ozamin 4 B.).—Sodium salt of orthotoluidindisazobinaphtylaminesulphonic acid.—Brown or red powd.—*Sol.* W.—*Uses:* Dyeing cotton.

Benzopurpurine Paper

Wh. paper charged w. an acidulated solut. Benzopurpurine B. and dried.—*Uses:* Indicator for amm. & o. alkalies (brownish-red color), & acids (bluish-black color).

Benzoquinone.—see **Quinone**

Benzosalin

(Benzoylsalicylic-acid Methyl Ester).—$C_6H_5OC.O.C_6H_4.COOCH_3$.—Wh., acic. cryst.—*Sol.* A., B., C.; more diffic. E.; insol. W.—*Melt.* 85° C.—Intest. Antiseptic & Disinf.—*Uses:* Artic. rheum., neuralg., &c.—*Dose* 8–15 grains (0.5–1 Gm.) 3–4 t. p. d.

Benzosol (25

(Guaiacol Benzoate; Benzoylguaiacol).—Fr. guaiacol, w. benzoyl chloride or anhydride.—$C_{14}H_{12}O_3$, or, $C_6H_4(OCH_3)O.C_6H_5.CO$.—Colorl., cryst. powd.; odorl.; alm. tastel.—*Sol.* A., E., C.; insol. W.—*Melt.* 56–58° C.—Antituberc., & Intest. Antisep.—*Uses:* Phth., intest. disord., &c.—*Dose* 3–12 grains (0.2–0.8 Gm.) sev. t. p. d. in pill, powd., choc. pastil., or w. peppermint-oil sugar.—*Max. D.* 40 grains (2.6 Gm.) p. d.

Benzosulphinide.—*U. S. P.* (4

(Benzoylsulphonic Imide; Saccharin; Garantose; Glusidum; Gluside; Glycophenol; Glycosine; Saccharinol; Saccharinose; Saccharol; Saxin; Sykose; Zuckerin; Glusimide; Agucarina; Toluolsuss; Anhydroorthosulphamidebenzoic Acid; Neo-saccharin).—Fr. toluene or fr. thiosalicylic acid.—$C_7H_5NO_3S$, or, $C_6H_4(CO).SO_2.NH$.—Wh., odorl., microcryst. powd.; intens. sweet. taste: 500–550 times as sweet as cane sugar; sweet taste still detected in 1:70,000 solut.—*Sol.* 250 W., 25 A. at 25° C.; 24 W. at 100° C.—Alkal. carbonates increase solub. in W.—*Melt.*, abt. 220° C.—*Uses:* Cystitis; sweeten food of diabetics & obese subjects, cover taste of bitter & acrid remed., &c.; also as sweetener in household economy, in manuf. champagne, sweetening oils & essences.—*Dose* 2–5 grains (0.12–0.3 Gm.) several times per day in solution with sodium bicarbonate.

Benzotrichloride Merck.—Technical (5

(Toluene, Benzenyl, or Benzoic, Trichloride; Phenyl Chloroform).—Fr. boil. toluene, by chlorine.—$C_7H_5Cl_3$, or, $C_6H_5.CCl_3$.—Colorl. to yellowish liq., character. penetrat. odor.—Sp. Gr. 1.38 at 15° C.—*Boil.* 213–214° C.—*Uses:* Aniline dye industry.

Benzoyl Chloride Merck.—Highest Purity, free fr. Chlorobenzoyl Chloride (10

Fr. benzoic acid, by phosph. pentachloride.—C_7H_5OCl, or, $C_6H_5.CO.Cl$.—Transp., colorl., pung. liq.; vapor causes tears.—Sp. Gr. 1.21 at 19° C.—*Sol.* E., carb. disulph.—*Boil.* 194–195° C.—*Uses:* Reagent in org. anal. & syntheses.

do. Merck.—Pure (5

Benzoyl Green.—see **Malachite Green**

Benzoyl Hydride.—see **Benzaldehyde**

Benzoyl Oxide.—see **(Acid) Benzoic Anhydride**

Benzoylacetyl Peroxide.—see **Acetozone**

Benzoylanilide.—see **Benzanilide**

Benzoylecgonine Merck (300

By-prod. of cocaine.—$C_{16}H_{19}NO_4 + 4H_2O$.—Colorl. cryst.—*Melt.* 90–92° C. when cont. W. of cryst., & 188–190° C. when anhydrous.

Benzoylecgonine-ethylester.—see **Coca-ethyline**

Benzoyleugenol.—see **Benzoeugenol**

Benzoylglycin. } —see **Acid Hippuric**
Benzoylglycocoll. }

Benzoylguaiacol.—see **Benzosol**

Benzoylmethide.—see **Hypnone**

Benzoylnaphthol.—see **Betanaphthol Benzoate**

Benzoylphenylhydrazine Merck (60

(Symmetric Benzoylphenylhydrazine). — Fr. phenylhydrazine w. benzoyl chloride, or benzoic acid.—$C_{13}H_{12}N_2O$, or, $(C_6H_5)HN.NH.C_6H_5.CO$. — Colorl. cryst. — *Sol.* A., E., C. — *Melt.* 145° C.—Antisep.

Benzoylphloroglucinoldimethylester.—see **Hydrocotoin**

Benzoylpseudotropeine Hydrochloride.—see **Tropacocaine Hydrochloride**

Benzoylsalicin.—see **Populin**

Benzoylsalicylic-acid Methyl Ester.—see **Benzosalin**

Benzoylsulphonic Imide.—see **Benzosulphinide; Saccharin**

Benzoyltetramethyldiaminoethylisopropylalcohol Hydrochloride.—see **Alypin**

Benzoylvinyldiacetonalkamine Hydrochloride.—see **Eucaine, Beta-**

Benzozone.—see **Acetozone**

Benzyl Alcohol.—see **Alcohol, Benzylic**

Benzyl Benzene.—see **Diphenylmethane**

Benzyl Bichloride.—see **Benzyl Dichloride**

Benzyl Chloride Merck.—Pure (4

(Omegachlorotoluene).—Fr. boil. toluene, by chlorine.—C_7H_7Cl, or, $C_6H_5.CH_2Cl$.—Colorl. liq.; arom. odor.—Sp. Gr. 1.107 at 15° C.—*Boil.* 178° C.—*Uses:* Chem., & techn. in manuf. artif. bitter oil almond, & dyes.—*Caut.* H'ly irrit. to eyes & air passages.

do. Merck.—Technical (3

Benzyl Cyanide Merck (25

(Phenylacetic-acid Nitrile).—Natur'ly, in garden cress & o. plants. Synth., fr. benzyl chloride, w. potass. cyanide. — C_8H_7N, or, $C_6H_5.CH_2CN$. —Liquid.—Sp. Gr. 1.0146 at 18° C.—*Sol.* A. —*Boil.* 232° C.

Benzyl Dichloride Merck (2

(Benzylidene Chloride; Benzal, or Benzylene, Chloride; Chlorobenzal). — Fr. toluene by phosph. pentachloride w. heat.—$C_7H_5Cl_2$, or, $C_6H_5.CHCl_2$.—Oily liq.; faint arom. odor.—Sp. Gr. 1.27 at 0° C.—*Sol.* A., E.—*Boil.* 204° C.

Benzyl Iodide.—Pure (100

Fr. benzyl chloride, by hydriodic acid.—C_7H_7I, or, $C_6H_5.CH_2I$.—Colorl. cryst.; vapor causes tears.—*Sol.* E., carbon disulphide; sl. in A.—*Melt.* 241° C.

Benzyl Sulphide Merck (25

Fr. benzyl chloride, w. potassium sulphide.—$C_{14}H_{14}S$, or, $(CH_2.C_6H_5)_2S$. — Colorl. tablets. — *Sol.* E.—*Melt.* 49° C.

Benzylamine Merck (200

Fr. thiobenzamide, by reduct. w. nascent hydrogen.—C_7H_9N, or, $C_6H_5.CH_2NH_2$.—Colorl. liq.; str'ly alkaline react.—Sp. Gr. 0.99 at 15° C.—*Sol.*, all prop., W., A., E.—*Boil.* 184° C.

Benzylamine Hydrochloride Merck (190

$C_7H_9N.HCl$, or, $C_6H_5.CH_2.NH_2.HCl$. — Colorl. cryst.—*Sol.* W.

Benzylaniline Merck (30

(Benzylphenylamine).—Fr. thiobenzanilide by reduct. — $C_{13}H_{13}N$, or, $C_6H_5.CH_2NH(C_6H_5)$.—Alm. colorl. prisms.—*Sol.* A.—*Melt.* 33° C.

Benzylcarbamide Merck (350

(Benzylurea).—Fr. benzyl chloride, by potass. cyanate in alc.—$C_8H_{10}N_2O$, or, $NH_2.CO.NH.CH_2.C_6H_5$.—Colorl. cryst.—*Sol.* W., A.—*Melt.* 147° C.

Benzylene Chloride.—see **Benzyl Dichloride**

Benzylethylaniline Merck (35

Fr. ethylaniline, w. benzyl chloride.—$C_{16}H_{17}N$, or, $C_6H_5.N(C_2H_5).C_6H_5.CH_2$.—Brownish-yellow liq.—*Boil.*, abt. 286° C., w. sl't decompos.—*Sol.* A., E., C.

Benzylidene Chloride.—see **Benzyl Dichloride**

Benzylideneacetone Merck (50

(Benzalacetone; Acetocinnamone; Methylcinnamylketone; Methylstyrylketone).—Fr. mixt. calc. cinnamate & acetate by heat.—$C_{10}H_{10}O$, or, $C_6H_5.CH:CH.CO.CH_3$.—Colorl. cryst.; odor of cumarin. — *Sol.* A., E., B., C.; sl. in petroleum benzin.—*Melt.* 42° C.

Benzylmorphine Hydrochloride.—see **Peronin**

Benzylphenylamine.—see **Benzylaniline**

Benzylurea.—see **Benzylcarbamide**

Berberine Carbonate Merck.—Cryst. (100

Yellow cryst.—*Sol.*, hot W., A.—*Uses, Doses, &c.:* As of berberine hydrochloride.

Berberine Citrate

Yellowish, cryst. powd.; bitter.—*Sol.* W.

Berberine Hydrochloride Merck (29

$C_{20}H_{18}NO_4Cl + 2H_2O$. — Yellow powd. — *Sol.* W. —Antiper.; Stoma.; Tonic.—*Uses:* Specially in splenic enlargem. due to malarial origin, in combin. w. quinine sulph. (berberine hydrochl. 2 parts, & quin. sulph. 1 part), amenor., anorexia, chronic intestinal catarrh, vomiting of pregnancy, &c.—*Doses:* Antiper., 8–15 grains (0.5–1 Gm.); stoma. & ton., $^1/_2$–1 grain (0.03–0.06 Gm.) 3 t. p. d.; of mixt. w. quinine, 7 grains (0.4 Gm.) every $^1/_2$–1 hr.

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Berberine Phosphate

$(C_{20}H_{17}NO_4)_3(H_3PO_4)_2+5H_2O$. — Yellow, cryst. powd.—*Sol.* W.—Most sol. salt & easiest to administer, in pills, hydro-alcoh. solut., or arom. syrup.—*Dose:* As of sulphate; best given in solut. flavored w. syrup, orange or syrup cinnamon.

Berberine Sulphate Merck.—Cryst. (29

Orange-yellow need.—*Sol.*, diffic. W.; almost insol. A.

do. Merck.—Cryst., soluble (150

$C_{20}H_{18}NO_4.HSO_4$.—Sulphate of colored alkaloid fr. Berberis vulgaris, L., & o. plants.—Yellow need.—*Sol.* W., A.—Antiper.; Stomachic; Tonic. —*Uses:* Malar., amenor., splenic congest., anorexia, chron. catarrh.—*Doses:* Antiper., 8–15 grains (0.5–1 Gm.); stom. & ton., $^1/_2$–1 grain (0.03–0.06 Gm.) 3 t. p. d.

Berberis Aquifolium

(Holly-leaved Barberry; Oregon Grape Root; Mountain Grape).—Root of Berberis aquifolium, Pursh. (Mahonia aquifolium, Nutt.). Berberideæ.—*Habit.:* U. S., & British Columbia. —*Etymol.:* Fr. "Berberys," the Arabic name for the fruit.—*Constit.:* Berberine, $C_{20}H_{17}NO_4$; berbamine, $C_{18}H_{19}NO_3+2H_2O$; oxyacanthine, $C_{19}H_{21}NO_3$ (Rüdel); phytosterin, $C_{26}H_{44}O.H_2O$; gum; sugar.—Alterat.; Antiper.; Tonic; Diuret. —*Uses:* Scrofula, skin dis., syphil., liver dis., malaria, typhoid fever, & chron. uter. affect.—*Doses:* Alcoh. extr., 2–6 grains (0.12–0.36 Gm.). —Fld. extr., 10–30 ♏ (0.6–2 Cc.).

Berberis Vulgaris

(Jaundice Berry; Wood-sour; Sow-berry; Pepperidge Bush; Sour-spine; Barberry.—Bark of root of Berberis vulgaris, L. Berberidaceæ.—*Habit.:* Europe & Western Asia; also U. S. (New England States, Pennsylvania & Virginia).—*Etymol.:* Either fr. "Barbary" (Africa), whence the tree was introduced into Spain through the Arabs; or fr. "berberis," the Arabian name for the fruit.—Thin fragments; yellowish-gray, soft periderm; inner surface smooth, orange-yellow; short, bright-yellow fracture; inodor.; bitter, non-astring. taste, & colors saliva yellow.—*Constit.:* Berberine, $C_{20}H_{17}NO_4$; berbamine, $C_{18}H_{19}NO_3+2H_2O$; oxyacanthine, $C_{19}H_{21}NO_3$; tannin; wax; fat; resin; gum; starch.—Tonic; Laxat.; Febrif.; Astring.—*Uses:* Debil. & jaundice. — *Techn.*, dyeing yellow; source of berberine. — *Doses:* 30–60 grains (2–4 Gm.) in powd. or decoct. as tonic & febrif.; 60 grains (4 Gm.) as cathart.—Fld. extr., 30–60 ♏ (2–4 Cc.).

Berlin Blue.—see **Iron Ferrocyanide**

Beryllium Merck.—Powd. & cryst. (15000

(Glucinum).—*Etymol.:* Fr. Grk. "beryllion," under which name beryl (an aluminum-beryllium metasilicate) was known to the ancient Greeks & Romans.—Metal.—Be.—Color, luster, & hardness of steel.—Sp. Gr. 2.1 at 15° C.—*Sol.*, in dil. hydrochl. acid, potassa solut.; slowly in warm dil. sulphuric acid.—*Uses:* In manuf. beryllium-copper alloys, which, because of their resonance, are used in the making of musical instruments.

Beryllium Carbonate Merck (50

(Basic Beryllium Carbonate).—Comp. variable. —Wh. powd.—*Sol.*, acids.

Beryllium Chloride Merck. — Anhydrous, Sublimed (600

$BeCl_2$.—Wh. to faintly yellowish, very deliquesc., cryst. powd.—*Sol.*, acids.

do. Merck.—99% solution (50

$BeCl_2$+abt. $4H_2O$.—Colorl. or faintly yellow, syrupy liq.—*Misc.*, w. W. & A.

Beryllium Hydrate.—see **Beryllium Hydroxide**

Beryllium Hydroxide Merck (50

(Beryllium Hydrate). — $Be(OH)_2$.—Wh. powd. —*Sol.*, alkalies, acids.

Beryllium Nitrate Merck (35

$Be(NO_3)_2+3H_2O$.—Wh. to faintly yellowish, deliq. mass.—*Sol.* W., A.—*Caut.* Keep well stoppered.

Beryllium Oxide Merck (85

BeO.—Wh., amorph. powd.—*Sol.*, acids.

Beryllium Sulphate Merck (35

(Normal Beryllium Sulphate).—$BeSO_4+4H_2O$. —Colorl. cryst.—*Sol.* W.—*Caut.* Stopper well.

Beryllium & Potassium Fluoride Merck (110

$BeF_2.(KF)_2$ (Berzelius).—Wh. cryst., or amorphous, wh. masses.—*Sol.*, v. sl. in W.

Beryllium & Sodium Fluoride Merck (110

$BeF_2.(NaF)_2$.—Wh. to grayish-wh., cryst. powd. —*Sol.* W.—*Uses:* Source of pure beryllium metal.

Betachloralose.—see **Parachloralose**

Betacollidine.—see **Collidine**

Betacymophenol.—see **Carvacrol**

Betadiaminololuene (or, *-ol*) *Hydrochloride.*—see **Toluylenediamine (Ortho-) Hydrochloride**

Beladibromhydrin.—see **Alcohol, Dibromopropylic**

Beladibromocamphor.—see **Camphor, Dibromated**

Beta-Eucaine.—see **Eucaine, Beta-**

Betaine Hydrochloride Merck (350

(Trimethylglycine Hydrochloride; Oxyneurine Hydrochloride; Lycine Hydrochloride). — Fr. alkaloid of the sugar beet; also synthet.—

$C_5H_{11}NO_2.HCl$.—Colorl., monocl. tablets.—*Sol.* W.—Is credited with power to completely neutralize tetanus toxin.—*Uses:* In gastric affect. like HCl.—8 ♏ (0.5 Cc.)= 5 drops 10% hydrochloric acid.

Betaisoamylene.—see **Amylene; Pental**

Betamethylethylpyridine.—see **Collidine**

Betamethylindole.—see **Skatol**

Betanaphthol Merck.—Medicinal, Resublimed (1

$C_{10}H_8O$, or, $C_{10}H_7.OH$.—Colorl. laminæ.—*Sol.* A., E., C., B., oils, alkaline liquids; sl. in W.; (950 W., 0.61 A., at 25° C.; abt. 75 boil. W.; v. sol. boil. A.-U. S. P.).—*Melt.* 122° C.—*Boil.* 285–286° C.—Antisep.; Parasiticide.—*Uses: Intern.*, in typhoid condit. of intest. & chronic diar.—*Extern.*, psoriasis, scabies, eczema, & o. skin affect. Apply in 2–10% ointment.—*Dose* 3–8 grains (0.2–0.5 Gm.).—*Max. D.* 15 grains (1 Gm.) single; 60 grains (4 Gm.) p. day.—*Incomp.*, antipyrine, camphor, carbolic acid, exalgine, ferric chloride, menthol, potass. permanganate, urethane.

do. Merck.—Medicinal, Recryst. (1

Constit. of coal-tar; also obt. artificially.—$C_{10}H_8O$, or, $C_{10}H_7.OH$.—Wh., lustr., bulky scales; darkens with age.

do. Merck.—Medicinal, cryst. & powd. (1

Antiseptic.—*Uses:* Inst. of tar in skin dis.; salves, 1:10; solut. 0.01–0.025%.—*Caut.* Keep fr. light.

do. Merck.—Purified, powd. (1

Betanaphthol Benzoate Merck (3

(Benzoylnaphthol; Benzonaphthol).—By fusing together equal quantities betanaphthol & benzoyl chloride.—$C_{17}H_{12}O_2$, or, $C_{10}H_7.C_7H_5O_2$.—Whitish powd.; darkens with age.—*Sol.* A., 33 C., alm. insol. W., E.—*Melt.* 110° C.—Antiseptic.—*Uses:* Diar., dysent., typhoid fever, cholera, & all intest. inflam.; also in dentistry.—*Dose* 5–15 grains (0.3–1 Gm.) 4–5 t. p. d., in wafer or mixt.—Daily dose for adults, 75 grains (5 Gm.); for children, 30 grains (2 Gm.).

Betanaphthol Camphorated Merck (6

(Naphthol Camphor; Naphtylated Camphor).—Mixt. of betanaphthol & camphor.—Syrupy liq.—*Sol.* A.—Antisep.; Resolv.—*Uses:* With cocaine for local tuberc. affect.; & w. oil for coryza, itch, & furuncles.

Betanaphtholbismuth.—see **Orphol**

Betanaphtholdiiodide.—see **Iodonaphthol**

Betanaphthol Lactate.—see **Lactol**

Betanaphthol Orange.—see **Tropæoline OOO, No. 2**

Betanaphthol Salicylate.—see **Betol**

Betanaphtholsodium.—see **Microcidin**

Betanaphthol Sulphoricinate Merck (40

Solut. of abt. 6% betanaphthol in sulphoricinoleic acid.—Antisep.—*Misc.*, eas. W.—*Uses: Extern.*, in local treatment of nasal, laryngeal, & pharyngeal affections.

Betanaphtoquinone.—see **Naphtoquinone, Beta-**

Betanaphtylamine.—see **Naphtylamine (Beta-)**

Betanaphtylethylester.—see **Bromelia**

Betanaphtylhydrazine Hydrochloride.—see **Naphtylhydrazine (Beta-) Hydrochloride**

Betanaphtylmethylester.—see **Methyl Betanaphtholate**

Beta-parvoline.—see **Parvoline fr. Cinchonine**

Betaquinine.—see **Quinidine**

Betaresalgin.—see **Resorcylalgin**

Betel.—see **Areca**

Bethroot.—see **Trillium**

Betol Merck (12

(Naphthalol; Naphthosalol; Salinaphthol; Betanaphthol Salicylate).—React.-prod., betanaphthol sodium, phosph. oxychloride & sod. salicylate.—$C_{17}H_{12}O_3$, or, $C_6H_4.OH.COO.C_{10}H_7$.—Wh. powd.; odorl.; tastel.—*Sol.*, boil. A.; in E., B.; insol. W., G.—*Melt.* 95° C.—Internal Antisep.; Antizym.; Antirheum.—*Uses:* Putrid processes of intest. tract, cystie catarrh, rheum., &c. Decomp. in intest. into salicylic acid & betanaphthol.—*Dose,* 4–8 grains (0.25–0.5 Gm.) 4 t. p. d. in wafers, milk, or emuls.

Betony

(Wood Betony; Bishop's-wort; Wild Hop; Betonica).—Lvs. & tops of Betonica officinalis, L. Labiatæ.—*Habit.:* Southern Europe; U. S.—*Etymol.:* Celtic "bentonic," fr. "ben," head, & "ton," good, *i.e.*, good for headache, referring to its use as a sternutatory.—*Constit.:* Bitter prin.; tannin.—Sternutatory.

Betula Alba

(European White Birch).—Bark & lvs. of Betula alba, L. Betulaceæ. (Cupuliferæ).—*Habit.:* Europe & Northern Asia; also America, north of Pennsylvania.—*Etymol.:* Fr. Celtic "betu," birch.—Outer bark fr. limbs is brown & warty, & fr. body of tree whitish, separating in paper-like layers; bitter, astring. taste. Inner bark is bitterish & astring.—*Constit.:* Betulin (betula camphor), $C_{30}H_{60}O_3$, 10–12%; betuloresinic acid, $C_{30}H_{66}O_5$(?).—*Uses:* The astring. inner bark is employed as antipyr. in interm. fever; external whitish bark source of empyreum. oil birch (Ol. Rusci).—Lvs. are diuret.—*Doses: Lvs.:* 6–9 dr. (abt. 25–35

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Gm.) in infus. w. hot W., per day.—Aqu. extr., 15–30 grains (1–2 Gm.) dissolved in abt. $3^1/_3$ fld. oz. (100 Cc.) W. & taken during 24 hrs.

Bibirine.—see **Bebeerine**

Bicalcic Phosphate.—see **Calcium Phosphate, Dibasic**

Bicolorin.—see **Esculin**

Bidens Bipinnata

(Spanish Needles).—Root of Bidens bipinnata, L. Compositæ.—*Habit.:* Eastern U. S.—*Etymol.:* Fr. Lat. "bis," twice, & "dens," tooth, two-toothed, referring to the achenes. "Bipinnata" refers to the bipinnate lvs.—Emmen.; Expector.—*Uses:* Amenor., dysmenor., bronch., & laryng.—*Dose:* Fld. extr., 30–60 ♏ (2–4 Cc.).

Bidens Cernua

(Bur Marigold; Double-tooth; Water Agrimony).—Lvs. & tops of Bidens cernua, L. Compositæ.—*Habit.:* Europe; Asia; North America.—*Etymol.:* Lat. "bis," twice, & "dens," tooth, *i.e.*, the achenes have 2 to 5 bristles.—Lat. "cernua," bent forward.—*Constit.:* Volat. oil; pectin.; tannin.—Emmen.; Expector.—*Uses:* Hay asthma; remedy for gravel.

Biebrich Scarlet Merck (7

(Ponceau).—Sod. salt amidoazobenzenedisulphonic-acid-azobetanaphthol.—Reddish-brown powd.—*Sol.* W. w. yellowish-red color.—*Uses:* As a coloring, & for dyeing wool scarlet in acid bath.

Bikh.—see **Aconitum Ferox**

Bilberry.—see **Vaccinium**

Bilifulvin.—see **Bilirubin**

Bilifuscin Merck (40000

Bile-pigment.—$C_{16}H_{20}N_2O_4$(?).—Dark-brown powd.—*Sol.* A., alkal. hydroxides, glacial acetic acid; sl. in C.

Bilihumin Merck (13000

Bile-pigment (Staedeler).—Dark-brown, amorphous powd.—*Sol.*, sod. hydroxide.

Bilineurine.—see **Choline**

Biliphaein.—see **Bilirubin**

Biliprasin Merck (36000

Bile-pigment (Staedeler).—Prob'ly mixt. of bilifuscin & biliverdin.—Dark-green powd.—*Sol.* A.

Bilirubin Merck (31500

(Biliphaein; Bilifulvin; Cholepyrrhin; Hematoïdin).—Prin. pigment of bile, & constit. of many biliary calculi.—$C_{18}H_{18}N_2O_3$ (Staedeler, Maly.).—Orange-red powd.—*Sol.* C., B., acids & alkal.; sl. in A.

Biliverdin Merck (40000

Bile-pigment; fr. oxid'n of bilirubin.—$C_8H_9NO_2$.—Dark-green, amorph. powd.—*Sol.* A., wood A., glacial acetic acid, concentr. sulphuric acid.

Biodal (12

(Monoiododibismuthmethylene Dicresotinate).—Pink, odorl., tastl., insol. powd.—Antisep.—*Uses:* As of iodoform.

Birch, White.—see **Betula Alba**

Bird-Weed.—see **Polygonum**

Bish., *Bishma.*—see **Aconitum Ferox**

Bismal (15

(Bismuth Methylenedigallate Merck).—$4\,C_{15}H_{12}O_{10}+3Bi(OH)_3$.—Grayish-blue, bulky powd.—*Sol.*, alkalies; insol. W.—Intest. Astring.—*Uses:* Specially in prolonged diarrheas not benefited by opium.—*Dose* $1^1/_2$–5 grains (0.1–0.3 Gm.) 3–6 t. p. d.

Bismarck Brown Merck (6

(Vesuvine; Manchester, English, Gold, Phenylene, Cinnamon, or Aniline, Brown; Metaphenylenediamine-disazobimetaphenylenediamine Hydrochloride).—Dark-brown powd.—*Sol.* W.—*Uses:* Dyeing silk & wool; leather & cotton, when tannined, reddish-brown. Bacteriol., as contrast color. w. methyl violet.—*Caut.* Preserve solut. in dist. W. by adding a small piece of camphor.

Bismon (50

Colloidal bismuth oxide; 20% Bi.—*Sol.*, cold & hot W.—*Uses:* As of bism. subnitrate in digestive disturbances.—*Dose* 8 grains (0.5 Gm.) in 10% aqu. solut. w. milk, 3–4 t. p. d.

Bismuth Merck.—Highest Purity (8

Etymol.: Derived by the alchemists fr. the German "Wismut." This word, according to Koch, is derived fr. the Arabic "wiss majaht," metal which melts as readily as storax; according to Mathesius, fr. "Wiesmatte," the name used by the ancient miners, as the tarnished surface of the metal sometimes presents beautifully variegated colors, like a meadow (German "Wiese," meadow, & "matt," dim, tarnished).—Bi.—Pure metal.—Grayish-wh., w. reddish tinge; hard & brittle; bright metal. luster.—*Sol.*, aqua regia, nitric, & hot sulphuric acids.—*Melt.* 286° C.—*Uses:* Pharmaceutically, & in dental techn.

do. Merck.—Highest Purity, powder (10

Steel-gray powd.—*Uses:* Dental techn., & in manuf. easily-fusible alloys.

do. Merck.—Pure, gran., free fr. Arsenic (7

do. Merck.—About 98% (3

Cont. some lead, iron, & copper, traces arsenic, antimony, & tellurium, rarely selenium.—*Uses:* Techn.

Bismuth Acetate Merck (5

$Bi(C_2H_3O_2)_3$.—Wh. powd.—Loses acetic acid on expos., espec. when warm.—*Sol.*, acetic acid.

Bismuth Albuminate Merck (8

Light-gray powd.—9% bismuth.—*Uses:* Choleraic or crampy symp. in stom. or intest.—*Dose* 5–15 grains (0.3–1 Gm.) 3 or 4 t. p. d.

Bismuth Alginate

(Alginoid Bismuth).—Fr. sod. alginate & solut. bism. nitrate; 32% Bi.—*Sol.*, ammonia (solut. misc. w. W.).—Decomp. in intestines.

Bismuth Benzoate Merck (5

$Bi(C_7H_5O_2)_3$.—Wh., tastel. powd.—*Sol.*, mineral acids; insol. W.—Antisep.—*Uses: Intern.*, gastro-intest. dis.—*Extern.*, like iodoform on wounds, &c.—*Dose* 5–15 grains (0.3–1 Gm.).

Bismuth Benzoate, Basic.—see **Bismuth Subbenzoate**

Bismuth Betanaphtholate.—see **Orphol**

Bismuth Bismuthate.—see **Bismuth Peroxide**

Bismuth Borate Merck (13

$BiBO_3$.—Wh. powd.—*Sol.*, acids.—Intest. antisep.

Bismuth Bromide Merck (20

(Bismuth Tribromide).—$BiBr_3$.—Colorl. cryst.—*Sol.* E.—*Caut.* Keep dry.

Bismuth Camphorate Merck (25

$Bi_2(C_{10}H_{14}O_4)_3$.—Wh. powd.—Insol. W.

Bismuth Carbolate.—see **Bismuth Phenate**

Bismuth Carbonate.—see **Bismuth Subcarbonate**

Bismuth Chloride Merck (6

(Bismuth Trichloride).—$BiCl_3$.—Wh., v. deliq. cryst.; volat. by heat.—*Sol.*, in sm. quant. W.; & in W. acidulated w. HCl; w. much W. prod. oxychloride.—*Melt.* 227° C.—*Caut.* Keep dry.

Bismuth Chromate Merck (8

$Bi_2O_3.2CrO_3$.—Orange-yellow, amorph. powd.—*Sol.*, acids.—*Uses:* Pigment.

Bismuth Chrysophanate.—see **Dermol**

Bismuth Citrate Merck (4

Fr. boil. bismuth subnitrate in solut. citric acid.—$BiC_6H_5O_7$.—Wh., micro-cryst. or amorph. powd.; free fr. nitrates; odorl.; tastel.—*Sol.*, amm., solut. of alkali citrates.—Stomachic & Astring.—*Uses:* Diar., dyspep., &c.—*Dose* 1–3 grains (0.06–0.2 Gm.).—*Caut.* Keep dry, fr. light, well stoppered.

Bismuth Dilhiosalicylate.—see **Thioform**

Bismuth Formic-iodide (5

Mixt. of formaldehyde-gelatin, thymol iodide, & bismuth subiodide.—Surg. Antisep.; Astring.; Alter.; Analg.—*Uses:* As stim. dry dress. to wounds, ulcer., & in skin dis.

Bismuth Gallate, Basic.—see **Bismuth Subgallate**

Bismuth Hydroxide Merck (5

(Bismuth Hydrate, Trihydroxide, or Trihydrate; Hydrated Bismuth Oxide).—$Bi(OH)_3$.—Wh., amorph. powd.—*Sol.*, acids; insol. W.—*Uses:* Making bismuth salts, & techn.

Bismuth Iodate Merck (25

$Bi(IO_3)_3$.—Heavy, wh. powd.—*Sol.*, sl. in nitric acid; insol. W.

Bismuth Iodide Merck (20

(Bismuth Triiodide).—BiI_3.—Grayish-black, metal., glist. cryst.—*Sol.*, potass. iodide solut.

Bismuth Iodoresorcinsulphonate.—see **Anusol**

Bismuth Iodosalicylate.—see **Iodylin**

Bismuth Lactate Merck (8

$C_3H_4O_3.BiH.C_3H_4O_3$.—Wh., cryst. crusts, or powd.—*Sol.*, sl. in W.—*Uses:* As of bismuth subnitrate.—*Dose* 5–15 grains (0.3–1 Gm.).

Bismuth Lactophosphate Merck (10

Wh., micro-cryst. powd.—*Sol.*, v. sl. W.

Bismuth Lorelinate.—see **Loretin-Bismuth**

Bismuth, Magistery of.—see **Bismuth Subnitrate**

Bismuth Methylenedigallate.—see **Bismal**

Bismuth Molybdate Merck (25

Yellow powd.—*Sol.*, mineral acids.

Bismuth Nitrate Merck.—Cryst. (3

(Bismuth Ternitrate, or Trinitrate; Normal Bismuth Nitrate).—$Bi(NO_3)_3+5H_2O$.—Lustr., clear, colorl., hygros. cryst.; acid taste; changed to subnitrate by W.—*Sol.*, acids, G.—Astring.; Antisep.—*Uses:* Phth. diar., &c.; also techn.—*Dose* 5–10 grains (0.3–0.6 Gm.).

Bismuth-Nosophen.—see **Eudoxin**

Bismuth Oleate Merck.—Dry (5

Comb. bismuthous oxide & oleic acid.—Yellowish-brown, soft, granular mass.—*Sol.* E.

Bismuth Ortho-oxyquinolinemetaiodosulphonate.—see **Loretin-Bismuth**

Bismuth Oxalate Merck (5

$Bi_4(C_2O_4)_6+15H_2O$.—Wh., granular powd.—*Sol.*, acids.

Bismuth Oxide.—see **Bismuth Trioxide**

Bismuth Oxide, Hydrated.—see **Bismuth Hydroxide**

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Bismuth Oxybromide Merck (15

(Bismuthyl Bromide).— BiOBr. — Yellowish-white powd.—*Sol.*, acids.—*Uses:* Nerv. dyspep., hysteria w. gastric pains & vomiting.—*Dose* 5–7 grains (0.3–0.4 Gm.) several t. p. d.

Bismuth Oxycarbonate.—see **Bismuth Subcarbonate**

Bismuth Oxychloride Merck (5

(Bismuthyl Chloride; Pearl White).—BiOCl.—Wh., lustr., cryst. powd.—*Sol.*, hydrochl. acid; insol. W.—*Uses:* Face powders, pigment, &c.

Bismuth Oxyiodide Merck (6

(Bismuth Subiodide).—BiOI.—Brownish-red, amorph., insol. powd.; odorl.; tastel.—67% bismuth trioxide.—Antisep.—*Uses: Extern.*, on suppurat. wounds, ulc., in skin dis., gonor., &c. —*Intern.*, gastric ulc., typh. fever, & dis. muc. membr.—*Dose* $1^1/_2$–3 grains (0.1–0.2 Gm.) 3 t. p. d., in mixture, powder, or capsule.—*Appl.*, like iodoform; in gonor. in 1:1000. inj.

Bismuth Oxyiodogallate.—see **Airol**

Bismuth Oxyiodomethylgallate. — see **Iodogallicin**

Bismuth Oxyiodotannate.—see **Ibit**

Bismuth Pancreatinized Merck (10

Yellowish-white powd.—10% bismuth trioxide. —Insol. W.—Astring.; Antisep.—*Uses:* As of bismuth subnitrate, but larger doses are given.

Bismuth Peptonized Merck (5

(Bismuthated Peptone).—Grayish-yellow, soluble bismuth comp.—*Uses:* Dyspep., gastralgia, &c.; 3.5% bismuth trioxide.—Stomachic.—*Dose* 30–75 grains (2–5 Gm.), 2 or 3 t. p. d.

Bismuth Permanganate Merck (15

$Bi(MnO_4)_3$. — Black, bulky powd. — *Sol.*, dil. acids.—Antisep.—*Uses: Extern.*, dusting powder for wounds, & ulc., for combined effect of bismuth & permang. acid.

Bismuth Peroxide Merck (11

(Bismuth Bismuthate).—Bi_2O_4.—Brown powd.; loses oxygen at 150° C.; decomp. by acids.

Bismuth Phenate Merck (11

(Bismuth Carbolate or Phenylate; Phenolbismuth).—$Bi(OH)_2.C_6H_6O$ (B. Fischer).—Grayish-wh. powd.; alm. odorl. & tastel.—80% Bi_2O_3. —Antisep.—*Uses: Intern.*, intest. antisep.—*Extern.*, like iodof.—*Dose* 5–15 grains (0.3–1 Gm.).

Bismuth Phenolsulphonate Merck (13

(Bismuth Sulphophenate, or Sulphocarbolate). —Pale reddish powd.—*Sol.*, partially W.—Antisep.—*Uses:* Intest. disinf. in typhoid fever, dyspep., abnorm. intest. ferment, &c.—*Dose* 3–8 grains (0.2–0.5 Gm.) 3 or 4 t. p. d.

Bismuth Phenylate.—see **Bismuth Phenate**

Bismuth Phosphate Merck (5

$BiPO_4$.—Wh. powd.—*Sol.*, acids; insol. W.

do. Merck.—Soluble (8

Wh. powd.—*Sol.*, abt. 3 W.—Contains equiv. of abt. 20% bismuth trioxide, besides phosphoric acid & soda.—Intest. Antisep., & Astring.—*Uses:* Acute gastric & intest. catarrh.—*Dose* 3–8 grains (0.2–0.5 Gm.) 3 t. p. d.

Bismuth Propionate Merck (45

$Bi(C_3H_5O_2)_3$(?).—Wh., amorph. powd. — *Sol.*, acids.

Bismuth Pyrogallate Merck

(Helcosol; Basic Bismuth Pyrogallate).—By action of 1 part pyrogallic acid on 2 bismuth carbonate.—$C_6H_3[OH]O_2.BiOH$.—Yellow, amorphous powd.; odorl.; tastel.—60% Bi_2O_3.—*Sol.*, sl. in v. dil. hydrochl. acid; insol. W., A.—Intern. & Extern. Antisep., like bism. subgallate. —*Uses: Intern.*, as intest. antisep.—*Extern.*, in skin dis., &c.—*Dose* 5–15 grains (0.3–1 Gm.) in powder or tablets.—*Appl.*, as of bismuth subgallate.

Bismuth Resorcinated Merck (15

(Resorcinol-bismuth).—Fr. bismuthous oxide & resorcinol; comp. variable.— Yellowish-brown powd.— Abt. 40% Bi_2O_3.— Insol. W.— *Uses:* Acute & chron. gastr. catarrh, & abnorm. gastric ferment. processes.—*Dose* 3–8 grains (0.2–0.5 Gm.) several t. p. d.

Bismuth Salicylate Merck.—Abt. 40% Bi_2O_3. —(Do not confound with Bismuth Subsalicylate, U. S. P.) (3

(Acid Bismuth Salicylate).—Bulky, wh. powd.— —Abt. 40% bismuth trioxide.—Loses salicylic acid when treated w. ether or alcohol.—Intest. Astring. & Antisep.—*Uses:* Dyspep., catarrh, enteritis, cyst., & dis. of alimentary canal.—*Dose* 5–10 grains (0.3–0.6 Gm.).

Bismuth Salicylate, Basic, 64% Bi_2O_3.—see **Bismuth Subsalicylate**

Bismuth Subbenzoate Merck (4

(Basic Bismuth Benzoate).—$Bi(C_7H_5O_2)_3.Bi(OH)_3$.—Wh. powd.—65–70% of Bi_2O_3.—Insol. W.—Antisep. like iodoform.—*Uses:* As dust. powd. for syph. ulc., &c.

Bismuth Subcarbonate Merck (3

(Bismuth "Carbonate," or Oxycarbonate).— $(BiO)_2CO_3$.—Wh., insol., tastel. powd.—*Sol.*, acids; insol. W.—Stomachic; Astring., &c.—*Uses: Intern.*, diar., vomit., & dis. condit. of alim. canal.—*Extern.*, face powd.—*Dose* 5–30 grains (0.3–2 Gm.).

Bismuth Subgallate Merck (4

(Dermatol; Basic Bismuth Gallate).—$Bi(OH)_2C_7H_5O_5$. — Odorl., saffron-yellow powd. — 52–57% of bismuth oxide.—*Sol.*, dil. alkalies; insol. W., A., E., C.—Antisep.; Astring.—*Uses: Intern*, gastro-intest. affect. (bismuth indic.), diar., dysent., &c.—*Extern.*, wounds, burns, weep. ecz., & ulc.—*Dose* 4–8 grains (0.25–0.5 Gm.) 4–8 t. p. d., w. opium if pain.—*Appl.* 10–20% oint. or dust.-powd.

Note.—This is a most desirable & efficient preparation, because of its absolute freedom from free, & possibly irritating, gallic acid.

Bismuth Subiodide.—see **Bismuth Oxyiodide**

Bismuth Subnitrate Merck (3

(Magistery of Bismuth).—Mixt. of $BiNO_3(OH)_2$ & $BiONO_3.BiOOH$(U. S. P.).—Wh., heavy powd. —Not less than 80% Bi_2O_3.—*Sol.*, acids; insol. W.—Antisep.; Astring.—*Uses: Intern.*, subacute. gastr., pyrosis, gastral., irrit. condit. of intest., diar., dysent., &c.—*Extern.*, acute & chronic moist ecz., herpes zoster, ulc., fiss., excoriat., gonor., leucor., &c.—*Dose* 5–60 grains (0.3–4 Gm.) in powd., or w. liquids, but *not* in pill, sev. t. p. d.—*Appl.*, as dust. powd.; in aqu. suspension in gonor. —*Techn.*, manuf. of bismuth flux for enamels; cosmetics.—*Antid.*, sacchar. ferric oxide; diuretics; pilocarpine subcut.—*Incomp.*, alkaline bicarbonates (in water); with potass. iodide double decomp. slowly sets in; gallic acid; calomel; salicylic acid; tannin; sulphur.

Note.—This article is particularly well adapted for infants' use, as it is free from arsenic, lead, & silver.

Bismuth Subnitrate Merck.—Reagent (5

(Basic Bismuth Nitrate).—Wh., microcryst. powd.—*Sol.*, dil. HCl, HNO_3, or H_2SO_4; insol. W., A.—*Tests:* (H_2CO_3; *Pb; Cu; Alkali Salts, &c.*) 0.5 Gm. + 25 Cc. dil. H_2SO_4 – clear solut. without warm., & without evol. of CO_2. To 10 Cc. solut. add excess NH_4OH – colorl. filtrate. Treat 10 Cc. of H_2SO_4-solut. w. H_2S gas to compl. ppt. Bi; filter; evap. filtrate & ignite – no wghble res.—(*Cl*) 0.5 Gm. + 5 Cc. HNO_3 (sp. gr. 1.153) + solut. $AgNO_3$–at most sl. opalesc.—(H_2SO_4) 0.5 Gm. + 5 Cc. HNO_3 + 5–10 drops solut. $Ba(NO_3)_2$ – no turb. —(NH_3) warm 1 Gm. + 10 Cc. solut. NaOH (sp. gr. 1.3) – no NH_3 evolv. (test w. moist litmus paper).—(*Res.*) ignite 1 Gm. – res. should weigh 0.79–0.82 Gm. (Bi_2O_3).—(*As*) diss. ignition res. fr. 1 Gm. in H_2SO_4 w. heat; introduce in sm. quantities into a Marsh apparatus started w. 20 Gm. As-free gran. Zn & dil. (1:5) H_2SO_4 – no As deposit in reduct. tube within half an hour. —*Uses:* Prepar. reagents for albumin & dextrose. Converting sulphides of arsenic into corresponding acids.

Note. — For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Bismuth Subsalicylate Merck. — *U.S.P.* — 62–66% Bi_2O_3 (4

(Basic Bismuth Salicylate).—$Bi(C_7H_5O_3)_3.Bi_2O_3$. —Wh., bulky, micro-cryst. powd.; odorl.; tastel.; 64% of bismuth trioxide, free fr. subnitrate. —*Sol.*, acids, alkalies w. decomp.; insol. W., A., E.—Extern. & Intest. Antisep. & Astring.—*Uses: Intern.*, phth. diar., summer complaint, typhoid, &c.—*Extern.*, like iodoform.—*Dose* 5–15 grains (0.3–1 Gm.).

N. B.—Bismuth Subsalicylate is the article that should invariably be dispensed on prescriptions calling for "Bismuth Salicylate" without any further designation.

Bismuth Sulphate Merck (5

(Bismuth Trisulphate).—$Bi_2(SO_4)_3$.—Amorph., wh. powd.; decomp. by W.—*Sol.*, nitric acid.—*Caut.* Keep dry.

Bismuth Sulphide Merck (11

Bi_2S_3. — Blackish-brown powd. —*Sol.*, nitric & boil. conc. hydrochl. acids; insol. W. & dil. acids.

Bismuth Sulphite Merck (15

Composition doubtful.—Wh. powd.—*Sol.*, acids.

Bismuth Sulphocarbolate.
Bismuth Sulphophenate.
Bismuth Sulphophenylate.
} — see **Bismuth Phenolsulphonate**

Bismuth Tannate Merck (4

Yellow powd.—*Sol.*, acids; insol. W.—Astring.; Antisep.—*Uses:* Relaxed condit. muc. membr. alim. canal; dysent., diar., &c.—*Dose* 10–30 grains (0.6–2 Gm.); children, this quantity p. d.

Bismuth Tartrate Merck (8

$Bi_2(C_4H_4O_6)_3 + 6H_2O$.—Wh. powd.—*Sol.*, readily in alkalies & hydrochloric acid.

Bismuth Ternitrate.—see **Bismuth Nitrate**

Bismuth Tetroxide Merck (11

(Bismuth Peroxide).—By oxid'g bismuth trioxide.—Bi_2O_4.—Heavy, yellowish-brown powd. —Insol. W.

Bismuth Tribromide.—see **Bismuth Bromide**

Bismuth Tribromocarbolate.
Bismuth Tribromophenate.
} —see **Xeroform**

Bismuth Trichloride.—see **Bismuth Chloride**

Bismuth Trihydrate.
Bismuth Trihydroxide.
} —see **Bismuth Hydroxide**

Bismuth Triiodide.—see **Bismuth Iodide**

Bismuth Trinitrate.—see **Bismuth Nitrate**

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Bismuth Trioxide Merck (10

(Bismuthous Oxide).—Bi_2O_3.—Heavy, yellow powd.—*Sol.*, acids; insol. W.—*Uses, Doses, &c.:* As of bismuth subnitrate.—*Incomp.*, alkalies, W. in excess.

Bismuth Trisulphate.—see **Bismuth Sulphate**

Bismuth Tungstate Merck (20

(Bismuth Wolframate).—Wh. powd.; easily decomp.—*Sol.*, acids; insol. W.

Bismuth Valerate Merck (7

$Bi(C_5H_9O_2)_3.2Bi(OH)_3$(?).—Wh. powd.; odor of valeric acid.—*Sol.*, dil. hydrochl. or nitric acid; insol. W. or A.—Sedative; Antispasm.—*Uses:* Cephalal., neural., cardial., epilepsy, chorea, &c.—*Dose* 1–3 grains (0.06–0.2 Gm.).—*Caut.* Keep well stoppered.

Bismuth Wolframate.—see **Bismuth Tungstate**

Bismuth & Ammonium Citrate Merck (4

Comp. variable.—Pearly, shin., transp. scales; sl'y acid, metal. taste; opaque on expos.—*Sol.* W.; sl. in A.—Stomachic & Astring.—*Uses:* Dyspepsia, irritable stomach, diar., &c.—*Dose* 1–3 grains (0.06–0.2 Gm.).—*Appl.*, in 1–4:2000 aqu. solut. in urethral irrigat. in gonor.—*Caut.* Keep fr. light, well stoppered.

Bismuth & Cerium Oxalate Merck (6

$BiCe(C_2O_4)_6$.—Wh. powd.—*Sol.*, in HCl; insol. W.

Bismuth & Cerium Salicylate Merck (6

Wh. powd.—Insol. W., A.—Antisep.; Antirheum.—*Uses:* Intest. & rheumat. affect.

Bismuth & Cerium Valerate Merck (15

Wh. powd.—*Sol.*, mineral acids; insol. W.

Bismuth & Potassium Iodide Merck.—Solution (4

(Dragendorff's Reagent).—Aqu. solut. $BiI_3.4KI$.—Reag. for alkaloids.

Bismuth & Potassium Tartrate Merck.—Solution (2

Colorl. liq.—*Misc.* W.—*Uses:* As reagent for glucose in urine.

Bismuth & Sodium Benzoate Merck (6

Wh. powd.—Intest. Antisep.—*Uses:* Dis. of alim. tract & as appl. to ulc., &c.

Bismuth & Sodium Iodide Merck (25

$BiI_3.4NaI$.—Red cryst.; decomp. by water.—*Sol.*, dil. acids.—Alter.; Antisep.

Bismuth & Sodium Phosphosalicylate.—see **Bismuthol**

Bismuth & Sodium Salicylate Merck (8

Wh., bulky powd.; decomp. by water.—Mixt. of basic bism. salicylate & sod. salicylate in molec. proport.—Antisep.; Disinf.; Antirheum.—*Uses:* Intest. dis. & rheum. affect.

Bismuthated Peptone.—see **Bismuth Peptonized**

Bismuthol

(Bismutol; Bismuth & Sodium Phosphosalicylate).—Wh., cryst. powd.; odorl.; agre. taste.—Antisep.; Astring.—*Uses: Extern.*, cuts, burns, purulent wounds, ulc. tuberc. or syph. sores, skin dis., gonor., &c.—*Appl.*, in 10–30% oint. or dust.-powd. (with talc), or in 1–4% solut.

Bismuthyl Bromide.—see **Bismuth Oxybromide**

Bismuthyl Chloride.—see **Bismuth Oxychloride**

Bismutol.—see **Bismuthol**

Bismutose (10

Bismuth-albumin compound; contains abt. 22% Bi & abt. 66% albuminoid.—Wh. powd.—*Sol.*, alkalies; sl. dil. acids; insol. W.—*Uses:* Intest. & gastric affect., partic. in children.—*Dose* 15–30 grains (1–2 Gm.) for children under 6 mos. old; 1 teaspoonful for older children.

Bisol=Bismuth Phosphate, Soluble.—see **Bismuth Phosphate, Soluble**

Bistort

(Snakeweed; Adderswort; Snakewort).—Root of Polygonum Bistorta, L. Polygonaceæ.—*Habit.:* Europe; Northern Asia; North America.—*Etymol.:* Lat. "bis," twice, & "tortus," turned, referring to the shape of the root. "Polygonum," fr. Grk. "poly," many, & "gonos," offspring.—*Constit.:* Gallic acid; tannin; starch.—Astring.; Emmen.; Stim.—*Uses:* Acute & chron. intest. catarrh, dysent., & amenor.—*Extern.*, in preparations intended to promote growth of hair.—*Dose* 5–60 grains (0.3–4 Gm.).—Aqu. extr., 8–15 grains (0.5–1 Gm.) several t. p. d. in leucor.—Fld. extr., 20–60 ♏ (1.3–4 Cc.).

Bitter Milkwort.—see **Polygala**

Bitter Root.—see **Apocynum Androsæmifolium**

Bitter Salt.—see **Magnesium Sulphate**

Bittersweet.—see **Dulcamara**

Bitumen.—see **Asphaltum**

Biuret Merck (200

(Allophanamide).—Fr. urea by heat.—$C_2H_5N_3O_2+H_2O$, or, $NH_2.CO.NH.CO.NH_2+H_2O$.—Wh., cryst. need.; decomp. by heat into ammonia & cyanuric acid.—*Sol.*, hot W.—*Melt.* 190° C., w. decomp.

Bixin Merck (130

Red coloring matter fr. seeds Bixa Orellana, L. (Annatto).—Not ident. w. orlean extract.—$C_{25}H_{34}O_5$.—Dark red powd.—*Sol.* C., hot A.; sl. E.—*Melt.* 176° C.—*Uses:* Dye.

Bizzozero's Picrocarmine

Solut. 1 Gm. carmine in 6 Cc. ammonia & 100 Cc. W., mixed w. solut. 1 Gm. picric acid in

100 Cc. W.; liquid is evaporated to 100 Cc., & 20 Cc. alcohol added.—*Uses:* As of Ranvier's picrocarmine.

Black Alder.—see **Alnus Serrulata; Winterberry**

Black Antimony.—see **Antimony Sulphide**

Black Balsam.—see **Balsam Peru**

Blackberry.—see **Rubus**

Black Caraway.—see **Nigella Sativa**

Black Cohosh.—see **Cimicifuga**

Black Currant.—see **Ribes**

Black Haw.—see **Viburnum Prunifolium**

Black Hellebore.—see **Helleborus Niger**

Black Indian Hemp.—see **Apocynum**

Black Lead.—see **Graphite**

Black Precipitate.—see **Mercury Oxide, Black, Hahnemann**

Black Snake Root.—see **Cimicifuga**

Blackthorn.—see **Prunus Spinosa**

Blackwort.—see **Symphytum**

Bladder Wrack.—see **Fucus**

Blanc Fixe.—see **Barium Sulphate**

Blatta

(Cockroach).—Periplaneta (Blatta) orientalis, L. Insecta, Orthoptera.—*Habit.:* Asia originally; now domesticated in all parts of the world.—*Etymol.:* Fr. "blatta," the Lat. name for the insect, & "orientalis," from the East.—*Const.:* Blattaric acid; antihydropin (taracanin); fetid, fatty oil; and volat. trimethylamine base(?).—Diur.; Diaphor.—*Uses: Intern.*, in dropsy, Bright's disease, whooping-cough, etc.—*Extern.*, as oily decoct. for warts, ulcers, boils, &c.—*Doses:* 10–15 grains (0.6–1 Gm.) in dropsy, as powd., or 1:6 tinct., or pills; or 4 fl. dr. (15 Cc.) of 5–10:150 decoct. 3 t. p. d.

Blazing Star.—see **Helonias**

Bleaching Powder.—see **Lime, Chlorinated**

Blepharis

(Ubu-Illungu [the Kaffir name]).—Lvs. & tops of Blepharis capensis, Pers. Acanthaceæ.—*Habit.:* Southern Africa.—*Etymol.:* Grk. "blepharis," eyelash, *i.e.*, the bracts bear filaments resembling eyelashes. "Capensis," of or relating to the Cape, *i.e.*, where found.—*Constit.:* Unknown.—*Uses:* As antidote to poisoning by snake-bites, & as remedy for blood-poisoning fr. consumption of meat of animals affected with anthrax; also as remedy for toothache.—*Dose* 3 to 4 fl. oz. (90–120 Cc.) of decoct. (1:100) daily; in toothache, a paste of the powdered leaves, or a tincture, is applied to the painful spot or tooth.

Blessed Thistle.—see **Cnicus**

Blood Merck.—Fr. Bullocks.—Dry powder (3

Dark, reddish-brown powd.—*Sol.*, incompletely in W.—*Uses:* Anemia, chlorosis; also techn.—*Dose* 15 grains (1 Gm.) several t. p. d.

do. Merck.—Fr. Bullocks.—Scales (3

Reddish-brown scales.—*Sol.* W.—*Uses & Dose:* As above.

Blood Elder.—see **Ebulus**

Bloodroot.—see **Sanguinaria**

Bloodstone.—see **Hematite**

Bloodwort.—see **Ebulus**

Blue Black.—see **Nigrosine, Benzin-soluble**

Blue Cohosh.—see **Caulophyllum**

Blue Flag.—see **Iris**

Blue Malachite, Artificial.—see **Copper Carbonate, Blue**

Blue Mass.—see **Mercury, Mass of**

Blue Ointment.—see **Ointment Mercurial, Dilute**

Blue Pill.—see **Mercury, Mass of**

Blue Verdigris.—see **Copper Acetate, Basic, Blue**

Blue Vitriol.—see **Copper Sulphate**

Bog Rush.—see **Juncus**

Bohlig's Reagent.—For Ammonia

I, 1:30 aqu. solut. corros. sublim.; II, 1:50 aqu. solut. potass. carbonate.—On adding solut. I, free ammonia & ammonium carbonate yield a wh. ppt.; other ammonium salts are pptd. only on addition of solut. II.

Böhmer's Hematoxylin

Alcoh. 10% solut. hematoxylin.—*Uses:* As basis of other staining soluts.

Böhmer's Hematoxylin-Alum

Solut. 1 Gm. hematoxylin in 10 Cc. alcohol, mixed w. solut. 10 Gm. potassium alum. in 200 Cc. W.—*Uses:* Staining nuclei.

Boldin (Glucoside)

(Boldoglucin).—Fr. Peumus Boldus, Molina.—Leaves cont. 3%.—$C_{30}H_{52}O_8$(?).—Syrupy liq.—*Sol.* A.—Cholag.; Diur.; Tonic.—*Uses:* Dis. of liver & rheum.—*Dose* 1–3 grains (0.06–0.2 Gm.) 5 or 6 t. p. d., in caps.

Boldine Merck (2000

Alkaloid fr. Peumus Boldus, Molina.—Grayish-wh., alkal., bitter powd.—*Sol.* A., E., C.; alm. insol. W.—Hypn.—*Uses:* Insom.; in hepat. affect. in conjunct. w. calomel.—*Veter.*, in jaundice in dogs.—*Dose* $^1/_{30}$–$^1/_{10}$ grain (0.002–0.006 Gm.); in veter. medicine, $^1/_{15}$–$^1/_{10}$ grain (0.004–0.006 Gm.), combined w. calomel.

Boldo

(Boldu; Boldea; Boldus; Boldoa).—Lvs. of Boldea fragrans (Peumus Boldus Mol.), Gay. Monimiaceæ.—*Habit.:* Peru; Chili.—*Etymol.:* Named for the Spanish botanist, D. Boldo.—*Constit.:* Volat. oil; boldine; boldoglucin, $C_{30}H_{52}O_8$; tannin.—Diuret.; Tonic; Stim.; Sedat.—*Uses:* Dis. of the liver & bladder; also in atony of various organs where quinine is contraindic.; rheumat., dyspep., gonor., chron. hepat. torpor, &c.—*Techn.*, in perfumery.—*Dose* 2–5 grains (0.12–0.3 Gm.) in powd.—Fld. extr., 4–8 ♏ (0.25–0.5 Cc.).—Tinct., 10–20 ♏ (0.6—1.3 Cc.).

Boldoglucin.—see **Boldin (Glucoside)**

Bole, Armenian

(Bolus Armena; Bolus Rubra; Red Bole).—Natural ferruginous aluminum silicate.—*Habit.:* Originally Armenia, but now found elsewh. in Europe.—*Etymol.:* Fr. Grk. "bolos," a clod of earth.—Pieces of various sizes, reddish, soft, & unctuous; adhesive to the tongue; easily reduced to powd.—Sp. Gr. 1.9–2.0.—*Uses:* Veter. medicine; color. powders; cements; pigment.

Boletus.—see **Agaric**

Bolus Alba.—see **Kaolin**

Bolus Rubra.—see **Bole, Armenian**

Bonduc

(Nicker Seed; Gray Nicker Nuts [or Seeds]; Beazor Nuts; Molucca Bean).—Seed of Guilandina Bonducella, L. (Cæsalpinea Bonducella Roxb.) Leguminosæ. Cæsalpiniaceæ.—*Habit.:* Shores of tropical Asia, Africa, & South America (Sumatra, Borneo, New Guinea, Brazil).—*Etymol.:* Fr. Arabic "bondog," hazelnut (also necklace).—*Constit.:* Bonducin, guilandin.—*Uses:* Antimalarial.—*Dose* 8–15 grains (0.5–1 Gm.) 3 t. p. d.

Bone Black.
Bone Charcoal. } —see **Charcoal, Animal**

Bone Marrow, Red, Dried.—see **Marrow, Red, Bone**

Boneset.—see **Eupatorium**

Borage

(Burrage; Bee Bread; Star-flower).—Flowers & lvs. of Borago officinalis, L. Boraginaceæ.—*Habit.:* Levant; cultivated in Germany & U. S.—*Etymol.:* Fr. low Lat. "borra," rough hair, *i.e.*, the whole plant is furnished with bristly hairs; or fr. Grk. "bora," food, *i.e.*, the lvs. when fresh are used as salad; or, corrupted fr. Lat. "cor," heart, & "ago," to move, *i.e.*, a vinous infusion cheers the heart (Pliny).—*Constit.:* *Flowers:* Resin; mucilage; potassium nitrate.—*Lvs.:* Mucilage; resin; tannin.—*Flowers:* Emoll.; Demulc.; Diuret. — *Lvs.:* Demulc.; Refrig.; Diaphor.—*Uses:* Employed in catarrhal affect., rheumat., & skin dis.; lvs., also as kitchen vegetable.—*Dose:* Fld. extr., 30–60 ♏ (2–4 Cc.).

Boral (15

(Aluminum Borotartrate).—Wh. cryst.; sweet, astring. taste.—*Sol.* W.—Disinf.; Astring.—*Uses: Extern.*, inflam. dis. of nose & throat, chiefly.—*Appl.*, in substance, or in solut. w. addition of glycerin.

Borax.—see **Sodium Borate**

Borax-Carmine.—see **Nikiforoff's Borax-Carmine**

Borax-Carmine, Alcoholic.—see **Grenacher's Alcoholic Borax-Carmine**

Borax Glass.—see **Sodium Borate, Fused**

Borax Glycerite.—see **Sodium Glycerinoborate**

Borax-Methylene Blue.—see **Sahli's Borax-Methylene Blue**

Bordeaux Red Merck (6

Sodium salt of alphanaphtylamineazobetanaphtholdisulphonic acid.—Brown powd.—*Sol.* W. w. fuchsine-red color.—*Uses:* Coloring & dyeing.

Borneol Merck (25

(Baras, Sumatra, Borneo, or Malayan, Camphor; Bornyl Alcohol; Camphol).—Fr. Dryobalanops aromatica, Gaert., or fr. ordinary camphor by sod. or potass. alcoholate.—$C_{10}H_{18}O$, or, $C_{10}H_{17}OH$.—Wh., transl. substc.; pecul., peppery odor; burning taste. Less volat. than ordinary camphor; together w. acetic & valeric acids, it constitutes the odorous principles of pines & firs.—Sp. Gr. 1.011 at 15° C.—*Sol.* A., E.—*Melt.* 203–204° C.—*Boil.* 212° C.—Stim.; Antisep.—*Uses: Extern.*, in oint. as antisep. appl. for sores, headache, &c.—*Techn.*, incense & perfumery.

Borneol Isovalerate.—see **Bornyval**

Bornyl Alcohol.—see **Borneol**

Bornyval

(Borneol Isovalerate).—Colorl. liq.; odor & taste of valerian.—*Sol.* A., E.; insol. W.—Nervine.—*Uses:* Hysteria, nervous excitement & palpitation.—*Dose* 4 ♏ (0.25 Cc.) in gelat. caps., 4 t. p. d.

Boroglycerin Merck.—Dried (3

(Glyceryl Borate; Glycerite, or Glyceride, of Boric Acid).—Fr. boric acid (2), by heat. w. glycerin (3).—$C_3H_5BO_3$.—Wh., transp., glassy,

brittle, & hygros. masses.—*Sol.*, hot W.; changes into glycerin & boric acid.—Antisep.; Preserv. —*Uses: Intern.*, antisep.—*Techn.*, preserv. —*Dose* 30–75 grains (2–5 Gm.).

Boroglycerin Merck.—Syrupy (2

Sw., syr. liq.—Antisep.—*Uses:* Preservative. (See also Barff's Boroglycerin.)

Boron Merck.—Amorph. (400

Etymol.: Fr. "borax," which in Persian signifies "melter of metals."—Non-met. element.—B. —Very soft, brown, amorph. powd.; ignites in air.—Insol. acids.

do. Merck.—Cryst. (2200

(Wöhler's Boron-carbon Compound).—Exceed. hard, brown, or reddish-yellow to black, cryst. —*Uses:* Techn., inst. of diamond in glass-cut. & gem-polish.

Boron Oxide.—see **(Acid) Boric Anhydride**

Boron Tribromide Merck (320

BBr_3.—Colorl., fum. liq.; decomp. by W.—Sp. Gr. 2.69 at 15° C.—*Boil.* 90° C.

Boron Trichloride Merck (300

BCl_3.—Colorl., fum. liq.; decomp. by W.—Sp. Gr. 1.35 at 15° C.—*Boil.* 18° C.

Borsalyl.—see **Sodium Borosalicylate**

Böttger's Ozone Paper.—see **Gold-chloride Paper**

Bouchardat's Reagent.—For Alkaloids

Solut. 1 part iodine & 2 parts potassium iodide in 50 W.—Gives brown precip. w. alkaloids.—*Uses:* For detecting alkaloids, even in urine.

Boules de Nancy.—see **Iron & Potassium Tartrate, Globules**

Boutron-Boudet's Soap Solution

Potass. soap dil. to a definite standard.—45 pts. represent 0.012 pt. calcium oxide.—*Uses:* Determination of the hardness of W.

Bowdichia

(Soucoupire; Sebipira).—Bark of Bowdichia major, Mart. Papilionaceæ.—*Habit.:* Brazil.—*Etymol.:* Named for the English traveler, Thos. Ed. Bowdich (1790–1824).—Bark is hard, yellow, & very bitter.—*Constit.:* Mydriatic alkaloid; several resins; glucoside sicopirin(?).—*Uses:* Antisyph.; Antirheum.; Diaphor.; Febrif.

Brachycladus

Lvs. & root of Brachycladus Stuckerti. Compositæ.—*Habit.:* Argentine Republic.—*Etymol.:* Grk. "brachys," short, & "klados," branch. Plant named for Stuckert, a pharmacist in Cordoba (Argent. Repub.) who describ. the plant in 1900.—*Constit.:* Unknown.—*Uses:* In asthma & mountain dis., in form of cigarettes.

Brain Substance, Dried.—see **Cerebrum, Dried**

Bramble, Common.—see **Rubus Fruticosus**

Brasilin.—see **Brazilin**

Brassica Alba & Nigra.—see **Sinapis Alba, & Sinapis Nigra**

Brayera.—see **Kousso**

Brayerin.—see **Koussein**

Brazil Wax.—see **Carnauba Wax**

Brazil Wood.—see **Pernambuco**

Brazileïn

By oxid'g brazilin in pres. of alkali.—$C_{16}H_{12}O_5 + H_2O$.—Minute cryst.; gray luster; or reddish-brown powd. Solut. yellowish-pink & fluoresc. green.—*Sol.*, hot W.—*Uses:* Dye.

Brazilin Merck (100

(Brasilin).—Fr. Cæsalpinia echinata, Lam. (Brazil wood), or Cæsalpinia Sappan, L. (Sapanwood).—$C_{16}H_{14}O_5$.—Sulphur-yellow cryst.; turns orange in air & light.—*Sol.*, sl. W.; easily A., E. —Antipyr.—*Uses:* Techn., chiefly as a dye; also as indicator in volumet. analysis; solut. gives w. acids a yellow color, changed by alkalies to bluish-violet.—*Caut.* Keep well stoppered, fr. air & light.

Brazilin Paper

(Pernambuco, or Fernambuco, Paper).—Wh. paper, charged w. brazilin.—*Uses:* Indicator (acids=yellow; alkalies=bluish-violet).—*Caut.* Keep in dark.

Bremen Blue.—see **Copper Carbonate, Blue**

Bremen Green.—see **Copper Carbonate, Green**

Brenzcaïn (75

(Guaiacolbenzyl-ester Merck; Pyrocatechinmethylbenzyl-ester Merck).—$OCH_3.C_6H_4.OCH_2.C_6H_5$.—Colorl. cryst.—*Sol.* A., E.; vasogen.—*Melt.* 62° C.—Local Anesth.—*Uses:* Cataphoresis of cocaine hydriodide. Possesses all the advantages of guaiacol without causticity of latter.—*Caut.* Do not confound w. benzosol (guaiacolbenzoic-acid ester).

Brilliant Black B Merck.—Alcohol-Soluble (7

(Naphthol Black).—Sodium salt of disulphonamidoazonaphthaleneazobetanaphtholdisulphonic acid.—Blue-black powd.—*Sol.* W. & A. w. violet color.—*Uses:* Dyeing wool.

Brilliant Cotton Blue.—see **Methyl Blue**

Brilliantcroceine Merck (6

Sodium salt of amidoazobenzeneazobetanaphtholdisulphonic acid.—Light-brown powd.—*Sol.* W., w. cherry-red color.—*Uses:* Manuf. pigments.

Brilliant Green Merck (8

(Malachite Green, G.; Diamond Green, G.; Fast Green, J.; Ethyl, Emerald, Solid, or New Victoria, Green; Tetraethyldiparamidotriphenylcarbhydride Sulphate).—Glist., golden cryst.—*Sol.* W., A.—*Uses:* Dyeing silk, wool, leather,

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

jute, & cotton yellowish-green; green ink; also for blue ink or stain, mixed w. equal wt. Hofmann's violet.

Brimstone.—see **Sulphur**

Bromacetanilide (Mono-) Merck (20

(Monobromated Acetanilide; Monobromphenylacetamide; Bromanilide; Bromantifebrin; Asepsin; Antisepsin).—Fr. acetanilide in glacial acetic acid, by bromine.—C_8H_8BrNO, or, $C_6H_4Br.NH(C_2H_3O)$.—Wh. cryst.; odorl.; tastel.—*Sol.* A., E.; sl. in G.—*Melt.* 164° C.—Anod.; Analg.; Antipyr.; Antisep.—*Uses:* Neural.. rheumat., pneum., typh. fever, phth.—*Extern.*, wounds; oint. or supposit. in piles.—*Dose* 1–8 grains (0.06–0.5 Gm.).

Bromal Merck.—Anhydrous (15

(Tribromacetaldehyde).—Fr. alc., by bromine.—C_2Br_3HO, or, $CBr_3.CHO$.—Yellowish liq.; forms hydrate with W.—*Sol.* A., E.—Sp. Gr. 2.30 at 15° C.—*Boil.* 174° C. w. decomp.

Bromal Hydrate Merck.—Cryst. (30

Fr. bromal & water.—$CBr_3.COH.H_2O$, or, $CBr_3CH(OH)_2$, or, $C_2HBr_3O+H_2O$. — Wh., deliq. cryst.; chloral odor; pung. taste.—*Sol.* W., A., E., C., G.—*Melt.* 53° C.—Antispasm.; Sed., & Hypn.—*Uses:* Epilepsy, chorea, & insom.; chemically as alkaloidal reagent.—*Dose* 3–15 grains (0.2–1 Gm.), in solut.—*Incomp.*, alkaloids.

Bromalbacide

Yellowish-wh. powd.—*Sol.* W.—*Uses:* Instead of the usual bromides.—*Dose* 8 grains (0.5 Gm.).

Bromalin Merck (25

(Bromethylformin Merck; Hexamethylenamine Bromethylate Merck).—$C_6H_{12}N_4C_2H_5Br$.—Colorl. cryst.—*Sol.* W.—*Melt.*, abt. 200° C.—Nerve Sed.; Antiepil.—*Uses:* As substitute for potass. bromide; causes no bromism.—*Dose* 30–60 grains (2–4 Gm.) several t. p. d., in wafers or sweet. water.

Bromamide (400

(Tribromaniline Hydrobromide). — $C_6H_5Br_4N$, or, $C_6H_4Br_3.N.HBr$.—Colorl., odorl., tastel. need.—*Sol.* C., E., oils, hot A.; insol. W.—*Melt.* 117.2° C.—*Volat.* 154.4° C.—Antipyr.; Antirheum.; Analg.—*Uses:* Rheum. fever, chr. artic. rheum., neural. & nephr. dropsy.—*Dose*, abt. 10 grains (0.6 Gm.) several t. p. d.

Bromamylene Merck (10

(So-called "Amylene Bromide").—C_5H_9Br.—Colorl. to yellowish liq.—*Boil.* 100–110° C., with decomp.—Sp. Gr. 1.55 at 15° C.

Bromanilide.
Bromantifebrin. } —see **Bromacetanilide, Mono-**

Bromdiethylacetamide.—see **Neuronal**

Bromelia Merck (25

(Betanaphtylethylester) . — $C_{10}H_7OC_2H_5$. — Colorl. cryst.—*Sol.* A., E., C.; insol. W.—*Melt.* 38° C.—*Uses:* Perfumery, because of its fine, anise-like odor.

Bromeosine.—see **Eosine Yellowish**

Bromethylformin.—see **Bromalin**

Bromine Merck (1

Halogen element.—*Etymol.:* Fr. Grk. "bromos," stench. Because of its odor, Gay-Lussac gave the name "bromine" to the element discovered by Balard in 1826.—Br.—Very dark reddish-brown liq.; solid at *minus* 7° C.; v. irrit. vapor, oxid'g org. bodies.—Sp. Gr. 2.99–3.0 at 15° C.—*Sol.*, solut. alkali bromides, C., 28 W. at 25° C.; eas. A. or E., & in CS_2.—*Boil.* 63° C.—Alter.; Lymph. Stim.; Caustic; Stim. Antisep.—*Uses: Intern.*, laryng., diphth., or membr. croup, bronchocele, scrof. tumors, syphilis, &c.—*Extern.*, gangrene, uter. cancer, chancroids, hemorrhoids.—*Techn.*, Dentistry & photography; parting (gold & silver) & smelting works; rendering water germ-free for drinking (0.2 Cc. of a solut. of 100 Cc. W., 20 Gm. KBr, & 20 Gm. Br., per liter of W., the excess of Br. being removed after 5 minutes by adding 0.2 Cc. of 9% ammonia water).—*Dose* 1–3 ♏ (0.06–0.2 Cc. well dil. — *Appl.:* Caust., pure or in 1:1–3 A. or G.; antisep., 0.25–1% washes or oily paints.—*Inhalat.*, solut. bromine & potass. bromide 3 grains (0.2 Gm.) each in $3^1/_3$ fl. oz. (100 Cc.) W. as spray in diphth. & croup.—*Antid.*, inhal. of ammonia; stomach irrigation; albumin; sodium carbonate or bicarbonate.—*Incomp.*, alkali hydroxides, arsenites, ferrous salts, hypophosphites, hydriodic acid, mercurous salts.—*Caut.* Poison! Burns & blisters if strong. Keep sealed, glass stoppered. When handling bromine, always keep ammonia W. within reach.

do. Merck.—Free fr. H_2SO_4 (2

do. Merck.—Solidified

(Bromkieselguhr).—Thin sticks (abt. 150 = 1 kilo).—Contains abt. 75% Br.—*Uses:* Disinf. & deodor.—*Techn.*, in parting (gold & silver) & smelting works, & in photogr.

do.—Solution.—*N. F.*

(Smith's Solution Bromine).—25 Gm. Br, 12.5 Gm. KBr, & 100 Cc. W.

Bromine Merck.—Reagent (3

Br.—Dark-red, alm. black liq.—*Sol.*, abt. 30 W.; eas. A., E., C., CS_2.—Sp. Gr. 2.97–2.99.—*Boil.* 63° C.—*Tests:* (*Res.*) evap. 5 Gm. in porcel. dish on W.-bath – none wghble.—(*H_2SO_4; Cl; Organ. Br Compounds [Bromoform; CBr_4]*) 5 Gm.+100 Cc. H_2O+20 Cc. NH_4OH (sp. gr. 0.96) by drops – perf. clear solut. Evap. solut. to dryness & test result. res. of NH_4Br for, *a:* (*H_2SO_4*) 2 Gm. res.+60 Cc. H_2O+1 Cc. HCl (sp. gr. 1.124)+ solut. $BaCl_2$ – no ppt. ($BaSO_4$) within 12 hrs.; & for *b:* (*Cl*) 0.1 Gm. res.+10 Cc. H_2O+4 Cc. solut. ammon. carb. (1 ammon. carb., 1 NH_4OH [sp. gr. 0.96], & $3H_2O$)+12 Cc. decinorm. $AgNO_3$; filter; acidul. w. HNO_3 – only sl. turb.—(*I*) 1 Gm.+40

Cc. H_2O+4 Gm. powd. Fe; shake 2–3 min.; filter; add solut. starch to filtrate, & let few drops Br-water cautiously flow on surface – no immed. blue zone below yellowish upper portion of liquid.—*Uses:* Oxidizer; determ. S, phenol, nitrogen, Pb, Mn, & urea.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Bromine Chloride Merck (10

(Chlorine Bromide).—BrCl (only below 10° C.).—Reddish-yellow, mobile, v. volat. liq.; vapors irrit. eyes. Begins to lose chlorine at 10° C.—Caustic.—*Uses:* In cancer, both intern. & extern.—*Caut.* Vapors irritating. Keep well stoppered.

Bromine Iodide.—see **Iodine Monobromide**

Bromine Water Merck.—Reagent (1

Sat., aqu. solut.; abt. 3% Br.—*Tests:* (H_2SO_4) 50 Cc.+1 Cc. HCl (sp. gr. 1.124)+solut. $BaCl_2$; boil until Br all expelled – no ppt. ($BaSO_4$) within 1 hr.—*Uses:* Oxidizer, particularly for S; detect. phenol, uric acid, &c.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Bromipin.—10% (3

(10-% Brominized Sesame Oil Merck).—Bromine addition prod. of sesame oil.—Yellow, oily liq.; purely oleag. taste; contains 10% Br.—Nervine; Sedat.—Very efficient succed. for bromides, even in small doses; rarely occasions bromism.—*Uses:* Epilepsy, neurasth., nervous cardiac disturbances, muscular twitchings, insomnia, headaches, seasickness, &c.—*Doses:* Teaspoonf. 3–4 t. p. d.; in epilepsy, 2 teaspoonf. 3–4 t. p. d., in emuls. w. peppermint W. & syrup; or pure, flavored w. peppermint oil.

do.—33⅓% (10

(33 1/3% Brominized Sesame Oil Merck).—*Uses:* As of preceding, & in proportionate doses.

Bromobenzol, Mono-.—see **Benzene, Monobromo-**

Bromocamphor.—see **Camphor Monobromated**

Bromocoll (15

(Gelatin-dibromotannate).—20% Br.—*Sol.*, dil. alkalies; insol. W., A.—Sedat.—*Uses:* As of the alkaline bromides.—*Extern.*, in pruritus & ecz. (usually as 20% bromocoll-resorbin = "bromocoll ointment").—*Dose* 15–75 grains (1–5 Gm.).

Bromoform Merck. — **Highest Purity, Medicinal** (3

(Tribromomethane; Methenyl Tribromide; so-called "Formyl Tribromide").—Fr. acetone w. bromine.—$CHBr_3$.—Colorl., heavy liq.; odor & taste like that of chlorof.—Sp. Gr. 2.829–2.833 at 15° C.; (U. S. P., 2.808 at 25° C.).—*Sol.* A., E.; abt. 80 G.; alm. insol. W.—*Solidif.* 6° C. (U. S. P.).—*Boil.* 148–150° C.—Anesth.; Nervine; Sed.—*Uses:* Chiefly whoop.-cough; not safe as anesthetic.—*Doses* 2–20 drops in hydro-alcoh. solut. or emuls. Children, as many drops as age in years, 3 to 5 t. p. d.; babies, 1–2 drops, 2 to 4 t. p. d.—*Max. D.* 8 ♏ (0.5 Cc.) single; 23 ♏ (1.5 Cc.) daily.—*Antid.*, as of chloroform.—*Incomp.*, caustic alkalies.—*Caut.* Keep well stoppered.

Note.—The ordinary bromoform deteriorates very rapidly; this article, however, is correctly & carefully made, & is hence much more reliable.

Bromo-hemol.—see **Hemol, Bromo-**

Bromol.—see **Tribromophenol**

Bromomalonic-Acid Diethyl-ester.—see **Ethyl Bromomalonate**

Bromomethane.—see **Methyl Bromide**

Bromopyrine Merck (100

(Monobromantipyrine). — $C_{11}H_{11}BrN_2O$. — Wh. cryst.—*Sol.* A., C., hot W.—*Melt.* 114° C.—Antipyr.; Antisep.—*Dose:* As of antipyrine.—*Caut.* Not to be confounded with the mixt. of caffeine, antipyrine, & sod. bromide also known as "bromopyrine."

Bromoquinol (25

(Acid Quinine Dibromosalicylate).—$C_{20}H_{24}N_2O_2$.-2($C_6H_2Br_2$.OH.COOH).—Yellowish cryst.—*Sol.*, diffic. W., A., E.—*Melt.* 197–198° C.—Antipyret.—*Dose* 10–12 grains (0.6–0.75 Gm.) 2 t. p. d.

Bromotan

(Bromotannin-methyleneurea). — Light-brown, odorl., tastel. powd.—*Uses:* Cutan. eruptions, itch, hives, &c.—*Appl.* 10% oint. or dust. powd.

Bromotannin-methyleneurea.—see **Bromotan**

Brooklime.—see **Beccabunga**

Broom.—see **Genista; Scoparius**

Broussonetia Tinctoria.—see **Morus Tinctoria**

Brucine Merck.—**Highest Purity, cryst.** (35

Alkaloid fr. Nux-vomica & Ignatia seeds.—$C_{23}H_{26}N_2O_4$+$4H_2O$ (or $2H_2O$).—Wh. cryst.—*Sol.* A., C.—*Melt.* 105° C., hydrated; 178° C., anhydrous.—Nerve Tonic like strychnine, but much milder (1/6 as powerful).—*Dose* 1/12–1/2 grain (0.005–0.03 Gm.), with care, in pills or solution.—*Max. D.* 3/4 grain (0.05 Gm.), single; 3 grains (0.2 Gm.), p. day.—*Antid.*, hydrated chloral; chloroform; tannic acid.

do. Merck.—Cryst. (25

Cont. trace of strychnine.

Brucine Merck.—**Reagent** (40

$C_{23}H_{26}N_2O_4$+$2H_2O$. — Sm., wh. cryst. — *Sol.*, diffic. cold, more eas. boil., W.; eas. in 85% A., C.; aqu. solut. alkal. to litmus paper, & levogyr.—*Melt.* 178° C. when dried at 100° C.—*Tests:* (*W. of Cryst.*) dry 1 Gm. at 100° C. to constant

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wt. – loss not greater than 0.083 Gm.—(*HNO_3*) 0.01 Gm. + 5 Cc. conc. H_2SO_4 – solut. colorl., or at most a scarcely percept. pink.—(*Strychnine*) 0.5 Gm. + 5 Gm. absol. A., shake frequently for 1 hr., & filter; transfer portion of undiss. substc. to watch-glass, allow to dry, then diss. in few drops conc. H_2SO_4, & add a sm. cryst. $K_2Cr_2O_7$ – no play of colors fr. blue through violet & red to green.—*Uses:* Detect & determ. nitric acid in drinking water & elsewhere.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Brucine Hydrobromide Merck (40

$C_{23}H_{26}N_2O_4.HBr$.—Sm., wh. cryst.—*Sol.* W., A.—*Uses, Doses, &c.:* As of alkaloid; but preferable, because more soluble.

Brucine Hydrochloride Merck (30

$C_{23}H_{26}N_2O_4.HCl$.—Sm., wh. cryst.—*Sol.* W., A.—*Uses & Doses:* As of brucine.

Brucine Nitrate Merck (30

$C_{23}H_{26}N_2O_4.HNO_3 + 3H_2O$. — Wh. cryst. — *Sol.* W., A.—*Uses & Doses:* As of brucine.

Brucine Phosphate Merck (35

$(C_{23}H_{26}N_2O_4)_2.H_3PO_4$.—Wh., cryst. powd.—*Sol.* W., A.—*Uses & Doses:* As of brucine.

Brucine Sulphate Merck (35

$(C_{23}H_{26}N_2O_4)_2.H_2SO_4 + 3\frac{1}{2}H_2O$.—Sm., wh. cryst.—*Sol.* W., A.—*Uses & Doses:* As of brucine.

Brücke's Reagent.—For glucose

Solut. freshly precipitated bismuth subnitrate in hot aqu. solut. KI acidulated w. dil. HCl. —Gives w. glucose a brown to black ppt.

Brunfelsia.—see **Manaca**

Brunswick Green.—see **Copper Carbonate, Green**

Bryonia

(Bryony).—Root of Bryonia alba, L.; & B. dioica, L. Cucurbitaceæ.—*Habit.:* Europe.—*Etymol.:* Grk. "bryein," to grow, to sprout, referring to its luxuriant growth.—*Constit.:* Bryonin, resin. — Purgat.; Emmen.; Vesicant; Emet. (large doses).—*Uses:* In dropsy as a hydragogue cathart.—*Doses:* 10–60 grains (0.6–4 Gm.).—Alcoh. extr., 2–6 grains (0.12–0.4 Gm.) several t. p. d.—Fld. extr., 10–60 ♏ (0.6–4 Cc.). —Tinct., 1–2 fl. dr. (4–8 Cc.).

Bryonin Merck (215

Glucoside fr. root Bryonia alba, L.; & B. dioica, L.—$C_{48}H_{80}O_{19}$(?).—Amorph., brownish-yellow, bitter powd. — *Sol.* W., A. — Cathart. — *Uses:* Hepat. congest., & in conditions following acute infect. dis.; also in chronic inflammatory condit. of serous membranes.—*Dose* $^1/_{60}$ grain (0.001 Gm.) every 2 hrs. until catharsis.

Bryonin Tannate Merck (300

Brownish-gray powd.—*Sol.* A.—*Uses:* As of bryonin.

Bryony.—see **Bryonia**

Bucco.—see **Buchu**

Buchu.—*U. S. P.*

(Bucco; Bucku; Buku).—Dried lvs. of Barosma betulina, Bartl. & Wendl.; & B. crenulata, Hooker. Rutaceæ.—*Habit.:* Southern Africa (Cape of Good Hope).—*Etymol.:* Buchu fr. "bucco," the South African name of the plant. "Barosma" fr. Grk. "baros," heavy, & "osme," odor, *i.e.*, strong odor. "Betulina" fr. Celtic "betu," beech, *i.e.*, the lvs. resemble those of the beech. "Crenulata" fr. Lat. "crenatus," notched, fr. character of lvs.—*Constit.:* Diosphenol (barosma camphor), $C_{14}H_{22}O_3$; diosmin; bitter extractive; volat. oil; resin; mucilage; hesperidin; rutin(?).—Diuret.; Tonic; Stim.; Diaphor. —*Uses:* Chiefly in genito-urinary dis.—*Doses:* 15–60 grains (1–4 Gm.) in infus. or tinct.—Alcoh. extr. (solub. in A.), 5–10 grains (0.3–0.6 Gm.).—Fld. extr., 15–60 ♏ (1–4 Cc.).—Comp. fld. extr., abt. 20–60 ♏ (1.3–4 Cc.).

Buchu Resin.—see **Barosmin**

Buckbean.—see **Menyanthes**

Buckeye.—see **Æsculus Glabra**

Buckthorn.—see **Frangula; Rhamnus Cathartica**

Bugleweed.—see **Lycopus**

Bugloss.—see **Anchusa**

Bulbocapnine Merck.—Cryst. (1500

Princip. alkaloid fr. tubers of Corydalis cava.—$C_{19}H_{19}NO_4$.—Wh., cryst. powd.—*Sol.* A., C.—*Melt.* 199° C.

Bulbocapnine Hydrochloride Merck (1400

$C_{19}H_{19}NO_4.HCl$.—Wh., cryst. powd.—*Sol.*, hot W.; less sol., cold W.

Bumble-berry.—see **Rubus Fruticosus**

Bupleurum

(Hare's-Ear; Thorough-wax; Thoroughwort; Modesty; Herba Perfoliatæ).—Herb of Bupleurum rotundifolium, L. Umbelliferæ.—*Habit.:* Europe; western Asia; natur. in U. S.—*Etymol.:* Grk. "bous," ox, & "pleuron," rib, *i.e.*, ox-ribbed, referring to the lvs. Lat. "rotundus" & "folium," *i.e.*, round-leaved. Lat. "per," through, & "folium," leaf, *i.e.*, the leaf is united around its stem at its base.—Vulnerary.—*Uses:* Resolvent applic. in goiter, hernia, &c. Now obsolete.

Buranhem.—see **Monesia Bark**

Burdock.—see **Lappa**

Burgundy Pitch.—see **Pitch, Burgundy**

Burnt Lime.—see **Calcium Oxide**

Burnt Sugar.—see **Caramel**.

Bursa Pastoris.—see **Capsella**

Bursin

Astringent fr. herb Capsella Bursa-pastoris, Moench.—Yellow, deliq. powd.—Astring.; Tonic; Styp.—*Uses:* Inst. of ergot, hypoderm., in intern. hemorrhage.

Butter of Antimony.—see **Antimony Chloride, Antimonous, Solution**

Butter of Arsenic.—see **Arsenic Chloride**

Butter Cacao.—see **Oil Theobroma**

Butter Yellow.—see **Dimethylamidoazobenzene**

Butter of Zinc.—see **Zinc Chloride**

Buttercup Yellow.—see **Zinc Chromate**

Butternut.—see **Juglans**

Button Bush or *Buttonweed.*—see **Cephalanthus**

Button Snakeroot.—see **Eryngium**

Butyl-Chloral Merck (45

("Croton" Chloral; *α α β*- Trichlorbutyraldehyde; Anhydrous Butyl Chloral; Butyr-chloral).—Fr. acetic aldehyde, by chlorine.—$C_4H_5Cl_3O$, or, $CH_3.CHCl.CCl_2.CHO$.—Colorl., oily liq.—Sp. Gr. 1.395 at 20° C.—Unites w. water to butyl chloral hydrate.—*Sol.* W., A., E.—*Boil.* 165° C.

Butyl-Chloral Hydrate Merck (7

("Croton" Chloral, or Butyr-chloral, Hydrate).—Fr. anhyd. butyl chloral, by W.—$C_4H_7O_2Cl_3$, or, $CH_3.CHCl.CCl_2.CHO+H_2O$.—Light, wh., shin., cryst. scales; pung. odor.—*Sol.*, readily A., G., E.; sl. W.; insol. C.—*Melt.* 78° C.—Analg.; Hypn.; Teniaf.—*Uses:* Trigem. neural., toothache, &c., insom. of heart dis.—*Appl.*, w. eq. parts phenol.—*Doses:* Hypn., 15–30 grains (1–2 Gm.); analg., 3–7 grains (0.2–0.4 Gm.) every $^1/_2$ hr. till relieved, or 15–20 grains (1–1.3 Gm.) at longer intervals.—*Max. D.*, abt. 45 grains (3 Gm.), single; 60 grains (4 Gm.) daily.—*Antid.*, stomach siphon, picrotoxin, atropine, strychn., caffeine, artif. respir.

Butyl Iodide Merck (400

(Secondary Normal Butyl Iodide).—Fr. erythrite, by distil. w. hydriodic acid.—C_4H_9I, or, $CH_3.C_2H_5.CHI$.—Colorl. liq.; turns brown on expos. to light.—Sp. Gr. 1.626 at 0° C.—*Boil.* 118° C.—*Caut.* Dark amber, well-stop'd bot.

Butyl (Iso-) Acetate Merck (8

(Acetic Isobutylester).—Fr. potass. isobutylsulphate, by distil. w. potass. acetate.—$C_6H_{12}O_2$, or, $C_4H_9.C_2H_3O_2$.—Transp., colorl. liq.—Sp. Gr. 0.8921 at 0° C.—*Boil.* 116° C.

Butyl (Iso-) Benzoate Merck (9

$C_{11}H_{14}O_2$, or, $C_4H_9.C_7H_5O_2$.—Liq.—Sp. Gr. 1.002 at 15° C.—*Sol.* A.—*Boil.* 237° C.

Butyl (Iso-) Bromide Merck (20

C_4H_9Br, or, $(CH_3)_2.CH.CH_2.Br$.—Colorl. liq.—Sp. Gr. 1.260 at 15° C.—*Sol.* A.—*Boil.* 91–92° C.

Butyl (Iso-) Butyrate Merck (8

(Isobutyl Normalbutyrate; Isobutyric Ester of Normal Butyric Acid).—$C_8H_{16}O_2$, or, $CH_3.CH_2.CH_2.COO.CH_2.CH.(CH_3)_2$.—Colorl. liq.—Sp. Gr. 0.866 at 15° C.—*Sol.* A.—*Boil.* 156° C.

do. Merck.—Highest Purity (30

Butyl (Iso-) Butyrate (Iso-) Merck (40

(Isobutyl Isobutyrate; Isobutyric Ester of Isobutyric Acid).—$C_8H_{16}O_2$, or, $(CH_3)_2:CH.COO.CH_2.CH(CH_3)_2$.—Colorl. liq.—Sp. Gr. 0.875 at 0° C.—*Sol.* A.—*Boil.* 146° C.

Butyl (Iso-) Carbamate Merck (50

(Isobutyl Ester of Carbamic Acid).—Fr. isobutyl ester of chloroformic acid, by amm.—$C_5H_{11}NO_2$, or, $NH_2COOCH_2.CH:(CH_3)_2$.—Colorl. cryst.—*Sol.* A., E.; insol W.—*Melt.* 55° C.—*Boil.* 207° C.

Butyl (Iso-) Chloride Merck (8

Fr. isobutyl alc., by hydrochl. acid or phosph. pentachloride.—C_4H_9Cl, or, $(CH_3)_2.CH.CH_2Cl$.—Colorl. liq.—Sp. Gr. 0.880 at 15° C.—*Sol.* A.—*Boil.* 69° C.

Butyl (Iso-) Formate Merck (40

(Tetryl Formate).—React.-prod. silver formate w. tetryl iodide.—$HCOOCH_2.CH(CH_3)_2$.—Colorl. liq.—*Sol.* A.—*Boil.* 100° C.

Butyl (Iso-) Iodide Merck (80

Fr. isobutyl alc., by hydriodic acid.—C_4H_9I, or, $(CH_3)_2CH.CH_2I$.—Colorl. liq.—Sp. Gr. 1.640 at 0° C.—*Sol.* A.—*Boil.* 120° C.

Butyl (Iso-) Nitrate Merck (50

Fr. isobutyl iodide, by urea w. silver nitrate.—$C_4H_9NO_3$, or, $(CH_3)_2CH.CH_2NO_3$.—Colorl. liq.—Sp. Gr. 1.015 at 20° C.—*Sol.* A.—*Boil.* 123° C.

Butyl (Iso-) Nitrite Merck (30

By distil. tertiary butyl iodide w. silver nitrite.—$(CH_3)_2CH.CH_2NO_2$.—Yellowish liq.—*Sol.* A.—*Boil.*, abt. 67° C.

Butyl (Iso-) Phenate Merck (100

$C_{10}H_{14}O$, or, $C_4H_9.C_6H_4OH$.—Colorl. liq.—*Sol.* A., E., C.—Sp. Gr. 0.935 at 15° C.—*Boil.* 198° C.—Antisep.

Butyl (Iso-) Propionate Merck (60

(Isobutyl Ester of Propionic Acid).—$C_7H_{14}O_2$, or, $C_2H_5.COO.CH_2.CH.(CH_3)_2$.—Colorl., transp. liq.; agre. ether. odor.—Sp. Gr. 0.893 at 0° C.—*Sol.* A.—*Boil.* 136–137° C.

Butyl (Iso-) Sulphocyanate Merck (150

(Isobutyl Rhodanide; Isobutyl Ester of Sulphocyanic Acid).—C_5H_9SN, or, C_4H_9SCN.—Colorl. liq.—*Misc.* A.—*Boil.* 175° C.

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Butyl (Iso-) Valerate Merck (8

(Isobutyl Ester of Valeric Acid).—$C_8H_{18}O_2$, or, $C_4H_9.C_5H_9O_2$.—Colorl., transp. liq.; ether. odor. —*Sol.* A.

Butylamine (Iso-) Merck (200

(Primary Isobutylamine).—By heat. isobutylchloride w. amm.—$C_4H_{11}N$, or, $(CH_3)_2CH.CH_2.NH_2$.—Colorl., transp. liq.—*Sol.* A., W.—Sp. Gr. 0.736 at 15° C.—*Boil.* 66° C.

Butylene (Beta-) Bromide Merck (75

(Pseudobutylene Bromide; Symmetrical Dimethylethylene Bromide).—$C_4H_8Br_2$, or, $CH_3.CHBr.CHBr.CH_3$.—Yellowish liq.—*Sol.* A.—Sp. Gr. 1.821 at 0° C.—*Boil.* 158° C.

Bulylene Hydrate.—see **Alcohol Butylic, Secondary**

Butylene (Iso-) Bromide Merck (60

(Dibromoisobutane).—Fr. isobutylene, by bromine.—$C_4H_8Br_2$, or, $(CH_3)_2CBr.CH_2Br$.—Yellowish liq.—Sp. Gr. 1.798 at 15° C.—*Boil.* 149° C.

Butyramid Merck (100

(Normal Butyramid).—$CH_3.CH_2.CH_2.CONH_2$.—Wh. cryst.—*Melt.* 115°C.—*Sol.* W.—*Boil.* 216°C.

Butyr-chloral Hydrate.—see **Butyl-Chloral Hydrate**

Bulyric Anhydride.—see **(Acid) Butyric Anhydride, Normal**

Butyrin Merck (160

(Tributyrin; Glycerin Tributyryl).—Fr. monobutyrin, by butyric acid w. heat.—$C_{15}H_{26}O_6$, or, $C_3H_5(C_4H_7O_2)_3$.—Yellowish liq.—Sp. Gr. 1.052 at 22° C.—*Sol.* A., E.

Bulyrone.—see **Dipropylketone**

Butyryl Chloride Merck (40

(Normal Butyric Chloride).—Fr. butyric acid, by PCl_3.—C_4H_7OCl, or, $C_3H_7.COCl$.—Colorl. liq.—Sp. Gr. 1.027 at 20° C.—*Boil.* 101° C.

Butyryl (Iso-) Chloride Merck (30

(Isobutyric Acid Chloride).—$(CH_3)_2CH.COCl$.—Colorl. liq.—Sp. Gr. 1.0174 at 20° C.—*Boil.* 92° C.

Butyryl Oxide.—see **(Acid) Butyric Anhydride, Normal**

Buxine.—see **Bebeerine**

C

Cabbage-Tree Bark.—see **Andira**

Cacao Butter.—see **Oil Theobroma**

Cacao Shell

(Theobroma Shells; Cocoa Shells).—Shells of the seed of Theobroma Cacao, L. Sterculiaceæ.—*Habit.:* South America (Brazil, Cent. America); Mexico; West Indies; most tropical countries.—*Etymol.:* Fr. Mexican "cacauall," or "kakahuati," the native name of the tree.—Thin, papery, reddish-brown, concavo-convex shells; weak chocolate-like odor & taste.—*Constit.:* Theobromine; caffeine; cacao-red.—*Uses:* As diuretic tea.

Cachew Nut.—see **Anacardium; Semecarpus**

Cactus.—see **Cereus**

Cadaverine.—see **Pentamethylenediamine**

Cadmium Merck.—Sticks, ribbon, or powder (2

Etymol.: Fr. "kadmia," the Grk. name for galmei (a native zinc carbonate), in which cadmium was discovered in 1818 by Herrmann & Strohmeyer.—Cd.—Silver-wh., lustr., blue-tinged bars, ribbons, &c., or light-gray powd.; sl'y harder than zinc; v. mall., duct. & flex.—Sp. Gr. 8.604.—*Sol.*, dil. min. acids.—*Melt.* 320° C.—*Uses:* Preparation of readily fusible alloys, pigments, & medicinal preparations; coating metals; for precipitating copper instead of the more impure zinc in the test for the quartation of gold, &c.

Cadmium Acetate Merck (8

$Cd(C_2H_3O_2)_2 + 3H_2O$.—Colorl., deliq. cryst.—*Sol.* W.—*Incomp.*, caustic alkalies.—*Caut.* Keep well stoppered.—*Uses:* In dental techn.

Cadmium Borotungstate Merck (60

$2CdO.B_2O_3.9WO_3 + 18H_2O$.—Deliq., yellow cryst.—*Sol.*, eas. W.

do. Merck.—Solution (20

(See also Klein's Reagent.)

Cadmium Borotungstate Merck.—Reagent.—Solution (30

Clear, yellowish or light-brown liq.—Sp. Gr. 3.28. —*Uses:* Mechanically separ. minerals.

Cadmium Bromide Merck.—Anhydrous (9

By heating cadmium to redness in bromine vapor.—$CdBr_2$.—Yellowish, cryst. powd.—*Sol.* A., E.—*Uses:* Techn.

do. Merck.—Hydrated (2

$CdBr_2 + 4H_2O$.—Colorl. need.; efflor. rapidly on expos.—*Sol.* W., A., E.—*Uses:* In photography. —*Caut.* Keep well stoppered.

Cadmium Carbonate Merck (10

$CdCO_3$.—Wh., amorph. powd.—*Sol.*, dil. acids.

Cadmium Chlorate Merck (15

$Cd(ClO_3)_2$.—Colorl. cryst.—*Sol.* W.—*Caut.* Keep well stoppered.

Cadmium Chloride Merck.—Pure (4

$CdCl_2 + 2H_2O$.—Sm., wh. cryst.—*Sol.* W., A.—*Uses:* Photography, dyeing, & calico printing; also as a test for pyridine bases.

do. Merck.—Anhydrous (12

Cadmium Formate

$Cd(HCO_2)_2 + 2H_2O$.—Wh. prisms.—*Sol.* W.

Cadmium Hydroxide Merck (15
(Cadmium Hydrate).—$Cd(OH)_2$.—Wh., amorphous, solid or powd.—*Sol.*, amm., & acids.

Cadmium Iodate Merck (5
$Cd(IO_3)_2$.—Wh., cryst. powd.—*Sol.*, v. sl. hot W.

Cadmium Iodide Merck (5
CdI_2.—Colorl. flaky cryst.—*Sol.* W., A.—Resolvent; Antisep.—*Uses:* Scrof. glands, chronic inflam. joints, chilbl., & skin dis.—*Appl.*, oint. 1 to 8 lard.—*Techn.*, in photography.

Cadmium Nitrate Merck (4
$Cd(NO_3)_2+4H_2O$.—Wh., amorph. pieces, or hygroscop. need.—*Sol.* W., A.—*Uses:* Techn., imparting to glass & porcelain the reddish-yellow cadmium luster; also preparation of cadmium oxide.—*Caut.* Keep well stoppered.

Cadmium Oxalate Merck (10
$CdC_2O_4+3H_2O$.—Fine, wh., cryst. powd.

Cadmium Oxide Merck (16
CdO.—Amorph., dark brown powd.—*Sol.*, acids.

Cadmium Salicylate Merck (9
$Cd(C_7H_5O_3)_2+H_2O$.—Wh. needles.—*Sol.* W., A.—*Uses:* Like the sulphate as astring. in inflam. of eyes, & in gonor.—*Appl.* 1:100 solut.

Cadmium Succinate Merck (50
$CdC_4H_4O_4$.—Wh. powd.—*Sol.* A., v. sl. W.

Cadmium Sulphate Merck (5
$CdSO_4$+aq.—Colorl. cryst.—*Sol.* W., A.—Antisep.; Astring.—*Uses: Medic.*, inst. of zinc sulphate in eye washes (1:10 of W.). Rarely used intern. in syph. & rheumat.—*Techn.*, in manuf. of normal cadmium elements in electrotechn.—*Dose* $^1/_{10}$–$^1/_5$ grain (0.006–0.012 Gm.).—*Max. D.* $1^1/_2$ grain (0.1 Gm.) single; 6 grains (0.36 Gm.) daily.

Cadmium Sulphide Merck.—Light Yellow (7
(Cadmium Yellow; Jaune Brilliant).—CdS.—Light-yellow powd.—*Sol.*, boil. conc. HCl; insol. W.—*Uses:* Pigment; color for soaps; mixed w. ultramarine for produc. green color; pyrotechn.

do. Merck.—Orange (7
(Orange Cadmium Sulphide).—CdS.—Orange-colored powd.—*Sol.*, boil. conc. HCl; insol. W.—*Uses:* As of preceding.

Cadmium Sulphite Merck (11
$CdSO_3$.—Wh. powd.—*Sol.*, sl. in W.

Cadmium Tartrate Merck (15
$CdC_4H_4O_6$+aq.—Wh., cryst powd.—*Sol.*, in dil. acids; sl. in W.

Cadmium Valerate Merck (25
$Cd(C_5H_9O_2)_2$.—Colorl. scales; valerian odor.—*Sol.* W., A.—Antispasm.

Cadmium Yellow.—see **Cadmium Sulphide, Light Yellow**

Cadmium & Ammonium Bromide Merck (12
$CdBr_2.2NH_4Br+H_2O$.—Colorl. cryst.—*Sol.* W.

Cadmium & Ammonium Iodide Merck (20
$CdI_2.2NH_4I+H_2O$.—Colorl. or yellowish cryst.—*Sol.* W.—*Caut.* Keep well stoppered.

Cadmium & Potassium Cyanide Merck (12
$Cd(CN)_2.2KCN$.—Wh. cryst.—*Sol.* W.

Cadmium & Potassium Iodide Merck (18
$CdI_2.2KI+H_2O$.—Wh., deliq. cryst.—*Sol.* W.

Cadmium & Potassium Iodide Merck.—Reagent (25
Wh. powd.; acquires slight yellowish color on keeping.—*Sol.*, eas. in W., A.—*Tests:* (*Foreign Met.*) *a:* 1 Gm.+20 Cc. H_2O+2 Cc. solut. KOH; filter; filtrate+H_2S–no ppt., even when acidul. w. HCl; *b:* 1 Gm.+30 Cc. H_2O+5 Cc. NH_4OH (sp. gr. 0.96)–solut. clear & colorl.—(H_2SO_4) 1:20 aqu. solut.+HCl+solut. $BaCl_2$–no turb.—(HIO_3) fresh 1:20 solut. prepared w. boiled H_2O+starch solut.+2–3 drops dil. H_2SO_4–no immed. blue color.—*Uses:* Alkaloidal reagent.
Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given

do. Merck.—Reagent.—Solution (5

Cæsalpinia Echinata.—see **Pernambuco**

Caesium Merck.—By Electrolysis (6000
Cs.—*Etymol.:* Lat. "cæsius," bluish-gray, because it gives two bluish lines in the spectrum. Discovered 1860 by Bunsen & Kirchoff.—Silver-wh., soft, duct. metal; burns in contact w. W., and inflames in air.—*Melt.* 26–27° C.

Caesium Alum.—see **Aluminum & Caesium Sulphate**

Caesium Bichromate.—see **Caesium Dichromate**

Caesium Bisulphate Merck (240
(Caesium Disulphate; Acid Caesium Sulphate).—$CsHSO_4$.—Rhombic, colorl. prisms.—*Sol.* W.

Caesium Bitartrate Merck (160
(Acid Caesium Tartrate).—$CsHC_4H_4O_6$.—Wh., rhomb. cryst.—*Sol.* W.—*Uses:* In nervous heart palpitation.—*Dose* 4 grains (0.25 Gm.) 3 t. p. d.

Caesium Bromide Merck (200
CsBr.—Colorl., cryst. powd.—*Sol.* W.—*Uses & Dose:* As of caesium bitartrate.

Caesium Carbonate Merck (240
(Normal Caesium Carbonate).—Cs_2CO_3.—Wh., deliq. cryst. powd.—*Sol.* W., A.—*Uses:* Brewing & in manuf. mineral waters.

Caesium Chloride Merck (240
CsCl.—Colorl. cryst.—*Sol.* W., A.—*Uses:* Brewing, & in manuf. mineral waters.

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Caesium Cyanide Merck (300
CsCN.—Colorl. cryst.—*Sol.* W.

Caesium Dichromate Merck (240
(Caesium Bichromate).—$Cs_2Cr_2O_7$.—Reddish-yellow cryst.—*Sol.* W.

Caesium Disulphate.—see **Caesium Bisulphate**

Caesium Hydroxide Merck (250
(Caesium Hydrate).—CsOH.—Colorl. or yellowish, very deliq. cryst. mass; strongly alkaline react.—*Sol.*, in W. prod. much heat.—*Caut.* Keep well stoppered.

Caesium Iodide Merck (200
CsI.—Colorl., cryst. powd.—*Sol.* W., A.—Succedaneum for potass. iodide, without injurious action on heart.—*Uses:* As of potass. iodide.

Caesium Nitrate Merck (240
$CsNO_3$.—Glitter., colorl. prisms; saltpeter taste.—*Sol.* W., sl. in A.

Caesium Sulphate Merck (200
(Normal Caesium Sulphate).—Cs_2SO_4.—Colorl. prism. cryst.—*Sol.* W.; insol. A.—*Uses:* Brewing, & in manuf. of mineral waters.

Caesium & Ammonium Bromide Merck (75
$CsBr.3NH_4Br$.—Wh., cryst. powd.—*Sol.* W.—Nerve Sed.—*Uses:* Epilepsy, &c.—*Dose* 15–45 grains (1–3 Gm.) 1 or 2 t. p. d.—*Max. D.* 90 grains (6 Gm.) (Laufauer).

Caesium & Ammonium Chloride Merck (130
$CsCl.3NH_4Cl$.—Wh., cryst. powd.—*Sol.* W.—*Uses:* Epilepsy.—*Dose:* As of preceding.

Caesium & Antimony Chloride Merck.—Cryst. (225
$6CsCl.SbCl_3$.—Yellowish, cryst. powd.—*Sol.*, sl. W.

Caesium & Manganese Chloride Merck (140
$2CsCl.MnCl_2+3H_2O$.—Rose-red cryst.—*Sol.* W.

Caesium & Rubidium Alum.—see **Aluminum & Caesium & Rubidium Sulphate**

Caesium & Rubidium Bromide Merck (100
CsBr.RbBr.—Wh., cryst. powd.—*Sol.* W.; insol. A.—*Uses:* Succedaneum for potass. bromide.

Caesium & Rubidium Chloride Merck (150
CsCl.RbCl.—Colorl., cryst. powd.—*Sol.* W.

Caesium & Rubidium & Ammonium Bromide Merck (35
$CsBr.RbBr.6(NH_4Br)$.—Wh., cryst. powd.—*Sol.* W.—*Uses:* Nerv. affect. & epilepsy.—*Dose* 15–45 grains (1–3 Gm.) 1–2 t. p. d.—*Max. D.* 90 grains (6 Gm.) (Laufauer).

Caferana.—see **Tachia**

Caffea (Usta)
(Coffee).—Roasted seeds of Coffea arabica, L., & C. liberica, Hiern. Rubiaceæ.—*Habit.:* Tropical Africa, especially Abyssinia; cultivated in all tropical countries (Java, West Indies, Brazil, South America, &c.).—*Etymol.:* Fr. "Coffee," a province in Narea, Africa, where it grows wild. Or fr. the Arabic name for the decoction, "chaubé," "cavé," "cahua," "caova." "Arabica" refers to its chief habitat.—*Constit.:* Caffeine (theine), $C_8H_{10}N_4O_2+H_2O$; caffetannic acid, $C_{15}H_{18}O_8$; bitter principle; caffeol, $C_8H_{10}O_2$.—Stim.—*Uses:* As antid. to opium; also to cover taste of bitter remedies, & as flavor for soda-water, &c.—*Dose:* Fld. extr., 20–60 ♏ (1.3–2 Cc.).

Caffea (Viridis)
(Coffee).—Dry unroasted seeds of Coffea arabica, L. Rubiaceæ.—*Constit.:* Caffeine; caffetannic Acid; caffearine; chinaic acid; arom. oil.—Nerve stim.; Antineuralg.—*Uses:* Migraine, & as antid. to opium.—*Doses:* Alcoh. extr., 3–10 grains (0.2–0.6 Gm.).—Fld. extr., 20–60 ♏ (1.3–4 Cc.).

Caffeine Merck.—Pure (5
(Theine; Guaranine; Methyltheobromine; Trimethylxanthine).—Diureïd fr. coffee, tea, guarana, Paraguay tea, or kola nuts. Us'y fr. lvs. Thea sinensis, L. (Tea) or dried seeds of Coffea arabica (Coffee). — $C_8H_{10}N_4O_2+H_2O$, or, $\overline{N}(CH_3).CH:N.\overline{C}:\overline{C}.CO.N(CH_3).CO.\overline{N}(CH_3)+H_2O$.—Wh., fleecy masses, long, flex., silky cryst.; bitter taste.—*Sol.* 7 C., 55 A., 80 W., & 555 E. at 15° C.; (45.6 W., 53.2 A., 375 E., & 8 C., at 25° C., & in 17.1 A. at 60° C.—U. S. P.); solubil. increased by antipyrine, potass. bromide, sod. benz., or sod. salicyl.—*Melt.* 236.8° C.—*Subl.* 178° C.—Diur.; Cereb. Stim.; Card. Stim.; Muscle Invigor.—*Uses:* Nerv. headache, neural., heart fail., card. dropsy, chr. nephr., collapse, senile pneum., &c.—*Dose* 1–5 grains (0.06–0.3 Gm.) several t. p. d.—*Max. D.* 10 grains (0.6 Gm.), single; 30 grains (2 Gm.) p. day.

do. Merck.—True.—Fr. Coffee (300
Fr. seeds Coffea arabica, L. (Coffee.) Ident., chem., w. "theine," fr. tea.—$C_8H_{10}N_4O_2+H_2O$.—*Uses:* Claimed, differs physiol. fr. theine; said to act princip. on motor nerves, theine on sensory.

Caffeine Arsenate Merck (10
Wh. powd.—*Sol.*, hot W.—*Uses:* Neuralg., & as cholag. in certain forms of jaundice.—*Dose* 2 granules (each $^1/_{60}$ grain [0.001 Gm.]) ev. 15 min. until 16 are taken per day.—*Caut.* Poison!

Caffeine Benzoate Merck (7
Wh. cryst.—*Sol.* W., A.—*Uses & Doses:* As of caffeine.

Caffeine Borate
Wh. cryst. or powd.—*Sol.* W.

Caffeine Bromide.—see **Caffeine Hydrobromide**

Caffeine Citrate.—True salt

$C_8H_{10}N_4O_2.C_6H_8O_7$.—Wh., cryst. powd.—*Sol.* W., A., w. decomp.—*Uses & Doses:* As of caffeine. —*Caut.* This salt is not the one intended when simply "Caffeine Citrate" is prescribed. When "Caffeine Citrate" is ordered without express specification of "true," the "Citrated Caffeine" of the U. S. P. is always intended.

Caffeine Citrate, Ammoniated.—see **Caffeine & Ammonium Citrate**

Caffeine Citrated Merck.—*U. S. P.* (3

(Improperly called "Caffeine Citrate").—Abt. 50% caffeine.—Wh. powd.; acid taste.—*Sol.* W., A., mixt. C. & A.—*Uses:* As of caffeine.—*Dose* 3–8 grains (0.2–0.5 Gm.).—*Max. D.* 10 grains (0.6 Gm.) single; & 30 grains (2 Gm.) p. d.

Note.—This is prepared especially to meet the requirements of the U. S. P., & is always to be preferred when a preparation of high quality is to be dispensed.

do.—**Effervescent.**—*U. S. P.*

(Effervescent "Citrate" of Caffeine).—Abt. 1% caffeine.—Coarse, wh., granul. powd.; efferv. on add. W.—*Sol.* W.—*Uses:* As of caffeine.—*Dose* 60 grains (4 Gm.).—*Caut.* Keep dry.

Caffeine Diiodohydriodide.—see **Caffeine Triiodide**

Caffeine Hydrobromide Merck.—True salt (5

(So-called "Caffeine Bromide").—Colorl. cryst. —*Sol.* W., with decomp.—*Uses:* Chiefly as diuret.—*Dose* $^1/_2$–5 grains (0.03–0.3 Gm.).—*Inj.* 4–10 ♏ (0.25–0.6 Cc.) solut. caffeine hydrobr. 10, hydrobromic acid 1, distil. W. 3.—*Caut.* Keep well stoppered, in amber bottles, fr. air & light.

Caffeine Hydrochloride Merck.—True salt (7

(Caffeine Muriate).—$C_8H_{10}N_4O_2.HCl+2H_2O$.—True salt.—Colorl. cryst.—*Sol.* W., with decomp. —*Uses & Doses:* As of caffeine.

Caffeine Salicylate Merck.—True salt (7

$C_8H_{10}N_4O_2.C_7H_6O_3$.—Wh., cryst. masses.—*Sol.* W., A., with decomp.—*Uses:* Comb. act of caffeine w. salicylic acid.—*Doses:* As of caffeine.

Caffeine-Sodium Cinnamate.—see **Hetol-Caffeine**

Caffeine-Sodium Iodide.—see **Iodocaffeine**

Caffeine Sulphate Merck.—True salt (7

$C_8H_{10}N_4O_2.H_2SO_4$.—Wh. cryst.—*Sol.* W., w. decomp.—*Uses & Dose:* As of caffeine.

Caffeine Triiodide Merck.—Cryst. (30

(Caffeine Diiodohydriodide; Diiodocaffeine).—$(C_8H_{10}N_4O_2I_2.HI)_2+3H_2O$.—Dark green prisms. —*Sol.* A., w. decomp.; decomp. by W.—Alter.; Diuret.—*Uses:* Inst. of potass. iodide, said to be non-depressing. Readily liberates iodine in system.—*Dose* 2–4 grains (0.12–0.25 Gm.) several t. p. d.—*Incomp.*, acids.

Caffeine Valerate Merck.—True salt (8

$C_8H_{10}N_4O_2.C_5H_{10}O_2$.—Small cryst.—*Sol.* A., w. decomp.—*Uses:* Nerv. headache, nerv. vomit., whoop.-cough, & hyst. condit. w. pain.—*Doses:* As of caffeine.

Caffeine & Sodium Benzoate Merck (7

47.9% caffeine.—Wh. powd.—*Sol.* 2 W.—*Uses:* Inst. of caffeine, by inj.—*Dose,* abt. double that of caffeine.

do.—*N. F.*

Mixt. eq. parts caffeine & sod. benzoate.

Caffeine & Sodium Citrate Merck (10

47.5% caffeine, w. 52.5% sod. citrate.—Wh. powd.—*Sol.* 2 W.—*Uses:* Inst. of caffeine for subcut. inj.—*Dose,* abt. double that of caffeine.

Caffeine & Sodium Hydrobromide Merck (10

Abt. 60% caffeine hydrobromide, w. 40% sod. bromide.—Wh. powd.—*Sol.* W.—*Uses:* Inst. of caffeine for subcut. inj.—*Dose,* abt. double that of caffeine.

Caffeine & Sodium Salicylate Merck (7

45.45% caffeine.—Wh. powd.—*Sol.* 2 W.; diffic. in A.—*Uses:* Inst. of caffeine, by inj. Valuable in rheum. w. heart disease, & in threatened collapse of pneumonia.—*Dose,* abt. double that of caffeine.

do.—*N. F.*

Mixt. eq. parts caffeine & sod. salicylate.

Cahinca

(Caïnca; Snowberry; David's Root).—Bark of root of Chiococca racemosa, Jacquin. Rubiaceæ. —*Habit.:* West Indies; Mexico; Argentine; Brazil to New Granada.—*Etymol.:* "Cahinca," or "cainca," is the native name of the plant.—*Constit.:* Cahincic acid (or cahincin, a glucoside), $C_{40}H_{64}O_{18}$; caffetannic acid; resin.—*Uses:* Diuret. in dropsy; in Brazil as antid. to snake bites; large doses are violently emetic & drastic. —*Doses:* Bark of root, 20–60 grains (1.3–4 Gm.) as purgat. & diuret.—Alcoh. extr., 15–30 grains (1–2 Gm.) daily, as an addition to diuret. pills. —Fld. extr., 20–40 ♏ (1.3–2.6 Cc.).

Cahincin.—see **Acid Caïncic**

Caïnca.—see **Cahinca**

Caïncin.—see **Acid Caïncic**

Cajeputene.—see **Dipentene**

Cajeputol.—see **Eucalyptol**

Calabar Bean.—see **Physostigma**

Calaguala

Rhizome of Polypodium Calaguala, Ruiz. Polypodiaceæ; also Polypodium crassifolium, L., Acrostichum Huascaro, Ruiz, & Aspidium, coriaceum, Sw.—*Habit.:* Peru.—*Etymol.:* "Calaguala" is the South American name of the plant. —Resolvent; Diaphor.—*Uses:* Chronic affect.

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

of the respiratory organs, & in whoop.-cough.—*Extern.*, as vulnerary.—*Dose* 30–60 grains (2–4 Gm.) per day, in powd.; or in infus., 2–4:100. The decoct. is used externally like arnica.

Calamine (1

(Lapis Calaminaris).—Mixt. of native carbonate & silicate of zinc. —*Habit.*. Europe; U. S.—Prepared calamine, the preparation chiefly used, is a pinkish or flesh-colored powd. of earthy appearance.—*Uses: Medic.*, as a zinc preparation chiefly for extern. use.—*Techn.*, chiefly as a source for manuf. of zinc salts.

Calamus.—*U. S. P.*

(Sweet Flag; Calmus; Sweet Cane; Sweet Grass). —Unpeeled, dried rhizome of Acorus Calamus, L. Araceæ.—*Habit.:* Europe; North America; Western Asia; cult. in Burmah & Ceylon.—*Etymol.:* Grk. "kalamos," fr. the Arabic "kalem," a reed or tube, *i.e.*, the lvs. or scapes are cane- or reed-like. "Acorus," fr. Grk. "a," not, & "kore," pupil of the eye, *i.e.*, the plant was originally thought to cure eye troubles.—*Constit.:* Acorin, $C_{36}H_{60}O_6$; acoretin (choline); calamine; volat. oil; resin; tannin; mucilage.—Tonic; Stomachic; Bitter; Carmin.; Stim. — *Uses:* Dyspep., flatulence, &c.—*Doses:* 15–60 grains (1–4 Gm.).—Alcoh. extr., 2–6 grains (0.12–0.36 Gm.) several t. p. d.—Fld. extr., 10–30 ♏ (0.6–2 Cc.).—Tinct. 15–60 ♏ (1–4 Cc.).

Calaya.—see **Pambotano**

Calcatrippa.—see **Delphinium Consolida**

Calcic Liver of Sulphur.—see **Lime Sulphurated**

Calcinol=Calcium Iodate.—see **Calcium Iodate**

Calcium Merck (8

Metal.—Ca.—*Etymol.:* Lat. "calx," stone, but more particularly limestone; the metal was first obtained by Davy in 1808 fr. calcium chloride.—Wh. metal; brilliant surface when freshly cut.—*Caut.* Keep dry, in well-stop. bots.

Calcium Acetate Merck.—Pure, dried (1

$Ca(C_2H_3O_2)_2$.—Wh., amorph. powd.—*Sol.* W., A.—*Uses:* Chem. & techn.

do.—**Crude** (1

Fr. crude acetic, or pyroligneous, acid.—*Sol.* W. —*Uses:* Techn.; chiefly in manuf. of acetic acid & acetone; also in dyeing.

Calcium Arsenate Merck (4

(Tricalcium Orthoarsenate).— $Ca_3(AsO_4)_2$+aq. —Wh. powd., or cryst.—*Sol.*, v. sl. W.; easily in dil. acids.

Calcium Arsenite Merck (3

$Ca_3(AsO_3)_2$.—Wh., gran. powd.—*Sol.*, v. sl. W.

Calcium Benzoate Merck.—Pure (3

$Ca(C_7H_5O_2)_2+3H_2O$.—Wh. powd., or cryst.—*Sol.* W.—Alter.; Antisep.—*Uses:* Scrof. affect. & rachitis.—*Dose* 10–30 grains (0.6–2 Gm.).—*Caut.* Keep well stoppered.

Calcium Betanaphtholalphamonosulphonate.—see **Abrastol; Asaprol**

Calcium Bichromate.—see **Calcium Dichromate**

Calcium Bimalate Merck.—Cryst. (20

(Calcium Dimalate; Acid Calcium Malate).— $Ca(HC_4H_4O_5)_2+6H_2O$.—Wh. powd.—*Sol.*, sl. W.

Calcium Biphosphate.—see **Calcium Phosphate, Monobasic**

Calcium Bisaccharate.—see **Calcium Saccharate**

Calcium Bisulphate

(Acid Calcium Sulphate; Calcium Disulphate). —$Ca(HSO_4)_2$.—Gray paste; decomp. to gypsum by moist air.—*Incomp.*, water.—*Caut.* Keep well stoppered.

Calcium Bisulphite Merck.—Solution; 8° Bé. (1

Solut. of calc. sulphite ($CaSO_3$) in aqu. solut. sulphurous acid.—Liq. w. strong sulphur dioxide odor.—Disinf.; Antisep.—*Uses: Extern.*, dil. w. 4–8 volumes of W.: gargle or spray in catarrh of throat or diphth.; inj. in vaginitis & endometr.; antisep. wash f. wounds, burns, or ulcers.—*Techn.*, microbicide & preservative, particularly in brewing to prevent souring & cloudiness of beer (1:10,000), to prevent secondary fermentation, washing casks; bleaching sponges; also largely in manuf. sulphite cellulose fr. wood, & in paper-making.

Calcium Bitartrate Merck.—Pure (5

(Acid Calcium Tartrate).—$Ca(HC_4H_4O_6)_2$.—Colorl. cryst.—*Sol.* W.

Calcium Borate Merck (2

Wh. powd.—*Sol.*, hot W.—Antisep.; Astring.—*Uses: Intern.*, infant diarrhea.—*Extern.*, weeping eczema, fetid perspir., chafing, &c.—*Dose* (children) 1–5 grains (0.06–0.3 Gm.) 3 t. p. d., in powd.—*Appl.* 10–20% oint. or dust.-powd. in moist eczema & in bromidrosis.

Calcium Borocitrate Merck (4

Fine, wh. powd.—*Sol.*, dil. acids; sl. W.

Calcium Bromide Merck. (1

$CaBr_2$.—Wh. gran.; v. deliq.; sharp, saline taste. —*Sol.* very easily in W. & A. (U. S. P.).—Nerve Sed., like potas. brom.—*Uses:* Epilepsy, hyst., &c.—*Dose* 10–30 grains (0.6–2 Gm.) 2 t. p. d.—*Techn.*, in manuf. of mineral waters, & in photogr.—*Caut.* Keep well stoppered.

Calcium Bromoiodide Merck (20

Mixt. of calcium iodide & bromide in molec. prop.—CaI_2+CaBr_2.—Yellow powd.—*Sol.* W.—Alter.; Sed.—*Uses:* Epilepsy & rachitis.—*Dose* 5–10 grains (0.3–0.6 Gm.) 3 t. p. d.

Calcium Butyrate Merck.—Pure (3

$Ca(C_4H_7O_2)_2+H_2O$. — Colorl. cryst. — *Sol.* W.; v. sol. hot W.

Calcium Cacodylate Merck (20

$Ca([CH_3]_2AsO_2)_2$+aq.—Wh. powd.—*Sol.* W.

Calcium Carbide

Fr. lime w. carbon by the electric furnace.—CaC_2.—Grayish-black, irregular lumps. Decomp. with W., evolving acetylene (C_2H_2) & leaving residue of slaked lime. The acetylene evolved may be taken up by acetone, which will hold 60% of its weight of the gas in solution. —Sp. Gr. 2.22.—*Uses: Medic.*, Gynecol., in treatment of uterine & vaginal epithelioma, the calcium carbide, in pieces the size of a small nut, being introduced into the vagina, & the vagina then tamponed with iodoform gauze.—*Techn.*, for the generation of acetylene gas for lighting purposes (1 kilo of carbide yields 280–300 liters acetylene); as reducing agent, *e.g.*, for direct reduction of copper sulphide to metallic copper; signal fires for marine service.

Calcium Carbolate.—see **Calcium Phenate**

Calcium Carbonate Merck.—Precipitated (1

(Precipitated Calcium Carbonate; Precipitated Chalk).—$CaCO_3$.—Fine, wh., amorph. powd.—*Sol.*, acids, w. effervesc. — Antacid. — *Uses: Intern.*, diar., acid condit. of intest.—*Extern.*, tooth powd., & in pyrosis.—*Dose* 10–40 grains (0.6–2.6 Gm.).

do. Merck.—Pure, precip. (1

do. Merck.—Highest Purity, precip. (1

do.—Prepared (1

(Prepared Chalk; Drop Chalk).—Calc. carb. (chalk) purif. by mech. means.—$CaCO_3$.—Perf. wh., amorph. powd., or sm. conical drops.—*Sol.*, acids w. effervesc.—Antacid; Intern. Antisep.—*Uses: Intern.*, diar., acid dyspep.—*Extern.*, burns & ulcers.—*Techn.*, for preparing carbon dioxide, manuf. of calcimine, polishing powders, in metallurgical processes, building, &c.—*Dose* 10–40 grains (0.6–2.6 Gm.).

Calcium Carbonate Merck.—Reagent.—Precipitated (2

$CaCO_3$.—Wh., cryst. powd.—*Sol.*, somewh. in aqu. solut. CO_2; alm. insol. pure W. (1:27,000). —*Tests:* (*Solubility in HCl, HNO_3, & $C_2H_4O_2$*) 5 Gm. compl. solub. in 25 Cc. HCl (sp. gr. 1.124), or 25 Cc. HNO_3 (sp. gr. 1.153), or 60 Cc. dil. $C_2H_4O_2$; solns. must be clear & colorl.—(*Heavy Met.*) 1 Gm.+5 Cc. HCl (sp. gr. 1.124)+25 Cc. H_2O+aqu. H_2S (& even w. NH_4OH in excess+2–3 drops $[NH_4]HS$) – no ppt. or green color in either case.—(*Mg*) 1 Gm.+5 Cc. HCl (sp. gr. 1.124)+5 Cc. H_2O+10 Cc. NH_4OH (sp. gr. 0.96) +excess solut. $(NH_4)_2C_2O_4$; let stand 5 hrs.; filter; add to filtrate Na_2HPO_4 – no ppt. within 12 hrs.—(*H_2SO_4*) 1 Gm.+5 Cc. HCl (sp. gr. 1.124)+25 Cc. H_2O; boil 5 min.; add solut. $BaCl_2$ – no ppt. ($BaSO_4$) within 12 hrs.—(*Cl*) 1 Gm.+5 Cc. HNO_3 (sp. gr. 1.153)+25 Cc. H_2O +solut. $AgNO_3$ – no turb.—(*H_3PO_4*) 10 Gm.+50 Cc. HNO_3 (sp. gr. 1.153)+25 Cc. solut. ammon. molybd.; let stand at 30–40° C. – no ppt. within 12 hrs.—(*Alkalies; CaO*) 1 Gm.+50 Cc. boiled & cooled H_2O; shake; filter – filtrate free fr. alkalinity, & when evap. & ignited, leaves not more than 0.001 Gm. res.—*Uses:* Detect. Cl, Br, & I in organic substances; assistant w. NH_4Cl in decomposing silicates.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Calcium Chinate.—see **Calcium Quinate**

Calcium Chinovate.—see **Calcium Quinovate**

Calcium Chlorate Merck (7

$Ca(ClO_3)_2+2H_2O$.—Wh. to yellowish cryst.—*Sol.* 0.6 W., A.—*Uses:* Photography, pyrotechnics, & in manuf. of mineral waters.—*Caut.* Keep well stoppered.

Calcium Chloraurate.—see **Gold and Calcium Chloride**

Calcium Chlorhydrophosphate. — see **Calcium Hydrochlorophosphate**

Calcium Chlorhydrosulphate. — see **Calcium Hydrochlorosulphate**

Calcium Chloride Merck.—Pure, fused, white; granular, sticks, or lumps (1

$CaCl_2$.—Pure wh., v. deliq., gran. powd., or wh., light, easily broken sticks, or wh., lustrous lumps.—*Sol.* 1.5 W., 8 A.—*Uses:* Rachitis & arthritis, & as hemostat., intern. & extern.—*Chem.*, drying agent.—*Dose* 5–20 grains (0.3–1.3 Gm.), in solut.—In chron. irrit. (pruritus, urticaria, prurigo) large doses are given, *e.g.*, 20–40 grains (1.3–2.6 Gm.).—*Techn.*, in brewing & in manuf. of mineral waters.—*Caut.* Keep well stoppered.

do. Merck.—Pure, cryst. (1

$CaCl_2+6H_2O$.—Colorl., very deliq. cryst.—*Sol.* W., A.—*Uses:* As of preceding.—*Caut.* Keep well stoppered.

do. Merck.—Pure, dry (1

$CaCl_2$.—Sm., wh. lumps.—*Sol.* W., A.

do. Merck.—Crude, fused, or gran. (1

$CaCl_2$.—Grayish-wh., deliq. lumps or gran. powd. —*Sol.* W., A.—*Uses:* Drying agent; obtaining & maintaining baths of high & constant temperatures; preserving meat in boxes; refrig. mixt.; fire extinguishers; fire-proofing paints; impregnating fabrics; sprinkling on railway rails in snowfalls; in building; as size in admixture w. starch paste; manuf. artif. gypsum; manuf. of hydrochloric acid, alizarin, & sugar; preserving stone, &c.—*Caut.* Keep well stoppered.

Calcium Chloride Merck.—Reagent (1

$CaCl_2+6H_2O$.—Colorl., deliq. cryst.—*Sol.* W., A.—Aqu. solut. neutral.—*Tests:* (*Impur. Insol. in Absol. A.*) 2 Gm. compl. solub. in 20 Cc. absol. A.—(*Heavy Met.*) 20 Cc. aqu. 1:20 solut.+1 Cc. HCl (sp. gr. 1.124)+aqu. H_2S – no reaction; add further 5 Cc. NH_4OH+2–3 drops $(NH_4)HS$ –

no ppt. or green color.—(*H_2SO_4*) 2 Gm.+20 Cc. H_2O+1 Cc. HCl (sp. gr. 1.124)+solut. $BaCl_2$—no ppt. ($BaSO_4$) within 12 hrs.—(*NH_4 Salts*) boil 2 Gm.+10 Cc. solut. NaOH—no NH_3 evolved (test w. moist litmus paper).—(*Ba*) 2 Gm.+20 Cc. H_2O+20 Cc. solut. $CaSO_4$—no ppt. ($BaSO_4$) within 3 hrs.—(*As*) 5 Gm.+20 Cc. H_2O; introduce solut. in sm. quant. into Marsh appar. started w. 10 Gm. As-free Zn & dil. (1:5) H_2SO_4—no deposit in reduct. tube within 1 hr.—*Uses:* Detect. & separ. organic acids.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Calcium Chloride Merck.—Reagent.—Dry, granulated (1

$CaCl_2+2H_2O$.—Wh., gran., porous masses or pieces size of pea.—*Uses:* Chiefly drying gases.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

do. Merck.—Reagent.—Fused (1

$CaCl_2$.—Wh., cryst. masses.—*Uses:* Flux for silicates; dehydrating agent.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Calcium Chlorosulphate.—see **Calcium Hydrochlorosulphate**

Calcium Chromate Merck.—Pure (3

$CaCrO_4+2H_2O$.—Yellow powd.—*Sol.*, dil. acids; sl. W.

Calcium Cinnamate Merck.—Pure (30

(Calcium Cinnamylate).—$Ca(C_9H_7O_2)_2+3H_2O$.—Colorl. cryst.—*Sol.*, hot W.

Calcium Cinnamylate.—see **Calcium Cinnamate**

Calcium Citrate Merck (4

$Ca_3(C_6H_5O_7)_2+4H_2O$.—Wh. cryst.—*Sol.* 1730 W. at 90° C.; more readily cold W.

Calcium Dichromate Merck.—Highest Purity (8

(Calcium Bichromate).—$CaCr_2O_7$.—Brownish-red, deliq. cryst.—*Sol.* W.

Calcium Dimalate.—see **Calcium Bimalate**

Calcium Disulphate.—see **Calcium Bisulphate**

Calcium Eosolate

Calcium salt of trisulphoacetylguaiacol.—$Ca_3(C_6HO.CH_3.OC_2H_3O[SO_3]_3)_2$.—Gray powd.; pung., ether. odor & sl. sharp taste.—*Sol.* 8–10 cold, 7 hot, W., & in HCl & solut. citric acid; sl. A.; insol. C., oil turpent.—Antisep.—*Uses:* Diabet., phthis., & nephritis.—*Dose* 5–12 grains (0.3–0.75 Gm.) sev. t. p. d.

Calcium Ethylsulphate Merck (8

(Calcium Sulphovinate).—$Ca(C_2H_5SO_4)_2+H_2O$.—Transp., colorl. cryst.—*Sol.* W.; sl. in A.

Calcium Ferricyanide Merck.—Pure (40

$Ca_3Fe_2(CN)_{12}$+aq.—Reddish, very deliq. need.—*Sol.* W.

Calcium Ferrocyanide

Ca_2FeCy_6+aq.

Calcium Fluoride Merck.—Pure (3

CaF_2.—Wh. powd.; bec. luminous w. heat.—*Sol.*, aqu. solut. amm. salts; insol. W.—*Uses:* Etching glass; manuf. of enamels & HF, &c.

Calcium Formate Merck (4

$Ca(CHO_2)_2$.—Wh., cryst. powd., or colorl. cryst.—*Sol.* W.

Calcium Glycerate Merck (30

(Calcium Glycerolate or Glycerinate).—$Ca(C_3H_5O_4)_2+2H_2O$.—Wh. powd.—*Sol.* W.

Calcium Glycerinoarsenate.—see **Arsitriol**

Calcium Glycerinoborate Merck (7

Colorl., cryst. crusts.—*Sol.* W.—Antisep.—*Uses:* Extern., & as preservative.

Calcium Glycerinolactophosphate Merck (8

Mixt. of calc. glycerinophos. & calc. lactophos.—Wh. powd.—*Sol.* W.

Calcium Glycerinophosphate Merck (3

(Calcium Glycerophosphate).—From calcium carbonate by glycerinophosphoric acid.—Wh., cryst. powd.—*Sol.* 30 cold W.; alm. insol. in boil. W.—Nerve Tonic.—*Uses:* Where lime & phosph. are required. In rach., neurasthenia, scrofula, diffic. dentition, incontinence of urine, wasting dis. & convalesc. The phosphorus of lecithin of food is converted into glycerinophos. acid before assimil.; hence most nat. form for adm. phosphorus.—*Dose* 2–5 grains (0.12–0.3 Gm.).

do. Merck.—Granulated (3

95% calc. glycerinophosphate.

Calcium Glycerophosphate.—see **Calcium Glycerinophosphate**

Calcium Glycolate Merck (40

$Ca(C_2H_3O_3)_2$+aq.—Wh. cryst.—*Sol.*, sl. W.

Calcium Guaiacolmonosulphonate.—see **Guaiacyl**

Calcium Hippurate Merck (25

$Ca(C_9H_8NO_3)_2$.—Wh., cryst. powd.—*Sol.*, sl. in hot W.—Alter.; Antiarthrit. & Antilith.—*Uses:* Cystitis, lithiasis, scrof., phth., diffic. dentit., uric-acid diathesis, &c.—*Dose* 5–20 grains (0.3–1.3 Gm.).

Calcium Hydrate.—see **Calcium Hydroxide**

Calcium Hydrochlorophosphate Merck (4

(Calcium Chlorhydrophosphate).—Yellowish powd.—*Sol.* W.

do. Merck.—25% Solution (2

Colorl. to yellowish liq.—*Misc.*, w. W. in all proport.—Sp. Gr. 1.225 at 15° C.—Tonic;

Alter.—*Uses:* Tubercul., scrofula, rachitis, & incip. phth.—*Dose* 5–10 drops in W. several t. p. d.

Calcium Hydrochlorosulphate Merck (4

(Calcium Chlorhydrosulphate; Calcium Chlorosulphate).—Wh. to yellowish cryst. pwd.—Alm. insol. W.—*Uses:* As of calcium sulphate.

Calcium Hydrosulphide Merck (1

(Calcium Sulphydrate).—Fr. monosulphide by boil. with W., or fr. hydroxide, by sulph. hydrogen.—$Ca(HS)_2$.—Colorl., transp. cryst.; decomp. in air.—*Sol.* W.—*Uses:* Depilatory.—*Caut.* Keep well closed.

Calcium Hydroxide

(Calcium Hydrate; Slaked Lime).—$Ca(OH)_2$.—*Uses: Extern.*, depil. Also pharm. & techn.

do.—Solution.—*U. S. P.*

(Lime Water; Solution of Lime or Calcium Hydroxide).—$Ca(OH)_2$ + aq.—Colorl., clear liq.; fbl., alkal., saline taste.—*Misc.* W.—Antacid; Astring.; Tonic.—*Uses: Intern.*, sour stomach, diar., dysent., gravel, diab., vomiting, dyspep., &c.—*Extern.*, linim. on burns, &c.—*Dose* $^1/_2$–4 oz. (15–120 Cc.).

Calcium Hydroxide Merck.—Reagent (1

(Slaked Lime).—$Ca(OH)_2$.—Wh., dry powd.—*Uses:* Detect. alkalies in Mg salts.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

do. Merck.—Reagent.—Solution (1

(Lime-Water).—Clear, colorl. liq.; strong alkal. react.—*Uses:* Identif. citric & tartaric acids, &c.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Calcium "Hypochlorite."—see **Lime, Chlorinated**

Calcium Hypochlorite

$Ca(ClO)_2$ + aq.—Wh. cubes; decomp. readily.—Antisep.—*Uses:* Str. bleach. agent, disinf.—*Antid.*, ammonia vapor, steam, ether vapor, v. dil. hydrogen sulphide gas.—*Caut.* Poison!

Calcium Hypophosphite Merck (1

(Lime Hypophosphite).—$Ca(PH_2O_2)_2$.—Wh. to whitish-gray cryst.—*Sol.* W.—Decomp. & gives out inflam. gas above 300° C.—*Uses:* Phth., rach., chlorosis, defect. nutrit. of nerv. & bony tiss.; contraindic. in fever.—*Dose* 10–30 grains (0.6–2 Gm.).

do. Merck.—Purified (2

Calcium Hyposulphite.—see **Calcium Thiosulphate**

Calcium Iodate Merck (11

$Ca(IO_3)_2 + 6H_2O$.—Wh. prisms.—*Sol.* 400 W.; insol. A.—Antiseptic.—*Uses: Intern.*, cystitis, and abnorm. gastric processes.—*Extern.*, wounds, as excellent succedaneum for iodoform, & in mouth washes, gargles (1–3:100), fetid breath, angina, & diphth.—*Appl.* 1:10 oint. in ulcus cruris; as insufflat. in torrhea (1:9 with bismuth subcarbonate).—*Dose* 3–5 grains (0.2–0.3 Gm.) several t. p. d.

Calcium Iodide Merck (5

CaI_2.—Yellowish-white powd.; decomp. by absorp. of carbon dioxide fr. air.—*Sol.* W., A.—Alter.—*Uses:* Syph., hepat., asthma, struma & o. affect., inst. of potass. iodide; said to act better than the potass. salt.—*Dose* 2–5 grains (0.12–0.3 Gm.) 3 t. p. d., in syrup.—*Max. D.*, daily 15 grains (1 Gm.).—*Techn.*, in photog.

Calcium Iodobehenate.—see **Sajodin**

Calcium Isobutyrate Merck (4

$Ca(C_4H_7O_2)_2 + 5H_2O$.—Colorl., monocl. need.—*Sol.* W.

Calcium Kinate.—see **Calcium Quinate**

Calcium Lactate Merck.—Pure, soluble (3

$Ca(C_3H_5O_3)_2 + 5H_2O$. — Wh., cryst. masses. — *Sol.* W., hot A.—*Uses:* Rach. & scrof. of children as syrup of calcium lactophosphate.—*Dose* 3–10 grains (0.2–0.6 Gm.), in syrup.

Calcium Lactophosphate Merck.—Soluble.—Cryst. or powd. (2

Comb. of calcium lactate & phosphate.—Wh. cryst. or powd.—Abt. 3% $Ca_3(PO_4)_2$.—*Sol.* W.—Stim. & Nutrient.—*Uses:* Rach. & cond. of malnutrit. in children.—*Dose* 3–10 grains (0.2–0.6 Gm.) 3 t. p. d.

do. Merck.—Insoluble powd. (1

do. Merck.—Paste (2

Wh., pasty mass.—*Uses:* Well adapted for manuf. of syrup calcium lactophosphate.

Calcium Malate, Acid.—see **Calcium Bimalate**

Calcium Meconate Merck

Fr. extr. opium, by a solub. calc. salt.—$CaC_7H_2O_7 + H_2O$.—Yellowish-wh. powd.—*Sol.*, v. sl. W.

Calcium Methylsulphate Merck (15

(Calcium Sulphomethylate).—$Ca(CH_3SO_4)_2$.—Wh. cryst.—*Sol.* W.

Calcium Nitrate Merck.—Pure, dry (2

$Ca(NO_3)_2$ + aq. in variable proport. — Wh., deliq. mass.—*Sol.* 0.9 W., A.—*Melt.* 44° C.—*Caut.* Keep well stoppered.

Calcium Nitrite Merck 20

$Ca(NO_2)_2 + H_2O$.—Prisms, or yellowish, brittle masses.—*Sol.* W.—*Caut.* Keep well stoppered.

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Calcium Oleate Merck (7

$Ca(C_{18}H_{33}O_2)_2$.—Whitish-yellow, gran. powd.—*Sol.* A., E., oil turpentine.

Calcium Orthotungstate.—see **Calcium Tungstate**

Calcium Oxalate Merck (2

CaC_2O_4.—Wh. mass.—***Sol.***, nitric or hydrochl. acid; insol. W.

Calcium Oxide Merck (1

(Lime; Burnt Lime).—By burning marble or limestone.—CaO.—Hard, wh. lumps; gradually crumble on expos. to air; when wet evolve heat & bec. "slaked."—*Sol.*, dil. acids; 65 G.; abt. 800 W.—Eschar.; Antacid.—*Uses: Intern.*, in solut. (as lime-water or syrup lime) to check nausea, a id stom., & rachitis.—*Extern.*, in canc. growths & ulcers, &c.—*Uses:* For making lime water.—*Caut.* Keep fr. air.

Calcium Oxide Merck.—Reagent.—From Iceland Spar (100

CaO.—Wh. pieces in the form of Iceland-spar cryst.—*Tests:* (*Solub.; H_2SO_4*) 3 Gm.+10 Cc. H_2O+15 Cc. HCl (sp. gr. 1.124)–compl. solub. without effervesc.; dil. solut. w. 50 Cc. H_2O, heat to boil., & add solut. $BaCl_2$–not more than sl. percept. but non-wghble traces ppt. ($BaSO_4$) visible.—(*H_3PO_4*) 3 Gm.+10 Cc. H_2O+25 Cc. HNO_3 (sp. gr. 1.153)+25 Cc. solut. ammon. molybd., & let stand at 30–40° C.–no yellow ppt. within 12 hrs.—(*Cl*) 3 Gm.+10 Cc. H_2O +20 Cc. HNO_3 (sp. gr. 1.153)+10 Cc. H_2O+ solut. $AgNO_3$–no turb.—(*Fe*) 1 Gm.+5 Cc. H_2O+10 Cc. HCl (sp. gr. 1.124)+0.5 Cc. solut. potass. ferrocyan.–no immed. blue color.—*Uses:* Decomp. silicates, &c.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

do. Merck.—Reagent.—From Marble (1

CaO.—Wh. pieces; gran. structure; develop great heat when sprinkled w. W., & bec. converted into fine, dust-like powd. or pasty mass accord. to quant. of W.—*Sol.*, abt. 800 cold, & 1300 boil., W.—*Tests:* (*H_2CO_3; Si; Al; H_2SO_4*) 5 Gm.+10 Cc. H_2O+30 Cc. HCl (sp. gr. 1.124)–alm. compl. solub. without strong efferv. Dil. solut. w. 20 Cc. H_2O, & filter (insol. res. after ignition should weigh at most 0.005 Gm.); *a:* add to 25 Cc. filtrate solut. $BaCl_2$–no turb. within 10 min.; *b:* add to 25 Cc. filtrate excess NH_4OH–only sl. opalesc.—(*Cl*) 1 Gm.+3 Cc. H_2O +10 Cc. HNO_3 (sp. gr. 1.153)+10 Cc. H_2O; filter; add solut. $AgNO_3$–at most sl. opalesc.—*Uses:* Decomp. silicates; detect. S, P, & Cl, in organic substances.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Calcium Oxysulphide Merck (2

Yellowish-wh. powd.—*Uses:* Wash for scrof. ulc. & scabies, in aq. 1:4 solut. (Vlemingkx's Solution).

Calcium Palmitate Merck (12

$Ca(C_{16}H_{31}O_2)_2$.—Yellowish-wh., cryst. powd.—*Sol.* A.

Calcium Permanganate Merck.—Highest Purity, Medicinal, cryst. (20

$Ca(MnO_4)_2+5H_2O$.—Violet cryst.—*Sol.* W.—*Uses: Intern.*, gastro-enter. & diar. of children.—*Extern.*, as other permanganates for mouth lotions; taste less objectionable; exceedingly powerful disinf., being 100 times more powerful than potass. permang., & exceed. even corros. subl. as antisep. Chiefly used for sterilizing water for drinking purposes; also in dentistry.—*Dose* 1–2 grains (0.06–0.12 Gm.).—*Caut.* Keep well stoppered.

Calcium Peroxide Merck (20

(Calcium Superoxide).—CaO_2+4H_2O.—Yellow, cryst. powd.—*Sol.*, sl. W. with evolution of oxygen.—*Uses:* Recom. as excellent succed. for milk-of-lime in acid dyspep. & in the summer diar. of infants.—*Dose:* For children, 3–10 grains (0.2–0.6 Gm.) according to age.

Calcium Phenate Merck.—Pure (3

(Calcium Carbolate).—$Ca(OC_6H_5)_2$.—Reddish powd.—Antisep.—*Sol.*, sl. in W. & A.—*Uses:* Disinf.; extern. & intern. antisep.—*Dose* 2–5 grains (0.12–0.3 Gm.).

do. Merck.—Crude, abt. 40% (1

Uses: Disinf., sick-room utensils, privies, &c.

Calcium Phenolsulphonate Merck (1

(Calcium Sulphocarbolate, or Sulphophenate, or Sulphophenylate).—$Ca(C_6H_5SO_4)_2+H_2O$.—Wh. cryst. or powd.—*Sol.* W.—Intest. Antisep. & Astring.—*Uses:* Cholera morbus, infect. diar., intest. ulc., &c.—*Dose* 5–15 grains (0.3–1 Gm.) in 1% aqu. solut.

Note.—This article is specially prepared to be free from the undesirable phenol & other compounds apt to be found in the ordinary preparation; its purity hence makes the use of this salt desirable to the exclusion of all others.

Calcium Phosphate Merck.—Dibasic (1

(Dicalcium Orthophosphate; Bicalcic Phosphate; Secondary Calcium Phosphate; Bibasic Calcium Phosphate).—Fr. solub. calc. salt & disod. phosph.—$Ca_2H_2(PO_4)_2+4H_2O$, or, $CaHPO_4+2H_2O$.—Wh., cryst. powd.—*Sol.*, acids; insol. W.—*Uses:* Source of phosphorus or phosphates for syst., in bone dis. (rach., osteomal., card., diffic. dentition, &c.), chlorosis, fungous inflam. of joints, &c.; also in dentistry.—*Dose* 8–30 grains (0.5–2 Gm.) several t. p. d. in powd., pills, or dissolved w. aid of acid.

do. Merck.—Pure, dry (1

Calcium Phosphate Merck.—Dibasic.—Highest Purity (1

do.—Crude (1

Abt. 36% H_3PO_4.—*Uses:* As addition to food of domestic animals.

Calcium Phosphate Merck.—Dibasic.—Reagent (7

(Secondary Calcium Phosphate; Dicalcium Phosphate). — $CaHPO_4+2H_2O$. — Wh., cryst. powd.—*Sol.*, eas. in HCl, HNO_3, or H_3PO_4, without effervesc.; diffic. in W. & in cold $C_2H_4O_2$.—*Tests:* (*As*) as detailed under calc. phosph., monobasic, using a solut. 2 Gm. $CaHPO_4$ in 5 Cc. HCl (sp. gr. 1.124) & 15 Cc. H_2O.—(*Cl*) 1 Gm.+5 Cc. HNO_3 (sp. gr. 1.153)+15 Cc. H_2O +solut. $AgNO_3$–at most sl. opalesc.—(*Heavy Met.*) 1 Gm.+5 Cc. HCl (sp. gr. 1.124)+15 Cc. +aqu. H_2S+NH_4OH (sp. gr. 0.96)–pure white ppt.—(H_2SO_4) 1 Gm.+20 Cc. H_2O; shake; filter; to filtrate add 1 Cc. HCl+solut. $BaCl_2$–no ppt. ($BaSO_4$) within 12 hrs.—(*Res.*) 100 parts ignited yield 74–75 parts res.—*Uses:* In agricultural chemistry, & as a chemical fertilizer.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Calcium Phosphate Merck.—Monobasic.—Pure, cryst. (2

(Calcium Biphosphate; Acid Calcium Phosphate; Monocalcium Orthophosphate; Monocalcic Phosphate; Primary Calcium Phosphate).—Chief constit. of so-called "Superphosphate of Lime," prod. by decomp. tricalcic (or dicalcic) phosphate w. sulphuric acid.—$Ca(H_2PO_4)_2+H_2O$.—Wh. cryst.—*Sol.* W.—*Caut.* Keep well stoppered. —*Uses:* In baking powd.

Calcium Phosphate Merck.—Monobasic.—Reagent (3

(Calcium Biphosphate; Acid Calcium Phosphate; Primary Calcium Phosphate; Monocalcium Phosphate). — $Ca(H_2PO_4)_2+H_2O$. — Colorl., pearly scales; deliq. in air.—*Sol.*, in much W.—*Tests:* (*As*) 2 Gm.+5 Cc. HCl+15 Cc. H_2O; introduce solut. into Marsh appar. started w. 10 Gm. As-free gran. Zn & dil. 1:5 H_2SO_4–no deposit in reduct. tube within 1 hr.—(*Cl*) 1 Gm. +5 Cc. HNO_3 (sp. gr. 1.153)+15 Cc. H_2O+ solut. $AgNO_3$–at most sl. opalesc.—(*Heavy Met.*) 1 Gm.+5 Cc. HCl+15 Cc. H_2O+10 Cc. NH_4-OH+aqu. H_2S–ppt. should be pure white.—*Uses:* In agricultural chemistry.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Calcium Phosphate Merck.—Tribasic (2

(Precipitated Calcium Phosphate; Tricalcium Orthophosphate; Tricalcic Phosphate; Tertiary Calcium Phosphate).—Fr. bone-ash direct.—$Ca_3(PO_4)_2$.—Light, wh., amorph. powd.; odorl.; tastel.—*Sol.*, acids; insol. W.—*Uses:* In bone dis., and disturbances of nutrition; source of phosphorus; manuf. milk-glass, polishing powd.; enameling.—*Dose* 8–20 grains (0.5–1.3 Gm.), usually w. acids.

Calcium Phosphate.—Tribasic.—Crude (1

(Bone Ash).

Calcium Phosphate Merck.—Tribasic.—Reagent (8

(Tertiary Calcium Phosphate; Tricalcium Phosphate).—$Ca_3(PO_4)_2$.—Wh., amorph. powd.—*Sol.*, eas. HCl or HNO_3 without efferves.; insol. cold W.; decomp. by boil. W.—*Tests:* (*As*) As detailed under calc. phosph., monobasic, & using solut. 2 Gm. $Ca_3(PO_4)_2$ in 5 Cc. HCl (sp. gr. 1.124) & 15 Cc. H_2O.—(H_2SO_4) 1 Gm.+20 Cc. H_2O; shake; filter; filtrate +1 Cc. HCl+solut. $BaCl_2$–no ppt. ($BaSO_4$) within 12 hrs.—(*Cl*) 1 Gm.+5 Cc. HNO_3 (sp. gr. 1.153)+15 Cc. H_2O +solut. $AgNO_3$–at most sl. opalesc.—(*Heavy Met.*) 1 Gm.+5 Cc. HCl (sp. gr. 1.124)+15 Cc. H_2O+aqu. H_2S+10 Cc. NH_4OH (sp. gr. 0.96)–pure wh. ppt.—*Uses:* Agricultural chemistry.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Calcium Phosphate, Acid.—see **Calcium Phosphate, Monobasic**

Calcium Phosphate Antimoniated Merck (3

(James's Febrile Powder).—Antimony oxide (33) & precip. calc. phosphate (67).—Dull white, gritty powd.; odorl.; tastel.—*Sol.*, boil. W. —Diaphor.; Alter.; Purg., & Emetic.—*Uses:* Acute rheum., febr. dis., &c.—*Dose* 3–8 grains (0.2–0.5 Gm.) 4 to 6 t. p. d., in pills as w. opium; larger doses purg.

Calcium Phosphate, Precipitated.—see **Calcium Phosphate**

Calcium Phosphate, Primary.—see **Calcium Phosphate, Monobasic**

Calcium Phosphate, Secondary.—see **Calcium Phosphate, Dibasic**

Calcium Phosphate, Tertiary.—see **Calcium Phosphate, Tribasic**

Calcium Phosphide Merck (8

(Photophor).—Ca_2P_2.—Gray masses; decomp. on contact with W. generat. hydrogen phosphide which takes fire in air.—*Uses:* Signal fires.

Calcium Phosphite Merck (6

$CaHPO_3+H_2O$. — Sm., wh. cryst.; evolves hydrogen phosphide w. heat.—*Sol.*, sl. W.

Calcium Phtalate Merck (20

$CaC_8H_4O_4+H_2O$.—Wh. prisms.—*Sol.* W.

Calcium Picrate

(Calcium Picronitrate).— $Ca(C_6H_2[NO_2]_3O)_2$.—Reddish-brown to yellow powd.—*Sol.* W.—*Caut.* Explosive!

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Calcium Picronitrate.—see **Calcium Picrate**

Calcium Platinochloride.—see **Platinum & Calcium Chloride**

Calcium Platinocyanide.—see **Platinum & Calcium Cyanide**

Calcium Plumbate Merck (10

$Ca(PbO_3)_2$.—Flesh-colored powd.—*Sol.*, acids.—*Uses:* Oxidizer, in pyrotechn. instead of chlorates, in matches, in manuf. of lead-calcium glass, in bleaching, & in manuf. of accumulator batteries.

Calcium Propionate Merck (40

$Ca(C_3H_5O_2)_2$.—Wh. powd.—*Sol.* W.

Calcium Pyrophosphate Merck (3

$Ca_2P_2O_7$.—Wh. powd.—*Sol.*, acids; insol. W.

Calcium Quinate Merck.—Cryst. (25

(Calcium Chinate, or Kinate).—$Ca(C_7H_{11}O_6)_2+10H_2O$.—Wh. cryst.—*Sol.* W.

Calcium Quinovate Merck (25

(Calcium Chinovate).—Wh. to yellowish powd.—*Sol.* A.—*Uses:* Tonic in dysent. & malar. fever.—*Dose* $^1/_6$–$^1/_2$ grain (0.01–0.03 Gm.).

Calcium Rhodanide.—see **Calcium Sulphocyanate**

Calcium Saccharate Merck (3

(Saccharated Lime; Calcium Bisaccharate; Antacidin).—True calc. saccharate w. sugar.—Wh., glossy scales.—*Sol.* W.; eas. in sweet. water.—Antacid; Teniaf.—*Uses: Intern.*, dyspep., flatulence, tape-worm, &c., partic. in children; antid. to carbolic acid.—*Extern.*, burns.—*Dose* 10–30 grains (0.6–2 Gm.), children abt. half as much. In carbolic-acid poisoning doses up to 10 times as much must be given.

Calcium Salicylate Merck (4

$Ca(C_6H_4.OH.COO)_2+2H_2O$.—Wh. cryst.; alkal. react.—*Sol.*, eas. in carbonated W.; v. sl. W.—*Uses:* Gastroenteritis, summer diar. of childr.—*Dose* 8–20 grains (0.5–1.3 Gm.).

Calcium Santoninate Merck (70

$Ca(C_{15}H_{19}O_4)_2$.—Wh., cryst. powd.—Insol. in W. or C.—Anthelmintic.—*Uses:* Inst. of santonin; less dangerous, being less solub.—*Dose* $^1/_2$–$1^1/_2$ grains (0.03–0.1 Gm.), in confec. or sugar.

Calcium Selenite Merck.—Pure (120

$CaSeO_3+2H_2O$.—Wh. powd.—*Sol.* W.

Calcium Silicate Merck.—Pure (3

Fr. a calcium-salt solut., w. sod. or potass. silicate.—Wh., amorph. mass.—Insol. W. & acids.

Calcium Silicofluoride Merck.—Pure (7

$CaSiF_6+2H_2O$.—Wh. powd.—*Sol.*, v. sl. W.

Calcium Stearate Merck (6

(Calcium Stearinate).—$Ca(C_{18}H_{35}O_2)_2$.—Wh., pulv. mass.—*Sol.*, hot A.; insol. W.

Calcium Succinate Merck (50

$CaC_4H_4O_4+H_2O$.—Wh. cryst.—*Sol.* W.

Calcium Sulphate Merck.—Pure, precip. (1

(Artificial Gypsum; Hydrated Calcium Sulphate).—$CaSO_4+2H_2O$.—Wh. powd.—*Uses:* Techn., as white pigment, as glaze in paper manuf., cements, artif. ivory, polishing powd., plastering wines, &c.

do.—Dried (1

(Dried Gypsum; Plaster of Paris).—$2CaSO_4+H_2O$.—Fine, wh. powd.; 95% of anhyd. calc. sulph. & 5% W.; odorl.; tastel.—*Uses:* Making plaster bandages for fractures, &c.

Calcium Sulphate Merck.—Reagent.—Precipitated (3

(Gypsum).—$CaSO_4+2H_2O$.—Fine, wh. powd.—*Sol.*, diffic. W. (abt. 1:500).—*Tests:* (*Fe; Mg; Alkalies*) warm 2 Gm.+10 Cc. HCl (sp. gr. 1.124)+100 Cc. H_2O – clear solut.; the solut.+15 Cc. NH_4OH+few drops solut. $(NH_4)HS$ – no greenish or dark color. To solut. (no matter whether $CaSO_4$ pptd. or not) add solut. $(NH_4)_2C_2O_4$ in sl. excess; filter; evap. filtrate & ignite in platin. dish – not more than 0.001 Gm. res.—*Uses:* Detect. Ba, Sr, & oxalic & tartaric acids; standardizing soap solut.

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Calcium Sulphate, Acid.—see **Calcium Bisulphate**

Calcium Sulphate, Hydrated.—see **Calcium Sulphate**

Calcium Sulphide, Crude.—see **Lime Sulphurated**

Calcium Sulphide Merck.—Reagent (3

Light, gray cubes; evolve H_2S copiously with HCl.—*Tests:* (*As*) as detailed under barium sulphide.—*Uses:* Prepar. As-free H_2S.

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do. Otto-Merck.—Reagent (3

Grayish-wh. cubes.—*Uses:* Prep. hydrogen sulphide.

Calcium Sulphide Hydrated Merck (2

CaS+aq.—Greenish-gray, pasty mass.—*Uses:* Depil.

Calcium Sulphite Merck.—Pure (1

$CaSO_3$.—Wh. powd.—*Sol.*, sulphurous acid, 20 G., 800 W.—Antisep.—*Uses:* Flatul., diar., dyspep., & tonsil.—*Dose* 1–5 grains (0.06–0.3 Gm.).

do. Merck.—Purified (1

Wh. powd.

Calcium Sulphite Merck.—Crude (1

Wh. powd.—*Uses:* Gives off sulphur diox. w. acids. Disinf. in brewing as addition to beer, as coating to insides of brewing vats, antichlor in bleaching instead of sod. sulphite in sugar manuf., as a preservative, in manuf. cellulose fr. wood fiber by Mitscherlich's process, & rendering stable solut. sulphurous acid.

Calcium Sulphocarbolate.—see **Calcium Phenolsulphonate**

Calcium Sulphocyanate Merck.—Pure (3

(Calcium Sulphocyanide, or Rhodanide).— $Ca(SCN)_2$.—Wh., cryst. powd.—*Sol.* W.

Calcium Sulphomethylate.—see **Calcium Methylsulphate**

Calcium Sulphophenate. } —see **Calcium**
Calcium Sulphophenylate. } **Phenolsulphonate**

Calcium Sulphovinate.—see **Calcium Ethylsulphate**

Calcium Sulphydrate.—see **Calcium Hydrosulphide**

Calcium Superoxide.—see **Calcium Peroxide**

Calcium Tannate Merck (4

Yellowish-gray powd.—*Sol.*, dil. acids; v. sl. W.

Calcium Tartrate Merck (4

$CaC_4H_4O_6+4H_2O$.—Wh. powd.—*Sol.*, v. sl. W.

Calcium Tartrate, Acid.—see **Calcium Bitartrate**

Calcium Thiosulphate Merck.—Cryst. (2

(Calcium Hyposulphite).—CaS_2O_3.—Wh. cryst. —*Sol.* W.—Antisep.—*Uses:* Internal antiseptic in fermentative affections of stomach & bowels. —*Dose* 3–10 grains (0.2–0.6 Gm.).

Calcium Trichlorocarbolate.—see **Calcium Trichlorophenate**

Calcium Trichlorophenate Merck (12

(Calcium Trichlorocarbolate). — $Ca(C_6H_2Cl_3O)_2+4H_2O$.—Wh., cryst. powd.—*Sol.*, sl. W. & A.

Calcium Tungstate Merck.—Cryst. (15

(Calcium Orthotungstate; Calcium Wolframate). —$CaWO_4$.—Artif. Scheelit.—Shining, tetragonal, cryst. scales.—Insol. W.—*Uses:* In varying degrees of fineness for preparing screens for taking photographs by the Röntgen rays.

do. Merck.—Precip. (7

Wh. powd.—Insol. W.—Luminous in the dark. —*Uses:* Luminous paints.

Calcium Urate Merck (30

$Ca(C_5H_3N_4O_3)_2$.—Wh. powd.—*Sol.*, v. sl. W.

Calcium Valerate Merck (15

(Calcium Valerianate). — $Ca(C_5H_9O_2)_2+3H_2O$. —Wh. to yellowish, cryst. powd.; sl. valerian odor.—*Sol.* W.

Calcium Wolframate.—see **Calcium Tungstate**

Calcium & Antimony Sulphide Merck (2

Grayish-wh. powd.—*Sol.*, partially W.— *Uses: Intern.*, in chronic metallic poisoning.—*Extern.*, in mouthwashes & washes in 1% solut.; & mixed w. W. to paste as depilatory.—*Dose* $1^1/_2$–5 grains (0.1–0.3 Gm.).

Calcium & Copper Acetate.—see **Copper & Calcium Acetate**

Calcium & Iron Lactophosphate Merck.—Soluble (8

Wh. powd.—*Sol.* 5 boil. W.—*Uses:* Rachitis & scrof.; also in prepar. syrup calc. & iron lactophos. (calc. & iron lactophos., 6 Gm., dissolve in 30 Gm. warm W., & add syrup 70 Gm.).—*Dose* 3–8 grains (0.2–0.5 Gm.), sev. t. p. d. in syrup.

Calcium & Magnesium Phosphate Merck (4

Mixt. of calcium & magnesium phosphates.— Wh. powd.—Insol. W.

Calcium & Sodium Hypophosphite Merck (2

Mixt. of hypophosphites of calcium & sodium.

Calendula.—*U. S. P.*

(Marigold; Mary-bud; Gold-bloom).—Dried, ligulate florets of Calendula officinalis, L. Compositæ.—*Habit.:* Southern Europe & Levant; cultivated everywhere in gardens.—*Etymol.:* Fr. Lat. "calendæ," the first of the month, *i.e.*, flowers bloom almost every month.—*Constit.:* Volat. oil; bitter principle; coloring matter; calendulin.—Stim.; Diaphor.; Resolv.; Vulner.; Alter.—*Uses:* Typhoid fever & carcinoma.— *Extern*, for wounds & sores.— *Techn.*, for coloring butter, & as adulterant of saffron.—*Doses:* 15–60 grains (1–4 Gm.).—Alcoh. extr., 2–6 grains (0.12–0.36 Gm.).—Fld. extr., 15–60 ♏ (1–4 Cc.); *extern.*, pure or diluted, as appl. to sores, bruises, &c.—Tinct., 20–90 ♏ (1.3–6 Cc.).

Cali

(Pseudo-calabar Bean; Horse-eye Beans; Breadnut Berry).—Nut fr. Mucuna urens, D. C., Papilionaceæ.—*Habit.:* Western Africa; tropical America.—*Etymol.:* "Cali" is the West African commercial name of the nut.—*Constit.:* Pseudophysostigmine.—*Uses:* Sialag.; Myotic; Purgat.

Calliandra.—see **Pambotano**

Calliandrein

Glucoside (probably a saponin), fr. Calliandra grandiflora, a Mexican shrub.—Wh., odorl. powd. —*Sol.* W.; the solut. foams on being shaken. —Antipyretic.—*Uses:* Intermit. fever.—*Dose* 1 grain (0.06 Gm.).

Calluna

(Heather; Dog-heather; Scotch Heather; Herba Ericæ).—Whole plant Calluna vulgaris, Salisb. (Erica vulgaris L.). Ericaceæ.—*Habit.:* Europe; natur. in New England.—*Etymol.:* Fr. Grk. "kallos," beautiful, "kallyno," to adorn oneself. "Erica," fr. Grk. "ereikein," to break, as the

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plant is very fragile.—*Constit.:* Ericin(?); ericolin, $C_{34}H_{56}O_{21}$(?); callunatannic acid; arbutin; quercetin.—*Uses:* Nephrolithiasis.

Calomel.—see **Mercury Chloride, Mild**

Calomelol (15

(Colloidal, or Soluble, Calomel).—Whitish-gray, odorl., tastel. powd.—*Sol.* A., E., B., W., affording milky solutions.—80% HgCl & 20% albuminoids.—Antisyphil.—*Uses:* In syphilit. ulcers as dusting powd.; 2% dressing; & as 45% oint. by inunction in syphil. in quant. of 60–90 grains (4–6 Gm.).

Calumba.—*U. S. P.*

(Colombo). — Root of Jateorhiza palmata (Lamarck) Miers. Menispermaceæ. — *Habit.:* Eastern Africa.—*Etymol.:* "Kalumb" is the native African name, "colombo," the Ceylonese name; the habitat of the plant was supposed to be originally Ceylon. "Jateorhiza" fr. Grk. "iater," healing, & "rhiza," root, referring to its medicinal virtues. "Palmata" fr. Lat. "palmatus," palm of the hand, *i.e.*, the lvs. are palmately-lobed.—*Constit.:* Columbin, $C_{21}H_{22}O_7$; berberin, $C_{20}H_{17}NO_4+4H_2O$; columbic acid, $C_{21}H_{22}O_6+H_2O$; columbine(?); cholesterin; mucilage.—Tonic; Astring. in diar.; Stomach.; Stim.; Antisep.; Disinf.; Anthelm.—*Uses:* Dyspep., debil., flatulence, &c.—*Doses:* 5–60 grains (0.3–4 Gm.).—Alcoh. extr., (dry) 2–10 grains (0.12–0.6 Gm.); (soft) 4–20 grains (0.25–1.3 Gm.).— Fld. extr., 15–60 ♏ (1–4 Cc.).—Tinct., 1–4 fl. dr. (4–15 Cc.).

Calycanthus

(Florida Allspice). — Bark of Calycanthus floridus, L. Calycanthaceæ.—*Habit.:* N. & S. Carolina.—*Constit.:* Volat. oil; resin; tannin.—Antiper.; Tonic.—*Uses:* Malar. affect. & to increase appetite.—*Dose:* Fld. extr., 30–60 ♏ (2–4 Cc.).

Camara

(Bahama Tea; Wild Sage [Jamaica], Camabará). —Dried plant of Lantana spinosa, L. Verbenaceæ.—*Habit.:* Brazil; West Indies.—*Etymol.:* "Camara" is the South American name of the plant.—*Constit.:* Volat. oil.—*Uses:* Expector.; Diuret.; also in arom. baths.

Cambogia.—see **Gamboge**

Camellin Merck (2500

Glucoside fr. seeds Camellia japonica, L.—$C_{53}H_{84}O_{19}$.—Reddish-wh., bitter powd.—*Sol.* W. —Cardiac Stim.—*Uses:* Rec. in endocarditis & pericarditis inst. of digitalin.

Campani's Reagent.—For glucose

Mixt. of concent. solut. lead acetate w. a dil. aqu. solut. cupric acetate.—Is reduced by glucose, but not by cane sugar.

Camphol.—see **Borneol**

Campho-Menthol.—*N. F.*

Mixt. eq. parts camphor & menthol.

Camphor.—*U. S. P.* (2

(Gum Camphor; Formosa Camphor; Japan Camphor; Laurel Camphor).—Dextrogyrate modific. of the saturated ketone, $C_9H_{16}CO$, fr. Cinnamomum (Laurus, Linné) Camphora, Nees & Ebermaier, Lauraceæ, & purif. by sublim.—*Habit.:* China; Japan; Formosa, & other tropical & subtropical countries.—*Etymol.:* Fr. the Arabic "káfur," derived fr. the Malay "kápúr," chalk-like. Under the name "káfur," or "kámfur," the substance was first traded in by the Arabs. — Wh., transl. masses w. numerous cracks; easily broken, but diffic. to powd. —*Sol.* A., E., C., CS_2, benzin. & fixed & volat. oils; sl. in W.—*Melt.* 175° C.—*Boil.* 204° C.—Sp. Gr. 0.990 at 25° C.—Stim.; Diaph.; Sed.; Expector., & Carmin.—*Uses: Intern.*, in nerv. diar., flatul., colic, headache, rheum., gout, chordee, spasm, cough, asthma, &c.—*Extern.*, in neural., toothache, indol. ulc., paras. skin dis., coryza, &c.—*Techn.*, manuf. of celluloid; moth destroyer; tooth powd.; embalming; pyrotechn.; lacquers. —*Doses:* 1–3 grains (0.06–0.2 Gm.) stim.; 8–12 grains (0.5–0.8 Gm.) sedat.—*Max. D.* 20 grains (1.3 Gm.).—*Inj.*, subcut. in 1:10 oily or ether. solut. as analeptic.—*Extern.*, in 1–2% oint. or dust. powd.; f. inhal. in coryza, teaspoonf. to cup of boil. W.—*Incomp.*, butyl-chloral hydrate, carbolic acid, hydrated chloral, euphorin, menthol, naphthol, resorcinol, salol, salicylic acid, thymol, or urethane, in dry trituration; potass. permang. Camphor water is incompatible w. concentrated solutions of salts.—*Antid.*, emetics, followed by castor oil.

Camphor, Alant.—see **Helenin**

Camphor, Artificial.—see **Terpene Hydrochloride**

Camphor, Baras.—see **Borneol**

Camphor Benzoated Merck (10

Mixt. benzoic acid & camphor.—Wh. powd.—*Sol.* A., E., C.—Antiseptic.—*Uses: Extern.*, inst. of camphor & benzoic acid.

Camphor, Bitter-almond-oil.—see **Benzoïn**

Camphor, Borneo.—see **Borneol**

Camphor, Bromated or *Brominated.*—see **Camphor Monobromated**

Camphor, Cantharides.—see **Cantharidin**

Camphor, Carbolated.—see **Camphor Phenolated**

Camphor Chlorated Merck (30

(Monochlorated Camphor).—$C_{10}H_{15}ClO$.—Yellowish-wh., cryst. powd.—*Sol.* A., E.—*Melt.* 106° C.

Camphor Citrated Merck (8

Mixt. of citric acid & camphor.—Wh. powd.—Antisep.; Antispasm.; Stim.—*Uses:* Flatulence, colic, diar., rheum., & spasmodic cough.—*Dose* 3–10 grains (0.2–0.6 Gm.) several t. p. d.

Camphor Dibromated Merck (25

(Betadibromocamphor). — Fr. mono-(or fr. alphadi-)bromocamphor. — $C_{10}H_{14}Br_2O$. — Wh.

to yellowish cryst.—*Sol.* A., E.—*Melt.* 115° C. —Antiseptic.

Camphor, Elecampane. } —see **Helenin**
Camphor, Inula. }

Camphor, Malayan.—see **Borneol**

Camphor Monobromated Merck. — **Cryst. or powd.** (3

(Bromated, or Brominated, Camphor; Bromcamphor, Bromocamphor).—Fr. bromine & camphor by heat.—$C_{10}H_{15}BrO$.—Colorl. prismat. cryst.; camphor. odor & taste.—*Sol.* A., E., C., volat. & fixed oils, B.; sl. G.; alm. insol. W.—*Melt.* 76°C.—*Boil.* 274°C.—Sopor.; Antineural.; Antispasm.—*Uses:* Delir. trem., hyst., insom., spermator., convuls. irrit. of dentit., chordee; infant. diar.,whoop.-cough, epilepsy, neural.,&c., with codeine for morphine habit.—*Dose* 2–5 grains (0.12–0.3 Gm.) several t. p. d., in pill or emulsion.—*Inj.* $1^1/_2$ grains (0.1 Gm.) in oil.

Camphor Monochlorated.—see **Camphor Chlorated**

Camphor, Peppermint.—see **Menthol**

Camphor Phenolated Merck (7

(Carbolated Camphor; Camphorated Phenol).—Mixt. eq. wts. camphor & carbolic acid.—Colorl. to faintly-yellow, oily liq.; arom. odor.—*Sol.* A., E., C., fatty oils; insol. W.—Antisep.; Antiprur.; Local Anesth.; Carmin.—*Uses: Intern.,* dyspep., flatul., &c.—*Extern.,* toothache, neural., furunc., &c. Hypoderm., first prod. burn. sensation, then anesthesia.—*Dose* 5–10 ♏ (0.3–0.6 Cc.), in caps.—*Appl.* 50% oily solut.

Camphor Salicylated Merck (10

44% salicylic acid & 56% camphor.—Wh. powd. —*Sol.,* oils, A. — Antisep.; Astring. — *Uses: Intern.,* diar.—*Extern.,* oint. in lupus & o. skin dis.—*Dose* 1–5 grains (0.06–0.3 Gm.).

Camphor, Sumatra.—see **Borneol**

Camphor, Tonka-bean.—see **Cumarin**

Camphor Valerated Merck (20

Mixt. camphor & valeric acid.—Colorl. to yellowish liq.—*Sol.* A.—Sed.; Antisep.—*Uses:* Hyst. & o. nerv. affect.—*Dose* 1–5 grains (0.06–0.3 Gm.).

Camphoric Anhydride.—see **(Acid) Camphoric Anhydride**

Canada Snake-root.—see **Asarum Canadense**

Canadian Hemp.—see **Apocynum**

Canadian Moonseed.—see **Menispermum**

Canadine

Fr. rhizome Hydrastis canadensis, L.—$C_{21}H_{21}NO_4$.—Wh., somew. glossy, need.-like cryst.—*Sol.* A.—*Melt.* 132.5° C.

Canadine Hydrochloride Merck

$C_{21}H_{21}NO_4.HCl$.—Wh. cryst.—*Sol.* A.; v. sl. W. —Without action on the uterus.

Canadol Merck (1

(Kandol; Very Light Petroleum Ether; Light Ligroin).—Fr. petroleum, princip. normal hexane.—V. light, colorl. liq.—Sp. Gr. 0.650–0.700. —Local Anesthetic.—*Uses:* Sciatica, rheum., &c., in form of spray; in pharmacy, & techn., as solvent.

Canarium.—see **Elemi**

Canary Seed.—see **Phalaris**

Canchalagua

Dried plant of Erythræa chilensis, Pers. Gentianaceæ.—*Habit.:* Peru; Chili.—*Etymol.:* "Canchalagua" is the South American name of the plant.—*Constit.:* Bitter principle; fixed oil; erythrocentaurin (?).—*Uses:* Tonic; Febrif.; Emmen.

Candleberry.—see **Myrica Cerifera**

Canella

(White Cinnamon; False Winter's Bark; Wild Cinnamon; Bahama White Wood; Wild Canilla). —Bark of Canella alba, Murray. Magnoliaceæ. —*Habit.:* West Indies & Florida.—*Etymol.:* Spanish "canela," cinnamon, fr. Grk. "kanna," or Lat. "canna," a reed, or "canalis," a channel or tube, *i.e.,* fr. the appearance of the bark.—Bark occurs as quills 6–24 in. long, abt. $^1/_8$ in. thick; pale orange-yellow extern., yellowish-white inner surface; acrid, peppery taste; arom. clove-like odor.—*Constit.:* Ether. oil (cont. eugenol); resin; canellin.—Aromat.; Stomachic. —*Uses:* Debil. condit. of digest. organs, scurvy, &c. Also as spice, & as an addition to smoking tobacco.—*Doses:* 10–60 grains (0.6–4 Gm.).—Fld. extr., 15–60 ♏ (1–4 Cc.).

Cangoura

Seed of Rourea oblongifolia, var. floribunda, Hooker & Arnott. Connaraceæ.—*Habit.:* San Salvador.—*Etymol.:* Fr. "rourele," which, according to Aublet, is the Guiana name of the plant.—*Constit.:* A toxic substance (alkaloid?) said to develop symptoms like those of rabies.

Canker Lettuce.—see **Pyrola**

Canna

(Common Canna; Indian Shot; Tous-les-Mois). —Root of Canna indica, L. Scitamineæ.—*Habit.:* Europe; widely distributed in tropics. —*Etymol.:* Fr. Celtic "can," Grk. "kanna," a reed.—*Constit.:* Chiefly starch.—Diuret.—*Uses: Extern.,* in cutan. dis.—*Techn.,* source of starch.

Cannabin (Resinoid) Merck. — (*Not* Cannabine) (120

Fr. Cannabis sativa, L., var. indica (Indian Hemp).—Greenish-black, extr.-like mass.—*Sol.* A., E.—Hypn.; Narcot.; Analg., & Aphrod.—*Uses:* Hyst., delir. trem., neural., insom., gout, rheum., mental depres., insanity, &c.—*Dose* $^1/_4$–1 grain (0.015–0.06 Gm.).

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Cannabindon

Fr. Cannabis sativa, L., var. indica.—$C_8H_{12}O$.—Dark, cherry-red syrup.—*Sol.* A., E., C., B.—Nar.; Hypn.; Aphrod.—*Uses:* Causes sleep & intoxication w. hallucinations.—*Dose* $^1/_3$–1 ♏ (0.02–0.06 Cc.).

Cannabine (Alkaloid) Merck.—(*Not* Cannabin)

Fr. Cannabis sativa, L., var. indica.—Dark-brown, viscid mass; narcotic odor; alkal. react.—*Sol.* A., E., C.—Hypn., without dangerous second. effects.—*Dose* $1^1/_2$–4 grains (0.1–0.25 Gm.).

Cannabine Tannate Merck (50

Fr. aqu. extr. Cannabis sativa, L., var. indica.—Brownish powd.; sl'y bitter, & str. astring. taste.—*Sol.*, alkal. W. or A.; v. sl. W. or A.—Hypn.; Sed.—*Uses:* Hyst., delir., nerv. insomnia, &c.—*Dose* 8–15 grains (0.5–1 Gm.) at bedtime, in powd. w. sugar.—*Max. D.* 15 grains (1 Gm.) single; 30 grains (2 Gm.) p. day.

Cannabinine.—Liquid.—Pure

Fr. Cannabis sativa, L., var. indica.—Yellowish to brownish, syrupy liq.; odor similar to that of nicotine.—*Sol.* E.—Hypn.; Sed.—*Uses:* Produces sleep in insom. of hyst. & epilepsy.

Cannabinon Merck (30

Balsamic resin fr. fl. tops Cannabis sativa, L., var. indica.—Dark-brown, sticky mass; v. disagr. taste.—*Sol.*, benzin, A., C., E., oils; insol. W.—Hypn.—*Uses:* Hyst. & insanity.—*Dose* $^1/_2$–$1^1/_2$ grains (0.03–0.1 Gm.), grad. increased, once p. d., in powd. coffee & sugar; women half as much.—*Max. D.* 3 grains (0.2 Gm.) single; 6 grains (0.36 Gm.) daily.

do. Merck.—10% Trituration (8

Cannabis Indica.—*U. S. P.*

(Indian Hemp; Indian Cannabis).—Dried flowering tops of pistillate plants of Cannabis sativa, L. Moraceæ, gathered while yet undeveloped, & carrying the whole of their natural resin.—*Habit.:* Persia; East India; cultiv. in Europe, Asia, & Western U. S.—*Etymol.:* Grk. "kannabis," fr. "kanna," cane, derived fr. Celtic "can," reed, & "ab," small; or "ganeh," its Arabic name. Lat. "sativa," fr. "sativus," cultivated.—*Constit.:* Volat. oil; bitter principle; cannabin; cannabinon; oxycannabin(?); tetanocannabin(?); choline; trigonelline; muscarine.—Hypnot.; Diuret.; Intoxicant; Anodyne; Nervine; Sudorific; Aphrodis.—*Uses:* Headache, summer diar., anorexia, neural., rheum., gout, chorea, hyster., mental depress., delir. tremens, uterine hemorrhage, &c.—*Doses:* 2–5 grains (0.12–0.3 Gm.).—*Max. D.* 8 grains (0.5 Gm.) single, & 30 grains (2 Gm.) daily.—Alcoh. extr., $^1/_4$–2 grains (0.015–0.12 Gm.); *Max. D.* 2 grains (0.12 Gm.) single, 5 grains (0.3 Gm.) p. d.; *Extern.*, in oint. & linim. (1:100) in local rheum., neuralgic, or inflammatory pains.—Fld. extr., 3–10 ♏ (0.2–0.6 Cc.).—Fatty extr. (a solut. of hashishin-Sée in butter, contain. the active constituents of Cannabis indica in finest subdivision, & hence exceedingly active), 1 grain (0.06 Gm.) per day; $1^1/_2$ grains (0.1 Gm.) cause cannabis intoxication.—Tinct. 5–20 ♏ (0.3–1.3 Cc.); *Max. D.* 30 ♏ (2 Cc.) single, 120 ♏ (8 Cc.) per day.—*Antid.*, emetics, lemon juice, tannin, coffee, ammonia, atropine, strychnine, artificial respiration, spirit nitrous ether, electricity.

Cannabis Seed

(Fructus Cannabis).—Fruit of Cannabis sativa, L. Moraceæ.—*Habit.:* Asia; now widely cultiv. (N. America, Europe, Brazil, &c.).—*Etymol.:* As preceding.—Achenes, abt. $^1/_8$ in. (3 Mm.) long, roundish, smooth, & greenish; sweetish, oily taste.—*Constit.:* Fixed oil; resin.—*Uses:* Emuls. of seeds used in gonor. Chiefly used as bird food.

Cantharides.—*U. S. P.*

(Spanish Fly; Blistering Fly; Blistering Beetle).—The beetle, Cantharis (Lytta) vesicatoria, De Geer, Coleoptera, Meloidæ.—*Habit.:* Southern & Central Europe, mainly upon Oleaceæ & Caprifoliaceæ.—*Etymol.:* Lat. "cantharis," fr. Grk. "kantharis," the classic name for the Spanish-fly, and for an insect destructive to corn. "Vesicatoria," fr. Lat. "vesica," a blister.—Abt. 1 in. long & $^1/_4$ in. broad, flattish-cylindrical body; obtusely triangular head; membranous, brownish wings covered by shining, copper-green wing-cases; strong, disagr. odor; acrid taste. The powder is grayish-brown, with shining green particles.—*Constit.:* Cantharidin (0.4–0.7%); fat; odorous compound.—Diuret.; Aphrodis.; Emmen.; Rubefac.; Vesic.; Stim.—*Uses:* Chiefly as a blister, & in hair-washes. Also in veter. practice.—*Doses:* $^1/_2$–2 grains (0.03–0.12 Gm.), as diuret., aphrodis., &c.; large doses narcotic & irrit.—Ethereal & fld. extr. are used as vesicants.—Tinct., 3–10 ♏ (0.2–0.6 Cc.).—*Extern.*, in oint., plaster, &c.—*In Veter. Med.:* Dose for cattle, 30–75 grains (2–5 Gm.); horses, 8–30 grains (0.5–2 Gm.); sheep & pigs, 3–8 grains (0.2–0.5 Gm.); dogs, 1–3 grains (0.06–0.2 Gm.); cats, $^1/_6$–1 grain (0.01–0.06 Gm.).—*Antid.*, stomach pump; emetics; demulcents (*not* oils); morphine; stim.; warm baths; cataplasms to abdomen.

Cantharidin Merck (1026

(Lactone of Cantharidic Acid; Cantharides Camphor).—Act. prin. fr. Cantharis vesicatoria. De Geer.—$C_{10}H_{12}O_4$, or, $C_8H_{12}O{:}(CO)_2{:}O$, or, $CH_2.CH_2.CH.CH_2.CO.O.CH_2.CH_2.CH.CO.CO$(?).—Colorl., cryst. scales; blister the skin.—*Sol.* A., B., E., C., carbon disulph.—*Melt.* 218°C.—Stim.; Vesic.; Antituberc.; Aphrodis.—*Uses:* In lupus & tuberculosis; also cystitis.—*Dose:* Teaspoonful of 1:100,000 hydro-alcoholic solut. 3 or 4 t. p. d.—*Inj.*, in form of potass. cantharidinate, 3–6 ♏ (0.2–0.36 Cc.) of solut. 1:5000 several t. p. week.—*Max. D.* $^1/_{100}$ grain

(0.0006 Gm.).—*Antid.*, emetics, stomach pump, mucilaginous drinks, ice, camphor, & opium; *avoid* fats & oils.—*Caut.* Poison!

Caoutchouc.—see **Rubber**

Capparis.—see **Simulo**

Capronitrile.—see **Amyl Cyanide**

Capronyl Chloride Merck (350

$C_6H_{11}OCl$.—Colorl. liq.—*Boil.* 135–140° C.

Caproyl Hydride.—see **Hexane**

Capryl Acetate Normal Merck (75

$C_{10}H_{20}O_2$, or, $C_8H_{17}.C_2H_3O_2$.—Transp., colorl. liq.—*Sol.* A.—Sp. Gr. 0.8847 at 0° C.—*Boil.* 210° C.

Caprylene Merck (110

(Normal Octylene; Octene).—Secondary octyl alc. by anhyd. zinc chloride w. heat.—C_8H_{16}.—Colorl. liq.; rather str. odor.—Sp. Gr. 0.722 at 17° C.—*Boil.* 123° C.

Capsella

(Shepherd's Purse; Blind-weed).—Dried plant of Capsella Bursa pastoris, Moench. Cruciferæ.—*Habit.:* Europe; natur. in U. S.—*Etymol.:* "Capsella," dim. of Lat. "capsa," a box. Lat. "bursa," purse, & "pastor," shepherd, because the lvs. have the form of a shepherd's purse.—*Constit.:* Bursin; saponin(?); bursinic acid; tannin.—Hemost.; Febrif.; Diuret.; Antiscorbutic; Stim.; Astring.—*Uses:* Amenor., scurvy, dropsy, hemorrhages.—*Doses:* 15–60 grains (1–4 Gm.) in powd.—Fld. extr., as antiscorbutic, 15–30 ♏ (1–2 Cc.); in hemorrhage, 75–150 ♏ (5–10 Cc.); *Max. D.* 4 fl. dr. (15 Cc.) single, 1 fld. oz. (30 Cc.) per day.—Tinct. 30–60 ♏ (2–4 Cc.).

Capsicin Merck (20

Oleoresin fr. Capsicum annuum.—Soft, reddish-brown masses.—*Sol.* A., E.—Stim.; Rubef.; Anod.—*Uses: Intern.*, promote digestion.—*Extern.*, revulsive; relieve pain.—*Dose* $^1/_{10}$–$^1/_4$ grain (0.006–0.015 Gm.) 3 or more t. p. d. in pills.—*Appl.*, in olive oil, or petrolatum.—Also used to impart a pungent taste to brandy, & vinegar (for mixed pickles).

Capsicum.—*U. S. P.*

(Cayenne Pepper; African Pepper; Chillies; Bird Pepper).—Dried, ripe fruit of Capsicum fastigiatum, Blume. Solanaceæ.—*Habit.:* Southern India; extensively cultivated in tropical America & Africa.—*Etymol.*. Fr. Lat. "capsa" (Grk. "kapsa"), a box, or capsule, *i.e.*, the seeds are contained in one. Or, fr. Grk. "kapto," to bite, *i.e.*, the fruit has a hot, pungent taste. "Fastigiatum," fr. Lat. "fastigiatus," tapering, referring to the shape of the fruit.—*Constit.:* Fixed oils; capsaicin, $C_9H_{14}O_2$; capsacutin, $C_{35}H_{54}N_3O_7$; capsicin; capsicol; capsicine (volat. alkaloid[?]); fixed oil; oleic, stearic, & palmitic acids; coloring matter.—Stim.; Stomach.; Rubef.; Diaphor.; also as Condiment.—*Uses: Intern.*, diar., dyspep., palsy, sore throat, gastric inactivity of malaria, atonic gout, colic, alcoholism, &c.—*Extern.*, in rheum., neural., lumbago, &c.—*Doses:* 1–8 grains (0.06–0.5 Gm.).—Extr. $^1/_{10}$–$^1/_2$ grain (0.006–0.03 Gm.); *Extern.*, in alcoh. solut. in rheum., neural., lumbago, &c.—Fld. extr., 1–3 ♏ (0.06–0.2 Cc.).—Tinct., 15–30 ♏ (1–2 Cc.).

Caramel

(Sugar Coloring; Burnt Sugar).—Brown substc. fr. sugar, by heat.—Dark brown mass, or semi-solid; bitter taste; deliq.—*Sol.* W.—*Uses:* Coloring liquors, confectionery, &c.

Caraway.—see **Carum**

Carbamidated Quinine Dihydrochloride.—see **Quinine & Urea Hydrochloride**

Carbamide.—see **Urea**

Carbamidine Carbonate.—see **Guanidine Carbonate**

Carbanilide.—see **Diphenylurea**

Carbanilide Chloride.—see **Diphenylurea Chloride**

Carbazole Merck.—Cryst. (15

(Diphenylimide; Imidodiphenyl).—Fr. aniline by dissociation, or from crude anthracene.—$C_{12}H_9N$, or, $H.C_6.NH.C_6H_4$.—Wh. to reddish-wh. cryst.—*Sol.* A., toluene, sulphuric acid.—*Melt.* 238° C.—*Boil.* 338° C.

Carbenia.—see **Cnicus**

Carbol-Fuchsine.—see **Ziehl-Neelson's Carbol-Fuchsine**

Carbon Bichloride.—see **Carbon Dichloride**

Carbon Bisulphide.—see **Carbon Disulphide**

Carbon Chloride, Julin's.—see **Benzene, Perchloro-**

Carbon Dichloride Merck (60

(Carbon Bichloride; Tetrachlorethene; Tetrachlorethylene; Perchlorethylene).—Fr. carbon trichloride (C_2Cl_6) by dissociation.—C_2Cl_4, or, $CCl_2:CCl_2$.—Colorl. liq.; ether. odor.—Sp. Gr. 1.619 at 20° C.—*Boil.* 121–122° C.

Carbon Dioxide.—see **Acid Carbonic, Liquefied**

Carbon Disulphide Merck.—Highly Purified (1

(Carbon Bisulphide).—CS_2.—H'ly refract., clear, colorl., inflam. liq.; str., pecul. odor; sharp, arom. taste.—Sp. Gr. 1.270–1.272 at 15° C.; (1.256–1.257 at 25° C.–U. S. P.).—*Sol.* A., E., C., fixed & volat. oils.—*Boil.* 46–47° C.—Antisep.; Counter-irrit.; Local Anesth.—*Uses:* Chiefly techn.—*Intern.*, diar., gastric cancer, dyspep., &c.—*Extern.*, counter-irrit. in enl. lymph. glands, in rheum., neural., &c.—*Techn.*, as solvent of fats, resins, & oils fr. seeds & oil cake, for dissolv. sulphur & phosphorus in manuf. matches, in varnishes & lacquers, preservative, destroying insects, burning out vats & barrels, driving

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machinery, manuf. various chem. compounds for photographic & galvanoplastic purposes, filling glass prisms, &c.—*Dose* 3–10 ♏ (0.2–0.6 Cc.), in milk or mucilage.—*Caut.* Keep cool & well stoppered. Highly inflammable!

Carbon Disulphide Merck.—Deodorized (1

do.—Commercial (1

Carbon Disulphide Merck.—Reagent (2

CS_2.—Clear, colorl., neutr. liq.—Sp. Gr. 1.270–1.272.—*Boil.* 46–47° C.—*Tests:* (*Res.*) evap. 50 Cc. on W.-bath – none wghble.—(*H_2S; o. Foreign Organ. S Compounds*) *a:* shake 10 Cc. w. lead carbonate – latter not colored brown; *b:* shake 2 Cc. w. a globule metal. mercury – bright surface of latter should not be covered w. dark pulver. coating.—(*H_2SO_4; H_2SO_3*) shake 10 Cc. w. 5 Cc. H_2O – latter should not redden or decolorize blue litmus paper.—*Uses:* Organ. synthesis, principally as solvent.

Note. — For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Carbon Hexachloride.—see **Carbon Trichloride**

Carbon, Mineral.—see **Graphite**

Carbon Tetrachloride Merck (2

(Tetrachloromethane; Perchloromethane).—Fr. carbon disulph. & chlorine gas by heat.—CCl_4.—Heavy, colorl. fluid; agre., arom. odor.—Sp. Gr. 1.632 at 0° C.—*Sol.* A., E.; insol. W.—*Boil.* 77° C.—Local Anesth.—*Uses:* Tic douloureux, dysmenor., &c., & in dental techn.—*Techn.*, as non-inflammable substit. for benzin for cleansing, & as solvent for fatty lakes, caoutchouc, resins, nitrocellulose, &c.; for exterminating destructive insects in wheat, &c.; manuf. of rubber goods, extracting oil fr. seed, dissolving out fat fr. bones, wool, & polishing rags; manuf. of sulphocarbonates & xanthogenates of the alkalies; manuf. of viscin; solvent for alkali cellulose, &c.

do. Merck.—Highest Purity, free fr. sulphur (2

Carbon Trichloride Merck (30

(Hexachlorethane; Perchlorethane; Carbon Hexachloride; Tetrachlorethylenedichloride).—Fr. chlorine w. ethyl & ethylene chlorides in sunshine. — C_2Cl_6, or, $CCl_3.CCl_3$. — Colorl. cryst.; camphor. odor.—*Sol.* A., E.—*Melt.* 184° C.

Carbonic Anhydride.—see **Acid Carbonic, Liquefied**

Carborundum Merck (10

Cryst. silicon carbide, SiC.—Fr. coke & sand in electric furnace.—Exceedingly hard cryst. (9.5); hardness between that of sapphire & of diamond.—Sp. Gr. 3.23 at 15° C.—*Uses:* Polishing & sharpening; ahradant; 3–4 times more effective than corundum; instead of ferrosilicon in iron & steel industries; in manuf. porcelain, polishing granite, smoothing bisque ware, manuf. "emery" paper, polishing glass, &c.

Carbothialdine Merck (40

(Diethideneammonium Thiocarbamate; Diethylidene Dithiocarbamate).—Fr. carbon disulph., by alcoh. solut. aldehyde amm.—$C_5H_{10}N_2S_2$, or, $NH_2.CS.SN(CH.CH_3)_2$.—Yellowish-red cryst.—*Sol.*, in acids; sl. in A.

Cardamom.—*U. S. P.*

Dried, nearly ripe fruit of Elettaria repens (Sonnerat) Baillon, (E. Cardamomum, Maton). Zingiberaceæ.—*Habit.:* Malabar; cult. in India & Ceylon.—*Etymol.:* Fr. Grk. "kardia," heart, & "amomos," spice, *i.e.*, noble spice. "Repens," fr. Lat. "repo," to creep, *i.e.*, the stem inclines to creep on the ground.—*Constit.:* Resin; fixed and volat. oils; albuminoids; manganese.—Stomachic; Carmin.; Stim.; Aromat.; Condiment; Spice.—*Doses:* 5–15 grains (0.3–1 Gm.) in powd.—Fld. extr., 10–30 ♏ (0.6–2 Cc.).—Comp. fld. extr. (cardamom, cinnamon, caraway, & cochineal), 15–60 ♏ (1–4 Cc.).

Cardol Merck.—Pruriginous (10

Non-volat. oil fr. Anacardium orientale, & fr. Semecarpus Anacardium, L. fil.—Dark-brown, oily liq.—*Sol.* A., E.—Rubef.

do. Merck.—Vesicatory (11

Fr. Anacardium occidentale.—Oily, yellow or dark-brown liq.—Sp. Gr., abt. 0.978.—*Sol.* A., E. — *Uses:* Vesicant. For touching granulations, warts, corns, &c. Have skin dry; does not act when moist.—*Techn.*, in indelible inks; the written characters are moistened w. lime-water.—*Caut.* Use not free from danger.

Carduus.—see **Cnicus**

Carduus Marianus

(St. Mary's Thistle; Milk Thistle; Mary Thistle). Seed of Silybum Marianum Gaertner (Carduus marianus, L.). Compositæ.—*Habit.:* Central Europe.—*Etymol.:* Fr. Lat. "carduus," spiny, fr. the Celtic "ard," a point. "Marianus," fr. "Maria," whose milk, according to a legend, is said to have fallen on the lvs. of the plant.—*Constit.:* Fixed oil; tannin.—*Uses:* Jaundice & other hepatic affect.; also in hemorrhage & retention of menses.—*Dose:* Aqu. extr., 5 grains (0.3 Gm.) several t. p. d.

Carex

(Sand Sedge; Sand-star; Red Couch Grass; German Sarsaparilla).—Rhizome of Carex arenaria, L. Cyperaceæ.—*Habit.:* Europe; advent. in U. S.—*Etymol.:* Lat. "carere," to be absent, wanting, *i.e.*, the seeds are absent in the upper ears, because these are usually male in character.—*Constit.:* Volat. oil; resin.—Diuret.; Aper.; Alter., like sarsaparilla.

Carica Papaya.—see **Papaw**

Carlina

(Carline Thistle; Ground Thistle).—Root of

Carlina acaulis, L. Compositæ.—*Habit.:* Europe. —*Etymol.:* According to some, the plant was named for Charlemagne; according to others, for Charles V.; most probably, however, "carlina" is derived fr. the Italian "cardina," a small thistle.—*Constit.:* Volat. oil; tannin; resin. —Diuret.; Febrif.; Emmen.; large doses Purgat. —The root must not be confounded w. a very similar root fr. the south-Italian Atractylis gummifera (masticogna), which is very poisonous.—*Dose* 10–20 grains (0.6–1.3 Gm.).

Carlsbad Salt.—see **Salt, Carlsbad**

Carmine Merck.—Naccarat, I.—Pure, lumps (25

Pigment fr. dried female of Coccus cacti, L. (Cochineal).—*Constit.:* Carminic acid, alumina, lime & org. acids.—Sm., brill.-red lumps.—*Sol.*, in W. in presence of amm. or o. caustic alkalies, alkali carbonates, & borax; also acidulated W. —*Uses:* Dye, in microscopy, inks, & as indicator.

do. Merck.—Naccarat, II.—Pure, lumps (20

do.—Solution.—*N. F.*

Fr. 65 Gm. carmine, 365 Cc. ammon. water, & 365 Cc. glyc. w. W. to make 1000 Cc.

Carmine Merck.—Reagent.—Naccarat (30

Bright-red, light pieces; v. friable, & reducib. to fine powd.—*Sol.* NH_4OH; insol. W. & dil. acids. —*Tests:* (*Solub.*) 0.15 Gm. alm. compl. sol. in 5 Cc. NH_4OH (sp. gr. 0.96)+20 Cc. H_2O (solut. has violet-red color); only few flocks should remain.—(*Ash*) cautiously incin. 0.25 Gm. in porcel. crucib. – not more than 0.02 Gm. ash (observe odor during incinerat.; Br indicates pres. of eosine lakes; phenol indicates pres. of pæonin lakes).—*Uses:* Stain in microscopy; also indicator—the red ammoniacal solut. becomes yellowish-red on addition of acids.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Carmine, Acid Alcoholic.—see **Grenacher's,** or **Mayer's, Alcoholic Acid Carmine**

Carmine-Fibrin Grützner-Merck (25

Fr. blood fibrin by ammoniacal solut. carmine. —Dark, cherry-red, crumbly mass.—Swells up in 0.1% HCl without dissolving; if pepsin present, however, dissolves, and more or less rapidly in proport. to quant. or strength of pepsin, the solut. then acquiring a red color.—*Uses:* Estimating pepsin by observing red color developed in solutions & comparing w. standard color solutions.

Carmine Oxalate.—see **Thiersch's Carmine Oxalate**

Carmine Paper

Wh. paper impregn. w. an ammoniacal solut. carmine & dried.—Indicator for acids (yellowish-red color) & alkalies (purplish-red color).

Carnauba

(Brazilian Wax Palm).—Root of Copernicia (Corypha) cerifera, (Arruda) Mart. Palmæ.—*Habit.:* Brazil; Pernambuco.—*Etymol.:* "Carnauba" is the Brazilian name of the plant. "Copernicia," fr. Copernicus, in whose honor the plant was named. "Cerifera" fr. Lat. "cera," wax, & "ferre," to bear, *i.e.*, wax-bearing or yielding.—*Constit.:* Volat. oil; alkaloid; tannin; coloring matter; resin.—Diuret.; Blood Purifier, like sarsaparilla.

Carnauba Wax (1

(Brazil Wax).—Exudation fr. upper surface of lvs. of the wax palm, Copernicia (Corypha) cerifera, Mart. Palmæ.—*Habit.:* Brazil.—Hard, amorph., light-yellow to pale, dirty, greenish lumps; brittle & pulverizable; semi-resinous fracture & charact. polish; pecul. agre. odor. —*Sol.* E.; boil. A., hot oil turp.—*Melt.* 84–86° C.—Sp. Gr. 0.995–1.000 at 15° C.—*Constit.:* Myricyl alcohol, $C_{30}H_{61}.OH$; cerotinic acid; cerotinic-acid myricyl ester, $C_{27}H_{53}O_2.C_{30}H_{61}$.—*Uses: Techn.*, as a substit. for beeswax; wax varnishes; candles, &c.

Carniferrin

(Iron Phosphosarcolactate).—Tastel. powd.—*Sol.*, dil. acids & alkal.—Readily absorbable chalybeate nutritive.—*Uses:* Anemia, chlorosis, &c.—*Dose:* Adults, 8 grains (0.5 Gm.) 3 t. p. d.; children, 3–5 grains (0.2–0.3 Gm.) daily.

Carnine Merck (4000

Fr. meat extr.—$C_7H_8N_4O_3+H_2O$.—Wh. powd. —*Sol.*, v. sl. W.

Carnine Hydrochloride Merck (4000

$C_7H_8N_4O_3HCl$.—Fine, wh. need.—*Sol.* W.

Carnotine.—see **Primuline Yellow**

Carnoy's Alcohol-Acetic Acid

Mixt. 1 vol. glacial acetic acid & 3 vol. absol. alcohol.—*Uses:* Fixing animal organisms, sections, &c., before staining, particularly w. hematoxylin.

Caro's Reagent

Satur. solut. potass. persulphate in concen. sulphuric acid. With this reag. aniline may be directly converted into nitrobenzene (reversed Zinin reaction, *i.e.*, the conversion of nitro- into amido- groups).

Carob.—see **Jacaranda**

Carpaine Merck.—Pure, cryst. (12000

Alkaloid fr. lvs. of Carica Papaya, L. (Tropical melon-tree).—$C_{14}H_{25}NO_2$.—Wh. cryst.—*Sol.* A., E., C., amyl alcohol, B.—*Melt.* 119–120° C.—Cardiac Tonic, Diuret., &c., like digitalis.—*Uses, Doses, &c.:* As of the hydrochloride.

Carpaine Hydrochloride Merck (12000

$C_{14}H_{25}NO_2.HCl$.—Wh., bitter cryst.—*Sol.* W.—Card. Tonic; Diuret., &c., like digitalis.—

Uses: Mitral insufficiency & aortic stenosis.—*Dose:* Daily $^1/_6$–$^1/_3$ grain (0.01–0.02 Gm.).—*Inj.* $^1/_{10}$–$^1/_6$ grain (0.006–0.01 Gm.) per day.

Carpené's Reagent.—For tannin in wine

Satur. solut. zinc acetate in dil. ammonia water.—Precipitates tannin, but not gallic acid; ppt. insol. in W., NH_4OH, & zinc-acetate solut.

Carragheen.—see **Chondrus**

Carthagena Bark.—see **Cinchona Carthagena**

Carthamin Merck.—Highest Purity, scales (800

(Carthamic Acid; Safflor-carmine; Safflor-red).—Coloring prin. fr. Carthamus tinctorius, Willd. (Safflower). — $C_{14}H_{16}O_7$. — Dark-red scales or powd.—*Sol.*, dil. alkali carbonates; solut's rapidly decomp.—*Uses:* Dye.

do. Merck.—Pure, powd. (600

Carthamus

(Safflower; African Saffron; Thistle Saffron; American Saffron; False or Bastard Saffron; Dyer's Saffron).—Florets of Carthamus tinctorius, L. Compositæ.—*Habit.:* Levant; Orient; cultiv. extensively in Europe & America.—*Etymol.:* Fr. Arabic "quartama," pigment, or "kartham," to dye red.—*Constit.:* Carthamin (carthamic acid, $C_{14}H_{16}O_7$); safflor-yellow.—Diaphor.; Astring.; Emmen.—*Uses:* Hasten eruption in measles, scarlet fever, &c.—*Techn.*, in dyeing; surrogate for Spanish saffron; color for cosmetics.—*Doses:* 60–120 grains (4–8 Gm.) in infus.—Fld. extr., 15–60 ♏ (1–4 Cc.).

Carum.—*U. S. P.*

(Caraway).—Dried fruit of Carum Carvi, L. Umbelliferæ.—*Habit.:* Europe; Central & Western Asia; cultiv. in England, Russia, U. S., &c.—*Etymol.:* Lat. "careum," fr. Grk. "karon," after Caria, in Asia Minor, its original habitat. "Carvi" Lat. for "carvey," fr. Arab. "karawya," Eng. caraway.—*Constit.:* Volat. & fatty oils; resin; sugar; tannin; mucilage.—Carmin.; Stim.; Diuret.; Stomachic.—*Uses:* Particularly for infants in flatulent colic; also as spice in cakes, &c.—*Doses:* 10–30 grains (0.6–2 Gm.).—Fld. extr., 10–30 ♏ (0.6–2 Cc.).

Carum Copticum.—see **Ajowan**

Carvacrol Merck (30

(Oxycymol; Betacymophenol). — Constit. of oils of Cretan Origanum, thyme, & summer savory.—$C_{10}H_{14}O$, or, $C_6H_3.CH_3[1].(CH_3)_2CH[4].OH[2]$.—Colorl. liq.—Sp. Gr. 0.981 at 15° C.—*Boil.* 236–237° C.—Odor like thyme.—*Uses:* Perfumery.

Carvol.—see **Oil Caraway, Extra Strong**

Caryophyllin

Constit. of cloves.—$C_{20}H_{32}O_2$.—Stellate groups silky need.—*Sol.*, boil. alkal.; sl. in A.—*Subl.*, abt. 285° C.

Caryophyllus.—*U. S. P.*

(Cloves).—Dried flower-buds of Eugenia aromatica, Kuntze. (E. caryophyllata, Thunb.; Caryophyllus aromaticus, L.) Myrtaceæ.—*Habit.:* Molucca Islands, Zanzibar, Sumatra, S. America, W. Indies, &c.—*Etymol.:* Fr. Grk. "eu," well, & "genes," born, or race (plant was named for Prince Eugene of Savoy); Caryophyllus, fr. Grk. "karyon," nut, & "phyllon," leaf (fr. appearance of dried flowers).—*Constit.:* Ethereal oil; eugenol, $C_6H_3.OCH_3.OH$; caryophyllin, $C_{20}H_{32}O_2$; tannin; gum; resin (tasteless).—Stim.; Stomach., Carmin., & Antiemet.—*Uses:* Flatul. colic, dyspep., & to arrest vomiting.—*Techn.*, manuf. oil cloves, eugenol, vanillin, chocolate; also in baking.—The inspis. aqu. extr. is employed for clearing corneal opacities, a solut. being instilled twice daily at intervals of 5–10 minutes.—*Doses:* 5–10 grains (0.3–0.6 Gm.).—Fld. extr., 5–10 ♏ (0.3–0.6 Cc.).

Casca Bark.—see **Sassy Bark**

Cascara Amarga

(Honduras Bark).—Bark of Picramnia pentandra, Sw. (P. antidesma, Sieb. [?]). Simarubaceæ—*Habit.:* West Indies; Mexico.—*Etymol.:* Fr. Spanish "cascara" & "amarga," bitter bark (fr. the bitter taste of bark); "picramnia," fr. Grk. "pikros," bitter; & "antidesma," fr. Grk. "anti," against, & "desma," band, (the inner bark is used).—Extern. bark is $^1/_{25}$–$^1/_8$ in. (1–3 Mm.) thick, brownish-gray, striated, w. numerous longit. fissures; intern. bark is $^1/_8$–$^1/_6$ in. (3–4 Mm.) thick, deep-brown, hard & firm, bitter, and shows numerous white spots in section; commercial bark usually deprived of its outer bark.—*Constit.:* Picramnine.—Tonic; Alter.—*Uses:* Constit. syphilis, chron. eczema, & chron. nephritis.—*Doses:* 30–60 grains (2–4 Gm.).—Fld. extr., 30–60 ♏ (2–4 Cc.).—Powd. extr. (1:5), 5–10 grains (0.3–0.6 Gm.).

Cascara Sagrada.—*U. S. P.*

(Sacred Bark; Chittem, Chittam, or Chittim Bark; Purshiana Bark; Persian Bark; Bearberry; Bearwood).—Bark of Rhamnus Purshiana, De C. Rhamnaceæ.—*Habit.:* Northern Idaho, west to Northern California.—*Etymol.:* Fr. Spanish "cascara," bark, & "sagrada," sacred; Rhamnus, fr. Grk. "rhamnos," buckthorn, & "Purshiana," fr. the botanist, Frederick Pursh (1774–1820). — The bark loses its emetic properties on being kept for 1 year.—*Constit.: Bark*, Emodin, $C_{15}H_{10}O_5$; frangulin, $C_{21}H_{20}O_9$; 3 resins; tannin; purshianin; cascarin; chrysarobin; chrysophanic acid; fixed and volat. oils.—*Berries:* Frangulin, rhamnin, and rhamnocathartin.—Purg.; Tonic; Febr.—*Uses:* Chron. constip.; w. more potent remed. in rheumat.—*Berries* are diuret. & laxat.—*Doses:* 30–120 grains (2–8 Gm.) in powd.—Fld. extr., 30–120 ♏ (2–8 Cc.).—Hydro-alcoh. extr., dry, 2–10 grains (0.12–0.6 Gm.).—Hydro-alcoh

extr., soft, 5–15 grains (0.3–1 Gm.).—Tinct., 10–60 ♏ (0.6–4 Cc.).

Cascarilla.—*U. S. P.*

(Eleuthera Bark; Sweet-wood Bark).—Bark of Croton Eluteria, Bennett, Euphorbiaceæ.—*Habit.:* Bahama Islands; Cuba; Hayti.—*Etymol.:* "Cascarilla" is the dimin. of "cascara," Spanish for bark; "croton" fr. Grk. "kroton," dog-tick, fr. resemblance of seeds; "Eleuthera" is one of the Bahama Islands.—Broken quills or curved pieces up to 4 in. (100 Mm.) long, abt. $^1/_{12}$ in. (2 Mm.) thick; grayish, corky layer, tissue dull-brown; inner surface smooth; fract. short and resinous; warm, bitter taste.—*Constit.:* Volat. oil (1.6%); cascarillin, $C_{12}H_{18}O_4$; resin (15%); tannin; betaine.—Stim.; Tonic; Febrif.—*Uses:* Interm. fevers, dyspep., chronic diar., colic, &c.; also as an addition to smoking tobacco for flavoring.—*Doses:* 10–40 grains (0.6–2.6 Gm.); large doses are emetic.—Alcoh. extr., 2–6 grains (0.12–0.36 Gm.).—Fld. extr., 15–40 ♏ (1–2.6 Cc.).—Aqu. extr., 8–24 grains (0.5–1.5 Gm.).

Casein Merck.—Commercial (1

Albuminoid fr. milk.—Wh. to yellowish gran. powd.—*Sol.*, alkal.—*Uses:* Food (cheese).—*Techn.*, in leather industr., binder in dyes for paper, substitute for linseed oil in paints & for glue in cabinet making, substitute for albumin, varnish, & shellac; lakes, celluloid, gums, & gelatin; manuf. films, substitute for horn & hard rubber, &c.

do. Hammarsten-Merck (15

Albuminoid fr. milk.

do. Ritthausen-Merck.—From plants (75

(Vegetable Casein).—Chiefly legumin & alkali albuminate.

Casein-Ammonia.—see **Eucasin**

Casein, Plant.—see **Legumin**

Casein, Serum.—see **Globulin, Para-**

Casein-Sodium.—see **Nutrose**

Casein, Vegetable.—see **Casein, from Plants; Legumin**

Cassava Starch.—see **Tapioca**

Cassel's Green.—see **Barium Manganate**

Cassia Buds

Unripe, dried fruit of Cinnamomum aromaticum, Nees, & other sp. of Cinnamomum. Laurineæ. *Habit.:* China.—*Etymol.:* "Cassia" fr. Grk. "kasia," perfume, or fr. Hebrew "quetsioth, quatsa," to peel off (the bark). See also Cinnamon, Cassia.—Buds resemble cloves in appearance, but are smaller; nail-like shape, with round heads; brown color; cinnamon-like odor; pungent taste.—*Constit.:* Volat. oil; tannin.—*Uses:* Arom. & condiment, like cinnamon bark.

Cassia Fistula.—*U. S. P.*

(Purging Cassia; Drumstick; Indian Laburnum; Pudding-Pipe; Pudding-Stick).—Dried fruit of Cassia Fistula, L. (Cathartocarpus Fistula, Persoon). Leguminosæ.—*Habit.:* Upper Egypt; E. India; cultiv. in tropical America & Africa.—*Etymol.:* Grk. "kasia," perfume, or fr. Hebrew "quetsioth, quatsa," to peel off (the bark). Dioscorides used the term "kassia" to designate the bark of Laurus Cassia. "Fistula," fr. Lat. "fistula," a tube, pipe, or cane. "Cathartocarpus," fr. Grk. "kathartikos," purging, & "karpos," fruit.—Cylindrical, 16–24 inches long, abt. 1 in. diam.; blackish-brown; divided intern. transversely into numerous cells, each containing a reddish-brown, glossy seed imbedded in a blackish-brown sweet pulp; prune-like odor.—*Constit.:* Pulp contains sugar (abt. 60%); gum; tannin; albuminoids.—Lax.; Cath. Given as confect. of senna.—*Dose* 1–2 dr. (4–8 Gm.) lax.; 1–2 oz. (30–60 Gm.) cath.

Cassius' Purple.—see **Gold-Tin Purple**

Castanea

(Chestnut).—Lvs. of Castanea dentata (C. vesca Gaert., var. Americana), Sudworth.—*Habit.:* North America (Maine to Florida, west to Ont., Mich. & Arkansas.—*Etymol.:* Fr. Grk. "Kastanon," an ancient town in Thessaly; "dentata" fr. Lat. "dens," tooth, *i.e.*, the lvs. are dentate; "vesca" fr. Lat. "vescus," edible.—*Constit.:* Tannin; gum; albumin; resin.—Tonic; Astring.; Mild Sed.—*Uses:* Popular remedy in whoop.-cough.—*Dose* 30–120 grains (2–8 Gm.).—Fld. extr., 30–120 ♏ (2–8 Cc.).

Castor

(Beaver, Canadian & Siberian).—Dried preputial follicles, with their secretions, of the common beaver, Castor Fiber, L. Rodentia.—*Habit.:* Northern hemisphere, betw. 33 & 68° north latitude.—*Etymol.:* Fr. Grk. "kastor," the beaver.—Follicles in pairs, ea. abt. 3 inches long & 1–4 oz. in weight, club-shaped, wrinkled, brown or blackish; contents brown, hard, friable; peculiar odor; acrid, nauseous, bitter taste, Siberian (Russian) castor somewhat larger than the Canadian castor. Alcohol dissolves abt. one-half.—*Constit.:* Ethereal oil (abt. 2%); resin (14–50%); castorin; salicin; cholesterin; benzoic acid; salicylic acid.—Stim.; Antispasm.; Emmen.—*Uses:* Especially as nervine in hysteria, chorea, & epilepsy.—*Dose* 2–15 grains (0.12–1 Gm.) several t. p. d.

Castor Bean.—see **Ricinus**

Catechin Merck (25

(Catechuic, or Catechinic, Acid).—Fr. catechu.—$C_{21}H_{20}O_9 + 5H_2O$ (Liebermann & Tauchert).—Amorph., yellow powd.—*Sol.* W., A., acetic ether, alkalies.—*Uses:* Techn., as a dye, & in tanning.

Catechol.—see **Pyrocatechin**

Catechu

(Cutch; Black Catechu; Pegu Catechu; Terra Japonica; Cashoo).—Extr. prepared fr. wood of Acacia Catechu (L. fil.), Willd., (& A. Suma, Kurz). Leguminosæ. — *Habit.:* India; Hindustan; Ceylon; natur. in Jamaica.—*Etymol.:* Fr. East Indian name of the tree, "cate," & "chu," juice. Or, "kutch," "cutt," the East Indian for the juice of the tree, & applied to all astring. extr. — Irregular masses, containing fragments of lvs.; dark-brown, brittle, somewh. porous & glossy when freshly broken; nearly inodorous; strongly astring. & sweetish taste.—*Constit.:* Catechutannic acid, 25–48%; 2–10% catechin (catechuin, or catechinic or catechuic acid, $C_{18}H_{18}O_8$); catechu red; quercetin; gum.—Strong. Astr.; Mild Tonic. — *Uses: Medic.*, diarrh., gonor., leucor., gleet, hemor., irrit. coughs, spongy gums, &c.—*Techn.*, in tanning; dyeing fabrics brown & black.—Also in toilet preparations (mouth washes, powd., gargles, &c.).—*Doses:* 5–30 grains (0.3–2 Gm.). —Aqu. extr., 5–20 grains (0.3–1.3 Gm.).—Fld. extr., 10–30 ♏ (0.6–2 Cc.).—Comp. tinct. (catechu & cassia cinnamon), 30–180 ♏ (2–12 Cc.).

Catechu Brown

(Metaphenylenedisazobiamidobenzeneazometaphenylenediamine Hydrochloride). — Diazo compound fr. Bismarck Brown and phenylenediamine.—$C_{30}H_{31}N_{14}Cl_3$.—Dark-brown powd. —*Sol.* W., A.—*Uses:* Tanning & dyeing cotton & silk.

Cathartin.—see **Acid Cathartic**

Catmint.
Catnip (or *-nep*). } —see **Nepeta**

Caulophyllin (Eclectic) (10

Resinoid fr. root Caulophyllum thalictroides, Mich. (Blue Cohosh).—Brown powd.—*Sol.* A.—Diur.; Diaph.; Anthelm.; Emmen.—*Uses:* Parturit. Claimed to have direct influence on uterus.—*Dose* $^1/_2$–4 grains (0.03–0.25 Gm.).

Caulophyllum

(Blue Cohosh; Squaw Root).—Rhizome & roots of Caulophyllum thalictroides, Mich. (Leontice thalictroides, L.). Berberideæ.—*Habit.:* Canada to North Carolina, Missouri & Nebraska; Japan. —*Etymol.:* Fr. Grk. "kaulos," stalk or stem, & "phyllon," leaf, *i.e.*, the lvs. terminate in a manner to give them the appearance of being a continuation of the stem.—*Constit.:* Leontin; caulophylline; saponin; 2 resins, &c.—Diuret.; Emmen.; Demulc.; Diaphor.; Antispasm. — *Uses:* Amenor., dropsy, colic, epilepsy, cramp, & parturition.—*Doses:* Alcoh. extr., 2–5 grains (0.12–0.3 Gm.).—Fld. extr., 10–30 ♏ (0.6–2 Cc.).

Cayaponia

(Purga do Gentio).—Fruit of Cayaponia caboclea, Mars, or C. globulosa, Silva Manso. Cucurbitaceæ.—*Habit.:* South America (Brazil). —*Etymol.:* Both "cayaponia" & "caboclea" are of Brazilian origin, being the aboriginal names of the plants.—*Constit.:* Cayaponine = elaterin (Peckolt).—Drast. Purg.; Powerful Emmen.—*Uses:* Chron. cutaneous dis.

Cayenne Pepper.—see **Capsicum**

Cay Note.—see **Ephedra**

Ceanothin (Eclectic)

Fr. Ceanothus americanus, L. (New Jersey Tea). — Brown powd.—Purg.; Alter. — *Uses:* Syph., dysent., & sore throat.—*Dose* 1–2 grains (0.06–0.12 Gm.).

Cebu.
Cebur. } —see **Tagulaway**

Cedrin Merck.—Cryst. (7000

Bitter prin. fr. seeds Simaba Cedron, Planch.—Colorl. cryst.; bitter taste.—*Sol.* A., C.; sl. W.— —Antiper.—*Uses:* Rec. intermit. fever.—*Doses* of $^1/_{15}$ grain (0.004 Gm.) hypoderm. cause dizziness.

Cedron Seeds.—see **Simaba**

Cedrus

(Cedar).—Wood of Cedrus Libani, Barr. (Larix Cedrus, Mill.). Coniferæ.—*Habit.:* Asia Minor. —*Etymol.:* Grk. "kedros," cedar, fr. "kaiein," to burn, referring to the use of the wood as an incense or for fumigating.—*Constit.:* Volat. oil; resin.—*Uses:* Source of cedar oil.

Celandine.—see **Chelidonium**

Celastrine

(Katrine). — Fr. Celastrus edulis, Vahl. — Minute, wh. cryst.—Stim.—*Uses:* As of coca.

Celastrus

(Staff Tree; False Bittersweet; Waxwork; Fevertwig).—Bark of Celastrus scandens, L. Celastraceæ.—*Habit.:* Ontario to Manitoba, & south to North Carolina & N. Mexico.—*Etymol.:* Fr. "kelastros," the Grk. name for an evergreen tree. Lat. "scandens," climbing, referring to the plant's habit of twining about trees, or each other, & ascending to a considerable height.—*Constit.:* Celastrine; 2 resins; volat. oil; starch; gum; coloring matter.—Diuret.; Diaphor.; Alter.—*Uses:* Domestic practice, dropsy, & febrile condit.; induces perspiration.—*Dose:* Fld. extr., 30–60 ♏ (2–4 Cc.).

Celery.—see **Apium**

Celloidin.—Shreds (18

20% pure pyroxylin. — Tough, gelat. tablets, chips, or shreds; sl. milky-wh. transp.—*Sol.*, all prop., A., E.—*Uses:* Imbedding sections in microscopy; also in electrotechn., photography, (celloidin paper), galvanoplasty, &c.

Cellotropin

(Monobenzoyl-arbutin). — $OC_5H_{11}O_5.C_6H_4.OC_6H_5CO$.—Wh. powd., or fine need.; odorl.; tastel. —*Sol.* 80 W. at 100° C.; 1300 W. at 15° C.; 1800 W. at 9° C.; eas. A.; insol. E., B., C.—

Melt. 184.5° C.—*Uses:* Tuberc., scrof.—*Dose* 5–8 grains (0.3–0.5 Gm.).

Celluloid

(Zylonite).—Substc. prep. fr. gun cotton & camphor.—Colorl., amorph. mass.—Softens in boil. W.—*Uses:* Techn.; elastic material for manuf. various useful articles (toilet requisites), &c.; in electrotechn., photogr., galvanoplasty, &c.; also in surgery, for bandages.

Centaurea

(Blue Bottle; Bachelor's Buttons; Corn Centaury; French Pink; Flores Cyani; Corn Flower).—Flowers of Centaurea Cyanus, L. Compositæ.—*Habit.:* Europe; cultiv. in gardens, & natur. in U. S.—*Etymol.:* Fr. Grk. "kyanos," deep blue, referring to the color of the flower. Centaurea fr. Grk. "Kentauros," Centaur, for whom the plant was named.—*Constit.:* Anthocyan; tannin.—Diuret.; Febrif.; also as addition to fumigating powds., &c.

Centaury.—see **Erythrea**

Cephaeline Merck

Accompanies emetine in ipecac.—$C_{14}H_{20}NO_2$.—Snow-wh., fine, interlacing need.; rapidly turn yellow.—*Sol.* E., caustic soda.—*Melt.* 96–102° C. (Paul & Cownley).

Cephaeline Hydrochloride Paul-Merck (4000

$C_{14}H_{20}NO_2.HCl$.—Amorph., wh. to yellowish powd.—*Sol.* W. & A.—Much more eas. affected by light than emetine hydrochloride.—*Melt.* 96–98° C. (fr. ether); 102° C. when pptd. by NH_3.—*Uses:* Preferable to emetine as emetic.—*Dose* $^1/_{12}$–$^1/_6$ grain (0.005–0.01 Gm.).

Cephaelis.—see **Ipecac**

Cephalanthus

(Button Bush; Buttonwood).—Bark of Cephalanthus occidentalis, L. Rubiaceæ.—*Habit.:* Canada to Florida and California.—*Etymol.:* Fr. Grk. "kephalos," head, and "anthos," flower, referring to the spherical flowers. "Occidentalis" refers to the occurrence of the plant in the Western Hemisphere.—*Constit.*. Cephalanthin; cephaletin; cephalin; resins; tannin.—Antiper.; Antipyr.—*Uses:* Domestic practice & malarial fever.—*Dose:* Fld. extr., 30–60 ♏ (2–4 Cc.).

Cerasin (Eclectic) (15

(Prunin).—Fr. tincture Prunus serotina, Ehrhart (Wild Cherry).—Brown powd.—*Sol.* A.—Bitter Tonic; Sed.; Expector.—*Uses:* Cough in phth., bronch., & colds; gen'l debil., & palpit. of heart.—*Dose* 2–10 grains (0.12–0.6 Gm.).

Cerasin from Gum

(Metarabic, or Metagummic, Acid).—Fr. gum arabic by heat. Native in cherry & beet gums.—Wh., insipid powd.

Cerberid.—see **Cerberin**

Cerberin Merck (5000

(Cerberid).—Glucoside fr. fruit of Thevetia Yccotli, De C. — $C_{25}H_{38}O_{12}$. — Yellowish-wh., amorph., bitter powd.—*Sol.*, hot W., dil. A.—Cardiac Tonic, like digitalin.—*Uses:* Heart dis.—*Dose* $^1/_{250}$–$^1/_{60}$ grain (0.00025–0.001 Gm.).

Cercis

(Judas Tree; Red Bud).—Bark of Cercis canadensis, L. Cæsalpiniaceæ.—*Habit.:* Ontario & eastern U. S.—*Etymol.:* "Cercis," Grk. "kerkis," is the ancient name of the Old World Judas Tree. "Canadensis" refers to its habitat.—Astring.—*Uses:* Diar., dysen., leucor., & gleet.—*Dose:* Fld. extr., 15–60 ♏ (1–4 Cc.).

Cerebrin Merck (1000

Nitrogenous, phosphorus-free proximate principle from brain substance (*not* a so-called "animal extract").—$C_{80}H_{160}N_2O_{15}$ (Parcus).—Yellowish-wh., cryst. powd.—*Sol.* C., B., hot A. & hot glac. acetic acid; dil. alkalies; sl. in E., & in acetone; swells up in hot W.—*N. B.* Not a medicament! Possesses only physiological interest (see protagon).

Cerebrum Merck.—Dried, powdered (30

Defatted and dried gray brain substance of calves.—1 part = 5 parts of the fresh organ.—*Uses:* Neurasthenia, chorea, agoraphobia, psychoses, &c.—*Dose* 30–60 grains (2–4 Gm.) p. d.

Cerefolium.—see **Anthriscus**

Ceresin.—see **Paraffin, Hard**

Ceresin.—White

(Ozokerite; Earth Wax; Mineral Wax; Cerosin; Cerin).—Ozokerite purified by treat. w. conc. sulphuric acid & filtration through bone-black.—*Habit.:* Galicia; Baku; Utah; Tex.—*Etymol.:* Fr. Lat. "cera," wax. "Ozokerite" fr. Grk. "ozein," to smell, & "keros," wax.—Wh., waxy cakes; odorl.; tastel.; fracture very much like that of white wax.—*Melt.* 74–80° C.—Sp. Gr. 0.92–0.94.—*Sol.*, abt. 35 absol. A.; also B., C., hot oils; insol. in W.; very stable toward oxid'g agents; non-saponifiable.—*Constit.:* Ceresin is a hydrocarbon of complex compos.—*Uses:* Substit. for white wax; size; candles; making bottles for holding hydrofluoric acid.

do.—Yellow

Partly purified ozokerite.—*Habit. & Etymol.:* As of preceding.—Yellow, wax-like cakes or lumps; faint odor; tastel.; very stable toward oxid'g agents.—*Sol.* B., C., hot oils.—*Melt.* 75–85° C.—Sp. Gr. 0.85–0.95.—*Constit.:* Ceresin is a hydrocarbon of complex compos.—*Uses:* Substit. for wax; size; candles.

Cereus

(Night-blooming Cereus; Large-flowered Cereus).—Branches & flowers of Cereus (Cactus) grandiflorus, Miller. Cacteæ.—*Habit.:* Tropical America.—*Etymol.:* "Cereus" fr. Lat. "cera," wax, referring to the resemblance of some species

to the shape of a wax candle. "Grandiflorus" fr. Lat. "grandis," great, & "florus," flowered, *i.e.*, affording large flowers.—*Constit.:* Cactine; acrid, resinous glucoside; resins; fat; wax, &c.—Card. Stim.; Diuret.—*Uses:* In low fevers & in funct. & organ. dis. of heart; dropsy; hemoptysis; threatened apoplexy. Said to be devoid of cumul. action. — *Doses:* Fld. extr., 2–10 ♏ (0.12–0.6 Cc.).—Tinct., 5–20 ♏ (0.3–1.3 Cc.).—*Max. D.* 30 ♏ (2 Cc.) every 4 hrs.

Cerin.—see **Acid Cerotic; Ceresin, White & Yellow**

Cerise DN Merck (6

Impure fuchsine (containing some phosphine). —*Uses: Techn.*, dyeing wool, silk, & leather.

Cerium Merck.—Fused & powder (4000

Etymol.: Named by Hisinger & Berzelius in honor of the planet Ceres, which was discovered in 1801, at the time element was discovered.—Metal.—Ce.—Iron color; pieces are ductile & mall.—Sp. Gr. 6.728 at 15° C.—Tarnishes in moist air.

Cerium Acetate Merck (15

(Cerous Acetate).—$Ce_2(C_2H_3O_2)_6$.—Wh. to reddish-wh., cryst. powd.; contains traces of lanthanum & didymium.—*Sol.* W., A.

Cerium Benzoate Merck (20

(Cerous Benzoate).—$Ce_2(C_7H_5O_2)_6$.—Wh. to reddish-wh. powd.; contains traces of lanthanum & didymium.—*Sol.*, hot W., & hot A.

Cerium Bromate Merck (100

(Cerous Bromate).—$Ce_2(BrO_3)_6.18H_2O$.—Reddish-wh., cryst. mass; contains traces of lanthanum & didymium.—*Sol.*, eas. W.

Cerium Bromide Merck (25

(Cerous Bromide).—$Ce_2Br_6.14H_2O$.—Reddish-wh. cryst.; contains traces of lanthanum & didymium.—*Sol.* A.; sl. in W.—*Caut.* Keep well stoppered.

Cerium Carbonate Merck (10

(Cerous Carbonate).—$Ce_2(CO_3)_3.5H_2O$.—Light, wh. powd.; contains traces of lanthanum & didymium.—*Sol.*, dil. mineral acids; insol. W.

Cerium Chloride Merck (5

(Cerous Chloride).—$Ce_2Cl_6.14H_2O$.—Reddish-wh. cryst.; contains traces of lanthanum & didymium.—*Sol.*, v. eas. W. & A.

do.—Highest Purity (100

Colorl., transp. cryst.; free fr. other earths.—*Sol.*, v. eas. W. & A.—*Uses:* Incandescent lighting.

Cerium Citrate Merck (12

(Cerous Citrate).—$Ce(C_6H_5O_7)$.—Wh. powd.; contains traces of lanthanum & didymium.—*Sol.*, dil. mineral acids; insol. W.

Cerium Dioxide.—see **Cerium Oxide**

Cerium Hypophosphite Merck (25

(Cerous Hypophosphite).—$Ce_2(PH_2O_2)_6.2H_2O$. —Wh. to reddish-wh. powd.; contains traces of lanthanum & didymium.—*Sol.*, dil. mineral acids. —*Uses:* Recom. in phth.

Cerium Iodide Merck (20

(Cerous Iodide).—$Ce_2I_6.18H_2O$.—Reddish-wh. cryst.; contains traces of lanthanum & didymium; decomposes readily w. separation of iodine. —*Sol.*, v. eas. W., A.—*Caut.* Keep well closed.

Cerium Lactate Merck (15

(Cerous Lactate).—$Ce(C_3H_5O_3)_3$(?).—Wh. to reddish-wh. powd.; contains traces of lanthanum & didymium.—*Sol.*, diffic. W.

Cerium Malate Merck (10

(Cerous Malate).—$Ce_2(C_4H_4O_5)_3$.—Wh. to reddish-wh. powd.; contains traces of lanthanum & didymium.—*Sol.* W.

Cerium Nitrate Merck.—Cerous (4

$Ce_2(NO_3)_6.12H_2O$.—Reddish-wh. cryst.; cont. traces of lanthanum & didymium.—*Sol.*, eas. W. & A.

do.—Highest Purity (30

Colorl., transp. cryst.; free fr. other earths.—*Sol.* W. & A.—*Uses:* 1% cerous nitrate w. 99% thorium nitrate used in manuf. of incandescent mantles.

Cerium Oxalate Merck.—Pure (1

(Cerous Oxalate).—$Ce_2(C_2O_4)_3.9H_2O$.—Alm. wh., cryst. powd.; odorl.; tastel.—*Sol.*, dil. sulphuric acid, or hydrochl. acid; insol. W., A., E., alkalies.—Sed.; Nerve Tonic.—*Uses:* Vomit. of pregn., seasickn., epilepsy, migr., chronic diar., tabes, cardialgia & hyst.—*Techn.*, for isolating various elements of cerium group (Ce, La, Nd, Pr.).—*Dose* 1–5 grains (0.06–0.3 Gm.) several t. p. d.—*Max. D.* 5 grains (0.3 Gm.) single; 15 grains (1 Gm.) p. d.

Cerium Oxide Merck.—Pure (100

(Cerium Dioxide; Ceric Oxide).—CeO_2.—Pale yellow, heavy powd.; free fr. o. earths.—Insol. dil. acids; decomp. by heating w. conc. H_2SO_4.

do. Merck.—Commercial (8

Rust-colored powd.; cont. considerable traces La_2O_3, Nd_2O_3, Pr_2O_3, or PrO_2.—*Sol.*, hot nitric or sulphuric acid; insol. W.—*Uses:* Techn., as cerium oxalate; in chem. analysis for detection of strychnine (Sonnenschein's test).

Cerium Platinocyanide.—see **Platinum & Cerium Cyanide**

Cerium Salicylate Merck (12

(Cerous Salicylate).—$Ce_2(C_7H_5O_3)_6$.—Wh. to reddish-wh. powd.—Insol. W.

Cerium Sulphate Merck.—Ceric (10

$Ce(SO_4)_2.4H_2O$.—Reddish-yellow cryst. — *Sol.*, sl. W. & dil. sulphuric acid; w. much W. decomposes w. separation of basic salt. — *Uses:* Photo. as reducer; also for quantitative determ. nitrous acid.

do. Merck.—Cerous (6

$Ce_2(SO_4)_3.8H_2O$.—Sm. pink cryst.—*Sol.*, sl. W. —*Uses:* Develop. aniline black. Said to be superior to vanadium.

Cerium Valerate Merck (15

(Cerous Valerate).—$Ce_2(C_5H_9O_2)_6$.—Wh. to reddish-wh. powd.—*Sol.*, diffic. W.

Cerium & Ammonium Nitrate Merck.—Ceric (40

$Ce(NO_3)_4.2NH_4NO_3$.—Sm., orange-red, prismat. cryst.—Free fr. o. earths.—*Sol.*, eas. W., & A.; alm. insol. conc. HNO_3.—Easily reducible to colorl. cerous salt.—*Uses:* Incandesc. lighting.

do. Merck.—Cerous (75

$Ce_2(NO_3)_6.3NH_4NO_3+10H_2O$. — Large, white transp. cryst.—Free fr. o. earths.—*Sol.*, v. eas. W., A.—*Uses:* In incandescent lighting.

Cerolin (30

Fatty substce fr. yeast, & representing the specifically active constit. of yeast.—Yellowish to brownish, semi-fluid or tenacious mass (accord. to temperature); odor resembl. that of yeast.—*Uses:* Furunculosis, scurvy, acne, &c. Possesses also laxat. action.—*Dose* $1^1/_2$–5 grains (0.1–0.3 Gm.) 3 t. p. d. in pill (marketed in pills each cont. $1^1/_2$ grains [0.1 Gm.]).

Cerosin.—see **Ceresin, White & Yellow**

Ceruse.—see **Lead Carbonate**

Cetaceum.—see **Spermaceti**

Cetin Merck (75

(Cetyl-ester of Palmitic Acid).—Chief constit. of commercial purified spermaceti.—$C_{15}H_{31}COOC_{16}H_{33}$.—Wh., cryst. substc.—*Sol.*, abs. A., E.; insol. W.—*Melt.*, abt. 50° C.—*Volat.* 360° C.

Cetraria

(Iceland Moss).—Thallus of Cetraria islandica (L.), Acharius. Lichenes.—*Habit.:* Europe; North America.—*Etymol.:* "Cetraria" fr. Lat. "cetra," a small shield, referring to the shape of the frond. "Islandica" refers to its habitat, Iceland.—*Constit.:* Cetraric acid (cetrarin) $C_{30}H_{30}O_{12}$; licheno-stearic acid $C_{19}H_{32}O_4$; fumaric acid; lichenin; thallochlor (chlorophyll); oxalic & tartaric acids.—*Uses:* Demulc.; Emulsifier. —*Dose* 30–60 grains (2–4 Gm.) usually in decoct.

Cetrarin Merck.—Highest Purity (1000

(Cetraric Acid).—Bitter prin. fr. Cetraria islandica, Ach.—$C_{30}H_{30}O_{12}$.—Wh., cryst., bitter. powd.—*Sol.*, in alkalies & their carbonates, & in boil. A.; sl. in W., cold A., E.—Hematinic; Stom.; Expector.; Antemetic.—*Uses:* Chlorosis (incr. number red corpuscles in blood), incip. phth., bronchitis; digest. disturb. w. anemia, persist. vomiting, &c.—*Dose* $1^1/_2$–3 grains (0.1–0.2 Gm.).

Cetrarin Merck.—Pure (300

Brownish powd.—*Uses:* As above.

Cetyl Iodide Merck (100

Fr. cetyl alcohol, by iodine w. phosphorus.—$C_{16}H_{33}I$.—Fine leaflets.—*Sol.* A.—*Melt.* 22° C.

Cevadilla.—see **Sabadilla**

Cevadilline.—see **Sabadilline**

Cevadine.—see **Veratrine, Pure**

Chalk, Precipitated.—see **Calcium Carbonate, Precipitated**

Chalk, Prepared.—see **Calcium Carbonate, Prepared**

Chamædrys

(Germander; Chamædrys; Ground Oak; Wall Germander).—Dried plant Teucrium Chamædrys, L. Labiatæ.—*Habit.:* Asia; Europe.—*Etymol.:* "Teucrium" is the Grk. name of the plant. "Chamædrys" fr. Grk. "chamai," small, & "drys," oak, *i.e.*, the leaves somewhat resemble those of the oak.—*Constit.:* Volat. oil; bitter prin.; tannin.—Tonic; Diuret.; Antirheum.; Antipodagric; Antiscorbutic.

Chamælirium.—see **Helonias**

Chamomile.—see **Anthemis; Matricaria**

Champaca Camphor.—see **Champacol**

Champacol Merck (75

(Champaca Camphor).—Camphor fr. champaca wood (fr. Michelia Champaca, L.).—$C_{17}H_{30}O$.—Wh., cryst. need. or yellowish mass.—*Sol.* E., A. —*Melt.* 86–88° C.

Channing's Solution.—see **Mercury & Potassium Iodide, Solution**

Charcoal Animal Merck.—Highest Purity (8

(Bone, or Ivory, Black; "Char"; Bone Charcoal; Spodium).—Fr. bones.—Fine, black powd.—*Uses:* Decolorizer.—*Caut.* Keep fr. air, in well-stop. bots.

do. Merck.—Pure, moist & dry (1–3

do. Merck.—Purified, moist (1

do.—Commercial (1

Charcoal Merck.—From Blood.—Purified by acid (8

Fr. ox-blood.—Black powd.—*Uses:* Decolorizer.

do. Merck.—Commercial (6

Charcoal Merck.—From Blood.—Reagent (10

Blood charcoal purif. by acid.—Dry, light, black powd.—*Tests:* (*Impur. Sol. in H_2O*) boil 1 Gm. w. 20 Cc. H_2O; filter; evap. filtrate to dryness—not more than 0.003 Gm. res.—(*Impur. Sol. in*

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

A.) boil 1 Gm. w. 20 Cc. A.; filter; evap. filtrate – no res.—(*H_2SO_4; Cl; HNO_3*) boil 1 Gm. w. 50 Cc. H_2O a few min.; filter – filtrate colorl. & neutral. *a:* Add to 10 Cc. filtrate solut. $BaCl_2$ – no immed. turb.; *b:* add to 10 Cc. filtrate solut. $AgNO_3$ – at most sl. opalesc.; *c:* add to 10 Cc. filtrate 1 drop 1:1000 indigo solut. & 5 Cc. conc. H_2SO_4 – blue color should not disapp.—(*Cu; Fe; Ca*) boil 1 Gm. w. 40 Cc. H_2O + 10 Cc. HCl (sp. gr. 1.124) for abt. 5 min.; filter; add to 10 Cc. filtrate 25 Cc. NH_4OH (sp. gr. 0.96) – no blue color or flocc. ppt.; add further few drops solut. $(NH_4)HS$ & $(NH_4)_2C_2O_4$ – no immed. turb.—(*Incombust. Impur.*) ignite 1 Gm. – not more than 0.10 Gm. res.—(*H_2S*) heat 1 Gm. + 40 Cc. H_2O + 10 Cc. HCl (sp. gr. 1.124) & test. escap. vapors w. moist. lead-acetate paper – latter not colored brown.—(*Decolor. Power*) diss. 5 Gm. caramel in 50 Cc. H_2O, add 100 Cc. 85-% A., dil. to 1000 Cc., let stand sev. days, & filter. Dil. 5 Cc. of the solut. w. 50 Cc. H_2O, add 1 Gm. animal charcoal, boil 10 min. under reflux condenser, & filter – filtrate perfectly colorl.—*Uses:* Decolorizer.

Note. — For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

do. Merck.—From Meat.—Pure, lumps or powd. (10

(Flesh Charcoal).—Black powd.—*Uses:* Decolorizer.

do. Merck.—From Plant Sap (2

Obtained by evaporating & carbonizing the liq. resulting on treating wood w. alkaline fluids under pressure.—Black powd.—*Uses:* Strong decolorizer.—8–25 grains (0.5–1.6 Gm.) suffice to decolorize abt. 1 quart (abt. 1000 Cc.) liq.

do. Merck.—From Sponge (2

(Burnt Sponge).—Cont. sl. quant. iodine.—Black powd.—Alterative.—*Uses:* In homœopathy inst. of iodides in struma, scrof., &c.—*Dose* 8–30 grains (0.5–2 Gm.) several t. p. d.

do.—From Wood.—*U. S. P.* (1

(Vegetable Charcoal).—Fr. soft wood.—Fine, black powd.; odorl.; tastel.—*Uses:* Dyspep., flatul., &c.—*Techn.*, remove unpleas. effluv. fr. decomp. matter; filtering medium; tooth-powd. —*Dose* 20–60 grains (1.3–4 Gm.).

Chaulmoogra.—see **Gynocardia**

Checkerberry.—see **Gaultheria**

Chekan. }
Cheken. } —see **Eugenia Chequen**

Chelene.—see **Ethyl Chloride**

Chelerythrine Merck (750

Alkaloid fr. Chelidonium majus, & Sanguinaria canadensis.—$C_{21}H_{17}NO_4$.—Colorl. cryst. — *Sol.*, sl. A., E.; eas. C., amyl alc., B., petrol. ether, oils, &c.—Cardiac poison.

Chelidonine Merck (1200

Alkaloid fr. Chelidonium majus, L.—$C_{20}H_{19}NO_5 + H_2O$.—Wh. cryst.—*Sol.* A., C.; v. sl. E.; insol. W.—*Melt.* 135° C.—Toxic like morphine, but without increase of reflex action.—*Uses:* As analgesic in gastric & intestinal pains; used only in form of its salts.

Chelidonine Hydrochloride Merck (1200

$C_{20}H_{19}NO_5$.HCl.—Wh. cryst.—*Sol.*, v. sl. W. or A.

Chelidonine Phosphate Merck (1200

Wh., cryst. powd.—*Sol.* W.—Analg.—*Uses:* Gastr. & intestinal pains, particularly in children.—*Dose:* Adults, $1^1/_2$–3 grains (0.1–0.2 Gm.).

Chelidonine Sulphate Merck (1200

$(C_{20}H_{19}NO_5)_2.H_2SO_4$.—Wh., cryst. powd.—*Sol.* W.—*Uses:* Narc. like morphine, but not as toxic.

Chelidonine Tannate Merck (1200

Yellow powd.—*Sol.*, hot A.; alm. insol. W.—53.3% pure alkaloid.—Analgesic.—*Uses:* Gastric & intestinal pains.—*Dose* 3 grains (0.2 Gm.).

Chelidonium

(Celandine; Chelandine; Tetterwort).—Entire plant, Chelidonium majus, L. Papaveraceæ.—*Habit.:* Europe; natur. in U. S.—*Etymol.:* Grk. "chelidon," swallow, as the plant blooms during the entire period of swallows' sojourn.—*Constit.:* Chelidonine, $C_{20}H_{19}NO_5 + H_2O$; chelerythrine (pyrrhopine), $C_{21}H_{17}NO_4$; chelidoxanthin; chelidonic acid, $C_7H_4O_6$; protopine, $C_{20}H_{17}NO_5$; *a*-homochelidonine, $C_{21}H_{21}NO_6$; *β*-homochelidonine, $C_{21}H_{21}NO_5$; chelidysin(?); chelidoninic acid(?); resin.—Diuret.; Purg.; Stim.; Alter.; Diaphor.; Vulnerary; Drastic Hydragogue.—*Uses:* Hepatic dis., lepra & cancer. The milky juice of the fresh plant is used as a caustic for removing warts.—*Doses:* 15–60 grains (1–4 Gm.).—Fld. extr., 15–60 ♏ (1–4 Cc.); also extern. with 10% aristol & resorcinol w. lanum. —Alcoh. extr., 5–20 grains (0.3–1.3 Gm.) in scrofula, skin eruption, amenorrh., &c.—Aqu. extr., 20–75 grains (1.3–5 Gm.); subcut., 8 ♏ (0.5 Cc.) of a mixt. eq. parts extr. & W., repeated every 2–5 days.—Tinct. (Rademacher's), 5–20 ♏ (0.3–1.3 Cc.).

Chelidonium Juice

Fr. Chelidonium majus, L.—Purg.; Diaph.; Expector.—*Uses: Intern.*, scrof.; dis. of kidney, skin, eye, &c.—*Extern.*, corns, warts, ecz., & itching erupt.—*Dose* 10–20 ♏ (0.6–1.3 Cc.).

Chelone

(Balmony; Turtle Head; Snake Head; Shellflower).—Herb of Chelone glabra, L. Scrophulariaceæ.—*Habit.:* Canada & eastern U. S.—*Etymol.:* Fr. Grk. "chelone," turtle, referring to the fancied resemblance of the flowers to the head of a tortoise. "Glabra" fr. Lat. "glaber," smooth, hairless, referring to the smooth leaves. —*Constit.:* Glucoside(?); resinoid. — Cathart.;

Anthelm.; Tonic.—*Uses:* Chron. constip., liver dis., worms.—*Extern.*, in skin dis.—*Dose:* Fld. extr., 30–60 ♏ (2–4 Cc.).

Chelonin (Eclectic) (30

Fr. Chelone glabra, L. (Snake head).—Brown, bitter powd.—Tonic; Aper.—*Dose* 1–2 grains (0.06–0.12 Gm.).

Chenopodium

(American Wormseed; Mexican Tea; Spanish Tea; Jerusalem Tea; Ambrosia; Herba Botryos mexicanæ).—Fruit of Chenopodium ambrosioides, L. Chenopodiaceæ.—*Habit.:* Central America; Canada; U. S.—*Etymol.:* Fr. Grk. "chen," goose, & "pous," foot ("podion," a little foot), referring to the resemblance of the leaves to a goose's foot. "Ambrosioides" fr. "ambrosia," fr. "a," not, & "brotos," mortal, & "oides," like, *i.e.*, immortal, or causing immortality when taken. "Botryos" Grk. for grape, *i.e.*, the buds resemble grapes in appearance.—*Constit.:* Volat. oil (in both seed & herb); resin.—Anthelm.; Vermif.; Stomachic; Nervine; Emmen.—*Uses:* Worms, chorea, asthma, & o. catarrhal affect.—*Doses:* 15–60 grains (1–4 Gm.).—Fld. extr., 15–30 ♏ (1–2 Cc.).

Cherry-laurel.—see **Laurocerasus**

Chervil.—see **Anthriscus**

Chestnut.—see **Castanea**

Chian Turpentine.—see **Turpentine, Chian**

Chicory.—see **Cichorium**

Chili Niter.—see **Sodium Nitrate**

Chimaphila.—*U. S. P.*

(Pipsissewa; Prince's Pine; Bitter Wintergreen; Rheumatism Weed; Ground Holly; Pyrola; Pine Tulip).—Dried lvs. of Chimaphila umbellata (L.), Nuttall, Ericaceæ.—*Habit.:* Europe; Asia; North America.—*Etymol.:* Grk. "cheima," winter, & "philos," loving, *i.e.*, the plant remains green during winter. Lat. "umbellatus," umbellated, *i.e.*, flowers form corymbose umbels. "Pipsissewa" is the American Indian name.—*Constit.:* Chimaphilin, $C_{24}H_{21}O_4$; arbutin; ericolin; urson; tannin; resin; sugar; gum.—Tonic; Astring.; Diuret.; Nephritic; Rubefac.—*Uses:* Scrof. skin erupt., & obstin. ulcers; surrogate for uva ursi.—*Doses:* 15–60 grains (1–4 Gm.).—Fld. extr., 15–60 ♏ (1–4 Cc.).

Chimaphilin (Eclectic) (20

Extr. fr. Chimaphila umbellata, Nutt. (Pipsissewa).—Dark brown, bitter powd.—*Sol.* A.—Diur.; Tonic; Astring.—*Uses:* Scrof., rheum., & Bright's dis.—*Dose* 2–3 grains (0.12–0.2 Gm.).

China Blue.—see **Ethylene Blue; Pure Blue**

China Clay.—see **Kaolin**

China Root.—see **Smilax China**

Chinaldine.—see **Quinaldine**

Chinalgen.—see **Analgen**

Chinaphenin (25

(Phenetidin Quininecarbonic-acid Ester).—$(C_{20}H_{23}N_2O.O).CO.(NH.C_6H_4.OC_2H_5)$.—White, tastel. powd.—*Sol.*, eas. A., E., B., C., & acids; diffic. W.—Febrif.; Antipyr.—*Uses:* Whoop.-cough, malaria, fevers, &c.—*Doses:* 5–15 grains (0.3–1 Gm.). In whoop.-cough: Nurslings, $2^1/_2$–3 grains (0.15–0.2 Gm.); older children, 3–5 grains (0.2–0.3 Gm.).

Chinaphthol.—see **Quinaphthol**

Chinaseptol.—see **Diaphtol**

Chinese Galls.—see **Nutgall, Chinese**

Chinese Ginger.—see **Galanga**

Chinese Sumach.—see **Ailanthus**

Chinetum.—see **Quinetum**

Chinidine.—see **Quinidine**

Chinium.—see **Quinium**

Chinoidine.—see **Quinoidine**

Chinoiodine.—see **Quinoiodine**

Chinoline.—see **Quinoline**

Chinoline Blue.—see **Cyanine**

Chinone.—see **Quinone**

Chinopyrine.—see **Quinopyrine**

Chinosol.—see **Quinosol**

Chinotine.—see **Quinidine**

Chiococca Racemosa.—see **Cahinca**

Chionanthin (Eclectic) (25

Dried extr. fr. bark Chionanthus virginica, L.—Brown, bitter powd.—*Sol.* A.—Aper.; Diur.—*Dose* 1–3 grains (0.06–0.2 Gm.).

Chionanthus

(Fringe Tree; Snowdrop-tree).—Bark of Chionanthus virginica, L. Oleaceæ.—*Habit.:* U. S. (Delaware to Florida & Texas).—*Etymol.:* Grk. "chion," snow, & "anthos," flower, referring to the snow-white petals of the flowers. "Virginica" refers to its habitat.—*Constit.:* Chionanthin (glucoside); saponin(?).—Aper.; Diuret.—*Uses:* Dropsy & mild constip.—*Doses:* Extr., 3–10 grains (0.2–0.6 Gm.).—Fld. extr., 30–60 ♏ (2–4 Cc.).

Chirata.—*U. S. P.*

(Chiretta; Chirayta; Bitter Stick; East Indian Balmony).—Dried plant, Swertia (Ophelia) Chirayita. (Roxb.), Hamilton. Gentianaceæ.—*Habit.:* East Indies (Himalaya).—*Etymol.:* "Chiretta" is the East Indian name, and is derived fr. "Kirâtas," the name of a race of mountaineers among whom the plant grows, and by whom it is used. "Swertia" fr. "Emanuel Sweerts," a Dutch botanist (b. 1552).—*Constit.:* Chiratin, $C_{26}H_{48}O_{15}$; ophelic acid, $C_{13}H_{20}O_{10}$.—Bitter Tonic;

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Febrif.; Stomachic; Lax.; Anthelm.—*Uses:* Dyspep., debil., worms, fever.—*Doses:* 15–60 grains (1–4 Gm.).—Fld. extr., 15–60 ♏ (1–4 Cc.), —Aqu. extr., 8–15 grains (0.5–1 Gm.).—Tinct., 30–120 ♏ (2–8 Cc.).

Chitin Merck.—From Beetles (2500

Horny substc. from integuments of beetles.—$C_{15}H_{26}N_2O_{10}$.—Wh., amorph., semi-transp. mass. —*Sol.*, str. H_2SO_4, or HCl; insol. ordinary solv.

do. Merck.—From Crabs (1000

Horny substc. fr. carapaces of crabs.

Chloracetone Merck (40

(Monochlorated Acetone; Monochloracetone).—By chlorinating acetone.—C_3H_5ClO, or, $CH_3.CO.CH_2Cl$.—Colorl. liquid; pungent odor.—Sp. Gr. 1.162 at 16° C.—*Misc.* A., E., C.; insol. W.—*Boil.* 119° C.

Chloracetyl Chloride Merck (30

(Chloroacetyl Chloride).—Fr. acetyl chloride, by chlorine in sunlight.—$C_2H_2Cl_2O$, or, $CH_2Cl.CO.Cl$.—Colorl., transp. liq.—Sp. Gr. 1.495 at 0° C.—*Boil.* 105–106° C.

Chloral-Acacia.—see **Hoyer's Chloral-Acacia**

Chloral Alcoholate Merck (6

(Chloral Ethyl-alcoholate).—Fr. chloral, by ethyl alc.—$C_4H_7Cl_3O_2$, or, $CCl_3CH(OH)OC_2H_5$. —Colorl. cryst.—*Sol.* A.; sl. in W.—*Melt.* 56° C. —*Boil.* 115° C.

Chloral Anhydrous

(Trichloracetic Aldehyde; Chloral).—Fr. aqu. aldehyde, by chlorine.—C_2HCl_3O, or, $CCl_3.CHO$. —Colorl., mobile liq.; pungent odor; unites w. W. to form hydrated chloral.—*Boil.* 94.5° C.—Sp. Gr. 1.502 at 18° C.—*Sol.* W., A.

Chloral-antipyrine.—see **Hypnal**

Chloral Camphorated Merck.—*N. F.* (15

By tritur. eq. pts. camphor & hydrated chloral in a warm mortar.—Transp., colorl., syrupy liq. —*Sol.*, all prop., A., E., oils, fats; insol. W.—Analg.—*Uses:* Toothache, neural., &c.

Chloral, Carbolated.—see **Chloral, Phenolated**

Chloral Ethylalcoholate.—see **Chloral Alcoholate**

Chloral Hydrated-antipyrine.—see **Hypnal**

Chloral Hydrated Merck.—*U. S. P.*—**Loose cryst., or crusts** (2

(Erroneously called "Chloral"; Trichloraldehyde Hydrate).—Fr. chloral alcoholate.—$CCl_3.CH(OH_2)$.—Transp., colorl., rhomboidal cryst., or flat, wh., cryst. masses; pecul. pung. odor & taste. —*Sol.* W., A., E., C., G., B., benzin, fixed & volat. oils.—*Melt.* 58° C.—*Boil.* 97° C.—Hypn.; Antispasm.; Analg.; Antisep.—*Uses: Intern.*, prod. sleep; antid. to cocaine; puerperal eclampsia, mania, delir. trem., convuls., chorea, tetanus, phth. night-sw., hysteria, epilepsy, local spasm, asthma, strangul. hernia, incontin. urine, spasm. croup, & spasm of glottis.—*Extern.*, foul sores, irrit. ulc., destroy parasites.—*Dose* 10–30 grains (0.6–2 Gm.) in syrup or elixir.—*Appl.*, in 1–5% solut.—*Max. D.* 75 grains (5 Gm.). Contraindic. infl. stomach; large doses must not be given in heart disease; children & the aged, with caution. —*Antid.*, emetics, stomach siphon, cocaine hydrochloride, camphor (3 grains [0.2 Gm.]); sulphuric ether (20 drops); strych. ($^1/_{120}$–$^1/_{60}$ grain [0.0005–0.001 Gm.]), or atropine, hypoderm.; stimulants, oxygen, mucilage of acacia. —*Incomp.*, alcohol, potassium iodide or cyanide or permanganate; borax; alkali hydroxides & carbonates; euphorin; lead acetate; monobromated camphor; diuretin; exalgine; phenacetin; quinine sulphate; salol; sodium phosphate; urea; urethane. Liquefies when triturated w. an equal quantity camphor, carbolic acid, menthol, or thymol.—*Caut.* Keep glass stoppered!

Note.—The physiological action of this very pure article is perfect, & is promptly developed.

Chloral Hydrocyanate Merck (20

(Trichlorolactonitrile).—Fr. chloral, by anhydrous hydrocyanic acid, at 120° C.—$C_3Cl_3H_2NO$, or, $CCl_3.CH(OH)CN$.—Colorl. cryst.; odor of HCN & chloral.—15.33% hydrocyanic acid.—*Sol.* W., A., E.—*Melt.* 58–61° C.—*Boil.* 218° C.—*Uses:* In solut. inst. of cherry-laurel, or bitter-almond, W.; super. to hydrocyanic acid, as exact dose possible, because more permanent; 1 part dissolved in 160 distil. water makes bitter-almond water equiv. to that of the Ph.G.—6.46 chloral hydrocyan. = 1 anhydr. HCN.

Chloral Mentholated

By melting on water-bath eq. pts. hydrated chloral & menthol.—Analg.; Counter-irrit.—*Uses:* Neural., headache, &c.

Chloral (Meta-) (15

(Parachloral; Metachloral).—Fr. chloral, by contact w. sulphuric acid.—$(CCl_3COH)n$.—Wh., amorph. powd.—Insol. W.

Chloral Phenolated

(Carbolated Chloral; Chloralphenol).—By tritur., w. heat, 1 pt. hydr. chloral & 3 pts. phenol. —Oily liq.—Analg.—*Uses:* Toothache & neural.

Chloralamide.—see **Chloralformamide; Chloralammonia**

Chloralammonia Merck (25

(Trichloramidoethylic Alcohol; Chloralamide).—Fr. solut. chloral in C., by amm.—$CCl_3.COH.NH_2$, or, $CCl_3.CH(OH).NH_2$.—Wh., cryst. powd.; chloral odor & taste.—*Sol.* A., E.; alm. insol. cold W.; decomp. by hot W.—*Melt.* 71° C.—Hypn.; Analg.—*Uses:* Nerv. insom., neural., &c.—*Dose* 15–30 grains (1–2 Gm.).

Chloralbacide (20

Sodium compound of chloralbacide, a chlorine-albumin compound containing the halogen in firm intramolecular combination.—Yellowish-

wh. powd.—*Sol.* W.—*Uses:* Atonic digestive disturbances due to or resulting in anorexia, insufficiency of hydrochloric acid, abnormal formation of organic acids, impaired intestinal absorption, & costiveness.—*Dose* 15–30 grains (1–2 Gm.) before the two principal meals.

Chloralbenzaldoxime

$C_9H_8NO_2Cl_3$, or, $C_6H_5CH:N.OCH(OH)CCl_3$.—Wh., cryst. powd.—*Sol.* A., E.—*Melt.* 62° C.—Hypn.; Antisep.

Chloralcaffeine Merck (15

$C_8H_{10}N_4O_2.C_2Cl_3H_2O$.—Colorl., lustrous leaflets.—*Sol.* W.—Hypn.; Sed.; Analg.—*Uses:* Nervn., insom., neural., & headache.—*Inj.* 3–6 grains (0.2–0.36 Gm.) 2 or 3 t. p. d.

Chloralcamphoroxime

$C_{12}H_{18}NO_2Cl_3$, or, $C_{10}H_{16}:N.OCH(OH)CCl_3$.—Wh., cryst. powd.—*Sol.* A., E.—*Melt.* 98° C.—Hypn.; Stim.; Antisep.

Chloralformamide (20

(So-called "Chloralamide"; Formamidated Chloral).—Fr. chloral, by formamide.—$C_3H_4O_2Cl_3N$, or, $CCl_3CH(OH).CONH_2$.—Lustr., colorl., odorl., somewh. bitter cryst.—*Sol.*, slowly in 20 W., 2 A.; (in 18.7 W., & 1.3 A. at 25° C.; eas. E., G., acetone, & acetic ether.–U. S. P.); decomp. by warm solvents.—*Melt.* 114–115° C.; decomp. at higher temp.—Hypn.; Analg.—*Uses:* Claimed to prod. sleep without injur. act.; insom. of alcoholism, cardiac dis., pulmon. dis., neural., & hyst.—*Dose* 15–45 grains (1–3 Gm.).—*Max. D.* 60 grains (4 Gm.), single; 120 grains (8 Gm.), p. day.—*Incomp.*, with alkalies.—*Caut.* Keep below 60° C.

Chloralimide Merck (*Not* -amide) (100

(Trichlorethylideneimide).—Fr. chloralammonia, by heat; or fr. hydrated chloral by amm. acetate.—$C_2Cl_3H_2N$, or, $CCl_3.CH:NH$.—Colorl. cryst.; odorl.; tastel.—*Sol.*, readily A., E., C., oils; insol. W.—*Melt.* 155° C.—Hypn.; Analg.—*Uses:* Insom., headache, & fever.—*Dose* 15–45 grains (1–3 Gm.) 2 or 3 t. p. d.—*Max. D.* 45 grains (3 Gm.), single; 90 grains (6 Gm.) p. d.

Chloralose Merck (55

(Alphachloralose; Anhydroglucochloral).—Fr. anhydrous chloral, by heat. w. glucose.—$C_8H_{11}Cl_3O_6$.—Colorl. cryst.; bitter, disagr. taste.—*Sol.* A.; sl. in W. (1:200).—*Melt.* 185° C.—Hypn.—*Uses:* Insom. Free fr. disagr. cardiac after-effects & cumulative tendency of chloral. Acts princip. by reduc. excitability of gray matter of brain.—*Dose* 3–12 grains (0.2–0.8 Gm.) in wafers.—*Max. D.* 12 grains (0.8 Gm.).

Chloralose, Para-.—see **Parachloralose**

Chloralphenol.—see **Chloral, Phenolated**

Chloralurethane.—see **Urethane, Chloral-**

Chloranil Merck (50

(Tetrachloroquinone).—Fr. aniline or phenol, by potass. chlorate w. hydrochl. acid.—$C_6Cl_4O_2$.—Yellow leaflets.—*Sol.* B., E.; sl. in A.—*Uses:* Techn., as oxidizer in manuf. coal-tar dyes.

Chloretone (20

(Acetone-chloroform; Tertiary Trichlorbutyl-alcohol. Solut. known as Anesin or Aneson).—$CCl_3(CH_3)_2.C.OH+{}^1/_2H_2O$.—Wh. cryst.; camphor odor & taste.—*Sol.*, freely in A., E., benzin, glac. acetic acid; 100 W.; 7 G.; oils.—*Melt.* 80–81° C.—Local Anesth.; Hypnot.; Antisep.—*Uses:* Painful wounds, burns, &c.; insomnia in the aged; seasickness; gastric carcinoma; also as inhalant in rhinitis, bronchitis, "sore throat," & catarrh.—*Doses:* Insomnia, 5–20 grains (0.3–1.3 Gm.); to reduce nausea in chlorof. or ether anesthesia, 10–15 grains (0.6–1 Gm.) ${}^1/_2$ hr. before anesthetization; gastric carcin., up to 30 grains (2 Gm.); seasickness, 3–5 grains (0.2–0.3 Gm.) every ${}^1/_2$ hr.—*Extern.*, in saturated aqueous solut. or 10% oint. or 1–5% dusting-powd.

Chlorhydrin, Mono-.—see **Monochlorhydrin**

"Chloride of Lime."—see **Lime Chlorinated**

Chloridene.—see **Ethylidene Chloride**

Chlorin.—see **Dinitrosoresorcinol**

Chlorine Bromide.—see **Bromine Chloride**

Chlorine Water, U. S. P.—see **Solution Chlorine, Compound**

Chlorine Water Merck.—Reagent (1

Clear, pale, greenish-yellow liq.; strong odor Cl; abt. 0.4% Cl.—*Tests:* (*Res.*) evap. 20 Gm. in glass dish on W.-bath – none wghble.—(*HCl*) shake 20 Gm. + 5 Gm. Hg for 5 min.; filter; add to filtrate solut. phenolphtalein, & norm. KOH by drops till red color appears – not more than 0.1 Cc. should be required.—*Uses:* Detect. I, Br, quinine, xanthine, & uric acid.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Chloriodobenzoic-acid Glycerinic Ester.—see **Benzoiodhydrin**

Chloriodopyridine.—see **Pyridine Chloroiodide**

Chlormethylmenthyl Ester.—see **Forman**

Chloroacetyl Chloride.—see **Chloracetyl Chloride**

Chlorobenzal.—see **Benzyl Dichloride**

Chlorobenzol, Mono-.—see **Benzene, Monochloro-**

Chlorobromopropane.—see **Trimethylene Chlorobromide**

Chlorochromic Anhydride.—see **Chromium Oxychloride**

Chloroform Merck.—For Anesthesia.—Repurified & Redistilled (1

(Trichloromethane; improperly "Formyl Trichloride").—Fr. alcohol or acetone, by bleaching powd.—$CHCl_3$.—H'ly refract., sweet-tast., heavy liq.; charact. odor.—Sp. Gr. 1.490 at 15° C.—*Misc.*, all prop., A., E., B., petroleum ether, & oils; sl. in W.—*Boil.* 60–62° C.—Anesth.; Antisep.; Analg.—*Uses: Intern.*, colic, gastral., asthma, spasm. cough, atonic quincy, hyst., scar. fever, neural., cancer, hicc., tic douloureux, &c. Inhal. in pneum. & for anesth. surg. operat. —*Extern.*, 20–50% linim. for rheum., neural., colic, &c. Hypoderm., hydrocele.—*Dose* 10–20 ♏ (0.6–1.3 Cc.) in solution.—*Max. D.* 30 ♏ (2 Cc.).—*Antid.*, emetics, stomach siphon, cold douche, fresh air, strychnine hypoderm. ($^1/_{120}$–$^1/_{60}$ grain [0.0005–0.001 Gm.]), rubefac., artif'l respir., &c.—*Caut.* Keep in dark amber.

N.B.—Occasionally practitioners fail to recollect, until after the disagreeable occurrence, that chloroform rapidly decomposes when its vapor comes into contact with an exposed gas-light, evolving peculiar chlorine vapors which are extremely irritating to all present and may be even dangerous to the patient. Chloroform, therefore, should never be administered by gas-light unless the latter be well protected by a closed glass case, and abundant provision made for the rapid escape from the room of all decomposition products.

Note.—Purified by specially devised, careful processes, & freed from all poisonous foreign substances, Chloroform Merck for Anesthesia is particularly adapted for use as an anesthetic, as well as in all work of an exacting nature.

do. Merck (1

Uses: Techn., in dentistry, electrotechn., rubber industry, photo., & particularly as a solvent.

do. Merck.—From Chloral (3

Fr. chloral by potass. hydroxide.

Chloroform Merck.—Reagent (2

$CHCl_3$.—Clear, colorl., v. volat. liq.—*Misc.*, all prop., A., E., fixed & volat. oils; sl. sol. W. (1:200).—Sp. Gr. 1.485–1.489.—*Boil.* 60–62° C. —*Tests:* (*Free Acid*) shake 20 Cc. w. 10 Cc. H_2O $^1/_2$ min.; when chlorof. separated, draw off aqu. layer w. pipette – it should not redden blue litmus paper, or become opalesc. when overlayed on 2.5 Cc. H_2O+2.5 Cc. solut. $AgNO_3$. —(*Free Cl*) shake 5 Cc. w. 5 Cc. solut. zinc iodide-starch – solut. should not acquire blue color, nor should chlorof. bec. colored.—(*Organ. Impur.*) frequent. shake 20 Cc. w. 15 Cc. conc. H_2SO_4 – the acid should not acquire a color within 1 hr.—*Uses:* Solvent; testing primary amines, &c.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Chloroform Anschütz (5

(Salicylchloroform).—Fr. the crystalline comp. of chloroform & salicyl, by distillation.—Very pure prod., specially recom. for anesthesia.

Chloroform Pictet (4

Purified by freezing.—*Uses & Doses:* As of chloroform, for anesthesia.

Chlorogenine Merck (1250

(Alstonine).—Alkaloid fr. bark Alstonia constricta, F. Mueller, (Australian Fever Bark).—$C_{21}H_{20}N_2O_4+3^1/_2H_2O$.—Brown powd.—*Sol.* A., E., C., B., dil. acids; sl. in W.—*Melt.* 195° C.—Antipyr.; Antiper.; Antisep.; Stim.—*Uses:* Intermit. fever, typhoid fever, &c.; seems to possess propert. analogous to quinine & strychnine.

Chlorometaxylene (or *-ol*).—see **Xylene (Meta-) Chloro-**

Chloromethane.—see **Methyl Chloride**

Chloronitrobenzene (Meta-) Merck (40

(Metachloronitrobenzene [or -ol]).—Fr. nitrobenzene, by chlorine w. iodine.—$C_6H_4Cl(NO_2)$[1:3]. —Yellowish cryst.—*Sol.* E., C., B., hot A.—*Melt.* 44° C.—*Boil.* 236° C.

Chloronitrobenzene (Ortho-) Merck (30

(Orthochloronitrobenzene [or -ol]).—Fr. chlorobenzene, by nitration.—$C_6H_4Cl(NO_2)$[1:2].—Yellow liq.—*Sol.* A., B.—Sp. Gr. 1.454 at 15° C. —*Boil.* 243° C.

Chloronitrobenzene (Para-) Merck (30

(Parachloronitrobenzene [or -ol]).—Fr. chlorobenzene, by nitric acid.—$C_6H_4Cl(NO_2)$[1:4].—Yellowish cryst.—*Sol.* A., E.—*Melt.* 83° C.—*Boil.* 242° C.

Chlorophyll Merck.—Pure (60

Color. matter fr. plant leaves; pure but w. trace alkal. carbonate to prev. decomp. Free fr. copper.—Green masses; consist. of extr.; solut. exhibits beautiful blood-red fluoresc.—*Sol.* A., E., carbon disulph., & ethereal oils w. trace of acetic acid; sol. in alkaline W.—*Uses:* Color. pure alcoh. liquids, fats, oils, soap, &c.

do. Merck.—For alcoholic liquids (7

Intens. dark green liq.—*Sol.* A., E.—*Uses:* Color. alcoh. liq. cont. over 85% alcohol. Color stable in light, no fluoresc.

do. Merck.—For aqueous liquids (7

Intens., dark green, non-fluoresc. liq.; odorl.; alm. perman't. in light.—*Misc.*, all prop. W.—*Uses:* Color. liqueurs, confectionery, preserves, &c., cont. less than 85% alcohol. Non-poison.; perm't.

do. Merck.—Technically pure, for fats, oils, soaps, etc. (7

Sol., fats, oils, E., C., &c., w. perm't, beautiful stable green without fluoresc.; not acted on by light.—*Uses:* Color. oils, fats, soaps, oint., &c.; not suitable for aqueous or alcoh. solut's.

Chloropicrine Merck (40

(Trichloronitromethane; Nitrochloroform).—Fr. picric acid by distil. w. bleach. powd.—CCl_3NO_2.—Colorl. liq.; intense odor causes pecul. form of frontal headache.—Sp. Gr. 1.66 at 15° C.—*Sol.* A., E.—*Boil.* 112° C.

Chloropropyleneglycol.—see **Monochlorhydrin**

Chloropropylene Oxide.—see **Epichlorhydrin**

Chlorostigma

(Tasi; Tasillo; Tasi Crespo).—The whole plant Chlorostigma Stuckertianum. Asclepiadaceæ.—*Habit.:* Argentine Republic.—*Etymol.:* Fr. Grk. "chloros," green, & "stigma," spot. Named for Teodoro Stuckert, an Argentine apothecary & botanist, in 1897.—*Constit.:* Chlorostigmine.—*Uses:* Galactagogue; also as rennet (for curdl. milk) in 5–10% decoct.

Chlorosulphonic Anhydride.—see **Pyrosulphuryl Chloride**

Chlorotoluene, Omega-.—see **Benzyl Chloride**

Cholepyrrhin.—see **Bilirubin**

Cholesterin Merck (225

Fr. gall, brain, & vegetable fats.—$C_{26}H_{43}OH + H_2O$.—Unct., wh., pearly scales.—*Sol.* E., C., B., hot A.; sl. W.—*Melt.* 145–148° C.—Antisep.—*Uses:* Techn. Can absorb 200% water.—Antidote to saponins.

Choline Merck (2500

(Sinkaline; Bilineurine; Amanitine; Trimethylethylenehydrate-ammoniumhydroxide; Oxyethyltrimethylammonium Hydroxide).—$C_5H_{15}NO$, or, $(CH_3)_3{:}N(OH).CH_2.CH_2.OH$.—Viscid liq.—*Sol.* W., A.

Choline Hydrochloride Merck (2500

$C_5H_{14}NOCl$, or, $(CH_3)_3{:}N.CH_2.CH_2(OH).Cl$.—Deliq. cryst.—*Sol.* W., A.

Chondrin

Gelatin-like substc., fr. cartilage.—Yellow, glue-like, horny masses.—*Sol.*, hot W.

Chondrus.—*U. S. P.*

(Carragheen; Irish Moss; Pig-wrack; Pearl Moss; Killeen; Salt Rock Moss).—Dried plant of Chondrus crispus (L.), Lyngbye (and Gigartina mammillosa, Goodenough & Woodward). Gigartinaceæ.—*Habit.* Irish coast; New England; Atlantic Ocean.—*Etymol.:* Fr. Grk. "chondros," cartilage, gristle, the fronds are cartilaginous; "crispus," Lat. crumpled; "carragheen" fr. Gaelic "carraigeen," rock-moss.—Yellowish or whitish, horny, transl. segments, fr. 2–5 in. long, forked, wedge-shaped to linear; seaweed-like odor; mucilag., saline taste; when boiled w. 30 W. for 10 minutes, solut. gelatinizes when cold.—*Constit.:* Pectin (up to 80%; also termed carrageenin); proteids.—Nutr.; Demulc.—*Uses:* Chron. pector. affect., dysent., diar., &c.—*Extern.*, in catapl.—*Techn.*, emulsifier for oils.—*Micros.*, as nutr. media for amœba.—*Domestic economy*, for jellies, &c.—*Dose* 1–2 drams (4–8 Gm.) in form of decoct. or jelly.

Chong-Ching.—see **Rhinacanthus**

Chrome Alum.—see **Chromium & Potassium Sulphate**

Chrome Green.—see **Chromium Oxide**

Chrome Red.—see **Lead Chromate, Basic**

Chrome Yellow.—see **Lead Chromate, Precipitated**

Chromic-Platinum Chloride.—see **Merkel's Chromic-Platinum Chloride**

Chromium Merck.—Cryst. (500

Etymol.: Fr. Grk. "chroma," color, because most of the chromium salts exhibit bright colors.—Metal.—Cr.—Shin., steel-gray, cryst., or hard, lustrous steel-gray pieces; hard as corundum & less fusible than platinum.—Sp. Gr. 6.5–6.8 at 15° C.—*Uses:* Chromium compounds find important use in manufacturing leather, glass, & porcelain.

do. Merck.—Fused (20

Chromium Acetate Merck.—Dried (6

(Normal Chromic Acetate).—$Cr(C_2H_3O_2)_3 + H_2O$.—Grayish-green powd.—*Sol.* W.

do. Merck.—Paste (15

Normal chromous acetate, paste form.—Bluish-green, pasty mass.—*Sol.* W.—*Uses:* Techn., as chrome mordant & in dyeing.

Chromium Carbonate

$xCr_2(CO_3)_3 + xCr_2(OH)_6$ (?).—Amorph., grayish-blue mass.—*Sol.*, mineral acids.

Chromium Chloride Merck.—Sublimed (18

(Chromic Chloride; Chromium Sesquichloride).—Cr_2Cl_6.—Viol., cryst. powd., or v. lustrous leaflets.—*Sol.* W., cont'g traces chromous chloride; insol. plain W. & acids.—*Uses:* Techn.

do. Merck.—Solution (5

Green liq.—*Misc.* W.

Chromium Fluoride Merck.—Pure (6

(Chromic Fluoride).—$CrF_3 + 4H_2O$.—Fine, green, cryst. powd.—*Sol.* W.—*Uses:* Print. & dye. woolens, & dyeing & hardening marble.

Chromium Hydroxide Merck.—Dry (2

(Chromic Hydrate).—$Cr_2(OH)_6 + 4H_2O$.—Green powd.—*Sol.*, w. diffic. in acids.—*Uses:* Pigment in painting.

Chromium Nitrate Merck.—Solution (4

(Chromic Nitrate).—$Cr(NO_3)_3 + aq.$—Bluish-green liq.—*Sol.* W.

Chromium Oxalate Merck (4

(Chromic Oxalate).—$Cr(C_2O_4) + H_2O$.—Dark-green leaflets.—*Sol.*, hot W.

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Chromium Oxide Merck.—Highest Purity (3
(Chromic Oxide; Chromium Sesquioxide; Chrome Green).—Cr_2O_3.—Bright green, cryst. powd.—Insol. W.

do. Merck.—Anhydrous (2
Uses: Pigment, particularly in painting on glass & porcelain; printing fabrics & banknotes; polishing steel; abradant, &c.

Chromium Oxychloride Merck (20
(Chlorochromic Anhydride; Chromyl Chloride).—By heat. chromic acid w. ferric chloride.—CrOCl.—Dark-red, mobile liq.; fum. in air.—*Caut.* Keep in sealed glass tubes.

Chromium Phosphate Merck (5
(Chromic Phosphate; Arnaudon's, or Plessy's, Green).—$Cr_2(PO_4)_2$.—Bluish-green powd.—Insol. W.—*Uses:* Valuable pigment.

Chromium Sesquichloride.—see **Chromium Chloride**

Chromium Sesquioxide.—see **Chromium Oxide**

Chromium Sulphate Merck (2
(Green Chromic Sulphate).—$Cr_2(SO_4)_3$.—Dark-green scales; violet & red when hydrated; modific. depend. on amt. water of cryst.—*Sol.* W.—*Uses:* Techn., in manuf. other chromium compounds, green varnishes, & as addition to green inks.

Chromium Trioxide Merck.—Highest Purity (5
(Chromic Anhydride; so-called "Chromic Acid").—Fr. potass. dichromate.—CrO_3.—Reddish-brown cryst.—*Sol.* W. Decomp. org. solvents violently.—*Melt.* 192–193° C.—Caustic; Astring.—*Uses: Extern.*, syph. sores, hyperpl., or ulc.; condyl. & veget.; hypertr. coryza; exub. granul.; hemorrhage, persp. feet; leucor., &c.—*Appl.:* Caust., 20% solut. upw., or pure, melted on silver probe; astring. (sweat. feet), 5% solut.—*In Veter. Med., extern.*, in 33% solut. in mouth- & foot-dis.—*Antid.*, emetics, then milk; white of egg; calc. saccharate, 8–15 grains (0.5–1 Gm.) in sugar water hourly; powd. iron w. syrup; magnesia in abundance, 150 grains (10 Gm.): 5 fld. oz. (150 Cc.) water, in tablesp. doses; ice; chalk.—In burns fr. chrom. triox. apply dil. solut. sodium bicarbonate, followed by lead water & 10% lead-acetate oint.—*Incomp.*, alcohol, ether, glycerin, spirit nitrous ether, arsenic trioxide, & n'ly every org. substc.; bromides, chlorides, iodides, hypophosphites, oxalates, sulphides, sulphites & tartrates.—*Caut.* Poisonous! Dangerous accidents may occur by contact w. organic substances. Keep dry.

do. Merck.—Fused, in pencils
Dark red sticks.—*Sol.* W.—*Caut.* Keep dry & from organic matter. Poisonous!

do. Merck.—Commercial (1
Red, cryst. powd.—*Uses:* Electric batteries; photography; purifying oils; oxidizer in manufacturing & analyt. chemistry; manuf. aniline green; dyeing & tanning; etching copper; test for silver-plating; bleaching; hardening microscopical preparations.

Chromium Trioxide Merck.—Reagent.—Free fr. Sulphuric Acid (5
(Chromic Anhydride).—CrO_3.—Dark-brownish need. or rhomb. prisms.—*Sol.*, read. W.—Almost 100% pure.—*Tests:* (H_2SO_4) 2 Gm. + 20 Cc. W. gives clear solut.; add 20 Cc. HCl (sp. gr. 1.124) + 1 Cc. solut. $BaCl_2$—no immed. turbid.—(K_2SO_4; K_2CrO_4) ignite 0.2 Gm. in porcel. crucib.; tritur. res. w. abt. 20 Cc. W.; filter; evap. filtr. to dryness on W.-bath; dry res. at 100° C.—wt. of res. not more than 0.002 Gm.—*Uses:* Oxidizer; estim. C & P; hardening agent in microscopy.
Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Chromium & Potassium Oxalate Merck (6
$K_6Cr_2(C_2O_4)_6 + 6H_2O$.—Violet-red, cryst. mass.—*Sol.*, hot W.

Chromium & Potassium Sulphate Merck.—Highest Purity (1
(Chrome Alum).—By-prod. manuf. anthracene red, aniline violet, &c.—$Cr_2K_2(SO_4)_4 + 24H_2O$.—Dark violet-red, regular cryst.; ruby-red by transmit. light.—*Sol.* W.—*Uses:* Chiefly techn.

do. Merck.—Technical (1
Uses: Techn., as mordant for dyeing fabrics uniformly, for tanning leather, printing calico, rendering glue & gum insoluble, manuf. other chromium salts, & water-proofing fabrics.

Chromo-Acetic Acid.—see **Flemming's Chromo-Acetic Acid**

Chromo-Formic Acid.—see **Rabl's Chromo-Formic Acid**

Chromo-Nitric Acid.—see **Perenyi's Chromo-Nitric Acid**

Chromo-Osmic Acid.—see **Flesch's Chromo-Osmic Acid**

Chromyl Chloride.—see **Chromium Oxychloride**

Chrysaniline Yellow Merck (10
(Phosphine; Leather Yellow).—Mixture of salts of Diamidophenylacridine (chrysaniline), & its homologue, chrysotoluidine.—By-product in manuf. magenta.—Orange-yellow powd.—*Sol.* W., A. w. reddish-yellow color.—*Uses:* Dyeing leather reddish-yellow. Stain. bacteria in 2% solut.

Chrysaniline Yellow Basic Merck (75
(Asymmetric Diamidophenylacridine).—Yellow cryst.—*Sol.*, sl. W. & A.—*Melt.* 267–270° C.—*Uses:* Techn., to dye wool & silk yellow.

Chrysanthemum.—see **Parthenium**

Chrysanthemum Flowers

(Dalmatian Insect Powder).—Flowers of Chrysanthemum (Pyrethrum) cinerariæfolium, Benth. & Hooker. Compositæ.—*Habit.:* Dalmatia; Montenegro; Western Asia.—*Etymol.:* Chrysanthemum fr. Grk. "chrysos," gold, & "anthos," flower, fr. the color of the flower. Pyrethrum fr. "pyr," fire, & "athroos," strong, *i.e.*, roots of certain spec. have a burning taste.—*Constit.:* Volat. oil; chrysanthemic acid; pyrethrotoxic acid; chrysanthemin; a cryst. glucoside(?); sugar(?).—*Uses:* Insecticide.

Chrysarobin Merck (3

(Medicinal "Chrysophanic Acid"; Purified Goa Powder).—Neut. prin. fr. Goa powder, a substc. deposited in wood of Vouacapoua Araroba (Aguiar), Druce. Leguminosæ. — $C_{30}H_{26}O_7$. — Micro-cryst., orange-yellow powd.; turns brownish-yellow on expos. Yields chrysophanic acid on oxidation.—Sp. Gr. 0.920–0.922 (U. S. P.). —*Sol.* 4812 W., 308 A., 25 benzene, 18 C., 114 E., 30 amyl alc., & 230 CS_2, at 25° C. (U. S. P.); also alkalies.—*Melt.* 157° C. (U. S. P.).—Antiparasitic; Alter.—*Uses: Extern.*, psoria., herpes tonsurans, pityr. versic., hemorrhoids; do not cover large surf. at one time. Oint's 1:10–50 simple cerate or lard; or chrysarobin (10), acid salicylic (10), ether (15), flex. collod. (100).—*Dose* $^1/_8$ grain (0.008 Gm.). — *Caut.* Causes dangerous inflam. of eye if allowed to enter even as dust.

Chrysarobin, Crude.—see **Araroba**

Chrysarobin Oxidized Merck (100

Dark brown powd.—*Sol.* B., C., & hot A.—*Uses:* As of chrysarobin, in oint.—Milder action than that of chrysarobin.

Chrysarobin Tetracetate.—see **Lenirobin**

Chrysarobin Triacetate.—see **Eurobin**

Chrysaureine.—see **Tropæoline 000 No. 2**

Chrysene Merck.—Pure (175

Fr. benzene.—$C_{18}H_{12}$, or, $C_{10}H_6.(CH)_2C_6H_4$.—Colorl. scales; reddish-violet fluoresc.—*Sol.* A., B., & toluene.—*Melt.* 250° C.

Chryseoline.—see **Yellow T**

Chrysoidine Orange Merck (8

(Diamidoazobenzene Hydrochloride).—Diazo-compound fr. aniline w. monophenylenediamine. —$C_{12}H_{13}N_4Cl$, or, $C_6H_5.N_2.C_6H_3(NH_2)_2HCl$[1:2:4]. —Reddish-brown, cryst. powd.—Nontoxic.—*Sol.* W. with brown color.—*Uses:* Techn., coloring confectionery & liqueurs. Dyes wool, silk & cotton orange.

Chrysoine.—see **Yellow T**

Chrysophyllum Glyciphlœum.— see **Monesia Bark**

Churchill's Iodine Caustic.—see **Solution Iodine, Caustic**

Cibotium Baromez.—see **Penghawar Djambi**

Cichorium

(Wild Succory; Blue Daisy).—The whole plant Cichorium Intybus, L. Compositæ.—*Habit.:* Europe; Asia; Northern Africa; natur. in U. S.—*Etymol.:* Fr. Grk. "kinein," to move, & "chorion," field, *i.e.*, the plant grows along the edges of fields.—*Constit.:* Bitter principle; resin; potassium salts. Root contains in addition volat. oil, tannin, inulin, & sugar.—Aper.; Tonic. —*Uses:* Root is alterative, & is used as a coffee surrogate, & in jaundice & congest. of liver, instead of extr. taraxacum.—*Dose:* Alcoh. extr., 20–40 grains (1.3–2.6 Gm.).

Cicuta

(Water Hemlock; Cowbane; Brook-tongue).—Whole plant, Cicuta virosa, L. Umbelliferæ.—*Habit.:* Europe; Asia; northern North America. —*Etymol.:* Fr. Grk. "kyein," hollow, referring to the stems, which are hollow.—*Constit.:* Cicutoxin; cicutine.—Antispasm.; Anti-scorbutic; Anodyne; Analges.; Sedat.—*Uses:* Rheum., gout, spasm. cough, & nerv. & sick headache.—*Dose:* Fld. extr., 1–5 ♏ (0.06–0.3 Cc.).—*Antid.*, emetics, stomach siphon, tannic acid, coffee, atropine, artif. respir., &c.

Cicutine.—see **Coniine**

Cimicifuga.—*U. S. P.*

(Black Snake Root; Actæa; Black Cohosh; Bugbane; Bugwort).—Dried rhizome & roots of Cimicifuga (Actæa) racemosa (L.), Nuttall. Ranunculaceæ. — *Habit.*. U. S.; Canada. —*Etymol.:* Lat. "cimex," bedbug, & "fugere," to drive or fly away, *i.e.*, its odor is said to drive away bedbugs. Grk. "akteia," elder, *i.e.*, its lvs. are said to resemble those of the elder tree. Lat. "racemosus," full of racemes, *i.e.*, the flowers. —*Constit.:* Resin; cimicifugin; tannin; volat. oil; sugar.—Alter.; Analg.; Diuret.; Diaphor.; Expector.; Antispasm.; Sedat.; Emmen.—*Uses:* Chiefly in rheum.; also in fevers, asthma, chorea, heart dis. (when digitalis contraindic.), myal., neuralg., hyster., dropsy, dysmenor., & amenor.—*Doses:* 5–45 grains (0.3–3 Gm.).—Alcoh. extr., 3–10 grains (0.2–0.6 Gm.).—Fld. extr., 15–45 ♏ (1–3 Cc.).—Tinct., 20–120 ♏ (1.3–8 Cc.).

Cimicifugin Merck (30

(Macrotin).—Resinoid fr. roots Cimicifuga racemosa, Nutt.—Yellowish-brown, hygros. powd.—*Sol.* A.—Antispasm.; Nerv.; Oxytocic.—*Uses:* Rheum., gout, dropsy, hyst., St. Vitus's dance, dysmenor., abn. pregn., tinnitus aurium, & phth.—*Dose* 1–2 grains (0.06–0.12 Gm.).

Cina.—see **Santonica**

Cincholepidine.—see **Lepidine**

Cinchona (Calisaya).—*U. S. P*

(Peruvian Bark; Yellow Cinchona or Calisaya Bark; Jesuits' Bark).—Dried bark of Cinchona Calisaya, Weddell, C. Ledgeriana Moens, C. officinalis L., & of hybrids of these w. o. spec. of Cinchona. Rubiaceæ.—*Habit.:* South

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America; cultivated in Java, India, Jamaica, Ceylon, & West Africa.—*Etymol.:* Fr. "kina" or "quina," the Peruvian name of the bark. Or, perhaps, more properly fr. "Chinchon," after Countess Ana de Osorio, wife of Count Chinchon, Viceroy of Peru; she was cured of tertian fever by this bark in 1638, by recommendation of a Jesuit. "Calisaya" is the Spanish & Indian name of the bark. Or, Calisaya fr. "colli," remedy, & "salla," stony ground, hence more properly "collisalla," because calisaya grows upon stony ground. (There is no province named "Calisaya" in Peru).—Quills or flat pieces of varying size; gray extern.; yellowish cinnamon-colored intern.; inner surface nearly smooth; granul. & short-fibrous; tawny-yellow color; powd. light cinnamon-brown; slightly arom. odor, & persistent bitter taste.—*Constit.:* Abt. 35 natural cinchona alkaloids (chiefly quinine); cinchotannic acid, $C_{14}H_8O_9+2H_2O$; quinic acid, $C_7H_{12}O_6$; cinchona red, $C_{28}H_{22}O_{14}$; volat. oil; quinovic acid, $C_{24}H_{38}O_4$, &c.—Bitter Tonic; Febrif.; Antiper.; Astring.—*Uses:* Malaria, anorexia, debil., &c.; source of quinine & other cinchona alkaloids.—*Extern.,* as poultice for felons, gangrenous ulcers, &c.—*Doses:* 10–15 grains (0.6–1 Gm.) as tonic; 30–60 grains (2–4 Gm.) as antiper., 2–3 t. p. d.—Alcoh. extr., 3–5 grains (0.2–0.3 Gm.) tonic, 15–30 grains (1–2 Gm.) antiper.—Fld. extr., tonic, 15–60 ♏ (1–4 Cc.); antiper., 30–120 ♏ (2–8 Cc.).—Tinct., 60–120 (4–8 Cc.).—Comp. tinct., 60–240 ♏ (4–15 Cc.).

Cinchona (Carthagena)

(Carthagena Bark).—Var. spec. of Cinchona (C. lanceolata, C. lancifolia, C. cordifolia, &c.). Rubiaceæ.—*Habit.:* South America.—*Etymol.:* See Cinchona (Calisaya).—Quills & half-quills; periderm whitish, ocher-colored or yellowish-brown, & soft; inner surface cinnamon-brown, with orange or reddish tint; inner fract. fibrous.—*Constit., Uses, & Doses:* As of cinchona (calisaya).

Cinchona (Loxa).—*U. S. P.*

(Loxa Bark; Cinchona Pallida; Crown Bark; Pale Cinchona; Loja Bark; Huanuco Bark; Cuenca Bark).—Bark of Cinchona officinalis, L., & other sp. of C. Rubiaceæ.—*Habit.:* Loxa & other parts of Ecuador; cultivated in India.—*Etymol.:* See Cinchona (Calisaya).—Thin single or double quills, more covered with lichens than other varieties (a sign of good quality); periderm grayish to blackish-brown; inner surface pale- to reddish-brown; fract. slightly fibrous & short; yields pale-brown powd.—*Constit.:* Cinchona alkaloids (chiefly quinine, 60–70% of the total alkaloids); otherwise like cinchona (calisaya).—*Uses & Doses:* As of cinchona (calisaya).

Cinchona (Succirubra).—*U. S. P.*

(Red Cinchona; Red Peruvian Bark; Red Bark; St. Ann's Bark).—Dried bark of Cinchona succirubra, Pavon, or of its hybrids. Rubiaceæ.—*Habit.:* S. America; cultivated in Japan, Java, India, & Western Africa.—*Etymol.:* Succirubra fr. Lat. "succus," juice, & "ruber," red, *i.e.*, the sap is first colorless, then white, & finally red on exposure. See also Cinchona (Calisaya).—Quills or incurved pieces of varying length; outer surface covered w. grayish-brown cork; few, most short transverse fissures; inner surface more or less deep-reddish brown; fract. short-fibrous; slight odor, & bitter, astring. taste.—*Constit., Uses, & Doses:* As of cinchona (calisaya).

Cinchonamine Merck.—Pure, cryst. (1000

Fr. Remijia Purdieana Wedd. (False Cuprea bark).—$C_{19}H_{24}N_2O$.—Yellowish-wh. cryst.—*Sol.* A., E., C., B., carbon disulph; v. sl. in W.—*Melt.* 184–185° C.—*Uses:* Reag.

Cinchonamine Hydrochloride Merck (1250

$C_{19}H_{24}N_2O.HCl+H_2O$.—Yellowish-wh. powd.—*Sol.* A., & W.

Cinchonamine Nitrate Merck (900

$C_{19}H_{24}N_2O.HNO_3$.—Wh. to yellowish cryst.—*Sol.*, v. sl. in W., & A.; insol. in dil. nitric acid. The least soluble nitrate known.

Cinchonamine Sulphate Merck (900

(Acid Cinchonamine Sulphate; Cinchonamine Bisulphate).—$C_{19}H_{24}N_2O.H_2SO_4$.—Colorl. cryst.—*Sol.* W.

Cinchonidine Merck.—Pure, cryst. (10

Alkaloid fr. certain var. Cinchona (chiefly red).—$C_{19}H_{22}N_2O$.—Wh. prisms, or wh. powd., light masses; v. bitter taste.—*Sol.*, dil. acids, A., C.; sl. E.; v. sl. in W.—*Melt.* 200–207° C.—Most of the salts are affected by light.—Antiper.; Bitter Tonic; &c., like quinine.—*Uses:* Intermit. & remit. fever, anorexia, &c.—*Doses:* 15–30 grains (1–2 Gm.), betw. parox.; tonic, 1–2 grains (0.06–0.12) 3 or 4 t. p. d., in pills or syrup.

Cinchonidine Bisulphate Merck

(Cinchonidine Disulphate; Acid Cinchonidine Sulphate).—$C_{19}H_{22}N_2O.H_2SO_4+5H_2O$.—Striated prisms.—*Sol.* W., A.—*Uses & Doses:* As of cinchonidine.

Cinchonidine Borate Merck (22

$C_{19}H_{22}N_2O.B(OH)_3$(?).—Wh. powd.—*Sol.* A.

Cinchonidine Dihydrobromide Merck (12

$C_{19}H_{22}N_2O.(HBr)_2$.—Yellowish prisms.—*Sol.* W.

Cinchonidine Disulphate. — see **Cinchonidine Bisulphate**

Cinchonidine Hydriodide Merck (20

$C_{19}H_{22}N_2O.HI+2H_2O$.—Yellowish-wh. cryst.—*Sol.* W.

Cinchonidine Hydrochloride Merck (20

$C_{19}H_{22}N_2O.HCl+2H_2O$.—Wh. prisms.—*Sol.* W., A., C.

Cinchonidine Salicylate Merck (7

$C_{19}H_{22}N_2O.C_7H_6O_3$.—Colorl., micros. cryst.—*Sol.* A.; v. slightly W.

Cinchonidine Sulphate Merck (6

(Neutral Cinchonidine Sulphate).—Fr. mother liq. of quinine sulphate.—$(C_{19}H_{22}N_2O)_2.H_2SO_4+3H_2O$.—Wh., silky, acic. cryst.; effloresce on expos.—*Sol.* 63 W., 72 A., 4400 E., & 900 C., at 25° C. (U. S. P.).—*Mclt.* 205.3° C. (U. S. P.).—*Uses & Doses:* As of cinchonidine.

Cinchonidine Tannate Merck (14

Comp. varia.—Yellow, amorph. powd.; tastel. —*Sol.* A.—*Uses:* Intermit. & remit. fevers of children.—*Doses:* Adults, 8–15 grains (0.5–1 Gm.); children, $1^1/_2$–8 grains (0.1–0.5 Gm.).

Cinchonidine Tartrate Merck (20

$(C_{19}H_{22}N_2O)_2.C_4H_6O_6+2H_2O$.—Wh., cryst. powd. —*Sol.*, hot W., & hot A.

Cinchonine Merck.—Pure, cryst., & precip. (5

Alkaloid fr. bark var. sp. Cinchona.—$C_{19}H_{22}N_2O$. —Wh., shin. prisms, or need.; tastel., w. bitter after-taste.—*Sol.*, dil. acids, 116 A., 163 C.; v. sl. E. & W.—*Melt.* 240–250° C., w. partial decomp.—Antiper.; Bitter Tonic, &c., like quinine. —*Uses:* Malar., intermit. & remit. fevers, anorexia, &c.—*Doses:* Antiper., 15–30 grains (1–2 Gm.), betw. parox.; tonic, 1–2 grains (0.06–0.12 Gm.).

do. Merck.—Highest Purity, free fr. Cinchotine (30

Cinchonine Benzoate Merck (11

$C_{19}H_{22}N_2O.C_7H_6O_2$.—Wh. to yellowish cryst.—*Sol.* A., C.; sl. in W.

Cinchonine Ferrocitrate.—see **Iron & Cinchonine Citrate**

Cinchonine Glycyrrhizinate Merck (13

Brownish to gray powd.—25% cinchonine.—*Sol.* A.—*Uses & Doses:* As of quinine sulphate.

Cinchonine Hydrobromide Merck (17

$C_{19}H_{22}N_2O.HBr$.—Wh. cryst.—*Sol.* W., & A.—*Uses:* As of cinchonine.

Cinchonine Hydrochloride Merck (6

$C_{19}H_{22}N_2O.HCl+2H_2O$.—Fine, wh., bitter cryst. —*Sol.* 1 A., 22 W., 550 E., C.—*Uses & Doses:* As of cinchonine.

Cinchonine Iodosulphate Merck (35

(Antiseptol).—Fr. aqu. solut. cinchonine sulph., by solut. iodine & potass. iodide.—Reddish-brown, odorl. powd.—50% iodine.—*Sol.* A., C.; insol. W.—*Uses:* Inst. of iodoform, chiefly extern.—*Dose* 1–5 grains (0.06–0.3 Gm.).

Cinchonine Nitrate Merck (20

$C_{19}H_{22}N_2O.HNO_3+H_2O$.—Colorl. prisms.—*Sol.* W.—*Uses:* As of cinchonine.

Cinchonine Salicylate Merck (11

$C_{19}H_{22}N_2O.C_7H_6O_3$.—Wh. to reddish cryst.—*Sol.* A., & hot W.—*Uses:* Rheum., espec. in malar. regions.—*Dose* 5–20 grains (0.3–1.3 Gm.).

Cinchonine Sulphate Merck (3

(Neutral Cinchonine Sulphate).—$(C_{19}H_{22}N_2O)_2.H_2SO_4+2H_2O$.—Colorl., lustr. cryst.; v. bitter. —*Sol.* 58 W., 10 A., 2300 E., 69 C. at 25° C. (U. S. P.).—*Mclt.* 198.5° C. (U. S. P.).—*Uses & Doses:* As of cinchonine.

Cinchonine Tannate Merck (6

Variab. comp.—Yellow, amorph. powd.—*Sol.* A.; v. sl. in W.—*Uses:* As of cinchonine.

Cinchotine.—see **Quinidine**

Cinene.—see **Dipentene**

Cineol.—see **Eucalyptol**

Cineraria Juice (120

Fr. fresh herb Cineraria maritima, L., preserv. w. alc.—*Uses: Extern.*, cataract of the eye; 2 drops 3 t. p. d.

Cinnabar.—see **Mercury Sulphide, Red**

Cinnabar, Austrian.—see **Lead Chromate, Basic**

Cinnamaldehyde.—see **Aldehyde Cinnamic**

Cinnamene (or, *-ol*).—see **Styrene**

Cinnamon Brown.—see **Bismarck Brown**

Cinnamon (Cassia)

(Cinnamon; Cassia Bark; Chinese Cinnamon).—Bark of Cinnamomum Cassia, Blume. Lauraceæ. —*Habit.:* Southern China; Anam, &c.—*Etymol.:* Grk. "kinamomon," fr. "kinein," rolled, "a" & "momos," fault or blemish; or, fr. Arabic "kinamon" fr. "quaneh," a cane; or Malay "kaju manis," sweetwood. "Cassia," fr. Grk. "kasia," perfume, or fr. Hebrew "quetsioth, quatsa," to peel off (the bark). Dioscorides designated the bark of Laurus Cassia by the name "kassia."—Quills of varying length, abt. $^1/_{25}$ in. (1 Mm.) or more thick; nearly deprived of its corky layer; yellowish-brown; nearly smooth fracture; fragrant odor; sweet arom. taste.—*Constit.:* Ethereal oil; cinnamic aldehyde; tannin; mucilage; sugar.—Stomachic; Hemost.; Carmin.; Astr.; Stim.—*Techn.*, source of oils, & as flavoring.—*Doses:* 5–30 grains (0.3–2 Gm.).—Fld. extr., 10–30 ♏ (0.6–2 Cc.).—Tinct. 15–45 ♏ (1–3 Cc.).

Cinnamon (Ceylon).—*U. S. P.*

Inner bark of the shoots of Cinnamomum zeylanicum, Breyne. Lauraceæ.—*Habit.:* Ceylon, Sumatra, Borneo; cultivated in tropical Africa, America, & Asia.—*Etymol.:* See Cinnamon (Cassia).—Long, closely rolled quills composed of 8 or more layers of bark of the thickness of paper; pale yellowish-brown; outer surface smooth; fracture short-splintery; fragrant odor; sweet, arom. taste.—*Constit., Uses, & Doses:* As of cinnamon (cassia).

Cinnamon (Saigon).—*U. S. P.*

Bark of an undetermined sp. of Cinnamomum. Lauraceæ.—*Habit.:* Anam (Cochin China); cultivated in Java, Sumatra, S. America, &c.

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

—*Etymol.:* See Cinnamon (Cassia); & "Saigon," a city in southern Anam, its habitat.—Quills abt. 6 in. (15 Cm.) long & $^{2}/_{5}$–$^{3}/_{5}$ in. (10–15 Mm.) diam., w. bark $^{1}/_{12}$–$^{1}/_{8}$ in. (2–3 Mm.) thick; gray or light grayish-brown extern.; cinnamon-brown or dark-brown intern.; short, granular fract.; fragrant odor; sweet, arom., somew. astring. taste.—*Constit., Uses & Doses:* As of cinnamon (cassia).

Cinnamon Root.—see **Conyza**

Cinnamyl Cinnamate.—see **Styracin**

Cinnamyl-eugenol

$C_{19}H_{18}O_3$, or, $C_3H_5.C_6H_3(OCH_3)CO_2(CH)_2C_6H_5$.—Colorl., shin. need.; odorl.; tastel.—*Sol.* C., E., acetone, hot A.—*Melt.* 90–91° C.—Antisep.; Antituberc.—*Uses:* Hypoderm., instead of eugenol, in tuberculosis.—*Inj.*, 2–8 ♏ (0.12–0.5 Cc.) of olive-oil solut.

Cinnamyl-guaiacol.—see **Styracol**

Cinnamylmetacresol.—see **Hetokresol**

Cinnyl Cinnamate.—see **Styracin**

Citarin (15

(Sodium Anhydromethylenecitrate). — $(CH_2.COONa)_2$: C.CO.C.CH_2.O.—Wh., cryst. powd.—*Sol.*, eas. in W.; insol. A.—Antilithemic; Uric-acid solvent.—*Uses:* Gout, rheum.—*Dose* 15–30 grains (1–2 Gm.) 3–4 t. p. d.

Citral Merck (15

Aldehyde in oil of lemon & some o. essential oils. —$C_{10}H_{16}O$.—Golden-yellow liq.; str. lemon odor. —Sp. Gr. 0.899 at 15° C.—*Boil.* 228–229° C.—*Uses:* Flavor. & fortifying oil of lemon.—*Caut.* Keep cool & dark.

Citro-Molybdic Acid Paper

(Mann's Paper).—Paper impregnated w. a solut. of molybdic & citric acids & dried.—*Uses:* Detecting water in alcohol, ether, air, &c.; the dry blue paper is decolorized by moisture in air, or by water in liquids.

Citro-Picric Acid Paper, Geissler-Oliver

Wh. paper impregnated w. a solut. of picric & citric acids & dried.—*Uses:* Detecting albumin in urine. On immersing a strip of the paper in urine, albumin is pptd.

Citro-Potassium Ferrocyanide Paper, Geissler-Oliver

Wh. paper impregnated w. a solut. potassium ferrocyanide & citric acid & dried.—*Uses:* Detecting albumin in urine. On immersing a strip of the paper in urine, albumin is pptd.

Citro-Potassium Mercuric Iodide Paper, Geissler-Oliver

Wh. paper impregnated w. a solut. potass.-mercuric iodide & citric acid.—*Uses:* Detecting albumin in urine. On immersing a strip of the paper in urine, albumin is pptd.

Citro-Sodium Tungstate Paper, Geissler-Oliver

Wh. paper impregnated w. a solut. sod. tungstate & citric acid & dried.—*Uses:* Detecting albumin, mucin, uric acid, peptones, & creatinin in urine. On immersing a strip of the paper in urine a precipitate forms.

Citronin A.—see **Naphthol Yellow S**

Citrophen (18

Compound of citric acid w. paraphenetidine. — $C_3H_4OH.(CONH.OC_2H_6C_6H_4)_3+3H_2O$.—Wh. powd. or cryst.; faint, persistent acidul. taste.—*Sol.* 40 cold W.—*Melt.* 181° C.—Antipyr.; Antineural.; Sed.—*Uses:* Typhoid fever, migraine, neural.; &c.—*Dose* 8–15 grains (0.5–1 Gm.).—*Max. D.* 90 grains (6 Gm.) p. d.

Citrullin Merck (400

Resinoid fr. Citrullus Colocynthis, L.—Yellow, amorph. powd.—*Sol.* A., E.—Cathartic.—*Uses:* General purg., pref. *by rectum.* Largely used in veter. med.—*Dose* $^{1}/_{6}$–$^{1}/_{3}$ grain (0.01–0.02 Gm.) diss. in 15 ♏ (1 Cc.) each alc. & glyc., & dil. with W.

Citrullus Colocynthis.—see **Colocynth**

Citrullus Vulgaris

(Watermelon).—Seed of Citrullus vulgaris, Schrader. (C. Citrullus [L.], Karst.).—Cucurbitaceæ.—*Habit.*. Asia; cultivated everywhere. —*Etymol.:* Fr. Lat. "citrus," orange, referring to the orange-red color of the fruit of the species when cut.—*Constit.*. Resin; albumin; dextrose.—Diuret.; Diaphor.—*Uses:* Strangury & diseases of genito-urinary system.—*Dose:* Fld. extr., 1–2 fl. dr. (4–8 Cc.).

Citrus Aurantium or *Vulgaris.*—see **Orange**

Civet (95

(Zibeth).—Unctuous secretion fr. receptacles between the anus & genitalia of both male & female Viverra Civetta (Civet cat), Schreber, of Africa, & fr. V. Zibetha, Schreber, of the East Indies. Class: Mammalia; Ord.: Carnivora; Fam.: Viveridæ.—*Habit.:* Asia; Molucca Islands; East Indies.—*Etymol.:* Fr. "zebad," the Arabic name of the animal.— Semisolid, yellowish to brown, unctuous substance; unpleasant, subacrid, bitter taste; fusible, & burns without leaving much residue.—*Sol.*, partly in hot A., & in E.; insol. in W. — *Constit.:* Fixed & volat. oils; ammonia; coloring matter; resin.—*Uses:* Formerly used like castor.; now used only in perfumery as a fixative.

Clark's Soap Solution

Cont. an amount of pure potass. soap (potass. oleate) corresponding with a solution barium chloride containing 0.523 Gm. per liter water (corresponding to 0.120 Gm. calcium oxide [CaO] in 1 liter).—*Uses:* In water analysis, for determining hardness.

Clary.—see **Sclarea**

Clavin Merck (1500

Act. principle fr. ergot.—$C_{11}H_{22}N_2O_4$.—Colorl. cryst.—*Sol.* W., dil. A.; insol. absol. A., E., benzin, acetic ether.—Powerful Oxytocic.—*Uses:* As of ergotin, but causes no spasms or o. toxic effects, & no gangrene.—Marketed in two forms of tablets ea. contain. $^1/_3$ grain (0.02 Gm.) clavin, one form w. sugar intended for intern. use, the o. w. $1^1/_3$ grains (0.08 Gm.) sod. chloride for hypoderm. use.—*Dose* 1 tabl.—That given hypoderm. is diss. in 15 ♏ (1 Cc.) water.

Cleavers.—see **Galium**

Clotbur; Spiny, or *Thorny.*—see **Xanthium**

Clover.—see **Trifolium**

Cloves.—see **Caryophyllus; Anthophylli**

Cnicus

(Holy Thistle; Our Lady's Thistle; Carduus Benedictus; Carbenia).—Herb & seed of Cnicus benedictus, Gaertn. (Carbenia benedict., Adams). Compositæ.—*Habit.:* Southern Europe; U. S.—*Etymol.:* "Cnicus" fr. Grk. "knekos," safflower; the name was early transferred to thistles. "Carduus" fr. Lat. "arduus," spiny, fr. the Celtic "ard," point. Lat. "benedictus," blessed, because of the curative properties of the plant.—*Constit.: Herb:* Cnicin, $C_{42}H_{56}O_{15}$; tannin; resin; fixed oil; gum.—*Seed:* Cnicin.—*Herb:* Bitter Tonic; Diaphor.; Emmen.; Emetic.—*Seed:* Diur.; Febrif.—*Uses:* Amenor., dyspep., intermit. fever.—*Doses: Herb,* 10–60 grains (0.6–4 Gm.).—Aqu. extr., 5–10 grains (0.3–0.6 Gm.).—Fld. extr., 30–60 ♏ (2–4 Cc.).

Cobalt Merck.—Pure (100

Etymol.: Of Slavonic origin, & derived fr. "kow," ore, or "kowalti," ore-like; according to others, named for the mischievous mountain spirit "Kobold," because the miners were often deceived by the silver-like, but useless ores; again, believed to be derived fr. Grk. "kobalos," parasite, because the metal is almost always found with nickel.—Metal.—Co.—Steel-gray, shin., v. ductile, hard, & somew. mall.—Sp. Gr. 8.710 at 15° C.—*Uses:* Techn., chiefly for galvanoplating.

do. Merck.—98-99%, Cubes, sheets, & powd. (20

do. Merck.—Highest Purity, free from Nickel (150

Cobalt Acetate Merck (8

(Cobaltous Acetate).—$Co(C_2H_3O_2)_2+4H_2O$.—Reddish-violet, deliq. cryst.—*Sol.* W.—*Uses:* Sympathetic ink.—*Caut.* Keep well stoppered.

Cobalt Arsenate Merck (20

(Normal Cobaltic Arsenate; Natural Erythrine).—Native cobalt bloom or erythrite.—$Co_3(AsO_4)_2+8H_2O$.—Violet-red powd.—*Sol.,* dil. mineral acids.—*Uses:* Techn., for painting on glass & porcelain in light-blue colors.

do. Merck.—Commercial "A. K. O." (10

Cobalt Bromide Merck (20

(Cobaltous Bromide).—$CoBr_2$+aq.—Red cryst.—*Sol.* A., W.—*Uses:* In hygrometers.

Cobalt Butyrate Merck (50

(Cobaltous Butyrate).—$Co(C_4H_7O_2)_2$.—Violet-red, gran. powd.—*Sol.* W.

Cobalt Carbonate Merck.—Pure (6

(Cobaltous Carbonate).—$CoCO_3$.—Light, rose-colored powd.—*Sol.,* dil. acids.—*Uses:* Manuf. cobalt oxides & cobalt pigments.

do. Merck.—Highest Purity, free fr. Ni (50

do. Merck.—Commercial, "K. O. H." (10

Violet-gray powd.

Cobalt Chloride Merck.—Pure (4

(Cobaltous Chloride).—$CoCl_2+6H_2O$.—Ruby-red cryst.—*Sol.* W., A.—*Uses:* Sympathetic ink, barometers, hygrometers, galvanoplating, &c.

do. Merck.—Highest Purity (8

do. Merck.—Highest Purity, free fr. Ni (25

Cobalt Chromate Merck (9

(Cobaltous Chromate).—$Co_2CrO_4(OH)_2+H_2O$.—Brown powd.—*Sol.,* solut. chromic acid.

Cobalt Citrate Merck (10

(Cobaltous Citrate).—$Co_3(C_6H_5O_7)_2$+aq.—Pale-red, amorph. powd.—*Sol.,* sl. W.

Cobalt Cyanide Merck (30

(Cobaltous Cyanide).—$Co(CN)_2$.—Reddish-gray powd.—*Sol.,* solut. potass. cyanide.

Cobalt Formate Merck (15

(Cobaltous Formate).—$Co(HCOO)_2$+aq.—Red cryst.—*Sol.* W.

Cobalt Hydroxide.—Cobaltic (50

(Cobaltic Hydrate).—$Co_2O_3.3H_2O$, or, $Co_2(OH)_6$.—Dark brown powd.

Cobalt Hydroxide.—Cobaltous (50

(Cobaltous Hydrate).—$Co(OH)_2$.—Rose-red, cryst. powd.; brown on exposure.

Cobalt Iodide Merck (35

(Cobaltous Iodide).—CoI_2+6H_2O.—Brownish-red cryst.—*Sol.* W., A.—*Uses:* In hygrometers.

Cobalt (Luteo-) Chloride Merck (150

(Luteocobaltic Chloride).—Fr. oxid'n of amm. solut. cobalt dichloride w. large amount amm. chloride.—$Co_2Cl_6.12NH_3$.—Orange-yellow cryst.—*Sol.* W.—*Uses:* Reag. for pyrophosphoric acid.

Cobalt Nitrate Merck.—Pure (4

(Normal Cobalt, or Cobaltous, Nitrate).—$Co(NO_3)_2+6H_2O$.—Red, deliq. cryst.—*Sol.,* eas. W.—*Uses:* Blowpipe reag.; also as antid., per os or hypoderm. in 0.5% solut., in poisoning by HCN.—*Techn.,* in manuf. cobalt pigments & sympathetic inks.—*Caut.* Keep well stoppered.

do. Merck.—Highest Purity, free fr. Ni (25

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Cobalt Nitrate Merck.—Reagent (15

(Cobaltous Nitrate).—$Co(NO_3)_2+6H_2O$.—Red, monoclin. prisms; deliquesc. in moist air.—*Sol.*, eas. W., A.—*Tests:* (H_2SO_4) 1 Gm.+20 Cc. H_2O +1 Cc. HCl (sp. gr. 1.124)+solut. $BaCl_2$ – no turb.—(*Alkali Salts*) diss. 2 Gm. in 100 Cc. H_2O; compl. ppt. all Co by add. $NH_4OH+(NH_4)HS$; filter; evap. filtrate to dryness & ignite – wt. of res. not more than 0.005 Gm.—(*Zn*) 0.5 Gm.+ 50 Cc. H_2O+5 Cc. solut. NaOH (sp. gr. 1.3); filter; to filtrate add $(NH_4)HS$ – no ppt.—(*Pb; Cu*) 2 Gm.+50 Cc. H_2O+2 Cc. HNO_3 (sp. gr. 1.153) +aqu. H_2S – no change.—(*Ni*) 1 Gm.+20 Cc. H_2O+3 Gm. KCN; boil till yellow; filter; to filtrate add solut. KOH & Br-water – no brown color.—*Uses:* Blow-pipe analysis for Al, Zn, Mg; prepar. sodium cobaltic nitrite for detect. K.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Cobalt Oleate Merck (12

Brown, extract-like mass.—*Sol.*, fatty oils.

Cobalt Oxalate Merck.—Pure (10

(Cobaltous Oxalate). — $CoC_2O_4+2H_2O$. — Pale flesh-colored powd.—Insol. W.

Cobalt Oxide "A. K. O."—see **Cobalt, Arsenate, Commercial**

Cobalt Oxide "K. O. H."—see **Cobalt Carbonate, Commercial**

Cobalt Oxide "P. K. O."—see **Cobalt Phosphate, Commercial**

Cobalt Oxide Merck.—Cobaltic (22

(Cobalt Peroxide or Sesquioxide). — Co_2O_3. — Black powd.—*Sol.*, acids.—Loses oxygen when heated, & leaves residue of cobaltous oxide.

Cobalt Oxide Black I a Merck.—"F. F. K. O." (25

do. III a Merck.—"R. K. O." (6

Uses: Techn., & painting porcelain.

do. IV a Merck.—"P. O." (12

Cobalt Oxide Blue Merck.—"F. U." (35

Uses: Techn., & painting porcelain.

Cobalt Oxide Gray II a Merck.—"F. K. O." (12

Uses: Techn., & painting porcelain.

Cobalt Paper

Wh. paper charged w. cobaltous chloride solut., colored blue w. methylene blue and dried.—Indicator in volumetric estimation of Zn, Cu, & Ni, using sodium sulphide.—An excess of the sulphide develops a black spot on the paper.

Cobalt Peroxide.—see **Cobalt Oxide, Cobaltic**

Cobalt Phosphate Merck (18

(Normal Cobalt Phosphate).—$Co_3(PO_4)_2+2H_2O$. — Pink powd. — *Sol.*, dil. phosphoric acid. — *Uses:* Techn., manuf. cobalt pigments, coloring glass, & painting on porcelain in light-blue colors.

do. Merck.—Commercial, "P. K. O." (18

Uses: Techn., & painting porcelain.

Cobalt (Purpureo-) Chloride Merck (18

(Purpureocobaltic Chloride).—Fr. roseocobaltic chloride, by HCl & heat.—$Co_2Cl_6.10NH_3$, or, $ClCo(NH_3)_5Cl_2$. — Sm., violet-red cryst. — *Sol.*, boil. W.; sl. in W. acid. w. HCl; alm. insol. cold W.

Cobalt Rhodanide.—see **Cobalt Sulphocyanate**

Cobalt (Roseo-) Chloride Merck (18

(Roseocobaltic Chloride). — $Co_2Cl_6.10NH_3+2H_2O$.—Red, dichroic, micro-cryst. powd.; very unstable.—*Sol.* W.

Cobalt Sesquioxide.—see **Cobalt Oxide, Cobaltic**

Cobalt Sulphate Merck.—Pure (4

(Cobaltous Sulphate). — $CoSO_4+7H_2O$. — Red prisms.—*Sol.* 24 W.—*Uses:* Techn., manuf. cobalt oxides & cobalt pigments used in decorating porcelain; cobalt-plating steel, iron, copper, brass & zinc galvanically; manuf. black flux for porcelain signs, & cobalt glaze for porcelain.

do. Merck.—Highest Purity, free fr. Ni (25

Cobalt Sulphide Merck (14

(Cobaltic Sulphide). — Co_2S_3. — Black powd.— Insol. W.

Cobalt Sulphocyanate (35

(Cobaltous Sulphocyanide, or Rhodanide).—$Co(CNS)_2+4H_2O$. — Deep-blue, hygrosc. cryst.— *Sol.*, dil. acids.

Cobalt Tartrate Merck (12

Pink powd.—Alm. insol. W.

Cobalt Yellow.—see **Cobalt & Potassium Nitrite**

Cobalt & Ammonium Sulphate Merck (5

$CoSO_4(NH_4)_2SO_4+6H_2O$. — Ruby-red, cryst. masses.—*Sol.* W.

Cobalt & Nickel Sulphate.—see **Nickel & Cobalt Sulphate**

Cobalt & Potassium Cyanide Merck (20

(Potassium Cobalticyanide). — $Co_2K_6(CN)_{12}$. — Yellowish cryst.—*Sol.* W.

Cobalt & Potassium Nitrite Merck (15

(Cobalt Yellow; Potassium Cobaltinitrite; also improperly "Indian Yellow").—$2CoK_3(NO_2)_6+3H_2O$.—Yellow, micro-cryst. powd.—*Sol.*, sl. in W. — Antispasm.; Antidyspneic. — *Uses:* Asthma, dyspnea, & heart dis.—*Techn.*, as oil- & water-color pigment instead of Indian Yellow; also painting on glass & porcelain.—*Dose* $^1/_4$–$^1/_2$ grain (0.015–0.03 Gm.).

Cobalt & Potassium Sulphate Merck (15

(Potassium Cobaltosulphate). — $CoK_2(SO_4)_2+6H_2O$.—Red cryst.—*Sol.* W.

Coca.—*U. S. P.*

(Erythroxylon; Cuca; Hayo; Ipado).—Dried lvs. of Erythroxylon Coca, Lamarck, Erythroxylaceæ, known commercially as Huanaco Coca, or of E. Truxillense Rusby, known commercially as Truxillo Coca.—*Habit.:* Bolivia; Chili; Peru. —*Etymol.:* Erythroxylon fr. Grk. "erythros,"

red, & "xylon," wood, *i.e.*, the wood of some species is red. "Coca" is the Spanish name of the plant.—*Constit.:* Cocaine, $C_{17}H_{21}NO_4$; benzoylecgonine, $C_9H_{14}NO_3.COC_6H_5$; α-hygrine, $C_8H_{15}NO$; β-hygrine, $C_{14}H_{24}N_2O$; cinnamylcocaine, $C_{19}H_{23}NO_4$; truxillococaine (truxilline, isatropylcocaine, or cocamine), $C_{19}H_{23}NO_4$; cocaicine; cocatannic acid; resin; wax, &c.—Stim.; Diaphor.; Anodyne; Anaphrodis.; Narcotic; Cerebr. Stim.; Bitter Tonic.—*Uses:* Hyster., melancholia, debil., dyspep., musc. exhaust., & var. dis. of nerv. system.—*Doses:* 15–60 grains (1–4 Gm.).—Alcoh. extr., 4–15 grains (0.25–1 Gm.).—Fld. extr., 20–60 ♏ (1.3–4 Cc.).

Cocaethyline Merck (900

(Ethylbenzoylecgonine; Benzoylecgonine-ethylester.—Fr. benzoylecgonine, by ethyl iodide.—$C_{18}H_{23}NO_4$, or, $C_9H_{13}(C_7H_5O)NO_3.C_2H_5$.—Colorl. cryst.; benumbs tongue & lips.—*Sol.* A., E.; alm. insol. W.—*Melt.* 109° C.—*Uses:* Local anesth. like cocaine, but milder. Hence recom. in nervous patients.

Cocaine Merck.—Pure (91

(Methylbenzoylecgonine).—Alkaloid fr. lvs. of Erythroxylon Coca, Lam. & o. varieties of Coca.—$C_{17}H_{21}NO_4$.—Colorl. cryst.; benumb lips & tongue.—*Sol.* 9.5 A., 15.5 dil. A.; 5.5 E.; C., B., carbon disulph., petroleum ether, & 2500 W. at 15° C.; (5 A., 3.8 E. at 25° C.; v. sol. C. & warm. A.; 14 oil turpent.; 12 olive oil; insol. G.–U.S.P.).—*Melt.* 98° C.—Cerebro-spinal Stim.; Local Anesth. Hydrochloride usually used.

do. Merck.—Pure, Synthetic (4000

Fr. ecgonine.—Identical w. natural cocaine.

Cocaine Benzoate Merck (300

$C_{17}H_{21}NO_4.C_7H_6O_2$.—Colorl., partly cryst., gummy mass.—*Sol.* W., A.—*Uses:* In 5% aqu. solut. like hydrochloride. Used hypoderm.; said to be painless.

Cocaine Borate Merck (300

White, cryst. powder.—68.7% cocaine.—*Sol.* A.—*Uses:* Eye-douches & subcutan. inj.; solut. more permanent than that of hydrochloride.

Cocaine Carbolate.—see **Cocaine Phenate**

Cocaine Citrate Merck (300

$(C_{17}H_{21}NO_4)_2C_6H_8O_7$.—Wh. cryst.—*Sol.* W.—*Dose* $^1/_{20}$–1 grain (0.003–0.06 Gm.).

Cocaine Formate

$C_{17}H_{21}NO_4.CH_2O_2$.—Lustr., silky, faintly bitter need.—*Sol.* 41 W.; 2.5 A.; diffic. E., C.; insol. oils.—*Melt.*, abt. 42° C. w. decomp.

Cocaine Hydriodide Merck (300

$C_{17}H_{21}NO_4.HI$.—Yellowish cryst.—*Sol.*, sl. W., A.—Better adapted for cocaine cataphoresis than the hydrochloride.

Cocaine Hydrobromide Merck (300

$C_{17}H_{21}NO_4.HBr$.—Wh. cryst.—*Sol.* W.—*Uses & Doses:* As of the hydrochloride.

Cocaine Hydrochloride Merck.—Highest Purity, Medicinal, small or large crystals, gran. or powder (75

(Cocaine Muriate; Cocaine Hydrochlorate).—$C_{17}H_{21}NO_4.HCl$.—Colorl. cryst. or scales, or fine powd. (for insufflat.); saline, sl'y bitter taste, benumb tongue & lips.—*Sol.* 0.48 W., 3.5 A., 3 G., 20 C., 2800 E. at 15° C.; alm. insol. oils; (0.4 W., 2.6 A., 18.5 C. at 25° C.; 0.1 W. at 80° C.; 1.4 A. at 60° C.; insol. benzene, benzin, E.–U. S. P.).—*Melt.*, abt. 183° C. (abt. 189.9° C., U. S. P.).—Anesth.; Stim.; Sed.; Antisialag.; Antihidrotic; Antiprur.; Mydr.; Anod.—*Uses:* Local anesth., on muc. membr. (mouth, nose, eye, throat), toothache, catarrh, whoop.-cough, tonsil., vomit., ring. in ears, &c., also hemostatic. It is contraind. in fatty heart, arterial atheroma, pernicious anemia, hyst., & epilepsy. Maclagan's test should be appl. to see no isatropylcocaine (heart-poison) present.—*Dose* $^1/_2$–$1^1/_2$ grains (0.03–0.1 Gm.), in solution.—*Appl.*, 1–4% solut. in urethral inj., nose & throat, & eye drops; 10% solut. in vagina & rectum; general appl. 10–20% solut.; subcut., $^1/_4$–$^1/_2$ grain (0.015–0.03 Gm.) in 1–10% solut.; in Schleich's infiltration anesth., 0.01–0.2% solut.; in Bier's lumbar anesth., solut. of $^1/_{12}$–$^1/_2$ grain (0.005–0.03 Gm.) in 8–45 ♏ (0.5–3 Cc.) W.—*Max. D.* 2 grains (0.12 Gm.), single; 6 grains (0.36 Gm.), p. d.—*Antid.*, hydrated chloral, amyl nitrite, chlorof., paraldehyde, sulfonal, caffeine, morphine, digitalis, alcohol, ammonia, appl. of ice to head.—*Tests:* Chem. pure cocaine hydrochlor. should bear the following stringent tests: U. S. P. VIII Test: Dissolve 0.1 Gm. cocaine hydrochlor. in 85 Cc. cold W.; add 4 drops 10% ammonia water & stir well. Within 15 minutes, if pure, a cryst. precip. will settle, & the liq. remain *clear.* Stirring w. a glass rod aids reaction.—Permanganate Test: Dissolve 0.1 Gm. of the salt in 5 Cc. water w. 3 drops dil. H_2SO_4, & add 3 drops decinorm. solut. of potass. permang. The pink tint must persist at least $^1/_2$ hour.

Note.—The Merck brand is exceptionally free from the two highly toxic alkaloids, isatropylcocaine and cinnamyl-cocaine, which are so often found as impurities in cocaine hydrochloride. When ordering, please specify "Merck's."

Cocaine Lactate Merck (300

$C_{17}H_{21}NO_4.C_3H_6O_3$.—Thick, wh. liq.; honey consist.—*Sol.* W., A.—Anesth.; Sed.; Antisep.—*Uses:* Partic. in tuberculous cyst., w. painful irrit. of bladder.—*Inj.* (into blad.), $1^1/_2$ grains (0.1 Gm.) diss. in 8 ♏ (0.5 Cc.) each lactic acid & dist. W.

Cocaine Muriate.—see **Cocaine Hydrochloride**

Cocaine Nitrate Merck (200

$C_{17}H_{21}NO_4.HNO_3$.—Colorl. cryst.—*Sol.* W.—*Uses & Doses:* As of hydrochloride; preferred for use w. ureth. inj. nitrate silver.—*Max. D.* $^3/_4$ grain (0.05 Gm.), single; $2^1/_2$ grains (0.15 Gm.), p. day.

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Cocaine Oleate Merck.—25% (90

Solut. of cocaine in oleic acid.—Partly cryst. mass.—*Sol.* A., oleic acid & oils.—*Uses: Extern.*, local anesthesia.

do. Merck.—50% (180

do.—5%, 10%, & 15%

Cocaine Phenate Merck (570

(Phenol-Cocaine; Cocaine Carbolate).—Butter-like, alm. colorl., partly cryst. masses.—*Sol.* A., dil. A., E.; insol. W.—Local Anesth.; Sedat.; Analg.; Anticatar.—*Uses: Extern.*, hypoderm. by dentists; dust. throat in catarrh w. acetanilide; inhaled w. menthol; dis. of respir. org., rheumat. —*Dose* $^1/_{12}$–$^1/_6$ grain (0.005–0.01 Gm.) 1–2 t. p. d. in capsules.—*Inj.*, 16 ♏ (1 Cc.) of 0.7% solut. in dil. A.—*Appl.* 1–3% solut. in 30% alc.; 5% powd. w. acetanilide, or pure.

Cocaine Salicylate Merck (300

$C_{17}H_{21}NO_4.C_7H_6O_3$.—Wh. cryst.—*Sol.* W., A.—*Uses:* Spasm. asthma, &c.—*Dose:* As of the hydrochloride.

Cocaine Sulphate Merck (110

$(C_{17}H_{21}NO_4)_2.H_2SO_4$.—Gran., wh., cryst. powd. —*Sol.* W., A.—*Uses & Dose:* As of the hydrochloride.

Cocaine Tannate Merck (300

Wh., amorph. powd.—*Sol.* A.

Cocaine Tartrate Merck (300

$(C_{17}H_{21}NO_4)_2.C_4H_6O_6$.—Wh., cryst. powd.—*Sol.* W., A.—*Uses & Dose:* As of the hydrochloride.

Cocculin.—see **Picrotoxin**

Cocculus Indicus

(Fish-berries; India Berries; Oriental Berries). —Seed of Anamirta paniculata, Colebrooke. Menispermaceæ.—*Habit.:* East Indies.—*Etymol.:* Grk. "kokkulos," small grains, referring to the appearance of the fruit.—*Constit.:* Menispermine; paramenispermine; picrotoxin, $C_{30}H_{34}O_{13}$; picrotoxic acid; anamirtin (cocculin).—Nervine; Sedat.—*Uses: Extern.*, in parasitic skin dis.; insecticide; also used as a fish poison.—*Techn.*, for preventing secondary fermentation of alcoholic liquors (but this use is very dangerous).—*Dose* 1–3 grains (0.06–0.2 Gm.) as powd., tinct., or fld. extr.—Fld. extr. is used also in 2–5% oint. or lotion for pediculi & other parasitic skin dis.—*Antid.*, stomach siphon, emetics, ammonia, brandy, &c.—*Caut.* Poison!

Cochineal.—*U. S. P.*

The dried female insect of Pseudococcus cacti (L.) Burmeister. Hemiptera. Found on various other cacti (Opuntia Tuna, &c.).—*Habit.:* Mexico, Central America; cultivated in W. Indies, Canary Is., Algiers, & Southern Spain. —*Etymol.:* Cochineal fr. Spanish "cochinilla," the name of the insect, & signifying "wood louse." "Coccus," fr. Grk. "kokkos," a grain or berry (fr. resemblance); "cacti," fr. Grk. "kaktos," a prickly plant.—Abt. $^1/_5$ in. (5 Mm.) long; purplish-gray or purplish-black color; somewh. oblong & angular, flat or concave beneath, & convex above; faint odor, & slightly bitterish taste. Abt. 7000 insects to 1 lb.—*Constit.:* Carminic acid, $C_{17}H_{16}O_{10}$ (or $\cdot C_{11}H_{12}O_6$[?]); coccerin (a wax), $C_{30}H_{60}(C_{31}H_{61}O_3)_2$. The coloring matter (alkali carminate) is contained only in the fatty parts of the insect, & in the yolk of the eggs, to the extent of fr. 10–14%.—*Uses:* In whoop.-cough (rarely).—*Techn.*, as a coloring for food products, toilet preparations, &c.; manuf. of carmine & carminic acid; also as indicator in alkalimetry.—Fluid extr. is used for coloring medic. preparations.—*Dose* 2–10 grains (0.12–0.6 Gm.) sev. t. p. d. w. K_2CO_3.

do.—Solution.—*N. F.*

Fr. 65 Gm. cochineal, 32 Gm. K_2CO_3, 32 Gm. alum, 65 potass. bitart., 500 Cc. G., 32 Cc. A., & water to make 1000 Cc.

Cochineal-Alum.—see **Czokor's Alum Cochineal**

Cochineal Paper

Wh. paper impregnated w. aqueous cochineal solut. & dried.—*Uses:* Indicator (acids = red color; alkalies = violet color).

Cochineal Tincture

Uses: Staining nuclei, & as indicator in volum. determ. of alkali carbonates where litmus is inapplicable; also as coloring for foods, cosmetic preparations, &c.

Cochlearia

(Scurvy Grass; Scurvy Weed; Spoon-wort).—Whole plant, Cochlearia officinalis, L. Cruciferæ.—*Habit.:* Europe; Asia; North America.—*Etymol.:* Fr. Grk. "kochlearion," spoon, referring to the shape of the leaves.—*Constit.:* Volat. oil; butyl isosulphocyanate, $SCNC_4H_9$; bitter principle; tannin; salts.—Stim.; Antiscorbutic; Diuret.—*Uses:* Sea-scurvy & chron. rheum.; also as a blood purifier, & sometimes used as a salad.—*Dose:* Extr., 8–30 grains (0.5–2 Gm.).

Cocoa Shells.—see **Cacao Shell**

Codeine Merck.—Pure, cryst. or powder (81

(Methylmorphine). — Alkaloid fr. opium.—$C_{16}H_{21}NO_3+H_2O$.—Colorl., bitter, alkal. cryst., or wh. powd.—*Sol.* 3 A., 2 C., 30 E., B., carbon disulph., abt. 120 W. at 15° C.; (120 W., 1.6 A., 12.5 E., & 0.66 C. at 25° C.–U. S. P.).—*Melt.* 154.9° C., U. S. P.—*Uses:* Inst. of morphine as analgesic, but not for severe pains; in bronch., irritat. cough, ovarian pains, pains fr. tumors, insom. not due to viol. pain; to abate desire morphine habit; diab. mell.; bladder trouble complic. w. enlarged prostate; dis. respir. organs, &c.—*Dose* $^1/_2$–1 grain (0.03–0.06 Gm.).—*Inj.*, half as much.—*Max. D.* (all codeine salts) $1^1/_2$ grains (0.1 Gm.) single; 5 grains (0.3 Gm.) daily.—*Antid.*, as of morphine.—Codeine salts are less poison. than morphine.—*Incomp.*, alkalies; alkaloidal precipitants; ammonium bromide, chlor-

ide, or valerate; salts of copper, iron, or lead.

Note.—Codeine Merck is suitable for use in the most exacting cases, because it has been repeatedly purified. It is adapted to the needs of the careful dispenser.

Codeine Citrate Merck (275

$(C_{18}H_{21}NO_3)_3C_6H_8O_7$.—Wh. cryst.—*Sol.* W.—*Uses & Dose:* As of codeine.

Codeine Hydrobromide Merck (250

$C_{18}H_{21}NO_3.HBr+2H_2O$.—Wh. cryst.—*Sol.* W.—*Uses:* Espec. in nerv. cough, like codeine phosphate.—*Dose:* As of codeine.

Codeine Hydrochloride Merck (76

$C_{18}H_{21}NO_3.HCl+2H_2O$.—Sm., fine, wh. need.—*Sol.* 20 W.; less than 1 boil. W.—*Uses & Dose:* As of codeine.

Codeine Methylbromide.—see **Eucodin**

Codeine Nitrate Merck (76

$C_{18}H_{21}NO_3.HNO_3$.—Sm., wh. cryst.; yellow on expos.—*Sol.* W.—*Uses & Dose:* As of codeine.

Codeine Phosphate Merck (71

$C_{18}H_{21}NO_3.H_3PO_4+2H_2O$.—Wh., cryst. powd.—*Sol.* 4 W.; sl. in A. at 15° C.; (2.25 W., 261 A., 1340 E., & 6620 C., at 25° C.–U. S. P.).—*Melt.* 235°C.(U. S. P.).—*Uses:* Mental dis., morphinism; hypoderm. hypnot. Best salt for hypoderm. use; more sol., less irrit.—*Dose* $^1/_6$–1 grain (0.01–0.06 Gm.) several t. p. d.—*Inj.*, $^1/_3$–$^3/_4$ grain (0.02–0.05 Gm.).—*Max. D.* $1^1/_2$ grains (0.1 Gm.) single; 5 grains (0.3 Gm.) daily.

Codeine Salicylate Merck (250

$C_{18}H_{21}NO_3.C_7H_6O_3$.—Wh., cryst. powd.—*Sol.* 1 W.; sl. A.—*Uses:* Rheum. affect. & mening. pain.

Codeine Sulphate Merck.—Pure, cryst. or powder (76

$(C_{18}H_{21}NO_3)_2.H_2SO_4+5H_2O$.—Wh. cryst. or powd.—*Sol.* 40 W.—*Uses:* As of codeine.

Note.—The extreme purity of codeine sulphate Merck is at once apparent from its well-defined crystals & its beautiful downy appearance. The lightness of the crystals, too, insures ready solubility.

Codeine (Pseudo-) Merck.—Pure, cryst. (2500

By-prod. prep. apocodeine.—$C_{18}H_{21}NO_3$.—Colorl. prisms., or need.—*Sol.* A.; sl. in W.—*Melt.* 182° C.—Weaker than codeine.

Codeine (Pseudo-) Hydrochloride Merck (2350

$C_{18}H_{21}NO_3.HCl+1^1/_2H_2O$.—Wh. need.—*Sol.* W.

Codoil.—see **Retinol**

Coerulein Merck (12

(Alizarin Green).—Black paste.—*Sol.*, only in dil. H_2SO_4, w. dirty yellowish-brown color.—*Uses:* Techn., dyeing wool, cotton, & silk.

Coffee.—see **Caffea**

Cognac Essence.—see **Ethyl Pelargonate**

Cognac Ether.—see **Ethyl Cocoinate**

Cognac Oil.—see **Ethyl Oenanthate**

Cola

(Kola; Soudan Coffee; Guru).—Seeds of Cola acuminata, R. Brown. Sterculiaceæ.—*Habit.:* West Africa; natur. in West Indies, India, Ceylon, &c.—*Etymol.:* "Cola" is the African name of the drug. Lat. "sterculia" fr. "stercus," excrement, referring to the fetid odor of the flowers or fruit of certain species.—Oblate-ovate seeds abt. 1 in. (25 Mm.) long, & somewh. flattened; testa brown or reddish-brown, often w. blackish spots, & brittle; embryo usually dark-colored, but when freshly cut yellow or whitish; cotyledons differ in size; nutmeg-like odor; taste bitterish & somewh. astring. when fresh, but mild & arom. when dried.—*Constit.:* Caffeine (2–2.4%); theobromine; kola-red; kolanin (glucoside); kolazyme (ferment); kolatannin, $C_{20}H_{10}O_8$; glucose; gum; starch; sugar.—Stim.; Tonic; Nervine; Diuret.; Masticatory; Aphrodis.; Astring.—*Uses:* Heart failure, general debil., incr. muscul. exertion, dropsical condit., instead of caffeine or coffee, & as stimul. in marching or traveling.—*Doses:* 15–60 grains (1–4 Gm.).—Alcoh. extr., 2–5 grains (0.12–0.3 Gm.).—Fld. extr., 15–60 ♏ (1–4 Cc.).—Tinct., 30–120 ♏ (2–8 Cc.).

Colchicein Merck (5000

(Acetotrimethylcolchicinic Acid).—Decomp. prod. colchicine.—$C_{21}H_{23}NO_6+^1/_2H_2O$.—Sm., yellow need.—*Sol.* A., E., C.; sl. in W.—*Melt.* (hydrated) 149–151° C.—Antipodagric & Antirheum.—*Dose* $^1/_{120}$–$^1/_{60}$ grain (0.0005–0.001 Gm.).

Colchicine Merck.—Highest Purity, cryst., or amorph. powd. (Cryst., 640; amorph., 2625

(Methyl Ether of Colchicein).—Alkaloid fr. Colchicum autumnale, L.—$C_{22}H_{25}NO_6$.—Yellow, cryst. or amorph. powd.; v. bitter taste.—*Sol.* 22 W., 155 E., & 87 B. at 25° C. (U. S. P.); insol. benzin.—*Melt., cryst.*, abt. 120°C., w. previous softening; *amorph.*, at 142° C., w. decomp., when dried; (142.5° C., U. S. P.).—Antipodagric; Antirheum.; Antineural.—*Uses:* Rheum., gout, uremia, chron. sciat., asthma, cereb. conges., & rheum. ischiagra.—*Dose* $^1/_{120}$–$^1/_{30}$ grain (0.0005–0.002 Gm.) 2 or 3 t. p. d.—*Max. D.* $^1/_{30}$ grain (0.002 Gm.) single; $^1/_{12}$ grain (0.005 Gm.) daily.—*Antid.*, stimulants, tannin, strong coffee, opiates, emetics (copper sulphate 3 grains [0.2 Gm.], & zinc sulphate 5 grains [0.3 Gm.] every 15 min.).—*Caut.* Very poisonous!

Colchicine Salicylated Merck (1225

$C_{22}H_{25}NO_6+C_7H_8O_3$.—Yellow powd.—*Sol.* W., A., C.—*Uses:* Recom. in gout & rheum.—*Dose* $^1/_{80}$ grain (0.00075 Gm.) every 4 hrs.

Colchicine Tannate Merck (1000

38% colchicine.—Yellow powd.—*Sol.* A.—*Uses:* As of colchicine.—*Dose* $^1/_{60}$–$^1/_{15}$ grain (0.001–0.004 Gm.).

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Colchicum Corm.—*U. S. P.*

(Meadow Saffron; Autumn Crocus; Wild Saffron; Meadow Crocus).—Dried corm of Colchicum autumnale, L. Liliaceæ. (Colchiceæ).—*Habit.*. Central & Southern Europe; North Africa.—*Etymol.:* Fr. Grk. "kolchikon," poison plant, fr. "Colchis," an ancient province in Asia Minor, east of the Black Sea, where this poisonous plant flourished. Lat. "Au(c)tumnale," pertaining to autumn (when the plant blooms).—*Constit.:* Colchicine (0.4–0.5%), $C_{22}H_{25}NO_6$; colchicein, $C_{21}H_{23}NO_6+{}^1/_2H_2O$; colchicoresin, $C_{51}H_{60}N_2O_{15}$; betacolchicoresin, $C_{34}H_{39}NO_{10}$; starch, &c.—Diur.; Cath.; Antarthr.; Diaph.; Emet.; Alterat.; Sedat.; Expector.—*Uses:* Rheum., gout, dropsy, asthma, & ascites fr. hepatic obstruct.—*Doses:* 1–10 grains (0.06–0.6 Gm.) in gout, rheum., sciatica, &c., with an alkali.—Acet. extr., ${}^1/_2$–2 grains (0.03–0.12 Gm.); *Max. D.* 3 grains (0.2 Gm.) single, 12 grains (0.75 Gm.) p. day.—Fld. extr., 2–8 ♏ (0.12–0.5 Cc.).—Tinct., 10–60 ♏ (0.6–4 Cc.).—*Antid.*, stomach siphon; emetics; tannin; demulcents; stimulants; opium.

Colchicum Seed.—*U. S. P.*

Seed of Colchicum autumnale, L. Liliaceæ.—*Habit. & Etymol.:* As of colchicum corm.—*Constit.:* Colchicine (0.45%, U.S.P.), $C_{22}H_{25}NO_6$; fixed oil (6–8%); gum; starch; tannin; colchicoresin; proteids.—Cath.; Emet.; Diur.; Sedat.—*Uses:* Gout, rheum., & dropsy; also source of colchicine.—*Doses:* 1–5 grains (0.06–0.3 Gm.).—Acet. extr., 1–3 grains (0.06–0.2 Gm.); *Max. D.* 4 grains (0.25 Gm.) single, 15 grains (1 Gm.) daily.—Alcoh. extr.; dry.: *Max. D.* ${}^3/_4$ grain (0.05 Gm.) single, $1{}^1/_2$ grains (0.1 Gm.) daily; soft.: *Max. D.* 1 grain (0.06 Gm.) single, 2 grains (0.12 Gm.) daily.—Fld. extr., 3–10 ♏ (0.2–0.6 Cc.).—Tinct., 10–60 ♏ (0.6–4 Cc.).—*Antid.*, as of colchicum corm.

Coleïn Paper

Wh. paper impregnated w. alcoh. solut. coleïn (coloring matter fr. stems & lvs. of Coleus verschaffelti) & dried.—*Uses:* Sensitive indicator (alkalies = yellow; acids = red).

Colic Root.—see **Aletris; Dioscorea; Galanga**

Collargol (55

(Argentum Credé; Colloidal Silver).—Soluble metallic silver.—Antiseptic.—*Uses:* Sepsis, lymphangitis, cellulitis, &c.—*Dose* ${}^1/_6$–${}^1/_3$ grain (0.01–0.02 Gm.) 2 or 3 t. daily.—*Extern.*, mostly in 15% oint. ("Ungt. Credé"), 3 drams (12 Gm.) of this by inunction; also in 1:1000–5000 lotion.

Collaurin

Colloidal gold.—*Uses:* Cancer, syph., & scrof. affections.—*Dose* ${}^1/_2$–1 grain (0.03–0.06 Gm.).

Collidine (50

(Betamethylethylpyridine; Betacollidine).—Fr. cinchonine by decomp.—$C_8H_{11}N$, or, $CH_3.C_5H_3N(C_2H_5)$.—Yellowish liq., readily becoming brownish-red.—*Sol.* A., E., C.; sl. W.—Sp. Gr. 0.966 at 0° C.—*Boil.* 178.8° C.

Collinsonia

(Stone-root; Horse Balm; Rich-weed).—Root of Collinsonia canadensis, L. Labiatæ.—*Habit.:* North America, fr. Ontario to Florida, & west to Kansas.—*Etymol.:* Named for the English botanist, Peter Collinson (1693–1768).—*Constit.:* Resin; volat. oil; tannin; mucilage.—Antispasm; Diuret.; Astring.; Anticatarrh.; Diaph.—*Uses:* Dropsy, stone, leucorrh., cystitis, & u. inflam. condit. of genito-urin. organs.—*Doses:* Extr., 4–10 grains (0.25–0.6 Gm.).—Fld. extr., 20–60 ♏ (1.3–4 Cc.).

Collinsonin (Eclectic) (60

Resin. extr. fr. Collinsonia canadensis, L. (Stone-root).—Choc.-colored powd.; peculiar odor; bitter, astring. taste.—*Sol.* A., E., C.—Tonic; Astring.; Diaph.; Diuret.—*Uses:* Catarrh of bladder, leucor., gravel, & dropsy of Bright's dis.—*Dose* 2–4 grains (0.12–0.25 Gm.).

Collodion Merck.—*U. S. P.* (1

Simple solut. nitrated cellulose (mixt. of tri-, & tetra-nitrocellulose) in E. & A.—Alm. colorl., syrupy liq.—*Uses:* Coat. wounds & abrasions; —*Techn.*, in photography.

Note.—Collodion Merck being of the full U. S. P. strength, affords a good film, & is hence to be preferred both for general & special purposes.

Collodion Merck.—Reagent.—4% (2

Colorl. or sl. yellowish, neutr., syr. liq.; exposed in thin layers, evaporates & leaves colorl. film. —*Tests:* (*Acids*) should not redden blue litmus paper.—(*Res.*) evap. 10 Gm. on W.-bath & dry res. at 100° C.-should weigh 0.38–0.40 Gm.—*Uses:* Distinguishing bet. phenol & creosote.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Collodion Cantharidal Merck.—*U. S. P.* (3

(Blistering, or Vesicating, Collodion).—Olive-green, syrupy liq.—100 parts represents the active constit. of 60 parts cantharides.—*Uses:* Blist. inst. of cantharides, severe neuralgic pains, pneum., & o. pain. affect.

Collodion Cotton or *Wool.*—see **Pyroxylin**

Collodion, Croton-Oil.—*N. F.*

10% croton oil.

Collodion Flexile.—*U. S. P.* (1

Simple collodion, w. Canada balsam & castor oil. —Yellow, syrupy liq.—*Sol.* A., E.—*Uses:* Flexible appl. to cuts & injuries, erysipelas, & var. skin dis.

Collodion, Iodized.—*N. F.* (2

Iodine (5%) & flex. collodion.—Dark-brown, syrupy liq.—*Uses:* Chilblains.

Collodion, Iodoform.—*N. F.* (4

Iodoform (5%) & flex. collodion.—Yellow, syr. liq.—*Sol.* A., E.—*Uses: Extern.*, rheum. orchitis, erysipelas, & o. inflam. condit., espec of vener. character.

Collodion, Paraform (3

Collodion w. 10% paraform (trioxymethylene). —*Uses:* As appl. in erythrasma, & pityriasis versicolor & rosacea. 5% paraform-collodion serves as caustic for soft, molluscoid nevi.

Collodion Salicylated, Compound.—*N. F.*

Mixt. salicyl. acid 11, extr. Indian Hemp 2, alcoh. 10, & flex. collod. 77.

Collodion, Styptic.—*U. S. P.*

Tannic acid, 20; alc., 5; ether, 25; collodion to make 100.—*Uses:* Bleeding wounds.

Colloxylin.—see **Pyroxylin**

Colocynth.—*U. S. P.*

(Bitter Apple; Bitter Cucumber; Bitter Gourd). —Peeled, dried fruit of Citrullus Colocynthis, Schrader. Cucurbitaceæ. —*Habit.:* Mediterranean region; Asia; Africa.—*Etymol.:* "Citrullus," fr. Lat. "citrus," & Grk. "kitron," of Arabic origin, & denoting "orange," *i.e.*, the cut fruit has an orange-red color. "Kolokynthis" is the Grk. classic name of the plant.—*Constit.:* Colocynthin, $C_{56}H_{84}O_{23}$ (Walz); colocynthitin; pectin; albuminoids. — Purgative; Emmen.; Hydragogue Cathart.; Hepat. Stim.; Diuret. —*Uses:* Obstin. constip. & dropsical condit.— Small doses bitter stomachic; large doses emetic; alcoholic tinct. also used as an insecticide.— *Doses:* 2–5 grains (0.12–0.3 Gm.) lax.; 5–10 grains (0.3–0.6 Gm.) drastic purg; *Max. D.* 10 grains (0.6 Gm.) single, 15 grains (1 Gm.) p. d. —Comp. extr., 3–10 grains (0.2–0.6 Gm.).—Fld. extr., 5–10 ♏ (0.3–0.6 Cc.); *Max. D.* 15 ♏ (1 Cc.) single, 45 ♏ (3 Cc.) daily.—Hydro-alcoh. extr., 1–3 grains (0.06–0.2 Gm.). — *Antid.*, opium; stimulants; emetics; tannin.

Colocynthin (Glucoside) Merck (1000

Fr. fruit of Citrullus Colocynthis, Schrader.— $C_{56}H_{84}O_{23}$ (Walz).—Yellow powd.—*Sol.* W., A. —Cathartic (not drastic & toxic, as the extr.). —*Uses:* Purgat.—*Dose* $^1/_6$–$^1/_2$ grain (0.01–0.03 Gm.).—*Inj.* $^1/_6$ grain (0.01 Gm.). Rectal, 4–16 ♏ (0.25–1.0 Cc.) of a 4% solut. in equal pts. glycerin & alcohol.

Colocynthin (Resinoid) (50

Fr. alcoh. tinct. colocynth, by evap.—Choc.-color. powd.—*Sol.* A.—Cathartic.—*Uses:* Purg. —*Dose* $^1/_4$–1 grain (0.015–0.06 Gm.).

Colombo.—see **Calumba**

Colophony.—see **Rosin**

Coltsfoot.—see **Tussilago**

Columbin Merck (1000

Bitter prin. fr. root of Jateorrhiza Calumba.— $C_{21}H_{22}O_7$.—Yellow, cryst. powd.—*Sol.* A., E., C.; v. sl. W.—*Melt.* 182° C.—Bitter tonic.—*Uses:* Nervous dyspep. & debil.—*Dose* $^1/_2$–1 grain (0.03–0.06 Gm.).

Columbine.—see **Aquilegia**

Columbium.—see **Niobium**

Combretum.—see **Kinkéllbah**

Comfrey.—see **Symphytum**

Commelina

(Yerba del Pollo; Day-flower).—Whole plant Commelina tuberosa, L. Commelinaceæ.— *Habit.:* Mexico.—*Etymol.:* Named for Caspar Commelyn, a Dutch botanist (1667–1731), & John Commelyn, uncle of Caspar (1629–1692). —Hemostat.—*Uses:* Metrorrhag., hemoptysis, hemorrhoids, leucorrhea, chlorosis, & gastric hemorrhage.—*Dose:* In injections as aqueous decoct. (1–8 dr. [4–30 Gm.] to 1 pint [abt. 500 Cc.]), or in form of extr. internally, 15–90 grains (1–6 Gm.) daily.

Common Alder.—see **Alnus Serrulata**

Concha Preparata.—see **Oyster Shell, Prepared**

Conchinine.—see **Quinidine**

Condurangin Merck (850

Glucoside fr. bark of Gonolobus Condurango, Triana.—Amorph., yellow powd.; arom. bitter taste.—*Sol.* A.; sl. E., W., C.—Stomachic; Astring., &c.—*Uses:* Gastric cancer, chron. dyspep., &c.—*Dose* $^1/_{10}$–$^1/_4$ grain (0.006–0.015 Gm.), 3 t. p. d., in sweet mixt.

Condurango

(Cundurango; Eagle Vine; Mata-perro; Condor Vine).—Bark of Gonolobus Condurango, Triana (Marsdenia Cundurango, Reichenbach). Asclepiadaceæ.—*Habit.:* Ecuador; Peru.—*Etymol.:* "Condurango" is the South American name for the drug, and means eagle vine, or condor vine. "Gonolobus," fr. Grk. "gonos," angle, & "lobos," pod.—Quills or curved pieces; ash-gray or brownish-gray periderm, wrinkled & warty; slight odor & bitter, acrid taste; inner surface pale-brownish; granular, slightly fibrous fract.—*Constit.:* Alpha-condurangin, $C_{20}H_{32}O_6$; beta-condurangin, $C_{18}H_{28}O_7$; conduranstérin, $C_{30}H_{50}O_2$; also trace of an alkaloid resembling strychnine in action.—*Uses:* Cancer, syphilis, rheum., & gastric round ulcer, gastric carcinoma. —*Doses:* 5–40 grains (0.3–2.5 Gm.) in decoct.— Fld. extr., 15–40 ♏ (1–2.5 Cc.).—Alcoh. extr., 3–8 grains (0.2–0.5 Gm.).—Tinct., 15–60 ♏ (1–4 Cc.).

Cone Flower.—see **Echinacea**

Conessi.—see **Holarrhena**

Conessine Merck (5000

(Wrightine).—Alkaloid fr. barks of Nerium antidysentericum, L. (Wrightia zeylanica, R. Br.), & Holarrhena africana, A. De C.—$C_{24}H_{40}N_2$. —Whitish cryst.; bitter taste.—*Sol.* E., C., A.;

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

sl. in W.—*Melt.* 122° C.—Astring.; Anthelm.—*Uses:* Dysent. & diar.—*Incomp.*, alkalies, tannic acid, &c.

Conglutin Merck (50

Veget. casein fr. almonds, 18% nitrogen & 0.6% sulphur.—Wh. powd.—*Sol.*, weak alkal. sol.—The 6% solut. is used in veter. med. in endovenous nutrition.

Congo Red Merck (8

(Sodium Benzidindisazobinaphtylanimesulphonate).—Diazo-compound, fr. one molec. of benzidene w. two molecules of naphtionic acid.—$(C_6H_4.N:NC_{10}H_5.NaSO_3.NH_2)_2$.—Reddish-brown lumps or powd.—*Sol.* W.—*Uses:* Dyeing wool or unmordanted cotton red fr. neutral or alkaline bath; chiefly as indicator, in titrating aniline, & as reagent for free acids.—Alkalies = red; acids = blue.

Congo Red Paper Merck

(Riegel's Paper; Herzberg's Paper).—Wh. paper, charged w. Congo red.—*Uses:* Test-paper for free acids (blue color), & for alkalies (red color); also for detecting free HCl in gastric juice.

Conhydrine Merck (500

(Oxyconiine).—Alkaloid fr. seeds Conium maculatum, L.—$C_8H_{17}NO$, or, $\underline{NH.(CH_2)_2.CH(OH).CH_2}.\underline{CH(C_3H_7)}$.—Colorl. cryst.—*Sol.* A., E., C.; sl. in W.—*Melt.* 118–121° C.—*Boil.* 220–225° C.—Nar.; Anod.; Antispasm.; Alter.; Antisep.—*Dose.* Statements wanting; lethal dose for rabbits, per kilo of body weight, 0.257 Gm.—*Caut.* Poison!

Conhydrine (Pseudo-) Merck (2000

Alkaloid fr. seeds of Conium maculatum, L.—$C_8H_{17}NO$.—Colorl. cryst.—*Sol.* W., A., E., B., C.—*Melt.* 100° C.—*Boil.* 230–232° C.—Less toxic than conhydrine.

Conicine.—see **Coniine**

Coniine Merck.—Highest Purity, limpid (500

(Conicine; Cicutine; Dextroalphapropylpiperidine).—Alkaloid fr. Conium maculatum, L.—$C_8H_{17}N$, or, $\underline{NH.(CH_2)_4.CH([CH_2]_2.CH_3)}$.—Colorl., oily liq.; mousy odor; darkens by age & expos. to light.—*Sol.* A., E., C., B., amyl A., acetone.—*Boil.* 166° C.—*Uses:* Paral. poison; antidote to strychnine & tetanus; used as hydrobromide.—*Antid.*, emetics, zinc sulphate, or mustard, stomach siphon, tannin, atropine, strychnine, picrotoxin & castor oil, caffeine, & o. stim., vinegar enemas, ice.—Lethal dose for rabbits per kilo of body weight 0.037 Gm.—*Incomp.*, albumin; salts of aluminum, copper, iron, manganese, & zinc.—*Caut.* Very poisonous!

do. Merck.—Pure (350

Mixt. of conium bases obtained betw. 165–175° C.—Yellowish liq.

Coniine, Animal.—see **Pentamethylenediamine**

Coniine Hydrobromide Merck.—Cryst. or powder (285

$C_8H_{17}N.HBr$.—Wh. need.—*Sol.* 2 W., 2 A., C.—*Melt.* 210–214° C.—Antispasm., Antineural., &c.—*Uses:* Tetanus, cardiac asthma, sciat., & whoop.-cough; large doses have been given in tetanus fr. injury.—*Doses:* $^1/_{60}$–$^1/_{30}$ grain (0.001–0.002 Gm.) 3–5 t. p. d.; children, $^1/_{600}$–$^1/_{40}$ grain (0.0001–0.0015 Gm.) 2–4 t. p. d.—*Inj.*, $^1/_{20}$–$^1/_{15}$ grain (0.003–0.004 Gm.).—*Max. D.* $^1/_6$ grain (0.01 Gm.), single (in traumatic tetanus).—*Antid. & Incomp.:* As of coniine.

Coniine Hydrochloride Merck (350

(Coniine Muriate).—$C_8H_{17}N.HCl$.—Wh. cryst.—*Sol.* W., A.—*Melt.* 210–212° C.—*Uses & Doses:* As of coniine hydrobromide & alkaloid.

Conium.—*U. S. P.*

(Hemlock; Poison Hemlock; Spotted Hemlock; Poison Parsley; Spotted Cowbane).—Full-grown, but unripe, carefully dried fruit of Conium maculatum, L. Umbelliferæ.—*Habit.:* Europe; Asia; natur. in U. S.—*Etymol.:* Grk. "koneion," fr. "konesthai," to whirl round, to become dizzy (fr. "konos," a top or cone), referring to the effect of the plant. Lat. "maculatum," spotted, fr. " macula," a spot, *i.e.*, the stem has brownish-purple spots or dots.—*Constit.:* Coniine, $C_8H_{17}N$; conhydrine, $C_8H_{17}NO$; pseudoconhydrine, $C_8H_{17}NO$; methylconiine, $C_8H_{16}(CH_3)N$; volat. oil; fixed oil; coniic (conic) acid.—Sedat.; Narcot.; Anodyne; Soporific; Antispasm.; Anaphrodisiac.—*Uses: Intern.*, in maniacal excitem., whoop.-cough, & chorea.—*Extern.*, in analgesic cataplasms & oint. in neural., rectal diseases, & pruritus.—*Techn.*, in manuf. of coniine, &c.—*Doses:* 1–5 grains (0.06–0.3 Gm.).—Aceto-alcoh. extr., $^1/_2$–2 grains (0.03–0.12 Gm.); *Max. D.* 2 grains (0.12 Gm.) single, 10 grains (0.6 Gm.) daily.—Fld. extr., 3–5 ♏ (0.2–0.3 Cc.), cautiously increased to 10 ♏ (0.6 Cc.) or more.—Tinct., 5–15 ♏ (0.3–1 Cc.).—*Antid.*, tannin; astringents; strychnine; picrotoxin; emetics; brandy; artif. respiration; warmth; coffee.

Conium Herb

Synonyms, Habit., Etymol., & Constit.: As of conium.—Sedat.; Narcot.; Anodyne; Soporific; Antispasm.; Anaphrodisiac. — *Uses: Intern.*, maniacal excitem., whoop.-cough, & chorea.—*Extern.*, in neural., rectal diseases, & pruritus (in form of oint.), & in eye lotions.—*Techn.*, in manuf. of coniine.—*Doses:* 1–5 grains (0.06–0.3 Gm.) in powd.—Alcoh. extr., 3–10 grains (0.2–0.6 Gm.).—Extr. (fr. inspis. juice), $^1/_2$–1 grain (0.03–0.06 Gm.); *Max. D.* 3–10 grains (0.2–0.6 Gm.).—Fld. extr., 2–5 ♏ (0.12–0.3 Cc.).—Tinct., 5–15 ♏ (0.3–1 Cc.).—*Antid.*, as of conium.

Conium Juice Merck (3

(Hemlock Juice).—Fr. fresh lvs. Conium maculatum, L.; preserv. w. alc.—Antispasm.; Sed.—

Uses: Chorea, whoop.-cough, & to quiet maniac. patients.—*Dose* 10–30 ♏ (0.6–2 Cc.).—*Antid.*, emetics, stomach siphon, tannin, followed by cathartic, brandy, artif. respir., warmth, &c.—*Caut.* Poison!

Contrayerva

Rhizome of Dorstenia brasiliensis, Lam., & D. Contrayerva, L. Moraceæ. — *Habit.:* Brazil.—*Etymol.:* "Contrayerva" from Lat. "contra," against, & Spanish "yerva," herb, *i.e.*, the plant is used as an antidote to snake poison. Plant named for T. Dorsten, a German botanist (d. 1552).—Rhizome forms knotty, woody pieces, 2–3 in. long; reddish-brown extern.; pale intern.; acrid, bitter taste; peculiar, arom. odor.—*Constit.:* Resin; volat. oil; bitter principle.—Stim.; Diaphor.; used also in snake bites.—*Dose* 30 grains (2 Gm.) in powd., decoct., or tinct.

Convallamarin Merck (428

Glucoside fr. Convallaria majalis, L.—$C_{23}H_{44}O_{12}$.—Yellowish, amorph., bitter powd.—*Sol.* W.; freely A.; insol. C., E.—Cardiac Stim., Diuret.—*Uses:* Heart dis., edema, &c.—*Dose* $^3/_4$ grain (0.05 Gm.) 6 t. p. d.—*Inj.* $^1/_{12}$–$^1/_3$ grain (0.005–0.02 Gm.) several t. p. d.—*Max. D.* 1 grain (0.06 Gm.), single; 5 grains (0.3 Gm.), p. day.—*Antid.*, emetics, stomach siphon, wine, camphor.

Convallaria.—*U. S. P.*

(Lily-of-the-Valley; May Lily; Park Lily; May Blossom).—Dried rhizome & roots of Convallaria "majalis," L. Liliaceæ.—*Habit.:* U. S.; Europe; Northern Asia; cultivated in gardens.—*Etymol.:* Fr. Lat. "convallis," valley, & Grk. "leirion," lily. "Majalis" fr. Lat. "majus," May, *i.e.*, the time of year when the flower blooms.—Cylindrical pieces, wrinkled, whitish, abt. 3 Mm. thick; fracture somewh. fibrous, white; peculiar pleasant odor; sweetish, bitter, somewh. acrid taste.—*Constit.:* Convallamarin, $C_{23}H_{44}O_{12}$; convallarin, $C_{34}H_{62}O_{11}$; resin; volat. oil.—Cardiac tonic, like digitalis; Diuret.—*Uses:* Functional & organic affect. of heart, & in cardiac dropsy, & renal affect.—*Doses:* 1–10 grains (0.06–0.6 Gm.).—Alcoh. extr., 1–4 grains (0.06–0.25 Gm.).—Fld. extr., 2–8 ♏ (0.12–0.5 Cc.).—Tinct., 5–30 ♏ (0.3–2 Cc.).—*Antid.*, as of digitalis.

Convallaria Flowers & Leaves

Synonyms, Source, Habit., & Etymol.: As of preceding.—*Constit.:* Volat. oil.; convallarin, $C_{34}H_{62}O_{11}$; convallamarin, $C_{23}H_{44}O_{12}$.—*Uses:* Diuret.; Cardiac Tonic; Emetic; Cathart.—*Doses:* 5–15 grains (0.3–1 Gm.), best in infus.—Fld. extr., 5–10 ♏ (0.3–0.6 Cc.).—Tinct., 5–30 ♏ (0.3–2 Cc.).

Convallarin Merck (342

Glucoside fr. Convallaria majalis, L.—$C_{34}H_{62}O_{11}$.—Yellowish-wh., amorph. powd.; acrid taste.—*Sol.* A.; insol. W.—Lax., no cardiac effect.—*Uses:* Constip.—*Dose* 2–4 grains (0.12–0.25 Gm.).

Convolvulin Merck (25

Fr. tubers Ipomœa Jalapa, Nuttall.—$C_{31}H_{50}O_{16}$.—Yellowish, amorph. masses, or wh. powd.—*Sol.* A., C.; partly W.—*Melt.* 150° C.—Drastic Cath.—*Dose* 1–3 grains (0.06–0.2 Gm.), in pills.

Convolvulus

(Small Bindweed; Bear-bind; Corn Lily).—Flowers & lvs. of Convolvulus arvensis, L. Convolvulaceæ.—*Habit.:* Europe; Asia.—*Etymol.:* Lat. "convolvere," to bind together, to entwine, *i.e.*, referring to the stem's twining habit. Lat. "arvensis," pertaining to fields.—*Constit.:* Lvs. contain bitter principle & resin.—Purg.; Vulnerary.

Convolvulus Scammonia.—see **Scammony Root**

Convolvulus Scoparius.—see **Rhodium**

Conyza

(Plowman's Spikenard; Cinnamon-root).—Whole plant Conyza (Inula) squarrosa, L. Compositæ.—*Habit.:* Europe.—*Etymol.:* Grk. "konyza," a fly, *i.e.*, the plant, because of its stickiness, may be used for catching flies.—Emmen.; Diuret.; Diaphor.; Insecticide (when charred).

Copaiba.—*U. S. P.*

(Balsam Copaiba; Balsam Capivi; Jesuits' Balsam).—Oleoresin fr. one or more South American spec. of Copaiba. Leguminosæ. (Copaifera Langsdorffi, Desf., & other sp. of Copaifera. Cæsalpiniaceæ).—*Habit.:* Brazil, Venezuela, Colombia, Amazon valley, & banks of Orinoco.—*Etymol.:* Fr. Brazilian "cupauba," the native name of the tree & its products.—Sp. Gr. 0.940–0.990 at 15° C.; (0.95–0.995 at 25° C.–U.S. P.).—Transparent, visc., light-yellow to brownish-yellow liq.; pecul. odor; bitter, acrid, nauseous taste.—*Sol.* E., oils, C., B., CS_2, absol. A., & str. alkal. solut.—*Constit.:* Ethereal oil; resin; β-metacopaivic acid, $C_{11}H_{16}O_2$, or, $C_{16}H_{24}O_3$; α-metacopaivic acid, $C_{22}H_{34}O_4$ (in Maracaibo balsam); copaivic acid, $C_{10}H_{32}O_2$; oxycopaivic acid, $C_{20}H_{28}O_3$ (in Para balsam); illurinic acid, $C_{20}H_{28}O_3$ (in Maracaibo balsam); paracopaivic acid, $C_{20}H_{32}O_3$ (in Para balsam); homoparacopaivic acid, $C_{18}H_{28}O_3$(?).—Stim.; Lax.; Diuret.; Antisep.—*Uses: Intern.*, gonor., cyst., chron. dysent., leucorrh., diarrh., hemorrhoids, chron. bronch.—*Extern.*, locally, indol. ulc. & chilbl.—*Techn.*, in varnishes, & brightening pictures.—*Dose* 10–60 grains (0.6–2 Gm.) 2 to 4 t. p. d. in emuls. w. alkal.; in mass w. magnesia in capsules or pills. Daily, 60–120 grains (4–8 Gm.).

Copaiba Mass

(Solidified Copaiba; Pill Copaiba).—*Constit.:* Balsam copaiba 94; magnesia 6; water suffic.—Diur.; Stim.; Antisep.—*Uses:* Gonor., leucor., & dis. of muc. membr.—*Dose* 10–60 grains (0.6–2 Gm.).

Copal

(Resin Copal; Gum Copal; Animé [soft copal]; Kaurie [or Cowrie]).—A resin found as a fossil in Zanzibar, or exuding fr. various sp. of Trachylobium, Hymenæa Courbaril, L., &c. Cæsalpinaceæ. Two varieties (hard copals, & soft

copals) known.—*Habit.:* Zanzibar, Mozambique; also S. America, Australia, Manila, & W. Indies. —*Etymol.:* Fr. Mexican "copalli," resins.—Yellowish to yellowish-brown pieces of var. size; conch. fract.; glossy, odorl., & tastel. Hard copals are alm. insol. in usual solvents; soft copals partly solub. in A., C., & glac. acetic acid; both copals are solub. in oil turpentine & linseed oil, after having been fused.—*Constit.:* Zanzibar copal contains 80% trachylolic acid, 4% isotrachylolic acid, 6% resene, & ethereal oil. Kaurie copal contains dammaric acid & a resin, dammaran.—*Uses:* Techn., in varnishes & cements; also as substitute for amber.

Copernicia.—see **Carnauba**

Copper Merck.—Granulated, sheet, filings, & turnings (5

Etymol.: Accord. to Pliny fr. "aes cuprium," *i.e.* Cyprian ore, because first known in Cyprus.—Metal.—Cu.—Reddish, ductile, mall., hard metal.—Sp. Gr., about 8.894.—*Melt.*, abt. 1065° C.—*Boil.*, abt. 2100° C.—*Uses:* Techn.

do. Merck.—Reduced, pure powder (7

Copper Merck.—Reagent.—By Electrolysis (3

Cu.—*Tests:* (*Foreign Met.*) *a:* diss. 10 Gm. in 60 Cc. HNO_3 (sp. gr. 1.3); evap. to dryness on W.-bath – res. compl. & clearly soluble. in 50 Cc. H_2O + 10 Cc. HNO_3 (sp. gr. 1.3) (absence of Sb & Sn). To solut. add 15 Cc. conc. H_2SO_4 (sp. gr. 1.84); evap. on W.-bath, & heat res. on sand-bath till H_2SO_4 vapors begin to evolve; take up res. w. 100 Cc. H_2O – no insol. res. (abs. of Pb). To clear solut. add 5 Cc. HCl – no turb. (absence Ag). Now add 150 Cc. NH_4OH; let stand 3–4 hrs. at 50–60° C.; filter; wash filter w. ammoniacal W. till free fr. Cu, & incin. w. any ppt. it may contain, & ignite – wt. of res. not more than 0.001 Gm. (Fe & Bi); *b:* diss. 10 Gm. in 60 Cc. HNO_3 (sp. gr. 1.3), add 15 Cc. conc. H_2SO_4 (sp. gr. 1.84); evap. on W.-bath; heat res. on sand-bath till H_2SO_4 vapors begin to evolve; diss. res. in 300 Cc. H_2O, and pass H_2S gas into solut. at 70° C. until all Cu pptd.; filter; concentrate filtrate; expel H_2SO_4 on sand-bath & ignite – wt. of res. not more than 0.002 Gm.—(*As*) diss. 10 Gm. in 60 Cc. HNO_3 (sp. gr. 1.3); add 15 Cc. conc. H_2SO_4 (sp. gr. 1.84); evap. on W.-bath & heat res. on sand-bath till H_2SO_4 vapors evolved; when cold diss. res. in 100 Cc. H_2O, & introduce solut. in sm. quant. at a time into a Marsh appar. started w. 50 Gm. As-free gran. Zn & dil. (1:5) H_2SO_4 – no deposit in reduct. tube within 2 hrs. —*Uses:* Detect. Fe, Hg, & As; determ. N; ultimate organ. analysis; elaidin test.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Copper Abietinate

$Cu(C_{19}H_{27}O_2)_2$(?).—Green scales.—*Sol.*, oils w. fine green color.—*Uses:* Anthelmintic for dogs. —*Techn.*, for impregn. wood as a preservative.

Copper Acetate (Basic) Merck.—Refined, powder (2

(Copper Subacetate; Green Verdigris).—$CuO.Cu(C_2H_3O_2)_2 + 6H_2O$.—Greenish-blue, very fine powd.; metal. taste.—*Sol.* W., dil. A.; sl. A.—*Uses:* Chiefly techn. in manuf. Schweinfurth green & o. pigments; dyeing & printing fabrics; prepar. gilder's wax in fire gilding; as water- or oil-color pigment.

do. Merck.—Technical, in globules (1

$Cu(C_2H_3O_2)_2.CuO$; with var. quant. of $CuCO_3 + Cu_2O$.—Faint, light-green balls, consist. of conglomerated cryst. powd.; disagr., metal. taste. —*Sol.* W., A.—*Uses:* Techn. (dyes).

do. Merck.—Blue (2

(Blue Verdigris).—Contains chiefly $Cu(C_2H_3O_2)_2.CuO + 6H_2O$, besides small quant. of other copper acetates.—*Uses:* Techn., in oil- & water-colors, & manuf. o. copper pigments for printing fabrics.

Copper Acetate (Normal) Merck.—Pure, cryst. (1

(Crystallized Verdigris).—$Cu(C_2H_3O_2)_2 + H_2O$.—Bluish-green cryst.; metal. taste; acetic-acid odor.—*Melt.* 240° C., w. decomp.—*Sol.* W., A. —Astring.; Alter., &c.—*Uses: Intern.*, scrofula, certain skin dis., epilepsy, chlorosis, &c.—*Extern.*, gonor., conjunctiv., &c.—*Techn.*, as mordant, & in enameling miniatures.—*Dose* $^1/_{10}$–$^1/_2$ grain (0.006–0.03 Gm.).—*Max. D.* 3 grains (0.2 Gm.) single; 6 grains (0.36 Gm.) p. d. —*Appl.*, in $^1/_4$–1% solut.—*Antid.*, for all copper salts: encourage vomiting; stomach siphon, then white of egg freely, charcoal, iron filings, magnesia, pure potass. ferrocyanide; milk & fatty acids must be avoided.—*Caut.* Keep well stoppered. Poison!

Copper Acetoarsenite (2

(Schweinfurth, Imperial, or Paris, Green).—By boil. verdigris w. As_2O_3.—$3CuOAs_2O_3.Cu(C_2H_3O_2)_2$. —Emerald-green powd.—*Uses:* Techn.

Copper Albuminate Merck (6

Green scales.—*Sol.*, in dil. acids & alkalies.

Copper Alum.—see **Copper Aluminated**

Copper Aluminated Merck.—Powd. or plates (1

(Copper Alum; Eye Stone).—Copper & aluminum sulphates, & potassium nitrate.—Green powd. or plates.—*Sol.* W.—*Uses:* Mild caustic in ophthalmia.

do. Merck.—Sticks (2

Bluish-green pencils.—*Sol.* W.—*Uses:* Check granulations; mild caustic.

Copper Amalgam Merck (10

Hard, brownish-red, metal. gran.; soft & plastic on warming.—*Uses:* For filling teeth.

Copper Arsenate Merck (3

Fr. ammonium arsenate, w. cupric sulphate.—Comp. variable.—Blue powd.—*Sol.*, in acids.—Alter. — *Uses:* Syph. — *Dose* $^1/_{30}$–$^1/_3$ grain (0.002–0.008 Gm.).

Copper Arsenite Merck (3

(Cupric Orthoarsenite).—$Cu_3As_2O_6$, or, $Cu_3(AsO_3)_2$.—Yellowish-green powd.—*Sol.*, alkal.; sl. W.—Intestinal Antisep., Antispasm., & Sed.—*Uses:* Cholera morbus, cholera infantum, enteric fever, Asiatic cholera, dysent., whoop.-cough, dysmenor., &c.—*Techn.*, as base for various green copper pigments.—*Doses:* Ordinarily $^1/_{100}$–$^1/_{25}$ grain (0.0006–0.0025 Gm.); in anemia & chlorosis, $^1/_{50}$–$^1/_{25}$ grain (0.0012–0.0025 Gm.) 3 t. p. d.; in cholera very small, frequent doses are recom., *e.g.*, at first every 10 minutes 1 teasp. of a mixt. cont. $^1/_{100}$ grain to 4 fl. oz. (0.0006 Gm.: 120 Cc.), then 1 teasp. every hr.—*Max. D.* 1 grain (0.06 Gm.) single or daily.

Copper Benzoate Merck (10

(Cupric Benzoate).—$Cu(C_6H_5CO_2)_2+2H_2O$.—Light-blue cryst. or powd.—Insol. W., & A.

Copper Bichloride.—see **Copper Chloride, Cupric**

Copper Bichromate.—see **Copper Dichromate**

Copper Borate Merck (2

(Cupric Borate).—Bluish-green, cryst. powd.—*Sol.*, dil. acids.—*Uses:* Techn., oil pigment, & painting on porcelain.

Copper Bromide Merck (10

(Cupric Bromide). — $CuBr_2$. — Grayish-black, cryst. powd., resembl. graphite.—*Sol.* W., A.

Copper Butyrate Merck (25

(Cupric Butyrate). — $Cu(C_4H_7O_2)_2+2H_2O$. — Monocl., green cryst.—*Sol.* A.; sl. W.—*Uses:* Reag. for essential oils.

Copper Carbonate Blue Merck (1

(Sesquicupric Carbonate; Artificial Blue Malachite; Mountain, Verditer, or Bremen, Blue).—Approx. $3CuO.2CO_2+H_2O$.—Blue powd.—*Uses:* Pigment, pyrotechn., & paper color.

Copper Carbonate Green Merck.—Highest Purity (2

(Copper Subcarbonate; Cupric Carbonate; Artificial Malachite; Dicupric Carbonate).—$CuCO_3.Cu(OH)_2$.—Green, amorph. powd.—*Sol.*, acids; insol. W.—*Uses: Intern.*, as antid. to phosphorus.—*Extern.*, astring. (in 1:10 oint.), & as caustic instead of copper sulphate.

do. Merck.—Pure (1

(Artificial Malachite; Mineral, Bremen, Brunswick, or Verditer, Green).—Green powd.—*Uses:* Pyrotechny, & pigment in paper manuf.; also for prep. Soldaini's reagent.

Copper Chlorate Merck (9

(Cupric Chlorate).—$Cu(ClO_3)_2+6H_2O$.—Bluish-green, deliq. cryst.—*Sol.* W., A.—*Uses:* Mordant in dyeing & printing fabrics.—*Caut.* Keep dry.

Copper Chloride Merck.—Cupric.—Pure, cryst., free from Arsenic (5

(Copper Bi-, or Di-, Chloride).—$CuCl_2$.—Fused, liver-colored, anhyd. mass.—*Sol.* W., A.

Copper Chloride Merck.—Cupric.—Pure, cryst. (1

$CuCl_2+2H_2O$.—Green, deliq., cryst. mass.—*Sol.* W., A.—*Caut.* Keep well stoppered.

do. Merck.—Commercial (1

Uses: Mordant in dyeing & printing fabrics, manuf. sympathetic ink, fast black (melanin), detecting gold on gilt articles, manuf. aniline dyes, oxidizer, liberating chlorine, & disinf. in murrain in cattle.

Copper Chloride Merck.—Cupric.—Reagent (5

$CuCl_2+2H_2O$.—Green, hygrosc. cryst.—*Sol.*, eas. W., A., E.—*Tests: (Impur. Insol. in A.)* 5 Gm. + 5 Cc. H_2O + 5 Cc. 90% A.—no turb.—(H_2SO_4) 1 Gm. + 20 Cc. H_2O + 1 Cc. HCl + solut. $BaCl_2$—no turb. within 5 min.—(*Salts of Alkali Met.*) 3 Gm. + 100 Cc. H_2O + 5 Cc. HCl (sp. gr. 1.124); pass in H_2S gas till all Cu pptd.; filter; evap. filtrate to dryness & ignite—wt. of res. not more than 0.002 Gm.—(*Fe*) as under copper & ammon. chloride.—(*As*) 1 Gm. + 20 Cc. H_2O; introduce in sm. quant. into Marsh appar. started w. 20 Gm. As-free Zn & dil. (1:5) H_2SO_4—no deposit in reduct. tube within 1 hr.—*Uses:* Determ. C in Fe.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Copper Chloride Merck.—Cuprous (2

(Copper Monochloride).—Cu_2Cl_2.—Greenish-wh. powd.—*Sol.* HCl; insol. W., A.—*Uses:* Gas anal., for detect. varying temperatures due to friction of various parts of machinery; determination of arsine & stibine, &c.

Copper Chloride Merck.—Cuprous.—Reagent (6

Cu_2Cl_2.—Wh., cryst. powd.—*Sol.*, NH_3, conc. HCl; insol. W.—*Uses:* Gas analysis, absorb. CO, arsine, stibine, & some gaseous hydrocarbons.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Copper Chromate Merck.—Pure (2

(Basic Cupric Chromate). — $CuCrO_4.2CuO + 2H_2O$.—Light, choc.-brown powd.—*Sol.*, solut. chromic acid; insol. W.—*Uses:* Dyeing.

do. Merck.—Solution (1

Copper Citrate Merck (5

(Cupric Citrate).—$Cu_2C_6H_4O_7+2^1/_2H_2O$.—Green powd.—*Sol.*, sl. W.—*Uses:* In trachoma in 5–10% oint. (w. starch glycerite).

Copper Cyanide.—Cupric (4

$Cu(CN)_2$.—Red powd.

Copper Cyanide Merck.—Cupro-cupric (3

Fr. cupric cyanide by boil. with W.—$Cu_3(CN)_4+5H_2O$, or, $Cu(CN)_2+Cu_2(CN)_2+5H_2O$.—Green powd.—*Sol.*, in solut. KCN; insol. W.

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Copper Cyanide Merck.—Cuprous (4
Fr. an acid (HCl) solut. cuprous chloride, by potass. cyanide. — $Cu_2(CN)_2$. — Light, wh., amorph. powd.—*Sol.*, amm. water & solut. KCN.

Copper Dichloride.—see **Copper Chloride, Cupric**

Copper Dichromate Merck (6
(Cupric Bichromate). — $CuCr_2O_7 + 2H_2O$. — Brown, deliq. cryst.—*Sol.* W., & chromic-acid solut.—*Caut.* Keep well stoppered.

Copper Ferrocyanide Merck (4
(Cupric Ferrocyanide).—$Cu_2Fe(CN)_6$.—Brownish-red powd.—*Sol.*, solut. KCN; insol. W.

Copper Fluoride Merck (5
(Cupric Fluoride).—$CuF_2 + 2H_2O$.—Blue cryst. —*Sol.*, sl. in W.

Copper Formate Merck (5
(Cupric Formate).—$Cu(CHO_2)_2$.—Blue cryst.—*Sol.* W.

Copper Hydroxide Merck.—Pure, powder (3
(Cupric Hydroxide; Hydrated Copper Oxide; Copper Hydrate).—$Cu(OH)_2$.—Blue or black powd.—*Sol.*, ammonia.—*Uses:* Chiefly techn.

Copper Hyposulphite.—see **Copper Thiosulphate**

Copper Iodide Merck (8
(Cuprous Iodide.)—Cu_2I_2.—Light brown, cryst. powd.—*Sol.*, dil. acids, alcoh. solut. iodine.—*Uses:* With equal parts HgI_2 & W. as a means of detecting rise of temperature.

Copper Lactate Merck (10
(Cupric Lactate). — $Cu(C_3H_5O_3)_2 + 2H_2O$. — Greenish-blue cryst.—*Sol.*, sl. W., A.

Copper Monochloride.—see **Copper Chloride, Cuprous**

Copper Monoxide.—see **Copper Oxide, Black**

Copper Nitrate Merck.—Highest Purity, cryst. (1
(Cupric Nitrate; Normal Copper Nitrate).—$Cu(NO_3)_2 + 3H_2O$.—Blue, prism., deliq. cryst.—*Sol.* W., A.—Astring.; Alter.—*Uses:* Syphilis, gonor., ulcers, &c.—*Dose* $^1/_{12}$–$^1/_6$ grain (0.005–0.01 Gm.).—*Max. D.* $^1/_2$ grain (0.03 Gm.).—*Appl.* 0.5–1.5% lotions, or 0.2–0.5% injections.

do. Merck.—Pure, cryst. (1

do. Merck.—Technical, cryst. (1
Uses: Preparation of light-sensitive papers for reproductive processes.

Copper Nitrite Merck (40
(Cupric Nitrite).—Variab. comp.—Fine, green powd.; decomp. v. easily.—*Sol.* W., A.

Copper Nitroferricyanide.—see **Copper Nitroprusside**

Copper Nitroprusside Merck (9
(Cupric Nitroprussiate, or Nitroferricyanide).—$Cu_2Fe_2(NO)_2(CN)_{10}$.—Grayish-green, gran. powd., bec. gray on exposure to light.—Insol. W.

Copper Oleate Merck (3
(Cupric Oleate).—10% copper oxide diss. in oleic acid.—$Cu(C_{18}H_{33}O_2)_2$ w. excess of oleic acid. —Greenish-blue mass.—*Sol.* E.—Antiseptic.—*Uses:* 10–20% oint. (lard or lanum), in indol. ulc. & unhealthy granulations.

Copper Orthoarsenite.—see **Copper Arsenite**

Copper Oxalate Merck (2
(Cupric Oxalate).—CuC_2O_4.—Bluish-green powd. —*Sol.*, acids; insol. W.

Copper Oxide Black Merck.—Cupric.—Pure, powder or coarse granules (powd. 1; gran. 3
(Cupric Oxide; Copper Monoxide).—Fr. copper nitrate, or carbonate, by ignit.—CuO.—Brownish-black, amorph. powd., or black, coarse granules.—Teniafuge; Resolvent.—*Uses:* Powd.: *Intern.*, in tapeworm.—*Extern.*, in 3–5% oint., to remove chronic indurat. glands. Both powd. & gran. used in organic analysis, & techn.—*Dose* $^3/_4$–$1^1/_2$ grains (0.05–0.1 Gm.) 3 or 4 t. p. d., in pills, for 2 weeks. Abstain from acid food. —*Max. D.* 8 grains (0.5 Gm.) single; 15 grains (1 Gm.) daily.

do. Merck.—Technical (1
Black powd.—*Uses:* Producing green & blue colors on glass, faience, porcelain, & stoneware.

do. Merck.—Wire (3

Copper Oxide Black Merck.—Cupric.—Reagent (6
CuO.—Fine powd., or coarse gran., or wire.—*Tests:* (*HNO_3; HCl; CO_2*) heat 100 Gm. & pass over it moist air free fr. CO_2 – no vapors which redden litmus paper or render lime-water turb. —(*Fe, &c.*) 2 Gm. + 10 Cc. HCl (sp. gr. 1.19) + 100 Cc. H_2O; collect insol. res.; ignite – wt. of res. not more than 0.005 Gm.; into filtrate pass H_2S gas at abt. 70° C. till all Cu pptd.; filter; evap. filtrate on W.-bath, & ignite – wt. of res. not more than 0.02 Gm.—(*H_2SO_4*) 1 Gm. + 5 Cc. HCl (sp. gr. 1.19) + H_2O to make 50 Cc.; add solut. $BaCl_2$ – no immed. turb.—(*Ca*) 20 Gm. + 5 Cc. HNO_3 (sp. gr. 1.153) + 95 Cc. H_2O; digest abt. 15 min. w. freq. shak.; filter; pass into filtrate H_2S gas till all Cu pptd.; filter; evap. filtrate on W.-bath to abt. 20 Cc.; add excess NH_3; filter; to filtrate add $(NH_4)_2C_2O_4$ – no immed. turb.—*Uses:* Ultimate organic analysis.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

do. Merck.—Reagent.—Wire (5

Copper Oxide, Hydrated.—see **Copper Hydroxide**

Copper Oxide Red Merck.—Cuprous.—Pure (2
(Cuprous Oxide; Copper Suboxide).—Cu_2O.—Reddish-brown, cryst. powd.—*Sol.*, amm., acids. —*Uses:* Chiefly techn., in manuf. red glass, red porcelain glaze, & copper electroplating.

do. Merck.—Technical (1
Dark-brown, gran. powd.—*Uses:* As of preceding.

Copper Oxychloride Merck (4
(Cupric Oxychloride).— $CuO.CuCl_2$. — Bluish-green powd.—*Sol.*, amm., acids.—*Uses:* Techn., as green pigment.

Copper Palmitate Merck (5
(Cupric Palmitate).—$Cu(C_{16}H_{31}O_2)_2$.—Greenish-blue powd.—*Sol.*, sl. A.

Copper Phenolsulphonate Merck (4
(Cupric Phenolsulphonate, or Sulphocarbolate). — $Cu(C_6H_5SO_4)_2+6H_2O$. — Green cryst. — *Sol.* W., A.

Copper Phosphate Merck (3
(Cupric Phosphate).—$CuHPO_4$.—Bluish-green powd.—*Sol.*, acids; insol. W.—Antituberc.—*Uses:* Recent tuberculosis.—*Dose* $^1/_8$–$^1/_2$ grain (0.008–0.03 Gm.) several t. p. d.—*Techn.*, detect. CO_2 in potable waters.

Copper Phosphide Merck.—Powder (10
(Cuprous Phosphide).— Cu_3P_2.— Grayish-black, metal. powd. — *Sol.* HNO_3; insol. W.— *Uses:* Manuf. phosphor-bronze.

Copper Platinocyanide.—see **Platinum & Copper Cyanide**

Copper Resinate Merck.—Precipitated (2
Green powd.—*Uses:* Techn., in varnishes intended for preservation of metallic surfaces, & particularly for ships' bottoms.

Copper Rhodanide.—see **Copper Sulphocyanate**

Copper Salicylate Merck (6
(Cupric Salicylate; Normal Copper Salicylate). —$Cu(C_7H_5O_3)_2+4H_2O$.—Bluish-green, micros. need.—*Sol.* W., A.

Copper Selenate Merck.—Cryst. (125
(Cupric Selenate).—$CuSeO_4+5H_2O$.—Isomorph. w. copper sulphate, blue cryst.—*Sol.*, sl. W.

Copper Sesquicarbonate.—see **Copper Carbonate, Blue**

Copper Silicate Merck (3
(Cupric Silicate). — $CuSiO_3$. — Greenish-blue, cryst. powd.—Insol. W.

Copper Silicide.—see **Silicon-Copper**

Copper Silicofluoride Merck.—Cryst. (6
(Cupric Silicofluoride). — $CuF_2.SiF_4+6H_2O$. — Blue, hygros. cryst.—*Sol.* W.—*Uses:* Techn., dyeing & hardening white marble, & prepar. the "bouillie beaujolaise" for treating the "white disease" of vines, caused by the Oïdium.

Copper-Silicon.—see **Silicon-copper**

Copper Stearate Merck (6
(Cupric Stearate).—React.-prod. copper salt w. alkali stearate.—$Cu(C_{18}H_{36}O_2)_2$.—Light blue, amorph. powd.—*Sol.* C., B., turpentine oil.—*Uses:* Bronzing plaster statues.

Copper Subacetate.—see **Copper Acetate, Basic**

Copper Subcarbonate.—see **Copper Carbonate, Green**

Copper Suboxide.—see **Copper Oxide, Red**

Copper Sulphate Merck.—Highest Purity, Medicinal, cryst. (1
(Cupric Sulphate; Blue Vitriol).—$CuSO_4+5H_2O$. —Large, deep blue cryst., slowly efflores. in dry air; str. metal., styp. taste.—*Sol.* 2.6 W.; abt. 4 G. at 15° C.; (abt. 2.2 W., 400 A., & 3.5 G. at 25° C.; & in 0.5 boil. W.–U. S. P.).—Eschar.; Styptic; Astring.; Emetic; Alter.; Nervine, &c.—*Uses: Intern.*, chronic diar. w. ulc., passive hemorrhage, epilepsy, diphth., croup, &c.—*Extern.*, in solut., ulc., gonor., hyperidrosis, &c. Wet cryst.: Warts, fungous granul. & edge of callous wounds; bleed. surf.; also used in veter. med.—*Dose:* Nerv. & Alter., $^1/_6$–$^1/_4$ grain (0.01–0.015 Gm.); emetic, 2–5 grains (0.12–0.3 Gm.).—*Incomp.*, alkalies; arsenites; arsenic trioxide; iodides; lead acetate; lime-water; mercury bichloride; phosphates; silver nitrate; sodium borate; vegetable infusions & tinctures. — *Antid.*, as of copper acetate.

do. Merck.—Pure, cryst., gran. or powd. (1

do. Merck.—Technical, cryst. or powd. (1
$CuSO_4+5H_2O$.—*Uses:* Techn., in dyeing; manuf. green & blue pigments; in galvanoplasty for plating other metals galvanically; copper soap; ink for marking tin; hair dye; insecticide mixtures (bouillies bordelaise, bourguignonne, dauphinoise) for treating the "white disease" of vines caused by the Oïdium.—*Caut.* Poison!

do. Merck.—Fused, sticks (3
Bluish-green sticks.—*Sol.* W.—Caustic, Styp. —*Uses:* Caustic, for unhealthy granul.; also dentistry.

do. Merck.—Pencils, turned; also mounted in wood
$CuSO_4+5H_2O$.—Blue, cone-pointed pencils.

Copper Sulphate Merck.—Reagent (2
(Cupric Sulphate). — $CuSO_4+5H_2O$. — Blue, transp. cryst.—*Sol.* 3.5 cold, & 1 boil., W.; insol. A.—*Tests:* (*Salts of Alkali Met.*) 3 Gm.+100 Cc. H_2O+5 Cc. HCl (sp. gr. 1.124); pass into solut. H_2S gas at abt. 70° C. till all Cu pptd.; filter; evap. filtrate to dryness & ignite – wt. of res. not more than 0.001 Gm.—(*Fe*) 5 Gm.+25 Cc. H_2O +2 Cc. HNO_3 (sp. gr. 1.3); heat to boil.; pass solut. through ashless filter & wash filter w. ammoniacal water till free fr. Cu; incin. filter w. any ppt. it contains, & ignite – wt. of res. not more than 0.001 Gm.—*Uses:* Prepar. Fehling's, Löwe's, Purdy's, & other reagents for glucose; test. peptones, albumen, mallow in wine; I & CS_2.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Copper Sulphate Merck.—Anhydrous.—Pure, powder (1

$CuSO_4$.—Gray-wh. powd.—*Sol.* W.—*Uses:* Dehydrating agent.—*Caut.* Keep absolutely dry.

Copper Sulphate Merck.—Basic (2

(Tribasic Cupric Sulphate).—$CuSO_4.3CuO.3H_2O$.—Blue powd.—*Sol.*, v. sl. W.

Copper Sulphide Merck.—Cupric.—Wet process (4

Fr. copper sulphate, by sod. sulphide.—CuS.—Black powd.—Insol. W.—*Uses:* Techn., as protective paint for ships' bottoms.

Copper Sulphide Merck.—Cuprous.—Fused, gran., powder or sticks (2

Fr. copper & sulphur, by heat.—Cu_2S.—Grayish-blue powd., gran. powd., or sticks.—Insol. W.

Copper Sulphite Merck (4

(Cuprous Sulphite).—$Cu_2SO_3+H_2O$.—Brown, cryst. powd.—Insol. W.

Copper Sulphocarbolate.—see **Copper Phenolsulphonate**

Copper Sulphocyanate Merck (4

(Cuprous Sulphocyanide, Thiocyanate, or Rhodanide).—$Cu_2(SCN)_2$.—Grayish-wh. powd.—*Sol.*, ammonia water; insol. W.

Copper Tannate Merck (4

(Cupric Tannate).—Comp. variable.—Brown powd.—*Sol.*, ammonia water; insol. W.

Copper Tartrate Merck (2

(Cupric Tartrate).—$CuC_4H_4O_6+3H_2O$.—Greenish-blue powd.—*Sol.*, sl. W.; readily in solut. tartaric acid & solut. alkalies.—*Uses:* Analysis.

Copper Thiocyanate.—see **Copper Sulphocyanate**

Copper Tungstate Merck (12

(Normal Cupric Wolframate).—$CuWO_4$.—Light-green powd.—Insol. W.

Copper Wolframate.—see **Copper Tungstate**

Copper & Ammonium Acetate Merck (5

(Ammonio-cupric Acetate).—$Cu(NH_4)_2.(C_2H_3O_2)_4$.—Blue cryst.—*Sol.* W.

Copper & Ammonium Chloride Merck (1

(Ammonio-cupric Chloride).—$CuCl_2.2NH_4Cl+2H_2O$.—Large, green cryst.—*Sol.* W.

Copper & Ammonium Chloride Merck.—Reagent (3

(Ammonio-Cupric Chloride).—$CuCl_2+2(NH_4Cl)+2H_2O$.—Blue cryst.—*Sol.* W. (solut. is clear, & sl. acid to litmus paper).—*Tests:* (*Free Acids*) 30 Gm.+100 Cc. H_2O+sev. pieces piano wire – latter dissolves w. deposit. of Cu, but without evol. of gas.—(*H_2SO_4*) 1 Gm.+20 Cc. H_2O+1 Cc. HCl+solut. $BaCl_2$ – no turb. within 5 min.—(*Salts of Alkali Metals, &c.*) 3 Gm.+100 Cc. H_2O+5 Cc. HCl (sp.gr. 1.124); pass into solut. at abt. 70°C. H_2S gas till all Cu pptd.; filter; evap. filtrate & ignite – wt. of res. not more than 0.002 Gm.—(*Fe*) 5 Gm.+25 Cc. H_2O+2 Cc. HNO_3 (sp. gr. 1.3); heat to boil.; add 20 Cc. NH_4OH (sp. gr. 0.96); pass through ashless filter & wash latter w. ammoniacal W. till free fr. Cu; incin. filter w. any ppt. it contains & ignite – wt. of res. not more than 0.002 Gm.—*Uses:* Determ. C in Fe.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Copper & Ammonium Chromate Merck (10

(Ammonio-cupric Chromate).—$Cu(NH_4)_2.(CrO_4)_2$.—Green cryst.—*Sol.*, NH_4OH, & solut. Cr_2O_3.

Copper & Ammonium Citrate Merck (7

(Ammonio-cupric Citrate).—$Cu_3(NH_4)_6.(C_6H_6O_7)_4$.—Steel-blue, shining scales.—*Sol.* W.

Copper & Ammonium Cyanide Merck (11

(Ammonio-cuprous Cyanide).—$CuCN.NH_4CN$.—Colorl. to green cryst.—Insol. W.

Copper & Ammonium Nitrate Merck.—Cryst. (6

(Ammonio-cupric Nitrate).—$Cu(NO_3)_2.2NH_4NO_3$.—Blue cryst.—*Sol.* W.

Copper & Ammonium Sulphate Merck (1

(Ammonio-cupric Sulphate; Copper Ammonio-sulphate).—By diss. cupric sulphate in amm. water & precip. w. alcohol.—$CuSO_4.4NH_3+H_2O$.—Dark blue, cryst. powd.—*Sol.* W.—Antispasm.; Astring.—*Uses: Intern.*, epilepsy, hyst., chorea.—*Extern.*, chronic inflam. of eye, gleet, &c.—*Techn.*, as reagent for arsenic trioxide, in calico printing, manuf. copper arsenate, & as insecticide under the name "azurin" for Peronospora fungus.—*Dose* $^1/_2$–2 grains (0.03–0.12 Gm.) 3 or 4 t. p. d., w. tinct. opium, after meals.—*Max. D.* 3 grains (0.2 Gm.) single; 6 grains (0.36 Gm.) p. d.—*Appl.* 0.2–1% solut. or oint.

do.—Solution.—*U. S. P.*

(Kieffer's Solution).—By adding amm. to copper-sulphate solut. until precip. nearly, but not completely, rediss.—*Uses:* Test for acids, espec. arsenic trioxide.—*Caut.* Keep in dark amber bot.

Copper & Calcium Acetate Merck.—Cryst. (25

(Cupricalcium Acetate; Calcium & Copper Acetate).—$CaCu(C_2H_3O_2)_4+8H_2O$.—Blue cryst.—*Sol.*, dil. acetic acid.

Copper & Hydrogen Arsenite

(Scheele's Green).—Fr. cupric sulphate & alkali arsenite).—$CuHAsO_3$.—Fine, light-green powd.—*Sol.*, alkalies.—*Uses:* Pigment.

Copper & Potassium Chlorate Merck (4

(Potassio-cupric Chlorate).—$Cu(ClO_3)_2.2KClO_3$.—Green cryst.—*Sol.* W.

Copper & Potassium Chloride Merck (1

(Potassio-cupric Chloride).—$CuCl_2.2KCl+2H_2O$.—Bluish-green cryst.—*Sol.* W.

Copper & Potassium Cyanide Merck (3

(Potassio-cuprous Cyanide).—$Cu_4K_2C_6N_6$, or, $Cu_2(CN)_2.2KCN$.—Wh., cryst. powd.—*Sol.* W.

Copper & Potassium Ferrocyanide Merck (6

(Potassio-cupric Ferrocyanide).—$K_2CuFe(CN)_6 + H_2O$.—Brownish-red powd.—Insol. W.

Copper & Potassium Tartrate Merck (8

(Potassio-cupric Tartrate).—Fr. cupric oxide in boil. solut. cream of tartar, $CuK_2(C_4H_4O_6)_2$.——Blue scales.—*Sol.* W.

Copper & Sodium Chloride Merck (3

(Sodio-cupric Chloride). — Mixture of cupric chloride & sodium chloride.

Copper Sulphate-Guaiac Paper.—see **Guaiac-Copper Sulphate Paper**

Copperas.—see **Iron Sulphate**

Coptis

(Gold Thread). — Roots of Coptis trifolia, Salisbury. Ranunculaceæ.—*Habit.:* British America, south to Maryland & Minnesota.—*Etymol.:* Fr. Grk. "koptein," to cut, *i.e.*, the lvs. appear as if cut. "Trifolia" refers to the ternate lvs.—*Constit.:* Berberine; coptine.—*Uses:* Tonic in gen'l debil.; also applied locally in ulcer. mouth.—*Dose:* Fld. extr., 10–30 ♏ (0.6–2 Cc.).

Coral Root.—see **Corallorhiza**

Coral-Tree Bark.—see **Erythrina**

Corallin Merck (8

(Pæonine; Aurine R.).—Probably rosaniline rosolate, or dioxyamidotriphenylcarbhydride.—Reddish-brown powd.—*Sol.* A.; insol. cold W., sl. in boil. W.—*Uses:* Dyeing wool & silk, shades between magenta & cochineal. Indicator for alkalies (alkalies=violet-red; acid=yellow).

Corallin Stain.—see **Strassburger's Corallin**

Corallorhiza

(Coral Root; Crawley Root). — Root of Corallorhiza odontorhiza, Nuttall. Orchidaceæ.—*Habit.:* U. S. (Massachusetts to Florida, & west to Missouri).—*Etymol.:* Fr. Grk. "korallion," coral, & "rhiza," root, referring to the coral-like root-stalks. "Odontorhiza" fr. Grk. "odonto," tooth, & "rhiza," root, referring to the toothed root-stalks. — Diaphor.; Anticatarrhal. — *Uses:* Colds & febrile condit.—*Dose:* Fld. extr., 30–60 ♏ (2–4 Cc.).

Cordia Boissieri.—see **Anacahuite**

Cordol.—see **Tribromsalol**

Coriamyrtin Merck (12000

Bitter principle fr. lvs. & fruit of Coriaria myrtifolia.—$C_{30}H_{36}O_{10}$.—Colorl. cryst.—*Sol.* W., A., E., C.—*Melt.* 228–230° C. (sinters fr. 220° C. upwards).—Analeptic.—*Uses:* Collapse, especially due to debilitated respiratory & vascular centers.—*Max. D.* $^1/_{60}$ grain (0.001 Gm.).

Coriander.—*U. S. P.*

Dried, ripe fruit of Coriandrum sativum, L. Umbelliferæ.—*Habit.:* Asia; Europe.—*Etymol.:* Grk. "koris," bed-bug, & "aneson," anise, *i.e.*, the lvs. have an odor resembling that of bed-bugs & anise. Sativum fr. Lat. "sativus," sown, cultivated.—*Constit.:* Volat. & fixed oils; malic acid; tannin; mucilage.—*Uses:* Carmin.; Aromat.; Stim.; Stoma.; Flavoring.—*Doses:* 10–60 grains (0.6–4 Gm.).—Fld. extr., 20–60 ♏ (1.3–4 Cc.).

Corn Ergot.—see **Ustilago**

Corn Flower.—see **Centaurea**

Corn Silk.—see **Zea**

Corn Smut.—see **Ustilago**

Corn Sugar.—see **Dextrose**

Cornin (Eclectic) (10

Powd., resin. extr. fr. Cornus florida, L. (Flowering Dogwood).—Brown, bitter powd.—*Sol.* A.—Antiper.; Tonic; Astring.—*Uses:* Interm. fever & as tonic.—*Dose* 2–5 grains (0.12–0.3 Gm.).

Cornus Circinata

(Green Osier; Round-leaved Dogwood).—Bark of Cornus circinata, L'Héritier. Cornaceæ.—*Habit.:* Canada & northeastern U. S.—*Etymol.:* Lat. "cornus," horn, referring to the hardness of the wood. "Circinata" refers to the circular form of the lvs.—Antiper.; Bitter Tonic.—*Uses:* Malarial fevers.—*Dose:* Fld. extr., 10–60 ♏ (0.6–4 Cc.).

Cornus Florida

(Dogwood; Flowering Dogwood).—Root bark of Cornus florida, L. Cornaceæ.—*Habit.:* Ontario & eastern U. S.—*Etymol.:* Lat. "cornus," horn, referring to the hardness of the wood.—"Florida" refers to its flowering habit.—*Constit.:* Cornine.—Astring.; Tonic; Antiper.—*Uses:* Diarrhea, dysentery, dyspep., malaria, &c.—*Doses:* Extr., 5–10 grains (0.3–0.6 Gm.).—Fld. extr., 30–60 ♏ (2–4 Cc.).

Cornutine Merck (8750

(Ecboline).—Alkaloid fr. Claviceps purpurea, Tulasne (Ergot).—Amorph., brownish powd.; or brownish-black mass.—*Sol.*, hot A.; sl. W.—Internal Hemostatic; Emmen.; Genital Tonic.—*Uses:* In hemorrhage fr. gen.-urin. organs, paralytic spermator., &c. Prof. Kobert claims it true active prin. ergot; accord. to Tanret, however, cornutine is a more or less decomposed ergotinine (which see).—*Doses:* Hemostat., $^1/_{12}$–$^1/_6$ grain (0.005–0.01 Gm.); spermator., $^1/_{20}$ grain (0.003 Gm.) twice daily.—For subcut. inject. a sterilized solut. of cornutine citrate is best adapted.

Cornutine Citrate Merck (8750

Brownish-black powd.—*Sol.* A.; v. sl. W.—Intern. Hemostat.; Emmen.; Genital Tonic.—*Uses:* To promote contractions both before & after childbirth; hemorrhage fr. genito-urinary

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

organs; paralytic spermatorrh., &c. — *Doses:* Hemostat. (urethra, bladder, uterus), $^1/_{30}$ grain (0.002 Gm.) 5 t. p. d.; in gynecol., $^1/_{12}$–$^1/_6$ grain (0.005–0.01 Gm.); in paralyt. spermator., $^1/_{20}$ grain (0.003 Gm.) twice daily, per os.—*Inj.*, subcut. $^1/_{30}$–$^1/_8$ grain (0.002–0.008 Gm.) of sterilized cornutine citrate in solut.

Cornutine Hydrochloride Merck (10000

Amorph., brown mass, or powd.—*Sol.* W., A.

Coronilla

(Ax-wort; Axseed; Hive-vine).—Whole plant, Coronilla varia, L. Papilionaceæ.—*Habit.:* Europe; adv. in U. S.—*Etymol.:* Fr. Lat. "corona," crown, referring to the crown-shaped appearance of the flower buds.—*Constit.:* Coronillin, $(C_7H_{12}O_5)_x$.—Diuret.—*Uses:* Specific in cardiac dropsy.—*Dose* 30–150 min. (2–10 Cc.) of 1:5 tinct. prepared with 80% alcohol.

Coronillin Merck (2500

Glucoside fr. Coronilla scorpioides, Koch.—$(C_7H_{12}O_5)$.—Yellow powd.—*Sol.* W., A.—Cardiac Tonic & Diur.—*Uses:* Cardiac dropsy & o. affect., especially paroxysmal tachycardia, aortal stenosis, & mitral insufficiency, inst. of digitalis; strengthens pulse, increas. secretion urine, & dimin. edema & dyspnea; contraindic. in fatty heart.—*Dose* 10 grains (0.6 Gm.) p. day, in 4–6 portions, in solut. w. G. & syrup, coffee, or in pills.

Corpus Luteum Merck.—Dried (700

Fr. the Corpus luteum of the cow.—1 part= $5^1/_2$ parts of the fresh organ.—*Uses:* In various affections of pregnancy.—*Dose* 1 grain (0.06 Gm.) twice daily.

Corrosive Sublimate.—see **Mercury Bichloride**

Corydalin (Resinoid) (40

Powd. alcoh. extr. fr. root Corydalis formosa, Pursh (Squirrel Corn).—Brown powd.—*Sol.* A.—*Uses:* Syph. affect., scrof. & skin dis.—*Dose* 1–3 grains (0.06–0.2 Gm.).

Corydaline Merck.—Alkaloid (2000

Fr. root Corydalis cava, L. (C. tuberosa, De C.), $C_{22}H_{27}NO_4$ (Freund).—Colorl. cryst.—*Sol.* A., C., E.—*Melt.* 135° C.—Heart Tonic.—See also Bulbocapnine.

Corydalis

(Squirrel Corn; Turkey Corn; Stagger-weed).—Rhizome of Corydalis cava L.; also Dicentra canadensis, De C. Fumariaceæ.—*Habit.:* Ontario to Kentucky & Missouri.—*Etymol.:* "Korydalis," the crested bark, is the Grk. name for the plant.—*Constit.:* Corydaline, $C_{22}H_{27}NO_4$; bulbocapnine, $C_{19}H_{19}NO_4$; corytuberine, $C_{19}H_{25}NO_4$; corycavine, $C_{23}H_{23}NO_6$; corybulbine, $C_{21}H_{25}NO_4$; corydine(?); fumaric acid; bitter extractive; acrid resin, &c.—Tonic; Diuret.; Alter.—*Uses:* Dyspep., dropsy, & syphil. affections.—*Dose:* Fld. extr., 30–60 ♏ (2–4 Cc.).

Corydine

Amorph. alkaloid fr. Corydalis cava, L. (C. tuberosa, De C.).

Corypha.—see **Carnauba**

Cosaprin

(Sodium Acetsulphanilate).— $NH(CO.CH_3)$ [1].-$C_6H_4.SO_3Na$[4].— Wh., cryst. mass. — *Sol.*, v. eas. W.; diffic. A.; insol. E.—Antipyr.—*Uses:* Instead of acetanilide.—*Dose* 3–8 grains (0.2–0.5 Gm.).

Cosmoline.—see **Petrolatum**

Cotarnine Hydrochloride.—see **Stypticin**

Cotarnine Phtalate.—see **Styptol**

Coto

(Coto Bark).—Bark of an undetermined South American tree, probably, however, Palicurea densiflora, Mart. Rubiaceæ. Drimys Winteri, var. granatensis, has also been credited as being the source.—*Habit.:* Bolivia.—*Etymol.:* "Coto-coto" is the Bravilian name of the bark.—Occurs in pieces 4–12 in. long, 2–4 in. wide, & $^1/_2$–$^3/_4$ in. thick, flat or curved; extern., cinnamon-brown & smooth; inner surface darker brown; granular fract.; arom., cinnamon-like odor; pungent, slightly bitter taste.—*Constit.:* Cotoin, $C_{14}H_{12}O_4$; dicotoin, $C_{25}H_{20}O_6$; phenylcumelin, $C_{11}H_8O_2$(?); piperonylic acid, $C_8H_6O_4$; volat. oil; resin; tannin.— Astring.; Antisep.; Antisudorific in phthisis; Antirheum. — *Uses:* In diar. & dysent: of tuberculosis & typhoid.—*Extern.*, in rheum., gout, & toothache.—*Doses:* 5–15 grains (0.3–1 Gm.), in powd.—Extr., 1–3 grains (0.06–0.2 Gm.).—Fld. extr., 5–15 ♏ (0.3–1 Cc.).—Tinct., 10–20 ♏ (0.6–1.3 Cc.).

Coto (Para-)

(Para-coto Bark).—Source not definitely known.—*Habit.:* Bolivia; Brazil.—Resembles coto bark in general appearance very much, but has a much weaker odor, & only a faintly pungent, acrid taste.—*Constit.*. Paracotoin, $C_{12}H_3O_4$; hydrocotoin, $C_{15}H_{14}O_4$; protocotoin, $C_{16}H_{14}O_6$; methylhydrocotoin, $C_{16}H_{16}O_4$; methylprotocotoin, $C_{17}H_{16}O_6$; piperonylic acid, $C_8H_6O_4$; volat. oil; tannin.—Astring.; Analg.; Antisep.—*Uses:* Chron. diar., gastric catarrh, neural., rheum., toothache, & gout.—*Doses:* 5–10 grains (0.3–0.6 Gm.).—Tinct., 10–20 ♏ (0.6–1.3 Cc.).—Fld. extr., 5–10 ♏ (0.3–0.6 Cc.).

Cotoin Merck.—True (280

Cryst. prin. fr. coto bark.—$C_6H_2(OH)_2(OCH_3)$-COC_6H_5.—Yellowish, cryst. powd.; pungent taste.—*Sol.* A., E., C., B.; sl. W.—*Melt.* 130–131° C. — Antidiar.; Antisudor., &c. — *Uses:* Cholera, dysent., diar., phthis. night-sw., &c.—*Dose* 2–3 grains (0.12–0.2 Gm.) several t. p. d. in wafers.—Contraind. in intest. hyperemia w. tendency to bleeding.—*Max. D.* 5 grains (0.3 Gm.) single; 15 grains (1 Gm.) daily.

Cotoin, Hydro-.—see **Hydrocotoin**

Cotoin, Para-.—see **Paracotoin**

Cotoin, Proto-.—see **Protocotoin**

Cotoinformaldehyde.—see **Fortoin**

Cotton Blue R.—see **Phenyl Blue**

Cotton-root Bark.—see **Gossypium-root Bark**

Couch Grass.—see **Triticum**

Coumarin.—see **Cumarin**

Coumarouna Bean.—see **Tonka**

Courbaril Bark.—see **Hymenæa Bark**

Cowbane.—see **Cicuta**

Cowhage.—see **Mucuna**

Cowslip.—see **Primula**

Cowrie.—see **Copal**

Crabs' Eyes

(Crabstones; Lapis Cancrorum; Oculi [Calculi] Cancrorum).—Concretions found in the stomach, one on each side, of the European crawfish, Astacus fluviatilis. Crustacea. Malacostraca.—*Habit.:* European rivers.—*Etymol.:* Lat. "lapis," stone, & "cancer," a crab.—Inod., insipid bodies; somewh. hemispherical shape; whitish or reddish color; hard & stony consistency & laminated texture.—*Constit.:* Carbonic acid; lime; calcium phosphate; animal matter (gelatin).—*Uses:* Antacid like prepared chalk; popular remedy for removing foreign bodies from the eye.—*Dose* 10–40 grains (0.6–2.6 Gm.).

Cramp Bark.—see **Viburnum Opulus**

Cranesbill.—see **Geranium**

Crawley Root.—see **Corallorhiza**

Cream Tartar.—see **Potassium Bitartrate**

Cream Tartar, Soluble.—see **Potassium & Sodium Borotartrate**

Creatin Merck (1500

(Methylglycocyamine; Methylguanidineacetic Acid; Kreatin).—Stimul. prin. fr. beef.—$C_4H_9N_3O_2$, or, $NH:C(NH_2)N(CH_3)CH_2.CO_2H$.—Colorl. to yellowish powd.—*Sol.* 70 W.—Muscular Stim., in atonic conditions of the general muscular system, of the heart, & of the digestive organs.—*Dose* $1^1/_2$ grains (0.1 Gm.) 4–6 t. p. d., in powd.

Creatin, Dehydrated.—see **Creatinine**

Creatinine Merck (5000

(Dehydrated Creatin; Kreatinine; Methylglycocyamidine).—Leucomaine fr. urine.—$C_4H_7N_3O$, or, $NH:C(NH.CO).N(CH_3).CH_2$.—Wh. or yellowish monoclinic cryst.—*Sol.* 12 W.—*Uses & Dose:* As of creatin.

Creatinine & Zinc Chloride Merck (1500

By-product in creatinine manuf.—$ZnCl_2C_8H_{14}N_6O_2$, or, $ZnCl_2(C_4H_7N_3O)_2$.—Colorl. to yellowish crystals.—*Sol.*, dil. HCl; sl. in W.

Creolin-Pearson (1

(Saponified Coal-Tar Creasote, Pearson).—Composed of homologues of carbolic acid, W., hydrocarb., org. bases, sod., resin, sulphur & chlorine.—Dark brown, syr. liq.; tar odor.—Sp. Gr. 1.040–1.080.—*Sol.*, all prop. A., E., C.; milky emuls. w. water; sol. in W. to 2.5%.—Germic.; Deodoriz.; Antisep.; Styp.; Anticholeraic, &c.—*Uses:* Non-poison. substit. f. carbolic acid.—*Intern.*, dysent., diar., meteorism, gast. catarrh, worms, thrush, diphth., &c.; enema 0.5% solut.; dysent. troubles.—*Extern.*, 0.5 to 2% solut.: somet. undil.; surg. operat. 1–5:1,000 inj., for gonor.; 2–5% oint. in scabies & pediculi, erysipelas, cyst., burns, ulcers, &c.—*Veter.*, 10% oint. w. petrolatum, lard or lanum.—*Dose* 1–5 ♏ (0.06–0.3 Cc.) 3 t. p. d., in pills. In cholera, 16 ♏ (1 Cc.) every $^1/_2$–1 hr. for 5 doses, then at longer intervals.—*Caut.* Aqueous solut. should be freshly made when wanted.

Creosal.—see **Tanosal**

Creosol Merck (35

(Homoguaiacol; Kreosol; Homopyrocatecholmonomethyl Ester).—By distil'n fr. beechwood tar or resin guaiac.—$C_8H_{10}O_2$, or, $C_6H_3.CH_3.(OCH_3).(OH)$. [1:3:4].—Colorl. to yellowish, str'ly refract., arom. liq.—Sp. Gr. 1.089 at 13° C.—*Misc.* A., E., B.—*Sol.*, sl. W.—*Boil.* 220° C.—Antisep.

Creosotal (13

(Creosote Carbonate).—Guaiacol carbonate w. o. carbonates.—Colorl. to yellowish, viscid, oily liq.—92% creosote.—*Sol.*, oils, A., E.; insol. W.—Antituberc.—*Uses:* As of creosote.—*Dose* 20 ♏ (1.3 Cc.) grad. increased to 80 ♏ (5 Cc.) sev. t. p. d.—*Max. D.:* Daily, 240 ♏ (15 Cc.).

Creosote from Beechwood Merck (2

(Kreosote; Creasote).—Mixture phenols, & phenol derivatives, chiefly creosol, $C_6H_3OCH_3.CH_3.OH$, & guaiacol, $C_6H_4(OCH_3).OH$, by distil'n fr. wood-tar, preferably that of Fagus sylvatica, L., or F. ferruginea Aiton. Fagaceæ. (Beech.).—Colorl., or faintly yellow, oily liq.; charact. smoky odor; caustic, burn. taste.—Sp. Gr. 1.080 at 15° C. (Not below 0.078 at 25° C., U. S. P.).—*Sol.*, all prop., A., E., C., B.; carbon disulphide, acetic acid, oils, 120 hot W.—*Boil.* 205–220° C.—Antituberc.; Antisep.; Antipyr.; Anthelm.—*Uses:* Phth., diab. mell., enlarged cervical glands, toothache, vomiting, cholera morbus, diar., dysent., abnorm. gastric & intestin. ferment. processes, &c.—*Extern.*, diluted, locally in chilbl., burns, diphth., fetid leucor., fistulous ulcers, &c.; used also in dentistry as addition to arsenical pastes, destroying diseased pulp.—*Dose* 2–5 ♏ (0.12–0.3 Cc.) in emulsion or pills; increase dose gradually to limit of tolerance.—*Max. Initial D.* 5 ♏ (0.3 Cc.) single; 15 ♏ (1 Cc.) p. day.—*Antid.*, emetics, stomach siphon, soluble sulphates, such as Glauber, or Epsom, salt.—*Incomp.*, acacia;

albumen; cupric, ferric, gold, & silver salts; oxidizers.—*Test:* If 1 Cc. is shaken w. 2 Cc. benzin & 2 Cc. freshly prepared barium-hydroxide T. S., upon separating, the benzin should *not* bec. blue or muddy, & the aqu. layer should not acquire a red tint, showing absence of poisonous cœrulignol & some other high-boiling wood-tar constituents (U. S. P.).—*Caut.* Wherever Creosote is indicated for internal medication, Creosote from Beechwood Merck should be dispensed; & under no circumstances give "Creosote from Coal Tar" unless explicitly ordered. Wood Creosote & Coal-tar Creosote differ very widely in their action on the human body: Wood Creosote is comparatively harmless; Coal-tar Creosote is decidedly poisonous. —Expose bottle to the light; avoid severe changes of temperature; keep in blue bottles; open to air as little as possible.

Note.—The U. S. P. now recognizes only this high grade.

"Creosote" from Coal Tar

Yellowish, oily, clear liquid.—Sp. Gr. 1.07.—*Boil.* 200–225° C.—*Caut.* This creosote should be used *only* for toothache, chilblains, &c.; also techn.—Wherever Creosote is indicated for internal or external medication, Creosote from Beechwood Merck should be dispensed; & under no circumstances give Creosote from Coal Tar unless explicitly ordered. Wood Creosote & Coal Tar Creosote differ very widely in their action on the human body. Wood Creosote is comparatively harmless, while Coal-tar Creosote is decidedly poisonous.

N. B.—Merck & Co. no longer supply Coal-tar Creosote, but give Beechwood Creosote on all orders calling for "Creosote." This course is in line with the resolution adopted by the A. Ph. A. (1902), "that the name 'Creosote' be confined to that derived from 'Beechwood'; and that manufacturers and wholesalers be requested to drop coal-tar creosote, under that name, from their price lists."

Creosote Benzoate Merck (25

Yellowish liq.—*Sol.* A., E.—Antisep.—*Uses:* Locally, by spray in nose & throat dis.

Creosote Carbonate.—see **Creosotal**

Creosote Oleate.—see **Oleocreosote**

Creosote Phosphate Merck (15

$PO_4(C_6H_7)_3$.—Colorl., viscid mass.—*Sol.* A.; insol. w., & dil. alkalies.—Recommended as non-irritant, non-toxic succedan. for creosote, & used like latter.—*Dose* 90 grains (6 Gm.) p. d.

Creosote Phosphite

(Phosphotal).—Reddish-yellow, oily liq.; faint creosote odor; pungent taste.—Abt. 90.5% creosote.—*Sol.*, eas. W., A., E., C., G., oils.—Antitubercular; Anticachectic.—*Uses & Dose:* As of creosote; in pills, wine, or elixir.

Creosote Tannate.—see **Tanosal**

Creosote Valerate (15

(Eosote).—Colorl. to yellowish liq.—*Sol.* A., E. —Antituberc.; Intest. Disinfect.—*Uses:* As of creosote.—*Dose* 3–10 ♏ (0.2–0.6 Cc.) 3 t. p. d. in caps. or milk.

Creosote-calcium Chlorhydrophosphate Merck (15

Syrupy mass, consisting of calcium chlorhydrophosphate & creosote carbonate.—*Uses:* Phth., scrofula.—*Dose* 5–8 grains (0.3–0.5 Gm.) twice p. d. in emulsion.

Cresalol (Meta-) Merck (20

(Metacresalol; Metacresylic Ester of Salicylic Acid).—Fr. salicylic acid, with metacresol.—$C_{14}H_{12}O_3$, or, $C_6H_4.OH.COOC_6H_4.CH_3$. — Wh. powd.—*Sol.* A.; insol. W.—*Melt.* 74° C.—*Uses & Dose:* As of paracresalol, as succedan. for salol.

Cresalol (Ortho-) Merck (20

(Orthocresalol; Orthocresylic Ester of Salicylic Acid).—Fr. salicylic acid with orthocresol.—$C_{14}H_{12}O_3$, or, $C_6H_4.OH.COOC_6H_4.CH_3$. — Wh. powd.—*Sol.* A., E.; insol. W.—*Melt.* 35° C.—Not used therapeutically.

Cresalol (Para-) Merck (20

(Paracresalol; Paracresylic Ester of Salicylic Acid; Cresol Salicylate).—Condens. prod. salicylic acid w. paracresol.—$C_{14}H_{12}O_3$, or, $C_6H_4.OH.COOC_6H_4.CH_3$. — Wh., cryst. powd. — *Sol.* A., E.; insol. W.—*Melt.* 39° C.—Antisep.; Antirheum., like salol.—*Uses:* Asiatic cholera, typhoid, dysent., rheum., &c.—*Dose* 5–15 grains (0.3–1 Gm.) several t. p. d. in wafers.—*Max. D.:* 60 grains (4 Gm.) p. d.

Cresol Merck.—*U. S. P.* (1

(Kresol; Cresylol; Cresylic, or Kresylic, Acid). —C_7H_7OH, or, $C_6H_4(CH_3)OH$.—Mixt. of three isomeric cresols obt. fr. coal-tar, freed fr. phenol, hydrocarbons, & water.—Colorl. or straw-colored liq.; phenol-like odor; turns yellowish-brown on prolonged expos. to light.—Sp. Gr. 1.032 at 25° C.—*Sol.* 60 W. at 25° C.; *misc.*, all propor. w. benzin, A., E., G., & solut. alkali hydroxides. —*Boil.* 195–205° C.—*Uses, &c.:* As of crude carbolic acid.

Cresol Iodide.—see **Europhen**

Cresol (Meta-) Merck (8

(Metacresylic Acid; Metaoxytoluene; Metamethylphenol; Cresylic Acid).—Fr. coal-tar, by fractional distil.; or fr. thymol, by phosphorus pentoxide & caustic potassa.—C_7H_8O, or, $C_6H_4.OH.CH_3$ [1:3].—Colorl. to yellowish liq.; phenol-like odor.—Sp. Gr. 1.0498 at 0° C.—*Sol.* A., E., C.; sl. in W.; solub. increased by alkali, sod. salicylate, or cresotate.—*Boil.* 202° C.—*Uses:* Disinfect.; Antisep.; abt. one-fourth as poison. as carbolic acid, while much stronger as antisep. —*Dose* 1–3 ♏ (0.06–0.2 Cc.).—*Appl.*, in 0.5% aqu. solut.

Cresol (Ortho-) Merck (3

(Cresylalcohol; Orthocresylic Acid; Ortho-oxytoluene; Orthomethylphenol).—Homologue of phenol, fr. tar oil, by fractional distil'n.—C_7H_8O, or, $C_6H_4.OH.(CH_3)$ [1:2].—Wh. crystals.—*Sol.* A., E., C., alkalies; abt. 30 W.—*Melt.* 28–30° C. —*Boil.* 187–189° C.—*Uses:* Disinf. Less poison. than carbolic acid.

do. Merck.—Highest Purity (4

Cresol (Para-) Merck.—Cryst. (10

(Paracresylic Acid; Paraoxytoluene; Paramethylphenol).—By fusing paratoluene-sulphonic acid w. KOH.—C_7H_8O, or, $C_6H_4.(CH_3).OH$ [1:4].—Cryst. mass; odor of phenol.—*Sol.* A., E., C.; sl. W.—*Melt.* 36° C.—*Boil.* 198° C. —*Uses:* Disinfect.

Cresol Salicylate.—see **Cresalol, Para-**

Cresylalcohol.—see **Cresol, Ortho-**

Cresylol.—see **Cresol**

Crispmint

(Balm Mint; Curled Mint; Cross Mint).—Lvs. of Mentha crispa, L. Labiatæ.—*Habit.:* Germany. —*Etymol.:* Fr. Grk. "Mintha," daughter of Cocytus, *i.e.*, she was supposed to have been changed into this plant by Proserpine, in a fit of jealousy. "Crispa" fr. Lat. "crispus," curl, referring to the shape of the leaf.—*Constit.:* Volat. oil; tannin. — Arom.; Carmin. — *Uses:* Colic, flatulence, cholera & diar.

Crocus

(Saffron; Spanish [or French] Saffron).—Stigmas of Crocus sativus, L. Iridaceæ.—*Habit.:* Western Asia; Southern Europe (France & Spain).—*Etymol.:* Fr.Grk. "krokos" or "kroke," a thread, *i.e.*, the stigmas are thread-like. Lat. "sativus," cultivated; saffron fr. the Arabic "asfar," yellow.—Flattish-tubular, almost threadlike stigmas abt. $1^1/_4$ in. (3 Cm.) long; orange-brown color; strong, peculiar, arom. odor; bitterish, arom. taste.—*Constit.:* Volat. oil; crocin (polychroit); fixed oil; wax.—Stomachic; Antispasm.; Emmen.; Antihysteric; Diaphor.; Anodyne. — *Uses:* Chiefly to hasten eruptions in exanthematous diseases.—*Techn.*, for flavoring & color. —*Doses:* 5–30 grains (0.3–2 Gm.) in powd. or infus.—Alcoh. extr., 2–6 grains (0.12–0.36 Gm.); rarely used.—Tinct., 20–40 drops.

Crocus Antimony.—see **Antimony Oxide, Brown**

Crocus Martis.—see **Iron Hydroxide**

Crocus Martis Adstringens.—see **Iron Oxide, Red**

Crocus Metallorum.—see **Antimony Oxide, Brown**

Crotin Merck

Mixt. of exceedingly toxic albuminoids fr. seeds of Croton Tiglium.—Wh. powd.; abt. 20% ash. —*Sol.*, solut. sod. chloride.—A vegetable agglutinin w. hemolytic action on blood of rabbits & crows; coagulates both boiled & unboiled milk.

"Croton" Chloral.—see **Butyl-Chloral**

"Croton" Chloral Hydrate.—see **Butyl-Chloral Hydrate**

Croton Tiglium.—see **Tiglium**

Crudya Obliqua.—see **Impigem**

Crurin (35

(Quinoline-Bismuth Sulphocyanate [Rhodanide]).—$Bi(SCN)_3+3(C_9H_7N.HSCN)$.—Reddish-yellow, gran. powd.—Insol. W., A., E.—*Melt.* 76° C.—Antisep.—*Uses:* Syphilit. sores & ulcers as dressing either pure, or w. equal part starch; in gonor., 0.5% glycerino-aqueous suspension.

Cryogenine

(Metabenzaminocarbazide; Kryogenin).—Wh., cryst., odorl., somewh. bitter powd.—*Sol.* A., C., E.; 40 W.—Antipyr.—*Uses:* Phth., typhoid. —*Dose* 5–15 grains (0.3–1 Gm.).

Cryptopine Merck.—Pure (3500

Alkaloid fr. opium.—$C_{21}H_{23}NO_5$.—Wh., cryst. powd.—*Sol.*, boil. C. & boil. A.; alm. insol. E. & B.—*Melt.* 217° C.

Cryptopine Hydrochloride Merck (3500

$C_{21}H_{23}NO_5.HCl+6H_2O$. — Wh., cryst. powd. — *Sol.*, eas. hot W.

Crystallin.—see **Globulin**

Crystallin

Solut. pyroxylin 1, in methyl alcohol 4, & amyl acetate 15; resembles collodion. An "elastic" crystallin results on adding 5 castor oil & 10 Canada balsam to 20 crystallin.—*Uses:* As of collodion; vehicle for remedial agents in skin diseases (*e.g.*, chrysarobin, salicylic acid, &c.).

Cubeba.—*U. S. P.*

(Cubebs; Tailed Pepper; Java Pepper).—Dried, unripe, but fully grown fruit of Piper Cubeba, L. fil. (Cubeba officinalis, Miq.). Piperaceæ.—*Habit.:* Southern Asia (Java, Borneo, Sumatra); cultivated in W. Indies & Ceylon.—*Etymol.:* Grk. "koubeba," fr. Persian "kababa," Indian "cubab," or Arabic "kababan." "Piper" fr.Grk. "piperi," Sanskrit "pippali," meaning to digest, *i.e.*, helps digestion.—Berries are globular, 4–5 Mm. in diam.; blackish-gray; internally whitish & hollow; strong, spicy odor; arom., pung. taste. —*Constit.:* Volat. & fixed oil; cubebin, $C_{10}H_{10}O_3$; cubebic acid, $C_{28}H_{30}O_7.H_2O$ (Schulze), $C_{13}H_{14}O_7$ (Schmidt); resin; fat; wax.—Stim.; Loc. Irrit.; Carmin.; Diuret.; Antiblennorrheic; Sedat.—*Uses:* Gonor., leucorrh., bronchial catarrh, pharyng., acute urethritis, prostatitis, & nasal catarrh.—*Doses:* 10–60 grains (0.6–4 Gm.).—Alcoh. extr., 2–10 grains (0.12–0.6 Gm.).—Fld. extr., 10–60 ♏ (0.6–4 Cc.).—Oleores., 5–30 ♏ (0.3–2 Cc.).—Tinct., 30–120 ♏ (2–8 Cc.).

Cubebin Merck (500

(Bitter substance fr. fruit Piper Cubeba, L. fil. (Cubebs).—$C_{10}H_{10}O_3$, or, $CH_2.O_2.C_6H_3.C_3H_4.OH$.

—Wh. cryst.—*Sol.* A., E., C.—*Melt.* 125° C.—Therapeutically inert.—*"Cubebine"* is the French designation for ethereal extract cubeb.

Cubic Niter.—see **Sodium Nitrate**

Cuccati's Hematoxylin-Potassium Iodide

0.75 Gm. hematoxylin, 6 Gm. alum, 25 Gm. potass. iodide, & 100 Cc. 75% A.—*Uses:* Staining nuclei, & whole masses.

Cucumber Tree.—see **Magnolia Acuminata**

Cucurbita Pepo.—see **Pepo**

Cudbear

Color. matter fr. various lichens of genera Lecanora & Rocella.—Reddish powd.—*Sol.* A.—*Uses:* Techn.

Culver's Root.—see **Leptandra**

Cumaric Anhydride.—see **Cumarin**

Cumarin Merck (6

(Coumarin; Tonka-Bean Camphor; Cumaric Anhydride).—Odorous prin. of tonka bean; artif'ly fr. salicylic aldehyde & sod. acet. w. acetic anhydride.—$C_9H_6O_2$, or, $C_6H_4.O.CO.CH:CH$.—Colorl. cryst.; pleas., fragr. odor; burn. taste.—*Sol.* 10 A., E., oils.—*Melt.* 67° C.—*Boil.* 290–291° C.—*Uses:* Flavoring agent for tobacco & butter; perfumery; "deodorizing" iodoform; lemonade (4 fl. dr. [15 Cc.] of a 1:200 alcoh. solut. to a bot.).—A 1:200 solut. is also insecticide.—65 times the strength of prime Angostura Tonka bean.

Cumene Merck.—Highest Purity (35

(Pseudocumol; Pseudocumene; Unsymmetrical Trimethylbenzene).—Fr. coal-tar.—C_9H_{12}, or, $C_6H_3(CH_3)_3$[1:3:4].—Colorl. liq.—*Sol.* A., B.—Sp. Gr. 0.853 at 20° C.—*Boil.* 169.8° C.—*Uses:* Sterilizing catgut (by heat. 1 hour at 160° C.).

do.—Technical (2

Boil. 160–170° C.—*Uses:* As of preceding.

Cumidine (Pseudo-) Merck.—Pure, cryst. (40

(Aminoalphatrimethylbenzene).—$(CH_3)_3.C_6H_2.NH_2$.—Wh. cryst.—*Sol.* A., E., C.—*Melt.* 70° C.—*Boil.* 234–235° C.

Cumin

(Cummin).—Fruit of Cuminum Cyminum, L. Umbelliferæ.—*Habit.:* Mediterranean region; northern Africa.—*Etymol.:* "Cuminum" fr. "kamoun," the Arabic name of the plant. "Cyminum" is simply an altered form of the generic name, "cuminum."—*Constit.:* Volat. & fixed oils; resin; proteids; malates.—Carmin.; Stim.; Arom.—*Uses:* Flavor.; also cookery.—*Dose* 15–60 grains (1–4 Gm.).

Cuminol Merck (90

(Cuminic Aldehyde; Paracuminic Aldehyde; Cumyl Hydride; Paraisopropylbenzoic Aldehyde).—Forms one of the constit. of oil fr. Roman chamomiles.—$C_{10}H_{12}.O$, or, $(C_6H_4).(CH_3)_2.CH.CHO$.—Yellowish oil; str., persistent odor; acrid, burn. taste.—*Sol.* A., E.—Sp. Gr. 0.9832 at 0° C.—*Boil.* 237° C.

Cumol.—see **Cumene**

Cumyl Hydride.—see **Cuminol**

Cundurango.—see **Condurango**

Cupreine

Alkaloid fr. bark var. species Remijia (Cuprea Bark).—$C_{19}H_{22}N_2O_2+2H_2O$.—Colorl. cryst.—*Sol.* A.; sl. in E.—*Melt.* 198° C.

Cupricalcium Acetate.—see **Copper & Calcium Acetate**

Cupro-hemol.—see **Hemol, Cupro-**

Cuprol (25

Compound of copper & nucleinic acid fr. yeast.—6% Cu.—*Uses:* As succedaneum for copper sulphate.—*Appl.*, in aqueous solut. or in ointment in slow-healing ulcers.

Curangin

Glucoside fr. Curanga amara, Juss. Scrophulariaceæ.—$C_{48}H_{77}O_{20}$.—*Sol.*, eas. A., hydrous acetone, & acetic ether.—Febrif.

Curare Merck.—Tested (712

(Urari; Woorari; Woorali; Wourali; Tubocurare).—Native extr. (arrow-poison) fr. the bark of var. spec. of Strychnos (Strychnos toxifera, Benth., & S. Castelniæana, Weid.).—*Habit.:* Orinoco, S. A.—Brown, intens. bitter mass.—*Sol.* W.; dil. A.—Paralyzes the ends of the motor nerves of the voluntary (striated) muscles.—Antitetanic; Nervine, &c.—*Uses:* Hypoderm.; does not act through stomach. Antid. for hydrophobia & strychn., & in tetanus. Filter solut. before use.—*Dose* $^1/_{12}$ grain (0.005 Gm.), 1 or 2 t. p. d., or until effect is noticed.—*Max. D.* $^1/_3$ grain (0.02 Gm.) single; 1 grain (0.06 Gm.) daily.—*Antid.*, artif. respiration, strychnine subcut. ($^1/_{60}$–$^1/_{12}$ grain [0.001–0.005 Gm.]), & physostigmine intravenously.—*Caut.* Avoid getting it into cut or scratch, as it may prove fatal.

Curarine

(Tubocurarine).—Active alkaloidal constit. of curare.—$C_{19}H_{26}N_2O$.—Deliq., brown powd.—*Sol.* W., A.—Antitetanic; Nervine; &c.—*Uses:* Recom. in tetanus, hydroph., & severe convulsive affect.—*Inj.* $^1/_{120}$–$^1/_{12}$ grain (0.0005–0.005 Gm.).—Lethal dose for rabbits = 0.006–0.012 Gm. per kilo of body weight.—*Antid.*, strychn., atropine, artif. respir., & stim.—*Caut.* Very poisonous!

Curcas

(Purging-Nut; Physic-Nut; Barbadoes-Nut; Semen Ricini Majoris).—Seeds of Jatropha Curcas, L. Euphorbiaceæ.—*Habit.:* West Indies; South America.—*Etymol.:* "Curcas" is the Malabar name of the plant. Lat. "purgans," purging, *i.e.*, the action of the drug. Grk. "iatron," remedy, & "phagein," to eat, referring

to the purgative action.—*Constit.:* Fixed oil (Oleum infernale) containing the very poisonous curcin, greatly resembl. ricin.—Drastic Purgat. —The tincture is used sometimes instead of the purgative fixed oil.

Curcuma

(Turmeric; Indian Saffron).—Rhizome of Curcuma longa, L. Zingiberaceæ.—*Habit.:* China; East Indies; many tropical countries.—*Etymol.:* Indian "kurkum" fr. the Chaldaic "kurkam," the name of the plant.—Rhizome is 1–2 in. long, & about $^1/_2$–1 in. thick; externally yellowish-gray & annulate; internally orange-yellow; resinous fracture; ginger-like odor; warm arom. taste. Powd. is deep yellow, changed to brownish by alkalies & boric acid. —*Constit.:* Volat. oil; curcumin (coloring matter); starch; resin.—*Uses:* Hepatic Stim.; Tonic in jaundice; Condiment (as curry powd.).—*Techn.,* as a color for ointments, solutions, &c. In chemical analysis for preparing curcuma test-paper (acids=yellow; alkalies=brownish-red; especially useful for boric acid).—*Doses:* Alcoh. extr., 1–5 grains (0.06–0.3 Gm.).—Fld. extr., 10–30 ♏ (0.6–2 Cc.).—Tinct., 30–120 ♏ (2–8 Cc.).

Curcuma Paper

(Turmeric Paper).—Wh. paper, charged w. alcoh. solut. of yellow color fr. root Curcuma longa, L. & dried.—*Uses:* Indicator for caustic alkalies & alkaline earths (develop a reddish-brown color), acids, &c. Useful for detecting boric acid (brown color); other acids, bright sulphur-yellow color.—Limits of sensitiveness abt. 1:180,000 for KOH; and 1:35,000 for NH_3.

Curcuma Zedoaria.—see **Zedoaria**

Curcumin Merck (150

(Turmeric Yellow).—Color. matter fr. root Curcuma longa, L.—$C_{10}H_{10}O_3$.—Yellow, amorph. mass.—*Sol.* A., E., acetic acid, alkalies.—*Uses:* Indicator (borax & alkalies color the solut. brownish-red; acids, light-yellow).

do. Merck.—Cryst. (450

Curled Mint.—see **Crispmint**

Cusparia.—see **Angostura**

Cusso.—see **Kousso**

Cutal

(Aluminum Borotannate).—React.-prod. tannic acid w. borax & aluminum sulphate.—76% tannin, 13.23% alumina, 10.71% boric acid. —Light-brown powd.—*Sol.,* dil. tartaric acid; insol. W.—Disinf.; Astring.—*Uses: Extern.,* skin dis., chiefly.—*Appl.,* pure or attenuated, in oint. or as dust.-powd.

Cutal Soluble

(Aluminum Borotannotartrate).—Fr. Cutal w. tartaric acid.—*Sol.* W.—Astring.; Antisep.—*Uses: Extern.,* skin diseases, gonor., &c.—*Appl.,* in solut., like alumnol.

Cuttle-fish Bone.—see **Sepia**

Cyanamide (10

(Normal Cyanamide).—Fr. any haloid cyanide, by amm. gas.—CH_2N_2, or, $(C{:}N).NH_2$.—Wh., deliq., cryst. comp.—*Sol.* W., A., E.—*Melt.* 40° C. —*Caut.* Keep well stoppered.

Cyanine Merck.—Cryst. (500

(Cyanine Iodide; Diamylcyanine Iodide; Quinoline, or Chinoline, Blue).—Color fr. quinoline & lepidine.—$C_{29}H_{35}N_2I$.—Shin., monocl. prisms; green metal luster.—*Sol.* A. (deep blue color), warm W.—*Uses:* Indicator (but little used, as unreliable); in photography in natural colors.

Cyanine Hydriodide Merck (800

$C_{29}H_{35}N_2I.HI$.—Yellow need.—*Sol.* W.

Cyanine Iodide.—see **Cyanine**

Cyanogen Iodide.—see **Iodine Cyanide**

Cyanus.—see **Centaurea**

Cyclamin Merck (200

Glucoside fr. roots Cyclamen europæum, L., & Primula veris, L.—Wh., amorph. powd.; intens. acrid taste in short time. Solut's froth.—*Sol.* W., A.; hot G.—Emetic; Cath.

Cydonia

(Quince Seed).—Seed of Cydonia vulgaris, Pers. Rosaceæ.—*Habit.:* Southern Asia; Europe; widely cultiv.—*Etymol.:* Named for "kydon," the town now known as Canea, in Crete, where the tree is abundant.—Seeds are abt. $^1/_4$ in. long, ovate, triangular; brown color; covered w. whitish, mucilaginous epithelium; swell up in water.—*Constit.:* Amygdalin; fatty oil; mucilage (cydonin).—Demulcent.—*Uses:* Particularly in eye lotions.

Cymene Merck (*Not* Cumene).—**Fr. Camphor** (40

(Cymol; Isopropyltoluene; Paracymol; Paramethylpropylbenzene).—Fr. camphor by heat. w. phosph. anhydride.—$C_{10}H_{14}$, or, $C_6H_4(CH_3)$-C_3H_7[1:4].—Colorl., transp. liq.; arom. odor.—Sp. Gr. 0.8678 at 12° C.—*Sol.* A., C.—*Boil.* 175–176° C.

do. Merck.—**Fr. Oil Cumin & other oils** (35

Fr. volat. oil Cuminum Cyminum, L. (Cumin) & o. oils.—Ident. w. preceding.

Cymene from Oil Turpentine.—see **Methylpropylbenzene, Meta-**

Cymol.—see **Cymene**

Cymophenol (*Beta-*).—see **Carvacrol**

Cynanchum.—see **Vincetoxicum**

Cynoglossum

(Hound's Tongue; Gipsy Flower).—Whole plant, Cynoglossum officinale, L. Boraginaceæ.—*Habit.:* Europe; widely natur. in U. S.—*Etymol.:* Grk. "kyon," dog, & "glosse," tongue, referring to the form & soft texture of the lvs.—*Constit.:*

Fixed oil; resin; gum.—Antispasm; Anodyne; Demulc.; Astring.—*Uses:* Hysteria, catarrhal affect., diar., hemorrhage, & spasmodic cough.—*Extern.*, in inflammations, contusions, &c.—*Doses:* Aqu. extr., 1–5 grains (0.06–0.3 Gm.).—Fld. extr., 10–30 ♏ (0.6–2 Cc.).

Cynosbata.—see **Rosa Canina**

Cyperus

(Antiemetic Root; Adrue; Guinea Rush).—Rhizome of Cyperus articulatus, L. Cyperaceæ.—*Habit.:* Tropical regions.—*Etymol.:* Fr. "kypeiros," the ancient Grk. name for the plant.—Antiemetic; Stomachic.—*Uses:* To check vomiting of pregnancy, in yellow fever, indigestion, & atonic dyspep.—*Dose:* Fld. extr., 10–30 ♏ (0.6–2 Cc.).

Cypripedin (Eclectic) (30

Extr. fr. conc. tinct. of root Cypripedium pubescens, Willd.—Brown powd.—*Sol.* A.—Nervous Stim.; Antispasm.—*Uses:* In neural. & hypochond.—*Dose* $^1/_2$–3 grains (0.03–0.2 Gm.).

Cypripedium.—*U. S. P.*

(Lady's Slipper; American Valerian; Nerve Root; Yellow Moccasin Flower; Noah's Ark).—Dried rhizome & roots of Cypripedium hirsutum (pubescens, Willd.), Miller, & of C. parviflorum, Salisbury. Orchidaceæ.—*Habit.:* Nova Scotia south to Alabama, & west to Nebraska & Missouri.—*Etymol.:* Lat. "Cypris," Venus, & "pes, pedis," foot, or Grk. "Kypris," Venus, & "pous, podos," foot, "podion," slipper, *i.e.*, referring to the slipper-like form of the flower's lip. "Pubescens" Lat. for downy, hairy, refers to the downy or hairy stems, lvs., &c. "Parviflorum" refers to the flowers which are smaller than those of the preceding.—*Constit.:* Cypripedin; volat. oil; volat. acid; tannin; gallic acid; resins.—Nervine; Stim.; Antispasm.; Analg.—*Uses:* Neuralg., hypochond., &c.—*Doses:* 10–30 grains (0.6–2 Gm.).—Extr., 2–5 grains (0.12–0.3 Gm.).—Fld. extr., 10–30 ♏ (0.6–2 Cc.).

Cystamin., *Cystogen.* } —see **Hexamethylenamine**

Cytisine Merck (2500

(Ulexine; Sophorine; Baptitoxine).—Alkaloid fr. seeds of Cytisus Laburnum, L., & many o. Papilionaceæ.—Considered to be identical w. ulexine fr. Ulex europæus, sophorine fr. Sophora speciosa, & baptitoxine fr. Baptisia tinctoria.—$C_{11}H_{14}N_2O$.—Colorl. to yellowish-wh. cryst.—*Sol.* W., A., E., B., C.—*Melt.* 152° C.—*Uses:* Medicinally, in form of its salts.—*Caut.* Poison!

Cytisine Hydrobromide

Yellowish-wh. cryst.—*Sol.* W.—Diuretic.—*Uses:* Cardiac dropsy & strychnine poison.—*Dose* $^1/_{20}$–$^1/_{10}$ grain (0.003–0.006 Gm.).

Cytisine Hydrochloride Merck (1200

$C_{11}H_{14}N_2O.HCl$.—Wh. cryst.—*Sol.* W., A.—Nervine, intermediate in action bet. strychnine & curare.—*Uses:* Paral. migraine, whoop.-cough & asthma.—*Dose* $^1/_{20}$–$^1/_{12}$ grain (0.003–0.005 Gm.), usually subcut.

Cytisine Nitrate Merck (1200

$C_{11}H_{14}N_2O.(HNO_3)_2+2H_2O$.—Yellowish cryst.—*Sol.* W.; sl. A.; insol. E.—*Uses & Dose:* As of preceding.

Czokor's Alum-Cochineal

Boil 1 Gm. cochineal w. 100 Cc. 1% solut. potassium alum until evaporated to 50 Cc., & add 0.5 Gm. carbolic acid.—*Uses:* Nuclear stain.

D

Dahlia.—see **Gentian Violet B B B**

Dahlia Paper

(Georgina Paper; Anthocyanin Paper).—Wh. paper, charged w. alcoh. solut. of color. matter of florets Dahlia variabilis, Desfontaines.—*Uses:* Indicator (acids = red; alkalies = green).

Dahlin.—see **Inulin**

Daisy.—see **Bellis**

Damar

(Gum Damar; Dammar; Resin Damar).—Resinous exudate fr. Shorea Wiesneri, Schiffner, Dipterocarpaceæ.—*Habit.:* East Indies; Philippines.—Yellowish-wh., roundish, or stalactite-shaped, friable masses; semi-transparent; conchoidal fracture; varying degrees of hardness.—*Sol.* A., C., E.; CS_2; conc. H_2SO_4; oil rosemary; oil turpent. (66%).—Sp. Gr. 1.04–1.12.—*Melt.*, abt. 120° C.—*Constit.:* Volat. oil; resins (alpha- & beta-); bitter subst'ce.—*Uses:* Techn., in plasters, varnishes, lacquers, &c.

Damiana

Lvs. of Turnera diffusa, Willd., var. aphrodisiaca (Ward), Urb. Turneraceæ.—*Habit.:* Texas to Lower California.—*Etymol.:* Plant named for Wm. Turner (1520–1568), author of an English "herbal." "Damiana" appears to be a coined name. "Aphrodisiaca" has reference to the aphrodisiac property of the plant.—*Constit.:* Volat. oil; resins (two); bitter principle; tannin; sugar; albuminoids; gum.—Aphrodisiac, Tonic & Diuret.—*Uses:* Sexual atony.—*Doses:* 30–120 grains (2–8 Gm.) in powd.—Alcoh. extr., 5–20 grains (0.3–1.3 Gm.).—Fld. extr., 1–2 fl. dr. (4–8 Cc.).—Tinct., 1–3 fl. dr. (4–12 Cc.).

Dandelion.—see **Taraxacum**

Daphnetin Merck (1000

(Dioxycumarin).—By heat. pyrogallol, malonic acid & sulphuric acid; or by hydrolyzing daphnin, the glucoside fr. the bark of Daphne Mezereum.—$C_9H_6O_4$, or, $(OH)_2C_6H_2.O.CO.(CH)_2$.—Yellowish-wh. cryst.—*Sol.* W., A., alkalies; sl. in E.—*Melt.* 253–256° C. w. decomp.

Dark Green.—see **Dinitrosoresorcinol**

Date Plum.—see **Diospyros**

Daturine Merck.—True.—Pure, cryst. (855

Alkaloid fr. Datura Stramonium, L. Identical w. hyoscyamine; isomeric w. atropine (as stated by Ladenburg).—$C_{17}H_{23}NO_3$.—Colorl. need.—*Sol.* A., E., C.—*Melt.* 106–108° C.—Sedat.; Hypnot.—*Uses:* Mania, epilepsy, neural., rheum., syph., cancer. pains, & spasm. asthma; hypn. to insane.—*Dose* $^1/_{240}$–$^1/_{60}$ grain (0.00025–0.001 Gm.).—*Antid.*, emetics, stomach siphon, castor oil, opium.—*Caut.* Poison!

Daturine Hydrochloride Merck.—True.—Pure (1000

$C_{17}H_{23}NO_3.HCl$.—Wh. cryst.—*Sol.* W., A.—*Uses & Dose:* As of daturine.

Daturine Sulphate Merck.—True.—Pure (855

$(C_{17}H_{23}NO_3)_2.H_2SO_4$.—Wh. cryst.—*Sol.* W., A.—*Uses & Dose:* As of daturine.

Day Flower.—see **Commelina**

Deer's Tongue.—see **Liatris**

Degener's Indicator.—see **Phenacetolin**

Delafield's Hematoxylin

Mixt. solut. 4 Gm. hematoxylin in 25 alcoh. w. satur. aqu. solut. ammonium alum, 400 Cc. After sev. days' exposure to air & light, 100 Cc. each of glycerin & methyl alcohol are added.—*Uses:* Stain. nuclei intense blue; protoplasm pale blue.

Delfs-Schwarzenbach's Reagent.—For alkaloids

Nitric acid & ammonia.—Certain alkaloids afford characteristic color reactions on treatment first w. HNO_3, & then w. NH_4OH.

Delphinine Merck.—Cryst. (6000

Alkaloid fr. seeds of Delphinium Staphisagria.—$C_{22}H_{35}NO_6$.—Wh. cryst.—*Sol.* W., A., E., C.—*Melt.* 119° C.—Antineural. & Antispasm., like aconitine.—*Uses:* Facial neural., chronic rheum., convuls., palpit. of heart; pediculosis, &c.—*Dose* $^1/_{60}$ grain (0.001 Gm.), gradually increased to $^2/_3$ grain (0.04 Gm.) per day, in pills (the aqu. solut. soon decomposes).—*Appl.*, in 1–2% oint. or alc. solut.—*Antid.*, emetics, stomach siphon, stimulants.—*Caut.* Poisonous!

do. Merck.—Amorphous (750

Amorph. alkaloid fr. seeds of Delphinium Staphisagria.—Yellowish powd.—*Sol.* C.

Delphinium.—see **Staphisagria**

Delphinium Consolida

(Knight's Spur; Lark's-heel; Lark's-claw; Staggerweed; Flores Calcatrippæ; Stavesacre).—Flowers & seed of Delphinium consolida, L. Ranunculaceæ.—*Habit.:* Central Europe; cultivated in U. S.—*Etymol.*. Fr. Grk. "delphis," dolphin, *i.e.*, form of nectary resembles imaginary figure of dolphin. Lat. "consolida," united, *i.e.*, two spurs are combined in one.—*Constit.:* *Flowers:* Bitter extractive; tannin; blue pigment; acrid principle.—*Seeds:* Calcatripine, volat. oil, gum, resin, fixed oil, gallic acid, & aconitic acid.—Anthelmintic; Diuret.; Aperient; Emmenag.—*Uses:* *Flowers:* Dysent., cholera morbus, dropsy, gout, vesical affections & in vomiting of autumnal fevers.—*Seeds:* Dropsy, spasmodic asthma, & calculus.—Both flowers & seeds are used externally for pediculi.—*Dose:* *Flowers:* 60–120 grains (4–8 Gm.) in infus.—The extract is used in aqueous solut. in eye dis.—*Seeds:* Fld. extr., 1–5 ♏ (0.06–0.3 Cc.).—*Antid.*, stomach siphon, ammonia, digitalis, tannin, brandy, &c.

Delphocurarine Merck (3500

Alkaloidal subst'ce fr. Delphinium scopulorum.—Amorph., wh. powd.—*Sol.* W., A.—*Uses:* As of curare.

Denigés' Reagent.—For acetone

Solut. 5 Gm. mercuric oxide in warm mixt. of 20 Cc. conc. sulphuric acid & 100 Cc. W.—On mixing equal. vol. reagent & suspected solut., a cloudiness or ppt. forms if acetone present.

Dermatol.—see **Bismuth Subgallate**

Dermol

(Bismuth Chrysophanate).—$Bi(C_{15}H_9O_4)_2.Bi_2O_3$ (Trojescu).—Yellow, amorph. powd.—*Sol.*, nitric or sulphuric acid; insol. ordinary solvents. Siccative Dermic.—*Uses:* Skin diseases.—*Appl.* 5–20% oint.

Derris

(Aker Tuba).—Root of Derris elliptica, Benth. Papilionaceæ.—*Habit.:* Java.—*Etymol.:* Fr. Grk. "derris," skin, *i.e.*, the pod is covered with a pellicle.—*Constit.:* Derrid (accord. to Greshoff; Tubain accord. to Wray); tannin; resin; derris-red (coloring matter).—*Uses:* Fish poison.

Desoxyalizarin.—see **Anthrarobin**

Deuteroalbumose Merck (200

Albuminoid product resulting fr. the conversion of primary albumoses into peptones.—Yellowish powd.—*Sol.*, cold & hot W.

Devil's Bit.—see **Succisa**

De Vrij's Reagent.—For quinine

Alcoh. solut. quinoidine iodide.—The sulphuric-acid solut. of quinine alkaloids affords w. the reagent a brownish-red ppt. (herapathite; quinine iodosulphate).

Dextrin Merck.—Highest Purity.—Precip. by alcohol (2

Fr. starch, by dil. mineral acids, or diastase.—$(C_6H_{10}O_5)x$.—Whitish powd.—*Sol.* W.—*Uses:* Techn.—*Caut.* Keep dry, well stoppered.

do. Merck.—Pure (1

Dry, odorl. powd.—*Usss:* Substit. for gum acacia, & powd. licorice; also as excipient for dry extracts.—*Caut.* Keep dry, well stoppered.

do. Merck.—Granulated (1

(Gommelin).—Transp., yellowish lumps or gran.; conch. fracture.—*Uses:* Substit. for gum arabic; also in photography.—*Caut.* Keep dry.

Dextrin Merck.—Technical, yellow & white (1 (Leiocom).—*Uses:* Thickening mordants in printing fabrics in fast colors, reserves, & discharges; manuf. of paper for pastelle painting; printing tapestries, &c.; preparing felt; manuf. printing rolls & printers' balls; inks, &c.

Dextroalphapropylpiperidine.—see **Coniine**

Dextroglucose.—see **Dextrose**

Dextrose Merck.—Highest Purity (3 (Glucose; Dextroglucose; Grape, Starch, Corn, or Honey, Sugar).—Fr. cane sugar, by inversion, and fr. starch & starchy substc., by action of mineral acids. — Wh. (anhydrous) powd. —$C_6H_{12}O_6$, or, $OHCH_2.(CHOH)_4.CHO$.—*Sol.* W. —*Uses:* Chem. analysis.

do. Merck.—From Urine

Yellowish powd.

do. Merck.—Technical (1

Always contains some dextrin & unfermentable gallisin.—*Uses:* Manuf. wine (in Gall's method of improving acid wines, & in Petiot's process of making sugar-water wines); as surrogate for malt & honey (in baking); manuf. caramel; preparing tobacco; confectionery, &c.

Dextrose Soxhlet-Merck (25

Anhydrous, perfectly pure glucose.—Wh. powd., or snow-wh., cryst. crusts.—*Sol.* W.—*Uses:* Chem. analysis.

Diacetanilide

By heat. monoacetanilide w. glac. acetic acid to 200–250° C. & exhaust. prod. w. benzin.—$C_5H_5.N(CH_3.CO)_2$.—Colorl. leaflets.—*Melt.* 111° C.—Action similar to that of acetanilide.

Diacetonamine Oxalate Merck (40

(Normal Diacetonamine Oxalate).—Fr. acetone, by ammonia gas w. oxalic acid.—$C_{14}H_{28}N_2O_6$, or, $(NH_2.C[CH_3]_2.CH_2.CO.CH_3)_2.C_2H_2O_4$.—Colorl. cryst.—*Sol.* W.; sl. in A.

Diacetylmorphine Merck (80

$C_{17}H_{17}NO(C_2H_3O_2)_2$.—Wh., cryst., odorl., bitter powd.—*Sol.*, in acidul. liquids, hot A., C., B.; diffic. E.; insol. cold W. & oils.—*Melt.* 173° C.—Cough-sedative; Antispasmodic.—*Uses:* Phthisis, bronchitis, asthma, &c.—*Dose* $^1/_{12}$–$^1/_6$ grain (0.005–0.01 Gm.).

Diacetylmorphine Hydrochloride Merck (80

$C_{17}H_{17}NO(C_2H_3O_2)_2.HCl$.—Wh., bitter powd.—*Sol.* A., 2 W.—*Melt.* 230–231° C.—Cough-sedative; Antispasmodic.—*Uses:* Phthisis, bronch., asth., &c.—*Dose* $^1/_{12}$–$^1/_6$ grain (0.005–0.01 Gm.).

Diacetyltannin (15

(Tannigen; Acetyltannin).—$C_{14}H_8(COCH_3)_2O_9$. —Yellowish-wh., amorph., odorl., tastel. powd. —*Sol.* A., dil. solut. sod. phosphate, carbonate, or borate, & lime-water; sl. sol. hot W.; insol. cold W. — Intest. astringent. — Tannin compound, decomposes only when reaching the intestines. — *Uses: Intern.*, like tannin, in chronic diar., *not* in acute diar. of children & adults. — *Extern.*, chronic pharyngitis. — *Dose* 3–8 grains (0.2–0.5 Gm.) 3 t. daily.—*Appl.* 3% solut. in 5% sod.-phosphate solut. in chron. pharyng.—*Max. D.* 60 grains (4 Gm.) p. d.

Diallyl Oxide.—see **Allyl Oxide**

Diallyl Sulphide.—see **Allyl Sulphide**

Dialuramide.—see **Uramil**

Diamidoazobenzene (or *-zol*) *Hydrochloride.*—see **Chrysoidine Orange**

Diamidobenzene (or *-zol*), *Meta-.*—see **Phenylenediamine, Meta-**

Diamidogen Sulphate.—see **Hydrazine Sulphate**

Diamidophenol.—see **Diaminophenol Hydrochloride**

Diamidophenylacridin, Asymmetric.—see **Chrysaniline Yellow, Basic**

Diamine Sulphate.—see **Hydrazine Sulphate**

Diaminethane.—see **Ethylenediamine Hydrate**

Diaminophenol Hydrochloride Merck.—Cryst. (13 (Amidol; Diamidophenol). — Fr. dinitrophenol. —$C_6H_8N_2O.2HCl$, or, $C_6H_3(NH_2)_2OH.2HCl$.—Grayish-wh. cryst.—*Sol.* W.; sl. in A.—*Uses:* Photo. developer.

Diammonium Orthophosphate.—see **Ammonium Phosphate, Dibasic**

Diamond Green B.—see **Malachite Green**

Diamond Green G.—see **Brilliant Green**

Diamond Ink Merck (5

(Etching Ink).—Mixt. of hydrofluoric acid w. enough barium sulphate to thicken it.—Milky wh. liq., w. a heavy sediment.—*Uses:* For etching glass.—*Caut.* Keep in gutta-percha, hard-rubber, or paraffin-paper bot.

Diamyl Ether.—see **Amyl Oxide**

Diamylamine Merck (140

(Diisoamylamine).—Fr. isoamylbromide & isoamylamine.—$C_{10}H_{23}N$, or, $(C_5H_{11})_2NH$.—Colorl. liq.—Sp. Gr. 0.7775 at 15° C.—*Sol.* A., E., C.; sl. in W.—*Boil.* 186–187° C.

Diamylamine Hydrochloride Merck (135

(Diisoamylamine Hydrochlorate).—$C_{10}H_{24}NCl$, or, $(C_5H_{11})_2NH.HCl$.—Wh., cryst. powd.—*Sol.* W., A.

Diamylcyanine Iodide.—see **Cyanine**

Diamylene.—see **Dipentene**

Dianthine G.—see **Iodeosine G**

Diaphoretic Antimony.—see **Potassium Antimonate, Purified**

Diaphtol

(Ortho-oxyquinolinemetasulphonic acid; Quinaseptol).—Fr. ortho-oxyquinoline by sulphuric acid. — $C_9H_7O_4SN$, or, $C_6H_5(OH)(SO_3H)N$. — Yellowish-wh. cryst.—*Sol.* 35 boil. W.; sl. cold W. — *Melt.* 295° C. — Antisep. & Antiferm. — *Uses: Intern.*, disinfect. urin tract; prevents decomp. of urine better than salol.

Diastase (of Malt) Merck.—Absolute (1:300) (50

Org. protein ferment in wheat & barley malt. —Yellowish-white to brownish-yellow, amorph. powd.—*Sol.* W.—Amylolytic.—*Caut.* Keep well stoppered.

do. Merck.—Medicinal (18

Mixt. of maltin w. abt. 25% milk sugar; 1 part dissolves 20 parts starch.—*Uses:* Aid to digest. starchy food.—*Dose* 1-3 grains (0.06-0.2 Gm.) several t. p. d., alone or w. pepsin.—*Caut.* Keep well stoppered.

Diastase, Taka- (40

(Koji).—Enzyme produced by action of Aspergillus Oryzæ, Cohn, on moist rice.—Whitish-yellow, v. hygroscop. powd.; converts over 100 times its weight starch into maltose.—Amylolytic.—*Uses:* Faulty digestion of starch, digestive disturbances due to gout, hyperacidity, &c. —*Techn.*, preparation of the Japanese national drink "saké," & converting maize into sugar in manuf. whisky. — *Dose* 3-5 grains (0.2-0.3 Gm.) after meals.

Diaterebinic Anhydride.—see **Acid Terebic**

Diaterpenic Anhydride.—see **Acid Terpenylic**

Diathesin (50

(Ortho-oxybenzylalcohol).—$C_7H_8O_2$.—Fine leaflets; sl. bitter taste.—*Sol.* 15 cold W.; freely hot W., A.—*Melt.* 86° C.—Analges.; Antipyr.; Antirheum.—*Uses:* Articul. & muscul. rheum., neural., tonsilitis, pleurisy, &c.—*Dose* 8-15 grains (0.5-1 Gm.) 3-4 t. p. d.

Diatomaceous Earth.—see **Kieselguhr**

Diazoamidobenzene Merck (40

(Diazoamidobenzol; Diazobenzolanilide; Benzeneazoaniline).—Fr. alcoh. solut. aniline, by nitrous acid.—$C_{12}H_{11}N_3$, or, $C_6H_5N{:}N.NH.C_6H_5$. —Golden-yellow scales.—*Sol.* E., B.; hot A.—*Melt.* 96° C.; explodes on heating.

Diazobenzolanilide.—see **Diazoamidobenzene**

Dibenzoyl.—see **Benzile**

Dibenzoylhydrocotoin Merck (100

Trimethylester of benzoylphloroglucinol.—Fr. paracoto bark.—$C_{22}H_{32}O_8$.

Dibromanthracene Merck (50

(Alphadibromanthracene).—Fr. anthracene, by bromine.—$C_{14}H_8Br_2$, or, $C_6H_4.C_2Br_2.C_6H_4$.—Yellow cryst.—*Sol.* C.; sl. A., E.—*Melt.* 221° C.; sublimes undecomposed.

Dibromethane.—see **Ethylene Bromide**

Dibromobenzene (or *-zol*), *Para-.*—see **Benzene, Dibromo-**

Dibromoisobutane.—see **Butylene, Iso-, Bromide**

Dibromomethane.—see **Methylene Bromide**

Dibromopropane.—see **Trimethylene Bromide**

Dicalcium Orthophosphate.—see **Calcium Phosphate, Dibasic**

Dicentra.—see **Corydalis**

Dichinoyldioxime.—see **Dinitrosoresorcinol**

Dichlorethane.—see **Ethylene Chloride**

Dichlorether Merck (12

(Dichlorethyl Oxide). — Fr. ethyl ether by chlorination.—$C_4H_8Cl_2O$, or, $CH_2Cl.CHCl.OC_2H_5$. —Colorl. liquid.—*Sol.* A., E.—Sp. Gr. 1.174 at 23° C.—*Boil.* 140-145° C.

Dichlorethyl Oxide.—see **Dichlorether**

Dichlorhydrin (Alpha-) Merck (5

(Alphapropenyl Dichlorhydrin; Glycerin Dichlorhydrin; Dichloroisopropyl Alcohol).—Fr. glycerin w. hydrochloric acid gas & fract. distil'n. —$C_3H_6OCl_2$, or, $CH_2Cl.CH(OH).CH_2Cl$.—Ether., colorl. liq.—Sp. Gr. 1.396 at 15° C.—*Sol.* A., E.; sl. in W.—*Boil.* 174° C.—*Uses:* Techn., & as a solvent for hard resins & nitrocellulose; manuf. photogr. lacquers & Zapon lacquer; cement for celluloid; manuf. water-colors.

Dichlorisopropyl Alcohol. — see **Dichlorhydrin, Alpha-**

Dichlorobenzene (or *-zol*), *Para-.*—see **Benzene, Dichloro-, Para-**

Dichlorobenzenesulphonamide (Para-) Merck. —Cryst. (900

$C_6H_3Cl_2.SO_2.NH_2$.—Colorl. cryst.—*Sol.* W., A.

Dichloromethane.—see **Methylene Chloride**

Dictamnus

(Cretan Dittany).—Whole plant, Origanum Dictamnus, L. Labiatæ.—*Habit.:* Crete; Levant. —*Etymol.:* Fr. "Dicte," the name of a Cretan mountain, where the plant grows profusely; & "thamnos," shrub or bush. "Origanum," fr. Grk. "oros," mountain, & "ganos," beauty, referring to the handsome appearance & fine odor of many spec. of Origanum.—*Constit.:* Volat. oil.—*Uses:* In fomentations for scrofula.

Dictamnus Albus

(White Fraxinella; European Dittany; Bastard Dittany; Garden Ginger).—Root of Dictamnus albus, L. Rutaceæ.—*Habit.:* Europe.—*Etymol.:* Same as preceding.—*Constit.:* Volat. oil; resin, bitter principle. — Antiepilep.; Antihysteric; Febrif.—*Dose* 20-60 grains (1.3-4 Gm.).

Didymium.—By Electrolysis.—Fused (10000

Metal.—Di.—*Etymol.:* Fr. the Grk. "didymoi," twins; so named by its discoverer, Mosander,

in 1842, because it occurs always with lanthanum in cerit, together with cerium.—Mixt. of praseodymium & neodymium; freed so far as possible fr. lanthanum.—Wh. metal.—Sp. Gr. 6.544.—Oxidiz. in air & burns in flame w. much light.—*Sol.*, dil. min. acids.

Didymium Carbonate Merck (250

$Di_2(CO_3)_3+6H_2O$.—Reddish-wh. powd.—*Sol.*, dil. mineral acids; insol. W.

Didymium Chloride Merck (250

$Di_2Cl_6+12H_2O$.—Large, violet-red, monosymmetr. cryst.—*Sol.*, eas. W., A.—Decomp. by heat.—*Caut.* Keep dry.

Didymium Nitrate Merck (110

$Di_2(NO_3)_6+12H_2O$.—Large, violet-red asymmetr. cryst.—*Sol.*, eas. W., A.

Didymium Oxide Merck.—Anhydrous (210

Di_2O_3.—Grayish powd.—*Sol.*, eas. dil. min. acids; insol. W.

Didymium Sulphate Merck (180

$Di_2(SO_4)_3+6H_2O$.—Violet-red cryst.—*Sol.*, diff. W.; insol. A.

Didymium Sulphide Merck (200

Di_2S_3.—Greenish-brown powd.—Decomp. in moist air.

Diethideneammonium Thiocarbamate.—see **Carbothialdine**

Diethyl Oxalate.—see **Ethyl Oxalate**

Diethyl Succinate.—see **Ethyl Succinate**

Diethyl Succinate, Monobromated.—see **Ethyl Monobromosuccinate**

Diethyl Sulphate Merck (40

$(OC_2H_5)_2.SO_2$.—Colorl. liq.—*Sol.* A., E.—Sp. Gr. 1.185 at 15° C.—*Boil.* 208° C. without decomposition.

Diethyl Sulphide.—see **Ethyl Sulphide**

Diethyl Truxillate.—see **Ethyl Truxillate, Alpha-**

Diethylacetal.—see **Acetal**

Diethylaldehyde.—see **Acetal**

Diethylamine Merck (110

By dil. potass. hydroxide on dinitrodiethylaniline.—$C_4H_{11}N$, or, $(C_2H_5)_2NH$.—Volat., colorl., inflam., str'ly alkal. liq.—*Sol.* A., W.—Sp. Gr. 0.710 at 15° C.—*Boil.* 56° C.

do. Merck.—33% Solut. (50

do. Merck.—Fr. Nitrosodiethylene (280

Diethylamine Hydrochloride Merck (65

$C_4H_{12}NCl$, or, $(C_2H_5)_2NH.HCl$.—Colorl. cryst.—*Sol.* W., A., C.—*Melt.* 215–217° C.

Diethylaniline Merck.—Pure (6

Fr. ethylaniline, by ethyl bromide.—$C_6H_5.C_2H_5.C_2H_5N$.—Yellowish to brownish liq.—*Sol.* A., E., C.—Sp. Gr. 0.936 at 15° C.—*Boil.* 213.5° C.

Diethylaniline Merck.—Commercial (3

Diethylbromacetamide.—see **Neuronal**

Diethylenediamine.—see **Piperazine**

Diethylglycocollguaiacol Hydrochloride. — see **Gujasanol**

Diethylglycocollparamido-oxybenzoylmethylester Hydrochloride.—see **Nirvanin**

Diethylidene Dithiocarbamate.—see **Carbothialdine**

Diethylketone Merck (110

(Metacetone; Propione; Ethylpropionyl).—By distil. sugar w. excess of lime.—$C_2H_5.C_2H_5.CO$.—Colorl., mobile liq.; acetone odor.—*Sol.* A., E.—*Boil.* 101° C.—Hypn.—*Uses:* Maniacal excit., melancholia with stupor & hysteria.—*Doses:* Hypnot., 8 ♏ (0.5 Cc.); in mania, 25–45 ♏ (1.5–3 Cc.).

Diethylmalonylurea.—see **Veronal**

Diethylmeta-amidophenolphtalein.—see **Rhodamine B**

Diethylnitrosamine.—see **Nitrosodiethylene**

Diethyloxamide Merck.—Symmetrical (200

$C_6H_{12}N_2O_2$.—Wh. cryst.—*Sol.*, hot W., & A.—*Melt.* 175° C.

Diethylsulphonediethylmethane.—see **Tetronal**

Diethylsulphonedimethylmethane.—see **Sulfonal; Sulphonmethane**

Diethylsulphonemethylethylmethane.—see **Sulphonethylmethane; Trional**

Difluordiphenyl (150

Organic fluorine compound.—$C_6H_4F.C_6H_4F$.—Colorl., cryst. powd.; arom. odor.—*Sol.*, eas. A., E., C., oils; insol. W.—*Melt.* 87° C.—Sp. Gr. 1.04.—Antisep.—*Uses:* As dusting powd., pure, or in 10% oint. or w. talcum in cutan. dis.

Digitalein Merck (450

Glucoside fr. lvs. Digitalis purpurea, L.—Wh., amorph. powd.; intens. bitter taste.—*Sol.* W., A.—Heart poison.

Digitalin Crystallized Merck (798

(Digitonin; Digitin).—Glucoside fr. lvs. Digitalis purpurea, L.—$C_{27}H_{46}O_{14}+5H_2O$.—Coarsely granul., cryst. powd.; decomp. above 235° C., without melting sharply.—*Sol.*, mixt. of A. & C.; sl. in A.; alm. insol. W., E., C.—Optically levogyrate.—No physiolog. action on heart.

Digitalin "French" Merck.—(*French & Belg. Pharm.*)—**Pure, amorph.—Compl. solub. in Chloroform** (1100

(Chloroformic, or Homolle's Amorphous, Digitaline; Digitalinum Gallicum).—Fr. Digitalis

purpurea, L.—Consists chiefly of an amorph. glucoside resembling digitoxin in action.—Yellowish, odorl., bitter powd.—*Sol.* A., C., 2000 W.—*Uses, Antid., &c.:* As of digitoxin.—*Dose* $^1/_{250}$ grain (0.00025 Gm.), rapidly increased until $^1/_{40}$ grain (0.0015 Gm.) is taken daily.—*Max. D.* $^1/_{30}$ grain (0.002 Gm.).

Digitalin "German" Merck.—Pure, powd. (140

Fr. Digitalis purpurea, L.—Mixt. of digitalin (Kiliani), amorph. digitonin, & digitaleïn; on boil. w. dil. acids, is split up into digitalose, digitaligenin, digitogenin, & amorph. cleavage products.—Yellowish-wh. powd.—*Sol.* W., A.; alm. insol. E., C. — Non-cumulative Heart Tonic; Diur.—*Uses:* As of digitalis; well adapted for inj.—*Dose* $^1/_{10}$–$^1/_2$ grain (0.006–0.03 Gm.) 3 or 4 t. p. d., in pills, tabl., or subcut.—*Antid.,* emetics, stom. siphon, tannic acid, saponin, nitroglycerin, morphine early, strophanthin later, alcoholic stimulants, camphor, mustard plaster, &c.—*Caut.* Poison!

Note.—Digitalin "German" Merck is declared by competent authorities to be the most reliable digitalis preparation because its effects are always certain & uniform, and particularly because it is *free from cumulative action.*

Digitaline, Chloroformic, or *Homolle's.*—see **Digitalin, "French"**

Digitalis.—*U. S. P.*

(Foxglove; Purple Foxglove; Fairy Gloves).—Dried lvs. of Digitalis purpurea, L. Scrophulariaceæ, collected fr. plants of second year's growth, at commencement of flowering. — *Habit.:* Southern & central Europe; cultiv. in U. S.—*Etymol.:* Fr. Lat. "digitus," finger, *i.e.,* the finger-shaped corolla; named by Fuchs in 1542. Purpurea, fr. L. "purpureus," purple, *i.e.,* the flowers are purple. "Foxglove," corruption of Folk's glove, fr. "Folk," synonym of Fairies. —*Constit.:* Digitoxin; digitonin; digitalin; digitalic acid(?); antirrhinic acid; digitalosmin; digitoleic acid; digitoflavon; resin; extractive; inosit; pectin.—Cardiac Tonic; Vasc. Stim.; Diuret.; Anaphrodis.; Sedat.; Narcot.—*Uses:* Cardiac diseases, pulm. edema, dropsy, &c.—*Doses:* 1–2 grains (0.06–0.12 Gm.) in powd. or infus.—Alcoh. extr., $^1/_4$–1 grain (0.015–0.06 Gm.); *Max. D.* 2 grains (0.12 Gm.) single, 5 grains (0.3 Gm.) daily.—Fld. extr., 1–3 ♏ (0.06–0.2 Cc.); *Max. D.,* 5 ♏ (0.3 Cc.) single, 15 ♏ (1 Cc.) daily.—Tinct., 5–30 ♏ (0.3–2 Cc.).—*Antid.:* As of Digitalin, "German."

Digitalis Juice Merck (3

Fr. fresh lvs. Digitalis purpurea, L.; preserv. w. alc.—Dark green.—Heart Stim.; Diur.—*Uses:* Weak or irreg. heart.—*Dose* 3–10 ♏ (0.2–0.6 Cc.).—*Antid.,* as of Digitalin, "German."

Digitalon

Alcohol-free, aseptic solut. of digitalis constituents.—*Dose* 8–15 ♏ (0.5–1 Cc.) hypoderm.

Digitin.
Digitonin. } —see **Digitalin, Crystallized**

Digitoxin Merck (13110

Most active glucoside fr. Digitalis purpurea, L. —$C_{28}H_{46}O_{10}$.—Wh., cryst. powd.; on boil. w. dil. acids, it decomposes into digitoxose, $C_6H_{12}O_4$, & digitoxigenin, $C_{22}H_{32}O_4$.—*Sol.* A., C., & also in a mixt. of 333 Cc. glycerin (Sp. Gr. 1.25), 147 Cc. W., & 95% alcohol enough to bring the whole to a Sp. Gr. 1.000 (1 Gm.=50 drops); sl. sol. in E.; insol. W.—Most prompt, reliable, powerful Heart Tonic, of uniform chem. compos. & therapeutic activity; perfect substitute for digitalis & all other digitalin preparations.—0.001 Gm. digitoxin is equal in effect to 1 Gm. digitalis herb.—*Uses:* Valvular lesions, myocarditis, &c.—*Doses:* $^1/_{240}$–$^1/_{60}$ grain (0.00025–0.001 Gm.) 3 t. daily, with 3 ♏ (0.2 Cc.) C., 60 ♏ (4 Cc.) A., $1^1/_2$ fl. oz. (45 Cc.) W.—*Enema,* $^1/_{80}$ grain (0.0008 Gm.) with 10 ♏ (0.6 Cc.) A., 4 fl. oz. (120 Cc.) W., 1 to 3 t. daily.—*Max. D.:* $^1/_{30}$ grain (0.002 Gm.) single; $^1/_{15}$ grain (0.004 Gm.) daily.

do. Merck.—Compressed Tablets

Ea. contains $^1/_{240}$ grain (0.00025 Gm.).—*Uses:* In enema, according to Wenzel-Unverricht, & also intern., like digitoxin.—*Dose* 1 tabl. every 3 hrs., or 3–4 t. p. d.; for enema, dissolve 1–2 tabl. in abt. 15 ♏ (1 Cc.) A., & add $3^1/_2$ fl. oz. (100 Cc.) luke-warm W.

Dihydroresorcinol

Fr. resorcinol, by sod. amalgam w. carbon dioxide. —Shin., wh. prisms.—*Sol.* W., A., C.; v. sl. E., carbon disulphide, ligroin.—*Melt.* 104–106° C. —Antiseptic.—Clinical data lacking.

Dihydroxyanthraquinone.—see **Alizarin**

Dihydroxyphtalophenone.—see **Phenolphtalein**

Diiodaniline Merck (110

(Metadiiodoaniline). — $C_6H_3.I_2.NH_2$ [4:2:1]. — Shining, brown cryst.—*Sol.* E., C., hot A., acetic ether, carbon disulphide.—*Melt.* 96° C. —Antisep.; Dermic.— *Uses: Extern.,* skin dis.

Diiodobetanaphthol.—see **Iodonaphthol**

Diiodocaffeine.—see **Caffeine Triiodide**

Diiododithymol.—see **Thymol Iodide**

Diiodoethane.—see **Ethylene Iodide**

Diiodoform Merck (85

(Ethylene Tetraiodide, or Periodide; Iodethylene).—Fr. acetylene iodide (carbon biniodide), by excess of iodine.—C_2I_4.—95.28% iodine.—Fine, yellow need.; odorl., w. charact. odor on expos. to light.—*Sol.* C., B., toluene, CS_2; sl. in A., E.; insol. W.—*Melt.* 187° C.—Antisep.—*Uses:* Inst. of iodof.—*Cau.* Keep in the dark.

Diiodohydroxypropane.—see **Iothion**

Diiodomethane.—see **Methylene Iodide**

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Diiodosalicylic-acid Methylester.—see **Sanoform**

Diisoamylamine.—see **Diamylamine**

Diisobutylamine Merck (115

$(C_4H_9)_2NH$.—Colorl. liq.—*Sol.* A., E., C.—*Boil.* 135–137° C.

Diisopropylideneacetone.—see **Phorone**

Dill.—see **Anethum**

Dimagnesium Phosphate.—see **Magnesium Phosphate**

Dimethyl Carbonate.—see **Methyl Carbonate**

Dimethyl Sulphate Merck (7

$SO_2(OCH_3)_2$.—Colorl. liq.—*Sol.* A., E.—Sp. Gr. 1.333 at 15° C.—*Boil.* 188° C.—*Uses:* As alkylizer in organ. chemistry.—*Caut.* The vapors are poisonous! The preparation has a powerfully caustic action on the skin.

Dimethyl Sulphide.—see **Methyl Sulphide**

Dimethylacetal Merck (50

(Ethylidenedimethylester). — Fr. aldehyde, methyl alc., & glacial acetic acid, by heat.—$C_4H_{10}O_2$, or, $CH_3.CH(OCH_3)_2$. — Colorl. liq. — *Sol.* W., A., E., C.—Sp. Gr. 0.879 at 0° C.—*Boil.* 62–63° C.—Anesth.—*Uses:* Inst. of chloroform.

Dimethylamidoazobenzene Merck.—Highest Purity (25

(Butter Yellow).—Deriv. of dimethylaniline.—$C_{14}H_{15}N_3$, or, $C_6H_5.N_2.C_6H_4N.(CH_3)_2$.—Sm., yellow plates.—*Sol.* A., str. mineral acids, oils.—*Melt.* 115° C.—*Uses:* Indicator in alkalimetry; fat color, partic. for identifying margarine.—The yellow solut. is reddened by acids.

do. Merck.—Purified (7

Dimethylamidoazobenzene Sulphonate Merck (15

(Sulphobenzeneazodimethylaniline). — $SO_3H.C_6H_4.N_2.C_6H_4N(CH_3)_2$.—Violet cryst. or powd.—*Sol.* A.; sl. W.—*Uses:* As starting point in manuf. helianthine & related dyes constituting the various salts of this acid.

Dimethylamine Merck.—Anhydrous (900

Fr. methyl iodide, by ammonia.—C_2H_7N, or, $(CH_3)_2NH$.—Gaseous at ordin. temp.—*Sol.* W.—*Boil.* 7.2° C.—Occurs in compressed form in tubes, & also in aqu. solut.

do. Merck.—33⅓% Solution (85

Aqu. solut.—Colorl. liq.—*Misc.*, w. W. & A.

Dimethylamine Hydrochloride Merck (125

$(CH_3)_2NH.HCl$.—Wh., deliq., cryst. scales.—*Sol.* A., W.—*Melt.* 168° C.—*Caut.* Keep fr. air.

Dimethylaminoantipyrine.—see **Pyramidon**

Dimethylaminoantipyrine-butylchloralhydrate.—see **Trigemin**

Dimethylaminobenzoylpentanol Hydrochloride.—see **Stovaïne**

Dimethylaniline Merck.—Mono-free (4

React.-prod. aniline hydrochloride w. aniline & methyl alc.—$C_8H_{11}N$, or, $C_6H_5N(CH_3)_2$.—Yellowish to brownish oily liq.; free fr. monomethylaniline.—*Sol.* A., E., C.—Sp. Gr. 0.957 at 20° C.—*Boil.* 193° C.—*Uses:* Technical.

Dimethylaniline Orange.—see **Methyl Orange**

Dimethylbenzene (or *-zol*).—see **Xylene**

Dimethylcarbinolchloroform.—see **Methaform**

Dimethylethylcarbinol.—see **Amylene Hydrate**

Dimethylethylcarbinolchloral.—see **Dormiol**

Dimethylethylene Bromide, Symmetrical. — see **Butylene (Beta-) Bromide**

Dimethylglyoxime Merck.—Reagent (600

(Alphadimethylglyoxime). — $CH_3.C(:N.OH)C(:N.OH).CH_3$.—Wh. cryst.—*Sol.*, eas. A., E.; diffic. W.—*Melt.* 240° C.—*Uses:* Exceed. sensit. reagent for nickel (scarlet-red ppt.).—Sensitive to over 1:400,000. Capable of detect. Ni in presence of 5,000 times its wt. cobalt.

Dimethylhydroquinone (50

(Dimethyl Ester of Hydroquinone; Quinoldimethyl Ester).—By boil. hydroquinone under press. w. potass. hydroxide & methyl iodide, diss. in methyl alc.—$C_8H_{10}O_2$, or, $C_6H_4(OCH_3)_2$.—Large cryst. plates.—*Melt.* 56° C.

Dimethylketone (or *-ketal*).—see **Acetone**

Dimethylnitrosamine.—see **Nitrosodimethylin**

Dimethylorthotoluidine Merck (10

$C_9H_{13}N$, or, $C_6H_4:CH_3.N:(CH_3)_2[2:1]$. — Colorl. liq.—*Sol.* E., C.—Sp. Gr. 0.932 at 15° C.—*Boil.* 183° C.

Dimethyloxamide Merck (250

Fr. methylamine by oxalic ether.—$C_4H_8N_2O_2$, or, $C_2O_2(NH.CH_3)_2$.—Wh. cryst.—*Sol.*, hot W., A.—*Melt.* 210° C.

Dimethyloxyquinizine.—see **Antipyrine**

Dimethylparaphenylenediamine Merck (250

(Paramidodimethylaniline). — Fr. helianthine (Orange III), by treat. w. W. & fresh amm. sulphide w. heat.—$C_8H_{12}N_2$, or, $C_6H_4.NH_2.N(CH_3)_2$.—Brown, cryst. mass.—*Sol.* A., E., C.—*Uses:* Reagent for lignin.

Dimethylparaphenylenediamine Hydrochloride Merck (140

Fr. dimethylparaphenylenediamine by dil. HCl. — $C_6H_4.NH_2.N(CH_3)_2.2HCl$. — V. deliq. cryst.—*Sol.*, eas. W.; sl. A.

Dimethylparaphenylenediamine Paper

(Wurster's Ozone Paper [Red]).—Unsized, wh. paper, charged w. para-amidodimethylaniline; used with color scale.—*Uses:* To detect ozone (bluish-violet color), hydrogen sulphide, rosin, turpentine, &c.; & wood pulp in paper.

Dimethylparaphenylenediamine Sulphate Merck.—Cryst. (150

$C_6H_4.NH_2.N(CH_3)_2.H_2SO_4$.—Colorl. to brownish cryst.—*Sol.* W.

Dimethylparatoluidine Merck (10

Fr. paratoluidine hydrobromide, by methyl alc. w. heat.—$C_9H_{13}N$, or, $C_6H_4.CH_3.N(CH_3)_2$ [4:1].—Colorl. liq.—*Sol.* E., C.—Sp. Gr. 0.938 at 15° C.—*Boil.* 208–210° C.

Dimethylphenylpara-ammoniumbetaoxynaphthoxazine Chloride.—see **Mukogen**

Dimethylpiperazine.—see **Lupetazin**

Dimethylpiperazine Tartrate.—see **Lycetol**

Dimethylpyridine.—see **Lutidine**

Dimethylresorcinol Merck (95

(Resorcinoldimethylester).—$C_8H_{10}O_2$, or, $C_6H_4.(OCH_3)_2$.—Pale-red liq.—*Sol.* A., E.—Sp. Gr. 1.086 at 15° C.—*Boil.* 214° C.

Dimethylsafranine Chloride.—see **Methylene Violet**

Dimethylthiourea Merck (10

(Dimethylsulphourea).—From methylthiocarbamide, w. methylamine.—$CS(NHCH_3)_2$.—Thick, syrupy liq., or very deliq. cryst.—*Sol.* W., A., C.; sl. E., B.—*Melt.* 51° C. (cryst.).

Dimethylxanthine.—see **Theobromine; Theophyllin**

Dinitroamidophenol.—see **Acid Picramic**

Dinitrobenzene (Meta-) Merck.—Pure (6

(Metadinitrobenzene[or,-zol]).—Fr. benzene, by H_2SO_4 & HNO_3 w. heat.—$C_6H_4N_2O_4$, or, $C_6H_4.(NO_2)_2$ [1:3].—Yellow cryst.—*Sol.* A.—*Melt.* 90° C.—*Boil.* 297° C.—*Uses:* Manuf. metaphenylenediamine.

do. Merck.—Commercial (1

Dinitronaphthalene (Alpha-) Merck (12

$C_{10}H_6N_2O_4$, or, $C_{10}H_6(NO_2)_2$.—Fine, yellow, cryst. need.—*Sol.* B., xylene, C., hot A.—*Melt.*, 153° C.

Dinitrophenol Merck (25

(Alphadinitrophenol). — Fr. paranitrophenol, by strong nitric acid & heat.—$C_6H_4N_2O_6$, or, $C_6H_3(NO_2)_2OH$ [2:4:1].—Yellow tables.—*Sol.*, hot A.—*Melt.* 113–114° C.

Dinitroresorcinol Merck (300

(Dinitroresorcin). — Fr. dinitrosoresorcinol in ether. solut., by nitrogen trioxide.—$C_6H_4N_2O_6 + 2H_2O$, or, $C_6H_2(NO_2)_2(OH)_2 + 2H_2O$.—Brownish-yellow cryst.—*Sol.* A., C.; sl. W.—Deflag. at 115° C.

do. Merck.—Paste (5

(Dark Green; Solid Green O Paste; Chlorin; Dichinoyldioxime).—$C_6H_2(NOH)_2O_2$.—Grayish-brown mass.—*Sol.* A.; dil. alkalies; sl. W.—*Uses:* Techn., dyeing fabrics mordanted w. iron a green color.

Dinitrotoluene Merck.—Pure, cryst. (7

(Dinitrotoluol).—Fr. toluene, by nitration.—$C_7H_6N_2O_4$, or, $C_6H_3.CH_3(NO_2)_2$ [1:2:4].—Yellow cryst.—*Sol.*, hot A.—*Melt.* 70° C.

do. Merck.—Techn. (2

Dionin (120

(Ethylmorphine Hydrochloride Merck).—$C_{19}H_{23}NO_3.HCl + 2H_2O$.—Wh., cryst., faintly bitter powd.—*Sol.*, abt. 7 W., 2 A., 20 syrup; insol. E., C.—Sedat.; Antispasm.; Analges.; Ocular Lymphagogue. Reported to produce neither constipation, nausea, lassitude, nor tolerance. Efficient succedaneum for morphine & codeine.—*Uses: Intern.*, phthisis, chron. bronchitis, emphysema, asthma, morphinomania, painful affections, insomnia, laryngitis, influenza, pneumonia, whooping-cough.—*Extern.*, corneal affect., dry & chron. conjunctival catarrh, iritis, opacity of vitr. humor.—*Doses:* $^1/_4$–$^1/_2$ grain (0.015–0.03 Gm.) 2–3 t. p. d., in tabl., pill, or solut.; at evening, $^1/_2$–$^3/_4$ grain (0.03–0.05 Gm.).—Inj. in morphinism, 1–2 grains (0.06–0.12 Gm.) single; 3–15 grains (0.2–1 Gm.) p. d.—*Extern.*, (eye diseases) 1–2 drops of 5–10% solut.; (in gynecol.) $^2/_3$ grain (0.04 Gm.) in suppos. w. 30 grains (2 Gm.) cacao butter.—*Max. D.*, (except in morphinism) $1^1/_3$ grains (0.08 Gm.) single; 5 grains (0.3 Gm.) daily.—*Antid.*, same as for morphine & codeine.

Note.—Marketed also in tablets ea. cont. $^1/_4$ grain (0.015 Gm.).

Dioscorea

(Wild Yam; Colic Root; Rheumatism Root).—Root of Dioscorea villosa, L. Dioscoreaceæ.—*Habit.:* North America.—*Etymol.:* Named for the celebrated Grk. naturalist Dioscorides, by Anazarba, of Sicily. D. lived in the first century A.D.—*Constit.:* Saponin; acrid resin.—Antirheumat.; Antispasm. (in bilious colic); Diaphor.; Expector.; Uterine Tonic.—*Doses:* 15–120 grains (1–8 Gm.).—Fld. extr., 15–60 ♏ (1–4 Cc.).

Dioscorein (20

Resinoid fr. Dioscorea villosa, L. (Wild-Yam Root).—Brown, bitter powd.—*Sol.* A.—*Uses:* Bilious colic & rheum.—*Dose* 1–4 grains (0.06–0.25 Gm.).

Diosma.—see **Buchu**

Diospyros

(Persimmon; Date Plum).—Bark and unripe fruit of Diospyros virginiana, L. Ebenaceæ.—*Habit.:* U. S. (Rhode Island to Florida & west to Texas & Kansas).—*Etymol.:* "Diospyros," fr. Grk. "Zeus," wheat, referring to the use of the fruit as an edible. "Virginiana" refers to its habitat.—*Constit.:* A cryst. subst'ce, $C_{30}H_{67}O_{10}$.—Astring.; Tonic; Antiper.; Hemostat.—*Uses:* Dysent., diarrh., intermitt. fever, & uterine hemor.—*Dose* 30–60 ♏ (2–4 Cc.) of fld. extr.

Dioxyanthranol.—see **Anthrarobin**

Dioxyanthraquinone.—see **Alizarin**

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Dioxycumarin.—see **Daphnetin**

Dioxyquinoline.—see **Quinoline-hydroquinone**

Dioxytoluene.—see **Orcin**

Dioxytriphenylphtalide.—see **Phenolphtalein**

Dipara-anisylmonophenetylguanidine Hydrochloride.—see **Acoin**

Dipentene Merck (110

(Diamylene; Cinene; Inactive Limonene; Dipentine; Cajeputene; Kautschin).—$C_{10}H_{16}$.—Occurs in various ethereal oils, particularly in oil Wormseed (Levant), together w. cineol.—Colorl. liq.; pleasant, lemon-like odor.—*Misc.*, A.—Sp. Gr. 0.772 at 15° C.—*Boil.* 175° C.

Dipentene Dihydrochloride.—see **Terpene Dihydrochloride**

Dipentene Hydriodide.—see **Terpene Hydriodide**

Dipenteneglycol.—see **Terpin Hydrate**

Dipentine.—see **Dipentene**

Diphenyl Merck (100

Fr. bromobenzene, by adding sodium & distil., or by slowly passing benzene through a red-hot iron tube.—$C_{12}H_{10}$, or, $C_6H_5.C_6H_5$.—Wh. scales; pleas., pecul. odor.—*Sol.*, hot A., E.—*Melt.* 70° C.—*Boil.* 254° C.

Diphenylamine Merck.—Pure (7

(Phenylaniline).—Fr. aniline blue (triphenylrosaniline), by dry distil.—$C_{12}H_{11}N$, or, $(C_6H_5)_2$-NH.—Colorl. to grayish cryst.—*Sol.* A., acids; sl. in W.—*Melt.* 54° C.—*Boil.*, abt. 302° C.—*Uses:* Chem.

do. Merck.—Commercial (4

Light yellow, cryst. mass.—*Sol.* A., acids; sl. W.—*Melt.* 54° C.

Diphenylamine Merck.—Reagent (8

$(C_6H_5)_2NH$.—Wh., monoclin. cryst.—*Sol.*, eas. A., E., B.; insol. W.—*Melt.* 54° C.—*Boil.* 302° C.—*Tests:* (HNO_3) 0.2 Gm. + 20 Cc. conc. H_2SO_4 + 2 Cc. H_2O – colorl. solut. If blue color develops, test the H_2SO_4 w. brucine for possible HNO_3.—(*Aniline*) 1 Gm. in powd. + 20 Cc. solut. chlorinated lime – no violet color.—*Uses:* Detect. nitrogen acids, especially HNO_3; detect. wood fiber in paper.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Diphenylamine Hydrochloride Merck (8

$C_{12}H_{11}N.HCl$, or, $(C_6H_5)_2NH.HCl$.—Wh. cryst.—*Sol.* A., W.—*Uses:* Reag. for nitric acid.

Diphenylamine Orange Merck (6

(Orange GS.; Orange N.; Orange IV.; New Yellow; Fast Yellow; Acid Yellow D.; Tropæoline OO.).—Sod. salt of parasulphobenzeneazodiphenylamine.—Diazo-compound, fr. diphenylamine w. parasulphanilic acid.—$C_{18}H_{14}N_3O_3SNa$, or, $SO_3Na.C_6H_4.N{:}N.C_6H_4.NH.C_6H_5$.—Orange-yellow scales, or yellow powd.—*Sol.* W.—*Uses:* Techn., dyeing wool orange-yellow fr. acid bath; also as indicator in chem. analysis (acids = red; alkalies = yellow).

Diphenylamine Sulphate (10

$C_{12}H_{13}N.SO_4$, or, $(C_6H_5)_2NH.H_2SO_4$.—Wh. cryst.—*Sol.* A.—*Melt.* 125° C.—*Uses:* Reag. for HNO_3.

Diphenylcarbamide Chloride.—see **Diphenylurea Chloride**

Diphenylethylene.—see **Stilbene**

Diphenylhydrazine Merck (200

(Monoamidodiphenylamine Hydrochloride).—$(C_6H_5)_2N.NH_2.HCl$.—Wh. to grayish-wh., cryst. powd.—*Sol.*, eas. W., A.—*Uses:* Reagent for milk sugar (not for o. sugars & carbohydrates).

Diphenylimide.—see **Carbazole**

Diphenylketone.—see **Benzophenone**

Diphenylmethane Merck (70

(Benzyl Benzene).—React.-prod., benzyl chloride w. benzene.—$C_{13}H_{12}$, or, $CH_2(C_6H_5)_2$.—Cryst. mass consist. of long, colorl. need.—*Sol.*, eas. A., E., C.—*Melt.* 26–27° C.—*Boil.* 261–262° C.

Diphenylmethylamine. — see **Methyldiphenylamine**

Diphenyloxamide.—see **Oxanilide**

Diphenylsulphone.—see **Sulphobenzide**

Diphenylurea (40

(Carbanilide).—Fr. aniline, w. phenyl cyanate.—$C_{13}H_{12}N_2O$, or, $(NH.C_6H_5).CO.(C_6H_5.NH)$.—Prisms.—*Sol.*, v. eas. A., E.; v. sl. W.—*Melt.* 235° C.—*Boil.* 260° C.

Diphenylurea Chloride Merck (40

(Carbanilide Chloride; Diphenylcarbamide Chloride).—Fr. carbonyl chloride, by diphenylamine.—$C_{13}H_{10}NClO$, or, $(C_6H_5)_2N.COCl$.—Wh., cryst. scales.—*Sol.* A.; hot W.—*Melt.* 85° C.

Diphtheria Antitoxin. — see **Serum, Antidiphtheric**

Diplatosamine Sulphate.—see **Platosammonium Sulphate**

Dipropylamine Merck (125

(Normal Dipropylamine).—Fr. normal propyl iodide by alcoh. amm. w. heat.—$C_6H_{15}N$, or, $(C_3H_7)_2NH$.—Colorl. liq.; amm. odor.—Sp. Gr. 0.743 at 15° C.—*Sol.* A.; sl. in W.—*Boil.* 110° C.

Dipropylenediamine.—see **Lupetazin**

Dipropylketone Merck (190

(Butyrone).—By distil. calc. butyrate at lowest possible temp.—$C_7H_{14}O$, or, $C_3H_7.CO.C_3H_7$.—

Str. refractive, colorl. liq.; pleas. odor; burning taste.—Sp. Gr. 0.820 at 20° C.—*Boil.* 144° C.

Dipropylmalonylurea.—see **Proponal**

Dipropylmethane.—see **Heptane**

Dipterix.—see **Tonka**

Diquinine Carbonic Ether.—see **Aristochin**

Diquinolyldimethylsulphate.—see **Quinotoxin**

Direct Violet.—see **Gentian Violet B B B**

Diresorcinol Merck (50

(Tetraoxydiphenyl).—By fusing resorcinol or phenol w. sodium hydroxide.—$C_{12}H_{10}O_4$, or, $(OH)_2.C_6H_3.C_6H_3.(OH)_2$.—Wh., cryst. powd.—*Sol.*, hot W., A.

Diresorcinolphtalein.—see **Fluoresceïn**

Disodium Methylarsenate.—see **Sodium Methylarsenate**

Disulphuryl Chloride.—see **Pyrosulphuryl Chloride**

Dita

(Dita Bark; Devil's Tree).—Bark of Alstonia (Echites) scholaris, R. Brown. Apocynaceæ.—*Habit.:* India; also tropical Australia, Philippines, New Guinea, & Eastern Africa.—*Etymol.:* "Dita" is the Philippine & East-Indian name for the plant. Named for Chas. Alston, a Scotch botanist (1683–1760). "Echites," fr. Grk. "echis," an adder. Planks of the wood, when sanded, were used by scholars for tracing letters, hence the designation "scholaris."—Pieces of irreg. size 3–6 in. long, 1–2 in. wide, & abt. $^1/_2$ in. thick; extern., mottled pinkish, or brownish & white; intern., light colored w. yellowish layers; texture granular & brittle; taste slightly bitter & not astring.—*Constit.:* Ditaine (echitamine) $C_{22}H_{28}N_2O_4$; ditamine, $C_{16}H_{19}NO_2$; echitin, $C_{32}H_{52}O_2$; echitein, $C_{42}H_{70}O_2$; echitenine, $C_{20}H_{27}NO_4$; echiretin, $C_{35}H_{56}O_2$; echicerin, $C_{30}H_{48}O_2$; echicaoutchin, $C_{25}H_{40}O_2$.—Febrif.; Tonic.—*Uses:* Particularly in chronic diar. & dysent.—*Dose* 5–10 grains (0.3–0.6 Gm.) in powd., tinct., or fld. extr.

Ditaine Merck (4000

(Echitamine).—Alkaloid fr. bark Alstonia scholaris, R. Br. (Dita bark).—$C_{22}H_{28}N_2O_4 + 4H_2O$.—Colorl. cryst.—*Sol.* W., A., E., C.; sl. in B.—*Melt.* 206° C. w. decomp.—*Uses, &c.:* As of curare.

Ditaine Sulphate Merck (4000

$C_{22}H_{28}N_2O_4.H_2SO_4$.—Colorl. need.; bitter taste.—*Sol.* W.

Dithienyl

By oxid'g thiophene w. sulphuric acid.—$C_8H_6S_2$, or, $C_4H_3S.C_4H_3S$.—Large, colorl., glossy laminæ.—*Sol.* A., E., & glacial acetic acid.—*Melt.* 83° C.—*Boil.* 266° C.

Dithion (15

Mixt. of the two sodium dithiosalicylates.—Yellowish-gray powd.—*Sol.* W.—*Uses: Veter.*, foot- & mouth- dis., extern. in 2.5 to 5% solut.

Dithionaphthol

Fr. alphanaphthalene disulphochloride, by reduct.—$C_{10}H_8S_2$, or, $C_{10}H_6(SH)_2$.—Wh., cryst. powd.—*Sol.*, hot A.; sl. in A., E., & toluene.—*Melt.* 180° C.—*Boil.* 210° C.

Dithymol Diiodide.—see **Thymol Iodide**

Dittany.—see **Dictamnus**

Diuretin Knoll (35

(Salicylate of Sodium-Theobromine).—$C_7H_7N_4O_2Na + C_6H_4(OH)COONa$.—White, amorph., hygrosc. powd.; cont. abt. 50% theobromine.—Decomp. on expos.—*Sol.*, eas. W., hot dilute A., & soda solut.—Diuret.—*Uses:* Heart dis., nephr., espec. of scar. fever, dropsy, in dyspnea & coughs.—*Dose* 8–15 grains (0.5–1 Gm.) sev. t. p. d. in gelat. caps., or diss. in peppermint W.—*Max. D.*, 15 grains (1 Gm.) single; 120 grains (8 Gm.) daily.—*Caut.* Keep fr. air!

Divanadyl Tetrachloride.—see **Vanadium Chloride**

Djamboë.—see **Guava**

Dobbin's Reagent.—For caustic alkalies in carbonates

Solut. potassium-mercury iodide w. addition of ammonium chloride.—Presence of NaOH in Na_2CO_3 is indicated by development of a yellow color on adding reagent.

Dock, Yellow.—see **Rumex**

Dogbane.—see **Apocynum; & A. Androsæmifolium**

Dog Grass.—see **Triticum**

Dog Rose.—see **Rosa Canina**

Dogwood.—see **Cornus Florida**

Dogwood, Jamaica.—see **Piscidia**

Dogwood, Round-leaved.—see **Cornus Circinata**

Donovan's Solution.—see **Solution Arsenous & Mercuric Iodides**

Dormiol.—50% (5

(Amylenechloral Kalle; Dimethylethylcarbinolchloral).—$CCl_3.CHOH.O(CH_3)_2C_2H_5$.—Colorl. liq.—*Sol.* A., E., C., fixed oils; insol. cold W.—Sp. Gr. 1.24 at 15° C.—Hypn.—*Doses:* In insomn., 8–15 ♏ (0.5–1 Cc.); in mania, 25–45 ♏ (1.5–3 Cc.).

Dorstenia.—see **Contrayerva**

Double Green.—see **Methyl Green**

Doundaké.—see **Njimo**

Dover's Powder Merck.—*U. S. P.* (2

(Powd. Ipecac & Opium).—Powd. ipecac & powd. opium each 1, & powd. milk sugar 8.—Anod.; Diaph.—*Dose* 3–20 grains (0.2–1.3 Gm.).

Note.—As this powder is prepared in strict

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accordance with the U. S. P., it always affords the results desired & expected, & it should hence always be dispensed when prescribed.

Dragendorff's Reagent.—For alkaloids

(Solution Bismuth & Potassium Iodides).—Aqu. solut. $BiI_3.4KI$.—Bismuth iodide in twice the amount warm conc. solut. of potass. iodide necessary for solut.—*Uses:* Alkaloid determination.—*Caut.* Keep in the dark in well-corked bottle. Do not dilute till needed.

Dragon's Blood

(Sanguis Draconis).—Resin fr. fruit of Dæmonorops Draco, Blume. Palmæ.—*Habit.:* South Asiatic Islands (Sumatra & Java).—*Etymol.:* Fr. Grk. "drakon," or "drakainos," dragon, or dragon-like, *i.e.*, the juice of the plant has a blood-red color.—*Constit.:* Dracoalban; dracoresen; benzoicacid-dracoresinotannolester; benzoylaceticacid-dracoresinotannolester; draconin.—*Uses:* Techn., in plasters, lacquers, tooth-powders; dentifrices, &c.

Drimys Winteri.—see **Wintera**

Drop Chalk.—see **Calcium Carbonate, Prepared**

Drosera

(Round-leaved Sundew; Common Sundew; Youthwort).—Whole plant, Drosera rotundifolia, L. Droseraceæ.—*Habit.:* Europe; Asia; N. America, south to Florida & California.—*Etymol.:* Grk. "droseros," bedewed, fr. "drosos," dew, referring to the appearance presented by the long, shining hairs in the sunlight.—*Constit.:* Peptonizing ferment; coloring matter; tannin.—Diuret.; Antispasm.—*Uses:* Particularly in epilepsy & asthma; also in whoop.-cough, chron. bronchitis, catarrh, dyspepsia, & in incipient phth. & chronic cough.—*Extern.*, as epispastic in warts.—*Doses:* 5–20 grains (0.3–1.3 Gm.).—Extr., 1–3 grains (0.06–0.2 Gm.).—Fld. extr., 5–20 ♏ (0.3–1.5 Cc.).—Tinct., 10–30 ♏ (0.6–2 Cc.).

Dryopteris.—see **Aspidium**

Duboisia

(Corkwood Elm; Orungurabie; Ngmoo).—Bark & lvs. of Duboisia myoporoides, R. Brown. Solanaceæ.—*Habit.:* Australia & New Guinea.—*Etymol.:* Named for François Noël Dubois, a French botanist, born at Orleans (1752–1824). Myoporoides, fr. Grk. "mus," mouse, "poros," cavity or hole, & "oidos," like, *i.e.*, like a mouse hole, because the lvs. are dotted w. transparent spots resembling mouse-holes.—*Constit.:* Duboisine, $C_{17}H_{23}NO_3$ (identical w. hyoscyamine, Ladenburg); hyoscine; & other alkaloids.—Mydriatic; Antispasm.; Hypnotic.—*Uses:* Instead of belladonna & hyoscyamus.—*Techn.*, source of duboisine.—*Doses:* Lvs., 5–10 grains (0.3–0.6 Gm.).—Extr., $^1/_4$–1 grain (0.015–0.06 Gm.).—Fld. extr., 5–10 ♏ (0.3–0.6 Cc.).—*Antid.*, emetics, stomach siphon, tannin, animal charcoal followed by an emetic, brandy, ammonia, artif. respiration.

Duboisine Merck.—Pure, cryst. (3000

(Identical with Hyoscyamine, Ladenburg).—Fr. lvs. of Duboisia myoporoides, R. Br.—$C_{17}H_{23}NO_3$.—Microsc., wh. need.—*Sol.* A., E., C.; sl. in W.—*Melt.* 106–108° C.—Sed.; Hypn.; Mydr.—*Uses:* Mental dis.; not used topically because insol.—*Dose* $^1/_{300}$–$^1/_{60}$ grain (0.0002–0.001 Gm.).—*Max. D.* $^1/_{60}$ grain (0.001 Gm.) single; $^1/_{20}$ grain (0.003 Gm.) daily.—*Antid.*, emetics, stomach-siphon, pilocarpine, muscarine.

do. Merck.—Pure, amorph. (2000

Yellow, thick, syrup-like, liq. alkaloid fr. lvs. Duboisia myoporoides.—*Sol.* A., E., C.—*Dose* $^1/_{300}$–$^1/_{60}$ grain (0.0002–0.001 Gm.).

Duboisine Hydrobromide Merck (1500

$C_{17}H_{23}NO_3.HBr$.—Yellowish, coarse, v. hygrosc. powd.; fr. amorph. duboisine.—*Sol.* W., A.—*Uses & Dose:* As of duboisine.

Duboisine Hydrochloride Merck (1500

$C_{17}H_{23}NO_3.HCl$.—Yellowish, coarse, v. hygros. powd.; fr. amorph. duboisine.—*Sol.* W., A.—*Uses & Dose:* As of duboisine.

Duboisine Sulphate Merck.—Amorph. (875

$(C_{17}H_{23}NO_3)_2.H_2SO_4$.—Yellowish, v. deliq. powd., fr. amorph. duboisine.—*Sol.* W., A.—*Uses:* Chiefly as mydr.; much stronger than atropine.—*Appl.*, in 0.2 to 0.8% solutions. *Dose:* As of duboisine.—Hypn. & sed., in psychic dis., us'y hypoderm. $^1/_{300}$–$^1/_{60}$ grain (0.0002–0.001 Gm.).

Dudley's Reagent.—For glucose

Bismuth subnitrate dissolved in nitric acid, diluted w. W., & then mixed w. acetic acid.—Reduced by glucose in alkal. solut. on boil., with formation of gray to black ppt.

Dulcamara

(Bitter-sweet; Woody Nightshade; Scarlet Berry).—Young branches of Solanum Dulcamara, L. Solanaceæ.—*Habit.:* Europe; western Asia; northern Africa; naturalized in U. S.—*Etymol.:* "Solanum," fr. Lat. "sol," sun, *i.e.*, the plants dislike sunlight, & grow best in the shade. "Dulcamara," fr. Lat. "dulcis," sweet, & "amarus," bitter, referring to the taste of the twigs, which is at first bitter, & then somewhat sweet.—*Constit.:* Solanine, $C_{52}H_{93}NO_{18}+4^1/_2H_2O$; dulcamarin, $C_{22}H_{34}O_{10}$.—Alter.; Diaphor.; Diuret.—*Uses:* Dropsy, diseases of respir. organs, lepra, psoriasis, pityriasis & other cutan. diseases; chron. catarrh, & rheum.—*Doses:* Extr., 5–20 grains (0.3–1.3 Gm.).—Fld. extr., 30–120 ♏ (2–8 Cc.).

Dulcin.—see **Dulcit; Sucrol**

Dulcit Merck (250

(Dulcitol; Melampyrit; Dulcin; Dulcose; Euonymit).—Sugar fr. Melampyrum nemorosum, L., & o. species of Melampyrum, & of Euonymus.—$C_6H_{14}O_6$, or, $C_6H_8(OH)_6$.—Crusts of wh., glitt. cryst.; sl'y sweet taste.—*Sol.* W.; sl. A.—*Melt.* 188–189° C.

Dulcitol. } —see **Dulcit**
Dulcose. }

Duotal.—see **Guaiacol Carbonate**

Dupasquier's Reagent.—For organic matter in water

Aqu. solut. gold chloride.—On boil., the reagent ppt's organic matter with bluish-violet color.

Durene Merck (550

(Durol; Symmetrical Tetramethylbenzene[-zol]).—Fr. bromopseudocumol & methyl iodide w. metallic sodium; or fr. orthoxylene & methyl chloride w. aluminum chloride.—$C_6H_2(CH_3)_4$-[1 : 2 : 4 : 5].—Colorl. cryst.; camphor. odor.—*Sol.* A., E., B.—*Melt.* 79–81° C.—*Boil.* 189–191° C.

Durol.—see **Durene**

Dutch Drops.—see **Oil Linseed Sulphurated, Terebinthinated**

Dutch Liquid.—see **Ethylene Chloride**

Dutch Oil.—see **Oil Linseed Sulphurated, Terebinthinated**

Dwarf Elder.—see **Aralia Hispida; Ebulus**

Dyes, Aniline.—see **Aniline Dyes,** or under the specific name of each dye

Dymal (7

A substance, consisting chiefly of didymium salicylate, obtained as a by-product in the manuf. of incandescent mantles.—Gran. powd.—Antisep.; Siccative.—*Uses:* Wounds, burns, var. skin diseases, erysipelas, hyperidrosis, bed sores, ulcers, gangrene, &c.—*Appl.,* as dusting powd., or in 10% oint. w. lanum.

Dysalbumose Merck (110

Albumose obt. according to Kühne by action of pepsin on fibrin.—Brown powd.—Insol. W. & dil. solut. NaCl; pptd. fr. its neutral solut. by NaCl.

Dyslysin Merck (400

(Cholalic Acid Anhydride).—Decomp.-prod. of cholalic acid.—$C_{24}H_{36}O_3$.—Yellowish powd.—*Sol.* E.; sl. in boiling A.—*Melt.,* above 140° C.

E

Earth; Diatomaceous, Infusorial, or *Siliceous.*—see **Kieselguhr**

Earth Wax.—see **Ceresin, White & Yellow**

Eber's Reagent.—For testing sausage

Mixture of 10 Gm. hydrochloric acid, 30 Gm. alcohol, & 10 Gm. ether.—A small piece of sausage held over a few drops of the reagent in a wide test-tube gives rise to a cloud (due to ammonia) if sausage is decomposed.

Ebulus

(Blood Elder; Bloodwort; Dwarf Elder).—Fruit, herb, & root of Sambucus Ebulus, L. Caprifoliaceæ.—*Habit.:* Europe.—*Etymol.:* "Sambucus," fr. Grk. "sambyx," a red dye, & referring to the color of the juice of the berries; or, fr. Lat. "sambuca," a term applied to various wind & string instruments, *i.e.,* the elder, freed fr. its soft pith, leaves a tube which was used to make musical instruments. "Ebulus," perhaps fr. Grk. "eu," good, & "bule," advice, because used for many ills.—*Constit.: Fruit:* Volat. oil; valeric acid; tannic acid. —*Root:* Bitter substance.— *Uses: Fruit:* Laxative.—*Herb & Root:* Purgat. & diuret.—*Techn.,* for ink.

Ecboline.—see **Cornutine**

Ecgonine Merck (500

(Betaoxymethylbetapyridylpropionic Acid).—Basic decomposition product of cocaine, by hydrochl. acid at 100° C.—$C_9H_{15}NO_3 + H_2O$, or, $CH(OH).CH(CO_2H).CH(N.CH_3).(CH_2)_2.CH.CH_2 + H_2O$.—Wh., monocl. prisms; sl. bitter taste.—*Sol.* A.; 5 W.; insol. E.—*Melt.* 198° C.

Ecgonine Hydrochloride Merck (450

$C_9H_{15}NO_3.HCl$.—Tricl., wh. tablets.—*Sol.* W.; sl. in A.—*Melt.* 246° C.

Echinacea

(Cone Flower; Black Sampson; Purple Cone Flower).—Root of Echinacea angustifolia, D. C. Compositæ.—*Habit.:* North America.—*Etymol.:* Grk. "echinos," hedge-hog, meaning spiny, & refer. to the spiny fruiting head. Lat. "angustus," narrow, & "folium," leaf, *i.e.,* narrow-leaved.—*Constit.:* Acrid resinous substance.—Antisep.; Aphrodis.; Febrif.; Analges.; Alterative.—*Uses:* Scrofula, rheum., & syphilis.—*Extern.,* as dressing in malignant carbuncle, & mammitis; also in cutaneous diseases.—*Doses:* 30–60 grains (2–4 Gm.).—Fld. extr., 30–60 ♏ (2–4 Cc.). 20–60 drops of a 1:3 aqu. solut. taken internally, & the solut. also applied to the glans penis, is said to relieve the erections of pseudo-impotence.

Echitamine.—see **Ditaine**

Eclipse.—see **Benzopurpurine**

Ehrlich-Biondi's Triacid Mixture

Satur. aqu. solut. of mixt. 10 Orange G., 3 Ruby S., & 5 Methyl Green OO.—*Uses:* Double- & poly-staining miscroscopic sections, particularly in pathologic-anat. exam. of intestines.

Ehrlich's Hematoxylin-Glycerin

Solut. 3 Gm. hematoxylin in 90 Gm. A., mixed w. solut. 6 Gm. glacial acetic acid, 120 Gm. G., & 120 Cc. W. saturated w. alum.—*Uses:* Staining nuclei & schizomycetes.

Ehrlich's Neutral-Red Stain.—For bacteria

1% solut. Neutral Red in v. dil. solut. sod. chloride. — *Uses:* Staining bacteria. Color changes to yellowish-orange in sl. alka. media.

Ehrlich's Reagent.—For bilirubin

(*a*), 2.5 sulphanilic acid, 25 hydrochloric acid, & 100 W.; (*b*), 0.5 sodium nitrate & 100 W.—

For use, 49 parts (*a*) & 1 part (*b*) are mixed.—On adding the reagent to a solut. containing bilirubin & acidulated w. acetic acid, an intense blue or violet color develops.

Ehrlich's Stain.—For tubercles

3 soluts. are used: (*a*) filtered 1:20 aqu. solut. aniline; (*b*) conc. alcoh. solut. fuchsine; (*c*) conc. alcoh. solut. gentian violet.—100 parts solut. (*a*) are mixed w. either 11 parts solut. (*b*) or (*c*).—*Uses:* When freshly prepared, mixture can be used for staining cover-glass preparations. For staining sections, only perfectly clear mixtures must be used, which can be obtained by allowing to stand for 24 hrs.

Ehrlich's Triacid Solution

Sâtur. aqu. solut. Orange G 100, Ruby S 80, & Methyl Green 100, in 300 W., 50 glycerin, & 180 absolute A.

Eikonogen (5

Sodium salt of amidobetanaphtholbetamonosulphonic acid.—$NH_2.C_{10}H_5(OH).SO_3Na+2^1/_2H_2O$.—Wh. powd.; str. reduc. power on silver salts.—*Sol.* W.—*Uses:* Photo. developer.—*Incomp.*, ammonia fumes.

Eimbrodt's Reagent.—For ammonium salts

Aqu. solut. mercuric chloride rendered alkaline w. alkali carbonate.—Gives a wh. ppt. or turbidity w. ammonium salts.

Elaïdin Merck (225

(Trielaïdin).—Solid polymeride of oleïn.—Fr. oleïn, by nitrous acid.—$C_3H_5(C_{18}H_{33}O_2)_3$.—Wh. cryst.—*Sol.* E.—*Melt.* 38° C.

Elaphomyces

(Hart's Truffle; Hart's Balls; Deer Balls; Lycoperdon Nuts; Fungus Cervinus; Boletus Cervinus).—The fungus, Elaphomyces granulatus, Fries. Tuberaceæ.—*Habit.:* Europe.—*Etymol.:* Fr. Grk. "elaphos," deer, & "mykes," fungus.—*Constit.:* Bitter principle.—*Uses:* Popular remedy, chiefly in veter. practice as aphrod.

Elastica.—see **Rubber**

Elastin Merck.—Dried (100

Fr. ligament. tissue, princ. ligamentum nuchæ of ox, horse, &c.—Yellow albuminoid like gelatin.—*Sol.*, hot conc. solut. potassa; cold conc. H_2SO_4, HNO_3; partially in pepsin solut.

Elaterin Merck (400

Active neutral prin. fr. Elaterium, a subst'ce deposited by juice of Ecballium Elaterium (L.) A. Richard, Cucurbitaceæ (Squirting Cucumber).—$C_{20}H_{28}O_5$.—Wh., cryst. powd.; v. bitter taste.—*Sol.* 262 A., 318 E., 22 C., 272 B., 200 amyl alcohol, at 25° C. (U. S. P.); insol. W.—*Melt.* 216° C. (U. S. P.).—Drastic Purg.—*Uses:* Ascites, uremia, pulmon. edema, poison. by narcotics, &c.—*Dose* $^1/_{20}$–$^1/_{10}$ grain (0.003–0.006 Gm.), in granules.—*Max. D.* $^1/_6$ grain (0.01 Gm.) p. d.—*Caut.* Poison!

Elaterium Merck (55

(White, English, or Clutterbuck's, Elaterium; Extract Elaterium).—Sediment fr. juice Ecballium Elaterium (L.) A. Rich. (Squirting Cucumber).—Grayish-green, flat or sl'y curled, sm. pieces, or powd.; fbl. odor; bitter, sl'y acrid taste.—*Sol.*, partly hot A.—*Uses:* Drastic purg. Variable act.; percentage elaterin fluctuates.—*Dose* $^1/_8$–$^1/_2$ grain (0.008–0.03 Gm.).

Elayl Chloride.—see **Ethylene Chloride**

Elder; Blood or *Dwarf.*—see **Ebulus**

Elder, European.—see **Sambucus**

Elder Fungus

(Jews'-Ear Fungus).—Auricularia sambucina Mart. Tremellineæ.—*Habit.:* Europe.—*Constit.:* Mycose, & mucilage.—*Uses:* In eye-lotions.

Elecampane.—see **Inula**

Elecampane Camphor.—see **Helenin**

Elemi

(Resin Elemi; Gum Elemi; Manila Elemi).—Concrete oleoresin fr. Canarium commune, L. Burseraceæ.—*Habit.:* Luzon.—*Etymol.:* "Elemi" is the East-Indian name of the plant; "Canarium," fr. "canari," the Malay name of the plant; "commune," fr. Lat. "commune," common.—Transp., soft, yellowish, granular masses; friable when cold; bitter, acrid, pungent taste; fragrant terebinthinate odor.—*Sol.*, partly in cold, but entirely in hot, A.; eas. in E. & oil turpentine; insol. W. — *Constit.*. Volat. oil; α-manelemic acid, $C_{37}H_{56}O_4$; β-manelemic acid, $C_{44}H_{80}O_4$; resins (α- & β-amyrin & manderesen); bitter principle; bryoïdin.— *Uses:* Ingred. in resolvent plasters & oints. for atonic ulcers.—*Techn.*, in varnishes & lacquers.

Eleuthera Bark.—see **Cascarilla**

Elm, European.—see **Ulmus Campestris**

Eluteria Bark.—see **Cascarilla**

Embelia

(Barabang; Babirung).—Fruit of Embelia Ribes, Burm. Myrsinaceæ.—*Habit.:* East India.—*Etymol.:* "Embelia" is the Ceylonese name of the plant. "Ribes," fr. Arabic "ribus," which, however, designates Rheum Ribes.—*Constit.:* Embelic acid, $C_9H_{14}O_2$.—Teniafuge; Carminative Stomachic; Alterat.; Antirheum.; Tonic.—*Uses:* Tapeworm, rheumat., chronic skin diseases, dyspep.; also locally in ringworm.—*Doses:* 60–180 grains (4–12 Gm.).—Fld. extr., 1–3 fl. dr. (4–12 Cc.).

Emerald Green.—see **Brilliant Green**

Emery

(Lapis Smiridis).—A very hard variety of massive corundum (aluminum silicate).—*Habit.:* Europe, Asia Minor, & U. S.—*Uses:* In form of fine powd. as abradant & polish for wood, stone, metal, microscopical stone sections, &c.

Emetic Root.—see **Euphorbia Corollata**

Emetin Merck.—Resinoid (150

Purified extr. fr. root Cephaëlis Ipecacuanha, A. Richard.—Yellowish-hrown, light lumps.—*Sol.* W.—Emetic; Diaph.; Expector.—*Doses:* Emetic 3 grains (0.2 Gm.) given in 2 portions; expector. $^1/_{60}$–$^1/_{30}$ grain (0.001–0.002 Gm.).—*Caut.* Keep well stoppered.

Emetine Merck.—Alkaloid (712

Total alkaloids fr. root Cephaëlis Ipecacuanha, A. Richard; contains both emetine & cephaëline.—Whitish powd.; bitter taste; darkens on expos.—*Sol.* A., C.; sl. in E.; v. sl. in W.—Emetic, in large doses; Expector., & Antipyr., small doses.—*Doses:* Emetic, $^1/_{12}$–$^1/_6$ grain (0.005–0.01 Gm.); expector., $^1/_{60}$–$^1/_{30}$ grain (0.001–0.002 Gm.).

Emetine Hydrochloride Paul-Merck (2000

Hydrochloride of a very stable base, found together w. cephaëlin, in Cephaëlis Ipecacuanha.—$C_{15}H_{22}NO_2.HCl$.—Wh., cryst. powd.—*Sol.* W., A.—*Uses:* As of emetine.—*Dose:* Expector., $^1/_{12}$–$^1/_6$ grain (0.005–0.01 Gm.).

Emodin Merck (3250

(Trioxymethylanthraquinone; Methyltrihydroxyanthraquinone).—Identical with frangulinic acid fr. Rhamnus Frangula, L.—$C_{15}H_{10}O_5$, or, $CH_3.C_{14}H_4O_2(OH)_3$.—Reddish-yellow cryst.—*Sol.* A.; glac. acetic acid; amyl. A.; alkal. solut. (w. cherry-red color).—Sublimable.—Aper.—*Dose* $1^1/_2$ grains (0.1 Gm.).

Emulsin Merck (125

Ferment, fr. seed Prunus Amygdalus, var. amara, De C. (Bitter almonds).—48.7% C., 7.1% H; 14.1% N, 1.25% S, & 28.7% O.—Wh. powd.—*Sol.* W.—*Uses:* Conv. amygdalin into benzoic aldehyde, HCN, & glucose.

Enallachrom.—see **Esculin**

Enesol

(Mercury Salicylarsenate).—Amorph., wh. salt.—38.46% Hg, & 14.4% As.—*Sol.* 25 W.—*Uses:* Syphilis, &c.—*Dose:* As of mercury biniodide (1 part enesol = abt. 1 of HgI_2).—*Inj.* 15–30 ♏ (1–2 Cc.) of 3-% solut. hypoderm.

English Brown.—see **Bismarck Brown**

English Yellow.—see **Victoria Orange**

Enterolobium Timboivum.—see **Pacara**

Eosine Bluish Merck (8

Commercial erythrosine (sodium iodeosine).—Brown powd.—*Sol.* W.—*Uses:* Dyeing wool, cotton, & paper. In histology as stain for epithelia, muscular fibers, nuclei, hemoglobin preparations, &c.

Eosine Yellowish Merck (8

(Bromeosine).—Alkali salt of tetrabromofluoresceïn.—By brominating fluoresceïn in solut.—$C_{20}H_6O_5.Br_4K_2$, or, $C_6H_4(CO.C_6HBr_2OK)_2O$.—Red, glisten. cryst.—*Sol.* W., A.—*Uses:* Adapted for coloring; also dyeing wool & silk yellowish-red, & in painting; 5 or 10% aqu. solut. in bacterial work.

Eosote.—see **Creosote Valerate**

Ephedra

(Cay Note; Canutillo; Whore-house Tea; Tapopote; Teamster's Tea).—Lvs. & branches of Ephedra nevadensis S. Wats. (E. antisyphilitica, C. A. Meyer) Gnetaceæ.—*Habit.:* U. S. (Calif.; Nevada).—*Etymol.*. Fr. Grk. "epi," upon, & "edra," seat, *i.e.*, the plant climbs & grows upon rocks.—*Constit.:* Ephedr in (a glucosidal tannin).—Antisyph.; Astring.—*Uses:* Gonorrh.—*Dose* 30–120 grains (2–8 Gm.) in powd., fld. extr., or infus.

Ephedrine

Alkaloid fr. lvs. of Ephedra helvetica, C. A. Meyer, Gnetaceæ.—$C_{10}H_{15}NO$.—Colorless cryst.—*Sol.* A., E., C., W.—Mydriatic.

Ephedrine Hydrochloride Merck (750

$C_{10}H_{15}NO.HCl$.—Wh. need.—*Sol.* W., A.—*Melt.* 214–215° C.—Mydr.—*Uses:* One to two drops of 10% aqu. solut. in eye, inst. of atropine or homatropine. No irritation or disturb. of accommodation.

Ephedrine (Pseudo-) Merck (2250

Alkaloid fr. Ephedra vulgaris.—$C_{10}H_{15}NO$.—Colorl. cryst.—*Sol.* A., E., C.—*Melt.*, abt. 115° C.—Mydriatic.

Ephedrine (Pseudo-) Hydrochloride Merck (1750

$C_{10}H_{15}NO.HCl$.—Yellowish cryst.—*Sol.* W., A.—*Melt.* 175–176° C.—Mydr.—*Appl.*, one or two drops of 10–12% solut. No inflammation, or disturb. of refract. or accommodation.

Epicarin (14

(Oxynaphtylortho-oxytoluylic Acid).—$COOH.C_6H_3(OH).(CH_2.C_{10}H_6OH)$.—Colorl. to yellowish need.—*Sol.* A., E., acetone, & in oils w. addition of a little E.; diffic. in warm W., glac. acetic acid, B., & C.—*Misc.*, w. petrolatum & lanum.—*Melt.* 195–199° C.—Antiparasitic.—*Uses:* Various skin diseases.—*Appl.* 5–20% oints. or alcoholic soluts.

Epichlorhydrin Merck (12

(Chloropropylene Oxide).—Fr. dichloropropyl alc. by HCl gas.—C_3H_5ClO, or, $CH_2Cl.CHO.CH_2$.—Colorl. liq.—Sp. Gr. 1.203 at 0° C.—*Misc.* A., E.—*Boil.* 118–119° C.—*Uses:* Techn., as solvent for resins, specially copal, for manuf. lacquer for negatives, solvent for nitrocellulose, manuf. zapon & o. lacquers, cement for celluloid, &c.

Epigæa

(Trailing Arbutus; Gravel Plant; Ground Laurel).—Lvs. of Epigæa repens, L. Ericaceæ.—*Habit.:* U. S. (Florida to Michigan & northwards).—*Etymol.:* Grk. "epi," upon, & "gaia," earth, referring to its habit of creeping on the

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

ground. Lat. "repens," also means creeping. —*Constit.:* Arbutin, $C_{12}H_{16}O_7+{}^1/_2H_2O$; urson, $C_{30}H_{48}O_3$; ericolin (glucoside), $C_{34}H_{66}O_2$, or, $C_{26}H_{30}O_3+4H_2O$ (?); formic acid. —Anticatarrh.; Diuret.; Astring.—*Uses:* Pyelitis, cystitis, lithiasis, incontin. of urine, leucorrh., &c.—*Dose:* Fld. extr., 30–60 ♏ (2–4 Cc.).

Epinephrin Hydrate.—see **Adrin**

Episin

$C_{16}H_{12}N_2$.—Deriv. of oxamidophenanthrene.—Colorl. cryst.—*Sol.* A., C.; insol. W., E.—*Melt.* 195° C.—Sedat.; Hypnot.—*Dose* $1^1/_2$ grains (0.1 Gm.).

Epsom Salt.—see **Magnesium Sulphate**

Equisetum

(Horsetail; Field Horsetail; Bottle-brush).—E. hyemale is also known as Scouring Rush.—Whole plant Equisetum arvense, L. Equisetaceæ, & of E. hyemale, L.—*Habit.:* Northern Europe; Asia; North America (south to Virginia & Calif.).—*Etymol.:* Lat. "equus," horse, & "seta," tail, referring to the copious branching of several species.—*Constit.:* Silica; resin; tannin.—Both plants are Diuret.; Astring., & Anticatarrh.—*Uses: Medic.*, gout, gravel, dropsy, hematuria, gonor., & gleet.—*Techn.* E. hyemale is used also as a polishing agent, & for scouring tin vessels, &c.—*Dose:* Decoct. (1:20) freely taken.—Fld. extr., 30–60 ♏ (2–4 Cc.).

Erbium Merck (7000

Fr. the gadolinite earths of medium basicity, freed so far as possible from the weaker base ytterbium & the stronger basic earths of the ytterbium group. Free fr. earths of the cerium group.—*Etymol.:* Fr. "Ytterby," the place where gadolinite was found; the name erbium was given the element in 1843 by Mosander, who separated the erbia fr. the ytterbium earths.—*Absorption Spectrum*, lines of erbium, thulium, & holmium. —Er.—Dark gray powd.

Erbium Nitrate Merck (250

$Er_2(NO_3)_6+12H_2O$.—Reddish cryst.—*Sol.*, eas. W., A.

Erbium Oxide Merck.—Anhydrous (350

Er_2O_3.—Reddish-yellow powd.; glows intens. green at h. temp., & gives a non-continuous emission-spectrum.—*Sol.*, min. acids; insol. W.

Erbium Sulphate Merck (250

$Er_2(SO_4)_8+8H_2O$.—Rose-red cryst.—*Sol.* W.

Erdmann's Reagent.—For alkaloids

Mixt. 1 vol. dil. HNO_3 w. 30 vol. conc. H_2SO_4.—Gives color reactions w. various alkaloids.

Ergot.—*U. S. P.*

(Secale Cornutum; Spurred Rye).—Sclerotium of Claviceps purpurea (Fries) Tulasne, Hypocreaceæ, replacing the grain of rye, Secale cereale, L. Gramineæ. —*Habit.:* Europe; cultiv. in Spain, Germany, & France.—*Etymol.:* "Ergot," fr. Lat., derived fr. French "ergot," or "argot," a spur, referring to its shape. "Secale," fr. Lat. "secare," to cut, Celtic "segal," fr. "sega," a sickle. "Cornutum," Lat. horny, referring to the character of the ergot. "Claviceps," fr. Lat. "clava," a club, referring to shape of the sclerotium.—*Constit.:* Ergotic (sclerotinic or ergotinic) acid; sphacelinic acid; ergotine; cornutine (ecboline); chrysotoxin; secalintoxin; sphacelotoxin; ergochrysin (coloring matter); cholesterin; leucin; mannit.—Parturient; Hemostat.; Emmenag.; Ecbolic; Excitomotor.—*Uses:* Labor, menorrhag., metrorrhag., & other internal hemorrhages, night-sweats, whoop.-cough, migraine, diabetes insipidus, paraplegia, epilepsy, chronic cerebral congest., vesical paralysis, &c.—*Doses:* 8–15 grains (0.5–1 Gm.) every 10–15 minutes as parturient; 3–5 grains (0.2–0.3 Gm.) 3–4 times daily as hemostat.—Aceto-alcoh. extr., 5–15 grains (0.3–1 Gm.); subcut. 1–8 grains (0.06–0.5 Gm.) dissolved in water.—Aqu. extr., see Ergotin, Bonjean.—Fld. extr., 30–120 ♏ (2–8 Cc.).—*Antid.*, ether; camphor; coffee; emetics; purgatives; tannin (5 grains [0.3 Gm.]) every 15 minutes.

Ergotin Bombelon-Merck.—Fluid (60

(Bombelon's Liquid Ergotin). — Dark-brown liq. — *Uses:* As of ergot.—*Dose* 30 ♏ (2 Cc.), repeated in 10 minutes.—*Inj.*, 3–8 ♏ (0.2–0.5 Cc.), w. enough sterilized W. to make 15 ♏ (1 Cc.).

Ergotin Bonjean-Merck (7

Fr. ergot by water, & purified by alcohol.—Reddish-brown, soft extr.; 1 part = 5–6 parts ergot.—*Sol.* W.—*Uses:* As of ergot.—*Dose* 2–5 grains (0.12–0.3 Gm.) in pill or subcut. several t. p. d.—*Incomp.*, astringents & metallic salts in solut.—*Antid.*, tannin, opium, nitroglycerin. —*Caut.* Decomp. in solut.; should be sterilized & kept with great care.

Note.—This Ergotin should be used when the best results are desired, because it is most carefully made from prime materials.

do. Bonjean-Merck.—Liquid, purified (12

(Bonjean's Hemostatic Extract).—The preceding still further purified; 1.5 parts = 1 part Ergotin-Bonjean.—Clear, reddish-brown liq.—*Uses:* Hypoderm. in uterine hemor. & o. intern. hemor.—*Dose* 8–10 ♏ (0.5–0.6 Cc.).

do. Bonjean-Merck. — Dried, with Dextrin (10

Bonjean's ergotin w. equal wt. dextrin.—Dry, brown, hygrosc. powd.—*Uses:* As of ergotin.—*Dose:* Double that of Ergotin Bonjean.—*Caut.* Keep well stoppered.

do. Bonjean-Merck. — Dried, with Milk Sugar (10

Bonjean's ergotin w. equal wt. milk sugar.—Dry, brown, hygrosc. powd.—*Sol.* W.—*Uses:* As of ergotin.—*Dose:* Double that of Ergotin Bonjean.—*Caut.* Keep well stoppered.

Ergotin Denzel-Merck (80

Purif. extr. fr. ergot.—*Dose:* 1 fl. oz. (30 Cc.) of a solut. 2 parts ergotin Denzel in 180 parts cinnamon water.—*Hypoderm.*, 8–15 ♏ (0.5–1 Cc.) of a solut. 38 grains (2.5 Gm.) ergotin in 110 ♏ (7.25 Cc.) W., w. 4 grains (0.25 Gm.) borax added.

Ergotin Keller.—see **Secornin**

Ergotin Kohlmann-Merck.—Fluid (10

Dark-brown liquid.—*Sol.* W.—15 ♏ (1 Cc.)= 1 Gm. powd. ergot not deprived of its oil.—The action is equal to that of fresh ergot.—*Doses:* In uterine atony following delivery, 60–75 ♏ (4–5 Cc.) in a single dose; in hemorrhage, the like dose is given in divided portions per day; as a parturient, 8–12 ♏ (0.5–0.8 Cc.) ev. hr., incr. as neces. to 20–30 ♏ (1.3–2 Cc.) per hour.

Ergotin Wernich-Merck.—Pure, dried (40

Purified & dialyzed, dried, aqu. extr. of ergot. —0.7 part of this extr.=1 part of the soft extr. —*Sol.* W.—*Uses:* Intern. & hypoderm., as of ergot.—*Dose* 20 grains (1.3 Gm.).—*Caut.* Keep dry; well closed.

do. Wernich-Merck.—Liquid (18

Dialyzed extr. of ergot.—Reddish-brown liq.— —*Uses:* Hypoderm. in all cases where ergot is indic. Gen'ly with W., glycerin & W., or alc. & glycerin. 2 parts abt. equal 1 part of the pure, dried.—*Dose* 60 ♏ (4 Cc.).

do. Wernich-Merck.—Soft (30

Purified & dialyzed soft extr. fr. ergot previously treated successively w. petroleum ether & alcoh. —Reddish-brown syrupy liq.; this preparation is rich in salts & is given in relatively large doses. —*Sol.* W.—*Uses:* As of ergot. Given also hypoderm.—*Dose* 30 grains (2 Gm.) & upwards.

Ergotin Wiggers-Merck.—Pure, dried (550

Dried alcohol-purified extr. of ergot partially freed fr. oil.—Brownish-red powd.—*Sol.*, warm A. (the solut. may be diluted w. W. without precipitation).—*Dose* $^1/_3$–$1^1/_2$ grains (0.02–0.1 Gm.).—*Max. D.* 8 grains (0.5 Gm.) p. d.

Ergotin Yvon-Merck (100

Reddish-brown fld. extr. prepared fr. ergot with dil. solut. tartaric acid, & containing cherry-laurel water; 1 Cc.=1 Gm. powd. ergot.—*Dose: Intern.*, 10–20 drops; *subcut.*, 15 ♏ (1 Cc.) p. d., repeated every second or third day.

Ergotinine Merck.—Pure, amorphous (9500

(Sclerocrystallin [Podwyssotzki]).—Alkaloid fr. sclerotium of Claviceps purpurea, Tulasne (Ergot of Rye).—1 kilo ergot cont. abt. 1.2 Gm. total ergotinine of which $^2/_3$ is amorph., & $^1/_3$ cryst.—Yellowish, amorph. powd.—*Sol.* A., E., C.; sl. W.—*Melt.* 138° C.—Recom. as Ecbolic, Hemost., &c., like ergotin; $^1/_{240}$ grain (0.00025 Gm.) subcut. is said to suffice to cause powerful uterine contractions (Tanret). Acc. to Kobert, therapeutic action is v. slight.

Ergotinine Merck.—Pure, cryst. (12500

$C_{35}H_{40}N_4O_6$.—Yellowish cryst.—*Sol.* A., E., C.; insol. W.—*Melt.* 205° C.—Recom. as Ecbolic, Hemost., &c., like ergot (Tanret). Acc. to Kobert, inert.

Ergotinine Citrate Merck (10000

$C_{35}H_{40}N_4O_6.C_6H_8O_7$. — Grayish-yellow powd. — *Sol.* W.—*Uses:* Instead of ergotin in vasomotor neuroses, cephalalgia, neuralgia, Basedow's disease, & enuresis.—*Dose: Inj.* 10–20 ♏ (0.6–1.3 Cc.) of a 0.1% aqu. solut. subcut.

Erica.—see **Calluna**

Ericin.—see **Mesotan**

Erigeron

(Fleabane; Horseweed; Scabious).—Lvs. & tops of Erigeron canadensis, L. Compositæ.—*Habit.:* Northern & central U. S.—*Etymol.:* Grk. "eri," early, & "geron," old, referring to the hoary appearance of some species. "Canadensis" refers to its original habitat.—*Constit.:* Volat. oil; tannin; gallic acid; bitter extractive.—Diuret.; Anticatarrh.; Astring.—*Uses:* Dropsy, & diseases of genito-urinary tract.—*Dose:* Fld. extr. 30–60 ♏ (2–4 Cc.).

Eriodictyon.—*U. S. P.*

(Yerba Santa; Consumptive's Weed; Bear's Weed; Mountain Balm; Gum Plant).—Dried lvs. of Eriodictyon Californicum (Hooker & Arnott), Greene, (E. glutinosum, Benth.). Hydrophyllaceæ.—*Habit.:* U. S. (California).—*Etymol.:* Grk. "erion," wool, & "diktyon," a net, referring to the wooly, net-veined lvs. Lat. "glutinosus," viscous, *i.e.*, the lvs. & stem are resinous & sticky. "Californicum" refers to California, its habitat. "Yerba santa," holy herb, refers to its curative powers.—*Constit.:* Volat. oil; eriodictyonic acid, $C_{14}H_{18}O_5$(?); ericolin, $C_{26}H_{30}O_3$ (Thal); resin.—Stim.; Expector.; Bitter Tonic; Alterat.; Anticatar. — *Uses:* Coughs, colds, asthma, inflam. of genito-urinary organs; corrigent vehicle for bitter & other disagreeable remedies.—*Doses:* 30–60 grains (2–4 Gm.).—Alcoh. extr. 4–12 grains (0.25–0.8 Gm.). —Fld. extr. 20–60 ♏ (1.3–4 Cc.).

Erlicki's Solution

Solut. 5–10 Gm. copper sulphate & 25 Gm. potass. dichromate in 100 Cc. W.—*Uses:* Fixing & hardening specimens. Acts more rapidly than Müller's Solution (q. v.).

Erodium

(Stork's-bill; Pin Clover; Pin-weed; Pin-grass; Filaree).—Whole plant, Erodium cicutarium, L'Hérit. Geraniaceæ. — *Habit.:* Central & Northern Europe; Asia; widely natur. in U. S. —*Etymol.:* Fr. Grk. "erodios," heron, referring to the bill-shaped form of the capsule; "cicutarius" having lvs. resembling those of cicuta.

—*Uses:* Diuret. (in dropsy); Hemostat. (in metror. & menor.).—*Doses:* 4 fl. dr. (15 Cc.) of 1:12 decoct. every 2 hrs.—Aqu. extr. 60 grains (4 Gm.) per day.—Fld. extr. 45–60 ♏ (3–4 Cc.).

Eryglucin.—see **Erythrol**

Eryngium

(Button Snake-root; Rattlesnake's Master; Water Eryngo; Eryngo).—Root of Eryngium yuccæfolium, Mich.—*Habit.:* U. S.—*Etymol.:* "Erygge," the Grk. name for a thistle-like plant. Or, fr. Grk. "erugge," to eruct, or belch, referring to its ancient use in flatulence. —Diaphor.; Expector.; Refriger.—*Uses:* Febrile condit., colds, coughs, snake-bite, &c.—*Dose:* Fld. extr. 30–60 ♏ (2–4 Cc.).

Eryngo.—see **Eryngium**

Erythræa

(European Centaury; Bitter Herb; Bloodwort; Centaury).—Lvs. & tops of Erythræa Centaurium, Pers. Gentianaceæ.—*Habit.:* Europe; U. S.—*Etymol.:* Fr. Lat. "centum," hundred, & "aurum," gold, *i.e.*, the plant was supposed to be of such value as to be worth 100 gold pieces; or, according to Pliny, the name is derived fr. the centaur, Chiron, who is said to have cured himself (with the plant) of a wound accidentally received fr. an arrow poisoned with the blood of the hydra. "Erythræa," fr. Grk. "erythros," red, referring to the color of the flowers.—*Constit.:* Volat. oil; resin. erythrocentaurin (Méhu), $C_{27}H_{24}O_8$.—Bitter Tonic; Febrif.—*Uses:* Weak appetite, fever, &c.—*Dose:* Aqu. extr. 5–30 grains (0.3–2 Gm.).

Erythræa Chilensis.—see **Canchalagua**

Erythrin.—see **Acid Erythric**

Erythrina Bark

(Coral-tree Bark).—Erythrina Corallodendron, L. Leguminosæ.—*Habit.:* Tropical Asia & America.—*Etymol.:* Fr. Grk. "erythros," red, "korallion," coral, & "dendron," tree, because of the handsome red color of the flowers.—*Constit.:* Erythrine; saponin (migarrhin-Young[?]).—*Uses:* Brazilians give small doses as a hypnotic; in the Philippines it is used as a diuret. & purgat.—*Dose:* Wineglassful of decoct. (1:250).

Erythrine, Natural.—see **Cobalt Arsenate**

Erythrite (or *-itol*).—see **Erythrol**

Erythrobenzin.—see **Fuchsine**

Erythroglucin.—see **Erythrol**

Erythrol Merck (200

(Erythrite; Erythritol; Erythromannite; Erythroglucin; Eryglucin; Phycite).—Deriv. of erythrin found in many lichens (Rocella species). —$C_4H_{10}O_4$, or, $CH_2(OH)CH(OH)CH(OH)CH_2(OH)$.—Wh. cryst.—*Sol.* W.; sl. in A.—*Melt.* 120–122° C., after previous softening.—*Boil.* 330° C.

Erythrol Tetranitrate Merck.—Compr. Tablets

Tablets each containing $^1/_2$ grain (0.03 Gm.) erythrol tetranitrate (tetranitrol), $CH_2(ONO_2).(CH.ONO_2)_2.CH_2(ONO_2)$.—Vasodilator like nitroglycerin.—*Uses:* Angina pectoris, asthma, cardiac diseases, chron. nephritis, &c.—*Dose* 1–2 tablets every 6 hrs.—Erythrol tetranitrate is marketed only in tablet form, as the pure substance is explosive.

Erythromannite.—see **Erythrol**

Erythrophleine Hydrochloride Merck (1500

Salt of alkaloid fr. bark Erythrophlœum guineense, Don. (Sassy Bark). — Yellowish-wh., amorph. powd.—*Sol.* W., A.—Local Anesth.; Cardiac Tonic; exhibits pure digitalis-like action. —*Uses:* Chiefly in ophthal., in 0.05–0.25% solut. —*Dose* $^1/_{30}$–$^1/_{15}$ grain (0.002–0.004 Gm.).

Erythrophlœum Guineense.—see **Sassy Bark**

Erythroretin Merck (205

(Red Rhubarb Resin; Rhabarberin).—Resin. bitter prin. fr. Rheum officinale, Baillon (Rhubarb).—Brownish-black, resinous subst'c.—*Sol.* A.; sl. in E.

Erythrosine

Sodium salt of tetraiodofluoresceïn (iodeosine). —Brown powd.—*Sol.* W.—*Uses:* Coloring & as dye.

Erythrosine G.—see **Iodeosine G**

Erythroxylin (Eclectic) (100

Alcoh. extr. of Erythroxylon Coca, Lamarck.—Brown powd.—*Uses:* Stim., Tonic.—*Dose* $^1/_4$–1 grain (0.015–0.06 Gm.).

Erythroxylon.—see **Coca**

Esbach's Reagent.—For albumin

Solut. of 1 Gm. picric acid & 2 Gm. citric acid in 100 Cc. W.—Gives a yellow ppt. w. albumin.

Escorcin Merck (1750

(Escorcinol; Æscorcin).—Fr. esculetin (a decomposition-product of esculin fr. the bark of the horse-chestnut), by sod. amalgam.—$C_9H_8O_4$. —Brown powd.—*Sol.*, in alkalies, green, changing to red.—*Uses:* Discov. defects in cornea & lesions of conjunc. epith.; red color of such more distinct on iris than green color of fluoresceïn (Fröhlich).—*Appl.* 1 drop 10–20% aqu. solut.

Escorcinol.—see **Escorcin**

Esculetin (900

(Æsculetin).—Fr. esculin by emulsin or dil. acids. —$C_9H_8O_4+H_2O$, or, $(OH)_2.C_6H_2(CH:CH).CO.O+H_2O$.—V. thin, shin. need., or scales. Solutions fluoresce faint blue.—*Sol.* W., A.—*Melt.*, above 270° C., w. decomp.

Esculin Merck (275

(Polychrome; Æsculin; Esculinic Acid; Bicolorin; Enallachrom).—Fr. bark Æsculus Hippo-

castanum, L. (Horse-chestnut).—$C_{15}H_{16}O_9 + 1^1/_2H_2O$, or, $C_6H_{10}O_5.C_9H_6O_4 + 1^1/_2H_2O$.—Wh. cryst.; bitter taste. Solutions fluoresce faint blue.—*Sol.* W., A., C.; v. in dil. alkalies.—*Melt.* 160° C., w. decomp.—Antiper.—*Uses:* Inst. of quinine in interm. fever.—*Dose* 5–15 grains (0.3–1 Gm.).

Eseridine Merck.—Pure (4000

Alkaloid found w. physostigmine in seed Physostigma venenosum, Balf. (Calabar Bean).—$C_{15}H_{23}N_3O_3$.—Colorl. cryst.—*Sol.* A., E., C.—*Melt.* 132° C.—Lax.; Motor-excit.—*Uses:* As of physostigmine (but only $^1/_6$ as powerful as this), as lax. in colic in horses.

Eseridine Tartrate Merck (3500

$C_{15}H_{23}N_3O_3.C_4H_6O_6$.—Wh. powd. or cryst.—*Sol.* W., A.

Eserine & salts.—see under **Physostigmine**

Eserine-Pilocarpine.—see **Physostigmine - Pilocarpine**

Essence Mirbane.—see **Nitrobenzene**

Essence Niobé.—see **Methyl Benzoate**

Estoral (20

Boric-acid Menthol Ester.—$B(C_{10}H_{19}O)_3$.—Colorl., tastel., cryst. powd.; faint menthol odor.—Decomp. into its constit. on contact w. mucus surfaces or when in solut.—*Uses:* Chronic nasal catarrh, by insuffl. w. equal wt. milk sugar.

Etching Ink.—see **Diamond Ink**

Ethal.—see **Alcohol Cetylic**

Ethanediamide.—see **Oxamide**

Ethanedioxylureid.—see **Acid Parabanic**

Ethenenaphthene.—see **Acenaphthene**

Ether Merck.—Sp. Gr. 0.716–0.717 at 25° C.—*U. S. P.*—For Anesthesia (2

(Ethyl Oxide; Ethylic, or Sulphuric, Ether).—Abt. 96% by wt. ethyl oxide, $(C_2H_5)O$, & abt. 4% alcohol cont. a little water.—$C_4H_{10}O$, or, $C_2H_5.O.C_2H_5$.—V. light, transp., colorl., diffus., inflam., mobile liq.; pleas. character., arom. odor; burn., sweet. taste.—*Misc.* A., C., B., benzin, oils: 10 W. at 25° C.—*Boil.* 35° C. (35.5° C., U. S. P.).—Inhal. Anesth.; Analg.; Antispasm.; Stim.—*Uses: Intern.*, by inhal. for prod. anesth. in surg. operat.; gastrodynia, colic, tet., nerv. affect., dyspnea, &c.—*Hypoderm.*, syncope, collapse, &c.—*Extern.*, earache, toothache, neural., & local pain; appl. also makes easier the reduction of hernias.—*Techn.*, solvent for ethereal oils, fats, resins, &c.; in phot., for manuf. collodion, smokeless powd., & many chemical operations.—*Dose* 5–60 ♏ (0.3–4 Cc.) several t. p. d.—*Antid.*, stom., siphon or emetic, free supply of fresh air; ammonia, strychnine inj. ($^1/_{60}$ grain [0.001 Gm.]), mustard plaster over heart, artif. respiration.—*Caut.* Keep well stoppered, cool & fr. fire. Administer only by daylight or electric light. Vapor highly inflammable.

Note.—This ether is prepared exceptionally pure so as to fully adapt it for anesthesia.

Ether Merck.—*U. S. P.* 1880 (2

do. Merck.—Washed (2

Ether Merck.—Reagent (2

(Ethylic Ether).—$C_2H_5.O.C_2H_5$.—Clear, colorl., mobile liq.—Sp. Gr. 0.720.—*Boil.* 34–36° C.—*Tests:* (*Res.*) evap. 20 Cc. spontaneously in glass dish – res. must be free fr. odor, should not redden or decolorize moist. litmus, & should compl. volatilize on heat. on W.-bath.—(*Ethyl Peroxide; H_2O_2; O_3*) vigor. shake 10 Cc. + 1 Cc. 1:10 solut. KI in gl.-stp. bottle compl. filled; set aside in dark – neither ether nor solut. KI should acquire a color within 1 hr.—(*Aldehyde*) cover sm. pieces KOH w. ether; set aside in dark – liq. must not acquire yellow color within half hr.—(*S Compounds*) shake 20 Cc. w. globule Hg 2 min. in gl. - stp. bot. – bright surface of Hg must not be tarnished, nor should black ppt. form.—(*H_2O*) 20 Cc. + 1 Gm. anhydr. $CuSO_4$; shake – $CuSO_4$ should not acquire green or blue color.—*Uses:* Solvent, etc.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

do. Merck.—Reagent.—Anhydrous.—Distilled over Sodium (2

In addition to preceding requirements, also following: 15 Cc. ether + freshly-cut piece met. Na; shake in dry bot. – only v. sl. evol. gas, & cut metal. surf. of Na should not compl. lose luster within 6 hrs.—*Uses:* Solvent, etc., partic. where absence of water is necessary.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Ether; Acetic, Acetoacetic, Acetylsalicylic, Benzoic, Benzoylacetic, Bromic, Butyric, Capric (or *Caprinic*), *Caproic* (or *Capronic*), *Caprylic, Carbonic, Chlorocarbonic, Chloropropionic* (*Alpha-*), *Cinnamic* (or *Cinnamylic*), *Citric, Cocoic* (or *Cocinic*, or *Cocoinic*), *Copaivic, Cyanacetic, Dichloracetic, Diiodosalicylic, Formic, Iodic, Lactic, Malonic, Methylacetoacetic, Monobromobutyric, Monobromopropionic, Monobromosuccinic, Monochloracetic, Nitric, Nitrous, Oenanthic, Oxalacetic, Oxalacetic-diethyl, Oxalic, Pelargonic, Propionic, Salicylic, Sebacic* (or *Sebacinic*), *Succinic, Sulphocyanic, Tartaric, Trichloracetic, Truxillic, Valeric* (or *Valeric, Iso-*), *etc.*—see under **Ethyl Acetate — Acetoacetate — Acetylsalicylate — Benzoate — Benzoylacetate — Bromide,** etc.

Ether, Acetolsalicylic.—see **Salacetol**

Ether, Amyl or *Amylic.*—see **Amyl Oxide**

Ether, Amylacetic.—see **Amyl Acetate**

Ether, Butyric, Alphamonobromo-.—see **Ethyl Butyrate, Monobromo-, Alpha-**

Ether, Carbanilic.—see **Euphorin**

Ether, Chloroformic.—see **Ethyl Chlorocarbonate**

Ether, Diacetic.—see **Ethyl Acetoacetate**

Ether, Diamyl.—see **Amyl Oxide**

Ether, Diethylcarbonic.—see **Ethyl Carbonate**

Ether, Ethylic.—see **Ether**

Ether, Glycerinic.—see **Allyl Oxide**

Ether, Hydriodic.—see **Ethyl Iodide**

Ether, Hydrobromic.—see **Ethyl Bromide**

Ether, Hydrochloric, Polychlorated.—see **Ethyl Chloride, Polychlorated**

Ether, Hydrocyanic.—see **Ethyl Cyanide**

Ether, Isobutyric.—see **Ethyl Butyrate, Iso-**

Ether, Methenyltriethylic.—see **Ethyl Formate, Ortho-**

Ether, Monosalicylic-acid Glycerinic.—see **Glycosal**

Ether, Orthoformic.—see **Ethyl Formate, Ortho-**

Ether, Ozonized.—see **Hydrogen Peroxide, Ethereal Solution**

Ether, Petroleum.—see **Benzin from Petroleum**

Ether, Petroleum, Light.—see **Canadol**

Ether, Phenylamyl.—see **Amyl Phenate**

Ether, Pyroacetic.—see **Acetone**

Ether, Quinine Carbonic.—see **Euquinine**

Ether, Succinyl-succinic.—see **Ethyl & Succinyl Succinate**

Ether, Sulphuric.—see **Ether**

Ether, Thioallylic.—see **Allyl Sulphide**

Ether, Wigger's Anesthetic.—see **Ethyl Chloride, Polychlorated**

Ethers, Isoamyl.—see under **Amyl**

Ethidene Bichloride.—see **Ethylidene Chloride**

Ethiops Antimonialis.—see **Mercury & Antimony Sulphide**

Ethiops Mineral.—see **Mercury Sulphide, Black**

Ethol.—see **Alcohol Cetylic**

Ethoxycaffeine Merck (200

$C_8H_9(OC_2H_5)N_4O_2$.—Wh. cryst.; silky luster.—*Sol.*, hot A.; E.; solubil. increased by sod. salicyl.—*Melt.* 140° C.—*Uses:* Migraine; trigem. neural., &c.—*Dose* 5–15 grains (0.3–1 Gm.) in wafers, or in solut. w. sod. salicyl. & cocaine hydrochloride.

Ethyl Acetate Merck.—Anhydrous (3

(Acetic Ether; Vinegar Naphtha).—Fr. Alcohol w. acetic acid, or an acetate by str. H_2SO_4. —$C_4H_8O_2$, or, $OC_2H_5.CH_3CO$.—Colorl., frag. liq.—Sp. Gr. 0.9253 at 0° C.—*Misc.* 17 W., all prop., A., E.—*Boil.* 72–77° C.—*Caut.* Keep well stop'd, fr. fire & light!

do. Merck—*Acetic Ether, U. S. P.*—Sp. Gr. 0.883–0.895 at 25° C. (2

Abt. 90% by wt. ethyl acetate, $CH_3CO.OC_2H_5$ & abt. 10% alcohol cont. a little water.—Light, inflam., volat., colorl. liq.; fragr., acetous odor; character., burn. taste.—*Sol.*, abt. 9 W. at 25° C.; misc. all prop. w. A., E., & oils.—*Boil.*, abt. 72–77° C.—Stim.; Antispasm.—*Uses: Intern.*, nerv. affect. & fainting spells.—*Extern.*, rheumat., & as anesthetic; subcut. as stimulant.—*Techn.*, as flavoring.—*Dose* 10–30 ♏ (0.6–2 Cc.).

Ethyl Acetoacetate Merck (7

(Diacetic Ether).—Fr. ethyl acetate, by sod. w. acet. acid.—$C_6H_{10}O_3$, or, $CH_3.CO.CH_2.COOC_2H_5$. —Colorl. liq.—Sp. Gr. 1.030 at 15° C.—*Boil.* 180–181° C.—*Uses:* Manuf. of antipyrine.

Ethyl Acetylsalicylate Merck (12

(Acetylsalicylic Ethyl Ester).—$O.CO.CH_3.C_6H_4.COOC_2H_5$.—Colorl. liq.—Sp. Gr. 1.153.—*Boil.* 272° C.

Ethyl Benzoate Merck (4

(Benzoic Ether).—Fr. alcoh. solut. artif. benzoic acid, by hydrochl. acid, w. heat.—$C_9H_{10}O_2$, or, $C_6H_5COO.C_2H_5$.—Colorl., aromatic liq.—*Sol.* A. —*Boil.* 212–213° C.—*Uses:* Techn., in perfumery under the name "Essence de Niobé"; largely employed in manuf. of "Peau d'Espagne"; artificial fruit-essence.

do. Merck.—Fr. Natural Acid (10

Ethyl Benzoylacetate Merck (125

(Benzoylacetic-acid Ethyl Ester).—Fr. mixt. ethyl benzoate & acetate, by sodium.—$C_{11}H_{12}O_3$, or, $C_6H_5.CO.CH_2COO.C_2H_5$.—Colorl. liq.; pleas. odor of aceto-acetic ether.—*Boil.* 265–270° C. w. sl. decomp.—Sp. Gr. 1.121 at 15° C.

Ethyl Bromide Merck.—Highest Purity, Medicinal (3

(Monobromethane; Hydrobromic, or Bromic, Ether).—C_2H_5Br.—Colorl., inflam., volat. liq.; burn. taste.—Sp. Gr. 1.453–1.457 at 15° C.—*Sol.* A., E., C.; insol. W.—*Boil.* 38–40° C.—Efficient & safe Inhal. & Local Anesthetic; Nerve Sed.—*Uses: Intern.*, minor surg.; epilepsy, hyst., &c. It is of great importance to have a pure article for internal use, since with an impure one, alarming after-effects may occur.—*Extern.*, spray in neuralgia, &c.—*Dose* 150–300 ♏ (10–20 Cc.) by inhalation, or 5–10 drops on sugar, or in capsules.—*Caut.* Keep fr. light & air. This is *not* Ethyl*ene* Bromide, which is poisonous!

Ethyl Bromomalonate

(Monobromomalonic-acid Diethylic Ester).—$CHBr(COOC_2H_5)_2$.—Colorl. to slightly yellowish liq.—*Sol.* A.—*Boil.* 230–236° w. part. decomp.

Ethyl Butyrate Merck.—Absolute (3

(Butyric Ether).—Fr. alcohol, by butyric acid & heat.—$C_6H_{12}O_2$, or, $C_3H_7.COOC_2H_5$.—Colorl. liq.; pineapple odor.—Sp. Gr. 0.886 at 15° C.—*Sol.* A.; sl. in W.—*Boil.*, abt. 121° C.

do. Merck.—Highest Purity (25

do. Merck.—Concentrated (2

Ethyl Butyrate (Iso-) Merck (40

(Isobutyric Ether).—$C_6H_{12}O_2$, or, $(CH_3)_2.CH.COOC_2H_5$.—Colorl. liq.—Sp. Gr. 0.889 at 0° C.—*Boil.* 110–111° C.

Ethyl Butyrate, Monobromo-, Alpha-.—see **Ethyl Monobromobutyrate, Alpha-**

Ethyl Caprate Merck (250

(Capric, or Caprinic, Ether; Ethyl Caprinate).—$C_9H_{19}COOC_2H_5$.—Colorl. liq.—Sp. Gr. 0.870 at 15° C.—*Boil.*, abt. 243° C.—*Misc.* A., E., C.—*Uses:* Scientific purposes, & techn. in manuf. wine-bouquets, cognac essence, &c.

Ethyl Caprinate.—see **Ethyl Caprate**

Ethyl Caproate Merck (100

(Ethyl Capronate; Caproic, or Capronic, Ether).—Fr. absolute alcohol & normal caproic acid, by H_2SO_4.—$C_8H_{16}O_2$, or, $C_5H_{11}.COOC_2H_5$.—Colorl. to yellowish liq.; pleas. odor.—Sp. Gr. 0.872 at 15° C.—*Boil.* 167° C.

Ethyl Capronate.—see **Ethyl Caproate**

Ethyl Caprylate Merck (250

(Ethyl Octoate; Caprylic Ether).—$C_{10}H_{20}O_2$, or, $CH_3(CH_2)_6.COOC_2H_5$.—Colorl. liq.; pineapple odor.—Sp. Gr. 0.873 at 15° C.—*Sol.* A.—*Boil.* 205–206° C.

Ethyl Carbamate Merck (10

(Urethane; Ethylurethane).—Fr. carbonic ether, by amm., or fr. ethyl alc., by urea w. heat.—$C_3H_7NO_2$, or, $CO(NH_2)OC_2H_5$.—Colorl. cryst.; odorl.; saltpeter-like taste.—*Sol.* 0.6 A., 1 W., 1 E., 1.3 C., 3 G., at 25° C.—*Melt.* 47.5–50° C.—*Boil.*, abt. 180° C.—Hypn.; Antispasm.; Sed.—*Uses:* Insom., eclampsia, nerv. excit., tetanus, & as antid. in strychnine, resorcinol, & picrotoxin poison. Does not interfere w. circulation, or secretion; no unpleas. after-effects; in large doses increases respiration without affecting pulse or temp., & produces a mild, natural sleep. In eclampsia it should be given per enema.—*Doses: Sedative,* children, 4–8–15 grains (0.25–0.5–1 Gm.) 1–4 t. p. d.; adults, *hypn.*, 30–45 grains (2–3 Gm.) in 3 portions at $^1/_2$–1 hr. intervals, in 10% solut.—*Max. D.* 75 grains (5 Gm.) single, 150 grains (10 Gm.) daily.—*Incomp.*, alkalies, acids, antipyrine, butyl-chloral hydrate, camphor, phenol, euphorin, menthol, naphthol, resorcinol, salol, or thymol, in trituration.

Ethyl Carbolate.—see **Phenetol**

Ethyl Carbonate Merck (60

(Carbonic, or Diethylcarbonic, Ether: Normal [or Neutral] Carbonic Ether).—By distil. ethyl potass. carbonate w. sulphate.—$C_5H_{10}O_3$, or, $(C_2H_5)_2CO_3$.—Colorl., inflam. liq.; pleas. odor.—Sp. Gr. 0.978 at 15° C.—*Sol.* A., E.—*Boil.* 126° C.—*Caut.* Keep fr. fire.

Ethyl Chloride Merck (23

(Monochlorethane; Kelene; Chelene).—Fr. alc. by hydrochl. acid.—C_2H_5Cl.—Gas at ord. temp. & press.; compressed, colorl., v. volat. liq.; burns green.—Sp. Gr. 0.911–0.916 at 8° C.—*Sol.* A.—*Boil.* 12.5–13° C.—Loc. Anesth.—*Uses:* Minor & dental surg., & neural., as spray; heat of hand forces the stream fr. the tubes. Hold 6–10 inches (15–25 Cm.) away from thoroughly cleansed surface to be sprayed; also as inhal. anesthet. for producing general narcosis.—*Caut.* Highly inflammable!

Ethyl Chloride Polychlorated

(Wiggers's Anesthetic Ether; Polychlorated Hydrochloric Ether).—Mixt. of chlorinated ethyl chlorides, chiefly tri-, tetra-, & pentachlorethane.—Clear, colorl. liq.; ethereal, arom. odor, faintly resembl. that of camphor; sweet, arom. taste.—*Misc.*, all prop., A., E.—Loc. Irrit.; Anesth.—*Uses:* Chiefly extern., in rheum., chronic sciatica, & o. forms of neural.—*Caut.* Keep in the dark.

Ethyl Chlorocarbonate Merck (8

(Chlorocarbonic Ether; Ethyl Ester of Chloroformic Acid; Chloroformic Ether; Ethyl Chloroformate).—Fr. alc., by carbonyl chloride.—$C_3H_5ClO_2$, or, $ClCOOC_2H_5$.—Colorl., mobile liq.; suffoc. odor & pung. taste.—Sp. Gr. 1.44 at 15° C.—*Sol.* A.—*Boil.* 94° C.

Ethyl Chloroformate.—see **Ethyl Chlorocarbonate**

Ethyl Chloropropionate (Alpha-) Merck (15

(Alphachloropropionic Ether; Ethylic Ester of Alphachloropropionic Acid).—Fr. abs. alc., by alphachloropropionyl chloride.—$C_5H_9ClO_2$, or, $CH_3.CHCl.COOC_2H_5$.—Arom. liq.—Sp. Gr. 1.087 at 15° C.—*Boil.* 146° C.

Ethyl Cinnamate Merck (30

(Cinnamic, or Cinnamylic, Ether).—By distil. cinnamic & sulphuric acids w. alcohol.—$C_{11}H_{12}O_2$, or, $C_2H_5.C_9H_7O_2$.—Limpid, oily liq.; pleas. strawberry odor.—Sp. Gr. 1.0499 at 15° C.—*Sol.* A., E.—*Boil.* 271° C.—*Uses:* Perfum. & confect'ry.

Ethyl Citrate Merck (20

(Normal Ethyl Citrate; Triethyl Ester of Citric Acid; Citric Ether).—Fr. alcoh. solut. citric acid by hydrochl. acid.—$C_{12}H_{20}O_7$, or, $(C_2H_5)_3.C_6H_5O_7$.—Colorl., oily liq.; odorl.; bitter.—Sp. Gr. 1.143 at 15° C.—*Sol.* W., A., E.—*Boil.* 294° C.

Ethyl Cocoinate Merck (15

(Cocoinic, Cocoic, or Cocinic, Ether; Cognac Ether).—By action of dry HCl gas on solut. of

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fatty acids of cocoa-nut oil in A.—$C_{18}H_{25}O_2.C_2H_5$.—Yellow, oily liq.; odor of russet apples.—Sp. Gr. 0.855 at 15° C.—*Uses:* Manuf. cognac.

Ethyl Copaivate Merck (90

(Copaivic Ether).—$C_2H_5.C_{20}H_{29}O_2$.—Yellow liq.; odor of balsam copaiba.

Ethyl Cyanacetate Merck (40

(Cyanacetic Ether; Ethylic Ester of Cyanacetic Acid).—Fr. alcoh. solut. cyanacetic acid, by HCl.—$C_5H_7NO_2$, or, $CN.CH_2.COOC_2H_5$.—Colorl. liq.—Sp. Gr. 1.066 at 15° C.—*Boil.* 207° C.

Ethyl Cyanide Merck (90

(Propionitrile; Propanenitrile; Hydrocyanic Ether).—Fr. barium ethylsulphate w. potass. cyanide by distil'n.—C_2H_5CN.—Mobile, colorl. liq.; charact., ether. odor.—Sp. Gr. 0.801 at 0° C.—*Sol.* W., A.—*Boil.* 97–98° C.—*Caut.* Keep well stoppered. Poison!

Ethyl Dichloracetate Merck (50

(Dichloracetic Ether).—By hydrated chloral & potassium cyanide in abs. alc.—$C_4H_6Cl_2O_2$, or, $CHCl_2.COOC_2H_5$.—Colorl. liq.—Sp. Gr. 1.283 at 15° C.—*Boil.*, abt. 156° C.

Ethyl Diiodosalicylate Merck (20

(Diiodosalicylic Ether; Ethyl Diiodo-ortho-oxybenzoate).—$C_9H_8O_3I_2$, or, $C_6H_2I_2(OH).COOC_2H_5$.—Wh. cryst.—*Sol.* A., fixed oils, B.; sl. W.—*Melt.* 132° C.—*Uses:* Succed. for iodof. in surg.

Ethyl Formate Merck.—Absolute (3

(Formic Ether).—Fr. alc. w. sod. formate & sulph. acid.—$C_3H_6O_2$, or, $HCOO.C_2H_5$.—Mobile, colorl. liq.; peach-kernel odor.—Sp. Gr. 0.917 at 15° C.—*Sol.* E., 9 W., all prop. A.—*Boil.*, abt. 54° C.—Hypn.; Analg.—*Uses:* As inhal. in inflam. of respiratory passages.—*Intern.*, as hypnot.—*Techn.*, as flavoring.—*Dose* 1–2 fl. dr. (4–8 Cc.).—*Caut.* Keep well stoppered in contact w. calc. chloride.

do. Merck.—Highest Purity (10

do. Merck.—Concentrated (3

Alcoh. solut. containing abt. 20% $HCOO.C_2H_5$.—*Uses:* Manuf. artif. rum & arrak, & essences.

do.—Diluted (1

10% $HCOO.C_2H_5$.

do.—Commercial (1

Impure ethyl formate.—Colorl. liq.—Sp. Gr. 0.922 at 15° C.—*Uses:* Manuf. artif. cognac & rum.

Ethyl Formate (Ortho-) Merck (40

(Orthoformic Ether; Tribasic Formic Ether; Methenyltriethylic Ether).—Fr. chloroform, by sodium ethylate.—$C_7H_{16}O_3$, or, $CH(OC_2H_5)_3$.—Colorl. liq.; str'ly arom. odor.—Sp. Gr. 0.896 at 15° C.—*Boil.* 145–146° C.

Ethyl Green.—see **Brilliant Green**

Ethyl Hydroxide.—see **Alcohol**

Ethyl Iodide Merck (8

(Hydriodic Ether; Monoiodoethane).—By act. of alc. solut. iodine on alc. solut. phosphorus.—C_2H_5I.—Clear, colorl., neutr. liq.; turns brown on keeping.—Sp. Gr. 1.94 at 15° C. (commercial grades, 1.92–1.94).—*Sol.* A., E.; insol. W.—*Boil.* 70–75° C.—Alter.; Antispasm.; Stim.; Anesth.—*Uses: Intern.*, chron. rheum., scrof., second. syph., chron. bronch., asthma, chron. laryngitis, & by inhal. in bronch. troubles.—*Extern.*, in 10–20% oint. — *Techn.*, in organic chem., in manuf. certain aniline dyes.—*Dose* 5–15 ♏ (0.3–1 Cc.) several t. p. d., in caps. or on sugar.—*Inhal.* 10–20 ♏ (0.6–1.3 Cc.).—*Caut.* Keep fr. air, in contact w. sm. am't mercury.

N. B.—Even in diffused daylight Ethyl Iodide decomposes quite rapidly, the light liberating iodine which colors the ether. When not exposed to light at all, the decomposition is very slow, and with the least practicable exposure, by care in using it, it is not rapid. The decomposition is rendered still slower by the presence in each vial of about 10 drops of a very dilute solution of soda. When deeper than a pale wine-color, it should be shaken up with 5 or 10 drops of a very dilute solution of soda.

Ethyl Isovalerate.—see **Ethyl Valerate**

Ethyl Lactate Merck (25

(Lactic Ether; Ethyl Ester of Lactic Acid).—Fr. calc. lactate w. potass. ethylsulphate.—$C_5H_{10}O_3$, or, $C_2H_5.C_3H_5O_3$.—Colorl., limp. liq.—Sp. Gr. 1.031 at 19° C.—*Sol.* W.—*Boil.* 154° C.—Hypn; Sed.—*Dose* 8–15 ♏ (0.5–1 Cc.) several t. p. d.—*Caut.* Keep well stoppered.

Ethyl Malonate Merck (15

(Malonic Ether; Diethyl Ester of Malonic Acid).—Fr. ca.c. malonate, abs. alc., & hydrochl. acid w. heat.—$C_7H_{12}O_4$, or, $(C_2H_5)_2.C_3H_2O_4$.—Colorl. liq.—Sp. Gr. 1.061 at 15° C.—*Boil.* 198° C.

Ethyl Monobromobutyrate (Alpha-) Merck (25

(Alphamonobromobutyric Ether; Alphamonobromated Normalbutyric Ether).—$C_6H_{11}BrO_2$, or, $CH_3CH_2CHBr.COOC_2H_5$.—Colorl. liq.—Sp. Gr. 1.345 at 12° C. *Boil.* 178° C.

Ethyl Monobromopropionate (Alpha-) Merck (35

(Alphamonobromopropionic Ether).—Fr. bromopropionyl bromide, by abs. alc.—$C_5H_9BrO_2$, or, $CH_3.CHBr.COOC_2H_5$.—Colorl. liq.—Sp. Gr. 1.396 at 11° C.—*Boil.*, abt. 162° C.

Ethyl Monobromosuccinate Merck (200

(Diethylmonobromosuccinic Ether). — $C_8H_{13}BrO_4$, or, $(C_2H_5COO)_2.CH_2.CHBr$.— Colorl. liq.—*Boil.* 226° C.—Local irritant.

Ethyl Monochloracetate Merck (12

(Monochloracetic Ether; Ethyl Ester of Monochloracetic Acid).—By heat. chloracetic acid, alc., & H_2SO_4.—$C_4H_7ClO_2$, or, $CH_2Cl.COOC_2H_5$.—Colorl. liq.; ether. odor; burn. taste.—Sp. Gr. 1.159 at 15° C.—*Boil.* 143–146° C.—*Caut.* Vapors injure the eyes!

Ethyl Mustard Oil.—see **Ethyl Thiocarbimide**

Ethyl Nitrate Merck (18
(Nitric Ether).—Fr. alc. & urea nitrate w. nitric acid.—$C_2H_5NO_3$.—Colorl., inflam. liq.; pleas. odor; sweet taste.—Sp. Gr. 1.116 at 15° C.—*Misc.* A., E.—*Boil.* 86° C.

Ethyl Nitrite.—True—15% (4
(Nitrous Ether).—Solut. of 15% $C_2H_5NO_2$ in ethyl alcohol.—Yellowish, hig'ly arom., ethereal, inflam., exceed. volat. liquid.—Sp. Gr., abt. 0.82 at 15° C.—*Uses:* In form of Spirit of Nitrous Ether, which see.—*Caut.* Best kept in sealed tubes, in cold place.

Ethyl Octoate.—see **Ethyl Caprylate**

Ethyl Oenanthate Merck.—Finest, limpid (120
(Oenanthic Ester, or Ether; Oil Cognac).—Mixt. of capric, caprylic, & butyric, esters of isoamyl alcohol.—Clear, colorl. oil.—*Sol.* A., E., C.—*Uses:* In manuf. artif. cognac.

do. Merck.—Natural, green (35
Fr. wine lees.

do. Merck.—Rectified, white (90

Ethyl Orange
(Sodium Paradiethylamidoazobenzenesulphonate).—*Uses:* As indicator, like methyl orange.

Ethyl Oxalacetate Merck (75
(Oxalacetic Ester, or Ether; Oxalaceticdiethyl Ester).—Fr. ether. solut. oxalic & acetic ethers, by metallic sod.—$C_8H_{12}O_5$, or, $(C_2H_5)_2C_4H_2O_5$.—Colorl., oily liq.—Sp. Gr. 1.159 at 23° C.—*Boil.* 132° C. at 24 Mm.

Ethyl Oxalate Merck.—Pure (10
(Diethyl Oxalate; Diethyl Ester of Oxalic Acid; Oxalic Ether).—Boil. together oxalic acid & alc.; then distil.—$C_6H_{10}O_4$, or, $(C_2H_5)_2C_2O_4$.—Colorl., oily liq.; fbl. odor.—Sp. Gr. 1.085 at 15° C.—*Sol.* A.—*Boil.* 186° C.

Ethyl Oxide.—see **Ether**

Ethyl Pelargonate Merck (10
(Pelargonic Ester, or Ether).—Mixt. of var. essences.—*Uses:* Artif. quince essence; 1 part pelargonic ether & 20 parts alcohol constitute "Cognac Essence."

Ethyl Phenate.—see **Phenetol**

Ethyl Propionate Merck (20
(Propionic Ester, or Ether).—$C_5H_{10}O_2$, or, $C_2H_5.COOC_2H_5$.—Colorl. liq.—Sp. Gr. 0.896 at 15° C.—*Boil.* 98° C.

Ethyl Propionate, (Alpha) Monobromo-.—see **Ethyl Monobromopropionate**

Ethyl Rhodanide.—see **Ethyl Sulphocyanate**

Ethyl Salicylate Merck (15
(Salicylic Ester, or Ether).—$C_9H_{10}O_3$, or, $C_6H_4.OH.COOC_2H_5$.—Colorl. liq.—Sp. Gr. 1.135 at 15° C.—*Sol.* A.—*Boil.* 231° C.

Ethyl Sebacate Merck (25
(Sebacic or Sebacinic Ester). — $C_{14}H_{26}O_4$, or, $C_8H_{16}(COOC_2H_5)_2$. — Colorl. to yellowish liq.—Sp. Gr. 0.967 at 15° C.—*Boil.* 307–308° C.

Ethyl Succinate Merck (30
(Succinic Ester, or Ether; Ethylsuccinic Ester; Diethyl Succinate; Normal Ethyl Succinate).—Fr. alcoh. solut. succinic acid, by hydrochl. acid.—$C_8H_{14}O_4$, or, $C_2H_4(COOC_2H_5)_2$.—Colorl., oily liq.; darkens by age; odor arom.—Sp. Gr. 1.044 at 15° C.—*Boil.* 215–217° C.

Ethyl Succinate, Monobromo-.—see **Ethyl Monobromosuccinate**

Ethyl Sulphide Merck (70
(Diethyl Sulphide).—Fr. potass. ethylsulphate, by potass. monosulphide.—$C_4H_{10}S$, or, $(C_2H_5)_2S$.—Colorl., oily liq.; garlic odor.—Sp. Gr. 0.837 at 20° C.—*Sol.* A.—*Melt.* 92° C.—*Uses:* Solvent for anhydrous mineral salts.

Ethyl Sulphocyanate Merck (50
(Ethyl Rhodanide; Sulphocyanic Ester, or Ether).—Fr. ethyl chloride, by conc. solut. potass. sulphocyanate.—C_3H_5NS, or, $NC.SC_2H_5$.—Mobile, colorl. oil; pung. disagreeab. odor of mercaptan.—Sp. Gr. 1.033 at 0° C.—*Misc.* A., E.—*Insol.* W.—*Boil.* 142° C.

Ethyl Tartrate Merck (30
(Normal Ethyl Tartrate; Tartaric Ester, or Ether).—Fr. alcoh. solut. of tartaric acid, by dry hydrochl. acid. — $C_8H_{14}O_6$, or, $(C_2H_5)_2C_4H_4O_6$.—Thick, oily, colorl. liq.; odorl.—Sp. Gr. 1.209 at 15° C.—*Sol.* A.—*Boil.* 280° C.

Ethyl Thiocarbimide Merck (275
(Ethyl Mustard Oil).—Fr. cyanic ether & phosphorus pentachloride w. heat.—C_3H_5NS, or, $C_2H_5.N:CS$.—Pung., colorl. liq.; inflames the tongue.—Sp. Gr. 1.019 at 0° C.—*Boil.* 133° C.—Local Irritant.—*Uses: Extern.*, rheum., neural., & o. local pain. affections.

Ethyl Trichloracetate Merck (20
(Trichloracetic Ether).—Fr. alcohol by trichloracetyl chloride.—$C_4H_5Cl_3O_2$, or, $C.Cl_3.COOC_2H_5$.—Colorl., oily liq.; peppermint odor.—Sp. Gr. 1.369 at 15° C.—*Boil.* 164° C.

Ethyl Truxillate (Alpha-) Merck (250
(Truxillic Ester, or Ether; Diethyl Truxillate).—Diethyl ester of truxillic acid fr. Truxillo coca leaves.—$C_{18}H_{14}O_4(C_2H_5)_2$.—Wh. need.—*Sol.*, sl. A.—*Melt.* 146° C.

Ethyl Valerate Merck (7
(Isovaleric Ester, or Ether; Ethyl Isovalerianate; Ethyl Ether of Isovaleric Acid).—React.-prod. of sod. isovalerate, alc., & sulphuric acid.—$C_7H_{14}O_2$, or, $(CH_3)_2CH.CH_2.COOC_2H_5$.—Colorl. liq.; when dil., pleas., fruity odor.—Sp. Gr. 0.871 at 15° C. — *Boil.*, abt. 134° C. — Antispasm.; Sedat.—*Uses:* Nerv. affect., partic. nerv. asth-

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

ma.—*Techn.*, alcoh. solut. used also as flavoring for confectionery & beverages.—*Dose* 1–2 drops several t. p. d., in capsules.

Ethyl Valerate Merck.—Highest Purity (15

Ethylacetanilide Merck (60

(Acetethylanilide).—Fr. ethylaniline & acetyl chloride w. heat.—$C_{10}H_{13}NO$, or, $C_6H_5N(C_2H_5)$-C_2H_3O.—Wh. cryst.—*Sol.* A., E.—*Melt.* 50° C.—Antipyr.; Analg.

Ethylamine Merck.—Anhydrous (80

(Amidoethane; Aminoethane).—Fr. cyanic, or cyanuric, ether, by potass. hydroxide.—C_2H_7N, or $C_2H_5.NH_2$.—Colorl., inflam. liq.; pung., amm. odor; burn. taste; bites tongue.—Sp. Gr. 0.7013 at 4° C.—*Sol.* W.—*Boil.* 19° C.

do. Merck.—33% Solution (30

Affords w. uric acid compounds very easily soluble, hence recom. in treatment of gout.

Ethylamine Chloride Merck (40

(Ethylammonium Chloride; Monoethylamine Hydrochloride).—Fr. ethyl chloride by boil. w. alcoh. amm.—C_2H_8NCl, or, $C_2H_5.NH_2.HCl$.—Colorl. cryst.—*Sol.* W., A.—*Melt.* 76–80° C.—*Caut.* Keep well stoppered.

Ethylamine Iodide Merck •(200

(Ethylammonium Iodide; Monoethylamine Hydriodide).—Fr. boil. ethyl iodide & abs. alc. by amm.—C_2H_8NI, or, $C_2H_5.NH_2.HI$.—Colorl. cryst.—*Sol.* W., A.—*Caut.* Keep dry, fr. light.

Ethylamine Sulphate Merck (50

(Ethylammonium Sulphate; Monoethylamine Sulphate).—$C_4H_{16}N_2SO_4$, or, $(C_2H_5.NH_2)_2.H_2SO_4$.—Gummy mass.—*Sol.* W., A.—*Caut.* Keep well stoppered.

Ethylammonium Chloride. — see **Ethylamine Chloride**

Ethylammonium Iodide.—see **Ethylamine Iodide**

Ethylammonium Sulphate. — see **Ethylamine Sulphate**

Ethylaniline Merck (7

(Monoethylaniline).—React.-prod. of aniline w. ethyl bromide.—$C_8H_{11}N$, or, $C_6H_5NH.C_2H_5$.—Colorl. liq. becoming brown on exposure to air.—Sp. Gr. 0.954 at 18° C.—*Boil.* 204° C.—*Caut.* Keep fr. air & light.

do. Merck.—Highest Purity (8

Ethylbenzene Merck (110

(Ethylbenzol).—Fr. benzene & alum. chloride, by ethyl chloride.—C_8H_{10}, or, $C_6H_5.C_2H_5$.—Colorl. liq.—Sp. Gr. 0.867 at 20° C.—*Boil.* 136° C.

Ethylbenzoylecgonine.—see **Cocaethyline**

Ethyldimethylaminopentanolbenzoyl Hydrochloride.—see **Stovaïne**

Ethylene Acetate, Mono-.—see **Ethylene Monacetate**

Ethylene Alcohol.—see **Ethyleneglycol**

Ethylene Blue

(China, or Serge, Blue).—Fr. diethylaniline hydrochl. by treating w. sod. nitrite & hydrogen sulphide & subseq. oxid'n.—$C_{18}H_{22}N_3SCl$.—Dark-green powd.—*Sol.* W.—*Uses:* Dye for cotton; also as stain.

Ethylene Bromide Merck (*Not* **Ethyl Bromide**) (12

(Dibromethane). — $C_2H_4Br_2$, or, $CH_2Br.CH_2Br$.—Colorl., volat., emulsifiable liq.; chlorof. odor.—Sp. Gr. 2.189 at 15° C.—*Misc.*, all prop. A.; insol. W.—*Boil.* 129–131° C.—Cardiac Poison; Antiepilep.; Sedat.; Antineural.—*Uses:* Epilep., delir. trem., nerv. headache, & nerv. insom.—*Dose* 1–2 ♏ (0.06–0.12 Cc.) 2–3 t. p. d. in emuls. or caps.—*Caut.* Poisonous!

Ethylene Chlorhydrin Merck (100

(Glycol Chlorhydrin; Monochlorethyl Alcohol).—Fr. glycol, by heat. w. sulphur monochloride.—C_2H_5ClO, or, $CH_2Cl.CH_2OH$.—Colorl. liq.—Sp. Gr. 1.223 at 0° C.—*Sol.*, all prop. W.—*Boil.* 128° C.

Ethylene Chloride Merck (*Not* **Ethyl Chloride**) (8

(Dichlorethane; Dutch Liquid; Elayl Chloride).—$C_2H_4Cl_2$, or, $CH_2Cl.CH_2Cl$.—Colorl., oily liq.; pleas. odor; sweet taste; irrit. vapor.—Sp. Gr. 1.265 at 15° C.—*Sol.* A., E., C.; sl. W.—*Boil.* 83° C.—Anesth.; Rubef.; Antispasm.—*Uses: Intern.*, gen'l anesth., inst. of chlorof., espec. operat. on the eye; cramps, diar., &c., as chloroform.—*Extern.*, rheumat.—*Max.* D. 15 ♏ (1 Cc.) single; 45 ♏ (3 Cc.) p. d.

do. Merck.—Highest Purity (10

Ethylene Cyanide Merck (140

(Succinonitrile).—Fr. ethylene bromide, by potass. cyanide w. alc.—$C_4H_4N_2$, or, $C_2H_4(CN)_2$.—Colorl., deliquesc. cryst.—*Sol.* W., C., A.—*Melt.* 51–54.5° C.—*Boil.* 158–160° C.

Ethylene Guaiacol.—see **Guaiacol Ethylene**

Ethylene Iodide Merck (*Not* Ethyl Iodide) (75

(Diiodethane). — $C_2H_4I_2$, or, $CH_2I.CH_2I$. — Yellowish cryst.—Sp. Gr. 2.07 at 15° C.—*Sol.* A., E.—*Melt.* 81–82° C.

Ethylene Monacetate. } —see **Ethyleneglycol**
Ethylene-monacetin. } **Monacetate**

Ethylene (Monochloro-) Chloride Merck (25

(Monochlorethylene Chloride; Monochlorinated Dutch Liquid; Vinyl Trichloride).—Fr. vinyl chloride, by antimony pentachloride.—$C_2H_3Cl_3$, or, $CH_2Cl.CHCl_2$.—Colorl. liquid; pleas. odor.—*Sol.* A., E.—Sp. Gr. 1.458 at 9° C.—*Boil.* 114° C.—*Uses:* Anesth.; said to be superior to chlorof. & ethylene chloride.

Ethylene Per-(or *Tetra-*)*iodide.*—see **Diiodoform**

Ethylenediamine (400

Fr. ethylene chloride, by ammon. & heat.—$C_2H_8N_2$, or, $NH_2.CH_2.CH_2.NH_2$.—Volat., alkal. liq.; ammon. odor.—Sp. Gr. 0.902 at 15° C.—*Sol.* W.; insol. E., B.—*Boil.* 117° C.—Solvent of albumen & fibrin.—*Uses:* Diphth., w. an antisep.

Ethylenediamine Hydrate Merck (300

(Diaminethane). — $NH_2.CH_2.CH_2.NH_2.H_2O$. — Colorl. liq.—Sp. Gr. 0.965–0.970 at 15° C.—*Sol.* W.—*Uses:* Solvent for albumen & fibrin.

Ethylenediamine Hydrochloride Merck (85

$C_2H_4(NH_2)_2.2HCl$.—Wh. cryst.—*Sol.* W.; insol. A.

Ethylenediamine Mercuric Sulphate.—see **Sublamine**

Ethylenediamine-Silver Phosphate Solution.—see **Argentamine**

Ethylenediamine-Trikresol.—see **Kresamine**

Ethylene-ethenyldiamine.—see **Lysidine**

Ethyleneglycol Merck (100

(Ethylene Alcohol; Glycol).—Fr. ethylene iodide, by silver acetate & saponif.—$C_2H_6O_2$, or, $CH_2OH.CH_2OH$.—Colorl., sweet, syrupy liq.—Sp. Gr. 1.115 at 15° C.—*Sol.*, sl. E.; all prop., W., A.—*Boil.* 195° C.

Ethyleneglycol Monacetate Merck (180

(Ethylene Monacetate; Ethylene-monacetin; Glycol-monacetin).—React.-prod. potass. acetate w. ethylene bromide & alc.—$C_4H_8O_3$, or, $OH.CH_2.CH_2OOC.CH_3$.—Colorl. liq.—*Misc.* W., A.—*Boil.* 182° C.—Sp. Gr. 1.108 at 15° C.

Ethylenenaphthalene.—see **Acenaphtene**

Ethylidene Chloride Merck.—From Paraldehyde (30

(Chlorinated Muriatic Ether; Alphadichlorethane; Ethidene Bichloride; Chloridene).—$C_2H_4Cl_2$, or, $CH_3.CHCl_2$.—Colorl., oily liq.; odor & taste of chlorof.—Sp. Gr. 1.178 at 15° C.—*Boil.* 58–60° C.—Inhal.—*Uses:* Anesth., inst. of chloroform, for minor operat.—*Extern.*, applied as analgesic.

Ethylidenediethylic Ether.—see **Acetal**

Ethylidenedimethylether.—see **Dimethylacetal**

Ethylideneurethane.—see **Urethane, Ethylidene-**

Ethylmorphine Hydrochloride.—see **Dionin**

Ethylmustard Oil.—see **Ethyl Thiocarbimide**

Ethylnarceine Hydrochloride.—see **Narcyl**

Ethylphenylketone Merck (140

Fr. benzoyl chloride, by zinc ethyl.—$C_9H_{10}O$, or, $C_6H_5.CO.C_2H_5$.—Colorl. liq.—Sp. Gr. 1.009 at 0° C.—*Boil.* 218° C.

Ethylpropionyl.—see **Diethylketone**

Ethylpyridine, Beta-.—see **Lutidine, Beta-**

Ethylurethane.—see **Urethane**

Eucaine (Beta-) (72

(Benzoylvinyldiacetonalkamine Hydrochloride; Beta-Eucaine).—$C_{15}H_{21}O_2N.HCl + H_2O$.—Colorl. cryst.—*Sol.*, abt. 30 W.; abt. 30 A.; abt. 7 C.; 50 G.—*Uses:* Local Anesth.; recom. for use on mucous membranes; said to irritate the eye but little, hence used (cautiously) in ophthalmology; also in dentistry.—*Appl.*, in ophthalm., solut. beta-eucaine & cocaine hydrochl. 3 grains (0.2 Gm.) of each in 5 fl. dr. (20 Cc.) W.; in cystoscopy, a 0.2% solut.; for nose & throat, a 5–10% aqu. solut.; in dentistry, 2–3% solut.; also used in Schleich's method of infiltration anesthesia; in hemorrhoids, a 5–10% oint. with 2% menthol.

Eucaine (Beta-) Lactate (72

(Benzoylvinyldiacetonealkamine Lactate).—$C_{15}H_{21}NO_2.CH_3.CH(OH).COOH$.—Wh. powd.—*Sol.*, abt. 5 W.; abt. 9 A.; 5 C.; 20 G.—*Melt.* 155° C.—Local Anesthetic.—*Uses:* Rhinology, otology, ophthalmology, in minor surgical operations, etc.—*Appl.* 2–15% solut.

Eucalyptene Merck (60

Hydrocarbon from oil eucalyptus.—$C_{10}H_{18}$.—Clear, colorl. liq.—*Sol.* A.—*Boil.* 160–170° C.

Eucalyptene Hydrochloride.—see **Eucalypteol**

Eucalypteol Merck (40

(Eucalyptene Hydrochloride; "Terpilene Dihydrochloride"). — Fr. oil Eucalyptus globulus, Labill. — $C_{10}H_{16}.2HCl$. — Yellowish-wh. cryst.; arom., camphor-like odor; pecul. feeble, but persist., taste.—*Sol.* A., E., C., oils.—*Melt.*, abt. 50° C.—Internal Antiseptic.—*Uses:* As substit. for eucalyptus oil & eucalyptol; in pulmon. & gastro-intest. disinf., no toxic action; bronch., typh. fever, choleriform diar., &c. Borne well by stomach.—*Doses:* 25 grains (1.6 Gm.) daily in wafers or caps.; children 4–12 grains (0.25–0.75 Gm.) daily, w. milk.

Eucalyptol Merck.—Highest Purity, Medicinal. —Crystallizable (2

(Cineol; Cajeputol).—Organic oxide fr. volat. oil Eucalyptus globulus, Labill.; chief constit. of this, & var. other eucalyptus oils, & of oil Artemisia Cina.—$C_{10}H_{18}O$.—Colorl. liq.; congeals below 0° C; camphor-like odor; pung., spicy, cooling taste.—Sp. Gr. 0.930 at 15° C. (0.921–0.923 at 25° C., U. S. P.).—*Sol.* A., CS_2, glacial acetic acid; sl. in W.—*Boil.* 176–177° C.—Antisep.; Expector.; Antispasm.; Antiper.—*Uses:* Inhal. for diphth., asthma.—*Intern.*, colds, bronch., pneum.—*Extern.*, rhinitis, scar. fever, measles, & chicken pox; also wounds or injuries, & in dentistry in antisep. mouthwashes.—*Dose* 5–15 ♏ (0.3–1 Cc.) 4 or 5 t. p. d. in gelat. caps., sweet. emuls., or sugar.—*Inj.* 8–15 ♏ (0.5–1 Cc.) of mixt. of 2–5 eucalyptol & 10 petrolatum.

do. Merck.—Water-white (2

Purified oil of Eucalyptus globulus, Labill.—Thin, alm. colorl. liq.; str., camphor. odor; pung. taste.—*Sol.* A.—Sp. Gr. 0.900–0.915 at 15° C.

Eucalyptol-Iodoform Merck (12

5% solut. of iodoform in eucalyptol.—Antisep.

Eucalyptolene Merck (60

Hydrocarbon fr. oil Eucalyptus globulus, Labill. —Thick, yellowish liq.—*Sol.* A.—*Boil.*, above 300° C.

Eucalyptus.—*U. S. P.*

(Gum Wood; Australian Fever Tree; Blue-Gum Tree).—Dried lvs. of Eucalyptus globulus, Labillardière. Myrtaceæ, collected fr. the older parts of the tree.—*Habit.:* Australia; cultiv. in subtropics, Europe, N. Africa, & southern U. S. —*Etymol.:* Fr. Grk. "eu," well, good, & "kalyptos," covered, *i.e.*, the calyx is furnished in the bud w. a conical lid or cap which later separates entire. "Globulus" has reference to the thick, button-like form of the fruit.—*Constit.:* Volat. oil; tannin; resins (three); eucalyptic acid; bitter principle; cerylic alcohol.—Antispasm.; Antisep.; Febrifuge; Stim.; Astring.; Antipyr.; Expector.; Tonic; Hemostat.—*Uses:* Hemorrhage, asthma, dyspep., malaria & phthisis.—*Doses:* 15–60 grains (1–4 Gm.).—Alcoh. extr. 1–3 grains (0.06–0.2 Gm.).—Fld. extr. 5–20 ♏ (0.3–1.3 Cc.).—Tinct. 30–120 ♏ (2–8 Cc.).

Eucasin (4

(Casein-Ammonia). — By passing NH_3 over casein.—Fine powd.—*Sol.*, warm W.—Nutrient; Dietetic.—Given in bouillon, cocoa, chocolate, soups, etc.; incompat. w. wine & beer.

Euchinin.—see **Euquinine**

Euchresta

(Pronodjuvo; Pranadjiwa).—Seed of Euchresta Horsfieldii, Bennett. Papilionaceæ.—*Habit.:* Java.—*Etymol.:* Grk. "euchrestos," useful, *i.e.*, the plant is used as a food in Java. Plant named for Thos. Horsfield, an American botanist (b. Pennsylvania, 1773—d. England, 1859), who, between 1802–1807, collected Javanese plants.—*Constit.:* Euchrestine (alkaloid), probably identical with cytisine.—Expector.; Aphrod. —*Uses:* Pectoral & throat affections; antidote to poisons.

Eucodin (150

(Codeine Methylbromide).—$C_{18}H_{21}NO_3.(BrCH_3)$. —Colorl. cryst.—*Sol.*, eas. W.—*Melt.* 261° C.—Narc.; Sed.—*Uses:* Phthisis, cough, &c.—*Dose* 3–5 grains (0.2–0.3 Gm.) p. d.

Eudermol=Nicotine Salicylate.—see **Nicotine Salicylate**

Eudoxin (42

(Bismuth salt of Nosophen [Tetraiodophenolphtalein]). — Reddish-brown, odorl., tastel. powd. — *Insol.* W. — Intest. Antisep. — *Uses:* Diarrhea, &c. (is decomposed in the intestines into nosophen-sodium & bismuth oxide).—*Doses:* 5–8 grains (0.3–0.5 Gm.) 3–5 t. p. d.; childr., $1^1/_2$–3 grains (0.1–0.2 Gm.) sev. t. p. d.

Eugallol (20

(Pyrogallol Monacetate, Knoll).—Dark-yellow, syrupy liq.; marketed only in 66% solut. in acetone. — *Sol.* W. — *Uses:* Succedaneum for pyrogallol in obstinate chronic psoriasis; very vigorous in action.—*Appl.*, usually pure, as paint once daily, followed in half hour by zinc-oxide powd. or paste.

Eugenia Chequen

(Cheken; Myrtus Chekan). — Lvs. of Eugenia Chequen, Molina. Myrtaceæ.—*Habit.:* Chili.—*Etymol.:* "Cheken," & "checan," are the native names of the drug.—*Constit.:* Chekenon, $C_{40}H_{44}O_8$; cheken bitter; chekenin, $C_{12}H_{11}O_3$; chekenetin, $C_{11}H_7O_6+H_2O$; volat. oil; tannin.—Expector.; Diuret.; Anticatarrh.—*Uses:* Catarrhal affect. of respir. & genito-urinary organs. —*Dose:* Fld. extr. 1–3 fl. dr. (4–12 Cc.).

Eugenia Jambolanum.—see **Jambul**

Eugenoform

(Eugenolcarbinol; Eugenolcarbinol-sodium).—Obt. by action of formaldehyde on eugenol.—Colorl. cryst.—*Sol.*, eas. W.; diffic. A.; insol. E.—*Melt.* 160° C.—Intest. Disinfect.—*Uses:* Cholera, typhoid, & o. infect. diseases.—*Dose* 8–15 grains (0.5–1 Gm.) twice p. d.

Eugenol Merck (7

(Eugenic Acid; Caryophyllic Acid; Paraoxymetamethoxyallylbenzene).—Unsaturated, aromat. phenol fr. oil of cloves & o. essential oils.—$C_{10}H_{12}O_2$, or, $C_6H_3(OH)(OCH_3).(CH_2.CH:CH_2)$ [4:3:1].—Colorl., or yellowish, oily liq.; becomes brown in air; spicy odor; burn. taste.—Sp. Gr. 1.066–1.068 at 25° C.—*Sol.* A., E., C., solut. caustic soda.—*Boil.* 251–253° C. (U. S. P.).—Antisep.; Antituberc. — *Uses:* Tuberc., &c. — *Techn.*, in manuf. vanillin, & in perfumery inst. of oil cloves.—*Extern.*, oint. w. lanum in ecz. & o. skin dis.; local anesth. in dentistry, &c.—*Dose* 8–30 ♏ (0.5–2 Cc.).—*Max. D.* 45 ♏ (3 Cc.).

Eugenol Benzoate.—see **Benzoeugenol**

Eugenolcarbinol.
Eugenolcarbinol Sodium. } —see **Eugenoform**

Euguform (30

(Acetylated Methylenediguaiacol).—Fr. guaiacol by action of formaldehyde & subsequent acetylization.—Fine, grayish-wh., alm. odorl. powd. — Insol. W. — Antisep. — *Uses:* Lupus, wounds, burns, ulcers & skin diseases.—*Appl.*, dusting powd.

Euguform Soluble

50% solut. euguform in acetone.—*Uses:* As of euguform, in pastes, oints.; also appl. undiluted.

Eumenol (5

(Fluid Extract Tang-kui [Kau-kui; Man-mu; Schan-ki] Merck).—Fr. root of a Chinese Araliaceæ, the genus & species of which are not yet

properly determined.—Emmen.; Uterine Sed. —*Uses:* Chiefly amenorrhea & dysmenorrhea, particularly if of nervous origin.—*Dose* 1 fl. dr. (4 Cc.) 3 t. p. d., in sweetened water.

Eumydrin (330

(Methylatropine Nitrate).—$C_6H_5(HO.CH_2).CH.CO.O.C_7H_{11}N(CH_3)_2NO_3$.—Wh., cryst., odorl. powd.—*Sol.*, eas. W., A.; v. diffic. in E., C.—Mydriatic; Antihidrotic.—*Dose* $^1/_{60}$–$^1/_{24}$ grain (0.001–0.0025 Gm.) as antihidrotic.

Eunatrol (18

(Sodium Oleate, Zimmer).—$NaC_{18}H_{33}O_2$.—Wh. powd.—*Sol.* W., A.—Cholag.; reported free fr. all injurious effect.—*Uses:* Biliary lithiasis.—*Dose* 4 grains (0.25 Gm.) 2–4 t. p. d., in pill form (the remedy is marketed only as chocolate-coated pills).—In severe cases 6–8 pills p. d. may be given.

Euonymin Merck.—Pure (275

Mixture of purified glucoside, euonymin, fr. the bark & root of Euonymus atropurpureus, Jacq. (Wahoo), with milk-sugar.—Yellowish powd. —Cholagogue; Cathart.—*Uses:* Chronic constipation due to hepatic swelling, dropsy, & other hepatic affections.—*Dose* $^1/_2$–3 grains (0.03–0.2 Gm.) in pills or mixture, w. extract belladonna (to prevent any occurrence of colicky pains).

do. Merck.—Brown (20

"Eclectic resinoid" fr. Euonymus atropurpureus, Jacq. (Burning-bush; Wahoo).—Light-brown powd.—*Uses:* Cholagogue & drastic purgative, like resin podophyllum.—*Dose* $1^1/_2$–6 grains (0.1–0.36 Gm.).

do. Merck.—Green (20

Resin, with chlorophyll, fr. Euonymus atropurpureus, Jacq. (Burning-bush; Wahoo).—Greenish powd.—*Sol.* W.—*Dose:* As cholag. & lax., $1^1/_2$–6 grains (0.1–0.36 Gm.), w. extract hyoscyamus.

Euonymit.—see **Dulcit**

Euonymus.—*U. S. P.*

(Wahoo; Arrow Wood; Indian Arrow Wood; Bitter Ash; Burning-bush; Strawberry Tree; Spindle Tree).—Dried root-bark of Euonymus atropurpureus, Jacquin. Celastraceæ.—*Habit.:* U. S., Ontario to Florida east of Mississippi.—*Etymol.:* Fr. Grk. "eu," well or good, & "onoma," name, *i.e.*, well known (all parts of the tree have a disagreeable odor). Atropurpureus, fr. Lat. "ater," dark, & "purpureus," purple-red, *i.e.*, the flowers & fruit are dark-red. —Curved or quilled pieces; extern., ash-gray with blackish ridges or patches, detached in thin scales; inner surface whitish or slightly tawny, smooth; fract. smooth; alm. inodor.; sweetish, then somewh. bitter, acrid taste.—*Constit.:* Resinoid euonymin; atropurpurin; asparagin; euonic acid; malic, citric, & tartaric acids; resins; fixed oil; albumin; wax.—Cholagogue; Laxative; Diur.; Tonic; Expector.; Antiper.; Antiparasitic; Cathart.—*Uses:* Chiefly as a laxat., & in dropsy.—*Doses:* 10–60 grains (0.6–4 Gm.) in powd.—Fld. extr. 15–60 ♏ (1–4 Cc.).—Hydro-alcoh. extr. 2–5 grains (0.12–0.3 Gm.).

Eupatorin (Resinoid) (15

Resin. extr. fr. Eupatorium perfoliatum, L. (Boneset, Thoroughwort).—Brown, v. bitter powd.—Expector.; Tonic; Diaph.—*Uses:* Colds, bronch., musc. rheum., catarrh, grippe, dyspep., gen'l debil., & tape worm.—*Dose* 1–3 grains (0.06–0.2 Gm.).

Eupatorin (Glucoside)

Fr. Eupatorium perfoliatum, L.—$C_{20}H_{25}O_{88}$.—*Sol.* W.—*Melt.* 102–103° C.

Eupatorium.—*U. S. P.*

(Boneset; Thoroughwort).—Dried lvs. & flowering tops of Eupatorium perfoliatum, L. Compositæ.—*Habit.:* Canada to Florida & west to Texas & Nebraska.—*Etymol.:* Grk. "eu," well, & "pater," father, *i.e.*, born of a noble father; named for Mithridates Eupator, king of Pontus (123–64 B.C.), who discovered one of the species. —*Constit.:* Eupatorin (bitter glucoside); volat. oil; resin; tannin; wax.—Tonic; Diaphor.; Anthelm.; Emetic.—*Uses:* Colds, gen'l debility, catarrh, rheumat., worms, & to induce vomiting. —*Doses:* Fld. extr. 20–60 ♏ (1.3–4 Cc.).—Hydro-alcoh. extr. 4–10 grains (0.25–0.6 Gm.).

Eupatorium Cannabinum

(Hemp Agrimony; Bastard Agrimony; Water Agrimony; Bastard Hemp; Hemp Weed).—Whole plant, Eupatorium cannabinum, L. Compositæ.—*Habit.:* Europe.—*Etymol.:* See preceding. "Cannabinus," Lat., meaning hemp-like. *Constit.:* Eupatorin.—Febrif. (in dropsy); Vulnerary; Cathart.

Eupatorium Purpureum

(Trumpet Weed; Queen of the Meadow; Gravel Root; Purple Boneset).—Root of Eupatorium purpureum, L. Compositæ.—*Habit.:* U. S.—*Etymol.:* See Eupatorium. "Purpureum" refers to the purple flowers of the plant.—*Constit.:* Euparin, $C_{12}H_{11}O_3$; volat. oil; fat; wax; resin.—Diuret.; Diaphor.; Anticatar.—*Uses:* Cystitis, lithiasis, prostatitis, dropsy, leucor., gleet, &c. —*Doses:* Extr. 5–10 grains (0.3–0.6 Gm.).—Fld. extr. 30–60 ♏ (2–4 Cc.).

Euphorbia Corollata

(Flowering Spurge; Emetic Root; Purging Root; Snake Milk).—Root of Euphorbia corollata, L. Euphorbiaceæ.—*Habit.:* Canada & eastern U. S. —*Etymol.:* The species was named for Euphorbos, physician to Juba, king of Mauritania (abt. 54 B.C.). "Corollata" refers to the corolla-like involucre of the flower.—Emet.; Diaphor.; Expector.—*Uses:* Instead of ipecac, for emesis, sweating, coughs, colds, &c.—*Dose:* Fld. extr. 5–30 ♏ (0.3–2 Cc.).

Euphorbia Pilulifera

(Pill-bearing Spurge; Snake-weed; Cat's-hair; Queensland Asthma - weed; Flowery - headed Spurge).—Whole plant, Euphorbia pilulifera, L. Euphorbiaceæ.—*Habit.:* Queensland (Australia); India; widely distrib. in tropical countries.—*Etymol.:* See preceding. "Pilulifera," fr. Lat. "pilula," pill, & "fero," to bear, referring to the inflorescence.—*Constit.:* Several resins. — Expect.; Diuret.; Antiasthmatic. — *Uses:* Asthma, cardiac dyspnea, hay fever, & chron. bronchitis. Lvs. sometimes smoked in pipes in paroxysmal asthma.—*Doses:* 10–60 grains (0.6–4 Gm.) in powd. or infus. — Fld. extr. 15–60 ♏ (1–4 Cc.).

Euphorbium

(Gum Resin Euphorbium).—Gum-resin fr. Euphorbia resinifera, Berg. Euphorbiaceæ.—*Habit.:* Morocco. — *Etymol.:* See Euphorbia Corollata. "Resinifera," fr. Lat. "resina," & "fero," resin-bearing. — Irreg., yellowish, or brownish, slightly friable tears; alm. odorl.; taste first feeble, then pungent & persistently acrid.—*Constit.:* Euphorbin; euphorbon, $C_{15}H_{24}O$; resin; caoutchouc; malic acid; gum; bitter principle. — *Uses:* Emet.; Cathart.; Errhine; Vesicant; Irritant.

Euphorin (*Not* Europhen) (20

(Phenylethyl Carbamate; Phenyl Urethane; Carabanilic Ether).—Fr. ethyl chlorocarbonate, by aniline.—$C_9H_{11}NO_2$, or, $C_6H_5(NH)CO_2.C_2H_5$. —Colorl. needles; arom. odor; clove taste.—*Sol.* A., E.; sl. W.—*Melt.* 49–50° C.—Antirheum.; Anod.; Antisep.; Antipyr. — *Uses: Intern.*, rheum., tuberculosis, headache, & sciatica. Increases excretion of urea.—*Extern.*, dustingpowd. in vener., & o. skin dis., ulc.—*Dose* 8–15 grains (0.5–1 Gm.) 2–3 t. p. d.—*Caut.* Do not confound this w. *Europhen.*

Euphrasia

(Eyebright; Eyewort; Euphrasy).—Whole herb, Euphrasia officinalis, L. Scrophulariaceæ.—*Habit.:* Europe.—*Etymol.:* Grk. "euphrasia," delight, referring to the effect the plant is believed to have on the eyes.—*Constit.:* Volat. oil; bitter principle; tannin; resin.—Slightly Tonic; Astring.—*Uses: Intern.*, in jaundice.—*Extern.*, in various eye-diseases as lotion, poultice, &c.

Euphthalmine Hydrochloride (700

(Phenylglycolyl-*n*-methyl-*β*-vinyldiacetonalkamine Hydrochloride).—$C_{17}H_{25}NO_3.HCl$.—Mandelic-acid derivative of beta-eucaine. — Wh., cryst. powd.—*Sol.* W., A.—Mydriatic; transitory action.—*Uses: Extern.*, in ophthalmoscopic examinations, chron. & acute iritis, operations on cataract, amblyopia, &c., in 2–10% soluts.

Eupion Reichenbach-Merck (60

Constit. of wood-tar.—Clear, colorl. liq.; agre. odor.—*Boil.*, abt. 47° C.—Antiseptic.

Euporphin (300

(Apomorphine Methylbromide).—$C_{17}H_{17}NO_2.CH_3.Br$.—Colorl. need. or scales.—*Sol.*, eas. W., A.—*Melt.* 180° C.—*Uses:* As of apomorphine hydrochloride, but soluts. said to be more stable than those of apomorph. salts.—*Caut.* Do not confound with *Euphorin* or *Europhen.*

Eupyrin (30

(Vanillinethylcarbonate paraphenetidin). — $C_6H_4(OC_2H_5)N$: $CH.C_6H_3(OCH_3)O.COOC_2H_5$.—Pale, greenish-yellow cryst.—*Sol.* A., E., C.; sl. W.—*Melt.* 87–88° C.—Mild, nontoxic antipyr., particularly adapted for debilit. & old persons.—*Dose* 15–30 grains (1–2 Gm.).

Euquinine (28

(Euchinin; Ethylcarbonic Ester of Quinine; Quinine Carbonic Ether Zimmer).—$OC_2H_5.CO.OC_{20}H_{23}N_2O$.—Wh., tastel., light, cryst. need. —*Sol.*, eas. in A., E., C.; sl. W.—Succedaneum for quinine & its salts. Reported not to derange the stomach or intestines; to cause no bitter eructations, nausea, or vomiting; causes cinchonism more rarely & less intensely than quinine sulph.—*Uses:* Malaria, febrile infect. dis., whoop.-cough, neuralgia, quinine idiosyncrasy; prophylactic for malaria. 1 part euquinine = 0.5 part quinine.—*Doses:* 15–30 grains (1–2 Gm.) w. soup, milk, or cacao; as a prophyl., 8 grains (0.5 Gm.) twice daily for adults, & 4 grains (0.25 Gm.) for children.—*Incompat.* Acids & acid salts.

Note.—This "perfected" quinine is particularly eligible for children's use, as well as in many other cases, because, while tasteless, it yet develops the full quinine effect with practically no after-effects.

Euquinine Salicylate (35

$COOH.OH.C_6H_4.C_2H_5O.CO.OC_{20}H_{23}N_2O$. —Wh., tastel. cryst. — Alm. insol. W.—*Melt.* 195° C. —*Uses:* Exhibits comb. effect of quinine & salicylic acid; partic. adapted for children.

Euresol (20

(Resorcinol Monacetate Knoll).—Viscid, yellow mass.—*Sol.*, acetone, solut. of alkalies.—Succedaneum for resorcinol, externally.—*Uses:* Acne, sycosis, seborrhea, &c. — *Appl.* 5–20% oints.

Eurobin (25

(Chrysarobin Triacetate Knoll).—Yellowish-red powd.—*Sol.* C., E., acetone; insol. W.—Succedaneum for chrysarobin. — *Uses: Extern.*, in psoriasis & o. skin diseases, in 1 – 20% solut. in acteone, with 5–10% of saligallol.

Europhen (*Not* Euphorin) (36

(Iododiisobutylorthocresol; Isobutylorthocresol Iodide; Cresol Iodide).—Fr. isobutylorthocresol, by solut. I in KI solut.—27.6% I.—$C_{22}H_{29}O_2I$, or, $(C_4H_9)C_6H_3(OCH_3).(C_4H_9)C_6H_2(CH_3).OI$. — Light, dull-yellow, amorph., arom. powd.—*Sol.*, eas. A., E., C., oils; insol. W., G.—*Melt.* 110° C.—Antisep.; Antisyph.; Alter.—*Uses: Extern.*,

in skin dis., varic. veins & ulc., 5–10% oint. or dust. powd., or pure.—*Intern.*, syphilis.—*Inj.* $^1/_2$–$1^1/_2$ grains (0.03–0.1 Gm.) once p. d., in oily solut.—*Caut.* Do not confound w. *Euphorin.*

Eurythrol Merck (20

Aqueous extract of spleen substance.—*Uses:* Anemia & chlorosis (like o. spleen prep'tions).

Euxanthin.—see **Acid Euxanthic**

Euxanthone Merck (400

Decomp. product of euxanthic acid ($C_{19}H_{16}O_{10}$+ H_2O) obtained fr. Indian Yellow (Puree).—$C_{13}H_8O_4$.—Pale-yellow need., or scales.—*Sol.* A., E., alkalies.

Evening Primrose.—see **Oenothera**

Extract Alkanet Merck.—Completely soluble in Alcohol (12

(Anchusin; Alcannin, or Alkannin).—Color. matter fr. root Anchusa tinctoria, L. (Alkanet).—Dark-red, amorph. powd.; sl'y acid.—*Sol.* A., E., C., B., oils.—*Tests:* Solut's give blue precip. w. lead acetate; violet with iron salts.—*Uses:* Coloring for galenicals, fats, and oils; in dental technic for coloring wax; in leather industry; in chem. analysis as indicator, chiefly in form of test paper (alkalies = blue color).

do. Merck.—Soluble in Alcohol & in Petroleum Ether (22

Extract Apple Ferrated Merck.—*N. F.* (1

(Crude Iron Malate).—Fr. ripe sour apples w. iron.—Contains at least 5% Fe.—Hemat.—*Uses:* Chlorosis & all affect. needing iron.—*Dose* 5–15 grains (0.3–1 Gm.).

Extract, Aspidium.—see **Oleoresin Male Fern**

Extract Cannabis Merck.—Alcoholic, soft.—*U. S. P.* (25

Fr. fl. tops of pistillate plant, C. sativa, L. (Indian Hemp) grown in East Indies.—Nar.; Sed.; Analg.; Aphrod.—*Uses:* Headache, sum. diar., anorexia, gastrod., neural., rheum., gout, chorea, hysteria, mental depress., delir. trem., uter. hemorrhage, &c.—*Extern.*, corn cures, &c.—*Dose* $^1/_4$–2 grains (0.015–0.12 Gm.).—*Max. D.* 2 grains (0.12 Gm.) single; 5 grains (0.3 Gm.) p. day.

Extract Cinchona Merck.—Aqueous, soft (6

Fr. Cinchona Officinalis (C. pallida).—Bitter Tonic; Antiper.—*Dose* 8–38 grains (0.5–2.5 Gm.).

Extract Colchicum Root Merck.—Acetic, soft (6

Fr. corm C. autumnale, L. (Meadow Saffron).—Alter.; Sed.; Diur.; Expector.—*Uses:* Rheum., gout, dropsy, asthma, & ascites fr. hepatic obstruc.—*Dose* $^1/_2$–2 grains (0.03–0.12 Gm.).—*Max. D.* 3 grains (0.2 Gm.), single; 12 grains (0.8 Gm.) p. day.—*Antid.*, emetics, stomach siphon, stimulants, tannic acid.

Extract Fluid Kau-Kui [*Man-mu, Schan-ki*, or *Tang-kui*].—see **Eumenol**

Extract Glycyrrhiza.—see **Extract Licorice**

Extract Hyoscyamus Leaves Merck.—Alcoholic, dry, w. powd. licorice root (4

Fr. fresh lvs. H. niger, L. (Henbane); plants of second year's growth.—Antispasm.; Hypn.; Sed.; Analg.—*Uses: Intern.*, spasm. cough, irrit. blad., insom., hyst., nerv. headache, delir. trem., spinal hyperesthesia & emphysema.—*Extern.*, hemorrhoids, rheum. swell., cancer. ulc., &c.—*Dose* 1–4 grains (0.06–0.25 Gm.).—*Antid.*, emetics, stomach siphon, animal charcoal w. emetics, opium, pilocarpine hypoderm., artif. respir., brandy, ammonia, &c.—*Caut.* Poison!

Extract Juniper Merck.—Soft (1

Conc. juice fresh berries J. communis, L. (Juniper).—Diur.; Diaph.; Aphrod.—*Uses:* Dropsy.—*Dose* 5–15 grains (0.3–1 Gm.).

Extract Leech Merck (8000

Aqu. extr. of the heads of Sanguisuga medicinalis (Leech) hardened by immersion in alcohol, & then dried & powdered.—30 ♏ (2 Cc.)=1 leech head.—Prevents decomp. & coagul. of blood.—Recom. as addition to blood in transfusions; & also intravenously in recurrent thromboses & vascular obstructions.—*Dose* 5–$6^1/_2$ fl. oz. (150–200 Cc.).

Extract Licorice Merck.—Soft (1

Prepared fr. commerc. extr., & purified.—*Uses:* Corrigent, pill excipient, &c.

Extract Male Fern.—see **Oleoresin Male Fern**

Extract Malt Merck.—Dry, powder (2

Cont. maximum amount diastase, dextrin, dextrose, protein bodies, & salts of barley.—Eas. digested Food; Tonic; Dietetic; Expector.—*Uses:* For babies, convalesc. scrof. patients; dyspep., &c.; vehicle for o. remed.; facilitates digestion of starchy foods because of its diastatic power.—*Dose* 1–4 dr. (4–15 Gm.) frequently w. other tonics like cinchona, iron, &c.—*Caut.* Keep dry.

do.—Soft (1

Brown, honey-like mass; sweet taste.—*Uses:* As preceding; emulsifier.—*Dose* 4 dr. (15 Gm.).

Extract Monesia Merck.—Aqueous, dry (8

Fr. bark of Chrysophyllum Glycyphlœum.—Tonic; Emmen.; Astring.; Expector.; Alter.—*Uses:* Dyspep., scrofula, hemorrhage, &c.—*Dose* $1^1/_2$–5 grains (0.1–0.3 Gm.) sev. t. p. d.—*Appl.*, in 1% solut. in leucorrh. & mouth-washes, & in 1:6 oints.

Extract Muira Puama Fluid Merck (20

Fr. wood & root Liriosma ovata, Miers.—Aphrod.; Nerve Stim.—*Uses:* Sexual debility, senile weakness, &c.—*Dose* 15–30 ♏ (1–2 Cc.).

Extract Opium Merck.—*U. S. P.***—Aqueous, dry** (20

Fr. powd. opium. — 20% morphine. — Nar.; Hypn.; Anod.; Stim.—*Uses:* Pain, diar., dysent., cough, pneum., bronch., & pleur.; stop periton.,

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

peristalsis, enteritis, & typhlitis.—*Dose* $^1/_4$–1 grain (0.015–0.06 Gm.).—*Max. D.* 2 grains (0.12 Gm.) single; 5 grains (0.3 Gm.) p. d.—*Antid.*, emetics, stomach siphon. potass. permang., atropine, tannin, friction, electricity. Give strong coffee, oxygen, brandy, &c.—*Caut.* Poison!

Extract Pine Needles Merck (1

Fr. fresh needles of Pinus sylvestris & Abies excelsa.—Diur.; Antisep.—*Uses:* Dropsy, & genito-urinary dis.—*Dose* 3–6 grains (0.2–0.4 Gm.) sev. t. p. d.—Extern. in baths (abt. $^1/_2$–1 lb. [abt. 250–500 Gm.] per bath); also as appl. in prurigo & herpes circinatus.

Extract Suprarenal Capsule Merck (912

Hemostatic Extract Suprarenal Capsule (gland).—Brown, light particles.—*Sol.*, w. turbidity in equal weight W.—Vasoconstrictor; Astring.; Styptic.—*Uses: Extern.*, in eye & nose operations (prior to cocaine), conjunctivitis, vascular keratitis, keratoconjunctivitis, episcleritis, hay fever, glaucoma, capillary hemorrhages; combined w. cocaine as anesthetic in all cases in which inflamed tissue impairs the action of cocaine; in surg. operations on eye as prevent. of hemorrhage & as hemostat. (in 6:20 solut.); *intraven.*, in acute cardiovascular paresis occurring in infectious diseases; in chloroform asphyxia, &c.—*Dose: Hypoderm.* 1–2 fl. dr. (4–8 Cc.) of 1% solut., 2 or 3 t. daily if required in cardiovascular paresis of infect. diseases.—*Extern.*, in 6–30% soluts. as spray in bleeding & swellings in nose & throat, & particularly in hay fever (in 6–12% aqu. solut.).—*Caut.* Solution should be prepared fresh each time, w. freshly sterilized distilled water.

Eyebright.—see **Euphrasia**

Eye Stone.—see **Copper, Aluminated**

F

False Bittersweet.—see **Celastrus**

False Grape.—see **Ampelopsis**

False Hellebore.—see **Adonis Vernalis**

False Unicorn.—see **Helonias**

False Unicorn Root.—see **Aletris**

Farfara.—see **Tussilago**

Farrant's Solution

Solut. acacia in mixt. of W. & G., with As_2O_3.—*Uses:* Preservative for macroscopic objects.

Fast Blue, Alcohol Soluble.—see **Induline Alcohol Soluble**

Fast Blue B Merck.—Alcohol-Soluble (10

(Anilidophenylsafranine Hydrochloride).—Blue-black powd.—*Sol.*, in A. w. violet color.—*Uses:* Dyeing blue, & in lacquers & varnishes.

Fast Blue, Water-Soluble.—see **Induline, Water-Soluble**

Fast Green.—see **Malachite Green**

Fast Green J.—see **Brilliant Green**

Fast Scarlet.—see **Benzopurpurine**

Fast Yellow.—see **Diphenylamine Orange**

Fehling's Solution

(Alkaline Solution Copper Tartrate).—Two solut's: (*a*) The Copper Solut.: 34.67 Gm. of pure cryst. cupric sulphate in distil. W. to measure 500 Cc. at 25° C.; (*b*) The Rochelle Salt Solut.: 173 Gm. of potass. & sod. tartrate & 75 Gm. of potass. hydroxide in distil. W. to measure 500 Cc. at 25° C. Just before use, mix equal volumes of the two solut's.—*Uses:* Test for glucose. 10 Cc. of the mixed solut. correspond to 0.05 Gm. anhydr. glucose, $C_6H_{12}O_6$.—*Caut.* Keep the solutions separately in small, rubber-stoppered bottles.

Fennel.—*U. S. P.*

(Large Fennel; Sweet Fennel).—Dried, nearly ripe fruit of Fœniculum vulgare, Miller (F. capillaceum, Gilibert; F. officinale, All.). Umbelliferæ.—*Habit.:* Southern Europe; Western Asia; widely cultivated.—*Etymol.:* Fr. Lat. "fœnum," hay, *i.e.*, the plant has a hay-like odor. "Capillaceum," fr. Lat. "capillaceus," hairy, *i.e.*, the leaflets are very long & narrow, or hair-like.—*Constit.:* Volat. & fixed oils.—*Uses:* Expector.; Carmin.; Galactag.; Stim.; Stomachic.—*Extern.*, in eye lotions; also used in cookery.—*Dose* 10–60 grains (0.6–4 Gm.).—Fld. extr., 30–60 ♏ (2–4 Cc.).

Fennel Flower.—see **Nigella Damascena**

Fenugreek

Seed of Trigonella Fœnum-Græcum, L. Papilionaceæ.—*Habit.:* Egypt; Asia Minor; France; Germany.—*Etymol.:* "Fœnum Græcum," Greek hay, *i.e.*, in Greece, the plant serves as cattle fodder.—*Constit.:* Volat. & fixed oils; trigonellin; pectin.—*Uses:* Resolvent fomentations.—*Intern.*, in hemorrhoidal affect. Also in veterinary medicine.

Fern Root.—see **Polypody**

Fernambuco.—see **Pernambuco**

Fernambuco Paper.—see **Brazilin Paper**

Ferrated Tartar.—see **Iron & Potassium Tartrate, Ferrous**

Ferratin (17

Pecul. acid albumin with 7% iron.—Fine, reddish-brown powd.; odorl.; tastel.—*Sol.*, dil. alkalies; insol. W. or dil. acids.—Hematinic. Claimed to be an absorbable organic iron compound.—*Uses:* Chlorosis, anemia, &c.—*Dose* 8–25 grains (0.5–1.6 Gm.) daily, in wafers or powd., w. milk or o. liq. food; children, half as much.—*Incomp.*, acids.

Ferratogen (20

Organic iron comp. obt. by growing yeast in a ferrug. medium.—Grayish-yellow powd.—Insol. W. & acids.—Hemat.; Tonic.—*Uses:* Chlorosis, anemia.—*Dose* 5 grains (0.3 Gm.) 3 t. p. d.

Ferreira da Silva's Reagent.—For alkaloids

Solut. ammonium selenite (1) in conc. sulphuric acid (20).—Gives characteristic color-reactions w. many alkaloids, &c.

Ferric Salts.—see under **Iron**

Ferric-Chloride-Antipyrine.—see **Ferropyrine**

Ferripyrine = Ferric-Chloride-Antipyrine.—see **Ferropyrine**

Ferroplatinous Cyanide.—see **Platinum & Iron Cyanide**

Ferropyrine (28

(Ferric-Chloride-Antipyrine Knoll).—64% antipyrine, 12% iron, 24% chlorine.—$(C_{11}H_{12}N_2O)_3$.Fe_2Cl_6.—Red cryst. powd.—*Sol.*, abt. 5 W. at 15° C.; 9 W. at 100° C.; A., B.; insol. E.—*Melt.* 220–225° C.—Styptic; Antisep.; Astring.—*Uses: Intern.*, Anemia, chlorosis, migraine, headache, neural.—*Extern.*, gonor., nosebleed, bleeding following tooth extraction, & hemorrh. fr. vagina; also in otitis med., chron. otorrhea, granulations & polypi in the tympanic cavity, &c.—*Dose* 5–15 grains (0.3–1 Gm.), w. peppermint-oil sugar.—*Appl.* 1–1.5% solut. for gonor.; 20% solut. or pure on tampons for hemorrhages. —*Incomp.*, alkalies, bicarbonates, carbonates.

Ferroso-ferric Oxide.—see **Iron Oxide, Black**

Ferrostyptin

Formaldehyde-iron preparation.—Yellow, cryst. powd.—*Sol.*, eas. W.; insol. cold A., E., acetone. —*Melt.* 111° C.—Hemost., partic. in dentistry.

Ferrous Salts.—see under **Iron**

Fetid Buckeye.—see **Æsculus Glabra**

Fever Bark.—see **Alstonia**

Fever Bush.—see **Lindera; Winterberry**

Feverfew.—see **Parthenium**

Fibrin Merck.—Fr. Blood (8

Yellowish-brown, horny masses; form gelat. solut. w. acid. water.—*Sol.*, dil. acids, w. heat. —*Uses:* Techn.

do. Merck.—Fr. Plants (90

(Gluten; Gluten-fibrin).—By-product of wheat- or corn-starch manuf.—*Constit.:* Gliadin, gluten-fibrin, mucin, & gluten-casein.—Horny, brownish-yellow masses, or yellowish-gray powd.—*Sol.*, hot A.; alkalies, & dil. acids.—Amylolytic; Nutr.—*Uses:* Chiefly techn.—See also Gluten.

Fibrin, Muscle.—see **Myosin; Syntonin**

Fibrin-ferment Merck (250

A proteid body (globulin) occ. in blood serum, chyle, lymph, &c., which caus. coagulation in liquids containing fibrinogen & in exudates, by causing formation of fibrin.—Tough, elastic flakes.—*Sol.*, in dil. solut. (5–10%) sod. chloride.

Fibrinogen Merck (400

Albuminoid subst'c. fr. blood serum which, by the action of fibrin-ferment, is converted into fibrin, & thus causes coagulation.—Yellowish-gray powd.—*Sol.* W., & in solut. sod. chloride.

Fibroin Merck (550

Nitrogenous prin. (albuminoid subst'c.) fr. silk. —$C_{15}H_{23}N_5O_6$.

Fibrolysin (50

(Solut. Thiosinamine & Sodium Salicylate Merck). —$CS(NH_2)NHC_3H_5 + {}^1/_2(C_6H_4[OH]COONa) + aq.$ —Marketed only in sealed tubes each cont. 35 ♏ (2.3 Cc.)—equal to 3 grains (0.2 Gm.) thiosinamine—of a 15% aqu. solut. of the subst'c., & sterilized at 115° C.—Cicatricial Resolvent.—*Uses:* As of thiosinamine, in strictures, ankyloses, lupus, chron. glandular tumors, scleroderma, & removal of cicatricial tissue. Particularly well adapted for hypodermic use, as the injections are painless.—*Dose:* The contents of one tube, every day or every second day. —*Caut.* Solut. unstable if exposed to light & air.

Fig.—*U. S. P.*

Part. dried fruit of Ficus Carica, L. Moraceæ.—*Habit.:* Western Asia; cultivated in sub-tropics, Italy, France, & California.—*Etymol.:* Lat. fr. Celtic "figueren"; Teutonic "feige"; Saxon "fic"; English "fig"; Grk. "syke." "Carica," fr. Lat. name of dried fig, fr. "Caria," in Asia Minor (the habitat).—*Constit.:* Grape sugar (up to 62%); gum; cradin (a peptonizing ferment).—Nutr.; Expector.; Purg.; Emol.; Demulc.—*Uses:* Suppurative poultice for gum-boils, buboes, carbuncles, &c.; in domestic economy as table fruit, & in confectionery.

Figwort.—see **Scrophularia**

Filicic Anhydride.—see **Filicin**

Filicin Merck (250

(Filicic Anhydride).—Fr. rhizome Dryopteris Filix-mas, Schott, or D. marginalis, Gray.—Yellowish powd.; odorl.—*Sol.* C.; partly in E.—*Melt.* 180° C.—No physiological action.

Filix-mas.—see **Aspidium**

Filmaron

Amorph. acid obt. fr. extr. male fern.—Light-brownish yellow powd.—*Sol.*, diffic. cold A., methyl alcoh., benzin; insol. W.; sol. in o. usual solvents.—*Melt.* 60° C.—Teniacide.—*Dose* 8–12 grains (0.5–0.75 Gm.) followed by a cathart.

Filmaron Oil (20

1:10 solut. filmaron in castor oil.—Anthelm.

Fischer's Reagent.—For cobalt

Aqu. solut. potassium nitrite acidulated w. acetic acid.—Gives a yellow ppt. of cobaltic potassium nitrite w. cobalt salts.

Fish Berries.—see **Cocculus Indicus**

Flag, Sweet.—see **Calamus**

Flaxseed.—see **Linseed**

Flea Mint.—see **Pulegium**

Fleabane.—see **Erigeron**

Fleawort.—see **Psyllium**

Flemming's Chromo-Acetic Acid

1 Gm. glac. acetic acid, 2 Gm. chromic acid, & 1000 Cc. W.—*Uses:* Fixing animal and vegetable tissues which are to be subsequently stained w. carmine & hematoxylin.

Flemming's Chromo-Aceto-Osmic Acid

Weak Solut.: 50 Cc. 1% aqu. solut. chromic acid, 20 Cc. 1% acetic acid, 20 Cc. 1% solut. osmic acid, & 110 Cc. W.—Strong Solut.: 30 Cc. 1% aqu. solut. chromic acid, 8 Cc. 2% solut. osmic acid, & 2 Cc. glacial acetic acid.—*Uses:* Fixing animal & vegetable preparations, particularly for observing karyokinetic processes.

Flesch's Chromo-Osmic Acid

0.1 Gm. osmic acid, 0.25 Gm. chromic acid, & 100 Cc. W.—*Uses:* Fixing specimens.

Flores Martis.—see **Iron Chloride, Ferric, Sublimed**

Flowering Spurge.—see **Euphorbia Corollata**

Flowers of Sulphur.—see **Sulphur, Sublimed**

Flowers of Tin.—see **Tin Oxide, Stannic**

Flowers of Zinc.—see **Zinc Oxide**

Fluorene Merck.—Highest Purity (150

(Alphadiphenylenemethane).—Fr. coal tar, or synthetically fr. diphenyleneketone by zinc-dust w. heat. — $C_6H_4.C_6H_4.CH_2$. — Sm., wh. plates; fluorescent, if not pure.—*Sol.*, hot A., benzene, carbon disulphide; v. sol. E.; sl. sol. cold A.—*Melt.* 113° C.—*Boil.* 302° C.

do. Merck.—Commercial (20

Wh. to yellowish cryst.

Fluorescein Merck (15

(Resorcinolphtalein; Diresorcinolphtalein; Tetraoxyphtalophenonanhydride).—Fr. phtalic anhydride, by heat. w. resorcinol to viscidity.—$C_{20}H_{12}O_5+H_2O$, or, $O(C_6H_3.OH)_2$:[1]C.C_6H_4.[2]COO $+H_2O$.—Orange-red, cryst. powd.—*Sol.* E., alkal. solut.; dil. acids, boil. A., &c.—*Decomp.* 290° C.—*Uses:* Diagnos. corneal lesions & impervious strictures of nasal duct. Solut. 10 grains w. 15 grains of sod. bicarb. in 1 oz. W. Also as indicator.—Alkal. solut. red, by transmit. light; fluoresc. bright green.

Fluorescein Paper

(Zellner's Paper).—Paper charged w. a black, substantive, neutral dye, & then impregnated w. a fluorescein solut. and dried.—Exceedingly sensitive reagent for alkalies & ammonia, & particularly for the latter in spring or well waters, & where other alkalies are also present; also for use in dark or strongly colored liquids.

Fluorescein-Sodium.—see **Uranine**

Fluorescin Merck (16

(Resorcinolphtalin).—Fr. fluorescein, by heating w. sod. hydroxide & zinc-dust. — $C_{20}H_{14}O_5$, or, $O:(C_6H_3.OH)_2:CH.C_6H_4.CO_2H$. — Bright-yellow powd.; readily oxidizes to fluorescein.—*Sol.* E. —*Uses:* Dye; diagnos. corneal lesions as fluorescein (1 drop of a 2% solut.).

Fluoroform Water.—see **Fluoroformol**

Fluoroformol (2

(Fluoryl; Fluoroform Water).—Odorl., colorl., alm. tastel. aqu. solut. cont. 2.8% fluoroform, CHF_3.—Intern. Antisep.; Antitubercular; Alter. —*Uses:* Phthisis & tubercular infiltrations, ac. pneum., &c.—*Dose:* Tablespoonful 4–5 t. p. d.

Fluorol=Sodium Fluoride.—see **Sodium Fluoride**

Fluoryl.—see **Fluoroformol**

Flux, Black

Potass. carb. & nitrate w. carbon.—Black powd. —*Uses:* Assaying.

Flux, White

Potass. carb., nitrate, & nitrite; strong oxidizer. —*Uses:* To facilitate the separation of certain fusion products.

Fœniculum.—see **Fennel**

Fœnum-Græcum.—see **Fenugreek**

Formal.—see **Methylal**

Formaldehyde Merck. — Highest Purity, Medicinal (1

(Solution Formaldehyde; Oxymethylene; Formic Aldehyde).—Aqu. solut. formaldehyde gas (fr. oxid'n of methyl alc.) conc. to 35–40% (37%, U. S. P.).—CH_2O, or, H.CO.H.—Clear, colorl. liq.; pung. odor.—*Misc.* W., & A. in all prop. —Sp. Gr. 1.075–1.081 at 25° C. (U. S. P.).—Antisep.; Bactericide; Disinf. — *Uses:* Non-irritat., non-tox., non-corros., surg. & general antisep. (in wounds, abscesses, &c.; for clothing, bed-linen, walls, &c.); preserv. of collyria & anatomical or botanical preparations.—*Appl.*, in vapor or solution. In surgery, 0.25–0.5% solut.; general antisepsis, 0.25–2% solut. or in vapor; for hardening anat. specimens, 4–10% solut.; for disinfec. rooms, utensils, books, clothes, furs, linen, sponges, &c., solut. up to 10%; as inhal. in whoop.-cough, 1% solut.; in eye lotions, 0.05% solut.—Also used as reagent for phenol; in dental techn.; in manuf. aniline dyes, rubber goods, & ink, & sole leather; electrotechnic; glass-making industry; in photography; hardening skin; tanning; &c.—*Incomp.*, ammonia; alkalies; tannin; iron preparations; gelatin; bisulphites; salts of copper, iron, or silver.—*Antid.*, solut. ammon. acetate; ammonia by inhal.; stomach siphon; warm baths.

Formaldehyde Acetale.—see **Methylene Diacetate**

Formaldehyde-Gelatin.—see **Glutol**

Formaldehyde, Para-. } —see **Trioxymethylene**
Formaldehyde, Polymerized. }

Formaldehydeacetamide.—see **Formicin**

Formalin. } = *Solution of Formaldehyde.* — see
Formalith. } **Formaldehyde**

Formaloin Merck (40

Condens. prod. of formaldehyde & aloin. — $CH_2 : C_{17}H_{16}O_7$.—Yellow, amorph., tastel. powd. —*Sol.*, alkalies; diffic. A.; insol. W.—*Uses:* As of aloin.

Formamidated Chloral.—see **Chloralformamide**

Formamide Merck (25

(Methanamide).—Fr. ethyl formate, by NH_3. —CH_3NO, or, $H.CO.NH_2$.—Clear, colorl., oily liq.—Sp. Gr. 1.146 at 19° C.—*Sol.* W., A.—*Boil.* 200–212° C., w. part. decomp.

Forman

(Chlormethylmenthyl-ester). — $C_{10}H_{19}O.CH_2.Cl$. —By act. of formaldehyde on menthol in pres. of HCl gas.—Colorl., oily liq.; fumes sl. in air; decomp. by W. into its constit.—*Sol.*, oils. —*Uses:* Catarrhal affect. of respir. passages, in form of inhal., or by applic. as forman-cotton.

Formanilide Merck (18

(Phenyl Formamide).—React.-prod. of aniline & formic acid.—C_7H_7ON, or, $C_6H_5.NH.CHO$.—Colorl. to yellowish cryst.—*Sol.* W., A.—*Melt.* 46° C.—Analg.; Anesth.; Antipyr.; Hemost.—*Uses: Intern.*, hemor., fever, local pain.—*Extern.* 20% solut. said to produce local anesth. in one hour.—*Dose* 2–4 grains (0.12–0.25 Gm.) several t. p. d. in wafers.—*Inj.* 15 ♏ (1 Cc.) of a 3% solut. in W.—*Appl.* 50% tritur. w. lycopodium; throat affect.; 2–3% solut. in ureth. disch.; 20% solut. as loc. anesth.

Formic Aldehyde.—see **Formaldehyde**

Formicin

(Formaldehydeacetamide).—$CH_3.CO.NH.CH_2.OH$.—Colorl., v. hygroscop. mass, hence marketed only as syrupy, colorl. liq.—*Sol.*, eas. W., A., C.; insol. E.—Sp. Gr. of solut. abt. 1.25.—Antisep.; Disinf.; Bactericide.—*Uses:* Disinf. cavities, as wash in cystitis, tuberc. ulcers, disinf. surg. instruments, as surg. bandages, &c. —*Appl.* 1–2–5% solut.

Formin (3

(Hexamethylenamine Merck; Hexamethylenetetramine).—$(CH_2)_6N_4$.—Wh., cryst. powd.—*Sol.* W.; dif. A.; alm. insol. E.—Sublimable.—Uratolytic & Genito-Urinary Antisep., & Diuret.—*Uses:* Uric-acid diathesis, cystitis, gout, bacterial urinary diseases; prevents development of typhoid cystitis, & destroys infectiousness of typhoid urine.—*Dose* 8–25 grains (0.5–1.5 Gm.) w. much water.—Also marketed in the form of tablets each $7\frac{1}{2}$ grains (0.5 Gm.).

Note.—This pure, crystalline article has long since established a position for itself as the most eligible & elegant form of hexamethylenamine on the market.

Formin Salicylate.—see **Saliformin**

Formol = Solution of Formaldehyde.—see **Formaldehyde**

Formonitrile.—see **Acid Hydrocyanic**

Formopyrine

(Methylenediantipyrine).—$(C_{11}H_{11}N_2O)_2:CH_2$.—By heat. antipyrine w. solut. formaldehyde.—Colorl. cryst.—*Sol.* A.; alm. insol. W.—*Melt.* 176–177° C.—Develops the comb. action of its constituents.

Formyl-phenetidin

(Paraethoxyformanilide).—Fr. phenetidine hydrochl., by formic acid w. anhydr. sodium formate.— $C_9H_{11}NO_2$, or, $C_6H_4(OC_2H_5)NH.COH$. —Colorl. cryst.; odorl.; tastel.—*Sol.* A., E.; hot W.—*Melt.* 60° C.—Antisep.

"Formyl" Tribromide.—see **Bromoform**

"Formyl" Trichloride.—see **Chloroform**

"Formyl" Triiodide.—see **Iodoform**

Fortoin (55

(Methylenedicotoin; Cotoinformaldehyde). — $CH_2(C_{14}H_{11}O_4)_2$.—Yellow cryst. or powd.—*Sol.* C., glacial acetic acid, dil. alkalies, acetone; v. sl. A., E.; insol. W.—*Melt.* 211–213° C.—Antisep.; Astring.—*Uses:* Diar., gonor., purulent condit. of tonsils, &c.—*Dose* 4 grains (0.25 Gm.) as astring. & antisep. 3 t. p. d.—*Appl.*, for painting-on, solut. fortoin 0.5, W. 45, & A. 5; for purul. tonsils, & in gonor., solut. fortoin 1, A. 10, & W. 150.

Fossil Flour.—see **Kieselguhr**

Fox Geranium.—see **Geranium Robertianum**

Fowler's Solution.—see **Solution Potassium Arsenite**

Fragaria

(Wood Strawberry).—Whole plant Fragaria vesca, L. Rosaceæ.—*Habit.:* Europe; natur. in eastern U. S.—*Etymol.:* Lat. "fragare," to emit fragrance, referring to the odor of fruit. —*Constit.:* Tannin.—*Uses:* Slight Astring. (in diar., &c.); surrogate for Chinese tea.—Root also Diuret.

Franciscea.—see **Manaca**

Frangula.—*U. S. P.*

(Buckthorn; Alder [European] Buckthorn; Black [Alder] Dogwood; Berry Alder; Arrow

Wood; Persian Berries).—Dried bark of Rhamnus Frangula, L., Rhamneæ, collected at least one year before being used.—*Habit.:* Europe; Russian Asia (except far north); Mediterranean coast of Africa.—*Etymol.:* Grk. "rhamnos," buckthorn, fr. Celtic "ram," a tuft of branches, *i.e.*, collection of thorns. "Frangula" fr. Lat. "frango," to break, *i.e.*, the stems break readily. —Quilled, abt. 1 Mm. thick; extern., grayish- to blackish-brown; inner surface smooth, pale brownish-yellow; colors saliva yellow when masticated; nearly inodor.; taste sweetish & bitter.—*Constit.:* Frangulin (rhamnoxanthin), $C_{21}H_{20}O_9$, abt. 0.04%; emodin, $C_{15}H_{10}O_5$, abt. 0.1%; frangulic acid, $C_{14}H_8O_4$; isoemodin, $C_{15}H_8O_4$; resin; tannin; coloring matters.—When fresh, Emetic; when old, efficient Purgat., Tonic, & Diuret.—*Uses:* Chronic constip.—*Doses:* 15–120 grains (1–8 Gm.) in powd.—Aqu. extr., 3–10 grains (0.2–0.6 Gm.).—Fld. extr., 30–120 ♏ (2–8 Cc.).

Frankenia

(Yerba Reuma).—Herb of Frankenia grandifolia, Cham. & Schlecht. Frankeniaceæ.—*Habit.:* California.—*Etymol.:* Named for Prof. Johann Franke, of Upsala (d. 1661).—*Constit.:* Astring. principle; salines.—Astring.; Tonic.—*Uses:* Catarrh. affect., leucor., &c.; & as injection.—*Dose:* Fld. extr., 10–20 ♏ (0.6–1.3 Cc.).

Frankincense.—see **Olibanum**

Fraserin (Eclectic) (25

Fr. root Frasera Walteri, Mich. (American Colombo).—Brown powd.—Bitter tonic, Lax. —*Uses:* Domestic medic., & by the Eclectics as appetizer & tonic.—*Dose* 1–3 grains (0.06–0.2 Gm.) in powd. or pill.

Fraude's Reagent.—see **Acid Perchloric**

Fraxinella, White.—see **Dictamnus Albus**

Fraxinus Americana

(White Ash).—Bark of Fraxinus americana, L. Oleaceæ.—*Habit.:* Canada & eastern U. S.—*Etymol.:* Fr. Grk. "phraxo," to split or cleave, *i.e.*, the wood is easily split. "Fraxinus" is the Lat. name for the ash tree.—Emmenag.—*Uses:* Amenorrh., & menstrual derangements. —*Dose:* Fld. extr., 20–40 ♏ (1.3–2.6 Cc.).

Fraxinus Excelsior

(European Ash).—Bark & herb of Fraxinus excelsior, L. Oleaceæ.—*Habit.:* Europe.—*Etymol.:* See preceding.—*Constit.:* Fraxin (paviin) $C_{16}H_{18}O_{10}$; tannin.—*Uses: Bark:* Febrif.; Anthelmin.; Tonic.—*Techn.,* in tanning, & in dyeing brown, blue, & black. — *Herb:* Purgat.; Antirheumat.; Antipodagr. — *Dose: Herb:* As purgat., a decoct. of 4 dr.: 8 fl. oz. (15 Gm.: 250 Cc.) water.

French Turpentine.—see **Turpentine, French**

Frey-Schneider's Acetic-Acid Carmine

Solut. carmine in 45% acetic acid.—*Uses:* For staining & at the same time fixing specimens.

Friar's Balsam.—see **Balsam Traumatic**

Friedländer's Hematoxylin-Alum-Glycerin

Solut. 2 Gm. hematoxylin in 100 Cc. A., mixed w. solut. 2 Gm. alum in 100 Cc. G. & 100 Cc. W. —*Uses:* Rapidly staining cell nuclei.

Friedländer's Picrocarmine

Solut. 1 Gm. carmine, 1 Cc. ammonia, & 50 Cc. water, w. sufficient sat. solut. picric acid added to cause permanent turbidity; then 2 drops carbolic acid added.—*Uses:* As of Ranvier's picrocarmine.

Fringe Tree.—see **Chionanthus**

Fröhde's Reagent.—For alkaloids

Solut. 0.1 Gm. sod. molybdate in 100 Cc. conc. H_2SO_4.—Gives color reactions w. alkaloids.

Frommherz's Reagent.—For glucose

Solut. 41.76 Gm. copper sulphate, 20.88 Gm. potass. bitartrate, & 10.44 Gm. potass. hydroxide in 1000 Cc. W.—Reduced by glucose.

Frostwort.—see **Helianthemum**

Fructose, or *Fruit Sugar.*—see **Levulose**

Fuchsiacine.—see **Fuchsine**

Fuchsine Merck.—Medicinal (10

(Rosaniline & Pararosaniline Monohydrochloride).—Fuchsine prepared without arsenic. —$C_{19}H_{18}N_3Cl.4H_2O + C_{20}H_{20}N_3Cl.4H_2O$.—*Sol.* W. —Antisep.; Antinephr.—*Uses: Intern.,* nephr.; said to reduce anasarca & arrest albumin.—*Dose* $^1/_2$–3 grains (0.03–0.2 Gm.) sev. t. p. d. in pills.—*Caut.* Do not confound w. *Fuchsine, Dye.*

do. Merck.—Dye.—Large or small cryst. (7

(Magenta; Roseine; Aniline Red; Rubine; Azaleine; Solferino; Erythrobenzin; Fuchsiacine; Harmaline; Rubianite).—Mixture pararosaniline & rosaniline hydrochloride or acetate. —By oxid'n of mixture of aniline, orthotoluidine, & paratoluidine. — Green cryst.; glist. like cantharides. — *Sol.* W., A. — *Uses: Techn.,* dyes silk, wool, & leather bluish-red direct; cotton, after mordant. w. tannin & tartar emetic. For staining tubercle bacilli (methylene blue, contrast color).

Fuchsine Paper

(Rosaniline Paper).—Wh. paper impregnated w. an alcoh. solut. of fuchsine and dried.—*Uses:* Detection of sulphurous acid (decolorization). — Paper charged w. a fuchsine solut. acidulated w. sulphuric acid (Kroupa's Paper) is an exceed. sensit. test for amm. (red color).

Fuchsine S.—see **Ruby S**

Fucus

(Bladder-wrack; Sea-wrack; Bladder Fucus; Kelp-ware; Black-tang; Cut-weed; Sea-oak).—Fucus vesiculosus, L. Fucaceæ.—*Habit.:* Atlantic & Pacific Oceans.—*Etymol.:* Fr. Grk. "phykos," fr. "phyein," to grow, the plant is

remarkable for its growth in length. "Vesiculosis," fr. Lat. "vesicula," dim. of "vesica," a vesicle, *i.e.*, a little vesicle, referring to the air blisters found in the frond. — *Constit.:* Mucilage; iodides & bromides; mannit; an odorous oil; cellulose.—Alter.; Antifat.—*Uses:* Scrofula, obesity, bronchocele, &c.—*Doses:* 120 grains (8 Gm.) in decoct.—Fld. extr., 10–30 ♏ (0.6–2 Cc.). — Hydro-alcoh. extr., 1–5 grains (0.06–0.3 Gm.); this extr. contains abt. 0.04% organically combined iodine.

Fumaria

(Fumitory).—Whole plant Fumaria officinalis, L. Fumariaceæ.—*Habit.:* Europe; adv. in U. S. —*Etymol.:* Lat. "fumus," smoke, because the growing plant presents the appearance of rising smoke.—*Constit.:* Fumarine; fumaric acid.—Alter.; Tonic; Diaphor.; Aper.—*Uses:* Skin diseases & scrofulous affect.—*Dose:* Aqu. extr., 10–60 grains (0.6–4 Gm.).—The fld. extr. of F. parviflora is given in doses of 10–30 ♏ (0.6–2 Cc.) in dyspep., hepat. dis., scrof., cancer, & ecz.

Fungus.—see **Agaric; Bedeguar; Elaphomyces; Elder; Polyporus**

Furfural Merck (13

(Furfuraldehyde; Furol; Pyromucic Aldehyde; Furfurol; Furfuranecarboxylic Aldehyde; Artificial Oil of Ants). — Fr. carbohydrates, by distil'n; us'y distil. bran w. sulphuric acid.—$C_5H_4O_2$, or, $(CH)_3OC.COH$.—Colorl., arom. liq.; turns reddish-brown on expos. to light.—Sp. Gr. 1.164 at 15° C.—*Sol.* W.—*Uses:* Chem. —*Caut.* Keep dark.

Furfural Merck.—Reagent (75

(Furfurol).—$C_5H_4O_2$.—Clear, colorl. liq. when fresh; soon acquires a yellow color on expos. to air & light.—*Sol.* 12 cold W.; v. eas. A., E.—Sp. Gr. 1.165–1.166.—*Boil.* 158–160° C.—*Uses:* Detect. sesame oil, urea, alkaloids; used especially in 2% alkal. solut. for determining the sesame-oil content of margarin cheese & margarin butter.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co.; New York. This reagent conforms to the standard therein given.

Furfuramide Merck (160

Fr. furfural by conc. NH_4OH.—$(C_5H_4O)_3N_2$.—Brownish cryst.—*Sol.*, eas. A., E.; insol. W.—*Melt.* 117° C.

Furfuranecarboxylic Aldehyde.—see **Furfural**

Furfurine Merck (340

Deriv. of furfuramide.—$C_{15}H_{12}N_2O_3$.—Yellowish need. Soluts. alkal.—*Sol.* A., E.; sl. in W. —*Melt.* 116° C.—*Caut.* Keep dry & fr. air.

Furfurine Nitrate Merck (340

$C_{15}H_{12}N_2O_3.HNO_3$. — Brownish-yellow cryst.; v. bitter.—*Sol.* A.; sl. W.

Furfurol, or *Furol.*—see **Furfural**

Fusel Oil.—see **Alcohol Amylic**

G

Gaduol (6

(Alcoholic Extract Cod-liver Oil Merck). — Brown, oily liq.; bitter, acrid taste; contains the therapeutic, active prin. of cod-liver oil (iodine, bromine, phosphorus, & alkaloid).—Alter.; Nutrient.—*Uses:* Inst. of cod-liver oil. —*Dose* 5–15 ♏ (0.3–1 Cc.) in wines, elixirs, &c. —Represents abt. 25 times its wt. of prime cod-liver oil.

Gaiacophosphal.—see **Guaiacol Phosphite**

Galactochloral

(Galactochloralose).—Comp. of chloral & galactose.—Lustr. leafl.—*Sol.* A.; insol. W., E.—Hypn.—*Dose* $1^1/_2$–15 grains (0.1–1 Gm.).

Galactose Merck.—Pure (25

(Lactoglucose). — Fr. carbohydrates, usually lactose, by boil. w. dil. acids.—$C_6H_{12}O_6$.—Wh. to yellowish powd.; dextrogyrate.—*Sol.* W.; alm. insol. methyl alc.—*Melt.* 163–164° C.

Galanga

(Galangal; Colic Root; East-India Root; Chinese Ginger). — Rhizome of Alpinia officinarum (Galanga), Hance. Scitamineæ.—*Habit.:* China. —*Etymol.:* Fr. Malabar "kelengu," Arabic "kutlendjan," Malayan "lanquas," by which names the drug is known.—Cylindrical, branched pieces abt. 2 in. (5 Cm.) long & $^3/_5$ in. (15 Mm.) thick; rust-brown color; short, fibrous fract.; yellowish inside; ginger-like odor & taste.—*Constit.:* Volat. oil; acrid resin; kaempferid, $C_{16}H_{12}O_6$; galangin, $C_{15}H_{10}O_5$; alpinin, $C_{17}H_{12}O_6$; galangol. — Aromat.; Stomachic.—*Uses:* As of ginger.—*Doses:* 15–20 grains (1–1.3 Gm.).—Ether. extr. 1–3 grains (0.06–0.2 Gm.).

Galbanum

Gum-resin obt. from Ferula galbaniflua, Boissier & Buhse. (Peucedanum galbanifluum, B.). Umbelliferæ. — *Habit.:* Persia. — *Etymol.:* Fr. Arabic "halab," or Hebrew "khelbenah," milk, *i.e.*, the liquid as it flows from the stem is milk-white.—*Constit.:* Volat. oil; gum; resin. —Stim.; Antirheumat.; Emmen.; Antispasm.; Rubefacient & Resolvent (in plasters).—*Dose* 5–20 grains (0.3–1.3 Gm.) in pill, emuls., or tinct.

Galega

(Goat's Rue).—Whole plant, Galega officinalis, L. Papilionaceæ.—*Habit.:* Mediterranean region to Central Europe.—*Etymol.:* Grk. "gala," milk, & "ago," to bring, referring to the action of the plant. — *Constit.:* Bitter principle; tannin. — Galactagogue; Vermif.; Diuret.—*Uses:* Scanty milk secretion; does not reduce quality of milk. —*Doses:* Aqu. extr., 8–30 grains (0.5–2 Gm.).—Fld. extr., 150 ♏ (10 Cc.) in sweet. W. as galact.

Galeopsis

(Pale-yellow Hemp-nettle).—Whole plant Galeopsis ochroleuca, Lam. Labiatæ.—*Habit.:* Eu-

rope.—*Etymol.:* Grk. "gale," weasel, or cat; & "opsis," face, referring to the shape of the corona.—*Constit.:* Bitter principle; resin; tannin.—*Uses:* Pulmonary affections.

Galipot.—see **Turpentine, French**

Galium

(Cleavers; Goose-grass; Catch-weed; Bedstraw; Cleaverwort).—Whole plant, Galium Aparine, L. Rubiaceæ.—*Habit.:* Europe; natur. in U. S.—*Etymol.:* Grk. "gala," milk, *i.e.*, it curdles milk, & "apairein," to cling to, *i.e.*, the lvs. cling to the clothes.—*Constit.:* Rubichloric acid; galitannic acid; citric acid.—Diuret. (in dropsy); Refrig.; Antiscorbut.; Antipyret.—*Uses:* Skin diseases, & diseases of genito-urin. tract.—*Doses:* 30–60 grains (2–4 Gm.) in powd.—Fld. extr. 30–60 ♏ (2–4 Cc.).

Gall (Hog-) Merck.—Purified, dry (7

Dried, purified bile of Sus Scrofa, L. (the Hog).—Yellowish powd.; contains hyoglycocholic acid, $C_{27}H_{43}NO_5$.—*Sol.* W.—*Uses:* Cholagogue, to promote biliary secretion in jaundice, impaired digestion, & other affections due to insufficient biliary secretion.—*Dose:* 5–10 grains (0.3–0.6 Gm.) several t. p. d.

Gall (Ox-) Merck.—*U. S. P.*—**Purified** (2

Thickened bile of Bos Taurus, L. (the Ox).—Yellowish-green, thick extract; unpleas. odor; disagr., bitter taste; contains chiefly sodium choleate.—Lax.; Digestive; Cholag.—*Uses:* Typhoid fever, jaundice, impaired digestion, deficiency of biliary secretion, &c.—*Dose* 8–25 grains (0.5–1.5 Gm.) sev. t. p. d., in gelatin caps. or pills.

Galla.—see **Nutgall**

Gallal (20

(Aluminum Gallate).—$Al_4(C_7H_2O_5)_3+4H_2O(?)$.—*Sol.*, amm.—Astring.—*Uses:* Where tannin is indicated.

Gallanilide.—see **Gallanol**

Gallanol Merck (25

(Gallic Acid Anilide; Gallanilide; Gallinol).—$C_{13}H_{11}O_4N+2H_2O$, or, $C_6H_5.NH.CO.C_6H_2(OH)_3+2H_2O$.—Brownish cryst. or powd.—*Sol.* A., E.; boiling W.; sl. cold W.; insol. B., C.—*Melt.* 205° C.—Antiseptic; Dermic.—*Uses: Extern.*, psoria., ecz., & o. skin dis. inst. of chrysophanic acid, or pyrogallol; free fr. unpleas. effects.—*Appl.*, in acute or chronic eczema, in 5–20% oint.; in psoriasis, 20% solut. in chloroform or traumaticin; for moist eczema, 25% dusting powd. w. talc.; for favus, prurigo, & trichophytosis, 20% solut. in alcohol with a little ammonia.

Gallein Merck (4

(Pyrogallolphtalein).—$C_{20}H_{10}O_7$.—Brown, extract-like mass.—*Sol.*, warm W.; A.

Gallein Merck.—Reagent (6

(Pyrogallolphtalein).—$C_{20}H_{10}O_7$.—Pale-brown color. matter.—*Uses:* Sensitive indicator (neutral = yellowish-brown; alkalies = rose-red) in form of alcoh. solut.

Gallic-acid Anilide.—see **Gallanol**

Gallic-acid Methyl Ester.—see **Gallicin; Methyl Gallate**

Gallicin Merck (25

(Methyl Gallate; Gallic-acid Methyl Ester).—$C_6H_2COOCH_3.(OH)_3$.—Wh. to grayish-wh. cryst.—*Sol.*, hot W.; A., & E.—*Melt.* 202° C.—*Uses:* Antisep. in ocular diseases like conjunctivitis, acute & chron. follicular catarrh, superficial keratitis, & phlyctenular inflam. of the eyes.—*Appl.*, powd. applied directly w. camel's-hair brush to dis'd parts.—See also Methyl Gallate.

Gallinol.—see **Gallanol**

Gallium Merck (12500

Etymol.: Named in honor of France (Gallium) by its discoverer, Lecoq de Boisbaudran, in 1875.—Metal.—Ga.—Brit., gray, hard, tough, sl'y mall.; greenish-blue reflect.; silver-white, melted.—Sp. Gr. 5.9.—*Melt.* 30.15° C.

Gallobromol Merck (25

(Dibromogallic, or Dibromotrioxybenzoic, Acid).—Fr. gallic acid w. bromine.—$C_7H_4Br_2O_5$, or, $C_6Br_2(OH)_3COOH$.—Light-brown powd.—*Sol.* A., E., boiling W.; 10 W. at 10° C.—*Melt.* 140–150° C.—Sed.; Antisep.; Astring.—*Uses: Intern.*, inst. of potassium bromide.—*Extern.*, cystitis, gonor., gleet, eczema, & o. skin dis.—*Dose* 10–30 grains (0.6–2 Gm.).—*Appl.*, in 1–4% solut., poultice, powder, or paste.

Gallocyanine Violet.—Fat dye

Chloride of dimethylphenylammonium dioxyphenoxazinecarboxylic acid.—$C_{15}H_{13}N_2O_5Cl$.—Greenish-gray paste.—*Sol.* A., E., fats, oils, &c.

Galloformin

$C_6H_2(OH)_2COOH.(CH_2)_6H_4$.—Fr. gallic acid & formin (hexamethylenamine).—Hard, strongly refractive cryst.—*Sol.*, diffic. W., A., E., G.; insol. C., B., olive oil.—Decomposed by heat.—Internal & external antiseptic.

Gallogen (16

(Ellagic Acid?).—$C_{14}H_6O_8$.—Yellowish, odorl., tastel. powd.—*Sol.*, alkalies; insol. acid & neutral media.—Intest. Astring.—*Uses:* Dysent., cholera infant., diar., &c.—*Doses:* Adults, 10–15 grains (0.6–1 Gm.); children, 5–8 grains (0.3–0.5 Gm.).

Galls.—see **Nutgall**

Gambir.—*U. S. P.*

(Pale Catechu; Gambir Catechu; Terra Japonica).—Extract prepared fr. lvs. & twigs of

Ourouparia (Uncaria) Gambier (Hunter), Baillon. Rubiaceæ. —*Habit.:* Southern Asia. —*Etymol.:* "Gambir" is the Malayan name of the plant. "Ourouparia" is the native name, fr. Grk. "oura," a tail, referring to the seed being tailed at each end. "Uncaria," fr. Lat. "uncus," a hook (the articulated peduncles harden & elongate to form strong hooks).—Irreg. masses or cubes abt. 1 in. (25 Mm.) square; extern. reddish-brown; intern. pale brown-gray or cinnamon-brown; dull, earthy fracture; friable, inodor., bitterish, astr., & sweetish.—*Sol.*, sl. in cold W.; alm. compl. sol. in boil. W.; A. dissolves abt. 70%.—*Constit:* Catechin (7.76–19.76%); catechutannic acid (33.3–47.2%); quercetin; gambircatechu red; gum; fixed oil; wax.—Strong Astr.; Mild Tonic.—*Uses: Medic.*, in diarrh., rclax. uvula, spongy gums, pharyngitis, chron. gonor., leucorrh., &c. —*Techn.* in tanning; dyeing fabrics brown & black.—*Dose* 5–30 grains (0.3–2 Gm.) in powd., tinct., pill, &c.

Gamboge.—*U. S. P.*

(Cambogia; Gummi Gutti). — Gum-resin fr. Garcinia Hanburii, Hooker fil. (& G. Morella. Desrousseaux). Guttiferæ. —*Habit.:* East Indies. —*Etymol.:* Fr. "Cambodia," a French protectorate in farther India, where indigenous. "Garcinia," fr. Laurent Garcin, a French botanist (d. 1752). "Gutti," fr. Malay "gutah," Javanese "getah," meaning gum or balsam.—*Constit.:* Resin; cambogic acid; gum.—*Uses:* Drast. Cathart.; Diuret.—*Dose* $^1/_6$–8 grains (0.01–0.5 Gm.) several t. p. d., in pills.—*Max. D.* 8 grains (0.5 Gm.) single; 15 grains (1 Gm.) daily.—*Antid.*, oil; albumen; opium; inj. camphorated oil.

Gamma-Methylquinoline.—see **Lepidine**

Garantose.—Refined (3

(Benzosulphinide Heyden; Saccharin). — 550 times as sweet as sugar.—*Uses, &c.:* As of benzosulphinide.

do.—"Crystal" (3

do.—"Soluble" (3

Garcinia

(Mangosteen; Mangostan; Mangostine). — Rind of the fruit of Garcinia Mangostana, L. Guttiferæ.—*Habit.:* East Indies; cultivated in tropical countries; Malayan Islands, &c. — *Etymol.:* Named for Laurent Garcin, French botanist (d. 1752). "Mangostana" is the Malayan name for the tree.—Rind abt. $^1/_4$ in. (6 Mm.) thick and deep brown; bitter & astring. taste.—*Constit.:* Mangostine, $C_{20}H_{22}O_5$; tannin; resin.—Astring. (in dysentery & leucor.); Febrif.—*Uses: Extern.*, the aqu. solut. of the extr. is used in var. catarrhal condit.—*Doses:* 60–180 grains (4–12 Gm.).—Extr., 1–2 grains (0.06–0.12 Gm.).—Fld. extr., 15–60 ♏ (1–4 Cc.).—Tinct., 15–90 ♏ (1–6 Cc.).

Garget.—see **Phytolacca**

Garlic.—see **Allium**

Gaultheria

(Wintergreen; Checkerberry; Deerberry; Boxberry; Teaberry).—Lvs. of Gaultheria procumbens, L. Ericaceæ.—*Habit.:* Canada & northeastern U. S.—*Etymol.:* Named for Dr. Gaulthier, of Quebec. "Procumbens," fr. Lat. "pro," forward, & "cumbere," to lie down, *i.e.*, the stem has a creeping habit.—*Constit.:* Volat. oil (0.5%; methyl salicylate); arbutin; ericolin; urson; resins; tannin.—Antipyr.; Antirheum.; Astring.—*Uses:* Rheum., diar., gout, & febrile condit.—*Dose:* Fld. extr. 30–60 ♏ (2–4 Cc.).

Gedölst's Picrocarmine-Sodium

Aqu. solut. sodium picrocarminate prepared according to a special process.—Said to possess certain advantages over the ammonium compound as a stain for microscopic objects (sections of central nervous system).

Geissler-Oliver Papers. —see **Citro-Picric Acid Paper; Citro-Potassium Ferrocyanide Paper; Citro-Potassium Mercuric Iodide Paper; Citro-Sodium Tungstate Paper; Indigo-Carmine & Sodium-Carbonate Papers**

Geissospermine

Alkaloid fr. bark Geissospermum Vellosii, Alem. —$C_{19}H_{24}N_2O_2+H_2O$.—Sm., wh. prisms.—*Sol.*, dil. acids; sl. in E.—*Melt.* 160° C.—Antiper.; Tonic.—*Uses:* Chiefly in intermit. fever.—*Dose* 8–30 grains (0.5–2 Gm.) abt. 4 hrs. before expected paroxysm.

Geissospermum Vellosii.—see **Pao-Pereira**

Geita.—see **Monsonia**

Gelanthum (1

Acc. to Unna an ideal water-soluble vehicle for the application of dermics. Said to form a smooth, homogeneous covering without tendency to stickiness; not to stain the skin or linen; to readily take up 50% ichthyol, 40% salicylic acid, resorcinol, or pyrogallol; 5% carbolic acid, & 1% mercuric chloride; to keep insoluble drugs well suspended.—*N. B.:* This preparation is prone to spoil.

Gelatin

V. pure glue.—Amorph., brittle, transp., tastel. —*Sol.* W.—*Uses:* In 1–2% sterilized solut. subcut. as efficient hemostat. (see also Gelatin, Sterilized).—*Intern.*, also in 2–20% aqu. solut. as efficient hemostat. in gastric & intest. hemorrhages, uterine hemorrhage, intrauterine inject., & tampons w. gelatin gauze; in metrorrhagia, brush appl. w. 5–25% solut.; also as wash in melena neonatorum. The gelat. solut. must be sterilized before use, & warmed up to 37–38° C.—*Techn.*, in bacteriology for preparing cultures.—*Incomp.*, tannin & formaldehyde.

do. Merck.—Sterilized solution, for injection (20

10% solut. gelat. intended specially for subcut. inject., & prepared fr. fresh calves' feet under special, aseptic precautions; it is very carefully

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

sterilized so that danger of a tetanus infection is absolutely excluded.—Efficient Hemostatic. —*Dose:* In epistaxis, 20–30 Cc. solut. cont. 2% gelatin & warmed to blood heat, injected into the nasal cavity; in aneurism, for checking cholemic hemorrhages, in hemorrhagic variola, &c., 200 Cc. 2% solut. inject. subcut. in lumbar region.—*Extern.*, as wash to check bleeding fr. leech bites, & fr. surface wounds of hemophilic subjects.

Gelatin Dibromotannate.—see **Bromocoll**

Gelatose-Silver.—see **Albargin**

Gelsemin Merck.—Resinoid (50

Fr. rhizome & root Gelsemium sempervirens, Persoon.—Yellowish-brown powd.—*Sol.* A.—Antipyr.; Analg.; Anod.; Cardiac Depress.; Hypn.—*Uses:* Fevers, dysent., rheum., dysmenor., delir. trem., neural., epilepsy, toothache, chorea, &c.—*Dose* $^1/_8$–2 grains (0.008–0.12 Gm.) several t. p. d.

Gelseminine Merck.—Alkaloid (1425

Fr. rhizome & root Gelsemium sempervirens, Persoon.—$C_{22}H_{28}N_2O_3$.—Sm., wh., micros. cryst. —*Sol.* A., E., C.; insol. W.—*Melt.* 158–160° C., after previous softening.—Antineural.; Antispasm.—*Uses:* Neural., rheum., dysmenor., &c.; also antid. to strychnine.—*Dose* $^1/_{120}$–$^1/_{30}$ grain (0.0005–0.002 Gm.).—*Max. D.* $^1/_{30}$ grain (0.002 Gm.) single; $^1/_6$ grain (0.01 Gm.) p. day. —*Antid.*, emetics early, atropine, strophanthin, artif'l respir., extern. stimulation.—*Caut.* Poison!

Gelseminine Hydrobromide Merck (1425

Wh. cryst.—*Sol.* W., A.—*Uses & Doses:* As of gelseminine.

Gelseminine Hydrochloride Merck.—Cryst. (1425

Wh., cryst. powd.—*Sol.* W.; sl. in A.—*Uses:* As of gelseminine.

do. Merck.—Amorph. (1425

Salt of a second alkaloid found in Gelsemium. —Yellowish, v. hygros. powd.—*Sol.* W., A.—Clinical data lacking.

Gelseminine Nitrate Merck (1425

Wh., cryst. powd.—*Sol.* W., A.

Gelseminine Salicylate Merck (1425

Wh., cryst. powd.—*Sol.* W., A.

Gelseminine Sulphate Merck (1425

Wh. powd.—*Sol.* W., A.

Gelseminine Tartrate Merck (1425

Wh., cryst. powd.—*Sol.* W., A.—*Uses, Doses, Antidotes, &c.:* As of gelseminine.

Gelsemium.—*U. S. P.*

(Yellow Jasmine; Wild Woodbine; Carolina Jasmine or Jessamine).—Dried rhizome & roots of Gelsemium sempervirens (L.), Aiton fil. Loganiaceæ.—*Habit.:* Southern U. S.—*Etymol.:* "Gelsemium" is the ancient name for jasmine, derived fr. the Arabic "jasmin." "Sempervirens," fr. Lat. "semper," always, & "virens," to be green, *i.e.*, referring to the evergreen lvs. —*Constit.:* Gelsemin; gelseminine; gelsemic (gelseminic) acid; volat. oil; resin.—Antineural.; Antiperiod.; Sedative; Mydriatic; Antispasm.—*Uses:* Neural., coryza, dysuria, hyster., dysmenor., whoop.-cough, asthma, malar. & yellow fevers, pneum., pleurisy, dysent., toothache, delir. tremens, rheumat., &c.—*Doses:* 2–10 grains (0.12–0.6 Gm.).—Alcoh. extr., $^1/_4$–$^1/_2$ grain (0.015–0.03 Gm.).—Fld. extr., 2–5 ♏ (0.12–0.3 Cc.).—Tinct., 2–15 ♏ (0.12–1 Cc.). —*Antid.*, cardiac & diffusible stimul'ts; tannin; evacuants; atropine; external heat & friction; morphine; mustard bath; artif. respir.; electricity; emetics; stomach siphon.

Genista

(Broom; Dyer's Broom; Dye-weed; Greenweed).—Whole plant Genista tinctoria, L. Papilionaceæ.—*Habit.:* Europe; northern Asia; natur. in U. S.—*Etymol.:* Lat. "genu," knee, because of the pliability of the stem.—*Constit.:* Tannin.—*Uses:* In hemorrhoids; affections of spleen & liver; in dropsy, as diuret. in cardiac affect., & Bright's disease.—*Dose:* Fld. extr., 2–5 fl. dr. (8–20 Cc.) per day in divided doses; extern. as appl. (by brush) in erysipelas.

Gentian.—*U. S. P.*

(Gentiana; Yellow [or Pale] Gentian; Bitter Root).—Dried rhizome & roots of Gentiana lutea, L. Gentianaceæ.—*Habit.:* Central & southern Europe.—*Etymol.:* Grk. "gentiane," after Gentius, king of Illyria, who first discovered its virtues, & employed it. Lat. "luteus," golden-yellow, referring to the color of the flowers.—*Constit.:* Gentisin (gentianin; gentisic acid), $C_{14}H_{10}O_5$; gentiopicrin, $C_{20}H_{30}O_{12}$; gentianose; pectin.—Bitter Tonic; Laxat.; Antiperiod.—*Uses:* Dyspep., anorex., amenor., atonic gout, &c.—*Techn.*, in manuf. of liqueurs, & as pill excip.—*Doses:* 5–30 grains (0.3–2 Gm.).—Aqu. extr., 2–6 grains (0.12–0.36 Gm.).—Fld. extr., 10–30 ♏ (0.6–2 Cc.).—Comp. tinct., 1–2 fl. dr. (4–8 Cc.).—Tinct., 1–2 fl. dr. (4–8 Cc.).

Gentian Blue 6 B Merck (15

Hydrochloride, sulphate, or acetate of triphenylrosaniline & triphenylpararosaniline.—Grayish-green to bluish-violet powd.—*Sol.* A.; insol. W. —*Uses:* Adapted for coloring paper & spirit lacquers, &c.

Gentian Violet B Merck (7

Commercial grade of Methyl Violet (which see). —*Uses:* Staining bacteria (Weigert's, Simon's, &c. solut.).

Gentian Violet B B B

(Paris Violet; Direct Violet; Dahlia).—Hydrochlor. of penta- & hexa-methylpararosaniline. —By oxid'n dimethylaniline w. cupric chloride. —$C_{24}H_{28}N_3Cl$, or, $(C_6H_4.N.[CH_3]_2)_2C.C_6H_4.N.CH_3.HCl$.—Green powd.; metal. luster.—*Sol.* A.,

amyl. A., & W.—*Uses:* Dye silk & wool direct, & cotton mord. w. tannin & tartar emetic. Also in Weigert's & Simon's stains for bacteria.

Gentian Violet B R Merck (7

Commercial grade of Gentian Blue (which see).

Gentian, White.—see **Laserpitium**

Gentiana Cruciata

Whole plant, Gentiana cruciata. Gentianaceæ. —*Habit.:* Mountainous woods of central Europe. —*Etymol.*. Fr. Gentius, king of Illyria (500 B. C.), who recommended the plant as a remedy for the plague.—*Constit.:* Bitter principle. Bitter tonic; Aper.

Gentianin Merck (12

(Crude Gentianic Acid; Crude Gentisin).—Crude, bitter prin. fr. root Gentiana lutea, L.—Dark, brownish extr.—*Sol.* A.—Tonic.—*Uses:* Dyspepsia, hysteria, debil., &c. — *Dose* 5–15 grains (0.3–1 Gm.) several t. p. d.

Gentisin, Crude.—see **Gentianin**

Gentisin Merck (3000

(Gentianic Acid; Gentianin).—Coloring matter root Gentiana lutea, L.—$C_{13}H_5O_2(OH)_2OCH_3$.—Pale-yellow powd.—*Sol.* A.; sl. E. & W.; alkalies. —*Subl.*, partly at 300–340° C.—*Melt.* 267° C.

Geoform.—see **Methylenediguaiacol**

Georgina Paper.—see **Dahlia Paper**

Geosote.—see **Guaiacol Valerate**

Geraniin (Eclectic) (15

Fr. rhizome Geranium maculatum, L.—Dark-brown powd.—*Sol.* A.—Astring.—*Uses:* Diar., dysent., & cholera inf.—*Dose* 1–3 grains (0.06–0.2 Gm.).

Geranium.—*U. S. P.*

(Cranesbill; Storksbill; Alum Root).—Dried rhizome of Geranium maculatum, L. Geraniaceæ.—*Habit.:* Canada & eastern U. S., south to Georgia.—*Etymol.:* Grk. "geranos," crane, referring to the long beak of the seed capsule, which resembles a crane's hill. Lat. "macula," spot, *i.e.*, the lvs. acquire whitish spots with age. —*Constit.:* Tannin; gallic acid; red coloring matter; sugar; pectin.—Astring.; Stypt.—*Uses:* Particularly useful in renal & intestinal hemorrhages; cholera infantum, diar., prolapsus, &c. —*Extern.*, in epistax., ulcers, hemorrhages, cracked nipples, gleet, leucor., & relaxed muc. membr.—*Techn.*, in tanning.—*Doses:* 15–60 grains (1–4 Gm.).—Extr., 5–10 grains (0.3–0.6 Gm.).—Fld. extr., 15–30 ♏ (1–2 Cc.).—Tinct., 30–60 ♏ (2–4 Cc.).

Geranium, Blood-.—see **Sanguinaria Herb**

Geranium Robertianum

(Herb Robert; Fox Geranium; Mountain Geranium).—Whole plant Geranium Robertianum, L. Geraniaceæ.—*Habit.:* Europe.—*Etymol.:* Grk. "geranos," crane, referring to the long beak of the seed capsule, which resembles a crane's bill; "Robertianum," fr. the French botanist, Robert (1701).—Astring.; Styptic. —*Uses:* Gargle in angina (in 15–30 : 500 decoct.).

Germander.—see **Chamædrys; Teucrium**

Germander, Water.—see **Scordium**

Germanium Merck.—Fused

Etymol.: Name given the element discovered by Clem. Winkler in 1886 in argyrodite.—Metal.—Ge.—Grayish-white, lustr., v. brittle.—Sp. Gr. 5.469 at 20° C.—*Melt.*, abt. 900° C.

do. Merck.—Powder

Dark-gray powder.

Germanium Oxide Merck (250000

(Germanium Dioxide; Germanic Acid).—GeO_2. —Wh. powd.—*Sol.*, hot W. & alkalies; sl. cold W. & acids.

Germanium & Potassium Fluoride Merck

K_2GeF_6.—Wh. cryst.—*Sol.*, quite eas. in boil. W.; sl. cold W.; insol. A.

Geum

(Avens; European Avens; Radix Caryophyllata). —Root of Geum urbanum, L. Rosaceæ.—*Habit.:* Europe.—*Etymol.*: Grk. "ge," earth, referring to the habit of the root to run deeply into the earth. "Caryophyllata" refers to the faint, clove-like odor which the roots give off on being rubbed.—*Constit.:* Volat. oil; bitter subst'ce; resin; tannin.—Astring.; Tonic; Stoma. —*Dose* 20–60 grains (1.3–4 Gm.).

Gillenia

(American Ipecac; Indian Physic).—Root of Gillenia trifoliata, Moench. Rosaceæ.—*Habit.:* Canada to Florida.—*Constit .:* Gillenin; gum-resin; wax; red coloring matter; volat. coloring matter.—Tonic; Expector.; Emetic.—*Uses:* Coughs & colds, & as emetic.—*Doses:* Fld. extr., 3–8 ♏ (0.2–0.5 Cc.) expector.; 20–30 ♏ (1.3–2 Cc.) mild emetic.

Gillenin (Eclectic)

Fr. root Gillenia trifoliata, Moench (Indian Physic).—Brown powd.—*Sol.* A.—Emetic; Cath.; Tonic; Expector.—*Uses:* Inst. of ipecac. —*Dose* 4–6 grains (0.25–0.36 Gm.).

Ginger.—*U. S. P.*

Dried rhizome of Zingiber officinale, Roscoe. Zingiberaceæ.—*Habit.:* Southern Asia; West Indies; Africa; cult. in all tropical countries.—*Etymol.:* Grk. "zingiberis," Arabic "zindschebil," root of zindschi (India), known already to the ancients. Derived fr. Sanscrit "gringavera," fr. "gringa," horn, & "vera," body, *i.e.*, the roots are horn-shaped.—*Constit.:* Volat. oil; acrid resin; gingerol.—Rubefac.; Stomachic; Digestive (in flatulence & digestive troubles); Carminat.; Stim.; Sternut.; Sialag.;

Corrigent.—*Uses: Extern.*, anodyne in colic, rheumat., neuralgia, toothache, &c.—*Techn.*, in manuf. ginger beer, in cookery, &c.—*Doses:* 5–20 grains (0.3–1.3 Gm.).—Fld. extr., 5–20 ♏ (0.3–1.3 Cc.).—Tinct., 15–60 ♏ (1-4 Cc.).

Ginger; Canada, or *Indian.*—see **Asarum Canadense**

Ginseng

(Panax; American Ginseng).—Root of Panax quinquefolium, L. Araliaceæ.—*Habit.:* North America.—*Etymol.:* Chinese "gin-seng," man-root, *i.e.*, the root has a shape resembling that of a man.—*Constit.*. Volat. oil; resin; panacin; panaquilon; sugar; mucilage.—Stim.; Tonic; Nervine; Aphrodisiac.—*Uses:* By the Chinese as a panacea for every variety of disease.—*Dose* 30–120 grains (2–8 Gm.).

Gladiolus

(Sword Lily; Round Mandrake; Sword Grass; Corn Flag).—Root of Gladiolus communis, L. Irideæ.—*Habit.:* Europe.—*Etymol.:* "Gladiolus," the dim. of Lat. "gladius," a sword, *i. e.*, a little sword, referring to the sword-shaped lvs.—*Uses:* Vulnerary; Antiscrof.

Glandes Quercus.—see **Acorn**

Glass, Soluble.—see **Potassium Silicate; Sodium Silicate**

Glass-wool Merck (20

(Slag Wool).—Wh., silky threads fr. readily fusible glass.—*Uses:* For filter. or strain. strong acids & alkalies.

Glass-wool Merck.—Reagent

Specially prepared for analytical work.

Glauber's Salt.—see **Sodium Sulphate**

Glaucium

(Horn Poppy; Horned Yellow Poppy).—Herb of Glaucium luteum, Scopoli.—*Habit.:* Europe; natur. in U. S.—*Etymol.:* Fr. Grk. "glaukos," sea-green, referring to the color of the foliage. Lat. "luteus," yellow, *i.e.*, the flowers are yellow.—*Constit.:* Sanguinarine; glaucine.—*Uses:* Anti-diab.—*Dose:* Fld. extr. 60 ♏ (4 Cc.) morn. & eve.

Glechoma

(Ground Ivy; Field Balm; Cat's-foot).—Whole plant Glechoma hederacea, L. Labiatæ.—*Habit.:* Europe; widely natur. in U. S.—*Etymol.:* Fr. "glechon," the Grk. name for pennyroyal; & Grk. "hedra," seat, referring to the strength with which it adheres to walls.—*Constit.:* Bitter principle; resin; tannin; volat. oil.—Febrif.—*Uses: Extern.*, as vulnerary.

Globularetin Merck (4500

C_9H_6O.—Cleavage product of globularin.—Brownish-yellow powd.—Diuret. & Purg.

Globularin Merck (3000

$C_{15}H_{20}O_8$.—Glucoside fr. lvs. Globularia Alypum, L., & G. vulgaris, L.—Brownish-yellow powd.—Acts like caffeine on the heart & nervous system. $^1/_5$ grain (0.012 Gm.) globularin, w. $^3/_{10}$ grain (0.018 Gm.) globularetin, in alc. solution, is given twice daily in rheumat., gout, typhoid, & uremia of Bright's disease. The French "Teinture prasoïde" consists of globularin 0.5 Gm., globularetin 0.7 Gm., 60% alcohol 20 Gm.; *dose*, 8–20 drops twice daily.

Globulin Merck (350

(Crystallin).—Albumin fr. egg-yolks; (also fr. crystalline lens of eye).—Yellowish powd.—*Sol.* W., alkal.

Globulin (Para-) Merck (500

(Serum-globulin; Serum-casein).—Albuminoid fr. blood serum or lymph.—Wh., or yellowish-white powd.—*Sol.*, v. dil. alkal.; v. dil. NaCl solut.

Globulin, Serum-.—see **Globulin (Para-)**

Glucinum.—see **Beryllium**

Glucose.—see **Dextrose**

Glue, Animal.—see **Glutin (Animal)**

Gluside. } —see **Benzosulphinide; Garantose; Saccharin**
Glusidum. }

Gluten.—see **Fibrin, from Plants**

Gluten, Alcohol-insoluble.—see **Albumin, from Plants**

Glutin (Animal) Merck.—Technical (5

(Animal Glue).—Fr. decalcified bones of vertebrate animals.—Yellowish scales.—*Sol.*, boil. W.; insol. A. & E.—*Uses:* As adhesive instead of ordinary glue.

Glutin-Peptone-Sublimate Hydrochloride.—Solution (10

(Mercury Peptonate, Paal).—Prepared according to German patents Nos. 54587 & 54747.—Yellow liq.; contains 1% $HgCl_2$; consists of a double-salt of mercuric chloride & glutin-peptone hydrochloride. — *Sol.* W. — *Uses:* Adapted for hypoderm. inject. in syphilis.—*Dose:* 1 Cc. of solut. (=0.01 Gm. $HgCl_2$) by inject.; 20 inject. are, on an average, required for successful treatment.

Glutoform.—see **Glutol**

Glutol Schleich (13

(Glutoform; Formaldehyde-Gelatin). — Compound of formaldehyde & gelatin.—Wh. to yellowish powd.—*Uses:* In surgical treatment of open wounds. The powd. is best simply applied to the sewn or torn wounds.

Glycerides.—see **Glycerites**

Glycerin Merck.—Highest Purity—Sp. Gr. 1.25= 30° Bé. (1

(Glycerine; Glycerol; Glycyl, or Propenyl, Alcohol).—Not less than 95% abs. glycerin.—$C_3H_8O_3$, or, $C_3H_5(OH)_3$.—Clear, colorl., syrupy liq.; sweet & warm taste.—*Sol.* W., A.—*Boil.*, abt. 165° C.—*Uses: Intern.*, inst. of sugar or syrup in mixt., or for diabetics.—*Extern.*, emollient; & as laxat., in form of supposit., ea.

containing 30 grains (2 Gm.), in obstin. constip. —*Techn.*, solvent for substances, but slightly sol. in water; also manuf. of glycerolates, & cosmetic prep's, &c.—*Dose* 1–4 dr. (4–15 Cc.).

Note.—This glycerin is especially suitable for pharmaceutical & medicinal uses, as it is free from foreign fats, arsenic, & acids.

Glycerin.—Sp. Gr. 1.265=30¼° Bé., crude (1

96% pure glycerin.—*Uses:* Techn., nitro-glycerin, wine & beer manuf., lubricants, preserving, keeping substances pliable, manuf. elastic glues, lead-oxide cement, & in gas meters.

Glycerin Merck.—Reagent.—Sp. Gr. 1.250 (1

$C_3H_8O_3$.—Clear, colorl., odorl., neutr. liq.—Sp. Gr. not less than 1.250.—At least 95% absolute glycerin.—*Misc.*, all prop. W. & A.—*Tests:* As under Glycerin, Reagent, Sp. Gr. 1.23, & the following in addition: (*Ca*) 5 Cc.+25 Cc. H_2O+ solut. $(NH_4)_2C_2O_4$–no reaction.—(*Sugars*) 5 Cc. +50 Cc. H_2O+few drops HCl; heat 30 min. on W.-bath. To 10 Cc. of hot liquid add NaOH to alkalinity & 1 Cc. Fehling's solut.–no yellowish-red turb. or ppt. within 6 hrs.—(*Readily Carbonizable Matter*) 5 Cc.+5 Cc. conc. H_2SO_4–not more than yellow color on standing 1 hr.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

do. Merck.—Reagent.—Twice distilled.—Sp. Gr. 1.23 (1

$C_3H_8O_3$.—Clear, colorl., odorl. liq.—*Misc.*, all prop. W., A.; insol. E., C.—Sp. Gr. 1.225–1.235. —*Tests:* (*As*) 1 Cc.+3 Cc. solut. $SnCl_2$–no dark color within 1 hr.—(*Free Acids & Bases*) 10 Cc. +50 Cc. H_2O–no action on red or blue litmus. —(*Inorgan. Impur.*) heat 5 Cc. in open dish to boil.; ignite gases evolv.–glyc. should compl. burn up, & leave only dark deposit which should disappear on strong heat.—(*Impur. Reducing Ammon. $AgNO_3$*) heat 1 Cc.+1 Cc. NH_4OH (sp. gr. 0.96) on W.-bath to 60° C.; add 3 drops solut. $AgNO_3$–no color or brownish-black ppt. within 5 min.—(*NH_4 Comp.; Organ. Impur.*) heat 1 Cc. +1 Cc. solut NaOH–no NH_3 vapors (detect. w. moist. litmus paper), & no odor like that afford. by glue.—(*Fatty Acids*) gently warm 1 Cc.+ 1 Cc. dil. H_2SO_4–no unpleas., rancid odor.—(*HCl; Cl*) 5 Cc.+25 Cc. H_2O+solut. $AgNO_3$– at most sl. opalesc. turb.—(*H_2SO_4; $H_2C_2O_4$*) 5 Cc.+25 Cc. H_2O+solut. $BaCl_2$ & $CaCl_2$–no turb.—(*Heavy Met.*) 5 Cc.+25 Cc. H_2O+aqu. H_2S–no react.—*Uses:* In various reagents for dextrose; determ. boric acid, testing creosote, &c.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Glycerin Dichlorhydrin.—see **Dichlorhydrin, Alpha-**

Glycerin Tributyryl.—see **Butyrin**

Glycerite Aluminum Acetate.—see **Aluminum Acetoglycerinate**

Glycerite Bismuth.—*N. F.*

Glycerinic solut. cont. abt. 25% Bism. & Sod. Tartr.

Glycerite Boric Acid.—see **Boroglycerin**

Glycerite Boroglycerin.—*U. S. P.*

(Solution of Boroglyceride; Glycerite of Glyceryl Borate).—31% boric acid in glycerin.—Thick, sweet, colorl. liq.—*Sol.* W.—Antisep.—*Uses: Extern.*, injured & diseased surf.

Glycerite Carbolic Acid.—see **Glycerite Phenol**

Glycerite Egg Yolk

(Glyconin).—Mixt. of 55% glycerin & 45% fresh yolk of egg.—Thick syrup; forms an opaque emulsion with W.—Protective; Emulsifier.—*Uses:* Vehicle for cod-liver oil, &, as application to burns, fissured nipples & in erysipelas.

Glycerite Gallic Acid

Glycerin (80), gallic acid (20).—Antiseptic; Astring.—*Uses:* Skin dis., night sw., pyrosis, albumin., & hemat.—*Dose* 20–60 ♏ (1.3–4 Cc.).

Glycerite Guaiac.—*N. F.*

By macerating 85 Gm. guaiac in 65 Cc. solut. KOH & W., adding 600 Cc. G., & W. to make 1000 Cc.

Glycerite Hydrastis.—*U. S. P.*

(Fluid Hydrastis).—Fr. hydrastis (1000) by exhaust. w. alc., evaporating, mixing residue w. cold W. (500), filtering, & adding glycerin (500) & W. (to make 1000).—Antisep.; Alter.; Tonic.—*Uses: Extern.*, inflam. genito-urin. org.

Glycerite Iron Quinine & Strychnine Phosphates.—*U. S. P.*

Solut. of solub. ferric phosph. (80), quinine (104), strychnine (0.8), phosph. acid (200), glycerin (500), & water (to make 1000).—Ferruginous tonic.—*Dose* 15 ♏ (1 Cc.).

Glycerite Pepsin.—*N. F.*

Fr. pepsin 85 Gm., HCl 10 Cc., G. 500 Cc., & W. to make 1000 Cc.

Glycerite Phenol.—*U. S. P.*

(Glycerite Acid Carbolic).—Glycerin (80) with liquef. phenol (20).—*Sol.* W., A.—Antisep.—*Uses:* Dil., intern. & extern. antisep. in diphth., aphthæ, wounds, bruises, burns, leucor., pruritus, gonor., &c. For extern. use reduce with 3–5 vols. W.—*Dose* 5–20 ♏ (0.3–1.3 Cc.), w. W.

Glycerite Starch.—*U. S. P.*

(Plasma).—10% starch & 10% W. w. 80% glycerin.—Translucent jelly.—*Uses:* Inst. of oint., excipient, &c.

Glycerite Sulphurous Acid

Sulphur dioxide in glycerin.—Colorl., syrupy liq.—*Sol.* W. & A.—Antisep.—*Uses: Extern.*, skin dis., sore mouth, tonsil., &c.

Glycerite Tannic Acid.—*U. S. P.*

(Glycerite of Tannin).—Glycerin (80), tannic acid (20).—Brown, syrupy liq.—*Sol.* W., A.—Antisep.; Astring.—*Uses:* Skin dis., fissured nipples, inflam. of genito-urin. org., erysipelas, ulc., & sores.—*Dose* 20–60 ♏ (1.3–4 Cc.), dil.

Glycerite Tar.—*N. F.*

Tar, 63 Gm.; glycerin, 250 Cc.; alcohol, 125 Cc., & W. to make 1000 Cc.—Dark-brown liq.; odor & taste of tar.—*Sol.* W., A.—Antisep.; Expector.—*Uses: Intern.*, for sore throat, colds, coughs, &c.—*Extern.*, ulcers, sores, & skin dis.—*Dose* 60–120 ♏ (4–8 Cc.).

Glycerite Tragacanth.—*N. F.*

Powd. tragac. 125 Gm., G. 775 Cc. & W. 185 Cc.

Glycerol.—see **Glycerin**

Glycerolates.—see **Glycerites**

Glyceryl Borate.—see **Boroglycerin**

Glycin.—see **Glycocoll**

Glycocoll Merck (75

(Aminoacetic Acid; Glycin).—$C_2H_5NO_2$, or, $CH_2(NH_2)COOH$.—Wh. cryst.—*Sol.* W.—*Melt.* 232–236° C.

Glycocoll Hydrochloride Merck (75

$C_2H_5NO_2.HCl$, or, $CH_2(NH_2)COOH.HCl$.—Acid, deliq. cryst.; astring.—*Sol.* W.; sl. in A.

Glycocollphenetidine.—see **Phenocoll**

Glycogen Merck (800

Constituent of normally functionating liver of the human being & of ruminants.—$6(C_6H_{10}O_5) + H_2O$ (Külz & Bornträger).—Yellowish-wh. powd.—*Sol.* W. Solut. dextrogyrate.

Glycogenal Rörig-Merck (75

Substance allied to glycogen.—Yellowish powd.—*Sol.* W.; insol. A. & E.—Tonic & Bacteric.—*Uses:* Recommended in combination w. tuberculin injections in tuberculosis, & also in inoperable carcinoma, purulent ear discharge, gum boils, typhoid, puerperal fever, caries, scarlet fever, Basedow's disease, & coma of diabetes.—*Doses: Intern.*, 5–8 grains (0.3–0.5 Gm.), twice da ly; *subcut.*, $^2/_3$ grain (0.04 Gm.) dissolved in W. Per clysma, a mixt. of glycogenal 30 grains (2 Gm.), ammonium carbonate 8 grains (0.5 Gm.), & water 13 fl. dr. (50 Gm.); also in supposit. ea. contain. 5 grains (0.3 Gm.).

Glycol.—see **Ethyleneglycol**

Glycol Chlorhydrin.—see **Ethylene Chlorhydrin**

Glycol-monacetin.—see **Ethylene Monacetate**

Glycoluril.—see **Acetylene-urea**

Glyconin.—see **Glycerite Egg Yolk**

Glycophenol.—see **Benzosulphinide; Saccharin**

Glycosal (25

(Monosalicylic-acid Glycerin Ester Merck).—$C_6H_4OH.COO.C_3H_5(OH)_2$.—Wh , cryst. powd.—*Sol.* 100 W., eas. hot W., & A.; sl. E., C.—*Melt.* 76° C.—Antisep.; Antirheum.—*Uses:* Rheum., cystitis, &c., like salicylic acid; said to be free fr. by-effects of o. salicylates.—*Dose* 150–180 grains (10–12 Gm.) & upwards p. d.—*Appl.* 20% alcoh. solut. in artic. rheumat. & serous gonitis.—Glycosal also eligible for rectal admin.

Glycosalicylic Aldehyde.—see **Helicin**

Glycosamine Hydrochloride Merck.—Cryst. (500

Decomp. product of chitin, by HCl w. heat.—$C_6H_{13}NO_5.HCl$.—Wh., cryst. powd.; reduces Fehling's solut.; not fermentable.—*Sol.* W.

Glycosine.—see **Benzosulphinide; Saccharin**

Glycyrrhiza.—*U. S. P.*

(Licorice; Liquorice; Sweet Root).—Dried rhizome & root of Glycyrrhiza glabra, L. (Spanish Licorice), Leguminosæ. Papilionaceæ; also of G. glandulifera, Waldst., & Kitaibel (Russian Licorice).—*Habit.:* Southern Europe to central Asia.—*Etymol.:* Grk. "glykys," sweet, & "rhiza," root. Lat. "glaber," smooth, hairless, *i.e.*, the leaves are smooth on both sides. "Liquorice," fr "liquiritia," is a corrupted form of "glycyrrhiza."—*Constit.:* Glycyrrhizin, $C_{44}H_{62}NO_{13}$; asparagin; sugar; resin; glycyramarin, $C_{36}H_{57}NO_{13}$.—Demulc.; Expector.; Lax.; Slight Stim. Locally; Corrigent.—*Uses:* Chiefly to cover unpleas. taste of bitter medicines.—*Doses:* 15–60 grains (1–4 Gm.) or more.—Fld. extr., 1–4 fl. dr. (4–15 Cc.).

Glycyrrhizin Ammoniated Merck.—Clearly soluble (4

Active sweetening substance fr. Glycyrrhiza glabra, L.; neut. ammon. salt of glycyrrhizic acid, $C_{44}H_{62}NO_{13}$.—Dark-brown, or brownish-red, sweet scales.—*Sol.* W., A.—Expector.; Demulc.—*Uses:* Chiefly with bitter or neut. medic., to cover taste; also as cough remedy.—*Dose* 5–15 grains (0.3–1 Gm.).—*Techn.*, as foam in mineral-water.—*Incomp.*, acids.

Glyoxyldiureïd.—see **Allantoin**

Gnaphalium.—see **Helichrysum**

Gnaphalium Flowers

(Life Everlasting; Catsear; Catsfoot; Catspaw; Cotton Weed).—Flowers of Gnaphalium dioica, L. (Antennaria dioica, L.) Compositæ.—*Habit.:* Northern Europe; Asia; North America.—*Etymol.:* Fr. Grk. "gnaphalon," wool or felt, *i.e.*, the plant has a wooly appearance. Pappus of plant resembles the antennæ of an insect, hence the name "antennaria."—*Constit.:* Resin; tannin.—Tonic; Astring.—*Uses:* Catarrh. affect.—*Dose:* Fld. extr., 30–60 ♏ (2–4 Cc.).

Goa Powder.—see **Araroba**

Goa Powder, Purified.—see **Chrysarobin**

Goadby's Solution

Solut. 0.2 mer uric chloride, 120 Gm. sod. chloride, & 60 Gm. alu i W. to make 3000 Cc.—*Uses:* Preserv. lower forms of marine animals.

Goanese Ipecac.—see **Naregamia**

Goat's Rue.—see **Galega**

Gold Merck.—Powder or foil (1700

Etymol.: Fr. Anglo-Saxon "geolu, giolo," yellow; also "auric," & "aurous," fr. Lat "aurum," calling to mind the Hebrew, "or," light, or the root-form "aus," with the basic designation "roth," *i.e.*, from, or of, red.—Pure gold.—Au.—*Melt.* 1065° C.—*Uses: Techn.*, jewelry, dentistry, manuf. gold-leaf, wire, alloys (coins), amalgams for fire-gilding, gold bronze, & for gilding.

do. Merck.—Precip. (1700

Lusterl., yellowish-brown to brown powd.

Gold Bromide.—see **Gold Mono- & Tri- bromide**

Gold Brown.—see **Bismarck Brown**

Gold Chloride Merck.—Yellow cryst. (235

(Auric Chloride; Gold Trichloride).—$AuCl_3$+ $HCl+4H_2O$.—Yellow cryst.—*Sol.* W., A., E. —Contains abt. 49% gold.—*Uses:* Phot. & electro-plating.—*Caut.* Keep dry & fr. light.

do. Merck.—Brown, cryst. (250

$AuCl_3+HCl+xH_2O$.—Brown masses.—*Sol.* W., A., E.—Antitubere ; Alter.—*Uses:* Phth. & o. tuberc. affect.; lupus.—*Dose* $^1/_{60}$–$^1/_{15}$ grain (0.001–0.004 Gm.).—*Max. D.* $^1/_3$ grain (0.02 Gm.) single; 1 grain (0.06 Gm.) p. d.—*Techn.*, in phot., &c.—Contains abt. 50–51% gold, & less W. than the yellow cryst.—*Caut.* Keep dry, fr. light.

Gold Chloride Paper

(Böttger's Ozone Paper).—Wh. paper impregn. w. an acid-free solut. gold chloride & dried.—*Uses:* Detecting ozone (violet color).

Gold Cyanide.—see **Gold Mono- & Tri- cyanide**

Gold Iodide Merck (1500

(Aurous Iodide).—AuI.—Greenish-yellow powd. —Alter.—*Uses:* Scrof. & tuberc. dis.—*Dose* $^1/_{60}$–$^1/_8$ grain (0.001–0.008 Gm.).

Gold Monobromide Merck (712

(Aurous Bromide).—AuBr.—Yellowish masses. —Insol. in W.—Anti-epileptic; Anod.; Nerv.—*Uses:* Epilepsy, migraine, &c.; said to act quickly & continuously in small doses & without bromism.—*Dose:* Antiepil., $^1/_{10}$–$^1/_5$ grain (0.006–0.012 Gm.) 2 or 3 t. p. d. in pills; anod., $^1/_{20}$ grain (0.003 Gm.) 2 t. p. d. Children, half as much.

Gold Monocyanide Merck (1140

(Aurous Cyanide).—AuCN.—Lemon-yellow, cryst. powd.—Insol. in W., A., or E.—Antitubercular.—*Dose* $^1/_{15}$–$^1/_4$ grain (0.004–0.015 Gm.) several t. p. d. in pills or tablets.—*Antid.*, emetics, stomach siphon, artif'l respir., iron persulphate & protosulphate, ammonia, chlorine, hot & cold douche, &c.—*Caut.* Poison!

Gold Orange.—see **Methyl Orange**

Gold Oxide Merck (712

(Auric Oxide; Gold Trioxide).—Au_2O_3.—Brown powd.—*Sol.*, hydrochloric acid.—Alter.; Antituberc.—*Uses:* Chronic rheum., scrof., syph., phth., &c.—*Dose* $^1/_{20}$–$^1/_4$ grain (0.003–0.015 Gm.).—*Techn.*, for fixing Daguerreotypes, in gilding liquids, coloring rubber for false teeth, porcelain manuf., &c.—*Caut.* Dark-colored bot.

Gold-Palladium Chloride Paper

Wh. paper charged w. a solut. of gold & palladious chlorides & dried.—*Uses:* Analysis of illuminating gas.

Gold Sulphide Merck (2000

(Aurous Sulphide).—Au_2S.—Brown.-black powd.

Gold-Tin Precipitate.—see **Gold-Tin Purple**

Gold-Tin Purple Merck (300

(Purple of Cassius; Gold-tin Precipitate).—Mixt. of gold chloride & tin oxide in varying proportions.—Fr. dil. neut. solut. gold chloride w. stannous, & stannic, chloride.—Brown powd. —*Sol.*, ammonia.—*Uses: Techn.*, manuf. ruby glass, colored enamels, & painting porcelain.

Gold Tribromide Merck (570

(Auric Bromide).—$AuBr_3$.—Dark powd.—*Sol.* W., E.—*Uses, Dose, &c.* As of monobromide. —*Caut.* Keep fr. light.

Gold Trichloride.—see **Gold Chloride**

Gold Tricyanide Merck (1140

(Auric Cyanide).—$Au(CN)_3+3H_2O$.—Wh., hygroscop. cryst.—*Sol.* W.—*Uses:* Antituberc.—*Dose* $^1/_{20}$–$^1/_{10}$ grain (0.003–0.006 Gm.).—*Antid.*, as for gold monocyanide.

Gold Trioxide.—see **Gold Oxide**

Gold Yellow.—see **Yellow T**

Gold & Ammonium Rhodanide.—see **Gold & Ammonium Sulphocyanate**

Gold & Ammonium Sulphocyanate Merck (500

(Gold & Ammonium Rhodanide).—$AuNH_4(CNS)_4+NH_4CNS$.—Brownish-yellow mass.—*Sol.* W.

Gold & Cadmium Chloride Merck (1000

Dark-yellow cryst.—*Sol.* W.

Gold & Calcium Chloride Merck (850

(Calcium Aurichloride, or Chloraurate).—$CaCl_2.2AuCl_3+6H_2O$.—Yellow cryst.—*Sol.* W.

Gold & Potassium Bromide Merck (900

(Potassium Auribromide).—$AuBr_3.KBr+2H_2O$. —Yellow need.—*Sol.* W.—Antiepilep.; Sed.—*Uses:* Epilepsy, hyst., &c.—*Dose* $^1/_6$–$^2/_3$ grain (0.01–0.04 Gm.), subcutan.

Gold & Potassium Chloride Merck.—Pure, Cryst. (800

(Potassium Aurichloride).—$AuCl_3.KCl+2H_2O$. Yellow cryst.—*Sol.* W.—*Uses:* In photography, & in painting porcelain & glass.

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Gold & Potassium Cyanide Merck (855

(Potassium Cyanaurate).—$KAu(CN)_2$.—Wh., cryst. powd.—*Uses:* Active antisep. One part to 25,000 blood serum prev. microbes. Also techn. for electrogilding.—*Antid.*, emetics, stomach siphon, iron persulphate & protosulphate, douche, artif'l respir., ammonia, chlorine, &c.—*Caut.* Poison!

Gold & Potassium Iodide Merck (1700

(Potassium Auriciodide).—$AuI_3.KI$.—Lustrous, black cryst.—*Sol.*, in W. w. decomposition.

Gold & Sodium Bromide Merck (300

(Sodium Auribromide).—$AuBr_3.NaBr+2H_2O$.—Black cryst.—*Sol.* W.—Antiepileptic.—*Uses:* In solut. 2:100 distil. W.—*Dose* 8 ♏ (0.5 Cc.) of solut., hypoderm.; grad. incr. to 30 ♏ (2 Cc.).

Gold & Sodium Chloride Merck (117

(Sodium Aurichloride).—Mixt. eq. parts by wt. of $AuCl_3$+NaCl.—Yellow cryst.—*Sol.* W.—Alter.; Nerv.—*Uses:* Syph., whoop.-cough, cancer, hyst., neural., rheum., dipsomania, progressive paralysis of syphilitic origin, &c.—*Doses:* $^1/_{24}$–$^1/_6$ grain (0.0025–0.01 Gm.); *subcut.*, $^1/_{12}$ grain (0.005 Gm.).—*Techn.*, in photography, decorating porcelain, & staining glass.—*Incomp.*, silver nitrate, ferrous sulphate, & oxalic acid.—*Caut.* Keep well stoppered.

Gold & Sodium Cyanide Merck (2000

(Sodium Aurocyanide).—$NaAu(CN)_2$.—Whitish, cryst. powd.—*Sol.* W.—*Uses:* Electrogilding.—*Antid.*, as of gold & potassium cyanide.—*Caut.* Poison!

Golden Maidenhair.—see **Polytrichum**

Golden Moss.—see **Penghawar Djambi**

Golden Ragwort.—see **Senecio Aureus**

Goldenrod, European.—see **Solidago Virgaurea**

Goldenrod, Sweet-scented.—see **Solidago Odora**

Golden Seal.—see **Hydrastis**

Goldthread.—see **Coptis**

Golgi's Osmic-Silver Nitrate

Consists of 2 soluts.: (*a*), 1.6 Gm. potass. dichromate, 0.1 Gm. osmic acid, & 90 Cc. W.; (*b*), an aqu. 0.75% solut. silver nitrate.—*Uses:* Demonstrating proliferations of ganglia cells.

Gomenol

(Niaouli Oil).—Volat. oil fr. lvs. Melaleuca viridiflora, a Myrtaceæ found in New Caledonia near Gomen.—60% cineol, some terpineol, & traces of acetic, butyric, & valeric acids. — Sp. Gr. 0.922.—Antituberc.—*Uses:* Phth., bronchitis, rheum., neuralg., cystitis, whoop.-cough.—*Dose* 4 ♏ (0.25 Cc.) in gel. caps. 4–10 t. p. d.—*Hypoderm.* in whoop.-cough in children, in 20% olive-oil solut., 45–240 ♏ (3–15 Cc.) accord. to age.—*Inj.*, in cystitis, 2% solut.

Gommelin.—see **Dextrin, Granulated**

Gossypiin (Eclectic) (40

Extr. fr. root-bark of Gossypium herbaceum, L. (Cotton-root bark).—Brown powd.—Emmen.—*Uses:* In labor, uter. hemorrhage, &c.—*Dose* 3–10 grains (0.2–0.6 Gm.).

Gossypium Bark.—*U. S. P.*

(Cotton-root Bark).—Dried bark of the root of Gossypium herbaceum, L., & of other cultiv. spec. of Gossypium. Malvaceæ.—*Habit.:* Asia (India, China, Arabia); Egypt; U. S.; W. Indies; S. America; Australia; Spain, &c.—*Etymol.:* Fr. Arabic "goz, gothn," a soft, silky substance; *e.g.*, cotton; "herbaceum," fr. Lat. "herbaceus," grassy, herb-like—the plant's habit.—Thin flexible bands or quilled pieces; extern., brownish-yellow; inner surface whitish w. silky luster; inodor.; taste very sl. acrid & faintly astring.—*Constit.:* Yellow chromogen; yellow resin; fixed oil; tannin; sugar.—Emmen.; Oxytocic.—*Uses:* Amenor. & menor.; also inst. of ergot to promote uterine contract., hence employed in primary & secondary labor-pain inefficiency, & as a hemostat. in metror. (fibromyoma), &c.—*Doses:* 30–60 grains (2–4 Gm.).—Alcoh. extr., 3–10 grains (0.2–0.6 Gm.).—Fld. extr., 30–90 ♏ (2–6 Cc.); up to 6 fl. dr. (25 Cc.) p. d.

Gossypose.—see **Raffinose**

Goulard's Extract.—see **Lead Subacetate, Solution**

Gouver's Reagent.—For albumen

Aqu. solut. potass. iodide & mercuric cyanide.—Gives a white ppt. w. albumin.

Grains of Paradise.—see **Amomum Melegueta**

Graminis.—see **Triticum**

Granatonine.—see **Pseudopelletierine**

Granatum.—*U. S. P.*

(Pomegranate).—Bark of stem & root of Punica Granatum, L. Punicaceæ.—*Habit.:* Mediterranean region; eastern, western, & southern Asia; cultivated in subtropical countries.—*Etymol.:* Lat. "punicus," *i.e.*, Punic, of or pertaining to Carthage, near which city it was said to have been first found; or, fr. Lat. "puniceus," scarlet, *i.e.*, the color of the berries. "Granatum" fr. Lat. "granum," corn, or seed, *i.e.*, the many-seeded fruit. "Pomegranate" fr. Lat. "pomum," fruit, & "granatum," seeded, *i.e.*, many-seeded fruit.—Stem Bark: Thin quills or fragments, 2–4 in. (5–10 Cm.) long & $^1/_{25}$–$^1/_8$ in. (1–3 Mm.) thick; extern., yellowish-gray; inner surface grayish-yellow & smooth; short, gran., greenish-yellow fract.; inodor.; astring., v. slightly bitter taste.—*Constit.:* Punico-tannic acid, $C_{27}H_{16}O_{13}$; pelletierine (punicine) $C_8H_{15}NO$ (0.5–1.5%); methylpelletierine, $C_9H_{17}NO$; pseudopelletierine, $C_9H_{15}NO.2H_2O$; isopelletierine, $C_8H_{15}NO$; mannit; sugar; gum.—Flowers contain granatin, tannin, & coloring matter.—Peel of fruit contains

tannin. — Anthelmintic; Teniafuge. — *Uses: Flowers,* as astring. in leucor., diar., &c., in infus.—*Peel,* as astring.; & techn. in dyeing.—*Root-bark,* in tape-worm, diar., night-sweats, & interm. fevers.—*Doses: Bark,* 30–120 grains (2–8 Gm.).—Alcoh. extr., 5–10 grains (0.3–0.6 Gm.); as anthelm., 30–90 grains (2–6 Gm.).—Fld. extr., 15–60 ♏ (1–4 Cc.); as anthelm., 4–12 fl. dr. (15–45 Cc.) in divided doses in 4 hours.—*Peel of fruit,* 20–30 grains (1.3–2 Gm.) in powd.

Grape Sugar.—see **Dextrose**

Graphite (Ceylon) Merck.—Lumps & fine Powder (1

(Black Lead; Mineral Carbon; Plumbago; Wad).—Found native, both cryst. & amorph., in Ceylon, Siberia, Canada, & the United States.—*Uses:* Techn., for lead pencils, refractory crucibles, in galvanoplastics as pigment, lubricant, graphite cement, explosives, axle grease, polishing comp'ds, & for rust- & needle-paper.

do. Merck.—Purified (2

Gratiola

(Hedge Hyssop).—Whole plant Gratiola officinalis, L. Scrophulariaceæ.—*Habit.:* Europe.—*Etymol.:* Lat. "gratia," grace, *i.e.,* the person who experiences the violent effects of gratiola may well need the grace of God.—*Constit.:* Gratiolin; gratiosolin; gratiolic acid.—Drast. Purg. (in gout).—*Max. D.* 15 grains (1 Gm.) single; 45 grains (3 Gm.) daily.—Green alcoh. extr., 1–3 grains (0.06–0.2 Gm.); as drast. purg., 8 grains (0.5 Gm.) single; 15 grains (1 Gm.) per day.

Gratiolin Merck (450

Glucoside fr. herb of Gratiola officinalis, L.—$C_{20}H_{34}O_7$.—Brownish-yellow powd.; lacks drastic purgative effect of herb.—*Sol.* A.; sl. in W.

Gravel Plant.—see **Epigæa**

Gravel Root.—see **Eupatorium Purpureum**

Green Hellebore.—see **Helleborus Viridis; Veratrum Viride**

Green Soap.—see **Soap, Soft**

Green Verdigris.—see **Copper Acetate, Basic**

Green Vitriol.—see **Iron Sulphate, Crude**

Greenish Blue.—see **Methyl Blue**

Gregory's Salt.—see **Salt, Gregory's**

Grenacher's Alcoholic Acid Carmine

1 Gm. carmine, 1–2 Cc. HCl., & 100 Cc. dil. A. (sp. gr. 0.890).—*Uses:* Staining nuclei.

Grenacher's Alcoholic Borax-Carmine

2 Gm. carmine & 4 Gm. borax in 100 Cc. W. & 100 Cc. dil. A. (sp. gr. 0.890).—*Uses:* Staining nuclei.

Grenacher's Alum-Carmine

5 Gm. potass. alum & 1 Gm. carmine in 100 Cc. W.—*Uses:* Stain (bluish-red) for nuclei, and for muscle tissue.

Grenacher's Purpurine-Glycerin

Solut. abt. 1 Gm. purpurine (trioxyanthraquinone) & 1 Gm. potassium alum in 50 Cc. G.—*Uses:* Stain nuclei a delicate rose-red.

Griess' Paper.—Red

Wh. paper, charged w. sulphanilic acid & naphtylamine sulphate.—*Uses:* To detect nitrous acid & nitrites (red color) in urine; also bilirubin & aldehydes.

do.—Yellow

(Metaphenylenediamine Paper).—White paper charged w. sulphanilic acid & metaphenylenediamine.—*Uses:* Delicate test for nitrites (yellowish-brown).

Griess' Reagent.—For nitrous acid

Solut. alphanaphtylamine & sulphanilic acid in glacial acetic acid.—Gives a red color w. traces of nitrous acid.

Grindelia.— *U. S. P.*

(Gum-plant).—Dried lvs. & flowering tops of Grindelia robusta Nuttall, & of G. squarrosa Dunal. Compositæ.—*Habit.:* North America (California).—*Etymol.:* Named for D. H. von Grindel, an apothecary & botanist of Riga (1776–1836). "Robusta," fr. Lat. "robustus," fr. "robur," strength, *i.e.,* the strongest, or hardiest variety. Lat. "squarrosus," scaly, referring to the involucre.—*Constit.:* Volat. oil; resin; grindeline; saponine; robustic acid.—Expector.; Antispasm.; Sedat.; Tonic; Stomachic; Diuretic.—*Uses:* Asthma, bronch., hay fever, whoop.-cough, bladder catarrh, chron. vaginitis.—*Extern.,* in burns, leucor., gonor., &c.—*Doses:* 15–60 grains (1–4 Gm.).—Aqu. extr., 3–10 grains (0.2–0.6 Gm.).—Fld. extr., 30–60 ♏ (2–4 Cc.).—Tinct., 30–60 drops.

Griserin

Loretin rendered soluble by combin. w. alkalies.—Intest. Bactericide & Disinfect.—*Uses:* Tuberculosis, lupus, psoriasis, eczema, & all bacterial diseases.—*Dose* 5–15 grains (0.3–1 Gm.).

Gromwell.—see **Lithospermum**

Groundsel.—see **Baccharis; Senecio Vulgaris**

Guacamphol

(Guaiacol Camphorate).—$C_6H_{14}(COO.C_6H_4.O.CH_3)_2$.—Fr. camphoric acid & guaiacol.—Colorl., odorl., tastel. need.—*Sol.,* eas. hot A., C.; insol. W.—Anthidrotic.—*Uses:* Night-sweats & diar. of phthisis.—*Dose* 3–15 grains (0.2–1 Gm.).

Guacetin.—see **Guaiacetin**

Guaco (see also **Aristolochia Cymbifera**)

Whole plant Mikania Guaco Hb. & Bpl. Compositæ.—*Habit.:* U. S. of Colombia; Mexico; Martinique.—*Etymol.:* "Guaco" is the Brazilian name of a species of falcon which is said to render itself immune against snake bites by partaking of this plant.—*Constit.:* Guacin (a bitter principle).—Antispasm.; Antisyphilitic;

Febrif.; Anthelmint.—*Uses:* Snake-bite, cholera, diar. & chron. rheum.—*Doses:* 15–75 grains (1–5 Gm.) in powd., or 5–8 fld. dr. of 1:50 infus. —Fld. extr., 30–60 ♏ (2–4 Cc.).—Tinct., 1–4 fl. dr. (4–15 Cc.).

Guaethol Merck (30

(Guaiacol-ethyl; Guethol; Pyrocatechin Monoethyl Ester). — $C_6H_4.OC_2H_5.OH$. — Oily, alm. colorl. liq.; pleas., arom. odor; solidifies on cooling to a cryst., colorl. mass.—*Melt.* 27–28° C.—*Boil.*, abt. 215° C.—*Sol.* A., C., E.; insol. W.—Antitubercular.—*Dose* 4–8 ♏ (0.25–0.5 Cc.) in alcoh. solut. or wine. The cryst. may be given in pill or powd., 2–4 t. p. d.

Guaiac.—*U. S. P.*

(Gum Guaiac; Resin Guaiac).—Resin of the wood of Guaiacum officinale, L., or G. sanctum, L. Zygophyllaceæ.—*Habit.:* West Indies; Central America. — *Etymol.:* Lat. fr .Spanish "guayaco, guayacan," the native Haytian name.—Irreg., greenish-gray brown masses; brittle, vitreous fract.; fusible; balsamic odor & slightly acrid taste; not more than 15 per cent. insoluble in alcohol.—*Constit.:* Guaiaretic acid; guaiaconic acid; guaiac beta-resin; guaiacic acid; guaiac yellow.—Antisyphil.; Alterative; Antirheumat.; Antipodagr.; Antiscrofular.—*Dose* 5–30 grains (0.3–2 Gm.) in powd. or tinct.

Guaiac-Copper Sulphate Paper

(Schönbein-Pagenstecher's Paper).—Wh. filtering paper impregn. first w. an alcoh. solut. guaiac resin, then, after drying, w. an aqu. solut. copper sulphate.—*Uses:* Detecting HCN (slightest trace colors paper blue).

Guaiacetin (70

(Guacetin; Sodium Pyrocatechinmonacetate; Sodium Phenonacetate). — $C_6H_4.(OH).OCH_2.COONa$.—Wh. powd.—*Sol.* W.—*Uses:* Recommended instead of creosote in tuberculosis. —*Dose* 8 grains (0.5 Gm.) several t. p. d.

Guaiacin Schmitt-Merck.—Reagent (250

Brownish, amorph. powd. — Obt. by spec. method fr. guaiac wood.—*Sol.* A.—Excellent reagent for oxydases (blue color). More sensit. than guaiac resin; used as 5% alcoh. solut., which keep in compl. filled bots. in dark. — *Uses:* Especially sensitive reagent for oxydases.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Guaiacol Merck (3

(Monomethylcatechol; Methyl Ester of Protocatechin; Pyrocatechin Monomethyl Ester). —Fr. beechwood creosote by fract. distil'n.— $C_7H_8O_2$, or, $C_6H_4(OH)OCH_3$ [1:2].—Faintly yellowish, limpid, oily liq.; charact. arom. odor. —Sp. Gr. 1.110–1.120 at 15° C.—*Sol.* A., E., carbon disulph.; abt. 60–70 W.; 1 G.; acetic acid. —*Boil.* 201–207° C.—Antituberc.; Antisep.; Antipyr.; Analg.—*Uses:* Phth., lupus, & intest. tuberculosis; febrile affect. Must be used long time to get maximum benefit.—*Dose* 2 ♏ (0.12 Cc.) 3 t. p. d., grad. increased to 15 ♏ (1 Cc.), in pills, or in 1–2% solut. brandy, wine, &c., after meals.—*Appl.* (Analg. & Antipyr.) 15–30 ♏ (1–2 Cc.), pure or with eq. part oil, alcohol, or glycerin.—Must not be exposed to light.

Note.—Guaiacol Merck is to be preferred on account of its uniformity of composition & the reliability of its action.

Guaiacol Merck.—Cryst. (10

Colorl. cryst.—*Sol.* A., E., oils; sl. W.—*Melt.* 28.5° C.—*Boil.* 205° C.—Sp. Gr., abt. 1.140 at 25° C. (U. S. P.).—*Uses, &c.:* As of preceding. —*Dose* 2 grains (0.12 Gm.) 3 t. p. d., grad. increased to 15 grains (1 Gm.), given as above.

Guaiacol Benzoate.—see **Benzosol**

Guaiacolbenzyl-ether.—see **Brenzcaïn**

Guaiacol Cacodylate Merck (25

Reddish-wh. cryst.—*Sol.* W.—*Uses:* In tuberculosis by subcut. inject. in oily mixt.

Guaiacol Camphorate.—see **Guacamphol**

Guaiacol Carbonate (30

(Duotal; Guaiacol Ester of Carbonic Acid; Neutral Guaiacol Carbonate).—$C_{15}H_{14}O_5$, or, $(C_6H_4OCH_3)_2CO_3$.—Obt. by action of carbonyl chloride on sodium-guaicolate.—Wh., cryst. powd.; odorl.; tastel.—*Sol.* 48 A., 1.5 C., 13 E., at 25° C.; read. hot A. & B.; sl. G. & fatty oils; insol. W. (U. S. P.). — *Melt.* 84–87° C. (U. S. P.). — Antituberc.; Antisep.—*Uses:* Tuberculosis inst. of guaiacol & creosote.—*Dose* 3–8 grains (0.2–0.5 Gm.) 3 t. p. d., grad. increased to 90 grains (6 Gm.) per day.

Guaiacol Cinnamate.—see **Styracol**

Guaiacol-ethyl.—see **Guaethol**

Guaiacol Ethylene Merck (75

(Guaiacol Ethylene Ether). — $(CH_3O.C_6H_4O).C_2H_4.(OC_6H_4.OCH_3)$. — Colorl., cryst. need. — *Sol.*, eas. A.; diffic. in W.—*Melt.* 138–139° C.—*Uses:* In phth. like other guaiacol derivatives.—*Dose* 8–15 grains (0.5–1 Gm.) 2 t. p. d.

Guaiacol Glycerylether.—see **Guaiamar**

Guaiacol-iodoform Merck (35

Solut. iodoform in guaiacol.—Reddish-brown liq.—*Uses:* In tuberculosis & pleurisy, by French physicians.—*Dose,* by subcut. inject. up to 3 Cc. of a 1:16 olive-oil solut., in the supraspinous fossa.

Guaiacol Oleate.—see **Oleoguaiacol**

Guaiacol Phosphate Merck (50

Fr. guaiacol diss. in dil. soda solut., by $POCl_3$ in the cold.—$(C_6H_4.O.CH_3.O)_3PO$.—Wh., cryst. powd.—*Sol.* A., C., toluene, acetone; insol. W.,

E.—*Melt.* 98° C.—*Uses, &c.:* As of guaiacol.—*Dose* 5–10 grains (0.36–0.6 Gm.) daily.

Guaiacol Phosphite

(Gaiacophosphal). — $P(O.C_6H_4.OCH_3)_3$. — Wh. powd.; pungent taste.—92.25% guaiacol.—*Sol.*, v. eas. W., & A.; G., E., C., acetone, oils.—*Melt.* 77.5° C.—Antituberc., &c., like guaiacol.—*Dose:* As of guaiacol, in pills, elixir, or wine.

Guaiacol Salicylate.—see **Guaiacol-Salol**

Guaiacol-Salol Merck (32

(Guaiacol Salicylate).—$C_{14}H_{12}O_4$, or, $C_6H_4.O.CH_3.C_7H_5O_3$.—Wh. cryst.—*Sol.* A.; insol. W.—*Melt.*, abt. 65° C.—Intest. Antisep.; Antituberc.; Antirheum.—*Uses:* Phth., diar., dysent., rheum., maras., chorea, &c.—*Dose* 15 grains (1 Gm.) sev. t. p. d.—*Max. D.* 150 grains (10 Gm.) p. d.

Guaiacol Succinate

Fr. mixt. of guaiacol & succinic acid w. phosphorus oxychloride. — $(C_6H_4OCH_3)_2C_4H_4O_4$. — Fine, wh. need.—*Sol.* C., acetone, toluene; sl. in A., E.; insol. W.—*Melt.* 136° C.—*Uses, &c.* As of guaiacol.

Guaiacol Valerate Merck (25

(Geosote).—$C_6H_4.OCH_3.O.COC_4H_9$.—Colorl. to yellowish liq.—*Sol.* A. & E.—*Boil.*, abt. 265° C.—*Dose* 3 ♏ (0.2 Cc.) us'y in gelat. caps., 3–6 t. p. d.

Guaiacophosphal.—see **Guaiacol Phosphite**

Guaiacum Wood

(Lignum Vitæ; Pockwood).—Heart-wood of Guaiacum officinale, L., & of G. sanctum, L. Zygophylleæ.—*Habit.:* West Indies; Central America.—*Etymol.:* Lat. fr. Spanish "guayaco, guayacan," the native Haytian name.—*Constit.:* Resin; quassin; extractive.—Alter. (in gout, rheum. & syphilis); Diaphor.; Expector.; Stim.; Antisep.; Astring.—*Uses:* Scrofula, amenor., scarlet fever, chron. rheum.—*Doses:* 30–120 grains (2–8 Gm.).—Alcoh. extr., 3–10 grains (0.2–0.6 Gm.).—Fld. extr., 30–120 ♏ (2–8 Cc.).—Tinct., 30–60 ♏ (2–4 Cc.).—Ammon. Tinct., 30–60 ♏ (2–4 Cc.).

Guaiacyl

(Calcium Guaiacolmonosulphonate).—$Ca(C_6H_3OH.OCH_3.SO_3)_2$.—Bluish-gray powd.—*Sol.* 20 W., A.; insol. fatty oils.—Local Anesthetic.—*Uses:* Minor surgery, dentistry, &c.—*Appl.* 8–25 ♏ (0.5–1.6 Cc.) of 5% solut. hypoderm.

Guaiaform.—see **Methylenediguaiacol**

Guaiamar (25

(Guaiacol Glyceryl Ester).—$OCH_3.C_6H_4.OC_3H_7O_2$.—By action of guaiacol on anhydrous glycerin.—Wh., cryst. powd.; bitter, arom. taste.—*Sol.* 20 W., A., E., G., & C.—*Melt.* 75° C.—Intest. Antiseptic.—*Uses: Intern.*, typhoid, phthisis, cystitis, chron. diar.—*Extern.*, in acute articular rheumat. (8:30 oint.), blenorrhagic arthritis, burns, phagedenic & syphilitic sores, &c.—*Dose* 3–15 grains (0.2–1 Gm.).

Guaiaperol (100

(Piperidine Guaiacolate).—$(C_6H_4[OH]OCH_3)_2.C_6H_{11}N$.—Colorl. cryst.—*Sol.* W., A., & E.—*Melt.* 80° C.—*Uses:* Pulmon. tuberculosis.—*Dose* 5–10 grains (0.3–0.6 Gm.) p. d.

Guaiaquin (35

(Quinine Guaiacolbisulphonate).—$C_6H_4O_2CH_3.HSO_3.C_{20}H_{24}N_2O_2$. — Yellowish, acrid, bitter powd.; 61.36% quinine, 23.48% guaiacol.—*Sol.* W., A., dil. acids.—Antiperiodic; Intest. Antiseptic.—*Dose* 5–10 grains (0.3–0.6 Gm.) 3 t. daily, before meals.

Guaiaquinol

(Quinine Dihydrobromoguaiacolate).—$C_{20}H_{24}N_2O_2.2HBr.C_6H_4OH.OCH_3$. — Yellow, hygrosc. cryst.—*Sol.* 23 W. at 15° C., & in less than 0.5 at 30° C.—Antitubercular; Antipyret.; Sedative.—*Dose* 8–20 grains (0.5–1.3 Gm.).

Guajava.—see **Psidium**

Guanidine Carbonate Merck.—Cryst. (50

(Carbamidine Carbonate).—$C_3H_{12}N_6O_3$, or, $(CH_5N_3)_2.H_2CO_3$.—Wh. cryst.—*Sol.* W.

Guanidine Hydrochloride Merck.—Cryst. (50

CH_6N_3Cl, or, $CH_5N_3.HCl$.—Wh., cryst. powd.—*Sol.* W., A.

Guanidine Nitrate Merck.—Cryst. (15

$CH_6N_4O_3$, or, $CH_5N_3.HNO_3$.—Fine, cryst. powd.—*Sol.*, sl. W. & A.

Guanidine Rhodanide.—see **Guanidine Sulphocyanate**

Guanidine Sulphocyanate Merck (12

(Guanidine Sulphocyanide or Rhodanide).—Fr. dry amm. sulphocyanate by heat.—$C_2H_6N_4S$, or, $CH_5N_3.HSCN$.—Wh. cryst.—*Sol.* W.—*Melt.* 120° C.

Guanine Merck (1000

(Imidoxanthine).—Fr. guano.—$C_5H_5N_5O$, or, $NH.CH:N.C:C.CO.NH.(C:NH).NH$.—Wh., amorph. powd.—*Sol.*, alkalies & acids; insol. W., A., & E.

Guanine Hydrochloride Merck (1000

$C_5H_5N_5O.HCl+H_2O$.—Fine need., easily decomp.

Guarana.—*U. S. P.*

(Brazilian Cocoa).—Dried paste consisting chiefly of crushed seeds of Paullinia Cupana, Kunth (P. sorbilis, Martius). Sapindaceæ.—*Habit.:* Brazil.—*Etymol.:* "Guarana," fr. "guaranis," the Brazilian name of a tribe of S. American Indians in whose territory the plant grows. "Paullinia," fr. C. F. Paullinia (1643–1712), a German botanist; or, perhaps, fr. "Simon Paulli," a German botanist (b. Rostock, 1603; d. 1680). Also named for Francis Cupani, an Italian monk, & botanist, died 1710. "Sorbilis," fr. Lat. "sorbere," to imbibe, *i.e.*, fr. its use as a beverage.—*Constit.:* Caffeine; tannin; resin; volat. oil; saponin; starch; fat.—Antineuralgic;

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Astring.; Stim.; Tonic; Nervine.—*Uses:* Headache, chron. diar., & nerv. affect.—*Doses:* 15–60 grains (1–4 Gm.).—Alcoh. extr., 2–5 grains (0.12–0.3 Gm.).—Fld. extr., 20–60 ♏ (1.3–4 Cc.).

Guaranhem.—see **Monesia Bark**

Guaranine Merck (250

Fr. guarana; chem. ident. w. caffeine & theine. —$C_8H_{10}N_4O_2 + H_2O$.—Wh. cryst.—*Sol.* A.; insol. W.—*Uses:* As of caffeine.—*Dose* 1–5 grains (0.06–0.3 Gm.).—See also Caffeine.

Guaranine Triiodide Merck (1250

Dark-green cryst.—*Uses & Doses:* As of caffeine triiodide.

Guava

(Common Guava; Bay Plum; Guajava; Djamboë).—Lvs. of Psidium pyriferum, L. Myrtaceæ. —*Habit.:* Tropical Asia; Tropical America.—*Etymol.:* Fr. Grk. "psidion," pomegranate peel, fr. the resemblance this bears to that of guava. "Pyriferum," fr. Lat. "pirus," pear, & "fero," to bear. "Guajava" is the South-American name of the plant.—*Constit.:* Tannin; guavin.—*Uses:* Styptic, & Astring. in chronic gastric & intest. catarrhs, diar., & dyspep.—*Doses:* 8–15 grains (0.5–1 Gm.).—Fld. extr., 15 ♏ (1 Cc.).

Guaycura.—see **Baycuru**

Guenzburg's Paper.—see **Phloroglucin-Vanillin Paper**

Guenzburg's Solution Merck.—For free HCl in gastric juice (10

Solut. 2 Gm. phloroglucin & 1 Gm. vanillin in 30 Gm. A. On evaporating w. some of the liquid to be tested, a red marginal zone forms if free HCl is present.

Guethol.—see **Guaethol**

Guilandina Bonducella.—see **Bonduc**

Guinea Grains.—see **Amomum Melegueta**

Gujasanol (20

(Diethylglycocollguaiacol Hydrochloride). —$OCH_3.C_6H_4.O.CO.CH_2.N(C_2H_5)_2.HCl$. — Colorl. cryst.; faint odor guaiacol.—*Sol.*, v. eas. W.; diffic. A.; insol. E.—*Melt.* 184° C.—Antituberc. —*Uses: Intern.*, pulmonary, laryngeal, & intest. tuberculosis.—*Extern.*, ozena, cystitis, purulent sores, &c.—*Doses:* 45–180 grains (3–12 Gm.) p. d. —*Hypoderm.*, 45–60 grains (3–4 Gm.) p. d. in concent. aqu. solut.—*Appl.*, as 10–20% solut. in ozena, stomatitis, cystitis, ulcers, &c.; also as mild antiseptic in ophthalmology.

Gum Ammoniac.—see **Ammoniac**

Gum Arabic.—see **Acacia**

Gum Benjamin., *Gum Benzoin.*—see **Benzoin**

Gum Camphor.—see **Camphor**

Gum Copal.—see **Copal**

Gum Damar.—see **Damar**

Gum Elastic.—see **Rubber**

Gum Elemi.—see **Elemi**

Gum Guaiac.—see **Guaiac**

Gum Kino.—see **Kino**

Gum Opium.—see **Opium**

Gum Plant.—see **Grindelia**

Gum Thus.—see **Olibanum**

Gum Tragacanth.—see **Tragacanth**

Gutta-Percha Merck.—Sticks (15

Concrete milky juice of Isonandra Gutta. Hooker. Sapotaceæ.—*Habit.:* Malayan Archipelago.—*Etymol.:* Lat. "gutta," drop, or gum, designates the thickened juice of the plant; "percha" is the Malayan name of the plant.—Grayis or yellowish sticks, frequently with red-brown streaks; hard, & rather leathery or horny; becomes very soft if placed in boil. W. —*Sol.* C.; CS_2; boil. E.; B.; oil turpent.—*Constit.*. Gutta, $(C_{10}H_{16})_n$; fluavil, $C_{20}H_{32}O$; alban, $C_{20}H_{32}O_2$; guttane.—*Uses: Techn.*, for dental cement; gutta-percha tissue; insulating in electrotechnic, &c.; splints for fractures & diseased joints.

do. Merck.—Solution (4

(Traumaticin).—5% solut. gutta percha in chlorof. — *Uses:* As protective coating for wounds, abrasions, &c., instead of collodion; also used as vehicle for dermic remedies.

Gymnema

(Merasingi).—Lvs. of Gymnema sylvestre, Robt. Brown. (Asclepias geminata, Roxburgh.) Asclepiadaceæ.—*Habit.:* India; Africa.—*Etymol.:* "Gymnema," fr. Grk. "gymnos," naked, & "nema," thread, *i.e.*, the anthers usual in this spec. are lacking.—*Constit.:* Gymnemic acid, $C_{32}H_{55}O_{12}$.—*Uses:* In parageusis of diabetic subjects; corrigent for bitter or sweet remedies.—Used by rolling a small quantity of the leaves in the mouth, without biting or chewing.

Gynocardia

(Chaulmoogra).—Seeds of Gynocardia odorata, Robert Brown. Bixaceæ.—*Habit.:* East Indies. —*Etymol.:* Grk. "gyne," woman, & "kardia," heart, *i.e.*, the spherical berry bears a heart-shaped hilum-residue.—*Constit.:* Fixed oil (chaulmoogra oil), containing gynocardic acid, palmitic acid, hypogæic acid, & cocinic acid.—*Uses:* Oil is believed to be a specific in leprosy; secondary syphilis; rheum.; scrofula; phthisis. —*Dose* 3–6 grains (0.2–0.36 Gm.) of powd. seeds.

Gypsophila

(Levant Soaproot; Spanish Soapwort; Radix Saponaria Alba).—Root of Gypsophila Struthium, L. Caryophyllaceæ.—*Habit.:* Mediterranean region.—*Etymol.:* Grk. "gypsos," lime, or chalk, & "phyllein," to love. "Struthium,"

fr. Grk. "strythion," a bush.—*Constit.:* Saponin. — Detergent.—*Uses:* Techn., source of saponin.

Gypsum.—see **Calcium Sulphate**

H

Haarlem Oil.—see **Oil Linseed Sulphurated, Terebinthinated**

Hæmatoïdin.—see **Bilirubin**

Hæmatoxylon.—*U. S. P.*

(Logwood). — Heart-wood of Hæmatoxylon campechianum, L. Leguminosæ (Caesalpiniaceæ).—*Habit.:* Central America; natur. in West Indies, Jamaica, St. Domingo.—*Etymol.:* Grk. "haima," blood, & "xylon," wood, referring to the color of the heart-wood; "campechianum" refers to its habitat, Campeachy Bay.—*Constit.:* Volat. oil; hematoxylin, $C_{16}H_{14}O_6.H_2O$; tannin; fat; resin.—Astring.; Tonic.—*Uses:* Chron. diar., dysen., & intestinal atony.—*Techn.*, as dye; also as indicator (in form of tinct. or decoct.) in volumetr. analysis (alkalies = blue; acids = red). Partic. sensitive to NH_3.—*Doses:* 30–60 grains (2–4 Gm.).—Extr., 8–24 grains (0.5–1.5 Gm.).

Hagenia.—see **Kousso**

Hager-Gawalowski's Reagent.—For glucose

Neutral, aqu. solut. ammonium molybdate.—Gives a blue color w. glucose at 100° C. In acid solut. the blue color is also given by dextrin & saccharose.

Hager's Reagent.—For glucose

Solut. 30 Gm. mercuric oxide, 30 Gm. sodium acetate & 50 Gm. sodium chloride, in 400 Cc. W. acidulated w. 25 Gm. glacial acetic acid.—In presence of glucose, the mercuric salt is reduced to mercurous chloride on heating.

Hahnemann's Soluble Mercury.—see **Mercury Oxide, Black, Hahnemann**

Haine's Solution.—For glucose

Solut. 2 Gm. copper sulphate w. 20 Gm. glycerin & 9 Gm. potass. hydroxide in 175 Gm. W. —Reduced by glucose.

Hamamelin (Eclectic) (13

Extr. fr. dried lvs. Hamamelis virginiana, L.—Brown powd.—*Sol.* A.—Hemost.; Astring.; Tonic.—*Uses:* Hemorrhoids & hemorrhages of lungs, uterus, & stomach.—*Doses:* Hemost., 5–20 grains (0.3–1.3 Gm.); tonic, 1–3 grains (0.06–0.2 Gm.).

do. Merck.—Scales

Brownish-red to dark brown scales.—*Sol.* W.

Hamamelis.—*U. S. P.*

(Witchhazel; Winter Bloom; Snapping Hazel; Striped [Spotted] Alder; Tobacco Wood; Wychhazel).—Dried lvs. & bark (also twigs) of Hamamelis virginiana, L. Hamamelidaceæ, collected in autumn.—*Habit.:* N. America (New England to Minnesota southward to Louisiana).—*Etymol.:* Fr. Grk. "hama," together with, & "melon," fruit (apple), *i.e.*, flowers & fruit together on one tree. "Virginiana," fr. Virginia, its original habitat.—*Bark:* Irreg. fragments or curved pieces $^1/_{25}$–$^1/_{12}$ in. (1–2 Mm.) thick; extern. ash-gray, smooth, w. scattered, sm. blackish warts; inner surface smooth; internally pale, cinnamon-brown; inodor.; astring., somewh. bitter, pungent taste.—*Lvs.:* Unequally obovate or oval, abt. 4 in. (10 Cm.) long; upper surface pale or brownish-gray; under surface light-green; odor slight; astring., sl'y arom. & bitter taste.—*Constit.. Leaves:* Tannin; volat. oil; bitter principle. — *Bark:* Gallic acid; hamamelo-tannic acid, $C_{14}H_{14}O_9 + 5H_2O$; fat; phytosterin; glucose; bitter & pungent principles; resin.—*Leaves:* Tonic; Astring.; somewh. Sedat.; used extern. in skin diseas.—*Bark:* Antisep.; Tonic; Astring.; Stypt.—*Uses:* Varicose veins, hemorrhoids, gonor., leucor., &c.—*Doses: Leaves:* 30–60 grains (2–4 Gm.) in decoct. or fld. extr.—*Bark:* Alcoh. extr., 3–10 grains (0.2–0.6 Gm.).—Fld. extr., 15–60 ♏ (1–4 Cc.).—Tinct., 10–60 ♏ (0.6–4 Cc.).

Hamann's Acetic Carmine, Neutral

Solut. 15 Gm. carmine in 100 Cc. ammonia, w. acetic acid added until solut. has a just faintly acid reaction.—*Uses:* As of o. carmine stains.

Haplopappus.—see **Baylahuen**

Hare's-Ear.—see **Bupleurum**

Harmaline.—see **Fuchsine**

Harmaline.—Cryst. (2000

(Harmine Dihydride).—Fr. seeds Peganum Harmala, L. (Wild Rue).—$C_{13}H_{14}N_2O$.—Trimet., octah. cryst.—*Sol.* A., E.; sl. W.—*Melt.*, abt. 238° C., w. decomp.—Stim.; Anthelm.; Nar.

Hart's Tongue.—see **Scolopendrium**

Hart's Truffle.—see **Elaphomyces**

"*Hartshorn.*"—see **Ammonium Carbonate**

Hartshorn

(Cornu Cervi; Deer's Horn).—The horn of the stag, a species of deer, Cervus Elaphus. Mammalia. Cervidæ.—*Etymol.:* Fr. Lat. "cornu," horn, & "cervus," deer. "Elaphus" fr. Grk. "elaphos," deer.—Occurs in form of raspings or turnings; white to dark-gray.—*Constit.:* Gelatin (25%); calcium phosphate (50%); calcium carbonate (15%).—*Uses:* Source of gelatin; v. rarely as addition to pectoral teas.

Hashish

(Hasish; Haschisch; Hasash; Kif).—Purified alcoh. extr. of Cannabis indica, Lam., Urticaceæ, deprived of its volat. oil.—*Etymol.:* "Hashish" is the Arabian name for hemp.—*Constit.:* Tetano-cannabin.—*Uses:* Sedat.; Antispasm.; Hypnot.; also as intoxicant by smoking.—*Dose* 1 grain (0.06 Gm.), taken with powd. coffee.

Hashishin Sée-Merck (15

Alc. extr. of Cannabis indica, washed with W. — *Uses:* Dyspep. & gastric neuroses, & for prepar. "Extr. Cannabis indicæ pingue" (Sée) = 5 hashishin to 95 butter. — *Dose* $^3/_4$ grain (0.05 Gm.) per day.

Hazelwort.—see **Asarum**

Heal-All.—see **Prunella**

Heather.—see **Calluna**

Heavy Spar, Artificial.—see **Barium Sulphate**

Hedeoma.—*U. S. P.*

(Pennyroyal; Squaw Mint).—Dried lvs. & flowering tops of Hedeoma pulegioides, Persoon. Labiatæ.—*Habit.:* Canada to Florida & west to Nebraska.—*Etymol.:* Grk. "hedys," sweet, & "osme," smell, referring to the agreeable odor, & altered fr. "Hedyosmum," the name given by Theophrastus. "Pulegioides," fr. Grk. "psyllon," Lat. "pulegium," fleabane, & Grk. "oidos," like, *i.e.*, the plant resembles the European pulegium in appearance & odor.—*Constit.:* Volat. oil (1%); bitter prin.; tannin.—Arom.; Stim.; Emmen.—*Uses:* Flatul. colic & amenor.—*Dose:* Fld. extr., 15–60 ♏ (1–4 Cc.).

Hedera Glucoside.—see **Helixin**

Hedge Hyssop.—see **Gratiola**

Hedge Mustard.—see **Sisymbrium**

Hedonal (32

(Methylpropylcarbinolurethane).—$O(CH_3.CH.C_3H_7).CO.NH_2$.—Wh. powd.—*Sol.* A., E.; in 120 W. at 37° C., but more solub. in hot W.—*Melt.* 76° C.—*Boil.* 215° C.—Hypnotic.—*Uses:* Melancholia, mania, delirium tremens, chron. alcoholism, &c.—*Dose* 15–30 grains (1–2 Gm.).

Heidenhain's Hematoxylin

Aqu. 1% solut. hematoxylin.—*Uses:* Staining histological specimens.

Heidenhain's Hematoxylin-Iron

a., aqu. solut. ammonioferric sulphate.—*b.*, alcoh. solut. hematoxylin.—*Uses:* Staining nuclei.

Helcosol.—see **Bismuth Pyrogallate**

Helenin.—see **Inulin**

Helenin Merck.—White, cryst. (100

(Inula, Elecampane, or Alant, Camphor; Alantolactone; Alant-acid Anhydride).—A stearopten fr. Inula Helenium, L.—$C_{15}H_{20}O_2$.—Wh., cryst.—*Sol.* A., E., oils.—*Melt.* 64–66° C.—Antiseptic; Expector.; & Antispasm. — *Uses: Intern.*, phth., diar., bronch., whoop.-cough, leucor. w. endometr. & catar. affect.—*Extern.*, surg. appl. in injuries, ulc., diphth., &c.—*Appl.* 2% oily solution.—*Doses* $^1/_6$–$^1/_2$ grain (0.01–0.02 Gm.) 5–10 t. p. d., in pills; or better, $1^1/_2$ grains (0.1 Gm.) every 2 hrs.—See also Inulin.

Helenium.—see **Inula**

Helianthemum

(Frostwort).—Herb of Helianthemum canadense, Michaux. Cistaceæ.—*Habit.:* U. S. (Maine to North Carolina & Kentucky, west to Wisconsin).—*Etymol.:* Grk. "helios," sun, & "anthos," flower, *i.e.*, the flowers open only in sunshine. "Canadensis" refers to its original habitat.—*Constit.:* Tannin; wax; fixed & volat. oils; crystalline principle.—Astring.; Tonic; Alter.—*Uses:* Scrofula, dysent. & secondary syphil.—*Extern.*, in scarlat. & prurigo.—*Dose:* Fld. extr., 30–120 ♏ (2–8 Cc.).

Helianthine.—see **Methyl Orange**

Helianthine Paper.—see **Methyl-Orange Paper**

Helianthus

(Sunflower).—Flowers & seeds of Helianthus annuus, L. Compositæ. Synantheræ.—*Habit.:* Cultivated everywhere.—*Etymol.:* Fr. Grk. "helios," sun, & "anthos," flower, & Lat. "annuus," yearly, *i.e.*, the plant is an annual.—*Constit.: Flowers:* Fixed oil; balsam. *Seeds:* Fixed oil; helianthic acid; tannin. — *Uses: Flowers:* Domestic remedy.—*Seeds:* Expector. & Diuret. in coughs, bronch. affect., & febrile condit.—*Techn.*, as source of sunflower-seed oil.—*Dose: Seed:* Fld. extr., 30–60 ♏ (2–4 Cc.).

Helichrysum

(Flores Stœchados citrinæ; Immortelles).—Flowers of Helichrysum (Gnaphalium) arenarium, D. C. Compositæ.—*Habit.:* Europe.—*Etymol.:* Helichrysum fr. Grk. "helios," sun, & "chrysos," gold, *i.e.*, the flowers are golden-yellow. "Arenaria" fr. Lat. "arena," sand, *i.e.*, the plant grows in sandy places.—*Constit.:* Volat. oil; tannin; bitter principle.—Antipodagr., & Antihidrot.—*Uses:* Renal & vesical affections & in chronic cutaneous affections.—*Techn.*, to preserve furs, &c., fr. moths.

Helicin Merck (100

(Glycosalicylic Aldehyde).—Fr. salicin, hyoxid'n. — $C_{13}H_{16}O_7 + {}^3/_4H_2O$. — Wh. need.; sl'y bitter taste.—*Sol.* W., A.—*Melt.* 170–175° C.

Helicina Merck.—Fr. Snails (4

(Saccharated Snail Juice).—Fr. Helix pomatia.—Mixt. of snail mucus & sugar (5:1).—Wh. powd.—*Sol.* W., with turb.—*Uses:* French remedy for dis. of chest.—*Dose* 30–150 grains (2–10 Gm.).—*Caut.* Not to be confounded with Helicin, an oxidation prod. of salicin.

Heliotropin Merck (13

(Piperonal; Piperonyl Aldehyde; Methylene Ester of Protocatechuic Aldehyde).—Synthet. fr. piperin.—$C_8H_6O_3$, or, $C_6H_3(CH_2OO)COH$.—Wh., shin. crystals.—*Sol.* A., E.; sl. in W.—*Melt.* 37° C.—Antisep.; Antipyr.—*Uses:* Fevers, skin dis.—*Extern.*, wash in alcoh. solut. in surg. practice.—*Techn.*, as perfume.—*Dose* 15 grains (1 Gm.) ev. 2 or 3 hrs.—*Caut.* Keep in cool, dark place; in hot climates, best in alcoh. solut.

Helixin Merck (700

Glucoside fr. lvs. Hedera Helix, L. (Ivy).—$C_{32}H_{54}O_{11}$ (Vernet).—Wh. powd.—*Sol.* A.; hot B., hot acetone.—*Melt.* 233° C.

Hellebore.—see **Helleborus**

Helleborein Merck (200

Glucoside fr. Helleborus niger, L., & H. viridis, L.—$C_{37}H_{56}O_{18}$.—Yellowish powd.—*Sol.* W., A. —Heart Stim. & Local Anesth.—*Uses: Intern.,* inst. of digitalis. — *Extern.,* on cornea 3 or 4 drops of solut. cont. in 1 drop $^1/_{125}$ grain (0.0005 Gm.) give comp. anesth., without irrit., lasting half an hour.—*Dose* $^1/_6$–$^1/_3$ grain (0.01–0.02 Gm.) 4–5 t. p. d.—Causes diarrhea.—*Antid.,* emetics, stomach siphon, tannin, brandy hypoderm., extern. stimul. w. heat, mustard, &c.—*Caut.* Poison!

Helleborin Merck

Glucoside fr. Helleborus viridis, L., & H. niger, L.—$C_{36}H_{42}O_6$.—Colorl. cryst.—*Sol.* A., C.; sl. in E.—*Melt.,* above 250° C.—Narcotic; without digitalis-like action.—*Antid.,* as of preceding.—*Caut.* Poison!

Helleborus Niger

(Hellebore; Christmas Flower or Rose; Winter Rose; Black Hellebore; Black Bear's Foot).—Root of Helleborus niger, L. Ranunculaceæ.—*Habit.:* Europe.—*Etymol.:* Grk. "helein," to take away, *i.e.,* life, & "bora," food, *i.e.,* something which, when eaten, will deprive of life.—*Constit.:* Volat. oil; helleborin; helleborein (glucoside); helleboretin; resin; fat.—Cardiac Tonic; Cath.; Emmen.; Alter. — *Uses:* Dropsy, epilepsy, &c., & in constip.—*Doses:* 5–20 grains (0.3–1.3 Gm.).—Alcoh. extr., $^1/_2$–$1^1/_2$ grains (0.03–0.1 Gm.), alter.; 3–10 grains (0.2–0.6 Gm.) cath. & emmen.—Fld. extr., 5–10 ♏ (0.3–0.6 Cc.), alter.; 30–60 ♏ (2–4 Cc.), cath. & emmen. —*Caut.* Poison!

Helleborus Viridis

(Green Hellebore; Bastard Hellebore).—Root of Helleborus Viridis, L. Ranunculaceæ.—*Habit.:* Europe; natur. in eastern U. S.—*Constit.:* Volat. oil; helleborein; helleborin. — Cardiac Tonic; Cath.; Emmen.; Alter.—*Uses:* Dropsy, epilepsy, &c.; also in constip.—*Doses:* Extr., $^1/_4$–$^3/_4$ grain (0.015–0.05 Gm.).; *Max. D.* $1^1/_2$ grains (0.1 Gm.) single; 8 grains (0.5 Gm.) daily. —Fld. extr., 1–5 ♏ (0.06–0.3 Cc.); *Max. D.* 5 ♏ (0.3 Cc.) single; 20 ♏ (1.3 Cc.) daily.—Tinct. 8–25 ♏ (0.5–1.6 Cc.).—*Caut.* Poison!

Helminthochorton

(Corsican Moss; Corsican Worm-weed; Worm Moss; Crow-silk).—Various spec. of Alsidium, Ceramium, Fucus, Gigartina, Polysiphonia, &c. Rhodophyceæ.—*Habit.:* Atlantic Ocean; Mediterranean Sea.—*Etymol.*. Fr. Grk. "helmins," worm, & "chortos," grass.—*Constit.:* Mucilage, & salts.—*Uses:* Vermif.; Antiscrofular.

Helmitol (12

(Hexamethylenetetramine - anhydromethylene Citrate).—$C_7H_6O_7.(CH_2)_6N_4$.—Colorl. cryst.—*Sol.* 10 W.; alm. insol. A., E.; decomp. by acids & alkalies w. liberation of formaldehyde.—*Melt.* 165–175° C., w. decomp.—Urinary Antisep.—*Uses:* Cystitis, urethritis, pyelitis, &c.—*Dose* 10–15 grains (0.6–1 Gm.) 3–4 t. p. d.

Helonias

(False Unicorn; Chamælirium; Blazing Star, Starwort).—Rhizome of Chamælirium luteum; Gray. Melanthaceæ, Liliaceæ.—*Habit.:* Ontario and eastern U. S.—*Etymol.:* Grk. "helos," marsh, *i.e.,* the plant grows in marshy ground. Grk. "chamai," ground, & "leirion," lily.—*Constit.:* Chamælirin.—Teniafuge; Tonic; Diuret.; large doses Emetic.—*Dose:* Fld. extr., 30–60 ♏ (2–4 Cc.).

Helonin (Eclectic) (30

Extr. fr. rhizome of Chamælirium luteum, Gray. —*Sol.* A. — Diuret.; Tonic; Anthelm.—*Uses:* Dropsy, dyspepsia, atony of gen.-urin. org., & worms.—*Dose* 1–5 grains (0.06–0.3 Gm.) in pills.

Hemacalcium.—see **Mayer's Hemacalcium**

Hemalbumin Dahmen (10

Ferruginous preparation fr. blood.—Dark-brown powd.; odor of cinnamon.—*Sol.,* hot W., & alcoholic liquids.—Consists of hematin, hemoglobin, serum albumin, & paraglobulin, together w. the mineral salts of blood.—*Uses:* Chlorosis, tuberculosis, & in convalesc. fr. acute, debilit. dis's.—*Dose* 15–30 grains (1–2 Gm.) 3–4 t. p. d.

Hematein

Deriv. fr. hematoxylin.—$C_{16}H_{12}O_6$.—Brown powd.—*Sol.,* sl. A., E.; sl. W.—*Uses:* Micros. stain.

Hematein Merck.—Reagent (250

$C_{16}H_{12}O_6$.—Reddish-brown plates; yellowish-green, metal. luster.—*Sol.* 1,670 W. at 20° C.; diffic. A., E.; insol. B., C.; sol. in NH_4OH w. brownish-violet color, & in dil. NaOH w. bright-red color.—*Uses:* Indicator like hematoxylin.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Hematein-ammonium

$C_{16}H_{10}O_5.NH_3+4H_2O$ (Hesse).—Violet-black, gran. powd.; aqu. solut. purple; alcoh. solut. brownish-red.—*Uses:* Stain.

Hematin Merck (1500

(Oxyhematin; Hematosin).—Fr. oxyhemoglobin by acids.—$C_{32}H_{32}N_4FeO_4$(Nencki).—Dark-brown powd.; amm. solut. red.—*Sol.,* alkalies, hot A.

Hematite

(Red Ferric Oxide; Reddle; Bloodstone).—An iron ore consisting of ferric oxide contaminated w. lime, quartz, & clay.—*Uses:* Techn., in powd. form as polishing powd. & putz-pomade, for metals, &c., & as a lithographic crayon.

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Hematoïdin.—see **Bilirubin**

Hematosin.—see **Hematin**

Hematoxylin. — see **Böhmer's, Delafield's, Heidenhain's,** or **Weigert's, Hematoxylin**

Hematoxylin Merck.—Pure, cryst. (40

Fr. heart-wood Hematoxylon campechianum, L.—$C_{16}H_{14}O_6+H_2O$.—Colorl. to yellowish cryst.; redden on expos.—*Sol.* A., E., borax solut., amm., G.; diffic. in E. & CS_2; sl. W.—*Melt.* 100–120° C.—*Uses:* As a coloring agent, partic. in microscopy.

Hematoxylin Merck.—Reagent (60

$C_{16}H_{14}O_6+3H_2O$.—Colorl. or pale-yellow, tetrag. cryst.—*Sol.*, sl. cold W., E.; more sol. hot W. & solut. borax; eas. in A., & in NH_4OH (w. purple color).—*Melt.* 100–120° C. (w. loss of W.).—On expos. to light acquires red color, & then yields yellow soluts.—Used as indicator in 0.5% alcoh. solut.—*Uses:* Stain in microscopy, & indicator especially in titration of alkaloids.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Hematoxylin-Alum.—see **Böhmer's Hematoxylin-Alum**

Hematoxylin-Alum-Calcium.—see **Mayer's Hemacalcium**

Hematoxylin-Alum-Glycerin.—see **Friedländer's Hematoxylin-Alum-Glycerin**

Hematoxylin-Eosine.—see **Renaut's Hematoxylin-Eosine**

Hematoxylin-Glycerin. — see **Ehrlich's, or Renaut's, Hematoxylin Glycerin**

Hematoxylin-Iron.—see **Heidenhain's Hematoxylin-Iron**

Hematoxylin Paper

Unsized, wh. paper, free fr. lime & charged w. hematoxylin. — *Uses:* Delicate indicator for ammonia, alkal., alkal. earths, & certain metals (alkalies=blue; acids=red).—*Caut.* Keep well sealed, in amber bots.

Hematoxylin-Potassium Iodide.—see **Cuccati's Hematoxylin-Potassium Iodide**

Hematoxylin-Safranine.—see **Rabl's Hematoxylin-Safranine**

Hemialbumose Merck (100

Product occupying a place midway between albumen & peptone, & obtained, according to Kühne, by digesting albumen w. pepsin, & then continuing the digestion until the product is converted into hemipeptone.—Yellowish powd.—*Sol.*, dil. acids & alkalies.

Hemlock.—see **Conium**

Hemlock, Water.—see **Cicuta**

Hemo-gallol (16

(Hemoglobin Deoxidized by Pyrogallol, Merck).—Fr. hemoglobin (the coloring matter of defibrinated blood) by reduct. w. pyrogallol. (Discovered by Kobert).—Reddish-brown powd. cont'g iron in condit. for easy assimilat.—Hematinic, Constructive, Tonic.—*Uses:* Anemia, chlorosis, debility, & in convalesc.; readily transformed into blood-coloring matter by debilit. people, & generally well borne; particularly suitable for children; much superior to inorg. prep. of iron.—*Doses:* 4–8 grains (0.25–0.5 Gm.) 3 t. p. d., $^1/_2$ hour before meals in powd. w. sugar, or in wafers, pills, or tablets. For children, 1–3 grains (0.06–0.2 Gm.), acc. to age.

do. Merck.—Tablets

Tablets each cont. 4 grains (0.25 Gm.) hemogallol.—*Dose* 2 tabl. 3 t. p. d., $^1/_2$ hr. bef. meals.

Hemoglobin Merck.—Powder (20

Red coloring matter of blood.—Brownish-red powd.—*Sol.* W.—Hematinic; readily absorbable Constructive, Tonic.—*Uses:* Anemia, chlorosis, &c.—*Dose* 75–150 grains (abt. 5–10 Gm.) daily in wine or syrup.

do. Merck.—Scales (20

Dark-brown, lustrous, odorl. scales.—*Sol.* W.—Hematinic, &c.—*Uses & Dose:* As of preceding.

Hemol (16

(Hemoglobin Deoxidized by Zinc, Merck).—Fr. hemoglobin by reduct. w. zinc-dust.—Dark-brown powd. cont'g easily assimil. iron.—*Sol.*, partly in W.—Hematinic.—*Uses:* One of best remed. in anemia & chlorosis; of great utility in treatm. of debilitated; readily absorbable.—*Dose* 2–8 grains (0.12–0.5 Gm.) 3 t. p. d. before meals, in powd., w. sugar or in wafers.

Hemol (Arsen-) Merck (16

Hemol w. 1% arsenic trioxide organically combined.—Brown powd.—Alter. & Hematinic.—Efficient remedy in skin diseases, anemia, chlorosis, & neuroses; no untoward action on stomach.—*Dose* $1^1/_2$ grains (0.1 Gm.) 2–3 t. p. d. in pills, increasing the dose by 1 pill every 4 days, until 10 pills are taken daily.

Hemol (Bromo-) Merck (16

Hemol w. 2.7% bromine organically combined.—Brown powd.—Antiepil.; specially useful in debility.—*Dose* 15 grains (1 Gm.) 3 t. p. d.

Hemol (Cupro-) Merck (20

Hemol w. 2% of copper organically combined.—Dark chocolate powd.—Readily absorbable, mildly acting substitute for older copper compounds in tuberc., scrof., syph., ecz., anemia, chlorosis, &c.—*Dose* $1^1/_2$ grains (0.1 Gm.) 3 t.p.d.—*Max. D.* 8 grains (0.5 Gm.) 3 t. p. d

Hemol (Iodo-) Merck (25

Hemol w. 16% iodine organically combined.—Brown powd.—Develops the iodine effect in

highest degree.—*Uses:* Tertiary syphilis, chron. lead poison., scrof., asthma, psoriasis, &c.—*Dose* 3–5 grains (0.2–0.3 Gm.) in pills, 3 t. p. d.

Hemol (Mercuro-iodo-) Merck (30

Hemol w. 12.35% mercury & 28.60% iodine organ. combined.—Brown powd.—Antisyph.; Tonic. — *Uses:* Chiefly in syphilis, particularly when accompanied by scrofula or anemic conditions. Develops fully the mercurial effect without the unpleasant by-effects ordinarily exerted by mercury.—*Dose* 2–5 grains (0.12–0.3 Gm.) 3 t. p. d., in pills.—*Subcut.*, a mixture containing 6–10% of the remedy suspended in a 1–2% gelatin solut. w. 0.6% sod. chloride added, the mixt. being warmed bef. injecting.

Hemol (Zinc-) Merck (20

Hemol w. 1% zinc organically combined.—Dark-brown powd.—*Sol.*, partly in W.—Hematinic & Constructive; mild zinc preparation, deserving of preference above all other zinc salts intended to be absorbed.—*Uses:* Anemia, chlorosis, & gastric or intest. erosions.—*Dose* 8 grains (0.5 Gm.) 3 t. p. d.

Hemp, Canadian.—see **Apocynum**

Hemp Nettle.—see **Galeopsis**

Hempseed.—see **Cannabis Seed**

Henbane.—see **Hyoscyamus**

Henna

(Egyptian Privet; Flower-of-Paradise).—Lvs. of Lawsonia alba, Lamarck. Lythraceæ.—*Habit.:* Orient; Mediterranean region; southern Asia; Australia.—*Etymol.:* Fr. Arabic "alhenneh," by which term the coloring matter is designated.—*Constit.:* Tannin; coloring matter.—Diuret.; Astring.—*Uses:* Jaundice & skin diseases.—*Extern.*, as an "Oriental cosmetic" for dyeing the finger nails, hands, feet, & hair.—*Techn.*, in combination w. indigo, as hair dye.

Henneguy's Acetic Alum Carmine

Boil 2–3 Gm. carmine w. 100 Cc. 15% aqu. solut. potass. alum, & when cold, add 10 Cc. acetic acid.—*Uses:* Staining tissues & cell nuclei.

Hepar Antimony.—see **Potassium & Antimony, Sulphurated; Sodium & Antimony, Sulphurated**

Hepar Calcis.—see **Lime Sulphurated**

Hepar Sulphuris.—see **Potassa Sulhpurated**

Hepatica

(Liverwort; Liverleaf; Noble Liverwort; Kidney Liverleaf).—Whole plant Hepatica Hepatica (triloba), Karst. Ranunculaceæ.—*Habit.:* Europe.—*Etymol.:* Lat. "hepar," liver, referring to the shape of the lvs.—*Constit.:* Tannin; oleoresin.—Tonic; Astring.—*Uses:* Supposed to be of benefit in hepatic affect.—*Dose:* Fld. extr., 30–60 ♏ (2–4 Cc.).

Heptanal.—see **Oenanthal**

Heptane Merck (10

(Heptyl Hydride; Methyl Hexane; Normal Heptane; Dipropylmethane).—Hydrocarbon of petroleum.—C_7H_{16}, or, $CH_3.(CH_2)_5.CH_3$.—Volat., colorl. liq.—Sp. Gr. 0.684 at 20° C.—*Sol.* A., E., C.—*Boil.* 95–100° C.—Anesth.; Solvent.

Heptoic Aldehyde.—see **Oenanthal**

Heptyl Hydride.—see **Heptane**

Herapathite.—see **Quinine Iodosulphate**

Herb Robert.—see **Geranium Robertianum**

Herniaria

(Rupturewort).—Whole plant Herniaria glabra, L. Caryophyllaceæ.—*Habit.:* Europe.—*Etymol.:* Lat. "hernia," rupture, referring to the medicinal uses of the plant. "Glabra," fr. Lat. "glaber," smooth, hairless.—*Constit.:* Herniarin (methyl-umbelliferone), $C_{10}H_8O_3$; paronychine; saponin; tannin.—*Uses:* Diuret. in nephritis & nephrolithiasis, & in vesical catarrh.—*Extern.*, in snake bites.

Heroin (100

(Diacetylmorphine). — $C_{17}H_{17}(C_2H_3O)_2NO_3$. — Wh., cryst., odorl., bitter powd.—*Sol.*, in acidul. liquids, hot A., C., B.; diffic. E.; insol. cold W. & oils.—*Melt.* 171° C.—Cough-sedative; Antispasmodic.—*Uses:* Phthisis, bronchitis; asthma, &c.—*Dose* $^1/_{12}$–$^1/_6$ grain (0.005–0.01 Gm.).

Heroin Hydrochloride (100

(Diacetylmorphine Hydrochloride). — $C_{17}H_{17}(C_2H_3O)_2NO_3.HCl$.—Wh., bitter powd.—*Sol.* A., 2 W.—*Melt.* 230–231° C.—Cough-sedative; Antispasm.—*Uses:* Phthisis, bronchitis, asthma, &c.—*Dose* $^1/_{12}$–$^1/_6$ grain (0.005–0.01 Gm.).

Hertwig's Osmic-Acetic Acid

0.05 Gm. osmic acid, 0.2 Gm. acetic acid, & 200 Cc. W.—*Uses:* Macerating liquid.

Herzberg's Paper.—see **Congo Red Paper**

Hesperetin Merck (750

(*Not* Hesperidin).—Decomp. product obt. by heating hesperidin w. dil. H_2SO_4 to 120° C.—$C_{16}H_{14}O_6$, or, $C_6H_3.(OCH_3)(OH).CH:CH.CO_2.C_6H_3(OH)_2$.—Yellow cryst.—*Sol.* A., E.; sl. W.—*Melt.* 220° C., w. decomp.

Hesperidin Merck (125

(*Not* Hesperetin).—Glucoside fr. unripe fruit, Citrus vulgaris, Risso (Bitter orange).—$C_{50}H_{60}O_{27}$.—Yellow powd.—*Sol.*, dil. alkalies; hot acetic acid.—*Melt.* 251° C., w. decomp.

Hetokresol (35

(Cinnamylmetacresol).—Wh., cryst. powd.—*Sol.* E.; insol. W.—*Melt.* 65° C.—*Uses: Extern.*, in treatment of osseous, articular, urogenital, & glandular, tuberculosis.—*Appl.*, in vesical irrigations in 1–5% suspensions; as wash for fistulas, hetokresol-iodoform (1–2 : 8) & hetol-iodolkresol-ether (1–2 : 7); sores, &c., washes of hetol-ether (1 : 10–20).

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Hetol = Sodium Cinnamate.—see **Sodium Cinnamate**

Hetol-Caffeine

(Caffeine-Sodium Cinnamate).—Amorph., odorl., bitter, alkaline powd.—*Sol.* 2 W., 50 A.—*Uses:* Instead of caffeine & sodium salicylate as diuret.

Hetralin

(Resorcinol-Hexamethylenamine).—$C_6H_6O_2.C_6H_{12}N_4$.—Wh., cryst. need.—*Sol.* 4 A., 4 hot W., 14 cold W.—Decomp. above 160° C.—Diur.—*Uses:* Gonor., cystitis.—*Dose* 15–25 grains (1–1.6 Gm.) p. d.

Hexachlorethane.—see **Carbon Trichloride**

Hexachlorobenzene (or *-zol*).—see **Benzene, Perchloro-**

Hexahydropyridine.—see **Piperidine**

Hexahydrothymol.—see **Menthol**

Hexamethylenamine (3

(Formin [a particularly pure grade]; Hexamethylenetetramine; Aminoform; Urotropin; Cystamin; Cystogen).—$(CH_2)_6N_4$.—Wh., cryst. powd.—*Sol.* W.; dif. A.; alm. insol. E.—Sublimable.—Uratolytic & Genito-Urinary Antisep.; Diuret.—*Uses:* Uric-acid diathesis, cystitis, gout, bacterial urin. dis's; prevents developm. of typhoid, cystitis, & destroys infectiousness of typhoid urine.—*Dose* 8–25 grains (0.5–1.5 Gm.) w. much W.

Hexamethylenamineanhydromethylene Citrate.—see **Helmitol**

Hexamethylenamine Bromethylate.—see **Bromalin**

Hexamethylenamine-Lithium Benzoate.—see **Urystamine**

Hexamethylenamine Oxymethylsulphonate.—see **Thial**

Hexamethylenamine Salicylate.—see **Saliformin**

Hexamethylenaminetannin.—see **Tannopine**

Hexamethylenetetramine.—see **Formin; Hexamethylenamine**

Hexane Merck (8

(Hexyl Hydride; Caproyl Hydride; Normal Hexane).—Principal constituent of petroleum ether, or ligroin.—C_6H_{14}.—Colorl., volat. liq.; faint, pecul. odor.—Sp. Gr. 0.658 at 20° C.—*Sol.* A., E., C.—*Boil.* 65–70° C.

Hexaoxyanthraquinone.—see **Acid Rufigallic**

Hexoic-Acid Nitrile.—see **Amyl Cyanide**

Hexyl Hydride.—see **Hexane**

Hexyl Iodide Merck.—Fr. Mannit (160

(Secondary Normal Hexyl Iodide).—Fr. mannit & HI.—$C_6H_{13}I$, or, $CH_3.(CH_2)_3.CHI.CH_3$.—Colorl. liq.—Sp. Gr. 1.453 at 0° C.—*Boil.* 168° C.

Hexyleneglycol.—see **Pinacone**

Hide Powder Merck.—Reagent.—For Tannin Determination (15

Wh., or yellowish-wh., woolly powd. fr. best quality of hide dehaired w. lime, & thoroughly washed.—Should have but sl. odor, & be free espec. fr. odors of decomp. prod.—*Tests:* (*Constit. Solub. in H_2O*) place 5 Gm. in a Procter bell-filter, & suspend in a 200 Cc. beaker; fix siphon in clamp so that bell-filter is near bottom of beaker; moisten hide powd. w. sm. quant. H_2O (requires abt. 1 hr.); fill beaker & apply suction to siphon till filtrate begins to drop slowly. 90–100 Cc. filtrate requires abt. $1^1/_2$–2 hrs. Reject first 30 Cc. filtrate; next 50 Cc. evap. to dryness on W.-bath; dry res. in air-bath at 100–105° C. to const. wt. – wt. not to exceed 0.005 Gm.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Hippocastanum Bark.—see **Æsculus Hippocastanum**

Hippol (30

(Methylenehippuric Acid).—$C_6H_5CO.N:(CH_2)_2.COO$.—Not a true acid.—Colorl. cryst.; odorl. & tastel.—*Sol.*, eas. C.; hot B, A., & acetic ether; 460 W. at 23° C.—*Melt.* 151° C.—Urinary Antisep.—*Uses:* Bacterial diseases of urinary organs.—*Dose* 25 grains (1.6 Gm.) sev. t. p. d.

Hips

(Dog Rose; Wild Brier; Cynosbata).—Recent ripe fruit of Rosa Canina, L. Rosaceæ.—*Habit.:* Europe; cultiv. in U. S.—*Etymol.:* "Rosa," fr. Grk. "rhodon," fr. Celtic "rhos," red, & "Canina," fr. Lat. "canis," dog. "Cynosbata," fr. Grk. "kyon," dog, & "batos," brier or bramble, *i.e.*, the fruit was credited with strong antihydrophobic properties.—Ovoid, smooth, shining, hollowed thalamus, bearing a number of achenes on its inner surface; scarlet or red color; inod.; pleasant, sweetish, acidulous taste.—*Constit.:* Tannin; vanillin; coloring matter.—*Uses:* As conserve, & pill excipient.

Hirudin (11000

Principle prevent. blood coagulation, & obt. fr. the heads of leeches by physiological salt solut.—Brownish, dry scales or bulky masses.—*Sol.*, v. eas. W.; insol. A., E.—*Uses:* To prevent blood coagulation in gynecology, &c., $^1/_{60}$ grain (0.001 Gm.) suffices to permanently prevent 2 dr. (7.5 Cc.) of blood fr. coagulating, & without changing its character.—For use a solut. in dist. W. or in physiol. salt solut. $^1/_6$ grain (0.01 Gm.) to 30 ♏ (2 Cc.) is prepared.

Histosan (26

Guaiacol-albumin comp.—Light-brown powd.—*Sol.*, alkal. intest. liquids; insol. gastric fluid.—Antitubercular.—*Uses:* As of guaiacol.—*Doses:* Adults, 8 grains (0.5 Gm.); children, 4 grains (0.25 Gm.) 3 t. p. d.

Hoffmann's Anodyne.—see **Spirit Ether Compound**

Hofmann's Violet Merck (8

(Dahlia Violet; Triethylrosaniline Hydrochloride).—Green lumps.—*Sol.* W.—*Uses:* To dye wool bluish-red. Also for inks & stain. In alcoh. solut. acidulated w. acetic acid as stain for cylinders of nerve fibers, & as test paper (see Dahlia Paper).

Hog-Gall.—see **Gall, Hog-**

Holarrhena

(Conessi; Tellicherry; Indageer). — Seeds of Holarrhena antidysenterica, Walt. Apocynaceæ. —*Habit.:* India.—*Etymol.:* Grk. "holos," whole, & "arrhen," male, referring to the free anthers. —*Constit.:* Conessine (wrightine), $C_{24}H_{40}N_2$.—*Uses:* Antidysenter.; Febrif.—*Dose* 2–5 grains (0.12–0.3 Gm.) in powd., or 15–60 ♏ (1–4 Cc.) of 1:5 tinct.

Holly, European.—see **Ilex**

Hollyhock.—see **Althæa Rosea**

Holocaine Hydrochloride (140

(Amidin; Paradiethoxyethenyl-diphenylamine Hydrochloride). — $C_2H_5O.C_6H_4.N:C(CH_3).NH.C_6H_4.OC_2H_5.HCl$.—Colorl. cryst.—*Sol.* 50 W.; A.—*Uses:* Local anesth. in ophthalm. Instillation of 2–5 drops of 1% solut. causes prolonged anesthesia in 10 minutes.

Homatropine Merck.—Alkaloid, pure (3420

(Oxytoluoltropine; Oxytoluylatropeïne). — By evap. mixt. tropine & mandelic acid w. dil. hydrochl. acid.—$C_{16}H_{21}NO_3$.—Wh. cryst.—*Sol.* A., E., C.; sl. in W.—*Melt.* 98–99° C.—Sedat.; Antispasm.; Anod.; Antihidrotic.—*Uses:* As of atropine, but less toxic. Salts are exceed. useful in ophthalmology; dilate pupil powerfully; effect subsides quicker than w. atropine; hydrobromide us'y used.—*Dose* $^1/_{120}$–$^1/_{60}$ grain (0.0005–0.001 Gm.) several t. p. d.—*Antid.,* emetics & stomach tube; tannin & animal charcoal; again give emetics, then castor oil; artificial respir., heat, stim., &c.—*Caut.* Keep well stoppered.

Homatropine Hydrobromide Merck (2565

$C_{16}H_{21}NO_3.HBr$.—Sm., wh. cryst.—*Sol.* 10 W., 33 A.; 5.7 W., 32.5 A., & 620 C. at 25° C. (U. S. P.); insol. E.—*Melt.* 210–212° C., when quickly heated (213.8° C., U. S. P.).—*Uses:* Mydriatic in ophthal. surg.; in night sw. of phth., & as sedative. Mydr. effect commences in $^1/_4$ to $^1/_2$ hour, reaches maximum in 1 hour, & disappears in 6 hours. Accommod. paresis ceases earlier. — *Dose* $^1/_{120}$–$^1/_{60}$ grain (0.0005–0.001 Gm.).—*Appl.,* to the eye, in a 1% solution.—*Max. D.* $^1/_{60}$ grain (0.001 Gm.) single; $^1/_{20}$ grain (0.003 Gm.) p. d.—*Antid.,* as of homatropine.

Note.—This salt is rendered perfectly pure by repeated recrystallization, thus making it a perfectly safe, reliable, & prompt mydriatic.

Homatropine Hydrochloride Merck (3135

$C_{16}H_{21}NO_3.HCl$.—Sm., wh. cryst.—*Sol.* W., A.—*Melt.* 216–217° C.

Homatropine Methylbromide Merck

Wh. cryst.—*Sol.,* eas. W. & dil. A.; diffic. cold absol. A. & E.—*Melt.* 180–181° C.

Homatropine Salicylate Merck (3135

$C_{16}H_{21}NO_3.C_7H_6O_3$.—Wh. cryst.—*Sol.* W., A.

Homatropine Sulphate Merck (3135

$(C_{16}H_{21}NO_3)_2.H_2SO_4$.—Wh. cryst.—*Sol.* W., A.

Homoarecoline Merck (1000

(Arecaïdinethyl-ester). — $C_7H_{10}(C_2H_5)NO_2$. — Colorl. liq.—*Sol.* W., A., E., & C.—Possesses action like that of arecoline, but is less toxic.

Homoarecoline Hydrobromide Merck (750

$C_9H_{15}NO_2.HBr$. —Colorl. cryst.—*Sol.* W. & A. —*Melt.* 118–119° C.

Homocresol = Guaiacol-ethyl.—see **Guaethol**

Homoguaiacol.—see **Creosol**

Homopyrocatecholmonomethyl Ester.—see **Creosol**

Honey Sugar.—see **Dextrose**

Hop-hornbeam.—see **Ostrya**

Hop Tree.—see **Ptelea**

Hops.—see **Humulus**

Horehound.—see **Marrubium**

Horn Poppy.—see **Glaucium**

Horsechestnut, American.—see **Æsculus Glabra**

Horsechestnut Bark.—see **Æsculus Hippocastanum**

Horsemint.—see **Monarda**

Horse Nettle.—see **Solanum Carolinense**

Horseradish.—see **Armoracia**

Horsetail.—see **Equisetum**

Hound's Tongue.—see **Cynoglossum**

Hoyer's Ammonium Carminate.—Dry, & Solution

Solut. is made fr. 2 Gm. carmine, & 100 Cc. ammoniacal water, with addition of hydrated chloral.—On adding alcohol to the solut., a ppt. forms which, when dried, affords the *Dry* preparation.—*Uses:* Staining nuclei, axis cylinders, & nerve cells.

Hoyer's Chloral-Acacia

Solut. acacia & hydrated chloral in W. & G.—*Uses:* For examining & preserving specimens.

Huber's Reagent.—For free mineral acids

Aqu. solut. ammonium molybdate & potass. ferrocyanide.—Free mineral acids (boric acid & arsenic trioxide excepted) afford a reddish-brown ppt. or turbidity w. the reagent.

Huckleberry, European.—see **Vaccinium**

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Huckleberry Paper

Wh. paper charged w. a hydro-alcoh. extract of huckleberries.—Indicator for ammonia & fixed alkalies (grayish-blue), & acids (red color).

Huebl's Solution

25 pts. of iodine & 30 pts. of mercuric chloride in 1,000 pts. of absolute alc. Titer must be verified before or after use, as it changes with time.—*Uses:* Determ. iodine No. of fats & oils.

Humulus.—*U. S. P.*

(Hops).—Carefully dried strobiles of Humulus Lupulus, L. Moraceæ, bearing their natural glandular trichomes.—*Habit.:* Europe; Asia; North America; cultivated widely.—*Etymol.:* Fr. Anglo-Saxon "hoppan," to climb. "Humulus" fr. Lat. "humus," ground, *i.e.*, the plant creeps on the ground unless supported. "Lupulus," a contraction of "Lupus salictarius" (Pliny), *i.e.*, wolf of the willows; or, diminutive of "lupus," *i.e.*, little wolf, because it strangles shrubbery around which it climbs.—*Constit.:* Volat. oil; asparagin; choline; hop-bitter acid; hop-resin; tannin.—Antispasm.; Tonic; Diuret.; Sedat.; Anodyne; Hypnot.; Carminat.; Diaphor.—*Uses:* Insomn., dyspep., irrit. bladder & inflam. of genito-urin. organs, gen. debility, nervous tremor.—*Techn.,* in beer brewing.—*Doses:* 30 to 60 grains (2–4 Gm.).—Alcoh. extr., 2–5 grains (0.12–0.3 Gm.).—Aqu. extr., 4–10 grains (0.25–0.6 Gm.).—Fld. extr., 30–60 ♏ (2–4 Cc.).—Tinct., 1–3 fl. dr. (4–12 Cc.).

Hyænanche

Fruit (seed) of Hyænanche globosa, Lamb. (Toxicodendron capense, Thunb.). Buxeæ.—*Habit.:* The Cape (South Africa).—*Etymol.:* Fr. Grk. "hyaina," hyena, & "anchein," to strangle, to choke, or destroy.—*Constit.:* Hyaenanchin (bitter principle).—*Uses:* Cerebral tonic.

Hydracetin.—see **Acetylphenylhydrazine**

Hydrangea

(Seven Barks).—Root of Hydrangea arborescens, L. Saxifragaceæ.—*Habit.:* Eastern U. S.—*Etymol.:* Grk. "hydor," water, & "aggeion," vessel, alluding to the shape of the capsule.—*Constit.:* Hydrangin (glucoside), $C_{31}H_{25}O_{11}$; sugar; saponin; resins; fixed & volat. oils; starch.—Diur., & Antilithic.—*Uses:* Dropsy, lithiasis, & dis. of genito-urin. organs.—*Dose:* Fld. extr., 30–60 ♏ (2–4 Cc.).

Hydrargyrol

(Mercury Paraphenolsulphonate).—$(C_6H_4.OH.SO_3)_2Hg$.—Obt. by action of phenolsulphonic acid on freshly precipit. mercuric iodide.—Brownish-red scales.—*Sol.* W., G.; insol. absol. A.—Antisep.—*Uses:* Inst. of corrosive sublim.

Hydrastin (Resinoid) (85

Resinous extr. fr. rhizome & roots Hydrastis canadensis, L.—*Sol.* A.—Antiseptic; Alter.; Astring.; Tonic; Emmen.—*Uses:* Gonor., leucor., constip., amenor., catarrh, uter. hemorrhage, piles, &c.—*Dose* 5–10 grains (0.03–0.6 Gm.).

Hydrastine Merck. — Alkaloid. — Highest Purity (250

Alkaloid fr. root of Hydrastis canadensis, L.—$C_{21}H_{21}NO_6$.—White prisms.—*Sol.* A., E., C., B.; sl. in W.—*Melt.* 132° C.—Alter.; Tonic; Antiper.—*Uses:* Gonor., leucor., constip., & uterine hemorrhages.—*Dose* $^1/_4$–$^1/_2$ grain (0.015–0.03 Gm.).—*Max. D.*, $1^1/_2$ grains (0.1 Gm.) single; 5 grains (0.3 Gm.) p. d.

Hydrastine Bitartrate Merck.—Cryst. (250

$C_{21}H_{21}NO_6.C_4H_6O_6+4H_2O$.—Small, white, cryst. need.—*Sol.*, hot W.

Hydrastine Hydrochloride Merck. — Highest Purity (250

$C_{21}H_{21}NO_6.HCl+aq$.—Amorph., wh. powd.—*Sol.* W.—Astring.; Alter.; Tonic; Hemost.—*Uses: Intern.*, uter. hemorrhage, dyspep., piles, &c.—*Extern.*, gonor., conjunct., endometr., leucor., cervical erosions, acne, hyperidrosis, sebor., &c.—*Dose* $^1/_2$–1 grain (0.03–0.06 Gm.) ev. 2 hrs. if necess.—*Appl.*, as astring., 0.1–0.5% solut.; in skin dis., 1% oint. or lotions.

Hydrastine Sulphate Merck (250

$(C_{21}H_{21}NO_6)_2.H_2SO_4+aq$.—Yellowish-wh., amorphous powd.—*Sol.* W.—*Uses:* As of hydrastine hydrochloride.

Hydrastinine Hydrochloride Merck (1040

$C_{11}H_{11}NO_2.HCl+H_2O$.—Yellow, cryst. powd.—*Sol.*, abt. 1 W.; 3 A.; alm. insol. E. & C.—*Melt.* 210° C.—Uterine Hemostatic; Emmen.; Vasoconstrictor.—*Uses:* Hemorrhages, congest. dysmenor., metrorrhagia, epilepsy, hemoptysis, &c.—*Dose* $^1/_4$–$^1/_2$ grain (0.015–0.03 Gm.) 3–4 t. p. d., in caps.—*Max. D.* 2 grains (0.12 Gm.) p. day.—*Inj.* 8–15 ♏ (0.5–1 Cc.) of 10% aqu. solut.

Hydrastinine, Oxy-.—see **Oxyhydrastinine**

Hydrastis.—*U. S. P.*

(Golden Seal; Orange Root; Yellow Root; Yellow Puccoon; Turmeric Root; Indian Turmeric).—Dried rhizome & roots of Hydrastis canadensis, L. Ranunculaceæ.—*Habit.:* N. America.—*Etymol.:* Grk. "hydor," water, & "aste," native of, *i.e.*, referring to its growing in moist places; or, "hydor," & "draο," to act, referring to the active properties of the drug.—*Constit.:* Hydrastine; berberine; canadine, $C_{20}H_{21}NO_4$.—Hemostat. (in uterine hemorrhages); Bitter Tonic; Antiper.; Alter.; Antisep.; Cholag.; Diuret.; Astring.—*Uses:* Jaundice, leucor., piles, gonor., spinal irrit., night-sweats, & intern. hemorrhage, catarrh, dyspep., constip.—*Doses:* 5–60 grains (0.3–4 Gm.).—Fld. extr., 10–60 ♏ (0.6–4 Cc.).—Hydro-alcoh. extr., 3–10 grains (0.2–0.6 Gm.).—Tinct., 20–60 ♏ (1.3–4 Cc.).

Hydrazine Sulphate Merck (80

(Diamidogen, or Diamine, Sulphate).—By heat. triazoacetic acid w. sulphuric acid.—$N_2H_4.H_2SO_4$,

or, $NH_2.NH_2.H_2SO_4$.—Wh. cryst.—*Sol.*, hot W. —Antisep. — *Uses:* Destroy fungi, mold, & bacteria.—*Techn.*, in chem. analysis for determining & separating copper accord. to Jannasch & Biedermann.

Hydrazobenzene Merck (50

(Hydrazobenzol).—By reduc. azobenzene w. amm. sulphide.—$C_{12}H_{12}N_2$, or, $C_6H_5.NH.NH.C_6H_5$.—Colorl. tablets; camphor. odor.— *Sol.* A.; sl. W.—*Melt.* 133° C.

Hydrobenzamide Merck (25

(Tribenzylidenediamine). — Fr. benzoic aldehyde, by NH_4OH.—$C_{21}H_{18}N_2$, or, $(C_6H_5.CH)_3N_2$. —Colorl. cryst.; fbl. sweet taste.—*Sol.* A., E.; insol. W.—*Melt.* 110° C.

Hydroberberine Merck (2000

Fr. berberine, by reduct. w. nascent hydrogen. —$C_{20}H_{21}NO_4$.—Yellow cryst.; reconverted to berberine by HNO_3.—*Sol.* A., C., CS_2; insol. W.

Hydrobilirubin.—see **Urobilin**

Hydrochinone.—see **Hydroquinone**

Hydrocotarnine Merck (20000

Alkaloid fr. opium in v. sm. quant.—$C_{12}H_{15}NO_3 + {}^1/_2H_2O$.—Wh. cryst.—*Sol.* A., E., C., alkalies. —*Melt.* 55° C.—More poisonous than morphine.

Hydrocotoïn Merck (90

(Benzocotoïn; Benzoylphloroglucindimethylester). — Fr. para-coto bark.— $C_{15}H_{14}O_4$, or, $OH.C_6H_2(CO.C_6H_5).(OCH_3)_2$. — Yellow need.— —*Sol.* A., E., C.—*Melt.* 98° C.

Hydrocotyle

(Water Pennywort; Thick-leaved Pennywort; Indian Pennywort; Bevilacqua).—Whole plant Hydrocotyle asiatica, L. Umbelliferæ.—*Habit.*: Southern Asia.—*Etymol.:* Grk. "hydor," water, & "kotyle," cup, referring to the cup-shaped lvs. which grow in water.—*Constit.:* Volat. oil; vellarin.—Diuret.; Alter. (in leprosy, elephantiasis, & skin diseases); Tonic.—*Uses:* Scrofula, syphilis, &c.—*Doses:* Alcoh. extr., 3–10 grains (0.2–0.6 Gm.).—Fld. extr., 15–40 ♏ (1–2.5 Cc.).

Hydrogen Ammonium Camphorate.—see **Ammonium Camphorate**

Hydrogen Ammonium Fluoride.—see **Ammonium Bifluoride**

Hydrogen Ammonium Oxalate.—see **Ammonium Binoxalate**

Hydrogen Ammonium Sulphate.—see **Ammonium Bisulphate**

Hydrogen Ammonium Sulphide.—see **Ammonium Sulphydrate**

Hydrogen Bromide.—see **Acid Hydrobromic**

Hydrogen Carboxylic Acid.—see **Acid Formic**

Hydrogen Chloride.—see **Acid Hydrochloric**

Hydrogen Cyanide.—see **Acid Hydrocyanic**

Hydrogen Diammonium Phosphate.—see **Ammonium Phosphate, Dibasic**

Hydrogen Dioxide.—see **Hydrogen Peroxide**

Hydrogen Ferrocyanide.—see **Acid Ferrohydrocyanic**

Hydrogen Fluoride.—see **Acid Hydrofluoric**

Hydrogen Iodide.—see **Acid Hydriodic**

Hydrogen Nitrate.—see **Acid Nitric**

Hydrogen Peroxide Merck.—Highest Purity.—Abt. 30% H_2O_2 by weight (16

(Perhydrol).—Abt. 30% by wt. (or 100% by vol.) H_2O_2.—Absolutely chem. pure solut. H_2O_2. —Sp. Gr. 1.111 at 15° C.—Preferable to the 3% H_2O_2 for medicinal purposes.—*Misc.*, all proport. w. W. or A.—Disinfect.; Antisep.; Deod.; Styptic; Antizym.—*Uses:* Chiefly extern., in diphth., sore throat, wounds, gonor., abscesses, &c.—*Intern.*, in flatulence, gastric affect., phthisical sweats, &c.—*Hypoderm.* (0.2% solut.), in cyanide poisoning.—*Dose* of 3% H_2O_2 (Perhydrol 1, water 9) 1–4 fl. drs. (4–15 Cc.), well dil. —*Extern.*, in 2–10% solut.; 3% solut. is as powerful antiseptically as a 1:1000 corros. sublim. solut.; also in eye lotions & eye drops (as 0.3% solut.), & in gynecol. (3% solut., & tampons moistened w. a 12% solut.); also in dentistry for bleaching teeth & as inject. (10% solut.) in alveolar pyorrhea. Counteracts poisonousness of diphth. & tetanus toxins, & also of abrin.—*Incomp.*, alkalies, albumen, ammonia, arsenous salts, balsam Peru, carbolic acid, charcoal, chlorides, chlorine water, citrates of alkalies, ferric salts, glycerin, gold salts, hydrocyanic acid, hypophosphites, iodides, lime-water, manganese dioxide, mercurous salts, nitrates, potassium bromide, permanganates, sulphates, solution chlorinated soda, tartrates, tinctures. —*Caut.* Keep cool & quiet.

do. Merck (1

(Solution Hydrogen Dioxide, U. S. P.; Oxygenated Water).—3% solut. corresp. to 10 vols. avail. O.—H_2O_2 + aq.—Colorl., sl'y acidulous liq.; foams in mouth.—Antisep.; Deodorant; Styp.—*Uses: Extern.*, diphth., sore mouth, anginal scarlat., eczema, chancre, whoop.-cough, gonor., otorrhea, absc., diab., phth., syph., rhinitis, suppur., fetid breath, fetid wounds, &c. Us'y appl. direct. to seat of dis., but occas. intern. —*Dose* 30–240 ♏ (abt. 2–15 Cc.) well diluted. —*Appl.* 1–10% solut.—*Techn.*, bleach hair, silk, feathers, straw, ivory, bone, & textile fabrics; remove stains on old paintings, engravings, &c., in combination w. paraphenylenediamine as a dye for furs, hair, &c.—*Incomp.*, as of preceding.

do.—Ethereal Solution

("Ozonized Ether").—Liq. obtained by mixing ether with hydrogen peroxide.—*Uses: Intern.*, Diabetes & whoop.-cough.—*Extern.*, as antisep., like hydrogen peroxide, & local. in scarlet fever.—*Dose* 30–60 ♏ (2–4 Cc.) sev. t. p. d.

Hydrogen Peroxide Merck.—Reagent.—30% (16

(Perhydrol).—H_2O_2.—30% by wt. H_2O_2.—Sp. Gr. 1.115–1.119.—Liq. acid to litmus paper (due entirely to high H_2O_2 content).—*Tests:* (H_2SO_4) 1 Cc.+20 Cc. H_2O+1 Cc. HCl (sp. gr. 1.124); boil; add solut. $BaCl_2$ – no ppt. within 12 hrs.—(*Res.* [H_2SO_4; H_3PO_4, &c.]) heat 10 Cc. on W.-bath – none wghble.—($H_2C_2O_4$) 2 Cc.+10 Cc. H_2O+solut. $CaCl_2$ – no react.—(*HCl*) 1 Cc.+20 Cc. H_2O+1 Cc. HNO_3 (sp. gr. 1.153)+solut. $AgNO_3$ – no turb.—(*HF*) concentrate 10 Cc.+few drops solut. NaOH on W.-bath; transf. to watch-glass, & dry on latter; pour on res. conc. H_2SO_4; let stand 2–3 hrs. in warm place – glass not etched.—(H_3PO_4) concentrate 5 Cc. on W.-bath; diss. res. in 3 Cc. H_2O; add 1 Cc. magnesia mixt.+3 Cc. NH_4OH (sp. gr. 0.96) – no ppt. within 12 hrs.—*Uses:* Partic. desirable oxidizer in analysis, *e.g.*, in oxidiz. sulphur in sulphides, sulphurous & hyposulphurous acids, of tin & the metals of the iron group, chromic acid, nitric acid, formaldehyde; analysis of MnO_2, conversion of iodates & bromates into iodides & bromides; determ. HCl, HI, & HNO_3; standardizing permanganate soluts.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Hydrogen Sulphide Water (1

(Hydrosulphuric Acid; Sulphuretted Hydrogen; Sulphydric, or Hydrothionic, Acid; Hydrogen Monosulphide).—Aqu. solut. of hydrogen-sulphide gas fr. iron sulphide.—H_2S+aq.—Transp., colorl. liq.; very offens. odor.—*Misc.*, all prop., W., A.—Antituberc.—*Uses:* Chiefly chem.—*Antid.*, fresh air & cold affusions, w. hot brandy & water, & breathing chlorine from chlorinated lime.—*Caut.* Keep fr. light.

Hydrogen Sulphide Water Merck.—Reagent (1

H_2S+aq.—Clear, colorl. liq.; strong odor H_2S; affords volum. ppt. on add. solut. $FeCl_3$; acid react. towards litmus paper.—*Uses:* Detect. heavy metals.

Hydrohydrastinine Hydrochloride Merck (800

$C_{11}H_{13}NO_2$.HCl.—Fine, wh. powd.—*Sol.*, eas. W.—*Melt.* 274° C.—Hemost.; Vasoconstrictor; accelerates respiration, & causes dyspnea; has no action on heart, & causes successive increase, decrease, & increase of blood pressure.—*Uses:* Chiefly in uterine hemorrhage.—*Dose* $^1/_3$–$^1/_2$ grain (0.02–0.03 Gm.) 4 t. p. d., in capsules.—*Inj.* 8 ♏ (0.5 Cc.) of 10% solut. in W.

Hydronaphtylamine Hydrochloride.—see **Thermin**

Hydroquinone Merck.—Highest Purity (2

(Paradioxybenzene [-zol]; Quinol; Hydrochinone).—Fr. quinone, by reduct. w. sulphurous acid.—$C_6H_6O_2$, or, $C_6H_4(OH)_2$[1:4].—Colorl. cryst.—*Sol.* A., E., 17 W.—*Melt.* 169° C.—Antisep.; Antipyr.—*Uses: Extern.*, 1–3% solut. in conjunctivitis, gonor., &c., infect. fevers, rheum., &c.—*Techn.*, as photo. developer.—*Doses:* 5–15 grains (0.3–1 Gm.) in wafers, caps., or in solut.—*Subcut.* 2 Cc. of a 10% solut. in W.—*Max. D.* 30 grains (2 Gm.) single.—*Caut.* Keep solut. fr. air & light.—Solut. should always be freshly made; old solutions have a caustic action.

Hydroquinone-dimethyl Ester Merck (40

Fr. boil. hydroquinone under pressure w. KOH & methyl iodide.—$C_6H_4(OCH_3)_2$.—Colorl. cryst.—*Melt.* 56° C.—*Sol.* A., E.

Hydroxybenzene.—see **Acid Carbolic; Phenol**

Hydroxylamine Hydrochloride Merck (18

NH_4OCl, or, $NH_2.OH.HCl$.—Colorl. cryst.—*Sol.* W., A., G.—Dermic Antisep.—*Uses: Extern.*, inst. of chrysarobin & pyrogallic acid in chronic psoria., lupus, itch, herpes, & o. skin dis.—*Techn.*, as photo. developer.—*Appl.* 0.1–0.5% solut. in A. or W.—*Caut.* Paint small surface at a time, else general health endangered.

Hydroxylamine Hydrochloride Merck.—Reagent.—Cryst. (25

$NH_2.OH.HCl$.—Dry, colorl. cryst.—*Sol.* 1 W.; 15 A.; G.—Aqu. solut. acid to litmus.—*Tests:* (*Res.*) heat 1 Gm. on platin. foil – none.—(NH_4Cl) 1:20 alcoh. solut.+$PtCl_4$ – no ppt.—(H_2SO_4) 20 Cc. 1:10 aqu. solut.+solut. $BaCl_2$ – no ppt. ($BaSO_4$) within 12 hrs.—(*Fe*) 10 Cc. aqu. 1:10 solut.+solut. KSCN – no react.—*Uses:* Reducer in determ. Au & Ag; in organic analysis & organic synthesis.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Hydroxylamine Sulphate Merck (30

($NH_2OH)_2.H_2SO_4$.—(Oxammonium Sulphate).—Colorl. cryst.—*Sol.* W.—*Melt.* 140° C.

Hymenæa Bark

(Locust Tree; Courbaril; Varnish Tree; Jatahy).—Hymenæa Courbaril, L. Cæsalpinaceæ.—*Habit.:* Brazil & West Indies.—*Etymol.:* Fr. Grk. "Hymen," god of marriage, *i.e.*, the plant-leaf-pairs approach each other at night; "Courbaril" is the South American name of the plant.—*Constit.:* Aromat. resin; catechin; catechutannic acid.—Arterial Sedat.; Astring.—*Uses:* Hemoptysis, hematuria, dysentery, &c.—*Dose* 10–20 grains (0.6–1.3 Gm.) in powder, or as fluid extract.

Hyoscine Merck.—Amorph. (3420

Fr. various Solanaceæ.—$C_{17}H_{21}NO_4$.—According to the latest investigations, it is chemically & physiologically identical with scopolamine (q. v.).—Thick, alm. colorl., syrupy liq.—*Sol.* A., E., C.; sl. W.—Levogyrate.—Hypn.; Sedat.; Mydr.—*Uses: Intern.*, mania, chorea, alcoh. tremor, &c.; quiet & give sleep to insane.—*Extern.*, 4–6 drops 1:400 aqu. solut., powerful mydr. effect. Salts us'y used.—*Doses:*

For insane, $^1/_{30}$ grain (0.002 Gm.), cautiously incr. or repeated until effect is prod. For sane, $^1/_{400}$–$^1/_{200}$ grain (0.00015–0.0003 Gm.).—*Inj.:* For insane, $^1/_{120}$–$^1/_{60}$ grain (0.0005–0.001 Gm.). For sane, $^1/_{400}$–$^1/_{200}$ grain (0.00015–0.0003 Gm.). —*Max. D.* $^1/_{20}$ grain (0.003 Gm.) daily.—*Antid.*, emetics, stom. siphon, muscarine, tannin, animal charcoal, emetics again; heat or cold extern., cathartics, &c.—*Caut.* Poison!

Hyoscine Hydriodide Merck.—Cryst. (2708

$C_{17}H_{21}NO_4.HI$.—Wh. prisms.—*Sol.* W., A.—*Uses:* As of hyoscine.

Hyoscine Hydrobromide Merck.—Cryst. (2708

$C_{17}H_{21}NO_4.HBr+3H_2O$. — Colorl. cryst. — *Sol.*, abt. 4 W., 15 A.; slightly in E. & C.—*Melt.* (when anhydrous) 191°–192° C.—Sed.; Mydr.; Antaphrod.; Antsialag.—Salt most commonly used intern.; little used extern.—*Uses, Doses, Antid., &c.:* As of hyoscine.—*Caut.* Poison!

Hyoscine Hydrochloride Merck.—Cryst. (2708

$C_{17}H_{21}NO_4.HCl+2H_2O$.—Wh. cryst.—*Sol.* W., A.—*Melt.*, abt. 200° C.—*Uses, Doses, &c.:* As of hyoscine.

Hyoscine Sulphate Merck.—Cryst. (2708

$(C_{17}H_{21}NO_4)_2.H_2SO_4$.—Wh. cryst.—*Sol.* W., A.—*Uses & Doses:* As of hyoscine.

Hyoscyamine Merck. — From Belladonna or Scopola.—Cryst. (600

Fr. Belladonna (or Scopola) root.—$C_{17}H_{23}NO_3$. —Wh., felted need.—*Sol.* A., E., C.—*Melt.* 108° C. — Levogyrate; $[\alpha]_D$ abt. −21° in alcoholic solution.

do. Merck.—From Hyoscyamus or Scopola. —Highest Purity, cryst. (2708

Alk'd fr. Hyoscyamus or Scopola (see also Daturine).—$C_{17}H_{23}NO_3$, or, $CH.(O.CO.CH[C_6H_5].CH_2.OH).CH_2.CH(N.CH_3).(CH_2)_2.CH.CH_2$.—Wh., silky crystals.—*Sol.* A., E., C., acidul. W.; sl. in W.—*Melt.* 106–108° C.—Mydr.; Hypn.; Sed.—*Uses:* To quiet insane & nervous; ease cough in tuberculosis, asthma, &c.—*Doses:* $^1/_{120}$–$^1/_{30}$ grain (0.0005–0.002 Gm.) several t. p. d. in pill or solut.; as hypn. for insane, $^1/_8$–$^1/_4$ grain (0.008–0.015 Gm.).—*Max. D.* $^1/_{20}$ grain (0.003 Gm.) daily.—*Antid.*, as of atropine.—*Caut.* Do not confound with eclectic "hyoscyamin!"

do. Merck.—From Hyoscyamus.—Amorphous (1710

Amorph. alkaloid fr. Hyoscyamus niger, L.—Brown, syrupy liq.—*Sol.* A., C., E.—*Uses, &c.:* As of hyoscyamine, cryst.—*Dose* $^1/_8$–$^1/_4$ grain (0.008–0.015 Gm.).—*Antid.*, as of atropine.—*Caut.* Don't confound w. eclectic "hyoscyamin!"

do. Merck.—From Scopola.—Cryst. (2708

Hyoscyamine Hydriodide Merck. — From Hyoscyamus.—Cryst. (2708

Fr. hyoscyamus alkaloid.—$C_{17}H_{23}NO_3.HI$.—Wh. cryst.—*Sol.* W., A.—*Uses:* As of hyoscyamine, cryst.

Hyoscyamine Hydrobromide Merck.—From Belladonna.—Cryst. (600

Fr. hyoscyamine fr. belladonna.—$C_{17}H_{23}NO_3.HBr$.—Wh. cryst.—*Sol.*, eas. W.; 2 A.; 2.5 C.; 1600 E. (U. S. P.).—*Melt.* 151.8° C. (U. S. P.).

do. Merck.—From Hyoscyamus.—Amorphous (1710

Fr. amorph. hyoscyamus alkaloid.—$C_{17}H_{23}NO_3.HBr$.—Deliq., amorph. masses.—*Melt.* 78° C. —*Uses, Doses, &c.:* As of hyoscyamine, amorph.

Hyoscyamine Hydrochloride Merck.—From Belladonna.—Cryst. (600

Fr. hyoscyamine fr. belladonna. — $C_{17}H_{23}NO_3.HCl$.—Wh. cryst.—*Sol.* W., A.

do. Merck.—From Hyoscyamus.—Amorphous (2138

Fr. amorph. hyoscyamus alkaloid.—Yellowish-wh., hygroscopic, crumbly mass.—*Sol.* W., A. —*Uses:* As of hyoscyamine, amorph.

Hyoscyamine Methylbromide Merck (5000

Wh. cryst.—*Sol.*, eas. W. & dil. A.; diffic. in cold absol. A. & E.—*Melt.* 210–212° C.

Hyoscyamine (Pseudo-) Merck (6000

Alkaloid fr. lvs. of Duboisia myoporoides, R. Br. —$C_{17}H_{23}NO_3$.—Yellowish need.—*Sol.* A., C.; sl. W., E.—*Melt.* 133–134° C.—Sed.; Antispasm., &c.; like atropine, but weaker & more evanescent. — *Doses:* For the sane, $^1/_{120}$–$^1/_{60}$ grain (0.0005–0.001 Gm.).—*Inj.*, for the insane, $^1/_{30}$–$^1/_{10}$ grain (0.002–0.006 Gm.).

Hyoscyamine Salicylate Merck.—From Hyoscyamus.—Cryst. (2708

Fr. hyoscyamus alkaloid, cryst.—$C_{17}H_{23}NO_3.C_7H_6O_3$.—Wh. cryst.—*Sol.* W., A.—*Uses:* As of the alkaloid.

Hyoscyamine Sulphate Merck.—From Belladonna.—Cryst., commercial (600

Fr. hyoscyamine fr. belladonna.—$(C_{17}H_{23}NO_3)_2.H_2SO_4$.—Fine, wh. need.—*Sol.* W., A.—*Melt.*, abt. 206° C.

do. Merck.—From Hyoscyamus.—Highest Purity, cryst. (2708

Fr. hyoscyamus alkaloid, cryst.—$(C_{17}H_{23}NO_3)_2.H_2SO_4$.—Wh., deliq. need.—*Sol.* W.; 6.4 A., 2500 E., & 2300 C. at 25° C. (U. S. P.).—*Melt.* 198.9° C. (U. S. P.).—*Caut.* Keep dry & fr. air.

do. Merck.—From Hyoscyamus.—Amorphous (1710

Fr. hyoscyamine, amorph.—Yellowish, hygros. powd.—*Sol.* W., A.—*Uses:* As of the alkaloid. Salt most largely used for restraint of the insane.—*Dose:* As of hyoscyamine, amorph.

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine, 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Hyoscyamus.—*U. S. P.*

(Henbane; Hog's Bean; Insane Root; Poison Tobacco; Black Henbane).—Dried lvs. & flowering tops of Hyoscyamus niger, L. Solanaceæ, fr. plants of second year's growth.—*Habit.:* Europe; Asia; natur. in U. S.; cultiv. in England. —*Etymol.:* Grk. "hys," hog, & "kyamos," bean, *i.e.*, the bean is poisonous to hogs.—*Constit.:* Hyoscine (scopolamine), $C_{17}H_{21}NO_4$; hyoscyamine, $C_{17}H_{23}NO_3$; hyoscipicrin, $C_{27}H_{52}O_{14}$; choline; mucilage. — Narcot.; Anodyne; Hypnot.; Mydriatic; Laxat.; Sedat. (to urinary tract.).—*Uses:* Delir. trem., insomn., mania, nervous cough, spinal hyperesthesia, irritable bladder, colic, hysteria, nervous headache, & scrofula. —*Extern.*, in hemorrhoids, rheumat. swell., cancer, ulcers, &c.—*Doses: Lvs.*, 2–10 grains (0.12–0.6 Gm.).—Alcoh. extr., 1–2 grains (0.06–0.12 Gm.); *Max. D.* 3 grains (0.2 Gm.) single, 10 grains (0.6 Gm.) daily.—Fld. extr., 3–10 ♏ (0.2–0.6 Cc.); *Max. D.* 15 ♏ (1 Cc.) single, 45 ♏ (3 Cc.) daily.—Tinct., 10–60 ♏ (0.6–4 Cc.).—*Seeds: Max. D.* 5 grains (0.3 Gm.) single; 10 grains (0.6 Gm.) daily.—Alcoh. extr., $^1/_6$–1 grain (0.01–0.06 Gm.).—*Antid.*, evacuants; stimulants (extern. & intern.); morphine; pilocarpine; physostigmine; artif. respiration; brandy; ammonia.

Hyoscyamus Juice Merck (3

(Henbane Juice).—Fr. fresh lvs. & fl. tops Hyoscyamus niger, L.; preserv. w. alc.—Dark-green liq.—Anod.; Sed.; Antispasm. — *Uses:* Gout, rheum., nerv. headache, hyst., cough.—*Dose* 30–60 ♏ (2–4 Cc.).—*Antid., &c.*, as of hyoscyamus.

Hypericum

(St. John's Wort).—Whole plant Hypericum perforatum, L. Hypericaceæ.—*Habit.:* Europe; Northern Asia; natur. in U. S.—*Etymol.:* Grk. "hypo," under, & "ereike," heather, referring to its habit of growth.—*Constit.:* Tannin; coloring matter; volat. oil.—Vulner.; Astring.; Sed.; Diuret.; Emoll.; Antisep.—*Uses:* Extern. inst. of arnica.—*Dose* 30–120 grains (2–8 Gm.).

Hypnal (30

(Chloral-antipyrine; Chloral-hydrate-antipyrine; Trichloraldehyde-oxyphenyldimethyl-pyrazol).—Hydrated chloral & antipyrine comb.—$CCl_3.CH(OH)_2.C_{11}H_{12}N_2O$.—Colorl. cryst.—*Sol.* 15 W.—*Melt.* 67° C.—Hypn.; Analg.; Antipyr. —*Uses:* Insom., headache, spasm. cough, &c. —*Dose* 15–30 grains (1–2 Gm.)

Hypnoacetin

(Acetophenonacetylpara-amidophenol Ester).—$C_6H_4(OCH_2.CO.C_6H_5)(NH.CO.CH_3)$.—By condens. of para-acetaminophenol w. phenol & glac. acet. acid by $ZnCl_2$.—Lustr. leafl.—*Sol.*, eas. A.; insol. W.—Antisep.; Hypn.—*Dose* 3–4 grains (0.2–0.25 Gm.).

Hypnone Merck.—Highest Purity, Medicinal (23

(Acetophenone; Phenylmethylketone; Benzoylmethide).—By dry distil. calcium benzoate w. acetate.—$C_6H_5.CO.CH_3$.—Limpid, colorl. liq.; or at low temp., lamin. cryst.; pung. taste.—Sp. Gr. 1.0285.—*Sol.* A., E., C., fatty oils; sl. W. —*Melt.* 14° C.—*Boil.* 198–200° C.—Hypn.—*Uses:* Insom.—*Techn.*, in perfumery occasionally, because of its orange-blossom-like odor.—*Dose* 3–8 ♏ (0.2–0.5 Cc.) in capsules with glycerin, or in emuls.—*Max. D.* 8 ♏ (0.5 Cc.) single; 25 ♏ (1.6 Cc.) daily.

Hypophysis Cerebri.—see **Pituitary Gland**

Hypoquebrachine Hesse-Merck

From bark of Aspidosperma Quebrachoblanco, Schlecht.—$C_{21}H_{26}N_2O_2$.—Yellow, or brown, amorph., bitter powd.; agglutinates in masses. —*Sol.* A., E., C.

Hypoquebrachine Hydrochloride Hesse-Merck

$C_{21}H_{26}N_2O_2.HCl$.—Yellow to brown powd.—*Sol* W., A.

Hypoxanthine.—see **Sarcine**

Hyrgol (17

(Colloidal Mercury).—Dark, alm. black, tastel. powd.—*Sol.* W.; insol. A., E.—*Uses:* In constitutional syphilis, as 1:10 oint. or plaster instead of mercurial oint.; 45 grains (3 Gm.) the average quantity for one inunction; also intern. in infantile syphilis.—*Dose* 3–20 ♏ (0.2–1.3 Cc.) of a 1% aqu. solut. accord. to age of child & severity of symptoms.

Hyssop

Whole plant Hyssopus officinalis, L. Labiatæ.—*Habit.:* Europe.—*Etymol.:* Fr. Hebrew "esob," & Arabic "azzof," sacred herb.—*Constit.:* Volat. oil; tannin; resin.—Stim.; Aromat.; Carmin.; Tonic; Sudorif. — *Uses:* Coughs, colds, & catarrhs, espec. of aged.—*Doses:* 15–60 grains (1–4 Gm.) in infus.—Fld. extr., 30–60 ♏ (2–4 Cc.).

Hyssop, Hedge.—see **Gratiola**

Hysterionica.—see **Baylahuen**

I

Iatrol

Fr. "nascent iodine on certain coal-tar derivatives."—$NH(C_6H_5O_2)(C_2H_5O)I_2$.—Grayish-wh., odorl. powd.—*Sol.* A., E., C.; insol. W., glycerin, fixed oils.—Antisep.; Cicatrizant, &c., like iodoform.

Ibit

(Bismuth Oxyiodotannate). — Greenish-gray, odorl., tastel. powd.—Insol. in ordinary solvents.—Antisep.—*Uses:* As of iodoform.

Iceland Moss.—see **Cetraria**

Ichthalbin (17

(Ichthyol Albuminate Knoll).—Grayish-brown, ordorl., alm. tastel. powd.—*Sol.*, in alkaline fluids (such as intestinal secretion); insol. in ordinary solvents & in diluted acids (as gastric

juice), & in W.—Contains abt. 40% *ichthyol*sulphonic acid.—External & Intestinal Antiseptic & Antiphlogistic; Alterative.—*Uses: Intern.*, phthisis, scrofula, marasmus, enteritis, peritonitis, tuberculosis, puerperal septicemia, gastric & intestinal catarrh, typhoid, skin diseases, &c.—*Extern.*, ulcers, gonorrheal & catarrhal inflammation of the vagina, metritis, in exudates in peri- & parametritis, granulating wounds, ulcers, nasopharyngeal catarrh, &c.—*Dose* 10–30 grains (0.6–2 Gm.) 2 or 3 t. daily, before meals, in powd. or in tabl.

Ichthargan (60

("Silver Sulpho*ichthyol*ate," Ichthyol Co.; Silver-Ichthyol).—Brown, odorl., slightly hygrosc. powd.; 30% silver.—*Sol.* W., G., dil. A.—Astring.; Antiphlog.; Bacter.—*Uses:* Gonor., &c.—*Extern.*, gonor., 0.04–0.2% solut.; posterior urethritis, 3% solut.; trachoma, 0.5–3% solut.—*Caut.* Keep soluts. in amber bottles.—*Incomp.*, soluble chlorides.

Ichthoform (20

(Ichthyol - formaldehyde, Ichthyol Co.).—Blackish-brown, alm. odorl. & tastel. powd.—Insol. in ordinary solvents.—Surgical & Intestinal Antiseptic; reported energetic in action, yet non-toxic.—*Uses: Extern.*, wounds, ulcers, &c.—*Intern.*, chronic intest. catarrh, tuberc. enteritis, typhoid, intest. fermentation.—*Doses:* 15–30 grains (1–2 Gm.) 3 or 4 t. daily, in powd. Children, 4–8 grains (0.25–0.5 Gm.), in gruel or cocoa.—*Appl.*, pure or mixed with boric acid, starch, &c.

Ichthyocolla.—see **Isinglass**

Ichthyol (5

(So-called Ammonium "*Ichthyol*sulphonate" or Ammonium "Sulpho*ichthyol*ate").—An undefinable chemical combination of sulphonated hydrocarbons obt. by dry distil. of bituminous shale found in Seefeld, Tyrol, and made by the Ichthyol Co., Hamburg, Germany.—Introduced by Unna into dermatol. practice.—Thick, brown liq.; bituminous odor; contains easily assimilable sulphur.—*Sol.* W., G., & mixt. of equal vols. alcohol & ether; partly sol. in strong A. or E.—*Misc.*, fats, oils.—Antiphlog.; Anod.; Alter.; Antigonor.; Antisep.; Dermic.—*Uses: Intern.*, phthisis, skin dis., rheum., scrof., nephr., &c., gonor., &c.—*Extern.*, 5–50% oint., solut., &c.; in scarlet fever (in 5–10% lanum oint., as recom. by Seibert); in urticaria, erosions, prur., gout, boils, carbunc., acne, ecz., herpes, burns, catarrh, erysipelas, chilbl., rheumat., peritonitis, &c.; 10% w. glycerin on tampons or in supposit. in uterine & vaginal inflam.; 1–3% soluts. or 1–2 ♏ (0.06–0.12 Cc.) bougies in gonor.; pure in ivy poisoning.—*Dose* 3–30 ♏ (0.2–2 Cc.), in pills, caps., or in water.—*Incomp.*, acids precipitate a dark, resinous mass; alkali hydroxides or carbonates decompose it; with alkaloids or their salts, compounds are formed of much firmer consistency than Ichthyol, and far less soluble; potass. iodide; hydrastis; mercuric chloride; resorcinol.—For Deodorizing Ichthyol the addition of 1 part each Oil Bergamot & Oil Eucalyptus, to 50 parts Ichthyol, has been recommended.—Before applying Ichthyol it is advisable, except in eczema, to wash parts each time in warm water & dry gently. After inunction or painting, the parts are best covered with cotton-wool, or flannel, & gutta-percha tissue.—Ichthyol stains may be removed by boiling the fabric in soap & water, or by washing with soft soap or soap spirit.

Caution.—*Ammonium "Ichthyol*sulphonate" is the article always understood when simply "Ichthyol" is spoken of, and all references in literature relate to this product. A large number of imitations of Ichthyol are to be found on the market under various misleading names. These substitutes, however, vary from Ichthyol, and from each other, in important physical and chemical characteristics and therapeutic properties, and are derived from sources other than the Seefeld shale yielding the true preparation upon which all clinical reports have been based.

Ichthyol Albuminate.—see **Ichthalbin**

Ichthyol-Formaldehyde.—see **Ichthoform**

Ichthyol Lithium (15

(So-called Lithium "Sulpho*ichthyol*ate").—Dark-brown, extr.-like mass.—*Uses, &c.:* As of Ichthyol. Us'y in 50% oint.—See Ichthyol.

Ichthyol Sodium (7

(So-called Sodium "Sulpho*ichthyol*ate").—Brown mass.—*Sol.* W., G., & mixt. of A. & E.

Ichthyol Zinc (10

(So-called Zinc "Sulpho*ichthyol*ate").—See Ichthyol.

Ignatia

(Ignatius Bean; St. Ignatius' Bean).—Bean of Ignatia amara, L. fil. (Strychnos Ignatia). Loganiaceæ.—*Habit.:* Philippine Islands; natur. in Cochin China.—*Etymol.:* Named for the Jesuit, Ignatius de Loyola (1491–1556), who brought the beans from India.—1 in. (25 Mm.) long, $^3/_4$ in. (abt. 20 Mm.) broad, brownish, & covered with brown, silky hairs; horny, & very bitter; odorl.—*Constit.:* Strychnine; brucine; igasuric acid; loganin, $C_{25}H_{34}O_{14}$.—Nerve Tonic, like strychnine.—*Uses:* Chron. constip., dyspep., nerv. dis., neural., paral., & as tonic in convalesc.—*Doses:* $^1/_2$–3 grains (0.03–0.2 Gm.).—Alcoh. extr., $^1/_8$–$^1/_2$ grain (0.008–0.03 Gm.); *Max. D.* $^3/_4$ grain (0.05 Gm.) single, 2 grains (0.12 Gm.) daily.—Fld. extr., 1–4 ♏ (0.06–0.25 Cc.).—*Antid.*, emetics, stomach siphon, tannin, potass. iodide, chloroform, amyl nitrite, opium, &c.

Ilex Aquifolium

(European Holly).—Lvs. of Ilex aquifolium, L. Ilicaceæ.—*Habit.:* Europe.—*Etymol.:* Ilex, fr. Celtic "ec," or "ac," point, fr. the spiny lvs.

"Aquifolium" fr. Lat. "acus," needle, & "folium," leaf, *i.e.*, the lvs. are spiny.—*Constit.:* Ilixanthin, $C_{17}H_{22}O_{11}$; ilicic acid; ilicin; pectin.—*Uses:* Antarthrit.; Antispasm.; Tonic; Antihidrotic; Antiperiod.

Ilex Paraguayensis.—see **Maté**

Illicium

(Star-Anise; Chinese Anise).—Fruit of Illicium verum, Hooker fil. (I. anisatum, Gaertn.). Magnoliaceæ.—*Habit.:* Northern Anam; southern China; Japan.—*Etymol.:* Fr. Grk. "anison," "anethon," fr. the Arabic "anisum," anise. "Illicium," fr. Lat. "illicio," to allure, owing to its attractive odor; & "verum," true.—*Constit.:* Volat. & fixed oils; anisic acid; tannin; resin; fat; pectin.—Stim.; Diuret.; Arom.; Carminat.—*Uses:* Techn., in manuf. of liqueurs, & volat. oil.—*Dose* 5–30 grains (0.3–2 Gm.).

Imidodiphenyl.—see **Carbazole**

Imidoxanthine.—see **Guanine**

Iminotetramethyldiamidodiphenylmethane Hydrochloride.—see **Pyoktanin Yellow**

Immortelles.—see **Helichrysum**

Imperatoria

(Masterwort; Felon-grass; Felonwort).—Rhizome of Imperatoria Ostruthium, L. Umbelliferæ.—*Habit.:* Central & southern Europe; adv. in U. S.—*Etymol.:* Lat. "imperator," imperial, referring to its valuable therapeutic properties.—*Constit.:* Volat. oil; ostruthin.—Stomachic; Stim.; Aromat.; Masticatory.—*Uses:* Techn., in manuf. of liqueurs.

Imperatorin.—see **Peucedanin**

Imperial Green.—see **Copper Acetoarsenite**

Impigem

(Paracaxi Beans; Rabo de Cavalho [Horse's Tail]; Piaca; Campineiro).—Beans of Crudya obliqua, Griesebach. Cæsalpiniaceæ, Amherstieæ.—*Habit.:* Brazil.—*Etymol.:* "Impigem" is the Brazilian name of the drug.—*Uses:* Skin dis.

Indageer.—see **Holarrhena**

Indian Aconite.—see **Aconitum (Ferox)**

Indian Balsam.—see **Balsam Peru**

Indian Cannabis.—see **Cannabis Indica**

Indian Ginger.—see **Asarum Canadense**

Indian Hemp, White.—see **Asclepias Incarnata**

Indian Licorice.—see **Abrus**

Indian Pennywort.—see **Hydrocotyle**

Indian Physic.—see **Gillenia**

Indian Poke.—see **Veratrum Viride**

Indian Tobacco.—see **Lobelia**

Indian Yellow.—see **Azoflavin 2; Cobalt & Potassium Nitrite**

Indigo (6

(Crude Indigo Blue).—Fr. var. sp. Indigofera.—Dark-blue, odorl., tastel. pieces or powd.—*Sol.*, conc. sulphuric acid.—Emmen.; Emetic; Antisep.—*Uses:* Techn. (in dyeing & printing); formerly intern. in epilepsy, hysteria, &c.

Indigo Merck.—Reagent.—Synthetic (40

Dark-blue, fine powd.; at least 95% indigo blue.—*Tests:* (*Ash*) heat 1 Gm. in platin. cruc. – purple-red vapors evolv.; ignite res. – wt. not more than 0.01 Gm.—(H_2O) dry 1 Gm. at 100° C. to const. wt. – loss not more than 0.01 Gm.—*Uses:* Prepar. indigo solut. for detect. & determ. HNO_3.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

do. Merck.—Reagent.—Fr. plants (8

Dark-blue, light pieces; metal. coppery luster on rubbing; at least 60% indigo blue.—Lighter than water.—*Tests:* (*Ash*) ignite 1 Gm. – not more than 0.12 Gm. res.—(H_2O) dry 1 Gm. to const. wt. at 100° C. – loss not more than 0.06 Gm.—*Uses:* Prepar. indigo solut. for detect. & determ. HNO_3.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. These reagents conform to the standard therein given.

Indigo Blue.—see **Indigotin**

Indigo Carmine Merck.—Dry (12

(Soluble Indigo; Indigo Extract; Sodium Indigotindisulphonate; Sodium Cœrulinsulphate).—$C_{16}H_8N_2O_2(SO_3Na)_2$.—Blue powd.—*Sol.* W.—*Uses: Techn.*, as a dye; also in volumetric estim. of nitrates or chlorine (these decolorize indigo soluts. on boiling).

do. Merck.—Paste (5

Blue, pasty mass.—*Sol.* W.—*Uses:* Dye.

Indigo Carmine-Boraxcarmine.—see **Seiler's Indigo-carmine-Boraxcarmine**

Indigo Carmine-Oxalic Acid.—see **Merkel's Indigo-carmine-Oxalic Acid**

Indigo-Carmine Paper

Wh. paper, charged w. indigo-carmine & sod. carbonate.—*Uses:* Test for sugar in urine (violet to yellow color), & for estimating oxygen (yellow color).

Indigo-Carmine & Sodium-Carbonate Papers, Geissler-Oliver

Strips of wh. paper some of which are impregnated w. a solut. of indigo carmine & some w. a solut. of sodium carbonate, & then dried.—*Uses:* Detecting sugar in urine (on immersing a strip of each paper in the urine, the bluish color imparted to the urine changes successively to green, red, & yellow, fr. reducing action of sugar on the indigo carmine [Mulder's reaction]).

Indigo, Soluble.—see **Indigo Carmine**

Indigo, Wild.—see **Baptisia**

Indigotin Merck.—Pure (110

(Indigo Blue).—Pure color. matter fr. indigo.—$C_{16}H_{10}N_2O_2$.—Dark-blue, cryst. powd.; bronze luster.—*Sol.*, aniline, nitrobenzene, conc. H_2SO_4, glacial acetic acid, heavy petroleum oil; sl. in C., CS_2, phenol; insol. W., A., & dil. acids.—*Subl.*, at 300° C.—*Uses:* Chem., & techn. as dye.

Indigotin Merck.—Reagent (140

$C_{16}H_{10}N_2O_2$.—Purple, rhomb. cryst., w. coppery luster; or dark-blue powd. w. reddish tint, exhibiting a coppery luster on pressure or rubbing.—*Sol.* 15 conc. H_2SO_4, 5 fum. H_2SO_4; insol. W., A., E., dil. acids, & alkalies.—*Tests:* (*Res.*) ignite 1 Gm. – not more than 0.0015 Gm. res.—(H_2O) dry 1 Gm. to const. wt. at 100° C. – loss not more than 0.005 Gm.—*Uses:* Determ. HNO_3.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent confo ms to the standard therein given.

Indium Merck (8500

Metal.—In.—*Etymol.:* Named fr. the indigo-blue line given by the spectrum of the metal. Discovered in 1863 by Reich & Richter.—Ductile, shin., silver-wh. metal.; softer than lead.—Sp. Gr. 7.362 at 15° C.—*Melt.* 176° C.

Indium Chloride Merck (8500

(Indium Trichloride).—$InCl_3$.—Yellowish, hygros. powd.—*Sol.*, eas. in W.

Indium Oxide Merck (10000

(Indium Sesquioxide).—In_2O_3.—Wh. to pale-yellow powd.—*Sol.*, hot acids.

Indium Sulphate Merck (8500

$In_2(SO_4)_3$+aq.—Wh. or gray, hygrosc. powd.—*Sol.* W.

Indium Trichloride.—see **Indium Chloride**

Indoform

(Salicylicacid-methyleneacetate).—By action of formaldehyde on acetylsalicylic acid. — Wh. powd.; acid, astring. taste.—*Sol.*, diffic. cold W., more eas. hot W.—*Melt.* 108–109° C.—Intest. Antisep.; liberates formaldehyde in intestines.—*Uses:* Gout, sciatica, rheumat., neuralgia, headache, toothache, gravel, &c.—*Dose* 8–25 grains (0.5–1.6 Gm.).

Indole Merck.—Cryst. (3500

(Ketole).—Decomp. prod. of pancreas; & synth. by heating orthonitrocinnamic acid w. KOH & iron filings.—C_8H_7N, or, $C_6H_4(CH.NH)CH$.—Colorl. to yellowish scales; intense fecal odor.—*Sol.* A., E., ligroin; hot W.—*Melt.* 52° C.—*Boil.* 254° C., w. decomp.—*Uses:* Best micro-chem. & physiolog.-chem. reagent for lignified cellular tissue (*e.g.*, wood shavings). The tissues are moistened first w. a warm, weak aqueous indole solut. & then w. sulphuric acid of sp. gr. 1.3, whereupon lignified cellular tissue soon acquires a red color. In highly dilute solution, indole possesses an odor like that of orange blossoms, hence may also be used in perfumery.

Indophenol Merck.—Powder (15

(Naphindophenol).—$(CH_3)_2$:N.C_6H_4.N:$C_{10}H_6$.O.—Brown. powd.—*Sol.* A., & acetic acid w. blue color; insol. W.—*Uses:* Dye.

Indophenol White

(Leucoindophenol).—Reduct.-prod.fr.blue indophenol.—$C_{18}H_{18}N_2O$.—Whitish paste.—*Sol.*, dil. acids.—*Uses:* Dye.

Induline Merck.—Alcohol-Soluble (10

(Alcohol-soluble Fast Blue; Azin Blue; Printing Blue; Acetin Blue; Nigrosine).—Anilido-diphenylsafranine hydrochloride(?).—Blue-black powd.—*Sol.* A., w. blue color; insol. W.—*Uses:* For black spirit lacquers & varnishes, & in printing fabrics blue.

do. Merck.—Water-Soluble (10

(Water-soluble Fast Blue; Solid Blue; Water-soluble Nigrosine).—Sodium salts of the sulphonic acids of various alcohol-soluble indulines.—Powd. w. bronze-like luster, or black, shining pieces.—*Sol.* W., w. blue-violet color; in A., w. blue color.—*Uses:* Dyeing wool, & manuf. ink.

Induline Blue 6 B.—Fat Dye (20

Sodium salt of sulphonic acid of the induline $C_{36}H_{28}N_5Cl$.—Obt. by heat. amidoazobenzene w. aniline hydrochloride & aniline.—Bluish-black powd.—*Sol.* A., fats, oils, &c.—*Uses:* Coloring oints., soaps, candles, pomades, &c.

Infusorial Earth.—see **Kieselguhr**

Ingluvin

Enzyme fr. gizzard of domestic hen.—Yellowish, horny masses, or gran. powd.—*Sol.* W.—Proteolytic.—*Uses:* Morn. sick. of pregn.; dyspep.—*Dose* 5–10 grains (0.3–0.6 Gm.), followed by 1 fl. oz. (30 Cc.) of a 1% solut. hydrochloric acid.

Ink; Diamond, or *Etching.*—see **Diamond Ink**

Inkomankomo.—see **Pannum**

Inosite Merck (6500

(Phaseomannite; Meat Sugar; Nucite).—Carbohydrate in several plants (lvs. of Fraxinus excelsior, &c.), & muscular tissue of animals.—$C_6H_6(OH)_6+2H_2O$.—Colorl., effloresc. cryst.—*Sol.* 6 W.; sl. dil. A.—*Melt.* (anhydr.) 220° C.

Insect Powder.—see **Chrysanthemum; Pyrethrum**

Inula

(Elecampane; Scabwort; Elfwort; Horse-heal; Helenium).—Root of Inula Helenium, L. Compositæ.—*Habit.:* Central Asia; Europe; natur. in U. S.—*Etymol.:* "Inula," old Lat. for elecampane, probably derived fr. "helenion," the Grk. name of the plant; & this fr. "helos," a marsh, *i.e.*, the plant usually grows in damp places.

Or, fr. Grk. "helios," the sun, because of the form of the flowers. Or, fr. Helen of Troy, fr. whose tears the plant is said to have sprung.—*Constit.:* Volat. oil; alantol; helenin; alantic acid; acrid resin; inulin; mucilage.—Expector.; Stim.; Diuret.; Diaphor.; Emmen.; Tonic. — *Uses:* Amenor., dyspep., bronch., & dropsy.—*Extern.*, psoriasis, tetter, & other skin diseases.—*Doses:* 30–60 grains (2–4 Gm.).—Alcoh.extr., 5–10 grains (0.3–0.6 Gm.).—Fld. extr., 30–60 ♏ (2–4 Cc.).

Inula Camphor.—see **Helenin**

Inulenin

Fr. Inula Helenium, L.—$(C_6H_{10}O_5)_{10}.2H_2O$.—Fine need.—*Sol.*, sl. W. & dil. A.

Inulin Merck.—White (15

(Alant Starch).—Carbohydrate fr. bulb Dahlia variabilis, Desf.—Horny, colorl., starch-like masses, or wh. powd.—*Sol.*, hot W.—*Uses:* Making bread for diabetic subjects.

do. Dragendorff-Merck (25

Fr. roots of Dahlia variabilis, Desf.—Wh. powd.—*Melt.* 165° C. to a gummy mass.—Otherwise like the preceding.

do. Kiliani-Merck (15

(Menyanthin; Dahlin; Alantin; Sinistrin; Synantherin; Helenin).—Carbohydrate fr. roots Inula Helenium, L. (Elecampane) & o. Compositæ.—$(C_6H_{10}O_5)$.—Wh.,starch-like powd.—*Sol.*, hot W.

Invertase.—see **Invertin**

Invertin Merck (1750

(Invertase; Zymase).—Enzyme fr. yeast (Saccharomyces species); converts sucrose into dextrose & levulose.—Whitish powd.—*Sol.* W.

Iodacetanilide Merck (100

(Iodantifebrin; Acetoparaiodanilide). — From acetanilide in acetic acid, by iodine chloride.—C_8H_8INO, or, $C_6H_4I.NH(C_2H_3O)$.—White cryst.—*Sol.* A., glac. acet. acid; insol. W.—*Melt.* 181.5° C.—Therapeutic data lacking.

Iodalbacide (22

Yellowish-wh. powd.—10% I.—*Sol.* W.—*Uses:* Tertiary & secondary syphilis, bronch. asthma, chronic catarrhal affect. of respiratory organs, struma, arthritis, & psoriasis.—*Dose* 15 grains (1 Gm.) 3–6 t. p. d.

Iodamyl.—see **Amyl Iodide**

Iodamylene Merck (15

(Valerylene Hydriodide).— React.-product of valerylene w. fuming hydriodic acid.—C_5H_9I, or, $C_5H_8.HI$.—Clear, colorl. liq.; soon darkens, espec. on expos. to light.—*Sol.* A.—*Boil.* 140–142° C.—*Caut.* Keep fr. light.

Iodaniline, Di-.—see **Diiodaniline**

Iodaniline (Para-) Merck.—Cryst. (90

(Paraiodoaniline).—React.-prod. fr. aniline w. iodine.—$C_6H_4.NH_2.I$ [1 : 4]. — Colorl. to bluish cryst.—*Sol.* A., E., C.—*Melt.* 60° C.—Antisep.

Iodaniline (Para-) Hydrochloride Merck (90

$C_6H_4.NH_2.I.HCl$. — Yellowish cryst. plates.—*Sol.* A., sl. W.

Iodaniline (Para-) Sulphate Merck (90

$(C_6H_4.NH_2.I)_2.H_2SO_4$. — Yellowish cryst.—*Sol.*, sl. W.

Iodanisol Merck (120

(Anisol Orthoiodide). — $C_6H_4.OCH_3.I$ [1:2]. — Yellow liq.—Sp. Gr. 1.8 at 20° C.—*Boil.* 240° C.—*Sol.*, eas. in A., E., & C.; insol. W.—Antisep. like iodoform; energetic Local Irritant.

Iodantifebrin.—see **Iodacetanilide**

Iodantipyrine.—see **Iodopyrine**

Iodeosine Merck (15

(Tetraiodofluoresceïn).—Red powd.—*Sol.* A., E.; insol. W. (the sodium salt—see Erythrosine—is soluble in W.).—*Uses:* Indicator.

Iodeosine Merck.—Reagent (20

(Tetraiodofluoresceïn). — $C_{20}H_8I_4O_5$. — Scarlet red, cryst. powd.—*Sol.* A. (deep-red solut.), E. (yellowish-red solut.); insol. in W. cont. trace HCl.—Indicator solut.: 1 Gm. iodeosine + 500 Cc. A.—*Tests:* (*Indicator*) 5 drops solut. + 100 Cc. H_2O; overlay w. 30 Cc. E.; run in by drops fr. burette centinorm. HCl, shake after add. ea. drop, till aqu. liq. just becomes colorless. Then add 5 drops more iodeosine solut.; again shake—aqu. layer must not acquire a pink color, or, if it does, color must disappear on add. 1 drop centinorm. HCl.—*Uses:* Indicator, specially suitable for titrating minute quantities of alkalies, & also alkaloids.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Iodeosine G

(Dianthine G.; Erythrosine G.).—Sod. or potass. salt diiodofluoresceïn. — Fr. fluoresceïn by I & HIO_3, or by ICl & NaOH in aqu. solut.—$C_{20}H_8O_5I_2Na_2$, or, $C_6H_4(CO.C_6H_2IONa)_2O$.—Yellowish-brown powd.—*Sol.* W.—*Uses:* Techn., dye. wool yellowish-red w. yellowish-red fluorescence.

Iodethylene.—see **Diiodoform**

Iodine Merck.—Resublimed (5

Etymol.. Fr. Grk. "ioeides," violet-colored. Discovered in 1811 by Courtois, & named by Gay-Lussac because of the violet-colored vapors.—I.—Fr. crude iodine by resubl.—Bluish-black, friable plates; metallic luster; peculiar odor; sharp, acrid taste.—Sp. Gr. 4.948 at 17° C.—*Sol.*, solut. potass. iodide, carbon disulph.; C.; 50 G.; 5000 W.; 10 A.; 3 E.—*Melt.*, abt. 114° C.—*Boil.* 187° C.—Antisep.; Alter.; Dermic, Caustic.—*Uses:* Chiefly extern., inhal.: asthma, croup, & bronch.; oint.: erysipelas, & o. skin dis., &c.; tincture: enlarged & scrof. glands &

cervix uteri, in inflam.—*Techn.*, preparing many important pharmaceutical & photographic preparations, & also largely in manuf. of aniline dyes.—*Dose* $^1/_4$–1 grain (0.015–0.06 Gm.) in dil. solut.—*Max. D.* 1 grain (0.06 Gm.) single; 3 grains (0.2 Gm.) p. day.—*Antid.*, emetics, stom. siphon, starchy foods in abundance, sodium sulphanilate, calcined magnesia, analeptics, starch injections, sodium thiosulphate; amyl nitrite by inhalat.—*Incomp.*, oil of turpentine, starch, veget. colors, tannin, &c.

do.—Crude (4

Crude iodine.—I.—Black, cryst. pieces.—*Sol.*, partly A.

Iodine Merck.—Reagent.—Resublimed (15

I.—Blackish-gray, dry, rhomb. plates or scales; metal. luster; 99.8–100% I.—*Sol.*, eas. A., E., C.; 5000 W.; v. freely in aqu. solut. KI.—*Tests:* (*Res.*) caut. heat 1 Gm. in porcel. dish – none wghble.—(*CN; Br; Cl*) 0.5 Gm. + 20 Cc. H_2O; shake & filter; *a:* to 10 Cc. filtrate add by drops decinorm. solut. $Na_2S_2O_3$ till decolorized, then add a granule Fe_2SO_4 + 1 drop solut. $FeCl_3$ + 2 Cc. solut. NaOH; warm to abt. 60° C.; add 10 Cc. HCl (sp. gr. 1.124) – no blue color; *b:* to 10 Cc. filtrate add 1 Cc. NH_4OH (sp. gr. 0.96) + 5 drops solut. $AgNO_3$; filter; add to filtrate 2 Cc. HNO_3 (sp. gr. 1.153) – not more than opalesc. turb., but no ppt.—*Uses:* Standard solut's; microscopy, synthesis; detect. cellulose, amyloid, alkaloids, sulphites, thiosulphates; determ. Hg, As, Sn, acetone, Sb, & tartar emetic.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Iodine Albuminate Merck (16

(Iodized Albumin).—Dried iodized albumin; cont. abt. 3% I.—Yellowish scales.—*Sol.*, part. in W.—Mild, readily absorbed iodine prep.—*Dose* 15–30 grains (1–2 Gm.) sev. t. p. d.

Iodine Bromide.—see **Iodine Monobromide, Tribromide & Pentabromide**

Iodine Chloride.—see **Iodine Monochloride & Trichloride**

Iodine Cyanide Merck (175

(Cyanogen Iodide).—Fr. iodine w. a metallic cyanide.—ICN.—Colorl. need.; v. pung. odor; acrid taste; violent poison for warm- & cold-blooded animals.—*Sol.* W., A., E., volat. oils.—*Melt.* 146.5° C.—*Uses:* Generally for destroying all lower forms of life. Taxiderm. preservative for insects, butterflies, &c.—*Antid.*, stom. siphon, plenty warm water, cold douches, artif'l respir., ammonia, chlorine, &c.—*Caut.* Poison!

Iodine Green Merck (25

(Metternich's Night, or Pomona, Green).—Fr. chlormethylhexamethylrosaniline hydrochloride w. zinc chloride.—$C_{27}H_{35}N_3Cl_2 + ZnCl_2$, or, $C_6H_3 \cdot CH_3 \cdot N(CH_3)_2 \cdot C(C_6H_4N[CH_3]_2)_2CH_3Cl_2 + ZnCl_2$.—Dark-green lumps.—*Sol.* W.—*Uses:* Techn., for dycing silk green.—Formerly cont. iodine.

Iodine Monobromide Merck (25

(Bromine Iodide).—IBr.—Cryst. mass; color of I.—*Sol.* W., w. decomp.—*Melt.* 36° C.

Iodine Monochloride Merck (14

Fr. dry chlorine w. dry iodine.—ICl.—Reddish-brown, oily liq. or cryst.—*Sol.* A., dil. HCl.—*Melt.* (cryst.) 25° C.—*Boil.* 101° C.

Iodine Pentabromide

IBr_5.—Dark-brown liq.—*Sol.* W.—Antiseptic.—*Uses:* 0.1% solut. as diphth. gargle.

Iodine Pentoxide.—see **(Acid) Iodic Anhydride**

Iodine Tribromide Merck (12

(Iodine Bromide).—IBr_3.—Dark-brown liq.—*Sol.* W.—Antisep.—*Uses:* Diphth., &c., in form of spray, & in gargles (in 1:300 solut. w. addition of 8 grains [0.5 Gm.] potass. bromide), sodium benzoate being also given internally in quantities of 45–60 grains (3–4 Gm.) per day.

Iodine Trichloride Merck (14

ICl_3.—Orange-yellow, deliq., cryst. powd.; pung., irrit. odor.—*Sol.* W., A., B.—*Melt.* 25° C., w. decomp.—Antisep.; Disinf.; Antizym.; Alter.—*Uses:* Chiefly extern., 1:1000 solut.: ulc., cutan. dis., gonor. & surg. prac.—*Intern.*, abnormal gastric decomposition processes.—*Dose* 60 ♏ (4 Cc.) of a 1:1000 solution.—*Max. D.* $^1/_6$ grain (0.01 Gm.) single; $^1/_2$ grain (0.03 Gm.) p. day.—*Caut.* Keep solutions & powd. fr. light & air. Poison!

Iodine Water Merck.—Reagent (1

Satur., aqu. solut.; 1000 Cc. cont. abt. 0.2 Gm. I.—*Uses:* Stain; detect. starch, & cocaine hydrochloride, &c.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Iodipin 10% (5

(10% Iodized Sesame Oil Merck).—10% iodine.—Iodine addition-product of sesame oil.—7.65 Gm. 10% iodipin correspond to 1 Gm. potass. iodide.—Yellow fluid, of purely oleaginous taste.—Alter.; Anticachectic. Readily absorbable, & liberates its iodine less rapidly than the alkali iodides, so that its action is sustained for a long time; also said to be carried even to remotest parts of body.—*Uses:* Tertiary syphilis, scrofula, tabes, angina pectoris, gonorrhoic sciatica, adiposity, tuberculous swellings, pleurisy, asthma, &c.—*Dose* 1–3 fl. drs. (4–12 Cc.) 3 or 4 t. daily, in emulsion with peppermint water & syrup, or pure, flavored with oil peppermint; children in proportion.—Iodipin is also excellently adapted for determining gastric motility.

do. 25% (11

(25% Iodized Sesame Oil Merck).—25% iodine.—3 Gm. 25% iodipin correspond to 1 Gm.

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

potass. iodide.—*Action & Uses:* Same as preceding, but intended more especially for hypoderm. use.—*Inj.*, 30–90 ♏ (2–6 Cc.).

Iodipin Solid Merck (12

Solid form of iodipin obt. by emulsionizing iodipin w. roborat (a veget. albuminoid rich in lecithin); cont. 40% of 25-% iodipin=10% I. —Grayish-yellow or yellowish scales.—*Uses, &c.:* As of iodipin; particularly suitable for intern. administration.—*Dose* 30 grains (2 Gm.) 2–3 t. p. d.

Iodistol.—see **Thymol Iodide**

Iodized Albumin.—see **Iodine Albuminate**

Iodlecithin

Fr. lecithin by iodine chloride.—Brownish-yellow, wax-like mass; 7–8% I.—*Sol.* E., warm A.; swell up without diss. in W.—*Uses:* Scrof. & syph.

Iodobenzol, Mono-.—see **Benzene, Iodo-**

Iodocaffeine Rummo-Merck (30

(Caffeine-Sodium Iodide).—Wh. powd.—65% caffeine.—*Sol.* W.; decomp. by hot W.—Diur.; Stim.; Alter.—Exhibits combined physiological properties of alkali iodides & caffeine; increases systolic energy, arterial pressure, & diuresis.—*Uses:* Chiefly mitral stenosis & o. cardiac affect., & inflammatory degenerative hepatic processes w. secondary ascites. —*Dose* 5–8 grains (0.3–0.5 Gm.) 2–6 t. p. d.

Iodochloroxyquinoline.—see **Vioform**

Iododiisobutylorthocresol.—see **Europhen**

Iodoform Merck.—Cryst. (5

(Triiodomethane; so-called Formyl Triiodide). —React.-prod. iodine, alc. (or acetone, &c.), sod. hydroxide & W.—CHI_3.—Sm., yellow, lustr. scales, or cryst. powd.; unct. touch; str., disagre. odor.—*Sol.* 6 E., 20 C., B., oils; 12 boiling & 60 cold A.; 52 A. at 15° C.; (9391 W., 46.7 A., 5.2 E. at 25° C., U. S. P.)—*Melt.* 115° C.—Antisep.; Alter.; Anesth.; Antituberc.—*Uses: Intern.*, w. tannin said to be better than ergotin for pulmon. or intest. hemorrhage; scrof., liver dis., &c.—*Extern.*, dress. wounds & ulc.; inject. into tuberc. joints (10% oil emuls.).—*Dose* 1–3 grains (0.06–0.2 Gm.).—*Max. D.* 3 grains (0.2 Gm.) single; 15 grains (1 Gm.) daily.—*Antid.*, emetics, sodium bicarbonate, potassium bromide or acetate, hydrated chloral, morphine (subcut.). Iodoform eczema (chronic poison.) treat by dipping frequently in water as hot as can be borne. Where wounds have been unfavorably affected by iodoform, remove the latter from the wound surface, & apply calcined magnesia.—*Incomp.*, calomel, mercuric oxide, silver nitrate, tannin, balsam Peru (directly mixed).—*Caut.* Keep well stoppered.

Note.—This article is prepared with scrupulous care in order to enable it to meet the most exacting requirements.

Iodoform Merck.—Light powder (5

A very fine yellow powd., much lighter than the ordinary powd., particularly adapted for making oints., suppos., &c., & as applic. to sores, wounds, &c.

Note.—This article is prepared with scrupulous care in order to enable it to meet the most exacting requirements.

do. Merck.—Heavy powder (5

Yellow, heavy powd.; the one most used in ordinary practice.

Note.—This article is prepared with scrupulous care in order to enable it to meet the most exacting requirements.

Iodoform Albuminate.—see **Iodoformogen**

Iodoform Aromatized Merck.—Powd.—*N. F.* (10

("Deodorized" Iodoform).—Aromatized by cumarin.

Iodoform Bituminized Merck (15

Transl. scales; faint, tar-like odor.—*Action, Uses, &c.:* As of iodoform, pure.

Iodoform Collodion.—see **Collodion, Iodoform**

Iodoform "Deodorized."—see **Iodoform Aromatized**

Iodoformal (54

$C_6H_{12}N.C_2H_6I.CHI_3$.—Obt. by action of ethyl iodide on iodoformin.—Lemon-yellow, odorl. powd.—*Sol.*, eas. boil. A.; diffic. cold A.; insol. W., E.—Antisep.—*Uses:* As of iodoform in purulent wounds, chron. ulcer of leg, chron. gonor., &c.

Iodoformhexamethylenamine.—see **Iodoformin**

Iodoformin (20

(Iodoformhexamethylenamine).—Compound of iodoform w. formin.—Contains 75% iodoform. —Wh. powd.—Insol. W., A., & E.—*Melt.* 178° C., w. decomp.—*Uses:* As of iodoform.

Iodoformogen (11

(Iodoform Albuminate, Knoll).—Yellow, fine, dry, non-conglutinating powd.; abt. 3 times as voluminous as iodoform, more pervasive, & free from its odor.—Reported a convenient, economical, & efficient form of iodoform; liberates the latter, on contact w. wound surfaces, gradually & equably, hence persistent in action.

Iodogallicin (20

(Bismuth Oxyiodomethylgallate).—$COOCH_3$.-$C_6H_2(OH)_2.OBi(OHI)$. — Dark-gray powd. — Siccative Antisep. like iodoform.

Iodo-hemol.—see **Hemol, Iodo-**

Iodohydromol.—see **Thymol Iodide**

Iodol (25

(Tetraiodopyrrol Kalle; Pyrrol Tetriodide). —Fr. pyrrol by iodine in solution KI.—C_4I_4NH. — V. light, fine, grayish-brown powd. —89% iodine.—*Sol.* 4900 W., 9 A., 1.5 E., 105

C. at 25° C.; fixed oils (U. S. P.).—Decomp. at 140–150° C.—Antisep.; Alter.—*Uses: Intern.*, syph., scrof., angina pectoris, diab., & inst. of potassium iodide.—*Extern.*, 5–10-% oint., chronic ulc., lupus, chancre, suppur. adenitis: erysip. (iodol 1, collodion 9), &c.; powd. or solut.: on muc. membr. as in ozena, tonsil., & inflam. condit. of larynx & trachea; tampons satur. w. A. (16), G. (34), & iodol (1) in gynecol.—*Dose* 5–15 grains (0.3–1 Gm.) p. d. in wafers.

Iodolen (15

Iodine-albumin compound; cont. 36% iodol.—Yellowish powd.—Insol. W.—*Uses: Extern.*, like iodoform in operative surgery, sores, purulent lymphadenitis, soft chancre, &c.

Iodolin

(Quinoline Chloriodomethylchloride).—C_9H_7.-$NCH_3Cl.CH$.—Light-yellow scales or yellow powd.—*Sol.* A.; v. sl. W.—*Melt.*, abt. 112° C.—Antisep.—*Uses:* As of iodoform. Seldom used.

Iodomethane.—see **Methyl Iodide**

Iodomethylphenylpyrazolon.—see **Mydrol**

Iodonaphthol

(Diiodobetanaphthol; Betanaphtholdiiodide; Naphtholaristol).—Fr. mixed solut. of iodine w. potass. iodide, betanaphthol w. sod. carbonate & sod. hypochlorite.—$C_{10}H_6I_2O_2$.—Yellowish-green powd.; odorl.; tastel.—Decomp. by heat, w. violet fumes.—*Sol.* C.; sl. in A., E.; insol. W.—Antisep.—*Uses:* As of thymol iodide.

Iodo-orthotoluidine.—see **Iodotoluidine, Ortho-**

Iodoparatoluidine.—see **Iodotoluidine, Para-**

Iodophen.—see **Nosophen**

Iodophenacetin.—see **Iodophenin**

Iodophenin (30

(Iodophenacetin).—React.-prod. of phenacetin in hydrochl. acid & iodine in potass. iodide.—25% iodine.—$C_{20}H_{25}I_3N_2O_4$.—Brownish-black cryst.—*Sol.* A.; W. liberates iodine.—*Melt.* 130–131° C., with decomposition.—Antisep.; solut. acts like iodine solut.—*Uses: Extern.*, like iodine.—*Intern.*, artic. rheum.—*Dose* 8 grains (0.5 Gm.).

Iodophenol, Para-.—see **Paraiodophenol**

Iodophenolphtalein, Tetra-.—see **Nosophen**

Iodophosphine.—see **Phosphonium Iodide**

Iodopyrine (100

(Antipyrine Iodide; Iodantipyrine).—$C_{11}H_{11}IN_2O$.—Colorl. cryst.—*Sol.* A., & hot W.—*Melt.* 160° C.—Antipyr.; Analg.; Alter.—*Uses:* Tuberculosis, typhoid fever, bronch. asthma, cephalal., migraine, & tertiary syphilis.—*Dose* 5–15 grains (0.3–1 Gm.).

Iodoquinine Sulphate.—see **Quinine Iodosulphate**

Iodose

Comp. of iodine (10%) w. a nucleoproteid.—Reddish powd.—*Sol.*, in alkal. intest. secretions; insol. gastric juice.—*Uses:* Syph., rheumat., glandular enlargem., asthma, goiter, &c.—*Dose* 5–20 grains (0.3–1.3 Gm.).

Iodosol.—see **Thymol Iodide**

Iodotannin.—see **Acid Iodotannic**

Iodotheobromine.—see **Theobromine & Sodium Iodosalicylate**

Iodothymol.—see **Thymol Iodide**

Iodothyrine (70

(Thyroiodine).—Dry milk-sugar trituration of the active constituent of thyroid gland.—15 grains (1 Gm.) iodothyrine contain $^1/_{200}$ grain (0.3 Mgrm.) iodine, & are equiv. to 15 grains (1 Gm.) fresh thyroid gland.—Wh. powd.—Alter.; Discut.—*Uses:* Goiter, corpulency, myxedema, psoriasis, eczema, menstrual disturb., menorrh., rachitis, &c.—*Doses:* 15–40 grains (1–2.5 Gm.) p. d. for adults; 5–15 grains (0.3–1 Gm.) p. d. for children.—*Max. D.* 30–60 grains (2–4 Gm.) p. d.

Iodterpin

By direct union of terpin & iodine.—Dark-brown liq.—*Sol.*, eas. E., B., benzin, C.; 10 absol. A.—Sp. Gr. 1.19.—*Uses:* Instead of tinct. iodine, & mixed w. sterilized kaolin (1–20%) as dusting powd. instead of iodoform.

Iodylin

(Bismuth Iodosalicylate).—Yellowish, odorl. powd.—Antisep., Vulnerary.—*Uses:* As of iodoform, in form of 7.5% gauze, & as powd., &c.

Ionone.—10% Solution

A ketone obtained fr. citral; the odorous principle of violets & orris root.—$C_{13}H_{20}O$.—Alcoholic solut. cont'g 10% ionone.—*Uses:* Perfumery.

Iosol.—see **Thymol Iodide**

Iothion (22

(Diiodohydroxypropane).—$C_3H_5I_2(OH)$.—Yellowish, oily, heavy liq.—*Sol.* 75–80 W., 20 G., 1.5 olive oil; all prop. in A., E., C., B., petrolatum & lanum; insol. benzin.—Sp. Gr. 2.4–2.5.—Dermic.—*Uses:* Syph., sycosis, ecz., trichophytosis, inguinal lymphadenitis, gonor., epididymitis, tuberc. of bone, &c.—*Appl.*, by inunct. in 10–50% oint.

Iothymol.—see **Thymol Iodide**

Ipecac.—*U. S. P.*

(Ipecacuanha; Hippo).—Dried root of Cephaëlis (Uragoga) Ipecacuanha (Brotero), A. Richard. Rubiaceæ. (Rio, Brazilian, or Para ipecac), w. portion of stem not exceeding 7 Cm. in length.—Carthagena ipecac fr. Cephaëlis acuminata, Karsten (or Psychotria emetica, Mutis).—*Habit.*: Brazil to Bolivia; cultiv. in India.—Carthagena ipecac fr. New Granada.—*Etymol.*: Brazilian "ipe," bark, "cau," plant, "cua," fragrant, & "uha," or "nia," radiant. Or, fr. Portuguese "i," small, "pe," on the roadside, "caa," herb, & "goene," emetic.—*Constit.*:

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Emetine, $C_{15}H_{21}NO_2$; cephaëline, $C_{14}H_{19}NO_2$; ipecacuanhic acid; psychotrine; choline; resin; sugar.—Carthagena ipecac contains chiefly cephaëline, w. emetin & ipecacuanhic acid.—Emetic; Expector.; Antidysenteric; Diaphor.; Sternutat.; Cholag.; Hemostat.; Counter-Irritant.—*Uses:* Emetic in poisoning, croup, &c.; bronch., coughs, pulmon. hemorrhage, hiccough, whoop.-cough, &c.—*Doses:* $^1/_4$–$^1/_2$ grain (0.015–0.03 Gm.) tonic; 5–20 grains (0.3–1.5 Gm.) emetic.—Alcoh. extr., $^1/_8$–$^1/_4$ grain (0.008–0.015 Gm.) expector.; $1^1/_2$–$2^1/_2$ grains (0.1–0.15 Gm.) emetic.—Fld. extr, 2–5 ♏ (0.12–0.3 Cc.) expect.; 15–45 ♏ (1–3 Cc.) emetic.—Hydro-alcoh. extr., $^1/_9$–$^1/_4$ grain (0.008–0.015 Gm.) expector; $1^1/_2$–$2^1/_2$ grains (0.1–0.15 Gm.) emetic.—Tinct., 10–20 ♏ (0.6–1.3 Cc.) as expector.

Ipecac De-emetinized (20

Ipecac root freed fr. its emetic principles (emetin & cephaëline), & containing only ipecacuanha-tannic acid.—Excellent antidysenteric, perfectly free fr. the depressing action commonly exhibited by ipecac. Employed in India & the German colonies w. great success.—*Doses:* 20 grains (1.3 Gm.) every 12 hrs.; in severe cases, every 6–8 hrs.—Alcoh. extr., 4–8 grains (0.25–0.5 Gm.) gradually increased, as astring. in tropical diarrh.—Fld. extr., 20 ♏ (1.3 Cc.) every 12 hrs. in dysentery.

Ipecac, Goanese.—see **Naregamia**

Ipecac & Opium, Powder.—see **Dover's Powder**

Ipé-tabaco

Wood of Tecoma Ipé, Mart. Bignoniaceæ.—*Habit.:* Brazil.—*Etymol.:* "Ipé-tabaco" is the Brazilian name of the plant.—*Constit.:* Chrysophanic acid.—*Uses:* In lichen; tetter.

Ipomein

Glucoside fr. root Ipomœa pandurata, G. F. W. Meyer (I. fastigiata, Sweet). — $C_{78}H_{132}O_{36}$. — *Sol.* A., acetic acid; insol. E., C.

Ipomœa Jalapa.—see **Jalap**

Ipomœa Turpethum

(Turpeth Root).—Root of Ipomœa Turpethum, R. Brown. Convolvulaceæ.—*Habit.:* East Indies.—*Etymol.:* Fr. Arab. "turbid," the name of the mercurial depurative of the Arabian physicians. "Ipomœa," fr. Grk. "ips," "ipos," a worm, bindweed, & "homoios," like, referring to its twining (worm-like) habit.—*Constit.:* Volat. oil; jalapin; resin (turpethin). — *Uses:* Purgat. — *Dose* 15–60 grains (1–4 Gm.) in powd.

Iridin Merck.—Pure (50

(Irisin).—Resinoid fr. rhizome Iris versicolor, L.; must not be confounded w. Tiemann-Lairés' glucoside, also named iridin, fr. Iris versicolor.—Brownish powd.—*Sol.* A.—Cholag.; Cath.; Emetic; Diuret.—*Uses:* Constip., amenor., & torpid liver; especially as a stimulant of biliary secretion.—*Dose* 1–3 grains (0.06–0.2 Gm.) in pills, at night, w. an equal weight oxgall.

Iridium Merck.—Fused or rods (4750

Etymol.: Discovered in 1804 by Smithson-Tennant, & named for the goddess of the rainbow, Iris.—Metal.—Ir.—Wh., lusterl., steel-like metal of the platinum group.—Sp. Gr. 22.7; heaviest of all the metals.—*Melt.* 1950–2500° C.

do. Merck.—Powder (4000

(Iridium Black).—Dark powd.—*Sol.*, nitrohydrochloric acid.—When alloyed w. platinum is particularly resistant to chemical agents, hence used in manufacturing industry for making vessels employed in chemical operations.

Iridium Bromide Merck (2000

(Iridium Tetrabromide; Iridic Bromide).—$IrBr_4$.—Deliq., brownish powd.—*Sol.* W., A.

Iridium Chloride Merck (2000

(Iridium Tetrachloride). — $IrCl_4$. — Brownish-black, hygros. mass.—*Sol.*, eas. in W.

Iridium-Osmium Alloy. — see **Osmium-Iridium Alloy**

Iridium Oxide Merck (1850

(Iridium Sesquioxide; Iridoiridic Oxide).—Ir_2O_3.—Dark powd.—*Sol.*, sl. in conc. HCl.

Iridium Sesquioxide.—see **Iridium Oxide**

Iridium Tetrabromide.—see **Iridium Bromide**

Iridium Tetrachloride.—see **Iridium Chloride**

Iridium & Ammonium Bromide Merck (2250

(Iridium Ammonium Sesquibromide; Ammonium Iridibromide).—$Ir_2Br_6.6NH_4Br + H_2O$.—Green, cryst. powd.—*Sol.* W.

Iridium & Potassium Chloride Merck (1250

(Potassium Iridichloride; Potassium Chloriridate).—$IrCl_4.2KCl$.—Dark-red cryst.—*Sol.*, hot W.—*Uses:* Techn., black pigment for porcelain.

Iridium & Sodium Chloride Merck.—Cryst. (1250

(Sodium Iridichloride or Chloriridate).—$IrCl_4.2NaCl + 6H_2O$.—Brownish-black cryst.—*Sol.* W.

Iridoiridic Oxide.—see **Iridium Oxide**

Iris

(Blue Flag; Flag Lily; Poison Flag; Water Flag).—Rhizome & roots of Iris versicolor, L. Iridaceæ.—*Habit.:* North America.—*Etymol.:* Fr. Grk. "iris," rainbow, referring to the varied colors of the flower. Lat. "versicolor," variously colored.—*Constit.:* Iridin (resinoid); camphoraceous substance; gum; tannin; sugar; oil.—Cholagogue; Cathart.; Diuret.; Emet.; Alter.—*Uses:* Jaundice, liver diseases, constipation, dropsy; large doses emetic.—*Doses:* 5–30 grains (0.3–2 Gm.).—Alcoh. extr., 1–6 grains (0.06–0.36 Gm.).—Fld. extr., 5–40 ♏ (0.3–2.5 Cc.).

Iris Florentina

(Orris; White Flag).—Rhizome of Iris florentina, L. Iridaceæ.—*Habit.:* Northern Italy (near Florence); Germany; France.—*Etymol.:* Fr. Grk. "iris," rainbow, referring to the varied

colors of the flower. "Florentina" refers to its habitat, Florence.—Peeled pieces are abt. 2–4 in. (50–100 Mm.) long, $^1/_2$–1 in. (12–25 Mm.) thick, flattish, whitish or whitish-yellow; short fracture; violet-like odor; mealy, bitter, acrid taste. —*Constit.:* Ionone; resin; starch; volat. oil; tannin.—Stim.; Diuret.; Masticatory for teething infants.—*Uses: Techn.*, in perfumes & cosmetics.

Iris Paper

Wh. paper impregnated w. hot, aqu. extract of Blue Flag (Iris versicolor).—*Uses:* Indicator (alkalies = green; neutral = blue; acids = red).

Irisin.—see **Iridin**

Iron Merck.—By Electrolysis (2

Etymol.: Fr. Anglo-Sax. "iren," Goth. "iarn."—Metal; alm. perf. pure Fe.—*Uses:* Chem. anal.

do. Merck.—By Hydrogen.—Gray, 90% Fe.—*U. S. P.* (1

(Reduced Iron; Quevenne's Iron).—Reduct. of oxide by hydrogen w. heat.—Not less than 90% Fe. (U. S. P.).—Iron-gray, lusterl. powd.; odorl.; tastel.—Chalyb.; Tonic.—*Uses:* Anemia, chlorosis, hyst., neural., scrof., debil., &c.—*Dose* 1–5 grains (0.06–0.3 Gm.).—*Caut.* Keep well stop'd.

do. Merck.—By Hydrogen.—Gray, 80% Fe (1

do. Merck.—By Hydrogen.—Black (1

do. Merck.—Filings (1

do. Merck.—Fine powder (1

("Alcoholized" Iron, *i.e.*, ironmechanically pulverized).—Gray powd.—*Uses:* Chlorosis, anemia, &c.—*Dose* $1^1/_2$–15 grains (0.1–1 Gm.) sev. t. p. d.

Iron Merck.—Reagent.—By Hydrogen (3

Fe.—Gray, lusterl., fine powd.; at least 90% Fe.—*Tests:* (*Solub. in Acids; C; Si*) 10 Gm. + 20 Cc. H_2SO_4 (sp. gr. 1.84) + 200 Cc. H_2O – alm. compl. sol.; filter off any res., dry at 100° C., & weigh – wt. not more than 0.05 Gm.—(*S*) 1 Gm. + 10 Cc. HCl (sp. gr. 1.124) + 10 Cc. W. – no H_2S evolv. (should not darken lead-acetate paper within 10 sec.).—(Na_2CO_3) 5 Gm. + 50 Cc. H_2O; shake; filter – filtrate should not render red litmus paper blue, & on evap. should leave no res.—(*N*) 10 Gm. + 20 Cc. conc. H_2SO_4 (sp. gr. 1.84) + 200 Cc. H_2O; heat; cool; add 100 Cc. solut. NaOH (sp. gr. 1.3); distil off abt. 50 Cc.; collect dist. in receiver cont. 20 Cc. H_2O w. 2–3 Cc. decinorm. HCl; titrate w. decinorm. KOH w. methyl orange as indic. – KOH used up should at most be 0.2 Cc. less than quant. acid placed in receiver.—(*As*) 1 Gm. + 1 Gm. $KClO_3$ + 10 Cc. HCl (sp. gr. 1.124); when react. subsides, heat till free Cl expelled; filter; add 15 Cc. solut. $SnCl_2$ to 5 Cc. filtrate; no dark color within 1 hr. —*Uses:* Particularly in estim. nitric acid.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Iron Merck.—Reagent.—Powder.—98% Fe (3

Fe.—Fine, heavy, gray powd.; metallic luster; at least 98% Fe.—*Tests:* (*Solub. in Acids; C; Si; S*) 10 Gm. + 20 Cc. conc. H_2SO_4 (sp. gr. 1.84) + 200 Cc. H_2O – alm. compl. sol.; filter off res. dry at 100° C., & weigh – wt. not more than 0.005 Gm. Gas evolv. dur. solut. should not impart more than brownish color within 5 sec. to lead-acetate paper.—(*N; As*) as under iron-by-hydrogen.—(*Cu; Zn; Pb*) 1 Gm. + 25 Cc. HNO_3 (sp. gr. 1.153); boil till dissolved; add 25 Cc. H_2O + 30 Cc. NH_4OH (sp. gr. 0.96); filter – filtrate should not have a blue color, or be affected by aqu. H_2S.—*Uses:* Testing Br for I; with Zn in determ. HNO_3.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

do. Merck.—Reagent.—Wire (2

Fe.—Thin polished wire (piano wire).—*Uses:* For standardizing soluts. $KMnO_4$.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Iron Acetate Merck.—Scales (4

(Ferric Acetate).—$Fe_2(C_2H_3O_2)_6$.—Brownish-red scales.—*Sol.* W.—*Uses:* Tonic; also techn. —*Dose* 3–10 grains (0.2–0.6 Gm.).

do. Merck.—Solution (1

31% anhydrous ferric acetate, $Fe_2(C_2H_3O_2)_6$, & represents abt. 7.5% iron.—V. dark, reddish-brown liq.; sweetish, acid., styptic taste.—Sp. Gr. 1.16 = 20° Bé. at 15° C.—*Misc.* W.—Tonic; Chalyb.; Astring.—*Uses:* Anemia, chlorosis, & during convalesc. fr. wasting dis.—*Dose* 2–10 ♏ (0.12–0.6 Cc.).—*Caut.* Keep dark & well stop'd.

do. Merck.—Solution, Sp. Gr. 1.145 = 18.5° Bé. (1

do. Merck.—Solution, Sp. Gr. 1.138 = 17.5° Bé. (1

Iron Acetate Merck.—Basic (3

(Basic Ferric Acetate).—$Fe_2(OH)_2(C_2H_3O_2)_4$.—Red powd.—*Sol.*, v. sl. W.—*Uses:* Dyeing.

do. Merck.—Solution (1

4.8–5% iron.—Sp. Gr. 1.087 to 1.091 = 12° Bé. —Reddish-brown liq.—*Sol.* W.—Astring.; Tonic; Hemostat.—*Dose* 8–15 ♏ (0.5–1 Cc.) sev. t. p. d. —*Extern.*, as inject. & compress. in 1–2:100 W.

Iron Acetoformate Merck.—Ferric (15

Brownish-red to yellowish-red powd.; saline taste.—*Sol.* W.

Iron Albuminate Merck.—Powder (6

(Ferric Albuminate).—Brown, v. stable powd. —*Sol.* W.—Tonic; Hematinic.—*Uses:* Chlorosis; Japanese remedy in beriberi.—*Dose* 3–10 grains (0.2–0.6 Gm.).

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Iron Albuminate Merck.—Scales (3
(Ferric Albuminate). — 5% Fe_2O_3. — Brown scales.—*Sol.* W.—Tonic; Hematinic.—*Uses:* v. assimilable iron prep.; not acid, astring., or injur. to teeth.—*Dose* 3–40 grains (0.2–2.5 Gm.).

do.—Solution (1
Clear, brown liq.—0.4% Fe.—Tonic; Hematinic. —*Uses:* Anemia, chlorosis, & o. affections where an easily assimilated iron prep. is required.—*Dose* 30–60 ♏ (2–4 Cc.).

do.—Solution.—*N. F.*
Approx. 0.6% Fe.—*Uses & Doses:* As of preceding.

Iron Albuminate Peptonized Merck (8
(Peptonized Ferric Albuminate).—Light-brown powd.—*Sol.* W.—*Dose* 3–10 grains (0.2–0.6 Gm.).

Iron Albuminate Saccharated Merck (5
(Saccharated Ferric Albuminate).—Iron albuminate & sacchar. ferric oxide.—Reddish-brown powd.—*Sol.* W.—*Dose* 5–20 grains (0.3–1.3 Gm.).

Iron Albuminate with Sodium Citrate Merck.—Scales (5
(Ferric Albuminate w. Sodium Citrate).—Brown scales.—*Sol.* W.

Iron Alcoholized.—see **Iron, Fine Powder**

Iron Alginate
(Alginoid Iron).—Fr. sod. alginate & $FeCl_3$.—$C_{76}H_{77}N_2O_{22}Fe_3$.—Brown, tastel. powd.; abt. 11% Fe.—*Sol.*, ammonia.—Hematinic.—*Dose* 3–15 grains (0.2–1 Gm.).—Decomp. in intestines.

Iron Ammoniated.—see **Ammonium Chloride, Ferrated**

Iron Ammoniochloride.—see **Ammonium Chloride, Ferrated**

Iron Anisate Merck (55
(Ferric Anisate).—Reddish-brown powd.; odor of aniseed.—Insol. W.

Iron Arsenate Merck (3
(Ferrous Arsenate).— $Fe_3(AsO_4)_2+6H_2O(?)$.—Green, amorph. powd.—*Sol.*, dil. hydrochl. acid. —Hemat.; Alter.—*Uses:* Chronic skin dis.: ecz., impet., lepra, psoria., cancer, lupus, &c.—*Dose* $^1/_{16}$–$^1/_3$ grain (0.004–0.008 Gm.).

Iron Arsenite Merck (3
(Ferric Arsenite).—$4Fe_2O_3.As_2O_3+5H_2O(?)$.—Brownish-yellow powd.—*Sol.*, in acids; insol. W.

Iron Arsenite with Ammonium Citrate Merck (4
(Ferrous Arsenite w. Ammonium Citrate).—Green scales.—*Sol.*, v. eas. W.—1.4% arsenic trioxide, & 15–18% iron.—Hematinic.—*Uses:* Particularly indicated in anemia complicated w. malaria; also in pernicious anemia, & especially in pellagra.—*Dose* $^1/_2$–$1^1/_6$ grains (0.03–0.07 Gm.).—*Inj.*, subcut., in malaria in children, $^1/_2$ grain (0.03 Gm.) dissolved in 15 ♏ (1 Cc.) water, every 2–3 days; in pellagra, a like dose is injected daily at first, then every other day. The injections should be made in the gluteal region in order to avoid unpleasant by-effects.

Iron Benzoate Merck.—Solub. in Cod-liver Oil (5
(Ferric Benzoate; Hydrated Ferric Benzoate). —$Fe_2(C_7H_5O_2)_6$+ aq.—Brown powd.; 25% ferric oxide.—*Sol.*, mixt. 80 cod-liver oil & 20 E.; slowly in warm E. & cod-liver oil.—*Dose* $1^1/_2$–3 grains (0.1–0.2 Gm.).

Iron Bichromale.—see **Iron Dichromate**

Iron Bromide Merck.—Ferric (4
(Ferric Bromide; Iron Tri- or Sesqui-bromide). —Fe_2Br_6, or $FeBr_3$.—Dark-red, deliques. cryst. —*Sol.*, eas. W., E., & A.—*Uses:* Scrofula, amenor., phthisis, leucor., glandular enlargem., &c.; exhibits in high degree the bromine action. — *Dose* $^1/_3$–1 grain (0.02–0.06 Gm.) several t. p. d.—*Max. D.* $1^1/_2$ grains (0.1 Gm.) single; 8 grains (0.5 Gm.) daily.

do. Merck.—Saccharated . (3
Ferric bromide & sacchar. ferric oxide.—Deliq., reddish-brown powd.—*Sol.* W.—*Uses:* As the preceding. — *Dose* 3–15 grains (0.2–1 Gm.) several t. p. d.—*Caut.* Keep dry, fr. air.

Iron Bromide Merck.—Ferrous (2
(Ferrous Bromide). — $FeBr_2+6H_2O$. — Reddish cryst. powd.—*Sol.* W., A.—*Uses:* Scrof., amenor., phthisis, leucor., & glandular enlargem.—*Dose* 1–5 grains (0.06–0.3 Gm.) several t. p. d.—*Caut.* Keep well stoppered.

Iron Bromoiodide Merck (18
Ferric bromide & ferric iodide.—Deliq., brown powd.—*Sol.* W. with part. decomp.—Alter.; Tonic; Chalyb.—*Dose* $^1/_2$–2 grains (0.03–0.12 Gm.).—*Caut.* Keep dry, fr. air.

Iron Cacodylate Merck (15
(Ferric Cacodylate).—$Fe([CH_3]_2AsO_2)_3$.—Grayish-yellow powd.—*Sol.*, in W.—Alter.; Antichlorot.—*Uses:* Anemia, chlorosis, various types of lymphadenitis & leukemia in which arsenic is indicated.—*Dose* 1–5 grains (0.06–0.3 Gm.) in aqu. solut. per day; *subcut.*, $^1/_2$–$1^1/_2$ grains (0.03–0.1 Gm.) per day.

Iron Camphorate Merck (35
(Ferric Camphorate). — Yellowish-red, voluminous powd.—Insol. in usual solvents.—*Uses:* Chlorosis.—*Dose* $1^1/_2$–3 grains (0.1–0.2 Gm.) several t. p. d. in pills.

Iron Carbazotate.—see **Iron Picrate**

Iron Carbolate.—see **Iron Phenate**

"Iron Carbonate Precipitated." — see **Iron Oxide Brown**

Iron Carbonate Merck.—Green (1
(Green Ferrous Carbonate).—$FeCO_3$ mixed w. ferric oxide.—Green lumps or powd.; turn red

on expos. to air.—*Sol.*, in dil. acids; insol. W.—Chalybeate.—*Dose* 5–15 grains (0.3–1 Gm.).—*Caut.* Keep well stoppered.

Iron Carbonate Merck.—Effervescent (3

(Effervescent Ferrous Carbonate). — Yellow gran's, variable comp. — *Sol.* W., with effervesc. —*Uses:* Mild chalyb.; for manuf. ferruginous mineral waters.—*Dose* 30 grains (2 Gm.).

do. Merck.—Saccharated (1

Fresh. precip. ferrous carbonate protected fr. oxid'n by sugar. — 15% ferrous carbonate. — Greenish-brown, sweet powd.—*Sol.* W.—Chalyb.; Tonic.—*Dose* 5–30 grains (0.3–2 Gm.).

Iron Chlorhydrophosphate Merck.—Dry (8

Fr. iron phosphate, by hydrochloric acid.—Yellow powd.; odor of hydrochl. acid.—*Sol.* W.—*Uses:* As of iron phosphate.

Iron Chloride Merck.—Ferric.—Cryst. (1

(Normal Ferric Chloride; Iron Trichloride, Perchloride, or Sesquichloride).—$FeCl_3+6H_2O$. —Not less than 22% Fe (U. S. P.).—V. deliq., orange-yellow, cryst., acid mass; astring., chalyb. taste.—*Sol.* W., A., & E.+A.—Styptic; Tonic; Astring.—*Uses: Extern.*, in solut. occasionally as styptic & caustic (styptic collodion, 1:9); usually, however, in form of solut. iron chloride; also pharmaceutical, & techn. in photoengraving.

do. Merck.—Sublimed, anhydrous (3

(Flores Martis).—$FeCl_3$.—Sm. cryst.—*Sol.* W., A.

do. Merck.— Solution.—*U. S. P.* (1

29% anhydrous ferric chloride ($FeCl_3$) & represents 10% iron.—Reddish-brown liq.; acid, styp. taste.—Sp. Gr. 1.280–1.290 at 25° C., U. S. P. —*Misc.* W., A.—Astring.; Tonic; Stypt.—*Uses:* Chlorosis, anemia & wasting dis.; us'y tincture. Styptic in post-partum hemorrhage; 1 dr. (4 Cc.) to 1 oz. (30 Cc.) to 1 pint (500 Cc.) W. & injected; brush application in diphtheria (1:1 W.); sweating feet (3:1 G.); enema (1:200); also as hemostat. (diluted w. W.) in nosebleed, wash, &c.—*Dose* 2–10 ♏ (0.12–0.6 Cc.).

Iron Chloride Merck.—Ferric.—Reagent (1

$FeCl_3+6H_2O$. — Yellow, cryst. lumps; v. deliquesc. in air.—*Sol.*, eas. W., A., & mixt. A. w. E.—Soluts. acid to litmus paper.—*Tests:* (*Basic Salt; Substcs Diff. Sol. in H_2O*) 10 Gm. compl. sol. in 10 Cc. H_2O; solut. perf. clear.—(*HCl; Cl*) *a:* place a few Cc. 1:1 solut. in watch-glass & bring over it a glass rod moist. w. NH_4OH – no cloud should form; *b:* into neck of a flask cont. solut. $FeCl_3$ introd. paper moist. w. zinc iodide-starch solut. – paper should not acquire blue color within 2 min.—(*As*) 1 Cc. 1:1 solut. $FeCl_3$ +3 Cc. solut. $SnCl_2$ – no darker color within 1 hr.—(*Ferrous Salt*) to 1:20 aqu. solut. add 1 Cc. HCl (sp. gr. 1.124)+few drops $K_3Fe(CN)_6$– no blue color.—(*Cu; HNO_3 & o. Impur.* [*Alkali Salts; Ca*]) 20 Cc. 1:1 solut.+100 Cc. H_2O+25 Cc. NH_4OH (sp. gr. 0.96); filter; *a:* evap. 50 Cc. filtrate & ignite – wt. of res. not more than 0.001 Gm.; *b:* 2 Cc. filtrate+2 Cc. conc. H_2SO_4; overlay w. 1 Cc. solut. Fe_2SO_4 – no brown color zone; *c:* 20 Cc. filtrate+$C_2H_4O_2$+$K_4Fe(CN)_6$ – no react. — (H_2SO_4) 10 Gm.+100 Cc. H_2O+25 Cc. NH_4OH (sp. gr. 0.96); filter; filtrate+$C_2H_4O_2$ +solut. $BaCl_2$–no ppt. ($BaSO_4$) within 12 hrs. —*Uses:* Detect. thiocyanic, ferrocyanic, salicylic, & tannic acids; prepar. organic acids & decomp. earthy phosphates.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

do. Merck.—Reagent.—Solution (1

Clear, deep yellowish-brown liq.; 10% Fe=29% $FeCl_3$.—Sp. Gr. 1.280–1.282.—*Tests:* As under iron chloride, ferric, using, however, 3 Cc. solut. inst. of 1 Gm. cryst. $FeCl_3$.—*Uses:* As of preceding.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Iron Chloride Merck.—Ferrous.—Pure, dry (2

(Ferrous Chloride; Iron Dichloride or Protochloride).—$FeCl_2$+ aq.—Greenish-white, cryst. powd.—*Sol.* W.—*Uses: Extern.*, astring., gargle, 2–5%.—*Intern.*, chalyb.—*Techn.*, as mordant in printing fabrics, in dyeing, & in metallurgy for extract. copper.—*Dose* 1–3 grains (0.06–0.2 Gm.).

do. — Solution

10% iron.—Clear, greenish liq.—Sp. Gr. 1.255= 30° Bé., at 15° C.—Tonic; Astring.; Styp.—*Uses:* Anemia, chlorosis, &c.—*Dose* 5–15 ♏ (0.3–1 Cc.) several t. p. d. in aqu. or alcoh. solut.—*Caut.* Keep in bright daylight.

do. — Solution.—*N. F.*

Cont. abt. 2% $FeCl_2$.

Iron Chloride Merck.—Ferrous.—Reagent (1

$FeCl_2+4H_2O$. — Pale-green, hygrosc. powd. — *Sol.* 1 W. acidul. w. few drops HCl; A.—*Tests:* (*Oxychloride*) 1 Gm.+1 Cc. W.+2–3 drops HCl (sp. gr. 1.124) – solut. green or pale-green, but no yellowish-green tint; add 5 Cc. aqu. H_2S – only v. sl. turb. (separ. of S).—(H_2SO_4; *Cu; Alkalies*) 5 Gm.+10 Cc. H_2O+5 Cc. HNO_3 (sp. gr. 1.3); boil; add H_2O to 120 Cc.; add 20 Cc. NH_4OH (sp. gr. 0.96); filter; *a:* evap. 50 Cc. filtrate & ignite – wt. of res. not more than 0.001 Gm.; *b:* to 20 Cc. filtrate add $C_2H_4O_2$+solut. $Ba(NO_3)_2$ – no react.; add $K_4Fe(CN)_6$ – no react. —(*As*) 1 Gm.+1 Cc. H_2O+few drops HCl+ 3 Cc. solut. $SnCl_2$ – no dark color within 1 hr.— *Uses:* Reducer; in gasometric determ. nitrates; determ. HNO_3.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Iron Chromate, Acid.—see **Iron Dichromate**

Iron Chromate Merck.—Liquid (1

Ferric chromate, $Fe_2(CrO_4)_3$ w. W.—Dark-brown liq.—*Misc.* W.; not decomp. by boiling.

Iron Citrate Merck.—Scales (1

(Ferric Citrate).—Appr.: $Fe_2(C_6H_6O_7)_2+6H_2O$. —Not less than 16% Fe. (U. S. P.).—Reddish-brown scales.—*Sol.*, slowly but completely in W.; at 25° C.; eas. sol. hot W.; insol. A.—Tonic; Astring.—*Uses:* Anemia & chlorosis.—*Dose* 3–10 grains (0.2–0.6 Gm.).—*Caut.* Keep. fr. light.

do. Merck.—Powder (1

Uses: As of preceding.

do. Merck.—Effervescent, white (1

Mixt. iron citrate w. an acid & carbonate.—Grayish-white granules.—*Sol.* W., with effervesc. —*Uses:* Pleas. chalyb.

do. Merck.—Effervescent, yellow (1

Mixt. iron citrate, tartaric acid, & a carbonate. —Drab-yellow granules.—*Sol.* W., with turbid. & effervesc.—*Uses:* Pleas. Chalyb.—*Dose* 5–20 grains (0.3–1.3 Gm.).—*Caut.* Sensitive to light; keep in dark bot.

Iron Citro-iodide.—Syrup.—*N. F.*

(Tasteless Syrup of Iron Iodide).—Abt. 6% ferric iodide & 8.5% potass. citrate.—Alter.; Tonic. — *Uses:* Scrof., tuberculosis, chronic rheum., chlorosis, persistent anemia, &c. — *Dose* 10–30 ♏ (0.6–2 Cc.).

Iron "Cyanide."—see **Iron Ferrocyanide**

Iron Dialyzed Merck.—Solution (1

(Solution of Basic Ferric Oxychloride).—Fr. solut. ferric chloride w. amm.; or, fr. supersat. hydrochloric solut. ferric hydroxide by dialyzing.—$Fe_2Cl_6.8Fe(OH)_6$.—Dark reddish liq.—5% Fe_2O_3,=3.5% Fe.—*Misc.* W.—Tonic; Astring.; Homost.—*Uses:* Arsenic antid.; also in chlorosis, anemia, hemorrhage, cholera, diar., gonor., leucor., wounds, &c.—*Dose* 10–30 ♏ (0.6–2 Cc.).

do. Merck.—Scales (6

Dark-brown scales.—*Dose* $^1/_2$–10 grains (0.03–0.6 Gm.).

Iron Dichloride.—see **Iron Chloride, Ferrous**

Iron Dichromate Merck (3

(Ferric Bichromate; Acid Iron Chromate).—$Fe_2(Cr_2O_7)_3$.—Fr. aqu. chromic acid & moist ferric hydroxide w. heat.—Reddish-brown granules. — *Sol.* W.—*Uses:* Techn., w. acacia & glue as water- & oil-color, & w. water-glass as pigment for cement paint; also mixed w. ultramarine as green pigment.

Iron Ethiops.—see **Iron Oxide, Black**

Iron Ferrocyanide Merck.—Pure, insoluble (1

(Ferric Ferrocyanide; Prussian, or Berlin, Blue; Insoluble Iron "Cyanide").—Fr. ferric salts, w. potass.ferrocy.—$Fe_4Fe_3(CN_6)_3$.—Dark-blue powd. or lumps.—*Sol.*, in aqu. solut. oxalic acid; insol. W. & dil. acids.—Tonic; Antiper.; Cholag.—*Uses:* Said to act well in interm. & remit. fev. where quinine fails.—*Techn.*, in more or less pure form as Prussian-, Berlin-, Paris-, or Mineral-Blue, in water- or oil-colors, & printing fabrics; dissolved in oxalic-acid solut. as ink & wash-blue.—*Dose* 2–5 grains (0.12–0.3 Gm.).

Iron Ferrocyanide Merck.—Pure, soluble (1

(Soluble Berlin, or Prussian, Blue; Soluble Iron "Cyanide").—Ferric ferrocyanide cont. some alkali-base. — Mostly $KFe(CN_6)$. — *Sol.* W.—*Uses:* Techn., blue pigment & dye.

Iron Filings.—see **Iron**

Iron Fluoride Merck (5

(Ferrous Fluoride). — FeF_2. — Wh. powd., or cryst. — *Sol.*, sl. W. — *Uses:* As of ammonium fluoride in hepatic hypertrophy.—*Dose* $^1/_{20}$–$^1/_2$ grain (0.003–0.03 Gm.) several t. p. d.

Iron Formate Merck (25

(Ferric Formate). — $Fe(HCO_2)_3$. — Cryst., red powd.—*Sol.* W., & hot A.

do. — Solution

5% ferric formate, $Fe(HCO_2)_3$,=2.13% Fe_2O_3.—Reddish-brown liq.—Sp. Gr. 1.04,=6° Bé., at 15° C.—*Misc.* W.

Iron Gallotannate.—see **Iron Tannate**

Iron Glycerinophosphate Merck. — Scales or powder (5

(Ferric Glycerinophosphate).—Yellowish scales or powd.—*Sol.*, dil. A.; diffic. W.—*Uses:* Deficient nerve nutrition, neurasth., anemia, chlorosis, Addison's dis., phosphaturia, convalesc. fr. influenza, beriberi, &c.—*Dose* 2–5 grains (0.12–0.3 Gm.) 3 t. p. d. in cinnamon W.

Iron Hippurate Merck (30

(Ferric Hippurate). — $Fe(C_9H_8NO_3)_3$. — Brown powd.—*Sol.*, v. eas. A.; insol. W.

Iron Hydroxide Merck.—Pure (1

(Ferric Hydroxide; Hydrated Iron Oxide; Hydrous Iron Peroxide; Hydrated Iron Sesquioxide; Crocus Martis).—$Fe(OH)_3$.—Brownish powd.—*Sol.*, hydrochl. acid.—*Uses:* Mild chalybeate; when freshly precip. as antidote for arsenic. — *Techn.*, in rubber industry. — *Dose* 3–15 grains (0.2–1 Gm.) several t. p. d.

Iron Hypophosphite Merck (2

(Ferric Hypophosphite).—$Fe(H_2PO_2)_3$.—Wh., or grayish-wh., powd.—*Sol.*, warm, conc. solut. of alkali citrate; sl. W.—*Uses:* Chalyb., us'y w. o. remed., in tuberculosis & rachitis.—*Dose* 5–10 grains (0.3–0.6 Gm.).—*Caut.* Keep dark & well stoppered.

do. Merck.—Highest Purity (14

Wh. powd.—*Caut.* Keep well stop'd & fr. light.

Iron Hypophosphite.—Solution.—*N. F.*
Abt. 16.5% iron hypophos.—*Dose* 10–20 ♏ (0.6–1.3 Cc.).

Iron Iodate Merck.—Ferric (16
$Fe_2O_3.2I_2O_5+8H_2O$.—Redd. to brownish powd.; decomp. by heat.—Alter.; Tonic.—*Uses:* Scrof. —*Dose* 2–5 grains (0.12–0.3 Gm.) sev. t. p. d. in pills.

Iron Iodide Merck (5
(Ferrous Iodide; Iron Protoiodide).—FeI_2+abt. $3H_2O$.—Cryst., grayish-black masses.—*Sol.* W., with part. decomp.—Alter.; Tonic. Seldom used. —*Dose* $^1/_2$–3 grains (0.03–0.2 Gm.).

do. Merck.—Saccharated (5
Abt. 20% ferrous iodide.—Yellowish-white, or grayish, hygrosc. powd.—*Sol.*, partly in W., with some decomp. — Alter.; Tonic. — *Uses:* Anemia, chlorosis, scrof., debil., &c.—*Dose* 2–15 grains (0.12–1 Gm.) several t. p. d.—*Caut.* Keep dark, cool, & well stoppered.

do. Merck.—Tasteless (10
Tasteless ferrous iodide; coutains potass. citrate.—Brown powd.—*Sol.*, hot W.—*Uses & Dose:* As of iron iodide.

do. Merck.—Syrup.—*U. S. P.* (1
5% by wt. of ferrous iodide, or abt. 6.74 Gm. in 100 Cc.—Sp. Gr., abt. 1.349 at 25° C.—Alter.; Tonic.—*Uses:* Scrof. affect., tuberculosis, leucocythemia, chlorosis, anemia, chronic rheum., &c.—*Dose* 15–30 ♏ (1–2 Cc.).—*Caut.* Keep in sm., well-stoppered & filled bots.

do.—Solution.—*N. F.*
Cont. abt. 85% FeI_2.—*Dose* 2–5 ♏ (0.12–0.3 Cc.).

Iron Lactate Merck.—Pure, cryst. or scales (1
(Ferrous Lactate). — $Fe(C_3H_5O_3)_2+3H_2O$. — Greenish-white cryst., in sm. crusts or transp., green scales.—*Sol.* 40 W.; 12 boil. W.; alkali citrate solut.—Tonic; Alter.; Chalyb.—*Uses:* Chlorosis, anemia, &c., where iron indic.—*Dose* 1–5 grains (0.06–0.3 Gm.) several t. p. d.—*Caut.* Keep fr. air & light.

do. Merck.—Pure, powder, free fr. H_2SO_4 (1
White, or greenish-white, powd.— Abt. 20% Fe. —*Sol.* W.—*Uses & Dose:* As of preceding.

do. Merck.—Powder (1
Yellowish, or grayish-green, powd.

Iron Lactoalbuminate Merck (12
(Ferrous Lactate with Ferric Albuminate).— Light-brown powd.—*Sol.*, partly in W.—*Uses:* Chalyb., espec. for children.—*Dose* 1–5 grains (0.06–0.3 Gm.).

Iron Lactocitrate Merck (6
(Ferrous Lactocitrate; Ferrous Lactate with Ferric Citrate). — Abt. 20% Fe. — Brownish powd.—*Sol.*, sl. in W.—*Uses & Dose:* As of iron citrate.

Iron Lactophosphate Merck (4
Double salt of ferric phosphate & ferrous lactate. —56% ferric phosphate & 44% ferrous lactate. —Greenish-white powd.—*Sol.* W. with mineral acid.—*Uses, Dose, &c.:* As of iron lactate.

Iron Malate Merck (22
(Ferric Malate). — $Fe_2(C_4H_4O_5)_3$. — Brown, hygrosc. scales.—*Sol.* W., A.—Tonic; Astring.— *Uses:* Mild chalyb.—*Caut.* Keep well stoppered.

Iron Malate Crude.—see **Extract Apple Ferrated**

Iron Monomethylarsenate Merck (55
$Fe(CH_3AsO_3)_3$.—Reddish-brown, lusterl. scales. —21.2% Fe, & 42.7% As.—*Sol.* 2 W.; insol. A., E. — Hemat. — *Uses:* Anemia, chlorosis, leucemia.—*Dose* $^1/_3$–$^3/_4$ grain (0.02–0.05 Gm.) in solut. or pill.

Iron Monosulphide.—see **Iron Sulphide**

Iron Nitrate Merck.—Ferric.—Cryst. (2
$Fe(NO_3)_3+18H_2O$.—Grayish-white cryst.—*Sol.* W.—*Melt.* 47.2° C.—*Uses:* Techn., in aqu. solut.

do. Merck—Solution.—33⅓% (1
33$^1/_3$% $Fe(NO_3)_3$ = abt. 7.5% Fe. — Dark-red liq.—Sp. Gr. 1.25 at 15° C.—*Misc.* W.—*Uses:* —Techn., as mordant in dyeing & calico printing, weighting silk & dyeing it black, tanning, & manuf. Berlin blue.

do. — Solution
6.2% anhydrous ferric nitrate, $Fe(NO_3)_3$=1.4% iron.—Clear, amber or reddish liq.—Sp. Gr. 1.050 at 15° C.—*Sol.* W., A.—Astring.; Tonic. —*Uses:* Chronic diar. & leucor.—*Dose* 10–15 ♏ (0.6–1 Cc.) in W.

Iron Nucleinate Merck (75
Yellow powd.—Insol. W. & A.

Iron Oleate Merck.—20% (4
(Ferric Oleate).—$Fe(C_{18}H_{33}O_2)_3$.—Brownish-red lumps.—*Sol.* E.—Tonic.—*Uses: Extern.*, in aqu. solut. (iron soap) on wounds, ulcers, &c.

Iron Oxalate Merck.—Ferric.—Scales (2
(Normal Ferric Oxalate).—$Fe_2(C_2O_4)_3$.—Greenish-yellow scales.—*Sol.* W.

do. Merck.—Powder (2
Greenish-yellow powd.—*Sol.*, in solut. alkali oxalates; sl. in W.

Iron Oxalate Merck—Ferrous (2
$FeC_2O_4+2H_2O$. — Pale-yellow, odôrl., cryst. powd.—*Sol.*, cold hydrochl. & hot dil. sulphuric acids; insol. W.—Tonic; Alter.—*Uses:* Anemia, chlorosis, &c.—*Techn.*, photo. developer for silver-bromide-gelatin plates.—*Dose* 2–6 grains (0.12–0.36 Gm.), twice daily, in pills.

Iron Oxide Black Merck.—Dry process (1
(Ferrosoferric Oxide; Magnetic Iron Oxide; Iron Ethiops).—$Fe_3O_3(OH)_2$.—Reddish-black, amorph. powd.—*Sol.*, hydrochlor. acid.—Hemat., &c.—*Dose* 2–10 grains (0.12–0.6 Gm.).

do. Merck.—Wet process (2

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Iron Oxide Brown Merck.—Commercial (1

("Iron Subcarbonate," or "Iron Carbonate Precipitated").—Contains ferric carbonate, $FeCO_3$, with ferric hydroxide, $Fe(OH)_3$, & $Fe(OH)_2$, in varying quantities. — Reddish-brown powd. — *Sol.*, dil. hydrochlor. acid; insol. W. — Mild chalybeate.—*Dose* 3–15 grains (0.2–1 Gm.).

Iron Oxide Hydrated.—see **Iron Hydroxide**

Iron Oxide Magnetic.—see **Iron Oxide, Black**

Iron Oxide Red Merck.—Anhydrous (1

(Anhydrous Ferric Oxide; Iron [Ferric] Trioxide; Iron Sesquioxide; Crocus Martis Adstringens). — Fr. hydroxide by ignit. — Fe_2O_3. — Dense, red powd.—*Sol.*, acids.—*Uses:* Obsol. in medicine.—*Techn.*, as polish. powd. for glass & metal, as pigment, in iron paints, & in manuf. of glass & pottery.

do. Merck.—Fr. Ferric Oxalate (5

Fr. ferric oxalate, by heat. — Reddish-brown powd.—*Sol.*, acids; insol. W.—*Uses:* Techn., polishing-rouge.

do. Merck. — Saccharated. — Soluble. — Ph. G. iv. (1

(Soluble Iron; Iron Saccharate; Iron Sugar).—Mixt. of sugar with ferric saccharate, $C_{12}H_{22}O_{11}\cdot(Fe_2O_3)_2+C_{12}H_{22}O_{11}Na_2O$.—Cont. at least 2.8% of met. iron.—Brown powd.—*Sol.* W.—*Uses:* Antid. for arsenic; in chlorosis, anemia, &c.—*Dose* 8–30 grains (0.5–2 Gm.).

Iron Oxychloride, Solution.—see **Iron Dialyzed**

Iron Paranucleinate.—see **Triferrin**

Iron "Peptonate."—see **Iron Peptonized**

Iron Peptonized Merck.—Powder (4

(Iron "Peptonate"; Ferric "Peptonate").—5% Fe_2O_3 w. peptone.—Yellowish-brown powd. —*Sol.* W. — *Uses:* Mild, eas. assimil. chalyb. —*Dose* 2–8 grains (0.12–0.5 Gm.).

do. Merck.—Scales (5

Reddish-brown, deliq. scales.—25% Fe_2O_3.

do. Merck.—Saccharated (8

Equal parts iron peptonized & sacchar. iron oxide.—Brown powd.—*Sol.* W.—*Uses:* As of iron peptonized, but in twice the dose.

do. — Solution.—*N. F.*

0.3% Fe.—Readily absorbed form of peptonized iron.—*Uses:* Anemia, chlorosis.—*Dose* 15–60 ♏ (1–4 Cc.) several t. p. d. in milk, etc.

Iron Perchloride.—see **Iron Chloride Ferric**

Iron Peroxide, Hydrous.—see **Iron Hydroxide**

Iron Persulphate.—see **Iron Sulphate, Basic**

Iron Phenate Merck (8

(Ferric Phenolate, or Carbolate; Phenol-Iron). —Variable comp.—Brownish-violet, deliq. pieces. —*Sol.* W.—*Caut.* Keep dry, fr. air.

Iron Phenolsulphonate Merck (2

(Ferrous Sulphocarbolate; Iron Sulphophenate, or Phenolsulphonate). — $Fe(C_6H_5SO_4)_2+7H_2O$. —Sm., violet-gray cryst.—*Sol.* W.

Iron Phosphate Merck.—Ferric (1

$Fe_2(PO_4)_2+8H_2O$. — Yellowish-white powd. — *Sol.*, in acids.—*Uses: Extern.*, solution w. dil. phosph. acid, f. carious teeth, in which it is introduced on cotton; oint. (10–20%) in carcin.

do Merck.—Ferric.—Soluble (1

(Soluble Ferric Phosphate; Iron Phosphate with Sodium Citrate).—Transp., bright green scales; acid, saline taste; darkens in light.—12% Fe.—*Sol.* W.; insol. A.—Chalyb.; Astring.; Emmen. —*Uses:* Dyspep. & amenor.— *Dose* 5–10 grains (0.3–0.6 Gm.).—*Caut.* Keep fr. air & light.

do. — *N. F.*—Effervescent

(Effervescent Phosphate of Iron).—Iron phosphate w. sugar, sod. bicarb., & tartaric acid.—Fine, white powd.—*Sol.* W., with effervesc.—Tonic; Nerve Stim.; Chalyb.; Emmen.—*Uses:* Pleasant tonic, drink.—*Dose* 1–2 dr. (4–8 Gm.).

Iron Phosphate Merck.—Ferrous (1

$Fe_3(PO_4)_2+H_2O+$oxide.—Grayish-blue powd.—*Sol.*, acids; insol. W.—*Caut.* Keep fr. light & air.

do. Merck.—*B. P.* (2

$Fe_3(PO_4)_2+8H_2O$ with ferric phosphate & some iron oxide (Ph. Brit.).—Blue powd.—*Sol.*, acids. —*Dose* 5–8 grains (0.3–0.5 Gm.) several t. p. d.

Iron Phosphate Albuminated Merck (3

Yellowish-brown scales.—*Sol.* W.

Iron Phosphate with Ammonium Citrate Merck (2

Greenish-yellow scales.—*Sol.*, hot W.—Tonic; Astring.; Emmen.; mild Chalyb.—*Uses:* As of o. iron salts, espec. in dyspep. & amenor.—*Dose* 2–15 grains (0.12–1 Gm.) several t. p. d.—*Caut.* Sensitive to light; keep dark & from air.

Iron Phosphate with Sodium Citrate.—see **Iron Phosphate, Soluble**

Iron Phosphide Merck (20

(Ferrous Phosphide).—Fe_2P.—Gray. lumps.—*Sol.*, hot nitric acid; insol. W.

Iron Phosphocitrate Merck (8

(Ferric Phosphocitrate).—Brown scales.—*Sol.* W.—*Uses, Dose, &c.:* As of iron citrate.

Iron Phosphosarcolactate.—see **Carniferrin**

Iron Picrate

(Iron Picronitrate, or Carbazotate).—Comp. variable.—Greenish-yellow or reddish-brown, hygrosc. cryst.—*Sol.* W., but muddy.—Antiper.; Tonic.—*Dose* $^1/_4$–1 grain (0.015–0.06 Gm.).

Iron Picronitrate.—see **Iron Picrate**

Iron Platinocyanide.—see **Platinum & Iron Cyanide**

Iron Protochloride.—see **Iron Chloride, Ferrous**

Iron Protoiodide.—see **Iron Iodide**

Iron Protosulphide.—see **Iron Sulphide**

Iron Pyrophosphate Merck.—Dry, powder (1

(Ferric Pyrophosphate). — $Fe_4(P_2O_7)_3$. — Wh. powd.—*Sol.*, carbonated water, acids, & solut. of alkali citrates; alm. insol. W.—Mild agre. chalyb.—*Uses:* Chlorosis, &c.—*Dose* 2–5 grains (0.12–0.3 Gm.).—*Caut.* Keep in a dark place.

do. Merck.—Soluble, scales (1

(Soluble Ferric Pyrophosphate; Iron Pyrophosphate with Sodium Citrate).—Apple-green, transp. scales; acidulous, saline taste.—10% Fe. —*Sol.* W.; insol. A.—Tonic; Emmen.; Astring.—*Uses:* Mild, agre., active chalyb. in chlorosis, anemia, debility, &c.—*Dose* 3–10 grains (0.2–0.6 Gm.); also given subcut.—*Caut.* Keep in dark.

Iron Pyrophosphate Albuminated Merck (13

Light green scales.—*Sol.* W.—*Uses, &c.:* As of iron pyrophosphate.

Iron Pyrophosphate with Ammonium Citrate Merck.—Scales (2

(Robiquet's Soluble Ferric Pyrophosphate; Ammonioferric Citrophosphate).—Light-green, transp. scales; sweetish, ferruginous taste.—*Sol.* W.—Tonic; Emmen.; Chalyb.—*Uses:* An agreeable ferrug. preparation that agrees well with the stomach.—*Dose* 5–10 grains (0.3–0.6 Gm.); subcut., 1–$2^1/_2$ grains (0.06–0.15 Gm.) dissolved in steril. W.—*Caut.* Keep in the dark.

Iron Pyrophosphate with Ammonium & Sodium Citrates Merck (4

(Ferric Pyrophosphate with Ammonium & Sodium Citrates).—Light-green scales.—*Uses, &c.:* As of iron pyrophosphate with sodium citrate.—*Caut.* Keep in a dark place.

Iron Pyrophosphate with Magnesium Citrate Merck.—Scales (5

(Ferric Pyrophosphate & Magnesium Citrate). —Light-green scales.—*Sol.* W.—*Uses, &c.:* As of iron pyrophosphate with sodium citrate.—*Caut.* Keep in a dark place.

Iron Pyrophosphate with Potassium Citrate Merck (2

(Ferric Pyrophosphate & Potassium Citrate).— —Light-green scales.—*Sol.* W.—*Uses, &c.:* As of iron pyrophosphate with sodium citrate.—*Subcut.*, like iron pyrophosphate with ammonium citrate.—*Caut.* Keep in a dark place.

Iron, Quevenne's.
Iron, Reduced. } —see **Iron by Hydrogen**

Iron Resinate Merck (2

(Ferric Resinate).—Reddish-brown powd.—*Sol.* E., benzin, CS_2, oil turp.; sl. A.; insol. W.

Iron Rhodanide.—see **Iron Sulphocyanate**

Iron Saccharate.—see **Iron Oxide Red Saccharated, Soluble**

Iron Salicylate Merck (3

(Ferric Salicylate).—Violet-gray powd.—*Sol.*, sl. in W.—Tonic; Antisep.; Astring.; Antirheum. —*Uses:* Bleeding & o. wounds, diar., rheum., &c. —*Dose* 3–10 grains (0.2–0.6 Gm.), in pills.

Iron Sesquibromide. — see **Iron Bromide, Ferric**

Iron Sesquichloride.—see **Iron Chloride, Ferric**

Iron Sesquioxide.—see **Iron Oxide, Red**

Iron Sesquioxide Hydrated.—see **Iron Hydroxide**

Iron Sesquisulphate.—see **Iron Sulphate, Ferric**

Iron Silicate Merck (2

(Ferric Silicate).—Reddish-brown, insol. powd.

Iron Silicofluoride Merck.—Pure (2

(Ferrous Silicofluoride).—$FeF_2.SiF_4$.—Yellowish white, cryst. powd.—Insol. W.

Iron, Soluble. — see **Iron Oxide Red Saccharated, Soluble**

Iron Stearate Merck (6

(Ferric Stearate).—$Fe(C_{18}H_{35}O_2)_3$.—Fr. potass. or sod. stearate w. solut. iron salt.—Light brown, insol. powd.

"Iron Subcarbonate."—see **Iron Oxide Brown**

Iron Subsulphate.—see **Iron Sulphate Basic**

Iron Succinate Merck (12

(Ferric Succinate).—$Fe(OH)C_4H_4O_4$(?).—Amorphous, reddish-brown powd.—*Sol.*, v. sl. in cold W.; eas. in acids.—Tonic; Alter.—*Uses:* Solvent biliary calculi.—*Dose* 10 grains (0.6 Gm.) grad. increased to 60 grains (4 Gm.) 3 t. p. d., after meals, best w. 10 drops chloroform.

Iron Sugar.—see **Iron Oxide Red Saccharated, Soluble**

Iron Sulphate Merck.—Basic.—Pure (1

(Ferric Subsulphate; Iron Per-, or Sub-sulphate; Monsel's Salt).—Approx.: $Fe_4O(SO_4)_5$.—Yellow, hygrosc. powd.—*Sol.* W.—Astring.; Styp.—*Uses: Intern.*, in gastric & intest. hemorrhage.—*Extern.*, in chancre, &c.—*Dose* 2–5 grains (0.12–0.3 Gm.). —*Caut.* Keep dry, fr. air.

do.—Solution.—*U. S. P.* (1

(Monsel's Solution; Solution Iron Persulphate). —Var. chem. comp.; not less than 13.57% Fe. —Dark, reddish-brown, str'ly styptic, acid liq. —Sp. Gr. 1.55 at 15° C. (abt. 1.548 at 25° C., U. S. P.).—*Misc.* W., A.—Styp.; Astring.; Alter. —*Uses:* Intern. & extern. hemorrhage, & in chancre.—*Dose* 2–10 ♏ (0.12–0.6 Cc.).—*N. B.* Solution Iron *Ter*sulphate must not be given when Solution Sub- or Per-sulphate is ordered!

Iron Sulphate Merck.—Ferric.—Pure (1

(Normal Ferric Sulphate; Iron Tersulphate, or Sesquisulphate). — $Fe_2(SO_4)_3$. — Grayish-wh. powd.—*Sol.*, slowly in W.—*Uses:* Medicinal only in solut.; the latter is *not* made fr. the salt.

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Iron Sulphate.—Ferric.—Solution.—*U. S. P.*
(Solution Iron Tersulphate).—Abt. 36% normal ferric sulphate, $Fe_2(SO_4)_3$, corresp. to not less than 10% Fe.—Dark, reddish-brown, str'ly styp. liq.—Sp. Gr. 1.430–1.450 at 25° C.—*Misc.* W., A.—Astring.—Too irrit. f. general use.

Iron Sulphate Merck.—Ferrous.—Pure (1
$FeSO_4+7H_2O$.—Large, bluish-green, effloresc. cryst.; odorl.; saline, astring. taste.—Oxidize on expos. to moist. air; lose 38.87% H_2O on slowly heating to 115° C.—*Sol.* 1.8 W. (0.9 W. at 25° C., U. S. P.); 0.5 boil. W.; insol. A.—Tonic; Astring.—*Uses: Intern.*, anemia & chlorosis, especially w. tendency to hemorrhage; night-sw. or relax. of system.—*Extern.*, leucor., gleet, ecz., erysip., or chr. ophthal.—*Dose* 1–8 grains (0.06–0.5 Gm.).—*Inj.*, 5–25% aqu. solut. in blenor.; 10–20% aqu. solut. in hemorrhage & baths.—*Appl.*, as oint. (1:30).—*Caut.* Keep cool & dry.

do. Merck.—Dried (1
Approx.: $2FeSO_4+3H_2O$.—Grayish-wh. powd.—*Sol.* W.—*Uses:* Best form for iron pills.—*Dose* $^1/_2$–3 grains (0.03–0.2 Gm.) several t. p. d.

do. Merck.—Granulated.—Precipitated (1
By precip. conc. solut. ferrous sulphate w. alc.—Pale, bluish-green, cryst. powd.—*Sol.* W.—*Dose* 1–5 grains (0.06–0.3 Gm.).

do.—Crude (1
(Copperas; Green Vitriol).—Greenish crystals, often dirty & rusty fr. oxid'n & effloresc.—*Sol.* 2 W.—*Uses:* Deodor., disinf.—*Techn.*, manuf. of iron salts, dyes; in dyeing & tanning; ink; reduction of indigo; photography, &c.—*Appl.*, for iron baths: 1 to $1^1/_2$ oz. (abt. 30–45 Gm.).

Iron Sulphate Merck.—Ferrous.—Reagent (1
$FeSO_4+7H_2O$.—Pale greenish-blue, monoclin. cryst.—*Sol.* 1.8 cold, & 0.5 boil., W.; insol. A., E.—*Tests:* (*Impur. Insol. in H_2O*) 1:20 solut. freshly prep. w. boiled & cooled H_2O should be clear, & have greenish-yellow color.—(*Alkalies*) 5 Gm.+100 Cc. H_2O+5 Cc. HNO_3 (sp. gr. 1.3); boil. few min.; add 15 Cc. NH_4OH (sp. gr. 0.96); filter; evap. filtrate & ignite – wt. of res. not more than 0.001 Gm.—(*Cu; Zn*) 2 Gm.+20 Cc. H_2O+3 Cc. HNO_3 (sp. gr. 1.3); boil; add 8 Cc. NH_4OH (sp. gr. 0.96); filter; *a:* to 15 Cc. filtrate add few drops $(NH_4)HS$ – no react.; *b:* to 20 Cc. filtrate add $C_2H_4O_2+K_4Fe(CN)_6$ – no react.—*Uses:* Reducing agent in determ. arsenic acid & gold; determ. Hg, Zn, & potass. ferricyanide; detect. cyanogen & HNO_3.
Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Iron Sulphide Merck.—Lumps, sticks, or granulated (1
(Ferrous Sulphide; Iron Monosulphide; Iron Protosulphide; Iron Sulphuret).—FeS.—Dark-brown or black, metal-like pieces, sticks, or gran. powd.—*Sol.*, in acids w. evol. of H_2S.—*Uses:* Chiefly in chemical laboratories & metallurgical operations for prep. H_2S; with magnesia as antidote in poisoning by metals, partic. $Hg(CN)_2$.

Iron Sulphide Merck.—Powder (1
By precip. solut. of ferrous salt w. alkali sulphide.—FeS.—Greenish-black precip.; oxidizes rapidly on expos.—*Sol.*, in acids.—*Caut.* Keep well stoppered.

Iron Sulphide Merck. — Reagent. — Lumps, sticks, & gran. (1
(Ferrous Sulphide).—FeS.—Dark-gray or grayish-black, heavy, hard lumps.—*Sol.*, dil. HCl or H_2SO_4 w. copious evol. H_2S.—*Uses:* Prepar. H_2S.
Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Iron Sulphocarbolate.—see **Iron Phenolsulphonate**

Iron Sulphocyanate Merck (12
(Ferric Sulphocyanide; Ferric, or Iron, Rhodanide).—$Fe(SCN)_3$.—Gran. powd.—*Sol.* W., A., E.

Iron Sulphocyanide.—see **Iron Sulphocyanate**

Iron Sulphophenate.—see **Iron Phenolsulphonate**

Iron Sulphuret.—see **Iron Sulphide**

Iron Tannate Merck (4
(Ferric Tannate; Iron Gallotannate).—$Fe_2(C_{14}H_7O_9)(OH)_3$.—Dark-brown powd.—Insol. W.—Astring.; Tonic; Emmen.—*Uses: Intern.*, chlorosis, &c.—*Extern.*, ringworm in 2:10 oint.

Iron Tartar.—see **Iron & Potassium Tartrate, Ferrous**

Iron Tartarized or *Tartrated.*—see **Iron & Potassium Tartrate, Ferric**

Iron Tartrate Merck.—Ferric.—Scales (5
$Fe_2(C_4H_4O_6)_3+H_2O$.—Brown scales.—*Sol.* W.—Tonic; Emmen.—*Uses:* Mild chalyb.—*Dose* 5–10 grains (0.3–0.6 Gm.) sev. t. p. d.

Iron Tartrate Merck.—Ferrous (5
$FeC_4H_4O_6+H_2O$.—Brown powd.—*Sol.*, v. sl. W.

Iron Tersulphate.—see **Iron Sulphate, Ferric**

Iron Tribromide.—see **Iron Bromide, Ferric**

Iron Trichloride.—see **Iron Chloride, Ferric**

Iron Trioxide.—see **Iron Oxide, Red**

Iron Valerate Merck (3
(Ferric Valerate).—$Fe_2(C_5H_9O_2)_2(OH)_4$.—Amorphous, brownish-red powd.; valerian odor; styptic taste.—Insol. W.—Tonic; Nerv.; Emmen.—*Uses:* Anemia or chlorosis, w. hyst. or nerv. exhaust.; diab. insipidus, epilepsy, chorea, &c.—*Dose* 3–15 grains (0.2–1 Gm.).

Iron Vanadate (Meta-) Merck (110

(Ferrous Vanadate).—Grayish-brown powd.—*Sol.*, acids; insol. W.—Powerful Tonic.—*Uses:* Chlorosis, anemia.—*Dose* $^1/_{15}$-$^1/_{12}$ grain (0.004–0.005 Gm.) daily, every second day, in pill form.

Iron & Ammonium Borocitrate Merck.—Scales (8

(Ferric Ammonioborocitrate).—Brownish-yellow scales.—*Sol.*, eas. W.

Iron & Ammonium Bromide Merck (8

(Ferrous Ammoniobromide).—Approx.: $FeBr_2 + 2NH_4Br$.—Reddish to brownish powd.—*Sol.* W.—*Caut.* Keep well stoppered.

Iron & Ammonium Chloride.— see **Ammonium Chloride, Ferrated**

Iron & Ammonium Chromate Merck (4

(Ferric Ammoniochromate).—$(NH_4)_2CrO_4.Fe_2(CrO_4)_3 + 4H_2O$.—Brown cryst. crusts.—*Sol.* W.

Iron & Ammonium Citrate Merck.—Soluble, brown scales (1

(Ferric Ammoniocitrate). — Reddish-brown, transp., hygrosc. scales; saline, ferrug. taste; deliquesc. in moist air.—Not less than 16% Fe.—*Sol.* W.; insol. A.—*Uses:* As of o. mild iron prep.; also techn. in photo., f. blue-prints.—*Dose* 3–10 grains (0.2–0.6 Gm.).—*Caut.* Keep well stoppered & in the dark.

do. Merck.—Green scales (2

Green, v. hygrosc. scales.—14–15% Fe.—*Sol.* W.—*Uses:* Perfectly free from ferrous salt, hence specially adapted for blue prints.—*Caut.* Carefully keep in the dark!

Iron & Ammonium Oxalate Merck (1

(Ferric Ammonio-oxalate).—Approx.: $(NH_4)_3Fe(C_2O_4)_3 + 3H_2O$. — Green cryst. — *Sol.* W.—*Uses:* Photo., somet. inst. of double citrate, for blue-prints.—*Caut.* Keep in a dark place!

Iron & Ammonium Sulphate Merck.—Ferric.—*U. S. P.* (1

(Ferric Ammonium Sulphate; Ammonioferric Alum).—$FeNH_4(SO_4)_2 + 12H_2O$.—Lilac to violet, efflor. cryst.; acid, styp. taste.—Not less than 11.5% Fe.—*Sol.* 3 W. (2.7 W. at 25° C., U. S. P.); 0.8 boil. W.; insol. A.—Styp.; Astring.; Tonic.—*Uses:* Hemorrhage, leucor., & o. uses, as iron.—*Techn.*, dyeing (where a perfectly neutral salt is required); also in chem. analysis.—*Dose* 5–15 grains (0.3–1 Gm.).—*Caut.* Keep cool & fr. light.

Iron & Ammonium Sulphate Merck.—Ferric.—Reagent (3

(Ammonio-ferric Sulphate; Iron-Ammonium Alum).—$Fe_2(SO_4)_3.(NH_4)_2SO_4 + 24H_2O$, or, $FeNH_4(SO_4)_2 + 12H_2O$.—Large, pale violet or amethyst, transp., octahedr. cryst.—*Sol.* 2 W.; insol. A.—Aqu. solut. acid.—*Tests:* (*Ferrous Salt*) 1 Gm. + 20 Cc. H_2O + 1 Cc. HCl (sp. gr. 1.124) + 1 drop freshly prep. solut. $K_3Fe(CN)_6$ – no green or blue color.—(*Cl*) 30 Cc. 1:20 solut. + 3 Cc. HNO_3 (sp. gr. 1.153) + solut. $AgNO_3$ – no turb.—(*Zn; Cu*) 2 Gm. + 50 Cc. H_2O + 10 Cc. NH_4OH (sp. gr. 0.96); filter; filtrate colorl.; *a:* 20 Cc. filtrate + $(NH_4)HS$ – no react.; *b:* 20 Cc. filtrate + $C_2H_4O_2$ + $K_4Fe(CN)_6$ – no react.—(*Alkalies*) 5 Gm. + 100 Cc. H_2O + 15 Cc. NH_4OH (sp. gr. 0.96); filter; evap. filtrate & ignite – wt. of res. not more than 0.002 Gm.—*Uses:* Indicator.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Iron & Ammonium Sulphate Merck.—Ferrous.—Highest Purity, cryst. (1

(Mohr's Salt; Ammonioferrous Sulphate).—$FeSO_4.(NH_4)_2SO_4 + 6H_2O$.—Pale-green need.—*Sol.* W.—*Uses:* As of ferrous sulphate; in volumetric anal. & in metallurgy.

do. Merck.—Cryst. (1

Iron & Ammonium Sulphate Merck.—Ferrous.—Reagent (2

(Ammonio-ferrous Sulphate; Mohr's Salt).—$FeSO_4.(NH_4)_2(SO_4) + 6H_2O$.—Pale, bluish-green cryst., or light bluish-green, cryst. powd.—*Sol.* 6 cold W.—Cont. exactly $^1/_7$ its wt. metal. Fe as ferrous oxide.—*Tests:* (Fe_2O_3) 1 Gm. + 20 Cc. boiled H_2O (free fr. CO_2) + 1 Cc. HCl (sp. gr. 1.124) + few drops solut. KSCN – no immed. red color.—(*Cu; Zn; Alkali Salts*) 5 Gm. + 50 Cc. H_2O + 5 Cc. HNO_3 (sp. gr. 1.3); boil a few min.; add 15 Cc. NH_4OH (sp. gr. 0.96); let stand abt. 1 hr.; filter – filtrate must be colorl. (abs. of Cu); *a:* to 10 Cc. filtrate add aqu. H_2S – no react. (abs. of Zn); *b:* evap. 30 Cc. filtrate on W.-bath to dryness & ignite – no wghble res.—*Uses:* Standardizing permanganate soluts.; substit. for ferrous sulphate in various uses, as determ. chromates, chromic acid, & manganese chloride.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Iron & Ammonium Tartrate Merck (3

(Ammonium & Iron Tartrate; Ferric Ammonium Tartrate).—Reddish-brown to garnet-brown, thin, transp. scales; sweetish ferrug. taste.—Not less than 13% Fe.—*Sol.* W.; insol. A.—*Uses:* As of o. mild iron preparations.—*Dose* 10–30 grains (0.6–2 Gm.).

Iron & Cinchonine Citrate Merck (5

(Cinchonine Ferrocitrate).—25% cinchonine.—Yellowish-brown scales.—*Sol.*, hot W.

Iron & Magnesium Citrate Merck.—Ferric (4

Brown scales.—*Sol.* W.—*Uses:* Mild chalyb.—*Dose* 5–10 grains (0.3–0.6 Gm.).

do. Merck.—Effervescent, white (3

Wh., effervesc. iron citrate & gran. effervesc. magnesium citrate.—White granules.—*Sol.* W., with effervesc.—*Uses:* Mild chalyb. for long use in chlorosis, &c.—*Dose* 1 dr. (4 Gm.) sev. t. p. d.

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Iron & Magnesium Citrate Merck.—Effervescent, yellow (3

Yellow, effervesc. iron citrate & effervesc. magnesium citrate.—Yellow granules.—*Uses, &c.:* As of preceding.

Iron & Magnesium Lactate Merck (5

(Ferrous Magnesium Lactate; Magnesium Ferrolactate).—Light-yellow powd.—*Uses:* Hemat.

Iron & Magnesium Sulphate Merck (4

(Ferrous Magnesium Sulphate).—$FeSO_4.MgSO_4 + 6H_2O$.—Greenish-wh., cryst. powd.—*Sol.* W. —*Uses:* Nonastring., mild chalyb. in chlorosis & anemia.—*Dose* 5–10 grains (0.3–0.6 Gm.).

Iron & Manganese Carbonate Merck (3

(Ferrous Manganese Carbonate). — Gray to brown powd.—*Sol.*, acids; insol. W.—Hemat.; Alter.—*Uses:* Anemia & chlorosis like iron carbonate.—*Dose* 5–10 grains (0.3–0.6 Gm.).

do. Merck.—Saccharated (3

Ferrous & manganous carbonate, w. milk sugar. —Grayish-brown powd.—*Sol.*, acids; partially in W. —Hemat.; Alter.; Chalyb.—*Uses:* Anemia & chlorosis.—*Dose* 5–30 grains (0.3–2 Gm.).

Iron & Manganese Chloride Merck (8

(Ferrous Manganese Chloride).—Orange-yellow cryst.—*Sol.* W., with turbidity.

Iron & Manganese Citrate Merck (3

(Ferric Manganese Citrate).—Brown scales.—*Sol.*, v. sl. in hot W.—*Uses:* As of iron citrate.—*Dose* 3–10 grains (0.2–0.6 Gm.) several t. p. d.

Iron & Manganese Iodide Merck (16

(Ferrous Manganese Iodide).—Granular, grayish-brown powd., or sticks.—*Sol.* W.

Iron & Manganese Lactate Merck (8

(Ferrous Manganese Lactate).—Wh. powd.—*Sol.* W.—Chalybeate; Tonic; Alter.; Emmen.—*Uses:* Chlorosis & anemia.—*Dose* 2–10 grains (0.12–0.6 Gm.).

Iron & Manganese Peptonized Merck (6

(Ferrous Manganese Peptonate).—2% Fe & 1% Mn.—Brown powd.—*Sol.* W.—Efficient Hematinic.—*Dose* 2–10 grains (0.12–0.6 Gm.).

do. Merck.—For preparing solutions (6

Brown scales.—15% Fe & $2^1/_2$% Mn.—*Sol.* W.

Iron & Manganese Pyrophosphate Merck (5

(Ferric Manganese Pyrophosphate).—Yellowish powd.; variable comp.

Iron & Manganese Pyrophosphate with Ammonium Citrate Merck (5

(Ferric Manganese Pyrophosphate with Ammonium Citrate).—Yellowish-green scales.—*Sol.*, hot W.—*Uses:* As iron pyrophosphate with ammonium citrate; particularly well adapted for subcut. inject.—*Dose: Inj.* 30 ♏ (2 Cc.) of a 10% aqu. solut.—*Caut.* Keep in a dark place.

Iron & Manganese Sulphate Merck (2

(Ferrous Manganese Sulphate).—Yellowish-wh. powd.—Astring.; Tonic; Antisep.—*Uses:* Erysipelas, leucor., gleet, &c.—*Dose* 1–2 grains (0.06–0.12 Gm.).

Iron & Manganese Tartrate Merck (12

(Ferric Manganese Tartrate).—Brown scales. —*Sol.* W.— *Uses:* Erysipelas, leucor., &c.— *Dose* $1–1^1/_2$ grains (0.06–0.1 Gm.).

Iron & Potassium Citrate Merck (5

(Ferric Potassium Citrate).—Brown scales.— *Sol.* W.—Mild chalyb.—*Dose* 3–10 grains (0.2–0.6 Gm.).

Iron & Potassium Oxalate Merck.—Cryst. (1

(Ferric Potassium Oxalate). — $K_3Fe(C_2O_4)_3 + 3H_2O$.—Emerald-green, monocl. cryst.—*Sol.* W.

Iron & Potassium Pyrophosphate Merck (18

(Ferric Potassium Pyrophosphate).—$Fe_4(P_2O_7)_3 \cdot 3K_4P_2O_7$ + aq.—Grayish-white powd.—*Sol.* W.

Iron & Potassium Tartrate Merck.—Ferric (1

(Ferric Potassium Tartrate; Tartrated Iron; Tartarized Iron).—$Fe_2O_3K_2(C_4H_4O_6)_2$.—Garnet-red to reddish-brown scales; sweetish ferrug. taste; 21% Fe.—*Sol.* W.; insol. A.—Tonic; Chalyb.; Emmen.—*Uses:* Non-astring., agre. chalyb.—*Dose* 5–10 grains (0.3–0.6 Gm.).

Iron & Potassium Tartrate.—Ferrous (1

(Ferrous Potassium Tartrate).—Mixt. of ferric & ferrous potassium tartrates.—Brownish-black powd.—*Sol.*, sl. W.—*Uses:* Iron baths.

do. Merck.—Green, powder or scales (2

(Ferrated Tartar; Iron Tartar).—Green powd., or alm. black, lustr. scales.—*Sol.* W.—Tonic; Alter.; Chalyb.—*Uses:* Iron baths: abt. 1–5 oz. (30–150 Gms.) at a time.

do. Merck.—Globules (2

(Ferrated Tartar; Iron Tartar; Boules de Nancy). —Brownish-black balls.—*Uses:* Iron baths: 1 to 5 pieces at a time for a full bath.

Iron & Potassium Tartrate with Ammonium Tartrate Merck.—Scales (4

(Ferric Potassium Tartrate & Ammonium Tartrate; Potassio- & Ammonio-ferric Tartrates). —Brown scales.—*Sol.* W.—*Uses:* Mild chalyb.

Iron & Quinine Bromide Merck (20

(Quinine Ferrobromide).—Brownish-red powd. —*Sol.* W. & A.—*Uses:* Malarial affect. w. nerv. symptoms.

Iron & Quinine Chloride Kersch-Merck.—Ferric (20

(Quinine Ferrichloride).—Dark-brown scales.— *Sol.* W., & in 70% A.—Hemostatic; Antipyr., &c.—*Uses: Intern. & Extern.*, hemostatic. In epistaxis powd. is snuffed up; on bleeding surfaces it is dusted; for spitting of blood & hematuria it is taken internally.—*Dose* $1^1/_2$–3 grains (0.1–0.2 Gm.) several t. p. d., in pills or wafers.

Iron & Quinine Chloride.—Ferrous (Quinine Ferrochloride). — Greenish-brown, amorph. powd.—*Sol.* W.—Hemost.; Emmen.; Astring., &c.—*Uses:* Profuse menstruat.; pulmon., post partum, & o. hemorrhages.—*Dose* 10 drops of 10% solut. every hour or two.

Iron & Quinine Citrate Merck.—Brown (3 Reddish-brown, deliq., transp. scales; bitter, ferrug. taste. — Not less than 11.5% dried quinine, & 13.5% Fe as ferric citrate.—*Sol.*, slowly but complet. in cold W., more read. in hot W.; partially in A. (U. S. P.).—Tonic; Emmen.—*Uses:* Chlorosis, neural., anemia, debil., & where quinine & iron are indic.—*Dose* 3–10 grains (0.2–0.6 Gm.).—*Caut.* Keep fr. light.

do. Merck.—Green.—Soluble (3 (Quinine Ferrocitrate, Soluble). — Citrate of iron & quinine w. ammonia.—Greenish-yellow, transp., deliq. scales; bitter, ferrug. taste.—Not less than 11.5% dried quinine, & 13.5% Fe as ferric citrate.—*Sol.* W.; partially in A.—Tonic; Emmen.; Astring.; Antipyr.—*Uses:* Where quinine & iron are indic.—*Dose* 3–10 grains (0.2–0.6 Gm.).

do.—*N. F.*—Effervescent Iron & quinine citr. (2 parts), sod. bicarb. (60 parts), tartaric acid (54 parts), & sugar (64 parts).—Fine, wh. powd., or wh. gran.—*Sol.* W., with effervesc.—Tonic; Emmen.—*Uses:* Pleas., chalyb. tonic in debil., chorea, anemia, &c.—*Dose* 1 dr. (4 Gm.), or more, in W.

Iron & Quinine Iodide Merck (25 (Quinine Ferroiodide).—Yellowish-green, deliq. cryst. — *Uses:* Anemia, scrofula, & intermit. fever.—*Dose* 8–30 grains (0.5–2 Gm.) daily, in pills or syrup.

Iron & Quinine & Strychnine Citrate Merck (3 (Quinine Ferrocitrate with Strychnine).—1% strychnine.—Green, transp. scales.—*Sol.* W.—Tonic; Antipyr.; Antiper.—*Uses:* Anemia, chlorosis, convalesc. fr. malarial & o. affect., &c.—*Dose* 2–5 grains (0.12–0.3 Gm.).—*Caut.* Keep carefully & in the dark.

Iron & Sodium Benzoate Merck (6 (Ferric Sodium Benzoate).—Equal parts iron & sod. benzoates.—Reddish-brown powd.

Iron & Sodium Citrate Merck (3 (Ferric Sodium Citrate).—Light-brown scales.—*Sol.* W.—Tonic; Astring.; Refrig.—*Dose* 1–10 grains (0.06–0.6 Gm.).

Iron & Sodium Oxalate Merck (1 (Ferric Sodium Oxalate). — $Na_3Fe(C_2O_4)_3 + 4^1/_2H_2O$.—Emerald-green cryst.—*Sol.* 2.5 W.—Tonic; Astring.; Emmen.—*Dose* 3–15 grains (0.2–1 Gm.).—*Uses:* Photography.

Iron & Sodium Pyrophosphate Merck.—Granulated, powder, & scales (2 (Ferric Sodium Pyrophosphate). — $Fe_4(P_2O_7)_3 \cdot 2Na_4P_2O_7 + 14H_2O$.—Grayish-wh. gran., powd., or scales.—*Sol.*, slowly in W.—Tonic; Astring.; Emmen.—*Dose* 3–15 grains (0.2–1 Gm.).

Iron & Sodium Tartrate Merck (4 (Ferric Sodium Tartrate). — Brownish-black scales. — *Sol.* W. — Tonic; Astring.; Chalyb.; Emmen.—*Dose* 10–30 grains (0.6–2 Gm.).

Iron & Strychnine Citrate Merck (2 Garnet to brown, transp., bitter scales.—1% strychnine, & 16% Fe as ferric citrate.—*Sol.* W.; partially in A.—Tonic; Hemat.—*Uses:* Where iron & strychnine are indic.—*Dose* 2–5 grains (0.12–0.3 Gm.).—*Caut.* Avoid large doses.

Ironwood.—see **Ostrya**

Ironwort, German.—see **Sideritis**

Isatin Merck (330 (Isatic Acid Anhydride; Orthoaminobenzoylformic Acid; Isatic Acid Lactime).—Fr. indigo by oxid'n.—$C_8H_5NO_2$, or, $C_6H_4.CO.C(OH):N$.—Yellowish-red cryst.; bitter taste. — *Sol.* A.; sl. in W., E.—*Melt.* 200° C.

Isinglass (Ichthyocolla; Fish Glue).—The inner membrane of the swimming bladder of Acipenser Huso, L., & other sp. of sturgeon, Ganoidei, Sturiones, found in the Black Sea, Caspian Sea, & in the rivers emptying into these seas.—*Etymol.*. Fr. Grk. "ichthys," fish, & "kolla," glue. Acipenser, fr. Grk. "akkipesios," the sturgeon.—Thin, wh., or yellowish, semi-transp., pearly, iridesc., horny sheets.—*Sol.*, hot W.; hot dil. A.—*Constit.:* Glutin.—*Uses:* Techn., as adhesive & as clarifying agent; also in cooking, as jellies, &c.

Isoamyl Ethers.—see under **Amyl**

Isoamyl Mercaptan.—see **Amyl Sulphydrate**

Isoamylamine.—see **Amylamine**

Isoamylurea.—see **Amylcarbamide**

Isobutyl.—see **Butyl, Iso-**

Isobutylcarbinol.—see **Alcohol, Amylic**

Isobutylcarboxyl.—see **Acid Valeric, Iso-**

Isobutylene.—see **Butylene, Iso-**

Isobutylorthocresol Iodide.—see **Europhen**

Isobutyryl.—see **Butyryl, Iso-**

Isobutyryloxynaphtoquinone.—see **Acid Filicio, Cryst.**

Isochinoline.—see **Isoquinoline**

Isodulcit Merck (150 (Rhamnose).—Carbohydrate. — $C_5H_9O_5.CH_3 + H_2O$, or, $CH_3(CH.OH)_4.CHO + H_2O$; one of the pentoses.—Decomp. prod. of various glucosides.—Wh. cryst.—*Sol.*, eas. W., A.—*Melt.* 93° C.

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Isoform (12

(Paraiodanisol).—$OCH_3.C_6H_4.IO_2$.—Wh. powd.; faint odor of anise.—*Sol.* A., E.; diffic. W.—Explodes on percussion, or on heating to 230° C., hence marketed as mixt. w. equal part calcium phosphate.—Antisep.; Deodorant.—*Uses: Extern.*, as of iodoform; *Intern.*, as intest. disinfect. —*Dose* 60–120 grains (4–8 Gm.) p. d.—*Appl.*, in glycerinic suspension (1:1), & as **1–10%** gauze.

Isohydrobenzamide.—see **Amarine**

Isonandra Gutta.—see **Gutta-Percha**

Isophysostigmine Sulphate Merck (10000

Salt of an alkaloid found with physostigmine in Physostigma venenosum (Calabar bean).—$(C_{15}H_{21}N_3O_2)_2.H_2SO_4$.—*Sol.* W.—*Melt.* 200–202° C.—Miotic.—*Uses:* As of physostigmine, but more powerful than latter ($^1/_{30}$ grain [0.00075 Gm.] isophysostigmine sulphate equals $^1/_{60}$ grain [0.001 Gm.] physostigmine sulphate in effect).—*Caut.* Keep solut. in amber bots.

Isopral (30

(Trichlorisopropylalcohol). — $CCl_3.CH:CH_2.OH$. —Prismatic cryst.; camphor. odor; pung. taste. —*Sol.*, abt. 30 cold W.; more read. in A. & E.—*Melt.* 49° C. — Hypnotic.—*Uses:* As of hydrated chloral. —*Dose* 5–20 grains (0.3–1.3 Gm.).

Isopropyl Bromide.—see **Propyl (Iso-) Bromide**

Isopropyl Carbinol.—see **Alcohol Butylic, Iso-**

Isopropyl Iodide.—see **Propyl (Iso-) Iodide**

Isopropylideneacetone.—see **Mesityl Oxide**

Isopropyltoluene.—see **Cymene**

Isopurpurin.—see **Purpurine Red**

Isoquinoline Merck (300

(Isochinolin).—Constit. of coal-tar; also prep. synthet. fr. homo-orthophtalamide.—C_9H_7N, or, $C_6H_4(CH:N)CH:CH$.—Colorl. to reddish cryst.; charact. quinoline odor.—*Sol.* E., C.—*Melt.* 22° C. —*Boil.* 240° C.

Isovaleral.—see **Aldehyde Valeric, Iso-**

Isovaleramide.—see **Valeramide**

Isovalerylparaphenetidin.—see **Valerydin**

Isoxylene.—see **Xylene (Meta-)**

Itrol=Silver Citrate.—see **Silver Citrate**

Iva

(Musk Milfoil).—Flowers & herb of Achillea (Santolina) moschata, L. Compositæ.—*Habit.:* The Alps.—*Etymol.:* "Iva," fr. Ajuga Iva, name given this plant by Linnæus, & derived from Lat. "abigere," to expel (referring to its supposed action on the fetus).—*Constit.:* Achilleïne, $C_{20}H_{38}N_2O_{15}$; ivaol, $C_{12}H_{20}O$; moschatine, $C_{21}H_{27}NO_7$; ivain, $C_{24}H_{42}O_3$.—*Uses: Flowers:* Diaphor.; Vulner.; *Herb:* Tonic; Stim.; Antiepileptic.

Ivarancusa

Root of Andropogon Ivarancusa, Roxb. Gramineæ.—*Habit.:* East Indies.—*Etymol.:* "Ivarancusa" is the Bengalese name for the plant. —*Constit.:* Volat. oil; resin; bitter substc.—Diaphor.—*Uses:* Techn., in perfumery.

Ivory Black.—see **Charcoal, Animal**

J

Jaborandi.—see **Pilocarpus**

Jaborine Merck (2500

Alkaloid fr. leaflets var. species Pilocarpus.—$C_{22}H_{32}N_4O_4$(?)—Amorph., yellow, syrupy mass. —*Sol.* A., E., C.—Mydriatic, like atropine but weaker.—*Caut.* Poison

Jabuti Matumata

(Cipó Jabuti Matúmatá).—Wood of a sp. of Bauhinia. Cæsalpiniaceæ.—*Habit.:* Brazil.—*Etymol.:* "Jabuti matumata" is the Brazilian name of the plant. — *Uses:* Expector.; Antidysenteric.

Jacaranda Fruit

(Arabicheo; Jarabisco; Paravisco). — Fruit of Jacaranda acutifolia, Hook. & Benth. Bignoniaceæ.— *Habit.:* Central & Northern Peru.—*Etymol.:* "Jacaranda" is the Brazilian name of the plant.—*Constit.:* Tannin.—*Uses:* Antisyph.; Astring.

Jacaranda Leaves

(Carob Tree; Caroba; Caaroba). — Lvs. of Jacaranda procera, Spreng., & other spec. of J. Bignoniaceæ. — *Habit.:* Guiana to Brazil. — *Etymol.:* "Jacaranda" is the Brazilian name of the plant. "Carob" is derived fr. "caraiba," another Brazilian name by which the plant is known. — *Constit.:* Carobin; carobic acid; caroba resin; steocarobic acid; carobone; caroba balsam; caroba tannin; bitter principle. — Diuret.; Antisyphilitic; Antisep. — *Uses:* Syphilitic affect. & indol. ulc.—*Doses:* 15–30 grains (1–2 Gm.) in powd.—Fld. extr., 15–60 ♏ (1–4 Cc.).

Jacquemart's Reagent.—**For ethyl alcohol**

Aqu. solut. of mercuric nitrate acidul. w. nitric acid.—On heating the reagent with the liquid to be examined, the mercury salt is partially reduced, &, if ethyl alcohol is present, it affords a black precipitate on adding ammonia water. Methyl alcohol does not afford this reaction.

Jalap.—*U. S. P.*

Dried tuberous root of Exogonium Purga (Wend.) Benth. Convolvulaceæ.—*Habit.:* Mexico; cult. India.—*Etymol.:* Named for "Jalapa," or "Xalapa," a city in Mexico whence the drug is chiefly exported. "Exogonium," fr. Grk.

"exo," outside, & "gonos," offspring, *i.e.*, the stamens & pistils are exserted. "Purga," fr. Lat. "purgo," to purge, referring to its cathart. action.—*Constit.:* Resin (convolvulin & jalapin); gum; sugar.—Drastic Purgat.; Diuret.; Anthelmin.—*Uses:* Dropsy, cerebr. hyperemia, constip., worms, &c.—*Doses:* 5–30 grains (0.3–2 Gm.).—Alcoh. extr., 5–10 grains (0.3–0.6 Gm.).—Fld. extr., 15–30 ♏ (1–2 Cc.).

Jalapin Merck (20

White or yellowish resin fr. roots of Convolvulus Orizabensis; ident. w. scammonin.—$C_{34}H_{56}O_{16}$.—*Sol.* A.—Drast. Purg.—*Dose* 1–5 grains (0.06–0.3 Gm.).

Jamaica Dogwood.—see **Piscidia**

Jambul

(Jamboo; Java Plum; Jumbul).—Bark, fruit, & seed of Eugenia (Syzygium) Jambolanum, Lam. Myrtaceæ. — *Habit.:* East Indies. — *Etymol.:* "Jambul" is the Malabar name of the plant; "syzygos," Grk., yoked, *i.e.*, the flower petals grow together.—*Bark:* Somewh. light, moderately hard, reddish-gray pieces showing dark brownish-red ring-zones; rather bitter, astring., & pungent taste.—*Fruit:* Purple, shape & size of olive, & very astring.—*Seeds:* Cylindrical, grayish-black, very hard, abt. $^1/_2$ in. long, & alm. tasteless.—*Constit.: Bark:* Resin, tannin.—*Fruit:* Volat. & fixed oils; resin; tannin.—*Seed:* Resin; fat; gallic acid; albumen.—*Uses: Bark:* Antidiabetic; Astring.—*Techn.*, in tanning.— *Fruit:* Specific in diabetes; used also in bilious diarrheas, sore throat, & ringworm.—*Seed:* Antidiabetic (the seeds have been found capable of retarding or restraining the action of diastatic ferments).—*Doses: Seeds:* 30–60 ♏ (2–4 Cc.) of the fld. extr. daily, beginning with 10 ♏ (0.6 Cc.) doses 3 times daily.—Alcoh. extr., 10–45 grains (0.6–3 Gm.).—*Bark:* Fld. extr., 1–4 fl. dr. (4–15 Cc.).

James' Febrile Powder.—see **Calcium Phosphate, Antimoniated**

Japaconitine.—see **Aconitine from Japanese Aconite**

Japan Wax.—see **Wax, Japan**

Jatahy.—see **Hymenæa Bark**

Jateorhiza.—see **Calumba**

Jatropha Curcas.—see **Curcas**

Jatropha Urens.—see **Pini-Pini**

Jaune Brillant.—see **Cadmium Sulphide, Light Yellow**

Jaune d'Or.—see **Martius Yellow**

Java Tea.—see **Orthosiphon**

Jeffersonia

(Rheumatism Root; Twinleaf).—Root of Jeffersonia diphylla, Persoon. Berberidaceæ.—*Habit.:* Ontario to Virginia & west to Wisconsin.—*Etymol.:* Named in honor of Thomas Jefferson. "Diphylla" fr. Grk. "di," two, & "phyllon," leaf, refers to the occurrence of the leaves in pairs.—*Constit.:* Berberine(?); saponin; bitter principle tannin. — Alter.; Diuret.; Expector.; Antispasm.; Diaphor.—*Uses:* Rheumat., syphil., coughs, colds, nerv. affect., bronch., etc.—*Dose:* Fld. extr., 30–60 ♏ (2–4 Cc.).

Jequiritol Merck.—Each package contains 4 tubes of graded solutions of jequiritol, and 4 tubes jequiritol serum

Preparation of abrin fr. jequirity seed, Abrus precatorius, & introduced by Römer into ophthalmic practice.—Sterile liquid containing 50% glycerin, & of constantly uniform physiological action, thus permitting accurate dosage.—*Uses:* Chronic ocular inflammations of various etiology, in which jequirity infusion was formerly used.— *Dose:* Beginning w. 1 drop per day of solut. No. 1, increasing the dose by 1 drop every day until the characteristic jequiritol inflammation supervenes.

Jequiritol Serum Merck

Prepared according to Behring's principle, possesses the power to rapidly & surely neutralize the action of jequiritol in the human system. The action is obtained both by applying it locally, or by subcut. inj.—Marketed in tubes of 75 ♏ (5 Cc.) each.

Jequirity.—see **Abrus**

Joannesia

(Anda Assu; Arara).—Seed of Joannesia princeps, Vell. Euphorbiaceæ. — *Habit.:* Brazil. — *Etymol.:* Named for the Archduke Johann I. of Austria.—*Constit.:* Fixed oil; joannesin(?); resin.—*Uses:* Hepatic diseases, jaundice, dropsy, scrofula, & menstrual disturbances; also as purgat.—*Dose:* One seed (as cathart.).—Of oil, 2–3 dr. (8–12 Gm.).

Jolles' Reagent.—For albumin in urine

Solut. 10 Gm. corros. sublim., 20 Gm. succinic acid, & 20 Gm. sod. chloride in 500 Cc. W.—Albuminous urine is rendered turbid by the reagent.

Judas Tree.—see **Cercis**

Judean Pitch.—see **Asphaltum**

Juglandin Merck (85

Resinoid fr. root bark Juglans cinerea, L.—Grayish-white powd.—*Sol.*, sl. A.—Cath.; Antiper.—*Uses:* Mild lax., habit. constip., & remit. fever.—*Dose* 2–5 grains (0.12–0.3 Gm.).

Juglans

(Butternut; White Walnut; Lemon Walnut; Oil Nut).—Bark of root of Juglans cinerea, L. Juglandaceæ. Collected in autumn.—*Habit.:* North America (Canada; U. S.).—*Etymol.:* Fr. Lat. "Jovis," Jupiter, & "glans," oak, *i.e.*, Jupiter's oak. "Cinerea" fr. Lat. "cinereus," ashen (color).—Flat or curved pieces abt. $^1/_8$ in.

(5 Mm.) thick; extern. dark-gray or deep-brown; inner surface smooth & striate; transv. fract. short, whitish & brown; feeble odor; bitter, somewh. acrid taste.—*Constit.:* Resinoid juglandin; nucin (juglone; juglandic acid); fixed & volat. oils; tannin.—Laxat.; Cathart.; Hepat.; mild Intest. Stim.; Antiper.; Alter.—*Uses:* Habitual constip., dysent., malar. fevers, &c.—*Doses:* 1–2 dr. (4–8 Gm.).—Fld. extr., 1–2 fl. dr. (4–8 Cc.).—Hydro-alcoh. extr., 10–30 grains (0.6–2 Gm.).

Juglans Regia

(English Walnut; European Walnut; Nux Regia).—Lvs. & green shells of fruit of Juglans regia, L. Juglandaceæ.—*Habit.:* Europe; Asia; cultiv. in U. S.—*Lvs.:* Pinnate, sessile, $2^1/_2$–6 in. (6–15 Cm.) long & abt. 2 in. (5 Cm.) wide; astring., bitter taste & characteristic odor when recent; odor becomes weaker on drying.—*Green Shells:* Green, but becoming blackish-brown on drying; astring., bitter taste, & characteristic odor.—*Constit.: Lvs.:* Volat. oil; juglon; tannin.—*Shells:* Juglon, $C_{10}H_6O_3$ (mucin; regianin); mucitannic acid.—*Uses: Lvs.:* Aper.; Antiarthrit.; Alter. (in scrofula); Astring. (in mammary secret., leucor., ulcers, diar., uterine hemorrh., &c.).—*Shells: Intern.*, in scrofula & syphilis; worms; *Extern.*, as appl. in form of decoct. to ulcers & sore eyes.—*Techn.*, as hair dye, & in manuf. of liquors.—*Doses: Lvs.:* Up to 1 oz. (30 Gm.) daily, in decoct.—Fld extr., 15–30 ♏ (1–2 Cc.); diluted with water, as appl. in blenorrhagia.—Alcoh. extr., 15–60 grains (1–4 Gm.).—*Green Shells:* Alcoh. extr., in 1:25 aqu. solut. as appl. to indol. ulcers; used mostly as a hair dye.

Juice; Belladonna, Chelidonium, Cineraria, Conium, Digitalis, Hyoscyamus, Olut-Kombul, Papaw, Sambucus, Scoparius, & Taraxacum.—see **Belladonna, Chelidonium, Cineraria, Conium Herb,** &c.

Juice, Broom.—see **Scoparius Juice**

Juice, Dandelion.—see **Taraxacum Juice**

Juice, Elderberry.—see **Sambucus Juice**

Juice, Hemlock.—see **Conium Juice**

Jujube-Berries

Fruit of Zizyphus vulgaris, Lamarck. Rhamnaceæ.—*Habit.:* Mediterranean region.—*Etymol.:* Fr. Lat. "jujuba," said to have been derived from "zizuf," the ancient Phœnician name of the plant.—*Constit.:* Sugar; pectin.—*Uses:* Demulc.; Resolvent.

Jumbai.—see **Leucæna**

Jumble or *Jumbul Beads.*—see **Jambul**

Juncus

(Rush; Bog Rush).—Root of Juncus conglomeratus, L. Juncaceæ.—*Habit.:* Europe; U. S.—*Etymol.:* Lat. "jungere," to bind, *i.e.*, the stems & lvs. are used for binding.—*Uses:* Demulcent.

Juniperus

(Juniper).—Berries, wood & tops of Juniperus communis, L. Coniferæ.—*Habit.:* Northern Europe; Asia; North America.—*Etymol.:* Celtic "jeneprus," thorny, rough, referring to the lvs. Or, fr. Lat. "juvenis," youthful, & "parere," to produce, *i.e.*, young shoots & lvs. are continually replacing the old. "Communis," fr. Lat. for common, or usual.—*Constit.*. Volat. oil; juniperin; resin; proteids; malates; formic & acetic acids.—*Uses: Berries:* Diuret.; Stim.; Anodyne; Emmen.; Carmin.; Stomachic; Antisep.—*Techn.*, in manuf. of liquor, & for fumigating.—*Wood:* Diuret.; Diaphor.—*Tops:* Diuret.—*Doses: Berries:* 60–120 grains (4–8 Gm.) in infus.—Extr. (inspiss. juice), 5–15 grains (0.3–1 Gm.).—Fld. extr., 30–90 ♏ (2–6 Cc.).

Jurubeba.—see **Solanum Insidiosum,** & **S. Paniculatum**

K

Kalmia

(Mountain Laurel; Lambkill).—Lvs. of Kalmia latifolia, L. Ericaceæ.—*Habit.:* Canada & eastern U. S.—*Etymol.:* Named for Peter Kalm, a pupil of Linnæus (d. 1779). Lat. "latifolius," broad-leaved.—*Constit.:* Andromedotoxin, $C_{31}H_{51}O_{10}$; arbutin; resin; tannin.—Alter.; Sedat.; Astring.—*Uses:* Syphil. affections, scrofula, funct. derangement of heart, & rheumat.—*Dose:* Fld. extr., 10–30 ♏ (0.6–2 Cc.).

Kamala

(Kamila; Kameela; Spoonwood).—Glands & hairs fr. the capsules of Mallotus philippinensis, (Lam.) Muell. Arg. (Rottlera tinctoria, Roxb.). Euphorbiaceæ.—*Habit.:* Philippine Islands; India; China; Australia.—*Etymol.:* "Kamala" is the Bengalese name of the drug.—*Constit.:* Kamalin (Rottlerin; Mallotoxin), $C_{32}H_{29}O_7$.-COOH; isorottlerin; rottlera red; wax.—*Uses:* Tape-worm remedy & Purgat.—*Extern.*, in ringworm, itch, & other parasitic skin dis.—*Doses:* 60–120 grains (4–8 Gm.).—Alcoh. extr., 10–20 grains (0.6–1.3 Gm.).—Fld. extr., 60–120 ♏ (4–8 Cc.).

Kamalin Merck (275

(Rottlerin).—Bitter prin. fr. Kamala.—$C_{32}H_{29}O_7$.-COOH.—Yellowish-brown to reddish-yellow, cryst. powd.—*Sol.* E.; boil. A.; acetic acid, CS_2, alkal. solut.—*Melt.* 200° C.—Anthelm.

Kandol.—see **Canadol**

Kaolin.—*U. S. P.*

(Bolus Alba; Argilla; China Clay; Terra Alba; White Bole).—Decomp. prod. of felspar.—White or yellowish-white, earthy mass, or white powd., unctuous when moist. Prepared for pharm. purposes by treat. w. 5% HCl, & remov. sand by levig. with water.—Insol. W., & in cold solut. of acids & alkali hydroxides.—Consists essentially of hydrated aluminum silicate, $H_2Al_2Si_2O_8 + H_2O$, or, $Al_2O_3.2SiO_2.2H_2O$.—*Uses:* Dust-

ing powd. for irrit. surfaces, sores, &c.; drying agent & emoll.; clarifying & decolorizing liquids (oils, wine, beer, honey, syrups); excip. for $AgNO_3$ & $KMnO_4$.

Kaolin Cataplasm.—*U. S. P.*

Mixt. Kaolin 577, boric acid 45, thymol 0.5, methyl salicylate 2, oil pepperm. 0.5, & glycerin 375.—*Uses:* Relieve congestion & pain in burns, boils, synovitis, orchitis, &c.—Applied hot.

Kassner's Mixture Merck.—Reagent

Mixt. of barium peroxide & potass. ferricyanide. —*Uses:* Evolving oxygen.—The constituents of the mixt. are kept separate.

Katrine.—see **Celastrine**

Kau-Kui.—see **Eumenol**

Kaurie.—see **Copal**

Kautschin.—see **Dipentene**

Kava-Kava

(Ava-Ava; Kawa).—Root of Methysticum (Piper) methysticum, Forst. (Macropiper methysticum, Miq.). Piperaceæ.—*Hobit.*. Polynesia. —*Etymol.:* "Kava-Kava," fr. the Polynesian "kava," or "ava," sharp, which by reiteration signifies having an exceedingly sharp taste. Grk. "methystikos," fr. "methyein," to be intoxicated, referring to the intoxicating action of the plant.—*Constit.:* Alpha- & beta- kava-kava resins; kavaine (alkaloid); kavahin; methysticin.—Sialag.; Sudorific; Diuret.; Tonic; Stim.; Anticatarrh. —*Uses:* Gonor., gout, rheum., dropsy, vaginitis, chron. cystitis, retention of urine, gleet, &c.—*Doses:* 15–90 grains (1–6 Gm.). —Fld. extr., 15–60 ♏ (1–4 Cc.).—Hydroalcoh. extr., 5–30 grains (0.3–2 Gm.).

Kawaïne.—see **Methysticin; Resin Kava-Kava**

Kefir Fungi Merck (20

(Kefir Grains; Kefir Seeds).—A fermentation-causing conglomeration of various fungi, including those of Dispora caucasica & Schizomycetes, besides a species of Saccharomyces.—*Etymol.:* The name "Kefir" is employed by the Caucasian tribes, & is probably derived from "keyf," meaning well-being.—Grayish-yellow lumps, irregular in size; firm, toughly gelatinous consistency, becoming cartilaginous & brittle when dry.—*Uses:* For preparing a refreshing beverage, which is also particularly beneficial for patients suffering from pulmonary & gastric diseases, as well as for convalescents.—**Preparation of Kefir:** A tablespoonful of Kefir fungi is soaked for 3 hrs. in luke-warm water, the water is then poured off, & the washed fungi introduced into a Selters flask $^3/_4$ filled with milk which has been heated to 30° C., but not boiled. The mixture is then allowed to stand, with occasional shaking, for 24 hrs. in not too warm a place; the liquid, ready for use, is poured off from the kefir fungi, which may be used to prepare further quantities of kefir in the manner described; or, the liquid itself may be used as a fermenter of fresh quantities of milk.

Kelene.—see **Ethyl Chloride**

Keratin Merck.—From Horn (70

Purif. corneous substance fr. horn or quills.—White to grayish-white scales or yellowish-brown powd.—*Sol.*, ammonia, acetic acid; insol. W., & dil. acids.—*Uses:* Coat. enteric pills.

do. Merck.—Pepsinized (60

Horn-substance purif. by pepsin.—Yellowish-brown, deliq. powd.—*Sol.*, ammonia & acetic acid; insol. W. & dil. acid.—*Uses:* Coating "enteric" pills which are unattacked in the stomach, but are dissolved by the alkaline intestinal secretions. The solut. used is made by dissolving 7 parts pepsinized keratin in 100 parts acetic acid, or in 50 parts ammonia water mixed w. 50 parts dil. alcohol. The pill mass should be made with fat or wax as an excipient, & the pills, before being coated, should receive a coating of graphite or cacao butter.

Kermes Mineral.—see **Antimony Sulphurated**

Kermesin Orange.—see **Orange T**

Ketole.—see **Indole**

Ketopropane.—see **Acetone**

Kidney Merck.—Dried, powder (25

Fr. fresh kidneys of sheep & pigs.—1 part = 6 parts fresh kidney.—*Uses:* Nephritis.—*Dose* 8–30 grains (0.5–2 Gm.) 3–4 t. p. d.

Kidney Bean.—see **Phaseolus**

Kidney Vetch.—see **Anthyllis**

Kieffer's Solution.—see **Copper & Ammonium Sulphate, Solution**

Kieselguhr

(Infusorial, Siliceous, or Diatomaceous, Earth; Fossil Flour).—Ground, levigated, & ignited siliceous shells of various species of Diatoms (Gallionella, Melosira, Navicula, Synedra, Gonphonema, &c.).—Wh. powd.; capable of taking up & holding 4 times its wt. of water.—*Uses:* Largely as an absorbent for liquids, & for dispensing fld. extracts in powd. form (equal parts yield a dry powd.). Also as constituent of & excipient for pill masses.—*Techn.*, manuf. dynamite, ultramarine, aniline, alizarine; in building, heat-insulating materials, as packing for caustic & inflamm. substances, electrical insulators; manuf. paper & soap, in putz pomade & other polishes; manuf. water-glass, glazes, & glass, in filtering (to obtain sterile filtrates), &c.

King's Yellow.—see **Arsenic Sulphide, Yellow**

Kinkélibah

Lvs. of Combretum album, Guill. et Perr. (C. Raimbaulti) Combretaceæ.—*Habit.:* West coast

of Africa; Senegal; Sierra Leone.—*Etymol.*. "Combretum" is the name given by Pliny (accord. to Löfling, 1729–1756) to a very thin-leaved plant, otherwise not specially described. Raimbault was a French missionary (1891).—*Constit.:* Potassium nitrate; tannin.—*Uses:* In form of decoct. in African black-water fever.—*Dose* 4 dr. (15 Gm.).

Kino.—*U. S. P.*

(Resin Kino; Gum Kino).—Inspissated juice of Pterocarpus Marsupium, Roxb. Leguminosæ. (Papilionaceæ).—*Habit.:* Western Africa; East India; Ceylon; Bengal.—*Etymol.:* "Kino," or "kano," is the name by which the Mandingos, a tribe of West-African negroes, designate the gum. Lat. "marsupium," a bag, pouch, referring to the shape of the fruit.—*Constit.:* Kinotannic acid, $C_{18}H_{18}O_8$; kino-red, $C_{28}H_{22}O_{11}$; pyrocatechin, $C_6H_6O_2$; kinoin, $C_{14}H_{12}O_6$; gum.—Stypt. & Astring.—*Uses:* Diar., heartburn, leucor., passive hemorrhages, diabetes, &c.—*Techn.*, in dyeing & tanning.—*Doses:* 5–30 grains (0.3–2 Gm.).—Fld. extr., 10–30 ♏ (0.6–2 Cc.).—Tinct., 30–120 ♏ (2–8 Cc.).

Kleinenberg's Fat Mixture

Solut. cacao butter & spermaceti in castor oil.—*Uses:* As imbedding material in microscopy.

Kleinenberg-Mayer's Picro-Sulphuric Acid

Satur. solut. picric acid in 2-% sulphuric acid, w. a few drops creosote added.—*Uses:* For fixing most tissue elements (except. those cont. $CaCO_3$).

Klein's Reagent.—For separating minerals

Satur. aqu. solut. cadmium borotungstate.—$2(CdH_2W_2O_8).7(WO_3)B_2O_3$+aq.—Sp. Gr. 3.28 at 15° C.—*Uses:* Separating minerals by sp. gr.

Klemensiewicz's Picrocarmine

Similar to Ranvier's picrocarmine, & used like it.

Knapp's Reagent.—For quantitatively estimating glucose

1% solut. mercuric cyanide w. addition of NaOH.—In titrating, the liquid is acidulated w. acetic acid, & SH_2 or ammon. sulphide serves as indicator by the "spot" method.—Calculation: Cc. solut.: 0.1::100 : x, where x = % glucose.

Knautia Arvensis.—see **Scabious**

Knot-Grass.—see **Polygonum**

Koch-Ehrlich's Stain.—For bacilli tuberculosis

(*a*): Aqu. 1:200 solut. methylene blue rendered alkaline w. 3–4 drops of a 10-% solut. potass. hydroxide.—(*b*): Concent. aqu. solut. vesuvin.—The objects are first stained in the methylene-blue solut., & then with the vesuvin solut. Nuclei, as well as most micrococci, are stained brown; tuberculosis bacilli, however, are stained an intense blue.

Koji.—see **Diastase, Taka-**

Kola.—see **Cola**

Kosin Merck.—Cryst. (2000

(Kussin; Koussin; Kossein).—Act. cryst. principle fr. female fls. Hagenia abyssinica, (Bruce) Gmelin.—$C_{31}H_{38}O_{10}$.—Yellow need.—*Sol.* A., E., C., B., & alkalies.—*Melt.*, abt. 150° C.—Anthelmintic.—*Dose* 20–30 grains (1.3–2 Gm.).

Kossein.—see **Kosin**

Kousseïn Merck.—Amorph. (120

(Brayerin, Kusseïn).—Amorph. prin. fr. female fls. Hagenia abyssinica, (Bruce) Gmelin.—Brownish, amorph. powd.—*Sol.* A., E., C.—Anthelmintic.—*Dose* 15–60 grains (1–4 Gm.) in 4 portions at intervals of half hour, followed by castor oil; children half the dose.

Koussin.—see **Kosin**

Kousso.—*U. S. P.*

(Cusso; Brayera).—Female inflorescence of Hagenia abyssinica, (Bruce) Gmelin; Brayera anthelmintica, Kunth. Rosaceæ.—*Habit.:* Abyssinia.—*Etymol.:* Named for Karl Gottfried Hagen (1749–1829). "Abyssinica" refers to the habitat of the plant. "Cusso" is the Abyssinian name of the plant. "Brayera" named for Dr. Brayer, a French physician who lived in Constantinople, & published a description of Kousso in 1823.—*Constit.*. Kosin (koussin; kosseïn; kosine), $C_{31}H_{38}O_{10}$; Kousseïn; volat. oil; tannin; kosidin; protokosin; kosotoxin, $C_{26}H_{34}O_{10}$.—Anthelmintic.—*Uses:* Tapeworm.—*Doses:* 2–6 dr. (8–24 Gm.).—Alcoh. extr., 30–60 grains (2–4 Gm.).—Fld. extr., 4–8 fl. dr. (15–30 Cc.) p. d., in two doses.

Krameria.—*U. S. P.*

(Rhatany; Payta [Peruvian name of drug]).—Dried root of Krameria triandra, Ruiz et Pavon (Peruvian Krameria), & of K. argentia, Martius (Para or Brazilian Krameria), (also K. Ixina). Krameriaceæ.—*Habit.:* Peru; Bolivia; Brazil.—*Etymol.:* Named for J. G. H. & W. H. Kramer, German botanists (18th century). "Ratanha," or "ratanhia," is the Quichuan (Peruvian) name of the drug, & is derived fr. Spanish "ratania," or "ratana," creeping, referring to the plant's habit. "Triandra," fr. Grk. "tri," three, & "andros," stamen, *i.e.*, the flowers have 3 stamens. "Ixina," Lat. fr. native name, "ixine," at Cumana, Venezuela, where Loefling discovered the plant in 1754.—*Constit.:* Kramero-tannic acid; rhatania-red.—Tonic; Astring. (like tannin).—*Uses:* Especially in hemorrhages; chronic diar., menor., spongy gums.—*Extern.*, in leucor., spongy gums, prolapsus ani, fissured anus, &c.—*Doses:* 5–30 grains (0.3–2 Gm.).—Alcoh. extr., 5–15 grains (0.3–1 Gm.); in oint., 1:10; gargles, 5–10% solut.; inject., 1–2%.—Fld. extr., 15–60 ♏ (1–4 Cc.).—Tinct., 30–120 ♏ (2–8 Cc.).

Kreatin.—see **Creatin**

Kreatinine.—see **Creatinine**

Kreosol.—see **Creosol**

Kreosote.—see **Creosote from Beechwood**

Kresalol ; Meta-, Ortho-. & Para-. — see **Cresalol; Meta-, Ortho-, & Para-**

Kresamine (100

(Ethylenediamine-Trikresol). — 25% each trikresol & ethylenediamine in aqu. solut.—Yellowish, alkaline liq.; phenol odor.—*Misc.*, all prop. G.; 3 W.; immiscib. w. petrolatum.—Surgical Antisep.; Dermic, &c.—*Appl.* 0.5–1.5% soluts.; 4–20% oints.

Kresol.—see **Cresol**

Kroupa's Paper.—see **Fuchsine Paper**

Kryofine (20

(Methoxyacetphenetidin).—Condensation prod. of paraphenetidin & methylglycolic acid.—$CH_3.OCH_2.CONH.C_6H_4OC_2H_5$. — White, odorl., cryst. powd.—*Sol.* 660 W.; freely in A.—*Melt.* 98° C. — Antipyr.; Anodyne; Antineuralgic. — *Dose* 5–15 grains (0.3–1 Gm.) daily.

Kryogenin.—see **Cryogenine**

Kussein.—see **Koussein**

Kussin.—see **Kosin**

L

Labarraque's Solution.—see **Solution Soda, Chlorinated**

Labordin.—see **Analgen**

Labrador Tea.—see **Ledum**

Lacca.—see **Shellac**

Lacmoid Merck.—Scales (35

(Resorcinol Blue).—Fr. resorcinol w. sod. nitrite. — $C_6H_3(OH)_2.N:O.OH.C_6H_3$. — Lustrous, dark violet scales.—*Sol.* A., acetone, E., wood A., acetic acid, phenol; sl. in W.; blue in str. hydrochl. or sulphuric acid.—*Uses:* Instead of litmus as indicator in alkalimetry.

Lacmoid Merck.—Reagent.—Scales (40

(Resorcinol Blue).—Lustr., dark-viol. scales.—*Sol.* A., acetone, E.; sl. W.—Indicator solut.: 0.5 lacmoid+100 Cc. 90% alcoh.+100 Cc. H_2O. —*Tests:* (*Indicator*) *a:* 0.2 Cc. solut.+100 Cc. absol. A.; add 0.05 Cc. decinorm. HCl – blue color should change to red, & on further add. 0.05 Cc. decinorm. KOH, red color should change to blue; *b:* 0.2 Cc. solut.+100 Cc. dist. H_2O (freed fr. CO_2 by boil. in platin. dish); add 0.05 Cc. decinorm. HCl – blue color should change to red, & on further add. 0.05 Cc. decinorm. KOH red color must change to blue. — *Uses:* Indicator (alkalies=blue; acids=red).

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Lacmoid Paper

Wh. paper, impregn. w. hydro-alcoh. solut. of lacmoid & dried.—Both a red & a blue paper are made. The red paper is far more sensitive than red litmus paper for alkalies, &, because of its proneness to spoil, should be preserved in well-stoppered bottles.—*Uses:* Indicator in alkalimetry (alkalies=blue; acids=red).

Lacmus.—see **Litmus**

Lac Sulphuris.—see **Sulphur, Precipitated**

Lactamide Merck (200

$C_3H_7NO_2$, or, $CH_3.CH(OH).CO.NH_2$. — Colorl. cryst.—*Sol.*, sl. W., A.—*Melt.* 74° C.

Lactoglucose.—see **Galactose**

Lactol

(Betanaphthol Lactate).—Antiseptic.—*Uses:* Recom. as substit. for benzonaphthol.

Lactophenin (20

(Lactylphenetidine).—Deriv. of phenetidin w. lactic acid.— $OC_2H_5C_6H_4.NH.CO.CH(OH)CH_3$. —Wh., cryst. powd.—*Sol.* 330 W.; sl. E.—*Melt.* 118° C.—Antipyr.; Antineural.; Hypnotic, & Analg.—*Uses:* Fever, headache, neural., rheum., influenza, scarlet fever, septicemia, &c.—*Dose* 8–15 grains (0.5–1 Gm.).—*Max. D.* 15 grains (1 Gm.) single; 45 grains (3 Gm.) per day.

Lactose.—see **Milk Sugar**

Lactuca

(Wild Lettuce; Acrid Lettuce; Strong-scented Lettuce; Green Endive).—Flowering herb of Lactuca virosa, L. Compositæ. Synantherеæ. —*Habit.:* Europe.—*Etymol.:* Lat. "lac," milk, because of the milky juice the plant exudes when bruised or punctured; & "virosus," poisonous, referring to its opium-like action. —*Constit.:* Lactucin, $C_{11}H_{12}O_3.H_2O$; lactucerin, $C_{28}H_{44}O_2$; lactucarium; lactucopicrin; lactucic acid.—Narcotic; Anodyne; Sedat.; Hypnot.; Diuret.; Expector.—*Uses:* Dropsy, jaundice, gout, asthma; & in prep. of lactucarium. Mild substitute for opium in cough mixtures.—*Dose:* Alcoh. extr., $^1/_2$–$1^1/_2$ grains (0.03–0.1 Gm.) — *Max. D.* 10 grains (0.6 Gm.) single; 40 grains (2.6 Gm.) daily.

Lactucarium Merck.—French (8

(Thridace).—Inspiss. juice of Lactuca sativa, var. capitata, L. Compositæ.—*Habit.:* Southern Asia; France; now widely cultiv.—*Etymol.:* For "Lactucarium," see preceding. Lat. "sativus," cultivated. — Brown pieces (less active than the German lactucarium). — *Constit.:* Lactucine; hyoscyamine. — Hypnot.; Sedat.; Narcot. (particularly in asthma, bronchitis, &c.). —*Uses:* Cough mixtures, & as a mild substitute for opium.—*Doses:* 8–30 grains (0.5–2 Gm.).—*Max. D.* 30 grains (2 Gm.).—Alcoh. extr., 2–10 grains (0.12–0.6 Gm.); *Max. D.* 12 grains (0.8 Gm.) single, 40 grains (2.6 Gm.) daily.—Fld. extr., 10–30 ♏ (0.6–2 Cc.).—Tinct., 10–60 ♏ (0.6–4 Cc.).

Lactucarium Merck.—German (9

("Lettuce Opium").—Concrete milk-juice of Lactuca virosa, L. Compositæ.—*Habit.:* Europe. —*Etymol.:* See Lactuca.—Irreg., brown lumps; wax-like when cut; narcotic odor; bitter taste.—*Sol.*, partly in W., A., E.—*Constit.:* Lactucine; lactucerin; hyoecyamine; lactucopicrin; lactucic acid; caoutchouc; volat. oil; mannit; gum, &c.—Anod.; Sed.; Hypn.—*Uses:* Nervousn., cough, &c., where opium is inadvisable.—*Doses:* Hypn., & anod., 3–8 grains (0.2–0.5 Gm.); sed., $^1/_2$–5 grains (0.03–0.3 Gm.).—*Max. D.* 8 grains (0.5 Gm.) single; 15 grains (1 Gm.) daily.—*Caut.* Keep dry.

Lactucerin Merck (500

(Lactucon).—Acetic ester of alpha- & beta-lactucerol fr. German lactucarium.—$C_{28}H_{44}O_2$.—Yellowish-white cryst.—*Sol.* A., E.—*Melt.*, abt. 200° C.—Sedative.

Lactucin Merck (6000

Bitter prin. fr. French lactucarium.—$C_{11}H_{14}O_4$.—Fine, wh. scales.—*Sol.* A.; sl. W.—Sed.; Hypn.—*Dose* 1–5 grains (0.06–0.3 Gm.).

Lactucon.—see **Lactucerin**

Lactylphenetidin.—see **Lactophenin**

Lactyltropeine Nitrate Merck (800

$C_8H_{14}NO.CO.CH(OH).CH_3.HNO_3$.—Wh., cryst. powd.—*Sol.* A., W.—Cardiac Tonic.

Lady's Slipper.—see **Cypripedium**

Laminaria

(Tangle; Sea Tangle; Sea Girdle; Sea Staff).—The sea-weed Laminaria Cloustoni (digitata, Lam.), Edmondston. Algæ. Fucaceæ.—*Habit.:* Cold northern seas.—*Etymol.:* Lat. "lamina," a thin plate, referring to the form of the thallus; & "digitata," provided with "fingers," referring to its appearance.—*Constit.:* Laminarin; laminaric acid; iodides.—*Uses:* Substitute for sponge tents for dilating such parts as the uterine os, urethra, &c.

Lamium

(Blind Nettle; Dead Nettle; White Nettle; White Archangel; Nettle).—Lamium album, L. Labiatæ.—*Habit.:* Europe; introd. into U. S.—*Etymol.:* Fr. Grk. "lamia," a sp. of shark, *i.e.*, from the dentate appearance of the ringent corolla.—*Constit.:* Lamine; pectin; tannin.—Hemost.; Alter.—*Uses:* Metrorrhag. (due to myoma), hemorrhagic metritis, & hemorrhoidal hemorrhage.—*Dose:* Tinct., 40 drops ev. 2 hrs.

Lanain, Lanalin, or, *Lanesin = Adeps Lanæ.*—see **Lanum, Anhydrous**

Lang's Picrocarmine-Eosine

1 Gm. picrocarmine, 1 Gm. eosine, & 200 Cc. W.—*Uses:* Staining alcoholic objects (lower forms of animal life).

Lang's Sublimate Solution

3 to 12 Gm. mercuric chloride, 100 Cc. W., 5 Cc. acetic acid, 0.5 Gm. alum, & 10 Gm. sod. chloride.—*Uses:* For hardening fresh objects.

Lanichol or *Laniol = Adeps Lanæ Anhydrous.*—see **Lanum, Anhydrous**

Lanolin = Adeps Lanæ.—see **Lanum**

Lantana Spinosa.—see **Camara**

Lanthanite, Artificial.—see **Lanthanum Carbonate**

Lanthanum Merck.—By Electrolysis.—Fused, globules (20000

Etymol.: Fr. Grk. "lanthano," I hide, because for a long time it remained hidden in cerite, in which it was discovered by Mosander in 1839. — La. — Fairly mall. & ductile, wh. metal; oxid. rapidly in air; decomp. W.—Sp. Gr. 6.163. —*Sol.*, acids.

Lanthanum Carbonate Merck (240

(Artificial Lanthanite).—$La_2(CO_3)_3 + 3H_2O$.—Wh., cryst. powd.—*Sol.*, readily in dil. mineral acids; insol. W.

Lanthanum Chloride Merck (240

$La_2Cl_6 + 14H_2O$.—Wh., transp., asymmetr. cryst. —*Sol.*, very eas. W., A.

Lanthanum Nitrate Merck (120

$La_2(NO_3)_6 + 12H_2O$.—Colorl., transp., asymmetr. cryst.—*Sol.*, very eas. W., A.—*Caut.* Keep well stoppered.

Lanthanum Oxalate Merck (160

$La_2(C_2O_4)_3$.—Wh., cryst. powd.—Insol. W.

Lanthanum Oxide Merck.—Anhydrous (180

(Lanthanum Trioxide; Lanthanum Sesquioxide). —La_2O_3.—Almost wh., amorph. powd.—*Sol.*, eas. in dil. mineral acids; insol. W.—*Uses:* Inst. of & better than lime in oxyhydrogen lights.

Lanthanum Sesquioxide.—see **Lanthanum Oxide**

Lanthanum Sulphate Merck (180

$La_2(SO_4)_3 + 9H_2O$.—Colorl., felted, acicular cryst. —*Sol.*, diffic. W.

Lanthanum Trioxide.—see **Lanthanum Oxide**

Lanum Merck (1

(Adeps Lanæ Hydrosus Merck; Hydrous Wool-fat, U. S. P.).—A superior wool-fat specially prepared from purified fat of sheep-wool for medical & pharmaceutical uses, & containing 25–30% water.—Yellowish-wh., unct. mass; freely takes up water & aqueous solutions.—*Misc.*, w. 1.8 parts water.—*Sol.* E., C., with turbidity.—*Uses:* Neutral, non-irritat., antisep., permanent emoll., & base for ointments & creams; extremely rapidly absorbed by the skin.

Note.—Free fr. foreign fats, acids, or alkalies, this article is particularly suitable for all uses requiring a specially careful choice of hydrous wool-fat.

Lanum Anhydrous Merck (1

(Adeps Lanæ Anhydricus Merck).—Purified wool-fat from Ovis aries (Sheep).—Yellowish,

semi-solid fat; peculiar odor; consists of cholesterin- & isocholesterin-esters of the higher fatty acids.—*Sol.* E., C.—*Uses:* As above.

Note.—Free fr. water, fats, acids, &c., hence this article is suitable for any purpose requiring the use of the anhydrous wool-fat.

Lapis Calaminaris.—see **Calamine**

Lappa.—*U. S. P.*

(Clotbur; Bardana; Burdock). — Dried root (also herb & seed, though not official in U. S. P.) of Arctium Lappa, L., & some other spec. of Arctium. Compositæ, from plants of first year's growth.—*Habit.:* Europe; Northern Asia; naturalized in N. America.—*Etymol.:* "Lappa," fr. Celtic "llap," hand, Grk. "labein," to seize, *i.e.*, the thorny fruit seizes & holds fast to clothing, &c. "Arctium," fr. Grk. "arktos," bear, *i.e.*, the involucre of flower & fruit is rough. "Bardana," fr. Italian "barda," a horse cover, *i.e.*, referring to the great size of the lvs.—*Constit.: Root:* Volat. oil; tannin; bitter principle; inulin; fat; mucilage. — *Herb:* Mucilage; inulin, & tannin.—*Uses: Root:* Aper.; Diuret.; Diaphor.; Alter.; Depurative.—*Extern.*, also for swellings, hemorrhoids, burns, &c., & as a hair-grower.—*Herb:* Aper.; Diuret.; Antiscrofular; Antisyphil.; Antirheumat.—*Extern.*, mixed with oil as appl. to atonic ulcers.—*Seeds:* Aper.; large doses Purgat.—*Doses: Root:* 30–120 grains (2–8 Gm.).—Alcoh. extr., 4–8 grains (0.25–0.5 Gm.).—Fld. extr., 30–60 ♏ (2–4 Cc.).

Lard

(Adeps; Axungia Porci).—Prepared purified internal fat fr. abdomen of Sus scrofa, L. (the Hog).—*Sol.* E., C., CS_2, B.; sl. in A.; insol. W.—Sp. Gr., abt. 0.917 at 25° C.—*Melt.* 38–40° C.—*Uses:* As emollient; also pharm.—*Caut.* Keep cool, & in tight containers.

Lard Benzoinated

Prepared by heat. lard w. 2% benzoin in coarse powd. on water-bath for 2 hrs.—Antiseptic.—*Uses:* Skin affect.

Largin (35

(Silver-protalbin, Lilienfeld).—Gray powd.; 11.1% silver.—*Sol.*, in abt. 10 W., G.; insol. A., E.—Bactericide & Astring.—*Uses:* Instead of silver nitrate.—*Extern.*, chiefly in gonor., in 0.25–1.5% solut.—*Intern.*, in gastric or intest. ulcer.—*Dose* 5–8 grains (0.3–0.5 Gm.), in pills.

Laricin.—see **Agaricin**

Larix

(Tamarack; American Larch; Hackmetack).—Bark of Larix americana, Mich. Pinaceæ. (Coniferæ).—*Habit.:* British America south to New Jersey, Indiana, & Minnesota.—*Etymol.:* Fr. Celtic "lar," fat, fr. the abundant oleoresin secreted by the tree.—Astring.; Antisep.—*Uses:* Catarrh. condit. of intest., & as gargle in diphth.—*Dose:* Fld. extr., 30–60 ♏ (2–4 Cc.).

Larix Cedrus.—see **Cedrus**

Larkspur.—see **Delphinium; Staphisagria**

Laserpitium

(Laserwort; White Gentian; Radix Gentiana Alba). — Root of Laserpitium latifolium, L. Umbelliferæ.—*Habit.:* Europe.—*Constit.:* Volat. oil; resin; laserpitin.—*Uses:* Tonic.

Lasiosiphon

Root of Lasiosiphon anthyloides, Meisn. Thymeleæ.—*Habit.:* South Africa; Natal.—*Etymol:* Grk. "lasios," raw, & "siphon," tube, *i.e.*, the perigynous tube is covered with rough hairs. "Anthyloides," fr. Grk. "anthos," flower, & "julos," beard, or bearded flower, *i.e.*, the flower is covered with rough hair.—*Uses:* Antidote for snake bite.

Laudanine Merck.—**Pure, precipitated** (9000

Alkaloid fr. opium.—$C_{20}H_{25}NO_4$.—Yellowish-wh., cryst. powd.—*Sol.* B., C.; hot A.; sl. E.—*Melt.* 165–166° C.—Toxic; Tetanic, like strychnine.—*Antid.*, tannin, emetic, or stomach tube.—*Caut.* Poison!

Laudanosine Merck (20000

Alkaloid fr. opium.—$C_{21}H_{27}NO_4$.—Yellowish-wh., cryst. powd.—*Sol.* A., E., C.; boil. B.—*Melt.* 89° C.—Tetanic poison.—*Caut.* Poison!

Laurel.—see **Laurus**

Laurel Camphor.—see **Camphor**

Laurene.—see **Pinene, Dextrogyrate**

Laurier Rose.—see **Oleander**

Laurocerasus

(Cherry-bay; Cherry-laurel). — Lvs. of Prunus Laurocerasus, L. Rosaceæ. Drupaceæ.—*Habit.:* Fr. Western Asia to Southern Europe.—*Etymol.:* Fr. Lat. "laurocerasus," fr. "laurus," laurel, & "cerasus," cherry, *i.e.*, the lvs. resemble those of the laurel, while the fruit resembles cherries.—Lvs. are up to 6 in. (15 Cm.) long; $^4/_5$–2 in. (2–5 Cm.) wide; oblong; serrate; odor of bitter almonds; aromat., bitter taste.—*Constit.:* Amygdalin (more properly laurocerasin); tannin; sugar; fatty matter; phyllic acid, $C_{72}H_{64}O_{16}$.—Anodyne; Antispasm.; Sedat.; Narcot.

Laurus

(Sweet Bay; Bay; Noble Laurel; Bayberry).—Lvs. & fruit of Laurus nobilis, L. Lauraceæ.—*Habit.:* Mediterranean region; cultiv. in Mexico.—*Etymol.:* Fr. Celtic "blawr," or "lauer," green; or perhaps fr. Lat. "laus," praise, as the laurel was given to victorious soldiers.—Lvs. 2–4 in. (5–10 Cm.) long; pellucid-punctate; smooth; aromat. odor; astring. taste.—Fruit, oval drupes abt. $^1/_2$ in. (12 Mm.) long; when dry, are wrinkled, green, black, or blackish-brown, & fragile.—*Constit.:* Volat. oil; fruit also contains fixed oil.—Stomach.; Spice.—*Uses:* As appl. in insect bites, stings, &c.; also in leucor.—Fruit also source of expressed oil bay.

Lauth's Violet.—see **Thionine**

Lavender

(Garden Lavender; True Lavender).—Lavandula vera (officinalis), D. C. Labiatæ.—*Habit.:* Mediterranean region.—*Etymol.:* Fr. Lat. "lavare," to wash, referring to the use made of its distilled water in baths & in perfumery.—*Constit.:* Volat. oil.—*Uses:* Stim.; Carmin.; Nervine; Errhine. Also for fumigation, in perfumery, to keep moths from clothes, &c., & in manuf. of oil.

Lawsonia Alba.—see **Henna**

Lead Merck.—Highest Purity, powder (2

Etymol.: Lead fr. Anglo-Saxon "léad," Old English "led," or "leed," a plummet, heavy. Named "plumbum nigrum" by the Romans, to distinguish it from "plumbum album," by which name tin was designated.—Pb.—Bluish-gray, soft metal.—*Sol.*, nitric acid.—*Melt.* 330–335° C.—Sp. Gr. 11.37.—*Uses:* Techn. & chem.

do. Merck.—Pure, sticks & ribbon (2

Prepared by casting, rolling, & drawing.—*Uses:* As solder; in comb. w. arsenic in making shot; manuf. of lead carbonate; making cables; as insulator in electrotechnic apparatus; lining for acid-proof vessels; storage batteries; manuf. white lead, &c.

do. Merck.—Granular & sheets.—Free fr. silver (1

Lead Acetate Merck.—Pure, cryst., powd., or gran. (1

(Normal Plumbic Acetate; Sugar of Lead).—$Pb(CH_3.COO)_2+3H_2O$.—Efflores., colorl., shin., transp. cryst.; acetous odor; sweet, metal. taste.—*Sol.* 2.3 W. (2 W. at 25° C., U. S. P.); 0.5 boiling W.; 30 cold A.; 1 boiling A.; 3 C.; 5 G.—*Melt.* 280° C.—Loses its water of cryst. at 40° C.—Astring.; Styp.; Antihidr.—*Uses: Intern.*, diar., dysent.; gastr., uterine, & intest. hemorrhages; in bronchoblennorrhea, pulmon. edema, aortal aneurism, & phth. night-sw.—*Extern.*, as astring. eye lotion, & inject. or wash (1:100–1:500 W.) for gonor.—*Techn.*, widely used in dyeing & printing cottons; manuf. varnishes, hair dyes, lead-acetate paper, &c.—*Dose* 1–4 grains (0.06–0.25 Gm.), usually combined w. opium. For children, $^1/_{20}$ grain (0.003 Gm.) for each year of age.—*Antid.*, emetics, stomach siphon; sodium, potassium, or magnesium sulphate; milk, albumen, opium (in pain), lumbar inj. of cocaine hydrochl. ($^1/_2$ grain [0.03 Gm.] to 45 ♏ [3 Cc.] water).—*Incomp.*, acids, sulphates, citrates, tartrates, chlorides, carbonates, alkalies, tannin, phosphates, resorcinol, salicylic acid, carbolic acid, hydrated chloral, sulphites, vegetable infusions & tinctures.—*Caut.* Poison!

Lead Acetate Merck.—Reagent (3

$Pb(CH_3.COO)_2+3H_2O$.—Colorl., transl. cryst.—*Sol.* 2.3 W.; 29 A. (85%). All aqu. soluts. should be prep. fr. water freed from CO_2 by boil.—*Tests: (Earths; Alkalies)* 5 Gm.+100 Cc. H_2O; pass in H_2S gas till all Pb pptd.; filter; evap. filtrate & ignite—wt. of res. not more than 0.001 Gm.—*(Cu; Fe)* 2 Gm.+40 Cc. H_2O+50 Cc. NH_4OH (sp. gr. 0.96); when ppt. settled, filter—ppt. must be pure white; & filtrate must be colorl.—*($PbCO_3$; Impur. Insol. H_2O)* 5 Gm.+50 Cc. H_2O—solut. should be clear or only v. sl. opalesc.—*(Cl)* acidul. 1:30 aqu. solut. w. HNO_3 & add solut. $AgNO_3$—no turb.—*(HNO_3)* 1 Gm. +30 Cc. H_2O+1 drop indigo solut.+15 Cc. conc. H_2SO_4—blue color should not disapp.—*Uses:* Determ. chromic & molybdic acids; precip. tannic, malic, & oxalic acids; prepar. lead paper; in reagents f. dextrose, cotton-seed oil, dextrin, & indican.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Lead Acetate Merck.—Basic (3

(Tribasic Lead Acetate).—$Pb(C_2H_3O_2)_2.2PbO+H_2O$.—Lustr., wh. micro-need.—*Uses:* Techn., for weighting silks.

Lead Acetate, Monobasic.—see **Lead Subacetate**

Lead Acetate Paper

Wh. paper impregnated w. a solut. lead acetate.—*Uses:* For detection of hydrogen sulphide & alkali sulphides (black color with much H_2S; brown color w. small amounts).

Lead Acetate, Tribasic.—see **Lead Acetate, Basic**

Lead Acetotartrate Merck (25

Colorl. cryst.—*Sol.* W.—Astring.; Antisep.—*Uses:* As of acetate.

Lead Antimonate Merck (7

(Naples Yellow).—$Pb_3(SbO_4)_2$.—Orange-yellow pigment.—*Uses:* Techn., as pigment in oil painting, & staining glass, crockery, & porcelain.

Lead Benzoate Merck (3

$Pb(C_7H_5O_2)_2+H_2O$.—Wh., cryst. powd.—*Sol.*, sl. W.

Lead Betanaphthalenesulphonate.—see **Lead Naphthalenesulphonate**

Lead Bichromate.—see **Lead Dichromate**

Lead Borate Merck (2

$Pb(BO_3)_2+H_2O$.—Wh. powd.—*Sol.*, dil. HNO_3.—*Uses:* Techn., drier for varnishes & paints.

Lead Bromate Merck (12

$Pb(BrO_3)_2$.—Colorl. cryst.—*Sol.*, hot W.

Lead Bromide Merck (5

$PbBr_2$.—Wh. powd.—*Sol.*, hot W.

Lead Butyrate Merck (20

$Pb(C_4H_7O_2)_2$.—Colorl. plates.—*Melt.*, in hot W.

Lead Carbolate.—see **Lead Phenate**

Lead Carbonate Merck.—Highest Purity (1

(Sub-, or Basic, Lead Carbonate; White Lead; Ceruse).—$2PbCO_3.Pb(OH)_2$.—Perfectly wh.

masses or powd.—*Sol.*, acetic acid; dil. nitric acid.—Antiseptic.—*Uses: Extern.*, dust. powd. for burns; 10% oint. for indol. ulc., skin dis., inflamed excoriat. surf., erysip., & carbuncles; injurious as face powder.—*Caut.* Poison!

Lead Carbonate Merck.—Purified (1

Uses: Techn., as pigment in water colors & oil paints; in the latter, with raw linseed oil, poppy-seed oil, fat varnishes; also in cements, & for making lead-carbonate paper.

Lead Carbonate, Basic.—see **Lead Carbonate**

Lead-Carbonate Paper

(White-Lead, or "Polka" Paper; Schott's Paper).—Prepared by coating sized paper w. white lead.—*Uses:* Indicator in titrating metallic salts w. sodium sulphide (dark-brown color); also for detecting hydrogen sulphide.

Lead Chloride Merck.—Pure (2

$PbCl_2$.—Wh., cryst. powd.—*Sol.* 140 W., 200 A.

do. Merck.—Commercial (1

Uses: Techn., in various proportions with lead oxide as a pigment (Pattison's white lead, Verona Yellow, Turner's Patent Yellow).

Lead Chromate Merck.—Pure, fused; lumps, gran., or powder (2

$PbCrO_4$.—Brownish-black lumps or brown powd. —*Sol.*, acids.—*Uses:* Oxidizer in organ. chemistry, & organic analysis.

do. Merck.—Pure, precipitated (2

(Chrome, Paris, Leipzig, or Lemon, Yellow).—$PbCrO_4$. — Fine, lemon-yellow powd. — *Uses:* Techn., pigment (in oil paints & water colors), printing fabrics, & dyeing.

Lead Chromate Merck.—Reagent (3

$PbCrO_4$. — Yellowish-brown powd. or brown lumps.—*Sol.*, alm. compl. in HNO_3, caust. fixed alkalies; insol. W., NH_4OH.—*Tests:* (*Impur. Solub. in H_2O*) 5 Gm.+50 Cc. H_2O (at abt. 50° C.); shake for 5 min.; filter; evap. filtrate & ignite—wt. of res. not more than 0.001 Gm.—(*Organ. Substcs.*) on ignition, no CO_2 evolv.—*Uses:* Ultimate analysis of organic substances cont. sulphur, & material diffic. of combustion.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Lead Chromate.—Basic (1

(Chrome, or Persian, Red; Austrian Cinnabar). —$PbCrO_4.PbO$.—Red cryst., or fine, red powd. —*Uses:* Techn.

Lead Citrate Merck (4

$PbHC_6H_5O_7$.—Wh., cryst. powd.—*Sol.* W.

Lead Cyanate Merck (20

$Pb(CNO)_2$.—Wh., cryst. powd.—Insol. W.

Lead Cyanide Merck (5

$Pb(CN)_2$. — Wh. powd. — *Sol.*, in KCN solut.; insol. W.—*Uses:* Techn.

Lead Dichromate Merck (20

(Lead Bichromate). — $PbCr_2O_7$. — Brick-red powd.—Insol. W.

Lead Dioxide.—see **Lead Oxide, Brown**

Lead Ethylsulphate Merck.—Liquid (4

(Lead Sulphovinate). — $Pb(C_2H_5SO_4)_2$+aq.—Colorl. liq.—66% lead ethylsulphate.—*Sol.* W.

Lead Ferrocyanide Merck (3

$Pb_2Fe(CN)_6$.—Yellowish-wh. powd.—Insol. W.

Lead Fluoride Merck (6

PbF_2.—Wh. powd.—*Sol.*, sl. in W.

Lead Formate Merck.—Pure, cryst. or dried (8

$Pb(CHO_2)_2$.—Lustrous, wh., rhombic prisms, or need.; sweet, styptic taste.—*Sol.* W.

Lead Hydrate. } —see **Lead Oxide, Hydrated**
Lead Hydroxide. }

Lead Hypophosphite Merck (8

$Pb(H_2PO_2)_2$.—Wh., hygrosc. powd.—*Sol.* W.

Lead Hyposulphate Merck (15

$PbS_2O_6+4H_2O$.—Wh. cryst.—*Sol.* W.

Lead Hyposulphite.—see **Lead Thiosulphate**

Lead Iodide Merck.—Cryst. or powder (4

PbI_2. — Golden-yellow cryst. or powd. — *Sol.*, alkalies, potass. iodide; 200 boil. W. — *Uses: Intern.*, in scrof., phthisis, & syphilis.—*Extern.*, indol. ulcers.—*Techn.*, bronzing, gold pencils, mosaic gold, printing, & in photography.—*Dose* 1–4 grains (0.06–0.25 Gm.).—*Max. D.* 8 grains (0.5 Gm.) p. day.—*Appl.*, in oint. (1–2:10 lanum or fat).—*Caut.* Keep fr. light.

Lead Lactate Merck.—Cryst. (9

$Pb(C_3H_5O_2)_2$.—Heavy, wh., cryst. powd.—*Sol.* W.—*Caut.* Keep well stoppered.

Lead Linoleate Merck.—Fused (1

Yellowish-brown, plaster-like mass. — *Sol.* C., & hot linseed oil.—*Uses:* Techn., in varnishes (1 part dissolved in 15–20 linseed oil at 120–150° C., then added to balance of oil).

Lead Malate Merck.—Pure (25

$PbC_4H_4O_5+3H_2O$.—Wh. powd.—*Sol.*, sl. W.

Lead Metavanadate.—see **Lead Vanadate**

Lead Molybdate Merck (16

$PbMoO_4$.—Yellow powd.—*Sol.*, HNO_3; insol. W.

Lead Monosulphide.—see **Lead Sulphide**

Lead Monoxide.—see **Lead Oxide, Yellow**

Lead Naphthalenesulphonate Merck (12

(Lead Betanaphthalenesulphonate).—$Pb(C_{10}H_7SO_2)_2$.—Wh., cryst. powd.—*Sol.*, hot A.; insol. W.

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Lead Nitrate Merck.—Pure (1

$Pb(NO_3)_2$.—Wh., translucent cryst.—*Sol.* 2 W.; v. sl. A. (1.85 W., at 25° C.; 0.75 boil. W.; alm. insol. A.–U. S. P.).—Antisep.; Astring.—*Uses: Intern.*, diar., dysent., or intest. hemorrhage.—*Extern.*, in 1:10 oint.: sore nipples, cracked lips, chapped hands; aqu. solut.: ulc., or 1:100 inj. in gonor. & leucor.—*Techn.*, for matches, as mordant in dyeing & printing calico, & as source of other lead salts; pigment for paints & lakes, manuf. hyponitric acid, mordant for staining mother-of-pearl horn (combs); oxidizer in tar-dye industry; sensitizer in photography; & manuf. toys (winter scenes in glass, &c.).—*Dose* 1–$1^1/_2$ grains (0.06–0.1 Gm.).—*Max. D.* $1^1/_2$ grains (0.1 Gm.) single; 5 grains (0.3 Gm.) p. d.

do. Merck (1

Lead Nitrite Merck.—Basic.—Cryst. (2

(Lead Subnitrite).—Varia. comp.—Yellow cryst.—*Sol.*, dil. nitric acid.

Lead Oleate Merck (3

React.-prod., sodium oleate & lead acetate.—$Pb(C_{18}H_{33}O_2)_2$.—Wh., oint.-like granules or mass.—28% lead oxide.—*Sol.* A., E., oil turp., benzin.—Antisep.; Astring.—*Uses:* Oint. w. oleic acid: indol. ulc. & imperfectly granulating sores.—*Techn.*, in lacquers.

Lead Orthophosphate, Normal.—see **Lead Phosphate**

Lead Oxalate Merck (2

PbC_2O_4.—Heavy, wh. powd.—Insol. W.

Lead Oxide Brown Merck.—Pure (2

(Lead Dioxide; Lead Peroxide; Anhydrous Plumbic Acid).—PbO_2.—Dark, puce-brown to black powd.—*Uses:* Anal. & techn.; in combin. w. amorph. phosphorus as ignition surface for phosphorus-free matches; also purif. alcohol, &c.

do. Merck (1

Lead Oxide Brown Merck.—Reagent.—Free fr. Manganese (6

(Lead Superoxide; Lead Dioxide).—PbO_2.—Dark-brown, amorph. powd.; 97.5–99% PbO_2.—Insol. W.—*Tests:* (*Cl*) 5 Gm.+60 Cc. H_2O+5 Cc. HNO_3 (sp. gr. 1.153); boil; filter; to 30 Cc. filtrate add solut. $AgNO_3$–at most only sl. opalesc. turb.—(*H_2SO_4*) 5 Gm.+30 Cc. cold sat. aqu. solut. $NaHCO_3$; shake frequently 3–4 hrs.; filter; acidul. filtrate w. HCl; boil 10 min. & add. 2 Cc. solut. $BaCl_2$–no ppt. ($BaSO_4$) within 12 hrs.—(*Impur. Sol. in H_2O[$Pb(NO_3)_2$]*) 2 Gm.+60 Cc. H_2O; boil; filter; evap. 40 Cc. filtrate & ignite–wt. of res. not more than 0.0005 Gm.—(*Ca; Alkal.*) 2 Gm.+25 Cc. HCl (sp. gr. 1.124)+200 Cc. H_2O; boil 10 min. to expel Cl; pass in H_2S gas in excess; filter; evap. filtrate & ignite–wt. of res. not more than 0.002 Gm.—(*Mn*) 5 Gm.+10 Cc. conc. H_2SO_4; heat till decomp.; treat cold mass w. 20 Cc. H_2O, & add 5 Gm. PbO_2; warm again–liq. must not acquire red color.—*Uses:* Especially for detect. Mn; separ. Co & Ni.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Lead Oxide Brown Merck.—Reagent.—For Elementary Analysis accord. to Dennstedt (4

Tests: (*Cl; Ca; Alkalies*) as preceding.—(*H_2SO_4*) 25 Gm.+50 Cc. cold aqu. sat. solut. $NaHCO_3$; shake frequently for 3–4 hrs.; filter; acidul. filtrate w. HCl; boil 10 min. & add 2 Cc. solut. $BaCl_2$–no ppt. within 12 hrs.—(*HNO_3*) 1 Gm.+5 Cc. dil. $C_2H_4O_2$+10 Cc. H_2O; boil; filter; add to filtrate 1 drop 1:1000 indigo solut.+10 Cc. conc. H_2SO_4–blue color should not disapp.—(*H_2CO_3*) 5 Gm.+HNO_3 (sp. gr. 1.153)–no gas evolv. even when observed through magnifying glass.—*Uses:* Partic. in organic analysis of compounds cont. sulphur.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Lead Oxide Hydrated Merck.—Pure (2

(Lead Hydroxide; Lead Hydrate).—$Pb_2O(OH)_2$.—Wh., amorph. powd.—*Sol.*, caustic alkal.; acetic & nitric acids.—*Uses:* Chem. anal.

Lead Oxide Red Merck (1

(Red Lead; Minium; Plumbo-plumbic Oxide).—Pb_3O_4.—Bright-red powd.—*Sol.*, glac. acetic acid, hydrochloric acid; insol. W.—*Uses:* Plasters & oint's; also techn. in manuf. colorl. glass, glaze for faience, flux for porcelain painting, oil-color ship paints, varnishes; cement for glass, gas, & steam pipes; matches; pencils for writing on glass; lead peroxide, &c.—*Caut.* Poison!

Lead Oxide Yellow (1

(Plumbous Oxide; Lead Protoxide; Litharge; Massicot; Lead Monoxide).—PbO.—Yellow to yellowish-red powd.—*Sol.*, acetic & nitric acids; insol. W.—*Uses:* Oint., plasters, &c.; also techn. for glazing pottery & faience, glass flux for painting on porcelain & glass, manuf. lead glass, varnishes, glass & metal cements, producing iridescent colors on brass & bronze, coloring sulphur-containing substances (hair, nails, wool, horn, &c.).

do. Merck.—Pure (1

Lead Oxide Yellow Merck.—Reagent (4

PbO.—Yellow or reddish-yellow powd.—*Sol.* HNO_3; $C_2H_4O_2$; solut. KOH; alm. insol. W. (1:12,000).—*Tests:* (*Impur. Insol. in $C_2H_4O_2$*) 2 Gm.+5 Cc. H_2O+10 Cc. dil. $C_2H_4O_2$–no gas evolv.; boil sev. min.; when cold, filter; collect insol. res., wash, & dry at 100° C.–wt. not more than 0.005 Gm.—(*H_2CO_3*) ignite 5 Gm. by heat. to melt.-point–should not lose more than 0.005 Gm.—(*Cu; Al*) 2 Gm.+10 Cc. HNO_4OH (sp. gr.

1.153)+5 Cc. H_2O; heat; add to clear solut. 15 Cc. dil. H_2SO_4; when ppt. deposited, filter off; add to filtrate excess NH_4OH – liq. should not acquire a blue color, or deposit a ppt.—(*HNO_3; HNO_2*) 1 Gm.+5 Cc. H_2O+5 Cc. dil. $C_2H_4O_2$+1 drop solut. indigo+10 Cc. conc. H_2SO_4 – blue color should not disapp.—(*Cl*) 1 Gm.+5 Cc. HNO_3 (sp. gr. 1.153)+20 Cc. H_2O+solut. $AgNO_3$ – no turb.—(*Earths; Gypsum; Alkalies*) 1 Gm.+10 Cc. dil. $C_2H_4O_2$+100 Cc. H_2O+H_2S gas in excess; filter; evap. filtrate & ignite – wt. of res. not more than 0.003 Gm.—*Uses:* Analysis organic substances cont. halogens; flux in fusion of minerals; saponif. fats.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Lead Oxychloride Merck

$PbCl_2.3PbO$.—Yellow powd.—Insol. W.

Lead Peroxide.—see **Lead Oxide, Brown**

Lead Phenate Merck (3

(Lead Carbolate).—By boil. phenol w. litharge.—$Pb(OH)OC_6H_5$.—Yellowish to grayish-white powd.—*Sol.*, in nitric acid; insol. W. & A.

Lead Phenolsulphonate (Para-) Merck (12

(Lead Sulphocarbolate). — $Pb(C_6H_4OHSO_3)_2+5H_2O$.—Wh., lustr. need.—*Sol.* W., A.—Astring.; Antisep.—*Uses: Extern.*, skin dis., ulc., inflam., &c., inst. of zinc phenolsulphonate.

Lead Phosphate Merck.—Highest Purity (4

(Normal Lead Orthophosphate).—$Pb_3(PO_4)_2$.—Wh. powd.—Insol. W.

do. Merck.—Pure (2

Lead Phosphite Merck (5

$PbHPO_3$.—Wh. powd.—Insol. W.

Lead Platinocyanide. — see **Platinum & Lead Cyanide**

Lead Propionate Merck.—Pure (12

(Normal Lead Propionate).—$Pb(C_2H_5COO)_2$.—Cryst. mass.—*Sol.* W.

Lead Protoxide.—see **Lead Oxide, Yellow**

Lead Pyrophosphate Merck (6

$Pb_2P_2O_7+H_2O$.—Amorph., wh. powd.—Insol. W.

Lead, Red.—see **Lead Oxide, Red**

Lead Resinate Merck.—Fused (1

Uses: Techn., in varnishes (2–3 parts dissolved in 100 linseed oil at 120–150° C., then added to balance of oil).

do. Merck.—Precipitated (1

Uses: As of preceding.

Lead Rhodanide.—see **Lead Sulphocyanate**

Lead Salicylate Merck (10

$Pb(C_6H_4.OH.COO)_2+H_2O$. — Wh. cryst. — *Sol.*, hot W., & A.

Lead Selenate Merck (125

$PbSeO_4$.—Wh. powd.—Insol. W.

Lead Sesquioxide Merck (10

Pb_2O_3.—Reddish-yellow powd.—Insol. W.

Lead Silicate Merck (2

$PbSiO_3$.—Wh., cryst. powd.—Insol. W. & acids.—*Uses: Techn.*, manuf. crystal & flint glass, strass, fluxes for painting on glass & porcelain, enamels & glaze for earthenware, fireproofing fabrics, &c.

Lead Silicofluoride Merck (2

$PbSiF_6+H_2O$.—Wh., cryst. powd.—*Sol.* W.

Lead-sodium Hyposulphite.—see **Lead & Sodium Thiosulphate**

Lead Sozoiodolate.—see **Sozoiodole-Lead**

Lead Stearate Merck (3

$Pb(C_{18}H_{35}O_2)_2$. — Yellowish, crumbly powd. — *Sol.*, hot A.; insol. W.

Lead Subacetate Merck.—Cryst. (3

(Monobasic Lead Acetate).—$Pb_2O(CH_3.COO)_2$ (approx.).—Wh. powd.—*Sol.*, eas. W. w. alkal. reaction.—*Uses:* Prep. solut. lead subacetate.

do. — Solution.—*U. S. P.* (1

(Goulard's Extract).—25% subacetate of lead.—$Pb_2O(CH_3.COO)_2$.—Clear, colorl. liq.; sweetish, astring. taste.—Sp. Gr., abt. 1.235 at 25° C.—*Misc.* W.—Astring.; Antisep.; Sed.

do. — Solution, Dilute.—*U. S. P.*

(Lead Water).—Abt. 1% subacetate of lead.—Clear, colorl. liq.; sweetish, astring. taste.—*Misc.* W.—Astring.; Antisep.; Sed.—*Uses: Extern.*, burns, blisters, sprains, bruises, inflam., eye-washes, erysipelas, gonor. inject., &c.—*Incomp.*, alkalies, carbonates of alkalies, sulphuric acid, & sulphates, hydrochl. acid & chlorides, tannin & tannates, albuminous substances, acacia, &c.—*Caut.* Keep well stoppered.

Lead Subacetate Merck.—Reagent.—Solution (1

Clear, colorl. liq.; alkal. to litmus paper, but does not redden phenolphtalein.—Sp. Gr. 1.235–1.240.—*Tests:* (*Cu; Fe*) 10 Cc.+2 Cc. dil. $C_2H_4O_2$ + solut. $K_4Fe(CN)_6$ – pure wh. ppt. — *Uses:* Detect. benzoic & formic acids; precipitant; clarifier; differentiating dioxybenzenes.

Note.— For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Lead Subcarbonate.—see **Lead Carbonate**

Lead Subnitrite.—see **Lead Nitrite, Basic**

Lead, Sugar of.—see **Lead Acetate**

Lead Sulphate Merck.—Highest Purity (1

$PbSO_4$. — Wh., cryst. powd. — *Sol.*, hot conc. HCl or HNO_3; warm ammonia; solut. amm. acetate or tartrate.—*Uses:* Techn.

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Lead Sulphate Merck (1

Uses: Techn., inst. of white lead as pigment; also w. zinc in galvanic batteries, manuf. of minium, & for prep'g rap. drying oil varnishes.

Lead Sulphide Merck.—Pure, fused (2

(Plumbous Sulphide; Lead Monosulphide).—PbS.—Prep. by fusing together lead & sulphur.—Lead-gray, cryst. solid.—*Uses:* Techn., for glazing earthenware.

do. Merck.—Wet process (2

By precip. lead salts w. hydrogen sulphide.—Black powd. — *Sol.*, dil. nitric acid. — *Uses:* Techn., as decolorizer of plant acids.

Lead Sulphite Merck (2

(Normal Plumbic Sulphite).—$PbSO_3$.—Crumbly, white, insol. powd.—Antisep.; Astring.—*Uses: Extern.*, in erysip., scabies, ecz., inj. surf., & var. skin affect., in 1–10% oint.

Lead Sulphocarbolate.—see **Lead Phenolsulphonate (Para-)**

Lead Sulphocyanate Merck (1

(Lead Sulphocyanide or Rhodanide). — $Pb(SCN)_2$. — Yellowish, micro-cryst. powd.—*Sol.*, hot W.

Lead Sulphocyanide.—see **Lead Sulphocyanate**

Lead Sulphovinate.—see **Lead Ethylsulphate**

Lead Superoxide.—see **Lead Oxide Brown**

Lead Tannate Merck.—Dry (4

Brownish-yellow, odorl., tastel., amorph. powd.—*Sol.*, sl. W. or A.—Astring.; Antisep.—*Uses: Extern.*, wh. swell. of knee, gangr. ulcers, bed sores, excoriated surf., sore nipples, &c.—*Appl.*, in substc. or in 10–20% oint.

Lead Tartrate Merck (3

$PbC_4H_4O_6$.—Wh. powd.—Insol. W.

Lead Tetraethyl Merck (600

$Pb(C_2H_5)_4$.—Colorl. liq. — *Boil.* 200° C., not without decomp.—Sp. Gr. 1.62 at 15° C.—Insol. W.—Burns w. an orange-colored flame the margin of which is green.

Lead Thiosulphate Merck (1

(Lead Hyposulphite).—PbS_2O_3.—When freshly prepared, a white powd. which on long keeping darkens (formation of lead sulphide).—*Sol.*, in solut. of alkali thiosulphates; v. sl. in W.

Lead Tungstate Merck (6

(Lead Wolframate).—$PbWO_4$.—Yellowish, insol. powd.

Lead Vanadate Merck (9

(Lead Metavanadate, or Vanadinate).—$Pb(VO_3)_2$.—Yellow powd.— Insol. W.

Lead Water.—see **Lead Acetate, Basic, Solution, Dilute**

Lead, White.—see **Lead Carbonate**

Lead Wolframate.—see **Lead Tungstate**

Lead & Manganese Linoleate Merck.—Fused (1

Dark-brown, plaster-like mass.—*Sol.* C., & hot linseed oil.— *Uses:* Techn., in varnishes (1 part dissolved in 100 linseed oil at 120–150° C., then added to balance of oil).

Lead & Manganese Resinate Merck.—Fused (1

Brownish-black, resin-like pieces. — *Sol.* C., linseed oil.—*Uses:* Techn., in varnishes (2–3 parts dissolved in 100 linseed oil, at 120–150° C., then added to balance of oil).

Lead & Sodium Thiosulphate Merck (8

(Lead-sodium Hyposulphite). — $PbS_2O_3.2Na_2S_2O_3$ (Lenz).—Sm., wh., heavy cryst.—*Sol.*, thiosulphate solut's.—*Uses:* Techn., manuf. matches.

Leather Yellow.—see **Chrysaniline Yellow**

Lecithin Merck (140

(Ovo-lecithin). — Phosphorus-containing constituent of brain substance; obtained fr. egg-yolk.—Important in the vital processes of plant & animal organisms.—$C_{42}H_{84}NPO_9$, or, $C_{44}H_{90}NPO_9$.—Yellowish-wh., waxy mass.—*Sol.* A., C., E., & fatty oils; swells up in water & in sodium-chloride solut.—Tonic.—*Uses:* Neurasth., nervous affections, tuberculosis, diab., tabes, osteomalacia, rachitis, disturbances of nutrition, &c.—*Doses:* 3–8 grains (0.2–0.5 Gm.) daily; in mental affections up to 15 grains (1 Gm.) daily. —*Subcut.*, 15–45 ♏ (1–3 Cc.) of a 5% solut. in olive oil.

Ledum Palustre

(Wild Rosemary; Marsh Tea; Marsh Rosemary; Swamp Tea; Marsh Cistus; Labrador Tea).—Whole plant Ledum palustre, L. Ericaceæ.—*Habit.:* Central & Northern Europe; Asia; North America.—*Constit.:* Volat. oil; tannin; ericolin, $C_{26}H_{30}O_3$.—*Uses:* Narcot. (in whoop.-cough); Febrif.; Insecticide.

Leech Extract.—see **Extract Leech**

Legumin Merck (50

(Plant Casein).—Nuclein substance fr. leguminous plant seeds.—Wh. to yellowish powd.—*Sol.*, dil. alkal., v. dil. acids.—See also Avenin.

Leiocom.—see **Dextrin, Technical**

Leipzig Yellow.—see **Lead Chromate, Precipitated**

Lemon Balm.—see **Melissa**

Lemon Peel.—*U. S. P.*

(Limonis Cortex).—Recently separated outer rind of ripe fruit of Citrus Limonum, Risso. Rutaceæ. (Aurantiaceæ).—*Habit.:* Northern India; cultivated in West Indies, Spain, & other tropical countries.—*Etymol.:* "Citrus" fr. Grk. "kitron," citron tree, fr. "kitrion," after the town Citron in Judea, where it formerly flourished. "Limonum" fr. Arab. "limun," or "limu," fr. Sanskrit "nimbuka." — *Constit.:* Volat. oil; hesperidin, $C_{22}H_{26}O_{12}$; bitter extract-

ive.—Corrig.; Tonic; Refrig.; Antiscorbutic.—*Uses:* Febrile & inflam. diseases; also in cookery & confectionery.

Lemon Yellow.—see **Lead Chromate, Precipitated**

Lenicet

(Aluminum Acetate). — $Al_2O_3.(C_2H_4O_2)_2$. — V. fine, volumin., wh. powd.; v. diffic. solub.; non-hygroscop.—Siccative; Deodorant.—*Uses:* Hyperidrosis, &c.—*Appl.*, pure or in 20–50% mixt. w. talcum.

Lenigallol (20

(Pyrogallol Triacetate Knoll).—$(CH_3COO)_3C_6H_3$. —Wh. cryst.—*Sol.*, hot A., & aqu. solut. alkalies; alm. insol. W.—*Melt.* 172° C.—*Uses:* As mild pyrogallol preparation in psoriasis & eczema.—*Appl.*, in oint. (0.5–5:100 zinc paste).

Lenirobin (20

(Chrysarobin Tetracetate Knoll).—Yellow powd. —*Sol.* C., acetone, B.; insol. W.—Mild "reactive" or "reducing" Dermic.—*Uses:* Succed. for chrysarobin, especially in herpes, tylosis, & keratosis; reported non-toxic, non-irrit., non-staining.—*Appl.: Extern.*, like chrysarobin.

Lentin Merck (50

Medicinal grade of metaphenylenediamine hydrochloride. — $C_6H_4(NH_2)_2.2HCl$. — Colorl. to reddish cryst. powd.—*Sol.* W., A.—*Uses:* In acute diarrheas caused by contaminated food, tuberculosis, amyloid condition of intestinal walls, &c.—*Doses:* Children, $^1/_6$ grain (0.01 Gm.) 3 t. p. d.; adults, $1^1/_2$ grains (0.1 Gm.) 3 t. p. d.—*Max. D.* 5 grains (0.3 Gm.).

Leontodin (Eclectic) (40

Extr. fr. root Taraxacum officinale, Weber (Dandelion). — Dark-brown powd. — *Sol.* A. — Tonic; Diur.; Aper.—*Uses:* Liver & spleen dis. —*Dose* 2–4 grains (0.12–0.25 Gm.).

Leonurus

(Motherwort; Lion's Tail).—Herb of Leonurus Cardiaca, L. Labiatæ.—*Habit.:* Europe & northern Asia; natur. in U. S.—*Etymol.:* Grk. "leon," lion, & "oura," tail, *i.e.*, the spikes of flowers were supposed to bear some resemblance to a lion's tail. "Cardiaca" refers to the supposed stimulant action of the plant.—*Constit.:* Bitter principle; alkaloid-like substance; hard & soft resins; fixed oil; wax.—Emmen.; Nerve Tonic. —*Uses:* Amenor., hyster., &c. — *Dose:* Fld. extr., 30–60 ♏ (2–4 Cc.).

Leonurus Lanatus.—see **Ballota**

Lepidine Merck.—Fr. Cinchonine (250

(Gamma-Methylquinoline; Cincholepidine). — $C_6H_4.C(CH_3):CH.CH:N$.—Oily liq., solid at 0° C.; odor like that of quinoline; turns red-brown in light.—Sp. Gr. 1.099 at 0° C.—*Sol.*, all prop., A., E., B.; sl. W.—*Boil.* 258–263° C.—*Caut.* Keep fr. light.

Leprolin

Serum prepared fr. cultures of lepra bacilli.—*Uses:* Lepra.—*Dose*, abt. 150 ♏ (abt. 10 Cc.) inject. in gluteus or muscle of arm at intervals of fr. sev. days to 2 weeks.

Leptandra.—*U. S. P.*

(Culver's Root; Black Root).—Dried rhizome & roots of Veronica (Leptandra) virginica, L. Scrophulariaceæ.—*Habit.:* North America.—*Etymol.:* Grk. "leptos," small, thin, & "aner," man, *i.e.*, referring to its two slender stamens. "Veronica," fr. Grk. "pherein," to bear, & "nike," victory, or fr. Lat. "vera," true, & Grk. "eikon," image, *i.e.*, flower of St. Veronica, thought to resemble Christ's face.—*Constit.:* Leptandrin; resin; saponin; tannin; mannit.—Purgat.; Emet.; Cholagogue; Alter.; Tonic.—*Uses:* Constip., liver diseases, diar., & dysent. —Supposed to act like calomel.—*Doses:* 15–60 grains (1–4 Gm.).—Fld. extr., 15–60 ♏ (1–4 Cc.).—Hydro-alcoh. extr., 3–10 grains (0.2–0.6 Gm.).—Tinct., 30–75 ♏ (2–5 Cc.).

Leptandrin Merck.—Pure (135

Resinoid fr. rhizome Veronica virginica, L.—Brownish-yellow powd. — *Sol.* A. — Cholag.; Purg.; Alter.—*Uses:* Chronic constip., duodenal indigest., torpid liver, &c. Favorite w. the Eclectics inst. of mercurials.—*Doses:* Cholag. & alter., 1–3 grains (0.06–0.2 Gm.); purg., 8 grains (0.5 Gm.).

do. Merck (18

Brown powd.—*Sol.* A.

Lettuce, Wild.—see **Lactuca**

Leucæna

(Jumbai).—Lvs. of Leucæna glauca, Benth. Mimosæ.—*Habit.:* Central America; South America; West India.—*Etymol.:* Fr. Grk. "leukainein," to bleach, referring to the almost white color of the flowers.—*Uses:* Depilat.

Leucine Merck.—Pure (1750

(Alpha-aminoisocaproic Acid).—Fr. horn shavings, by boil. w. H_2SO_4 & water.—$C_6H_{13}NO_2$, or, $(CH_3)_2:CH.CH_2.CH:(NH_2).COOH$. — Wh. powd. —*Sol.*, sl. W.; v. sl. A.—*Melt.* 170° C., w. sublim.

Leucine Hydrochloride Merck (1350

$C_6H_{13}NO_2.HCl$.—Wh. cryst.—*Sol.* W.

Leucoalizarin.—see **Anthrarobin**

Leucodendron

Lvs. of Leucodendron concinnum. Proteaceæ.—*Habit.:* Cape of Good Hope.—*Etymol.:* Fr. Grk. "leukos," white, & "dendron," tree.—*Constit.:* Proteacin (glucoside, very nearly allied to saligenin); leucoglycodrin; leucodrin.—*Uses:* Antiper. in malaria.

Leucogen.—see **Sodium Bisulphite**

Leucoindophenol.—see **Indophenol White**

Leucoline.—see **Quinoline**

Levant Soapwort.—see **Gypsophila**

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Levisticum

(Lovage; Sea Parsley; Ligusticum).—Whole plant Levisticum officinale, Koch. (Ligusticum Levisticum, L.). Umbelliferæ.—*Habit.:* Southern Europe.—*Etymol.:* "Levisticum," corrupted fr. "Liguria," the name of the country where the plant abounded.—*Constit.:* Volat. oil; resin; bitter principle; angelicic acid.—*Uses: Herb:* Arterial & nervous stimulant.—*Root:* Diuret. in dropsy; also used in fetid breath, & amenor. —*Seeds:* Tonic.—*Doses: Root:* Fld. extr., 15–60 ♏ (1–4 Cc.).—Alcoh. extr., 8–25 grains (0.5–1.5 Gm.).

Levulose Merck.—Cryst. (65

(Fructose; Fruit Sugar).—Fr. cane sugar by hydrolysis.—$C_6H_{12}O_6$, or, $CH_2OH.CO.COH(H).CH(OH).CH(OH).CH_2OH$. — Yellowish-wh., sweet cryst.—*Sol.* W., A.—*Uses:* Inst. of sugar in diabetes, & physiologico-chemical experiments.

do. Merck.—Syrupy (8

$C_6H_{12}O_6$+aq.—Yellowish syrup.—*Uses:* Micros. & preserv. medium for fat & fat impregnations.

Levurargyre

Mercury-nucleoproteid obt. by gradually habituating beer-yeast to act. of $HgCl_2$.—*Uses:* Syph. —*Dose* 30 ♏ (2 Cc.) of 1% solut.

Liatris

(Deer's Tongue; Vanilla Plant).—Lvs. of Liatris (Trilisa) odoratissima, Willd. Compositæ.—*Habit.:* U. S. (Virginia to Florida & Louisiana). —*Etymol.:* Fr. Grk. "leios," smooth, & "iatros," physician. — *Constit.:* Volat. oil; cumarin. — Stim.; Tonic.—*Uses:* Nervous affect., & said to be of benefit in whoop.-cough.—*Techn.*, perfumery, & perfuming tobacco (smoking, chewing, & snuff).—*Dose:* Fld. extr., 30–60 ♏ (2–4 Cc.).

Lichenin Merck (250

(Moss Starch).—Carbohydrate fr. Cetraria islandica, Acharius (Iceland Moss).—$(C_{12}H_{20}O_{10})n$. —Wh., gelat. mass, or wh. powd.—*Sol.*, boil. W.; hydrochl. acid.—Demulcent.

Lichtensteinia

Root of Lichtensteinia interrupta, E. M. Umbelliferæ.—*Habit.:* South Africa; Natal.—*Etymol.:* Named for Martin Heinrich Karl Lichtenstein, a German physician & naturalist (1780–1857).—*Uses:* Antiper. in fevers accompanied hy an enlarged spleen.

Licorice.—see **Glycyrrhiza**

Licorice; Indian, or *Wild.*—see **Abrus**

Life Everlasting.—see **Gnaphalium**

Life Root.—see **Senecio Aureus**

Light Green.—see **Methyl Green**

Lignum Vitæ.—see **Guaiacum Wood**

Ligroin, Light.—see **Canadol**

Ligusticum.—see **Levisticum**

Ligustrin.
Lilacin. } see **Syringin**

Lilacine.—see **Terpineol**

Lily-of-the-Valley.—see **Convallaria**

Lime.—see **Calcium Oxide**

Lime, "Chloride of."—see **Lime Chlorinated**

Lime Chlorinated (1

(Bleaching Powder; "Chloride of Lime"; "Calcium Hypochlorite").—Fr. act. chlorine on lime; cont. not less than 35% avail. chlorine.—$Ca(ClO)_2+CaCl_2+2H_2O$, or, $CaCl(ClO)+H_2O$(?). —Compos. variable.—Deliq., wh. powd.; strong odor of hypochlorous acid; unpleas., saline taste. —*Sol.*, partly in W.—Bleach.; Disinf.—*Uses:* As a gen'l disinfectant.—*Extern.*, in eye-washes & gargles (1:25), compresses (7.5–15:500), & in 1:9 oint. in frostbites, & 1:1000 solut. as inject. in gonor.—*Techn.*, bleach. agent; oxidizer in calico printing for obtaining white designs on a colored ground; removing fusel oil fr. alc.; destroy. caterpillars.—*Antid.*, ammonia vapors, ether, steam.—*Caut.* Keep dry, fr. air.

Lime Chlorinated Merck.—Reagent.—Cubes (1

Wh. cubes; Cl odor; evolves at least 25% Cl on add. HCl.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Lime Hypophosphite.—see **Calcium Hypophosphite**

Lime, Liver of.—see **Lime Sulphurated**

Lime Saccharated.—see **Calcium Saccharate**

Lime Slaked.—see **Calcium Hydroxide**

Lime Sulphurated Merck (1

(Calcic Liver of Sulphur; Liver of Lime; Hepar Calcis; Crude Calcium Sulphide).—Mixt. calcium monosulphide (at least 55%) & sulphate, w. carbon, obt. by calcin. calcium sulphate w. carbon & starch.—Yellowish-gray powd.; odor of hydrogen sulphide; unpleas. alkal. taste.—*Sol.*, v. sl. cold W.; more read. in boil. W., w. part. decomp.; insol. A. — Antipyic; Alter.; Depil. — *Uses: Intern.*, smallpox, erysipelas, scarlet fever.—*Extern.*, acne, furuncular erup. Also used in Hahnemann's wine test, as depilatory in tanning, & manuf. luminous paints, &c. —*Dose:* As prophylactic for influenza, 1 grain (0.06 Gm.) daily, in pills.—In measles, erysip., & scarlet fever, $1^1/_2$–3 grains (0.1–0.2 Gm.) single; & 30–40 grains (2–2.6 Gm.) daily.—*Appl.* 1–3:25 oint.—Also in baths (2–4 oz., [60–120 Gm.] per bath).—*Caut.* Keep fr. air.

do.—Solution.—*N. F.*

(Vleminck's Solution; Solution Calcium Oxysulphuret).—By boil. 165 lime (slaked) w. 250 Gm. sulphur & W. to make 1000 Gm.

Lime-Water.—see **Calcium Hydroxide, Solution**

Limonene, Inactive.—see **Dipentene**

Limonis Cortex.—see **Lemon Peel**

Linalool Merck (20

$C_{10}H_{17}OH$.—Chief constit. of linaloë oil.—Colorl. liq.—Sp. Gr. 0.873 at 15° C.—*Boil.* 195–199° C.—Odor like that of oil bergamot & of French oil lavender, hence linalool is sometimes added to these oils; also used in perfumery (in Extr. de Muguet).

Linaria

(Toad Flax; Snap Dragon; Ramsted).—Whole plant Linaria vulgaris, Miller. Scrophulariaceæ.—*Habit.:* Europe; natur. in U. S.—*Etymol.:* Lat. "linum," flax, referring to the flax-like leaves.—*Constit.:* Linarin; linaracrin; linaresin; antirrhinic acid; linarosmin; tannic & citric acids.—Laxative; Diuretic.—*Uses:* Especially in hemorrhoids.

Linden.—see **Tilia**

Lindera

(Fever Bush; Spice Bush; Wild Allspice).—Bark of Lindera Benzoin, Meissner. Lauraceæ.—*Habit.:* Ontario to North Carolina & Kansas.—*Constit.:* Volat. oil.—Diaphor.; Stim.; Aromat.—*Uses:* To produce sweating in febrile inflam. & dropsical condit.—*Dose:* Fld. extr., 30–60 ♏ (2–4 Cc.).

Liniment Camphor

(Camphorated Oil).—20% solut. of camphor in cottonseed oil.—Rubefacient, Stimulant.—*Uses: Intern.,* collapse.—*Extern.,* rheum., neuralgia, &c.—*Dose* 5–10 ♏ (0.3–0.6 Cc.) hypoderm. in collapse.

Linseed.—*U. S. P.*

(Flaxseed; Linum).—Ripe seed of Linum usitatissimum, L. Linaceæ.—*Habit.:* Cultivated everywhere.—*Etymol.:* Grk. "linon," fr. Celtic "llin," a thread; Lat. "linum," fr. "linea," a thread, referring to the use of the fibers for making fabrics. Lat. "usitatus," useful. "Flaxseed," fr. Anglo-Saxon "fleax," "flechten," to braid, plait (its fibers), + seed.—*Constit.:* Fixed oil; mucilage; proteids; amygdalin.—Purgat.; in ground form in cataplasms & enemas; Antidiabetic.—*Uses: Techn.,* as source of linseed oil. The oil is used as a substitute for glycerin in frost bites, & mixed with lime-water for burns, &c. Warm oil is one of the best remedies for burns by fire or steam; heated with lead & manganese oxides it affords siccatives; mixed with cork powder it forms linoleum; paper & fabrics impregnated with the oil are rendered waterproof & tough.—*Dose* 4 dr. (15 Gm.) boiled with 1 quart (abt. 1 liter) water to make 1 pint (abt. $^1/_2$ liter), the decoct. to be taken during 1 day, in diabetes.

Lion's Tail.—see **Leonurus**

Lipanin

Substitute for cod-liver oil, & consisting of olive oil w. 6% oleic acid.—Oily liq.; pleas. odor.; easily emulsified & absorbed.—*Dose:* Adults, 2–6 tablespoonfuls daily; children, 1–4 teaspoonfuls daily.

Lipp's Reagent.—**For dextrin**

Satur., aqu. solut. lead acetate treated w. excess lead oxide, & then extracted w. W.—The filtrate affords a white ppt. on boiling w. dextrin.

Lippia

(Fog-fruit).—Whole plant Lippia dulcis var. Mexicana. Trevir. Verbenaceæ.—*Habit.:* Mexico.—*Etymol.:* Named for the French physician, Auguste Lippi (1678–1703).—*Constit.:* Lippiol; volat. camphor; volat. oil.—Expector.—*Uses:* Coughs, colds & affections of respir. organs.—*Doses:* 30–60 grains (2–4 Gm.) in form of fld. extr.—Tinct., 60 ♏ (4 Cc.).

Liquidambar Orientalis.—see **Styrax**

Liquor Ammonia.—see **Water Ammonia**

Liquorice.—see **Glycyrrhiza**

Liriodendron

(Tulip-tree; Yellow Wood).—Bark of Liriodendron tulipifera, L. Magnoliaceæ.—*Habit.:* Eastern U. S., west to Wisconsin; China.—*Etymol.:* Grk. "leirion," lily, & "dendron," tree, *i.e.,* the tree bears lily-like blossoms. "Tulipifera," tulip-bearing.—*Constit.:* Liriodendrin(?); tulipiferine; glucoside; bitter extractive; volat. oil; resin.—Alter.; Antiper.—*Uses:* Dyspep., rheumat., & ague.—*Dose:* Fld. extr., 30–60 ♏ (2–4 Cc.).

Liriosma Ovata.—see **Muira Puama**

Litharge.—see **Lead Oxide, Yellow**

Lithium Merck (1500

Metal.—Li.—*Etymol.:* Fr. Grk. "lithos," stone, because first found in petalit (a silicate) by Arfvedson in 1818.—Silvery wh. metal, somewh. harder than sodium.—Lightest solid substance.—Sp. Gr. 0.5936 at 15° C.—*Melt.* 180° C.—*Uses:* All salts in lithiasis, arthritis, & chr. rheum.—*Caut.* Keep under benzin, naphtha or o. liquid free fr. oxygen.—*Tests:* Colors flame red; decomp. W.

Lithium Acetate Merck (4

$LiC_2H_3O_2 + 2H_2O$.—Colorl. cryst.—*Sol.* W.—Diuret.; Antipodagric.—*Uses:* See Lithium.—*Dose* 8–25 grains (0.5–1.6 Gm.).

Lithium Agaricinate

Wh. powd.; sl't saline taste.—*Sol.,* eas. W.—Antihidrotic.—*Uses:* Night-sweats of phth.—*Dose* $1^1/_2$–3 grains (0.1–0.2 Gm.) at night.

Lithium Arsenate Merck (12

$2Li_3AsO_4 + H_2O$.—Wh. powd.—*Sol.* W.—Antilith.; Alter.—*Uses:* Lithiasis, malar. affect., skin dis., & anemia.—*Dose* $^1/_{60}$–$^1/_{15}$ grain (0.001–

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0.004 Gm.).—*Antid.*, emetics, stomach siphon, hot milk, eggs, magnesia, sacchar. oxide of iron, dialyzed iron, or fresh iron sesquioxide.—*Caut.* Poison!

Lithium Benzoate Merck (2

$LiC_7H_5O_2$.—Wh., cryst. powd.—*Sol.* 3 W., 13 A., at 25° C. (U. S. P.), 2.5 boil. W., 10 boil. A. —Antilith.; Diuret.; Antirheum.—*Dose* 5–20 grains (0.3–1.3 Gm.).

do. Merck.—Fr. natural acid (12

do. Merck.—Effervescent (6

Effervesc. mixt. lithium benzoate, citric acid, a bicarbonate, & sugar.—10% lithium benzoate. —Wh., gran. powd.—*Sol.* W.—Antilith.; Anod. —*Dose* 30–60 grains (2–4 Gm.).

Lithium Benzosalicylate Merck (4

White, cryst. powd.—*Sol.* W.—Properties of lithium benzoate & salicylic acid.

Lithium Bichromate.—see **Lithium Dichromate**

Lithium Bitartrate Merck (5

$LiC_4H_5O_6+H_2O$.—Wh. cryst.—*Sol.* W.—*Uses:* Gouty & suppurative gingivitis.—*Dose* 5 grains (0.3 Gm.) 3 t. p. d.

Lithium Borate Merck (9

(Lithium Biborate). — $Li_2B_4O_7+5H_2O$. — Wh., cryst. powd.—*Sol.*, sl. W.

Lithium Borocitrate Merck (12

$Li_2HC_6H_5O_7.2HBO_2+2H_2O$.—Wh. powd.—*Sol.* W.—Antarthritic.—*Dose* 1–5 grains (0.06–0.3 Gm.) 3 t. p. d.

Lithium Bromide Merck (4

LiBr.—Wh., deliq., sl. bitter gran.—*Sol.* 0.6 W. at 25° C., 0.3 boil. W.; v. sol. A.; also sol. E. (U. S. P.).—Sed.; Antilith.—*Uses:* Espec. in epilepsy & headache; also acute & chronic parenchymatic nephritis.—*Techn.*, in photography.—*Dose* 10–30 grains (0.6–2 Gm.).—*Caut.* Keep well stoppered.

Lithium Cacodylate Merck (70

$Li(CH_3)_2AsO_2$+aq.—Wh. powd.—*Sol.* W.

Lithium Carbolate.—see **Lithium Phenate**

Lithium Carbonate Merck.—Pure (3

(Normal Lithium Carbonate).—Li_2CO_3.—Light, wh., alkal. powd.—*Sol.* 75 W. at 25° C., 140 boil. W.; sol. dil. acids (U. S. P.).; insol. A.—Antilith.; Diuret.; Antirheum.—*Uses:* Lithiasis, rheum., gout, & arthritis; for gravel inject 15 grains (1 Gm.) in aqu. solut.; also in manuf. mineral waters.—*Dose* 5–15 grains (0.3–1 Gm.) in soda-water or lemonade.

do. Merck.—Highest Purity (3

do. Merck. Effervescent (4

Mixt. lithium carbonate, sodium bicarbonate, citric acid, & sugar.—Wh., gran. powd.—Abt. 10% lithium carbonate.—*Sol.* W., with effervesc.—*Dose* 30–60 grains (2–4 Gm.).

Lithium-Carmine.—see **Orth's Lithium-Carmine**

Lithium Chlorhydromethylarsenate

$CH_3AsHCl(LiO)_2O$.—Hygrosc. cryst.—*Sol.*, eas. W., A.—*Uses:* As an arsenical.—*Dose* 5–10 ♏ (0.3–0.6 Cc.) of 4% solut.

Lithium Chloride Merck (4

LiCl.—Colorl., deliq. cryst.; sharp, saline taste. —*Sol.* W., A., E., C.—*Uses:* As carbonate; also pyrotechn. & in manuf. mineral waters.

Lithium Chromate Merck (25

$Li_2CrO_4+2H_2O$.—Yellow, deliq., cryst. powd.—*Sol.*, eas. W.

Lithium Citrate Merck.—Cryst. or powder (2

$C_3H_4.OH.(COOLi)_3.4H_2O$. — Transp., colorl. cryst. or cryst. powd.; fbl. alkal. taste.—*Sol.*, abt. 2 W. at 25° C., 1.5 boil. W.; alm. insol. A., & E. (U. S. P.).—Diuret. & Antarthrit.—*Uses:* More agre. than o. lithium salts, & less irrit. to stomach.—*Dose* 5–20 grains (0.3–1.3 Gm.).

do. Merck.—Effervescent (4

Mixt. lithium citrate, sodium bicarbonate, tartaric & citric acids. — Abt. 20% lithium citrate.—Wh. gran.—*Sol.* W., with effervesc.—*Uses:* Agreeable citrate drink.—*Dose* 30–60 grains (2–4 Gm.).

Lithium Dichromate Merck (11

(Lithium Bichromate).—$Li_2Cr_2O_7$.—Yellowish-red, cryst. powd.—*Sol.* W.—*Caut.* Keep well stoppered.

Lithium Dithiosalicylate (55

$Li_2C_{14}H_8S_2O_6$, or, $LiC_7H_4O_3S:SC_7H_4O_3Li$.—Gray powd.—*Sol.* W., A.—Antirheum.; Antilith.—*Uses:* Chronic rheum. & gout.—*Dose* 3–10 grains (0.2–0.6 Gm.).

Lithium Fluoride Merck.—Pure (22

LiF.—Wh., cryst. powd.—*Sol.*, abt. 400 W.

Lithium Formate Merck (20

$LiCHO_2+H_2O$.—Colorl. cryst.—*Sol.* W.—Antipodagr.—*Dose* 4 fl. dr. (15 Cc.) of 1% aqu. solut. every 2–3 hours.

Lithium Glycerinophosphate Merck (14

$C_3H_7O_3PO(OLi)_2$.—Wh., cryst. powd.—*Sol.* 3 cold W.—*Uses:* Gout, accomp. by nervous debility.—*Dose* 8–15 grains (0.5–1 Gm.).

Lithium Hippurate Merck (30

$LiC_9H_8NO_3$, or, $NH(C_7H_5O).CH_2COOLi$. — Wh. powd.—*Sol.*, sl. in hot W.—*Uses:* Uric-acid diathesis.—*Dose* 5–20 grains (0.3–1.3 Gm.).

Lithium Hydrate.—see **Lithium Hydroxide**

Lithium Hydroxide Merck (12

(Lithium Hydrate). — LiOH. — Wh., caustic powd.; acrid, alkaline taste; absorbs carbon dioxide fr. air.—*Sol.* W.; sl. A.—*Caut.* Keep well stoppered.

Lithium "Ichthyolsulphonate."—see **Ichthyol Lithium**

Lithium Iodate Merck (35

$LiIO_3$.—Wh. powd.—*Sol.* 1.25 W.—*Uses:* Uric-acid diathesis, renal colic, & gout.—*Dose* $2^1/_2$–3 grains (0.15–0.2 Gm.) 3 t. p. d.

Lithium Iodide Merck (6

LiI.—Wh., deliq., coarse powd.—*Sol.* W.—Antirheum.; Antilith.; Alter.—*Uses:* Chronic sciat., gout, & artic. rheum.—*Techn.*, to some extent in photography.—*Dose* 1–5 grains (0.06–0.3 Gm.).

Lithium Lactate Merck (7

$LiC_3H_5O_3$.—Wh., cryst. powd.—*Sol.* W.—*Uses:* As of carbonate.

Lithium Metaborate Merck (15

$LiBO_2$.—Wh. powd.—*Sol.*, sl. W.

Lithium Metavanadate.—see **Lithium Vanadate**

Lithium Nitrate Merck (5

$LiNO_3$.—Deliq., transp. cryst.—*Sol.* W., A.—*Uses:* As of carbonate.—*Caut.* Keep in well-stoppered bot.

Lithium Oxalate Merck (16

$Li_2C_2O_4$.—Colorl. cryst.—*Sol.* 8 W.

Lithium Phenate Merck (8

(Lithium Carbolate, Phenolate, or Phenylate; Phenol-lithium).—Wh. or reddish powd.—*Sol.* W.—Antisep.; Antilith.

Lithium Phenolate.—see **Lithium Phenate**

Lithium Phenolsulphonate Merck (12

(Lithium Sulphocarbolate, or Sulphophenylate). — $LiC_6H_5SO_4 + H_2O$. — Wh. cryst. — *Sol.* W. — *Uses: Intern.*, uric-acid diathesis.—*Extern.*, as inject. in gonor.

Lithium Phenylate.—see **Lithium Phenate**

Lithium Phosphate Merck (5

(Lithium Orthophosphate).—$2Li_3PO_4 + H_2O$.—Wh., cryst. powd.—*Sol.*, in acids; v. sl. W.—*Dose* 10–30 grains (0.6–2 Gm.) per day.

Lithium Platinichloride.—see **Platinum & Lithium Chloride**

Lithium Platinocyanide.—see **Platinum & Lithium Cyanide**

Lithium Quinate.—see **Urosine**

Lithium Rhodanide.—see **Lithium Sulphocyanate**

Lithium Salicylate Merck (2

$LiC_7H_5O_3$.—Wh. to pink powd.; deliq. in moist air.—*Sol.* W., A.—Decomp. by heat.—*Uses:* Gout & articular rheumatism instead of sod. salicylate; less irritat. to stomach than salicylic acid.—*Dose* 10–30 grains (0.6–2 Gm.).—*Caut.* Keep in well-stoppered bot.

do. Merck.—Effervescent (5

Lithium salicylate, sod. bicarbonate, tartaric acid, & sugar.—Wh., gran. powd.—Abt. 12% lithium salicylate.—*Sol.* W., with effervesc.—*Dose* 30–60 grains (2–4 Gm.).

Lithium Silicofluoride Merck (22

$Li_2SiF_6 + 2H_2O$.—Colorl. cryst.—*Sol.* W.—*Caut.* Keep in well-stoppered bot.

Lithium Sozoiodolate.—see **Sozoiodole-Lithium**

Lithium Succinate Merck (25

$Li_2C_4H_4O_4 + 3H_2O$.—Colorl. cryst.—*Sol.* W.

Lithium Sulphate Merck (6

$Li_2SO_4 + H_2O$. — Colorl. cryst. — *Sol.* W., A. — Cath.; Antiarthrit.—*Uses:* Constip. w. torpid liver or gravel.—*Dose* 10–30 grains (0.6–2 Gm.).

Lithium Sulphocarbolate.—see **Sodium Phenolsulphonate**

Lithium Sulphocyanate Merck (20

(Lithium Sulphocyanide or Rhodanide).—LiSCN.—Deliq., wh. cryst.—*Sol.* W.—*Caut.* Keep in well-stoppered bot.

Lithium Sulphocyanide.—see **Lithium Sulphocyanate**

Lithium "Sulphoichthyolate." — see **Ichthyol Lithium**

Lithium Sulphophenylate.—see **Lithium Phenolsulphonate**

Lithium Tartrate Merck (6

$Li_2C_4H_4O_6 + H_2O$.—Wh. cryst.—*Sol.* W.

Lithium Urate Merck (50

$LiC_5H_3N_4O_3$.—Wh. powd.—*Sol.*, sl. boil. W.—Antiarthrit.—*Dose* 8–30 grains (0.5–2 Gm.) p. d.

Lithium Valerate Merck (12

(Lithium Valerianate).—$LiC_5H_9O_2$.—Wh. cryst.; valerian odor.—*Sol.* W.—Antispasm.; Antilith.—*Uses:* Lithiasis, or rheum. w. hysteria, or nervousn.—*Dose* 5–15 grains (0.3–1 Gm.).

Lithium Vanadate Merck (75

(Lithium Metavanadate).—$LiVO_3$.—Yellowish powd.—*Sol.* W.—Antiarthrit.—*Dose* $^1/_{15}$ grain (0.004 Gm.) daily, in water, repeated every second or third day.

Lithium & Caffeine Sulphonate

(Symphorol, L.). — $LiC_8H_9N_4O_2.SO_3$. — Wh., micro-cryst. powd.; bitter taste. — *Sol.* W. — Diuretic.—*Uses:* Kidney dis., fatty heart, & obesity; does not affect the blood pressure or depress the heart power. Solut. does not keep well; & as it has a bitter taste it is best administered in capsules.—*Dose* 15 grains (1 Gm.) 4–6 t. p. d. in capsules.

Lithium & Potassium Tartrate Merck (35

$LiKC_4H_4O_6$. — Wh., cryst. powd. — *Sol.* W. — Antilith.; Lax.; Diur.—*Uses:* Lithiasis & rheum., w. chronic constip.—*Dose* 30–60 grains (2–4 Gm.).

Lithium & Sodium Salicylate Merck (7

Molec. prop. of the two salts.—Wh. powd.—*Sol.* W.—Antirheum.; Antilithic; Diur.—*Uses:* Lithiasis, rheum., gout, &c.—*Dose* 10–30 grains (0.6–2 Gm.).

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Lithospermum

(Gromwell; Semen Milii Solis; Stone Seed).—Seed of Lithospsrmum officinale, L. Boraginaceæ.—*Habit.:* Europe; Asia; natur. in U. S.—*Etymol.:* Grk. "lithos," stone, & "sperma," seed, referring to the hard, shining seed; or perhaps because of its resolving action on calculi.—Diuret.; Emmen.—*Uses:* Calculous affections, dysent. & gonor.

Lithrea

(Litré).—Lvs. of Lithrea caustica (L. venenosa, Miers). Anacardiaceæ.—*Habit.:* Chili.—*Etymol.:* Fr. "lithri," the Chilian name of the plant. —*Constit.:* A substance most probably resembling cardol; resin; volat. oil.—*Uses:* The alcoholic extract is epispastic & counterirrit.

Litmus Merck.—Purified (10

(Lacmus; Turnsole; Lacca Musica; Lacca Cœrulea).—Blue coloring matter fr. var. spec. Lichens (particularly Variolaria, Lecanora, & Rocella). Parmeliaceæ. — *Habit.:* Shores of African & Atlantic Islands, & coasts of various countries.—*Etymol.:* Lat. "lacca musica," fr. "muscus," moss, because obtained fr. a moss. —Small, light, friable, finely granular cakes or cubes; violet-blue color; charact. odor recalling that of indigo; pungent, somewh. saline taste; partly solub. in W., & dil. A.—*Constit.:* Azolitmin, $C_7H_7NO_4$; erythrolitmin; spaniolitmin; lecanoric acid, $C_{16}H_{14}O_7$; orcin, $C_7H_8O_2$; erythrolein.—*Uses:* As indicator in volum. analysis (alkalies = blue; acids = red).

do. Merck.—Cubes (1

Blue cubes or irreg. pieces.—*Sol.*, partly in W. —*Uses:* Color for foods; dye; also indicator in volumetric analysis.

Litmus Merck.—Reagent (15

Specially purif. dye consist. chiefly of erythrolitmin & azolitmin, & obt. fr. var. spec. lichens. Litmus tincture (for indicator): diss. 1 Gm. in 800 Cc. hot W., & add by drops dil. H_2SO_4 until liq. red; then boil 10 min. to expel CO_2. If blue color supervenes during boil. add more acid. Now add baryta water by drops till liq. violet; set aside to deposit, then filter; preserve in bots. not compl. filled, & simply covered w. a loose cap or stoppered w. a plug of cotton.—*Tests:* (*Indicator*) 0.2 Cc. tincture + 100 Cc. H_2O; boil in platin. dish till free fr. CO_2; add 0.05 Cc. decinorm. HCl – violet color must change to red; on further add. 0.05 Cc. decinorm. KOH red color must change to pure blue.—*Uses:* Indicator, & prepar. nutrient media in bacteriology.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Litmus Paper Merck.—Blue

Wh. paper, charged w. blue litmus.—*Uses:* Exceedingly sensitive indicator & test for acids (red color).

Litmus Paper Merck.—Neutral

Unsized, wh. paper, charged w. neutral litmus. —*Uses:* Exceedingly sensitive indicator for acids & alkalies (alkalies=blue; acids=red).—Must be preserved in well-closed bottles, because prone to spoil.

do. Merck.—Red

Unsized, wh. paper, charged w. red litmus.—*Uses:* Indicator for alkalies (blue color).

Lûré.—see **Lithrea**

Liver Merck.—Dried, powder (20

Fr. the fresh livers (deprived of blood) of cattle. —1 part = abt. 5 parts fresh organ.—*Uses:* Atrophic hepatic cirrhosis, diabetes, various hemorrhages, & hemeralopia.—*Dose:* Up to 5 dr. (20 Gm.) p. d.

Liver of Antimony.—see **Potassium & Antimony Sulphurated**

Liver of Sulphur.—see **Potassa Sulphurated**

Liverwort.—see **Hepatica**

Lobelia.—*U. S. P.*

(Indian or Wild Tobacco; Emetic Herb; Asthma Weed; Bladder Pod; Vomitwort).—Dried lvs. & tops (also seeds, though not official) of Lobelia inflata, L., Lobeliaceæ, collected after a portion of the capsules have become inflated.—*Habit.:* Canada; U. S.—*Etymol.:* Named for Matthias de Lobel, a Flemish botanist & physician (1538–1616); Lat. "inflatus," inflated, referring to the inflated, egg-shaped pod.—*Constit.: Lvs. & Tops:* Lobeline; lobelacrin; inflatin; lobelic acid; volat. oil; resin; wax; gum.—*Seeds:* Fixed oil; lobeline.—*Lvs.:* Antispasm.; Emetic; Expector.; Nervine; Purgat.; Narcot.; Diuret.; Diaphor.—*Seeds:* Expector.; Emetic; Antiasthmatic.—*Uses:* Both lvs. & seeds employed in spasm. asthma, whoop.-cough, croup, pneum., & cold.—*Doses: Lvs.:* 1–5 grains (0.06–0.3 Gm.) as expector.; 10–20 grains (0.6–1.3 Gm.) emet. —Alcoh. extr., $^1/_2$–2 grains (0.03–0.12 Gm.).—Fld. extr., 2–10 ♏ (0.12–0.6 Cc.).—Tinct., 8–15 ♏ (0.5–1 Cc.) expector.; 30–60 ♏ (2–4 Cc.) emetic.—*Seed:* Fld. extr., 2–10 ♏ (0.12–0.6 Cc.). —*Antid.*, emetics; tannin; stimulants; strychnine (hypoderm.); opiates; picrotoxin; digitalis; atropine; artificial heat; brandy; friction; mustard baths.

Lobeline Merck.—Pure, fr. Seeds (3000

Alkaloid fr. seeds of Lobelia inflata, L.—$C_{18}H_{23}NO_2$.—Yellow syrup.—*Sol.* C., A., E.—Sed.; Antispasm.—*Uses:* Salts best for medical use (see the sulphate, fr. seeds).—*Antid.*, aid emesis by large draughts of warm water. Give tannin, brandy, morphine, &c. Use mustard & friction. —*Caut.* Poison! *Not* the eclectic "Lobelin."

Lobeline Sulphate Merck.—Fr. Leaves (2000

Yellowish, coarse powd.; less hygrosc. than that fr. seed.—*Sol.* W., A.—*Uses & Dose:* As of the sulphate fr. seeds.

Lobeline Sulphate Merck.—Fr. Seeds (2500

Very deliq., yellow, friable pieces.—*Sol.* W., A. —*Uses:* Asthma, bronch., dyspnea, chorea, whoop.-cough, gout, epilepsy, & spasm. neuroses. —*Dose:* Spasm. asthma, 1 grain (0.06 Gm.) per day, grad. increasing to 3–6 grains (0.2–0.36 Gm.) per day; for children, $^1/_6$–$^3/_4$ grain (0.01–0.05 Gm.) per day.—*Incomp.*, same as of alkaloids in general.—*Antid.*, stomach siphon, emetics & tannin. Stimulate later w. brandy, spirit of ammonia, &c. Give morphine.—*Caut.* Keep in well-stoppered bot.

Löffler's Ferrous-Tannate Mordant

Solut. 20 Gm. tannin in 80 Gm. W., with addition of 50 Cc. cold satur. aqu. solut. ferrous sulphate & 10 Gm. conc. alcoh. solut. fuchsine.—*Uses:* As mordant & stain for flagella.

Löffler's Methylene-Blue Solution.—For tubercle bacilli

Mixt. 30 vol. conc. alcoh. solut. methylene blue w. 100 vol. KOH solut. (1:10000).

Logwood.—see **Hæmatoxylon**

Long Pepper.—see **Piper Longum**

Lophophorine Hydrochloride Merck (25000

Salt of alkaloid from Anhalonium Lewinii, a Mexican Cactaceæ. — $C_{13}H_{17}NO_2.HCl$. — Wh., cryst. powd.—*Sol.* W.—Acts like other Anhalonium alkaloids, & like the latter, causes hallucinations.—See also Anhalonine.

Loretin (30

(Metaiodo-ortho-oxyquinolinesulphonic Acid). —$C_9H_6IO_4SN$, or, $C_9H_4IN.OH.SO_3H$. — Cryst., yellow powd.—*Sol.*, sl. W., A.; alm. insol. in E. & fixed oils, emulsifiable w. ether & oily fluids. —Antiseptic.—*Uses:* Inst. of iodof. in skin dis., surg. & veter. practice, &c., either pure, or w. talcum, starch, or magnesia; also in 5–10% oint., & as gauze, collodion, pencils, &c.

Loretin-Bismuth

(Bismuth Loretinate; Bismuth Ortho-oxyquinolinemetaiodosulphonate).—Yellow, insol. powd. —Astring.; Antisep.—*Uses: Intern.*, in diarrhea of phthisis.—*Extern.*, siccative for wounds & weeping cutaneous eruptions, as dust.-powd. or oint. (1:15).—*Dose* 8 grains (0.5 Gm.) sev. t. p. d.

Losophan (36

(Triiodometacresol; Triiodocresol). — $C_7H_5I_2O$, or, $C_6HI_2.OH.CH_3$.—Colorl. need.; str. charact. odor.—Abt. 80% iodine.—*Sol.* E., C., B.; sl. A.; hot fatty oils; insol. W.—*Melt.* 121°C.—Astring.; Antisep.—*Uses: Extern.*, 1% hydro-alcoh. (3:1) solut., or 1–3% oint. in acute inflam., eczema, prurigo & o. parasitic skin dis. Checks secretion & hastens healing.

Lovage.—see **Levisticum**

Löwenthal's Reagent.—For glucose

Solut. 60 Gm. tartaric acid, 240 Gm. sod. carbonate, & 5 Gm. ferric chloride, in 500 Cc. W.—Reduced by glucose on warming, with formation of brown ppt.

Löwe's Reagent.—For glucose

Solut. 16 Gm. copper sulphate in 64 Cc. W., & adding 80 Cc. sodium-hydroxide solut. with 6–8 Gm. glycerin.—Is reduced by glucose on heating.—Also used for quantitative determ.

Loxa Bark.—see **Cinchona Loxa**

Loxopterygium Lorentzii.—see **Quebracho Colorado**

Lugol's Reagent.—For albumen

(1) Mixt. glacial acetic acid & W.—Precipitates albumen fr. its solutions.—(2) Aqu. solut. iodine in solut. potass. iodide, acidulated w. acetic acid (see Tanret's Reagent) is also used for the same purpose.

Lunge's Reagent.—For nitrous acid

Dissolve 0.1 Gm. alphanaphthylamine in 20 Cc. boil. water, filter through washed absorb. cotton, & add 150 Cc. dil. acetic acid (sp. gr. 1.04); to this liquid add a solut. 0.5 Gm. sulphanilic acid in 150 Cc. dil. acetic acid (sp. gr. 1.04).—Reagent affords a pink color with nitrous acid; a red color indicates much HNO_2 or its salts.

Lungmoss.—see **Sticta**

Lungwort.—see **Pulmonaria**

Lungwort Lichen.—see **Sticta**

Lupanin Merck (500

Alkaloid fr. seeds Lupinus albus, Perennis, & L. angustifolius.—$C_{15}H_{24}N_2O$ (Hagen & Siebert).—Pale-yellow, honey-like syrup; unpleas. odor; intens. bitter taste; green fluoresc.—*Sol.* E., C., ligroin; sl. W.

Lupetazin

(Dimethylpiperazine; Dipropylenediamine).—$NH(C_2H_3.CH_3)_2NH$.—Fr. dimethylpyrazine by reduct. w. alcoholic Na.—Colorl., oily liq.—*Boil.* 153–158° C.—Uric Acid Solvent.

Lupinidine Sulphate Merck (1500

(Lupinidine Bisulphate).—Salt of liq. alkaloid fr. seeds Lupinus luteus, & L. niger.—$C_8H_{15}N.H_2SO_4$.—Minute, colorl. cryst.—*Sol.* W.; sl. A. —*Caut.* Poison!

Lupinine Merck (1500

Alkaloid fr. seeds Lupinus luteus & L. niger.—$C_{21}H_{40}N_2O_2$.—Colorl. cryst.—*Sol.* W., A., E., & C.—*Melt.* 67–68° C.—*Boil.* 255–257° C.

Lupulin.—*U. S. P.* (8

Glandular trichomes separated fr. fruit of Humulus Lupulus, L. Moraceæ (Hops).—*Habit.:* Europe; Asia; North America; cultivated widely.—*Etymol.:* Fr. "lupulus," a contraction of "lupus salictarius" (Pliny), *i.e.*, the wolf of the willows; or, diminutive of "lupus," *i.e.*, a little wolf, because the plant strangles the shrubbery around which it grows.—*Constit.:*

Lupamaric acid; volat. oil; resin; choline (lupuline); wax (myricin); tannin; asparagin.—Not less than 60% lupulin is sol. in E. (U. S. P.).—Aphrodisiac; Stim.; Tonic; Anodyne.—*Uses:* Genital erethism, satyriasis, chordee, &c.—*Doses:* 5–15 grains (0.3–1 Gm.).—Alcoh. extr., 8–25 grains (0.5–1.5 Gm.).—Fld. extr., 10–20 ♏ (0.6–1.3 Cc.).

Luteocobaltic Chloride.—see **Cobalt (Luteo-) Chloride**

Luteol Autenrieth-Merck.—Reagent (500

(Oxychlordiphenylquinoxaline). — $C_8H_2.OH_2$-(NC).$(C_8H_5)_2Cl$.—Yellowish, cryst. need.—*Sol.*, hot A., & E.; insol. W.—*Melt.* 246° C.—*Uses:* As indicator in 1:300 solut. for alkalies, w. which it gives an intense yellow color.

Luteoline

(Sod. salt of sulphoxyleneazodiphenylamine).—Diazo-compound from diphenylamine with metaxylidinesulphonic acid.—$C_{20}H_{18}N_3O_3SNa$,or, $SO_3Na(CH_3)_2C_6H_2N:N.C_6H_4.NH.C_6H_5$.—Orange-yellow powd.—*Sol.* W.—*Uses:* Dyeing wool orange fr. an acid bath.—*Caut.* This luteoline aniline dye should not be confounded w. luteolin, $C_{15}H_{10}O_6+2H_2O$, from weld (Reseda luteola).

Lutidine Merck (30

(Dimethylpyridine).—Fr. bituminous shale, by distil.—C_7H_9N, or, $C_5H_3N(CH_3)_2$[1:2:6].—Clear, colorl. liq.—*Sol.* W.—*Boil.* 154–156° C.

Lycetol (85

(Dimethylpiperazine Tartrate).—$CH_2.(CH_3)CH.$-$HN.CH_2.CH(CH_3).NH.C_2H_2.(OH)_2.(COOH)_2$. — Wh., odorl. powd.—*Sol.* W.—*Melt.* 250° C.—Analg., Diur., &c.—*Uses:* Gout, rheum., lithiasis, &c.—*Dose* 15–30 grains (1–2 Gm.) per day.

Lycine Hydrochloride.—see **Betaine Hydrochloride**

Lycoctonine Merck (2500

Alkaloid fr. root Aconitum Lycoctonum, L.—$C_{27}H_{37}NO_5(OH)_4$.—Yellowish-wh. cryst.; intens. bitter taste.—*Sol.* A., E., C., petroleum ether, carbon disulphide.—*Melt.*, abt. 100° C.—*Antid.*, emetics, stimulants, & tannin.

Lycopin (Eclectic) (25

Resin. extr. fr. Lycopus virginicus, L. (Bugleweed).—Brownish powd.; peculiar odor; unpleas., sl'y bitter taste.—*Sol.* A., E.—Astring.; Narcot.—*Uses:* Pulmonic & o. hemorrhages.—*Dose* 1–6 grains (0.06–0.36 Gm.).

Lycopodium.—*U. S. P.*

(Club-Moss [plant]; Lycopodium Seed [spores]; Vegetable Sulphur).—Spores of Lycopodium clavatum, L. Lycopodiaceæ, & other spec. of L. —*Habit.:* N. America; Europe; Asia.—*Etymol.*. Grk. "lykos," wolf, & "pous," foot, fr. the resemblance of the shoots to a wolf's foot. "Clavatus," club-like, referring to the appearance of the fertile spikes.—*Constit.:* Spores contain fixed oil; cane sugar; lvs. of plant contain bitter principle, fat, & resin.—Popular remedy as an Emmen.; Cathart.; Diuret. — *Uses:* Chiefly in incontinence of urine, & other diseases of urinary organs; also as appl. in plica. —*Dose:* Tinct., 40 ♏ (2.6 Cc.) 3 t. p. d.

Lycopus

(Bugleweed; Sweet Bugle; Water Bugle).—Whole plant Lycopus virginicus, L. Labiatæ.—*Habit.:* British America south to Florida & Missouri.—*Etymol.*. Grk. "lykos," wolf, & "pous," foot, referring to the fancied resemblance of the deeply cut leaves to a wolf's foot. —*Constit.:* Volat. oil; resin; tannin; glucoside. —Hemost.; Astring.; Tonic; Sedat.; Narc.—*Uses:* Diar. & dysent.; tonic in convalescence. —*Doses:* 5–60 grains (0.3–4 Gm.).—Extr., 5–10 grains (0.3–0.6 Gm.).—Fld. extr., 10–60 ♏ (0.6–4 Cc.).

Lycorin

Alkaloid fr. Lycoris radiata.—$C_{32}H_{22}N_2O_8$.—Colorl. cryst.—*Sol.*, diffic. W., A., E.—*Melt.* 208° C.—Emet.; Purg.

Lygosine (20

(Sodium Lygosinate).—Sodium salt of diorthocumarketone (or diortho-oxydibenzylacetone), a condensat. prod. of salicylic aldehyde & acetone.—$CO(CH:CH.C_6H_4.ONa)_2+7H_2O$.—Black cryst. w. green luster.—*Sol.* W., afford. a red solut.—Antisep.; Bactericide.—*Uses:* Infectious ulcerative processes of skin & mucosa, gonor., gonorrheic endometritis, &c. —*Appl.*, 2–10% solut.; in uterine gonor. in 5% inject.

Lygosine-Quinine.—see **Quinine Lygosinate**

Lysidine (35

(Methylglyoxalidine; Ethylene-ethenyldiamine). —$C_4H_8N_2$, or, $CH_3.C:N.CH_2.CH_2.NH$.— Pinkish, hygros. cryst.; mousy odor.—Marketed as 50% solut.—*Sol.* W., A., E.—*Melt.* 105–106° C.—*Boil.* 198–200° C.—Uric-acid solvent.—*Uses:* Uric-acid diathesis. More active than piperazine. Does not cause digestive troubles or albuminuria.—*Dose* 15–75 grains (1–5 Gm.); or 30–150 ♏ (2–10 Cc.) of the 50% solut. daily, in 1 pint (abt. $^1/_2$ liter) cold, carbonated W.

Lysidine Bitartrate

$C_4H_8N_2.C_4H_6O_6$.—Sm., colorl. cryst.—*Sol.* 4 W.; diff. A.—*Melt.* 193–194° C.—*Uses & Doses:* As of preceding.

Lysol

Mixt. of alkali compounds of the higher phenols w. fat- & resin- soaps, obtained by boiling a mixture of heavy tar oils (boil. at 200° C.), fat, & resins, w. alkalies.—Brown, oily liq.; creosote odor.—Cont. abt. 50% of cresols.—Sp. Gr. 1.042. —*Sol.* W., A., C., G., B. & benzin.—Disinf.; Antisep.—*Uses: Extern.*, 0.3–1% solut.: dress wounds & injuries, & for skin dis., diphth., &c.; 2–4% solut.: disinf. hands & surg. instr. Recom. as destroyer of fungi & insects.

M

Mace

Arillode of the seed of Myristica fragrans, Hout. Myristicaceæ.—*Habit.:* Molucca Islands; cultiv. in tropics, India, Philippines, S. America, Ceylon, Sumatra, Java, &c. — *Etymol.:* Fr. the Indian "makir," spice. "Myristica," fr. Grk. "myron," balsam, "myrizein," to anoint, *i.e.*, an oint. used for its fragrant odor. Lat. "fragrans," fragrant, odorous.—*Constit.:* Volat. oil; fixed oil; resin; sugar; mucilage; proteids. —*Uses:* Stim.; Tonic; Carmin.; Spice; Flavoring.—*Dose* 5–20 grains (0.3–1.3 Gm.).

Maclurin Merck (2500

(Morintannic, or Moritannic, Acid).—Fr. wood Morus tinctoria, L. (Maclura aurantiaca, Nutt.) (Old Fustic).—$C_{13}H_{10}O_6+H_2O$.—Light-yellow, microcryst. powd.—*Sol.* A., E.; hot W.—*Melt.* 200° C.—*Uses:* Dye.

Macrolin.—see **Cimicifugin**

Madder.—see **Rubia**

Magdala Red Merck (250

(Naphthalene Red; Naphthalene Rose; Sudan Red; Naphthalene Scarlet; Rose Naphtylamine). —Mixture of naphtylnaphtorosinduline & naphtyldinaphthosafranine hydrochlorides.—Dark-brown powd.—*Sol.* A., sl. in boil. W.—*Uses:* Dyeing silk pink w. sl. fluorescence.

Magenta.—see **Fuchsine**

Magistery of Bismuth.—see **Bismuth Subnitrate**

Magnesia.—see **Magnesium Oxide**

Magnesium Merck.—Bars 5 to 10 Mm. thick, & over (5

Metal in bars.—Mg.—*Etymol.:* Derives its name fr. "Magnesia," the name of a town in Asia Minor.—Lustr., silvery-wh., mall, moderately hard; burns w. brill., wh. light.—*Melt.*, abt. 700° C.—*Uses:* Inst. of zinc in Marsh's apparatus & o. chem. anal.; also in powd. form for preparing various compounds, *e.g.*, magnesium nitride, &c.; as substitute for zinc in galvanic batteries; in metallurgy for prepar. nickel & cobalt for rolling & milling; manuf. useful alloys, &c.

do. Merck.—Fine powder (5

Uses: Pyrotechny; flash-light.

do. Merck.—Coarse powder (3

Uses: Pyrotechny; flash-light.

do. Merck.—Ribbon 2 to 6 Mm. wide (11

Uses: Prod. intense light.

do. Merck.—Wire, turnings & sticks

Magnesium Acetate Merck (4

$Mg(C_2H_3O_2)_2+4H_2O$. — Deliq., colorl. cryst. — *Sol.* W., A.—Cathartic.—*Uses:* As of the citrate. —*Dose* 5–60 grains (0.3–4 Gm.).—*Caut.* Keep well stoppered.

Magnesium Alginate

(Alginoid Magnesium).—Fr. magn. carbonate & sod. alginate.—$Mg_5(C_{76}H_{77}N_2O_{22})_2$.—*Sol.* W.

Magnesium Benzoate Merck.—Fr. natural acid (6

$Mg(C_7H_5O_2)_2$. — Wh. powd. — *Sol.* W. — Antilithic; Antisep.; Alter.—*Uses:* Lithemia, rheum., scrof., cirrhosis of liver, &c.—*Dose* 3–20 grains (0.2–1.3 Gm.) several t. p. d.

do. Merck.—Fr. Artificial acid (5

Magnesium Bichromate.—see **Magnesium Dichromate**

Magnesium Biphosphate Merck (6

(Acid Magnesium Phosphate; Magnesium Tetrahydrogen Phosphate; Monomagnesium Phosphate; Magnesium Phosphate, Monobasic).—$MgH_4(PO_4)_2$.—Yellowish, cryst. powd.—Recom. as laxative.—*Dose* 10–30 grains (0.6–2 Gm.).

Magnesium Bisulphate Merck (4

(Magnesium Hydrogen Sulphate; Acid Magnesium Sulphate).—$MgH_2(SO_4)_2$.—Wh. powd.—*Sol.* W.—Cath.—*Dose* 5–20 grains (0.3–1.3 Gm.).

Magnesium Borate Merck (3

("Antifungin").—$Mg(BO_2)_2.2Mg(OH)_2+7H_2O$. — Colorl. micro-cryst. — Antisep. — *Uses:* Preservative.—*Dose* 5–20 grains (0.3–1.3 Gm.).

Magnesium Borocitrate Merck. — Powder or scales (3

Wh. powd., or sm., wh., lustr. scales.—*Sol.* W. — Antilithic; Antisep. — *Uses:* Lithias., gout, rheum., &c.—*Dose* 15–30 grains (1–2 Gm.).

Magnesium Bromate Merck (30

$Mg(BrO_3)_2+6H_2O$.—Colorl. cryst.—*Sol.* 1.4 W.

Magnesium Bromide Merck.—Pure, cryst. (4

$MgBr_2+6H_2O$.—Colorl., v. deliq. cryst.; bitter taste.—*Sol.*, in 1 W.; sl. in A.—*Melt.* 165° C.—Nerve Sedative. — *Uses:* Insom., hyst., nymphomania, tetan., epilepsy, &c.—*Dose* 10–20 grains (0.6–1.3 Gm.) several t. p. d.—*Caut.* Keep dry, fr. air.

do.—Solution.—*N. F.*

Aqu. solut. cont. abt. 12.5% $MgBr_2$ & extemporan. prepared.—*Dose* 60 ♏ (4 Cc.).

Magnesium Butyrate Merck (10

$Mg(C_4H_7O_2)_2$.—Sm., deliq., colorl., cryst. scales. —*Sol.* W.

Magnesium Cacodylate Merck (15

$Mg([CH_3]_2AsO_2)_2$+aq.—Wh. powd.—*Sol.* W.—*Uses:* Instead of alkali arsenates; indicated in cases where cacodylates generally (see sod. cacodyl.) are used, but employed only subcutaneously in 5% aqu. solut.—*Dose* 8–15 ♏ (0.5–1 Cc.) of 5% solut. subcut.

Magnesium Carbonate Merck. — Light. — Cubes or powder (1

(Light Carbonate of Magnesia).—Approximately $(MgCO_3)_4.Mg(OH)_2+5H_2O$ (U. S. P.). — Perf'ly

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

wh., light pieces or fine, wh., bulky powd.; sl. earthy taste.—*Sol.* 3,000 W.; carbonic acid W.; acids. — Antacid; Cath.; Antilithic. — *Uses:* Constip., sour stomach, stone in bladder, &c. Excellent antid. to acid poison.—*Dose* 30–120 grains (2–8 Gm.).

Magnesium Carbonate Merck.—Reagent (1

$MgCO_3$.—Wh., light pieces, eas. reduc. to powd.; or wh., bulky powd.—Alm. insol. W., but imparts to latter a sl. alkal. react.—*Tests: (Impur. Sol. W.)* 5 Gm. powd. + 50 Cc. H_2O; heat to boil.; filter while hot; evap. 20 Cc. filtrate – wt. of res. not more than 0.006 Gm.—*(Impur. Insol. in HCl)* 1 Gm. compl. sol. in 10 Cc. HCl (sp. gr. 1.124) – solut. colorl.—*(Cl)* 1 Gm. + 5 Cc. HNO_3 (sp. gr. 1.153) + 15 Cc. H_2O + solut. $AgNO_3$ – at most sl. opalesc. turb.—*(H_2SO_4)* 1 Gm. + 5 Cc. HCl (sp. gr. 1.124) + 15 Cc. H_2O + solut. $BaCl_2$ – no turb.—*(Ba)* 1 Gm. + 5 Cc. HCl (sp. gr. 1.124) + 15 Cc. H_2O + dil. H_2SO_4 – no turb.—*(Ca; Al)* 1 Gm. + 30 Cc. dil. $C_2H_4O_2$ (sp. gr. 1.041) + 30 Cc. H_2O; boil; add 20 Cc. NH_4OH (sp. gr. 0.96) + solut. $(NH_4)_2C_2O_4$ – no turb. within 5 min.—*(Heavy Met.)* 1 Gm. + 20 Cc. dil. $C_2H_4O_2$ (sp. gr. 1.041) + 30 Cc. H_2O – solut. clear; add aqu. H_2S – no react.—*(Fe)* 1 Gm. + 5 Cc. HCl (sp. gr. 1.124) + 15 Cc. H_2O + 0.5 Cc. solut. $K_4Fe(CN)_6$ – no immed. blue color.—*Uses:* Prepar. o. Mg salts.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Magnesium Chlorate Merck (10

$Mg(ClO_3)_2 + 6H_2O$.—V. deliq., wh. powd.; bitter taste.—*Sol.* 0.8 W.—*Melt.* 40° C.—*Uses:* In epithelioma of lower lip as 20% oint.—*Caut.* Keep in well-stoppered bot.

Magnesium Chloride Merck.—Highest Purity, cryst. or fused (1

$MgCl_2 + 6H_2O$.—Colorl., deliq., bitter crystals; or deliq. mass ($MgCl_2$).—*Sol.* W.; partly in A. —Aper.; Cath.—*Uses:* Appetizer, incr. flow of bile, & in constip.—*Dose,* of cryst., 4–8 dr. (15–30 Gm.).—*Caut.* Keep well-stoppered.

do. Merck.—Pure, cryst. (1

Cont. some alkali chloride.—*Sol.* W.

do. Merck.—Crude (1

Uses: Manuf. of "commercial" magnesia for fireproof stones, dressing cotton fabrics, manuf. disinfectants, fire extinguishers, fireproofing wood, & manuf. Sorel's magnesia cement.

Magnesium Chloride Merck.—Reagent (2

$MgCl_2 + 6H_2O$. — Wh., deliquesc. cryst. — *Sol.,* abt. 0.6 cold, & 0.3 hot, W.; 5 A. (85%).—*Tests: (Impur. Insol. in A.)* 2 Gm. + 10 Cc. 85% A. – compl. solub., & clear solut.—*(H_2SO_4)* 1 Gm. + 20 Cc. H_2O + 1 Cc. HCl + solut. $BaCl_2$ – no turb.—*(H_3PO_4; H_3AsO_4)* 3 Gm. + 6 Gm. NH_4Cl + 24 Cc. H_2O + 12 Cc. NH_4OH (sp. gr. 0.96) – no turb. or ppt. within 12 hrs.—*(NH_4 Salts)* heat 3 Gm. w. 10 Cc. solut. NaOH (sp. gr. 1.3) – no NH_3 vapors evolv. (test w. moist litmus paper).—*(Ba)* 1 Gm. + 20 Cc. H_2O + dil. H_2SO_4 – no turb.—*(Heavy Met.; Ca) a:* 1 Gm. + 20 Cc. H_2O + aqu. H_2S – no react.; *b:* 1 Gm. + 20 Cc. H_2O + 1 Gm. NH_4Cl + 5 Cc. NH_4OH + $(NH_4)_2C_2O_4$ – no react.; add $(NH_4)HS$.—*Uses:* Prepar. magnesia mixt.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Magnesium Chromate Merck (7

$MgCrO_4 + 7H_2O$.—Orange-yellow, cryst. powd.—*Sol.,* abt. 1.5 W.—*Melt.,* partially below 100° C

Magnesium Citrate Merck.—Scales (5

(Normal Magnesium Citrate).—$Mg_3(C_6H_5O_7)_2 + 14H_2O$.—Wh. scales; fbl. saline taste.—*Sol.* W. —Cath.; Antilithic.—*Dose* 30–120 grains (2–8 Gm.).

do. Merck.—Soluble (3

do. Merck.—Effervescent (3

(Granulated Citrate of Magnesia).—Mixt. magnesium citrate, sodium bicarbonate, citric acid, & sugar.—Deliq., coarsely gran., wh. powd.; odorl.; mild. acid. pleas. taste.—*Sol.* 2 W.—Cath.; Antilithic.—*Uses:* Constip., sick headache, & gravel.—*Dose* 2–8 dr. (8–30 Gm.).—*Caut.* Keep dry.

Magnesium Copaivate Merck (25

Yellowish powd.—*Sol.,* sl. A.—Antisep.; Diur.; Lax.; Stim.—*Uses:* Gonor., leucor., dysent., hemorrhoids, & chron. bronch. catarrh.—*Dose* 10–20 grains (0.6–1.3 Gm.) 3 t. p. d.

Magnesium Dichromate Merck (8

(Magnesium Bichromate).—$MgCr_2O_7$.—Deliq., brownish-red cryst.—*Sol.* W.—*Caut.* Keep fr. air.

Magnesium Ergotate Merck (200

(Magnesium Sclerotinate). — Brown powd. — Emmen.; Vasoconstrict.; Motor-excitant. — *Uses:* Amenor., menor., uterine fibroids, epilepsy, &c.—*Dose* $^2/_3$–1 grain (0.04–0.06 Gm.).

Magnesium Ethylsulphate Merck (6

$Mg(C_2H_5SO_4)_2 + 4H_2O$.—Deliq., colorl. cryst.—*Sol.* W., A.

Magnesium Ferrolactate.—see **Iron & Magnesium Lactate**

Magnesium Fluoride Merck.—Pure (5

MgF_2.—Wh. powd.—*Sol.,* v. sl. acids; insol. W. —Shows violet fluorescence by electric light.—*Uses:* Recom. as antiseptic.—*Techn.,* in manuf. of glass, & of soda by Weldon process.

Magnesium Formate Merck (6

$Mg(CHO_2)_2 + 2H_2O$.—Colorl. prisms.—*Sol.* W.

Magnesium Glycerate Merck (135

$Mg(C_3H_5O_4)_2 + 3H_2O$.—Wh. to yellowish, cryst. powd.—*Sol.* W.

Magnesium Glycerinophosphate Merck (8
$MgPO_4C_3H_5(OH)_2$.—Colorl. powd.—*Sol.*, eas. W. —*Uses:* As of calcium glycerinophosphate.—*Dose* 3–10 grains (0.2–0.6 Gm.).

Magnesium Gynocardate Merck (30
Brownish, cryst. mass.—*Sol.*, sl. h. A.—Alterative.—*Uses:* Leprosy, phthisis, chronic rheum., & scrof. condit.—*Dose* 15–60 grains (1–4 Gm.).

Magnesium Hydrogen Phosphate. — see **Magnesium Phosphate**

Magnesium Hydrogen Sulphate. — see **Magnesium Bisulphate**

Magnesium Hypophosphite Merck.—Pure (3
$Mg(H_2PO_2)_2+6H_2O$. — Wh. cryst. — *Sol.* W. — Nerve Stim.— *Uses:* Phthisis, scrof., & loss of nerve power.—*Dose* 3–10 grains (0.2–0.6 Gm.).

do. Merck (2

Magnesium Hyposulphite.—see **Magnesium Thiosulphate**

Magnesium Iodide Merck (8
MgI_2+8H_2O.—Deliq., cryst. powd.; decomposes in aqu. solut.—*Melt.* 45° C.—Alter.; Sialag.—*Uses:* Scrof., syph. & chronic rheum. — *Dose* 2–10 grains (0.12–0.6 Gm.) several t. p. d.

Magnesium Lactate Merck.—Pure, cryst. (4
$Mg(C_3H_5O_3)_2+3H_2O$. — Wh. cryst.; v. bitter taste. — *Sol.* 30 W. — Lax.; Antilithic. — *Uses:* Constip. as mild laxative.—*Dose* 15–45 grains (1–3 Gm.) 4 t. p. d. in powd. or solut.

Magnesium Lactophosphate Merck (5
(Magnesium Phospholactate). — Wh. powd. — 45% magnesium lactate.—*Sol.* W.—*Uses, &c.:* As of lactate.—*Dose* 3–15 grains (0.2–1 Gm.).

Magnesium Malate Merck (35
$MgC_4H_4O_5$.—Wh., cryst. powd.—*Sol.* W.—Lax.; Antilithic. — *Uses:* Mild cathartic. — *Dose* 30–120 grains (2–8 Gm.).

Magnesium Molybdate Merck (8
$MgMoO_4$.—Wh., cryst. powd.—*Sol.* W.

Magnesium Nitrate Merck (2
$Mg(NO_3)_2$+aq. — Wh., deliquesc. cryst.—*Sol.* abt. 1.5 W., A.

Magnesium Nitrite
$Mg(NO_2)_2+2H_2O$ (Hampe).—Deliq., cryst. mass. —*Sol.* W.

Magnesium Oleate Merck (4
$Mg(C_{18}H_{33}O_2)_2$. — Yellowish mass. — *Sol.*, partially in A. & E.

Magnesium Oxalate Merck (3
$MgC_2O_4+2H_2O$.—Wh. powd.—*Sol.* W.

Magnesium Oxide Merck.—Light (1
(Light, or Calcined, Magnesia; Magnesia Usta). —MgO.—V. light, wh. powd.; sl. alkal. taste.—*Sol.*, dil. acids; carbonic-acid W. — Antacid; Cath.; Antilithic.—*Uses: Intern.*, sick headache, heartburn, gout, dyspep., sour stomach, constip., gravel, & as antid. to arsenic trioxide.—*Extern.*, ulc., & abraded surf.; dust. powd. for babies; & as base for tooth powders.—*Dose* 10–30–60 grains (0.6–2–4 Gm.). Smaller doses, antacid or antilithic; larger, laxative.

Magnesium Oxide Merck.—Heavy (1
MgO.—Dense, wh., v. fine powd.; does not form hydroxide as readily as the light oxide.—$^3/_7$ as voluminous as magnesium oxide, light.—*Uses & Doses:* As of preceding.

Magnesium Oxide Merck.—Reagent (2
(Magnesia).—MgO.—Wh., light, fine powd.—alm. insol. W.—*Tests:* (*Impur. Sol. in W.*) 0.5 Gm.+20 Cc. H_2O; heat to boil; cool; filter off 10 Cc.–filtrate at most sl. alkal. react.; evap.–wt. of res. not more than 0.002 Gm.—(*Impur. Insol. in HCl*) 1 Gm.+10 Cc. HCl (sp. gr. 1.124) +10 Cc. H_2O–compl. solub., & clear solut.—(*H_2SO_4*) 0.5 Gm.+10 Cc. dil. $C_2H_4O_2$ (sp. gr. 1.041)+solut. $Ba(NO_3)_2$ – no immed. turb.—(*Cl*) 0.5 Gm.+10 Cc. HNO_3 (sp. gr. 1.153)+10 Cc. H_2O+solut. $AgNO_3$–at most sl. opalesc. turb.—(*H_2CO_3*) 0.5 Gm.+10 Cc. H_2O+10 Cc. dil. $C_2H_4O_2$–should diss. without effervesc., & only a few individual gas bubbles may form.—(*Ba*) 1 Gm.+10 Cc. HCl (sp. gr. 1.124)+10 Cc. H_2O+dil. H_2SO_4–no turb.—(*Ca*) 1 Gm.+20 Cc. H_2O; filter; add to filtrate solut. $(NH_4)_2C_2O_4$–not more than sl. opalesc. within 5 min.—(*Heavy Met.*) 1 Gm.+20 Cc. dil. $C_2H_4O_2$ (sp. gr. 1.041)+aqu. H_2S–no react.—(*Fe*) 1 Gm.+10 Cc. HCl (sp. gr. 1.124)+10 Cc. H_2O+0.5 Cc. solut. $K_4Fe(CN)_6$–no immed. blue color.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

do. Merck.—Reagent.—Free fr. H_2SO_4 (10
Tests: (*H_2SO_4*) 3 Gm.+20 Cc. HCl (sp. gr. 1.124) +80 Cc. H_2O; boil; add solut. $BaCl_2$–no ppt. ($BaSO_4$) within 12 hrs.—Other tests as preceding.—*Uses:* Analysis iron & steel.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Magnesium Palmitate Merck (25
React.-prod., soluble magnesium salt w. potass., or sod., palmitate.—Wh., soapy mass.—*Sol.* A. —*Melt.* 120° C.

Magnesium Peptonized Merck.—Soluble (45
(So-called "Magnesium Peptonate").—Yellowish powd.—*Sol.*, eas. W.—*Uses:* Dyspep.—*Dose* 1–2 grains (0.06–0.12 Gm.).

Magnesium-Perhydrol Merck (20
Mixtures of (1): 15% MgO_2+85% MgO; & (2): 25% MgO_2+75% MgO.— Disinfect.; Oxidizer. —*Uses:* Abnorm. gastric & intest. fermentative

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

processes, fetid eructations, vomiting, nausea, diarrhea in phthisis, &c.—*Doses:* In digest. disturbances, 4–8 grains (0.25–0.5 Gm.); in diar., $2^1/_2$–4 grains (0.15–0.25 Gm.) in keratinized gelat. caps.—Ordinarily $^1/_2$–1 teaspoonful may be given 3–4 t. p. d.

Magnesium Permanganate Merck.—Cryst. (40
$Mg(MnO_4)_2 + 6H_2O$. — Crumbly, bluish-black cryst.—*Sol.*, eas. W.—Powerful Antiseptic.—*Uses:* As of potass. permang.

Magnesium Peroxide.—see **Magnesium-Perhydrol**

Magnesium Phenolsulphonate Merck (5
(Magnesium Sulphocarbolate; Magnesium Sulphophenylate). — $Mg(C_6H_4.OH.SO_3)_2 + 7H_2O$. — Colorl. cryst. — *Sol.* W. — Laxative, & Intest. Antiseptic.—*Dose* 15–30 grains (1–2 Gm.).

Magnesium Phosphate Merck.—Pure (1
(Dimagnesium Orthophosphate; Magnesium Hydrogen Phosphate; Magnesium Phosphate, Dibasic).—$MgHPO_4$ + aq.—Wh., cryst. powd.—*Sol.*, dil. acids; sl. W.

do. Merck.—Highest Purity (2

Magnesium Phosphate, Dibasic. — see **Magnesium Phosphate**

Magnesium Phosphate, Monobasic.—see **Magnesium Biphosphate**

Magnesium Phosphite Merck (3
$MgHPO_3$.—Wh., cryst. powd.—*Sol.* W.—*Uses:* As of other phosphites.—*Dose* 5–10 grains (0.3–0.6 Gm.) several t. p. d.

Magnesium Phospholactate. — see **Magnesium Lactophosphate**

Magnesium Platinocyanide. — see **Platinum & Magnesium Cyanide**

Magnesium Propionate Merck (40
$Mg(C_3H_5O_2)_2$.—Wh. powd.—*Sol.* W.

Magnesium Pyrophosphate Merck (4
$Mg_2P_2O_7$ + aq.—Wh. powd.—*Sol.*, HCl, & HNO_3.

Magnesium Rhodanide. — see **Magnesium Sulphocyanate**

Magnesium Ricinate Merck (4
$Mg(C_{18}H_{33}O_3)_2$.—Wh., cryst. powd.—*Sol.*, hot A.

Magnesium Salicylate Merck.—Highest Purity, Medicinal (4
$Mg(C_7H_5O_3)_2 + 4H_2O$.—Colorl., cryst. powd.—*Sol.* W.—Antisep.; Antirheum.; Antidiar., &c.—*Uses:* Typhus & typhoid fevers as intest. antisep.; & in diar., dysent., rheum., pleurisy, &c.—*Dose* 8–30 grains (0.5–2 Gm.) several t. p. d.

Magnesium Sclerotinate.—see **Magnesium Ergotate**

Magnesium Silicate Merck.—Pure (3
$3MgSiO_3 + 5H_2O$.—Fine, wh. powd.—Insol. W.—Absorbent; Astring.; Antisep.—*Uses:* Inst. of bismuth subnitr. in obstin. diar. Does not darken the stools.—*Dose* 60–240 grains (4–15 Gm.).

Magnesium Silicide.—see **Silicon-magnesium**

Magnesium Silvate.—see **Magnesium Sylvate**

Magnesium Sozoiodolate.—see **Sozoiodole-Magnesium**

Magnesium Succinate Merck (20
$MgC_4H_4O_4$.—Wh. powd.—*Sol.* W.

Magnesium Sulphate Merck.—Highest Purity, Medicinal, cryst. (1
(Epsom Salt; Bitter Salt).—$MgSO_4 + 7H_2O$.—Sm., colorl. prisms or need.; odorl.; bitter, saline taste.—*Sol.* 1.5 W. at 15° C.; (1.1 W. at 25° C., 0.3 boil. W.; insol. A., U. S. P.).—Cath.; Refrigerant.—*Uses:* Constip., lead colic, fevers, inflam. affect., &c., & in veterinary practice. — *Doses:* 240–480 grains (15–30 Gm.). — In veterinary practice the doses are as follows: Horses, $^1/_2$–1 lb. (approx. 250–500 Gm.); cattle, 1–2 lb. (approx. 500–1000 Gm.); sheep & goats, 3–6 oz. (approx. 50–100 Gm.); pigs, $6^1/_2$–13 dr. (25–50 Gm.); dogs, $2^1/_2$–$6^1/_2$ dr. (10–25 Gm.); cats, 30–75 grains (2–5 Gm.); fowls, 15–30 grains (1–2 Gm.).

do. Merck.— Highest Purity, Medicinal, dried (1
$MgSO_4$ + abt. $2H_2O$. — Wh. powd. — *Sol.* W. — *Uses:* As preceding, but only in $^2/_3$ the doses stated.—*Caut.* Keep dry, fr. air.

do. — White, cryst. & dried (1
—*Uses:* Commercial grades of magnesium sulphate are used in weighting cottons, increasing the bleaching action of chlorinated lime, manuf. mother-of-pearl & frosted papers, fire-proofing fabrics; Meidlinger's battery; mineral waters.

Magnesium Sulphate Merck.—Reagent (1
$MgSO_4 + 7H_2O$.—Clear, colorl., prism. cryst.; v. sl. effloresc. in air.—*Sol.* 1 cold, 0.3 boil., W.; insol. A.—*Tests:* (*Cl*) 1 Gm. + 20 Cc. H_2O + 1 Cc. HNO_3 (sp. gr. 1.153) + solut. $AgNO_3$ – no turb.—(*H_3PO_4; H_3AsO_4; Heavy Met.*) as under $MgCl_2$.—(*Fe*) 1 Gm. + 20 Cc. H_2O + 1 Cc. HCl + solut. KSCN – no react.—(*As*) 1 Gm. powd. + 3 Cc. solut. $SnCl_2$ – no darker color within 1 hr.—*Uses:* Prepar. magnesia mixt.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to he standard therein given.

Magnesium Sulphate, Acid. — see **Magnesium Bisulphate**

Magnesium Sulphite Merck (1
$MgSO_3 + 6H_2O$.—Wh., cryst. powd.; gradually changes to sulphate on expos.—*Sol.* 20 W.—Antisep.; Cath.—*Uses:* Inst. of sodium sulphite in infectious diseases; has less disagre. taste.—*Dose* 10–60 grains (0.6–4 Gm.); 150–300 grains (10–20 Gm.) may be given per day.

Magnesium Sulphocarbolate. — see **Magnesium Phenolsulphonate**

Magnesium Sulphocyanate Merck (15

(Magnesium Sulphocyanide, or Rhodanide).—$Mg(SCN)_2+4H_2O$.—Clear, colorl., deliq. cryst. —*Sol.* W.—*Caut.* Keep dry & well stoppered.

Magnesium Sulphophenylate.—see **Magnesium Phenolsulphonate**

Magnesium Sylvate Merck

(Magnesium Silvate or Sylvinate).—$Mg(C_{20}H_{29}O_2)_2$.—Wh. powd.—*Sol.* W.

Magnesium Tartrate (6

$MgC_4H_4O_6$.—Wh. powd.—*Sol.* 122 W.—Cathartic.—*Uses:* Spleen dis. w. neural. symp.—*Dose* 8–15 grains (0.5–1 Gm.).

Magnesium Thiosulphate Merck.—Pure (3

(Magnesium Hyposulphite). — $MgS_2O_3+6H_2O$. —Colorl. cryst. —*Sol.* W. — Antisep.; Cath.—*Dose* 10–30 grains (0.6–2 Gm.).

Magnesium Tungstate Merck.—Cryst. (35

(Magnesium Wolframate).—Wh. cryst. — Alm. insol. W.—Fluoresces in Roentgen rays, hence used like calcium tungstate in radiography.

Magnesium Urate Merck (12

$MgC_5H_2N_4O_3$.—Wh.,amorph.powd.—Insol.W.,A.

Magnesium Valerate Merck (8

(Magnesium Valerianate).—$Mg(C_5H_9O_2)_2$.—Wh. powd.; charact. valerian odor.—*Sol.* W.; hot A. —*Uses:* As other valerates.—*Dose* 3–10 grains (0.2–0.6 Gm.) several t. p. d. in pills.

Magnesium Wolframate.—see **Magnesium Tungstate**

Magnesium & Ammonium Arsenate Merck (5

Fr. solut. arsenic acid, magnes. sulphate & amm. chloride, in excess of ammonia.—$MgNH_4AsO_4+6H_2O$. — Wh. powd. — *Sol.*, sl. in W., & in solut. amm. chloride.

Magnesium & Ammonium Chloride Merck.—Reagent.—For Magnesia Mixture for Phosphoric Acid Determination (2

$MgCl_2.(NH_4)Cl+6H_2O$.—Rhomb. cryst., or wh., cryst. powd. — *Sol.*, eas. W. — *Tests:* (*H_2SO_4; Heavy Met.; Ca; Ba*) as under $MgCl_2$.—(*H_3PO_4; H_3AsO_4*) 5 Gm.+10 Cc. H_2O+5 Cc. NH_4OH (sp. gr. 0.96)—no turb. or ppt. within 12 hrs.—*Uses:* Prepar. magnesia mixt. for determ. phosphoric & arsenic acids.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Magnesium & Ammonium Phosphate Merck.—Highest Purity (3

(Magnesium & Ammonium Orthophosphate).—$Mg(NH_4)PO_4+6H_2O$. — Wh. powd. — *Sol.*, dil. acids.

Magnesium & Ammonium Sulphate Merck (1

$Mg(NH_4)_2(SO_4)_2$.—Wh. powd.—*Sol.* W.

Magnesium & Potassium Phosphate Merck (6

$MgKPO_4+6H_2O$. — Wh. cryst. — *Sol.* W. with decomp.

Magnesium & Potassium & Ammonium Phosphate Merck.—Pure, cryst. (4

$MgKNH_4.H_2(PO_4)_2+3H_2O$.—White cryst.—*Sol.*, sl. W.

Magnolia Acuminata

(Cucumber Tree).—Flowers of Magnolia acuminata, L. Magnoliaceæ.—*Habit.:* U. S. (New York to Alabama, west to Arkansas). — *Etymol.:* Named for Prof. Pierre Magnol, a French botanist (d. 1715). "Acuminata" refers to the acuminate leaves.—Antiper.; Tonic; Diaphor. —*Uses:* Malaria, rheumat. dyspep., &c.—*Dose:* Fld. extr., 30–60 ♏ (2–4 Cc.).

Magnolia Seeds.—see **Nigella Damascena**

Maidenhair.—see **Adiantum**

Maidenhair, White.—see **Ruta-Muraria**

Malabar Nut.—see **Adhatoda**

Malachite, Artificial. — see **Copper Carbonate, Green**

Malachite, Artificial, Blue.—see **Copper Carbonate, Blue**

Malachite Green Merck.—Cryst. (8

(Benzaldehyde, New, Victoria, Fast, Diamond B., Solid O., Benzoyl, or Benzal, Green).—Fr. hydrochl. of tetramethyldiparamidotriphenylcarbinol w. zinc chloride.—Yellow cryst. w. bluish-green reflect., or brown powd. — *Sol.*, ethyl- & methyl-A. — *Uses:* Techn., for directly dyeing silk & wool, jute & leather, bluish-green; cotton, after mordanting; also as stain.

do. Merck.—Powder (7

Malachite Green G.—see **Brilliant Green**

Malakin (30

(Salicylparaphenetidin). — 50% salicylaldehyde. — $OC_2H_5.C_6H_4.N:HC.C_6H_4.HO$. — Fine, bright-yellow need.—*Sol.*, hot A., solut. alkal. carbonates; sl. cold A.; insol. W.—*Melt.* 92° C. —Antipyr.; Analg.; Teniafuge; slower than antipyrine or acetanilide.—*Uses:* Fever; rheum., neural., tapeworm, &c.—*Doses:* 15 grains (1 Gm.) several t. p. d.; antipyretic dose in phthisis, 8 grains (0.5 Gm.) every 2 hrs.

Malarin

(Acetophenonephenetidin Citrate).—$C_2H_5O.C_6H_4.N:C(CH_3).C_6H_5$.—Colorl., cryst. powd.—*Sol.*, hot W., & in sod. carbonate solut.; sl. cold W. — Antipyr.; Antineural. — *Uses:* Headache, neuralgia, &c.—*Dose* 8–15 grains (0.5–1 Gm.) 1–3 t. p. d.

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Male Fern.—see **Aspidium**

Malleine Foth-Merck.—Dry

Mixture of toxic, specifically active products of metabolic processes occurring during growth of glanders bacillus.—Yellowish-wh., voluminous powd.—*Sol.* W.—*Uses: Veter.*, diagnosis of glanders.—*Inj.* (Horse): $^3/_8$–$^5/_6$ grain (0.04–0.05 Gm.) in 75 ♏ (5 Cc.) steril. cold dist. W. If temperature rises over 2° C. the presence of glanders may be assumed.

Mallow

(Common Mallow; High Mallow; Cheese-flower).—Flowers & lvs. of Malva silvestris, L. Malvaceæ.—*Habit.:* Europe; Asia; naturalized in U. S.—*Etymol.:* Fr. Grk. "malakos," soft, mild, *i.e.*, the plant has emollient properties.—*Constit.:* Pectin; tannin; coloring matter.—Demulc.; Emoll.

Malt Sugar.—see **Maltose**

Maltose Merck.—Pure, cryst. (25

(Malt Sugar).—Carbohydrate fr. starch paste, by malt diastase.—$C_{12}H_{22}O_{11}+H_2O$.—Wh., cryst. powd.—*Sol.* W., A.—Nutr.—*Uses:* Sweetener.

Mammary Gland Merck.—Dried, powder (25

Fr. the fresh udders of cows.—1 part = 8.75 parts fresh gland.—*Uses:* Uterine fibroma, menorrhagia, & metrorrhagia.—*Dose* 5–10 grains (0.3–0.6 Gm.) 3 t. p. d.

Manaca

(Manacán; Vegetable Mercury; Mercurio-vegetal; Camganiba; Geratacáca; Brunfelsia).—Root of Franciscea uniflora, Pohl (Brunfelsia Hopeana, Benth.). Solanaceæ.—*Habit.:* Brazil.—*Etymol.:* "Manaca" is the South American name of the plant, which was named for Emperor Franz II. of Austria (1768–1835), during whose reign Pohl traveled through Brazil. Otto Brunfels, for whom the species was also named, was a botanist of Metz (16th century).—*Constit.:* Manacine (alkaloid); aesculetin; fluorescent substance probably identical w. gelsemic acid.—Antisyphil.; Antiscrofular; Antirheumat.; Cathart.; Diuret.; Alterat.—*Uses:* Rheum., gout, & syphilis; sometimes in asthma & pneumonia.—*Doses:* 10–60 grains (0.6–4 Gm.).—Fld. extr., 5–20 ♏ (0.3–1.3 Cc.).

Manchester Brown.—see **Bismarck Brown**

Manchester Yellow.—see **Martius Yellow**

Mancona Bark.—see **Sassy Bark**

Mandarin.—see **Tropæoline 000 No. 2**

Mandarin G R.—see **Orange T**

Mandelin's Reagent.—For alkaloids

Solut. 1 Gm. ammonium vanadate in 200 Gm. conc. sulphuric acid.—Affords brown, red, or green color reactions w. alkaloids.

Mandrake.—see **Podophyllum**

Manganese Merck (5

Metal.—Mn.—*Etymol.:* Fr. Grk. "manganizo," to purify, because w. Mn manufacturers removed from glass the color imparted by ferric oxide; or perhaps fr. Grk. "manganon," magical substance.—V. hard, brittle, steel-gray lumps; lustr., whitish-gray, metal. fracture.—*Sol.*, dil. acids.—*Uses:* Technically important because of its alloys, *e.g.*, ferromangan, ferrosilicon-mangan, copper mangan.

Manganese Acetate Merck.—Pure (4

(Manganous Acetate).—$Mn(C_2H_3O_2)_2+H_2O$.—Transp., pale red cryst.—*Sol.* W.

do. Merck.—Technical (2

Uses: Techn., in dyeing, & manuf. of bistre.

Manganese Albuminate Merck (20

Brown scales.—*Sol.* W.—Tonic & Alter.—*Uses:* Chlorosis & anemia, alone or w. some iron prep.

Manganese Arsenate Merck.—Pure (5

(Manganous Arsenate).—$MnHAsO_4$.—Reddish-wh. powd.—*Sol.*, sl. in W.—Alter.; Tonic.—*Uses:* Anemia & chlorosis.—*Dose* $^1/_{20}$–$^1/_6$ grain (0.002–0.01 Gm.) several t. p. d.—*Antid.*, as for arsenic trioxide.

Manganese Benzoate Merck (8

$Mn(C_7H_5O_2)_2$.—Wh., scaly cryst.—*Sol.* W.; sl. A.

Manganese Binoxide.—see **Manganese Dioxide**

Manganese Borate Merck (1

(Manganous Borate).—MnB_4O_7 (50% to 80%).—Wh., loose powd.—*Uses:* Techn., in drying varnishes & oils (as siccative w. linseed oil 1:500), & in leather industries.

Manganese Bromide Merck (5

(Manganous Bromide).—$MnBr_2$.—Rose-red cryst.—*Sol.* W., with decomp.—*Dose* 1–8 grains (0.06–0.5 Gm.) sev. t. p. d.—*Caut.* Keep fr. air.

Manganese Butyrate Merck (30

$Mn(C_4H_7O_2)_2$.—Rose-red powd.—*Sol.* W.

Manganese Cacodylate Merck (20

(Manganous Cacodylate).—$Mn([CH_3]_2AsO_2)_2$.—Reddish-wh., cryst. powd.—*Sol.* W.

Manganese Carbonate Merck.—Highest Purity (2

(Manganous Carbonate).—$MnCO_3$.—Fine, amorphous, light-brown powd.—Tonic.—*Uses:* Anemia & chlorosis.—*Dose* 5–15 grains (0.3–1 Gm.) 2–3 t. p. d.

do. Merck.—Pure (1

Manganese Chloride Merck.—Highest Purity, cryst. (1

(Manganous Chloride).—$MnCl_2+4H_2O$.—Deliq., rose-red crystals.—*Sol.* eas. W.; A.—*Uses: Intern.*, chlorosis, chronic cutaneous eruptions, & hemorrhages.—*Extern.*, in solut. as mouth-wash & gargles in syphilitic ulcers in mouth.—*Techn.*, in dyeing (manganese bistre), manuf. of

chlorine, disinfecting, purifying glass, & regenerating manganese dioxide. — *Caut.* Keep well stoppered.

Manganese Chloride Merck. — Highest Purity, dried (2

$MnCl_2$.

do. Merck.—Pure cryst. (1

Manganese Chloride Merck.—Reagent (2

(Manganous Chloride).—$MnCl_2 + 4H_2O$.—Reddish, hygrosc. cryst.—*Sol.*, abt. 1 W.; A.—*Tests:* (H_2SO_4) 1 Gm. + 10 Cc. H_2O + 1 Cc. HCl (sp. gr. 1.124) + solut. $BaCl_2$ – no turb.—(*Cl*) 1 Gm. + 40 Cc. H_2O + 5 Cc. dil. H_2SO_4 + solut. zinc iodide-starch – no immed. blue color.—(*Ca*) 1 Gm. + 20 Cc. H_2O + 2 Cc. solut. $(NH_4)_2C_2O_4$ – no immed. turb.—(*Fe; o. Foreign Met.; Salts of Mg & Alkalies*) *a:* 1 Gm. + 15 Cc. H_2O + 1 Cc. HCl (sp. gr. 1.124) + 3 Cc. Cl-water; boil; cool; add solut. KSCN – no red color; add aqu. H_2S – no react.; *b:* 3 Gm. + 50 Cc. H_2O + solut. ammon. carbonate (5 Gm. to 50 Cc. H_2O); when Mn pptd., filter; evap. filtrate & ignite – wt. of res. not more than 0.001 Gm.—(*Zn*) 1 Gm. + 1 Gm. $NaC_2H_3O_2$ + 10 Cc. H_2O + few drops $C_2H_4O_2$ + aqu. H_2S – no wh. ppt. solub. in HCl.—*Uses:* Determ. oxygen & boric acid.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Manganese Chromate Merck (6

(Basic Manganous Chromate).—$MnCrO_4.MnO + 2H_2O$.—Brown powd.—*Sol.*, partially in W.

Manganese Citrate Merck (5

$MnHC_6H_5O_7$.—Wh. powd.—*Sol.* W.—Tonic; Astring.—*Uses:* In chlorosis, & instead of iron citrate in anemic condit.—*Dose* 1–3 grains (0.06–0.2 Gm.).

Manganese Dioxide Merck.—Artificial, Pure (2

(Manganese Peroxide or Binoxide; Black Oxide of Manganese). — MnO_2. Cont. abt. 90% MnO_2.—Heavy, black powd.—*Sol.*, hot mineral acids.—Tonic; Alter.; Emmen.—*Uses:* Flatul., amenor., calculi, erysip., scrofula, septicemia, syph., chlorosis, scurvy, & var. skin dis. Also techn. in electrotechn., glass-making, rubber goods, &c.—*Dose* $1^1/_2$–10 grains (0.1–0.6 Gm.). —*Appl.*, in 12–15% oint. in porrigo, exanthema, scabies, &c.

do.—Natural (1

(Pyrolusite).—Steel-gray lumps; metal. luster; cont. abt. 90% MnO_2.—*Uses:* Techn., in electrotechn. as manganese dioxide paper for dry galvanic piles & Leclanché elements; also for making amethyst glass, & for painting on porcelain, faience, & majolica.

Manganese Dioxide Merck.—Reagent (1

(Manganese Per- or Super- oxide; Pyrolusite).—MnO_2.—Grayish-black to steel-blue, brittle, or fibrous pieces. Abt. 90% MnO_2.—*Uses:* Prepar. Cl & O.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Manganese Dithionate.—see **Manganese Hyposulphate**

Manganese Ferrocyanide Merck (8

$Mn_2Fe(CN)_6 + 7H_2O$.—Greenish-white powd.—*Sol.*, solut. potass. cyanide; insol. W.

Manganese Fluoride Merck (10

(Manganous Fluoride).—MnF_2.—Reddish powd. —*Sol.* W.

Manganese Glycerate Merck (125

$Mn(C_3H_5O_4)_2 + 3H_2O$.—Whitish powd.—*Sol.* W.

Manganese Glycerinophosphate Merck (8

$MnC_3H_7O_3PO_2$. — Yellowish-wh. powd. — *Sol.* W.—*Uses:* Deficient nerve nutrition, neurasthenia, anemia, chlorosis, Addison's dis., phosphaturia, convalesc. fr. influenza, beriberi, &c.—*Dose* 2–5 grains (0.12–0.3 Gm.) 3 t. p. d.

Manganese Green.—see **Barium Manganate**

Manganese Hydrate.—see **Manganese Hydroxide**

Manganese Hydroxide Merck (1

(Manganic Hydroxide or Hydrate).—$Mn_2O_2(OH)_2$.—Dark brown powd.—*Sol.*, hot nitric acid.—*Uses:* Techn., under the name "manganese bistre" as pigment for fabrics, & for painting on porcelain.

Manganese Hypophosphite Merck.—Pure (2

$Mn(H_2PO_2)_2 + H_2O$.—Rose-red cryst.—*Sol.* 6.6 W. at 25° C., 6 boil. W.; alm. insol. A. (U. S. P.). —*Uses:* Anemia, chlorosis, & scrofula.—*Dose* 1–10 grains (0.06–0.6 Gm.) several t. p. d.

Manganese Hyposulphate (10

(Manganous Dithionate).—MnS_2O_6.—Wh. need. —*Sol.* W.

Manganese Iodide Merck (8

(Manganous Iodide).—MnI_2.—Yellowish-brown, deliq., cryst. masses.—*Sol.* W., with decomp.—Alter.; Tonic.; Antisep.—*Uses:* Anemia, chlorosis, scrof., syph., & splenic enlargement.—*Dose* 1–3 grains (0.06–0.2 Gm.).

Manganese Lactate Merck (5

$Mn(C_3H_5O_3)_2 + 3H_2O$. — Pale-red crusts. — *Sol.* W.; A.—Tonic.—*Uses:* Chlorosis, & all weak & anemic condit.—*Dose* 1–5 grains (0.06–0.3 Gm.).

Manganese Lactophosphate Merck (9

(Manganous Phospholactate).—Manganous lactate w. 36% manganous phosphate.—Reddish-wh. powd.—*Sol.* W.—Tonic.—*Uses:* Convalesc. fr. fevers, in anemia, chlorosis, tuberculosis & scrof.—*Dose* 1–5 grains (0.06–0.3 Gm.) sev. t. p. d.

Manganese Linoleate Merck.—Fused (1
Dark-brown, plaster-like mass.—*Sol.* C., & hot linseed oil.—*Uses:* Techn., in varnishes (1 part dissolved in 100 linseed oil at 120–150° C., then added to balance of oil).

Manganese Monosulphide.—see **Manganese Sulphide**

Manganese Monoxide.—see **Manganese Oxide, Manganous**

Manganese Nitrate Merck.—Pure (4
(Manganous Nitrate).—$Mn(NO_3)_2$+aq.—Rose-red, monocl., deliq. cryst.—*Sol.* W.

Manganese Oleate Merck.—Pure (6
$Mn(C_{18}H_{33}O_2)_2$.—Brown, gran. mass.—*Sol.* E., oleic acid; sl. in A.—*Uses:* Inunction in chlorosis & anemia.—*Techn.*, in varnishes.

do. Merck.—Commercial (1
Uses: Techn., as drier.

Manganese Oxide Merck.—Manganic (2
(Manganese Sesquioxide). — Mn_2O_3. — Black powd.—*Sol.*, conc. acids.—*Uses:* Techn.

Manganese Oxide Merck.—Manganomanganic (4
Mn_3O_4.—Brownish-black powd.—*Sol.*, hydrochloric acid.—*Uses:* Chiefly in chemical analysis.

Manganese Oxide Merck.—Manganous (10
(Manganese Monoxide or Protoxide).—MnO.—Grayish-green powd.—*Sol.*, acids.—Tonic.—*Uses:* Chlorosis & anemia.—*Techn.*, as green pigment.—*Dose* 2–10 grains (0.12–0.6 Gm.).

"Manganese Peptonate."—see **Manganese Peptonized**

Manganese Peptonized Merck (5
(So-called "Manganese Peptonate"). — Brown powd.; contains 4% manganic oxide.—*Sol.* W.—Tonic, Nutritive.—*Uses:* Anemia & chlorosis.—*Dose* 10–30 grains (0.6–2 Gm.).

Manganese Peroxide.—see **Manganese Dioxide**

Manganese Phenolsulphonate Merck (5
(Manganese Sulphocarbolate; Manganese Sulphophenylate).—$Mn(C_6H_4.OH.SO_3)_2$+$7H_2O$.—Reddish cryst.—*Sol.* W., A.—Tonic; Antisep.—*Uses:* Intest. derang. w. anemia or chlorosis.—*Dose* 3–8 grains (0.2–0.5 Gm.).

Manganese Phosphate Merck.—Pure (3
(Normal Manganous Orthophosphate). — $Mn_3(PO_4)_2$+$7H_2O$.—Reddish-wh. powd.—*Sol.*, eas. in mineral acids; sl. A.; insol. W.—*Uses:* Chlorosis; also techn. as reagent.—*Dose* 1–5 grains (0.06–0.3 Gm.).

Manganese Phospholactate.—see **Manganese Lactophosphate**

Manganese Propionate Merck.—Pure (70
(Manganous Propionate).—$Mn(C_3H_5O_2)_2$.—Reddish-white powd.—*Sol.*, sl. in W.

Manganese Protoxide.—see **Manganese Oxide, Manganous**

Manganese Pyrophosphate Merck (125
(Manganous Pyrophosphate).—$Mn_2P_2O_7$+$3H_2O$(?).—Amorph., wh. powd.—*Sol.*, in excess of solut. of sodium- or potassium pyrophosphate.

Manganese Resinate Merck.—Fused (1
Dark, brownish-black, resin-like masses.—*Sol.* C., & hot linseed oil.—*Uses:* Techn., in varnishes.

do. Merck.—Precipitated (1
Flesh-colored, loose powd.—*Sol.* C., & hot linseed oil.—*Uses:* As preceding (2 parts dissolved in 100 linseed oil at 120–150° C., then added to balance of oil).

Manganese Salicylate Merck (40
(Manganous Salicylate).—$Mn(C_7H_5O_3)_2$.—Wh., cryst. powd.—*Sol.* W., A.—Tonic; Alter.; Antirheum.—*Uses:* Anemia, chlorosis, rheum., & gout.—*Dose* 2–10 grains (0.12–0.6 Gm.).

Manganese Sesquioxide.—see **Manganese Oxide, Manganic**

Manganese Silicate Merck (10
(Manganous Silicate).—$MnSiO_3$.—Red cryst., or yellowish-red powd. — Insol. W. — *Uses:* Techn., as color. for glass.

Manganese Succinate Merck (25
(Manganous Succinate).—$MnC_4H_4O_4$.—Whitish, cryst. powd.—*Sol.* W.

Manganese Sulphate Merck.—Pure, cryst. (1
(Manganous Sulphate). — $MnSO_4$+$4H_2O$. — Transp., pale rose-red, efflores. prisms; bitterish, astring. taste.—*Sol.* 0.8 W., at 15° C.; (0.7 W. at 25° C., 0.53 boil. W.; insol. A., U. S. P.).——Tonic; Cholag.; Cath.; Styp.—*Uses: Intern.*, anemia, chlorosis, arthritis, & jaund.—*Extern.*, hemorrhage.—*Dose* 5–10 grains (0.3–0.6 Gm.).—*Appl.*, in 1:5–10 oint. in stiff joints (from gout, rheumat., &c.).

do. Merck.—Pure, dried (2
(Anhydrous Manganous Sulphate).—$MnSO_4$.—Reddish-wh. powd.—*Uses:* Techn., in dyeing, & for glazing porcelain.

do. Merck.—Crude (1

Manganese Sulphate Merck.—Reagent (2
(Manganous Sulphate).—$MnSO_4$+$4H_2O$.—Pale-red, monoclin. cryst.—*Sol.* 0.8 W.; insol. A.—*Tests: (Cl)* 1 Gm.+20 Cc. H_2O+1 Cc. HNO_3 (sp. gr. 1.153)+solut. $AgNO_3$ – at most sl. opalesc. turb.—*(Fe; Zn; o. Foreign Met.; Salts of Mg & Alkalies)* as under $MnCl_2$.—*(Ca)* 1 Gm.+20 Cc. H_2O – solut. perf. clear; add 2 Cc. solut. (NH_4)-C_2O_4–no immed. turb.—*Uses:* Determ. oxygen

& boric acid; assistant in permanganate titrations in presence of HCl.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Manganese Sulphide Merck.—Pure (5

(Manganous Sulphide; Manganese Monosulphide).—MnS.—Greenish-gray to brown powd.—*Sol.*, acids; insol. W.—*Uses:* Techn., as green pigment (feuille morte).

Manganese Sulphite Merck (3

(Manganous Sulphite).—$MnSO_3$.—Gray, cryst. powd.—*Sol.*, in aqueous solut. SO_2.—Tonic; Cholag.; Antisep.—*Uses:* Anemia, chlorosis, & diar.—*Dose* 5–15 grains (0.5–1 Gm.).

Manganese Sulphocarbolate. } —see **Manganese**
Manganese Sulphophenylate. } **Phenolsulphonate**

Manganese Tannate Merck (10

(Manganous Tannate).—Brown powd.—*Sol.*, acids; insol. W.

Manganese Tartrate Merck (9

(Manganous Tartrate).—$MnC_4H_4O_6$.—Wh. powd.—*Sol.*, v. sl. W.

Manganese Valerate Merck (40

(Manganous Valerate).—$Mn(C_5H_9O_2)_2+2H_2O$.—Brown powd.; alm. insoluble.

Manganese & Ammonium Sulphate (1

(Manganous Ammonium Alum).—$Mn(NH_4)_2(SO_4)_4$.—Pale, rose-red cryst.—*Sol.* W.

Manganese & Iron Lactate.—see **Iron & Manganese Lactate**

Manganic & Manganous Salts.—see under **Manganese**

Manganomanganic Oxide.—see **Manganese Oxide, Manganomanganic**

Mangin's Reagent.—For cellulose

Aqu. solut. iodine, potass. iodide, & tin chloride.—*Uses:* Microscopic detect. cellulose (blue color).

Mangini's Reagent.—For alkaloids

Solut. potass. iodide & bismuth iodide in conc. HCl.—Affords reddish-brown ppt. w. alkaloids.

Mangosteen.—see **Garcinia**

Manihot Utilissima.—see **Tapioca**

Man-mu.—see **Eumenol**

Manna.—*U. S. P.*

Concrete, saccharine exudation of Fraxinus Ornus, L. Oleaceæ.—*Habit.:* Mediterranean Basin; Asia Minor to Spain.—*Etymol.:* Fr. Grk. "manna," Hebrew "man," Arabic "manu," gift of heaven, *i.e.*, food divinely supplied.—*Constit.:* Mannit, $C_6H_8(OH)_6$; glucose; mucilage; fraxin, $C_{16}H_{13}O_{10}$.—Laxat.; Demulc.; Expector.; Nutrient; Cholag.—*Dose* 1–8 dr. (4–30 Gm.).

Manna Sugar.—see **Mannit**

Mannit Merck (5

(Manna Sugar).—Fr. manna, the sacchar. secret. fr. Fraxinus Ornus.—$C_6H_{14}O_6$, or, $C_6H_8(OH)_6$.—Wh. prisms.—*Sol.* W.; sl. A.—*Melt.* 165–166° C.—Laxative.—*Uses:* Gentle lax. in constip. & recommended in diabetes.—*Dose* 6–8 dr. (20–30 Gm.); children, 1–3 dr. (4–12 Gm.) in W.

do. Merck.—Powder (8

Wh. powd.—*Sol.* W.

do. Merck.—Recrystallized fr. Alcohol (12

Mann's Paper.—see **Citro-Molybdic Acid Paper**

Manzanita, Great-berried.—see **Arctostaphylos Glauca**

Maranta.—see **Starch, Arrowroot**

Maretin (28

(Metatolylhydrazine Carbaminate).—$C_6H_4.CH_3.NH.NH.CONH_2$.—Colorl., lustr., tastel. cryst.—*Sol.* 100 A.; 1000 W.; diffic. C., & acetone; alm. insol. E.—*Melt.* 183–184° C.—Antipyr.—*Uses:* Phthisis, typhoid, influenza, intermitt. fever, &c.—*Dose* 3–8 grains (0.2–0.5 Gm.).

Margaron

By distil. beef-suet w. lime.—$(C_{16}H_{33})_2O$.—Wh. mass; odorl.; tastel.—*Uses:* Pharmaceutical.

Marignac's Salt.—see **Potassium Stannosulphate**

Marigold.—see **Calendula**

Marine Blue Merck (6

Sodium salt of Triphenylpararosanilinedi(& tri-)-sulphonic Acids.—Dark-blue powd., or lumps w. bronze luster.—*Sol.*, eas. W.—*Uses:* Dyeing silk.

Marjoram

(Sweet Marjoram; Knotted Marjoram).—Whole herb Origanum Majorana, L. Labiatæ.—*Habit.:* Southern Europe; Western Asia; widely cultivated.—*Etymol.:* Fr. "marjamie," by which name the Arabs designated the plant.—*Constit.:* Volat. oil; tannin.—Stomachic; Condiment; Sternutatory; used also in cookery.

Marjoram, Common.—see **Origanum**

Marmé's Reagent.—For alkaloids

(Solution Cadmium & Potassium Iodides).—Dissolve 10 Gm. cadmium iodide in a hot solut. 20 Gm. potass. iodide in 60 Cc. W., & then add an eq. volume cold, satur. solut. potass. iodide.—Develops wh. to yellow ppt. in acidulated solutions of alkaloids.

Marrow, Red, Bone.—Dried, powder

Fr. bones of cattle.—1 part = 5 parts fresh, red bone marrow.—*Uses:* Anemia, chlorosis, pernicious anemia, rachitis, purpura hemorrhagica, psychoses, & infantile anemia pseudoleucemia.—*Dose* 3 grains (0.2 Gm.) several t. p. d.

Marrubium.—*U. S. P.*

(Horehound; Hoarhound).—Dried lvs. & tops of Marrubium vulgare, L. Labiatæ.—*Habit.:*

Europe; Central Asia; natur. in U. S.—*Etymol.:* Fr. Hebrew "mar," bitter, & "rob," much, or great. "Vulgaris," common, ordinary, *i.e.*, growing wild. "Horehound," fr. Anglo-Saxon "hor," gray, & "hune," hound, *i.e.*, the stem & branches are covered with a white felt.—*Constit.:* Volat. oil; marrubiin; tannin; resin; fat; wax; sugar.—Nervine; Vermif.; Bitter Stomachic; Resolvent; Stim.; Tonic; Deobstruent; large doses are Diuret., Diaphor., & Laxat.—*Uses:* Colds, chron. lung affections, amenor., jaundice, cardialgia, dyspep., &c. — *Doses:* 30–60 grains (2–4 Gm.). — Aqu. extr., 3–10 grains (0.2–0.6 Gm.).—Fld. extr., 30–60 ♏ (2–4 Cc.).

Marsh Parsley.—see **Selinum**

Marshmallow.—see **Althæa**

Martius Yellow Merck (6

(NaphtholYellow; Manchester Yellow; Naphthalene Yellow; Jaune d'Or).—Amm., sod., or calc. salt dinitroalphanaphthol.—By act. of HNO_3 upon alphanaphtylamine, or alphadiazonaphthalene, or upon the disulphonic acid of alphanaphthol.—$NH_4C_{10}H_5N_2O_5$, or, $NaC_{10}H_5N_2O_5$+ H_2O, or, $Ca(C_{10}H_5N_2O_5)_2$.—Sm., glist., orange-yellow plates; or yellowish-red cryst.—*Sol.* W., & A.—*Uses:* Dyeing wool golden-yellow in acid bath; coloring lacquers, &c.

Mass, Blue.—see **Mercury, Mass of**

Mass Copaiba.—see **Copaiba Mass**

Mass Ferrous Carbonate (1

(Vallet's Mass).—Abt. 40% $FeCO_3$.—*Sol.*, acids. —Tonic.—*Uses:* Anemia & chlorosis.—*Dose* 3–6 grains (0.2–0.36 Gm.).

Mass, Mercurial.—see **Mercury, Mass of**

Mass, Vallet's.—see **Mass Ferrous Carbonate**

Massicot.—see **Lead Oxide, Yellow**

Masterwort.—see **Imperatoria**

Mastic.—*U. S. P.*

(Balsam Tree; Lentisk; Pistachia Galls; Mastiche; Mastix).—Concrete resinous exudation fr. Pistacia Lentiscus, L. Anacardiaceæ.—*Habit.:* Mediterranean Islands, especially Chios (Scio). —*Etymol.:* Grk. "mastichaein," to chew, to masticate, *i.e.*, the gum is used in the East as a chewing-gum. "Pistacia," fr. Grk. "pistake," fr. Persian "pistah," altered fr. its Arabic name "foustaq," or "fistaq," the pistachio tree (Dioscorides). Lat. "lentiscus," fr. "lens, lentis," a lenticel, *i.e.*, having elliptical cavities in which the resin is secreted.—*Constit.:* Volat. oil; bitter principle; alpha-resin (masticic acid), $C_{20}H_{32}O_2$; beta-resin (masticin), $C_{20}H_{31}O_2$. — Mild Stim.; Diuret.; Protective (in solut.).—*Uses:* Techn., in tooth cements, plasters, lacquers, chewing-gums, & incense.

Maté

(Paraguay Tea; Yerba Maté; St. Bartholomew's Tea; Jesuits' Tea).—Lvs. of Ilex paraguayensis, St. Hilaire. Aquifoliaceæ. Ilicaceæ.—*Habit.:* South America (Brazil; Argentine Republic).—*Etymol.:* "Maté," according to Bonpland, is the name by which is designated a warm infusion of the leaves of Ilex paraguayensis. — *Constit.:* Volat. oil; caffeine (0.2–1.8%); tannin; a stearopten; mateviridic acid; vanillin.—Diur.; Sudorif.; Nerve Tonic; Exhilarant; Lax.; large doses Drastic Purgat.—*Uses:* Headache, chron. constip., & nervous affections; also in domestic use like coffee & tea.—*Dose:* Fld. extr., 30–60 ♏ (2–4 Cc.).

Matico.—*U. S. P.*

(Matico Leaves).—Lvs. of Piper angustifolium, Ruiz et Pavon. Piperaceæ. —*Habit.:* Peru; Bolivia; Brazil; Mexico; Cuba. — *Etymol.:* "Matico" is the Spanish name of the shrub—it is perhaps derived from the Peruvian "maté," which designates a warm infusion.—*Constit.:* Volat. oil; maticin (bitter principle); artanthic acid; tannin; mucilage; resin. — Hemostat.; Antiblennor.; Bitter Tonic; Stim.; Aromat.; Astring. — *Uses: Intern.*, in diseases of muc. membranes, cystic catarrh, hemorrhoids, dysent., gonor., diar., hemoptysis, menor. — *Extern.*, epistaxis & other hemorrhages, ulcers, &c.—*Doses:* 30–120 grains (2–8 Gm.).—Alcoh. extr., 5–10 grains (0.3–0.6 Gm.).—Fld. extr., 30–60 ♏ (2–4 Cc.).—Tinct., 30–120 ♏ (2–8 Cc.).

Matricaria.—*U. S. P.*

(German Chamomiles; Wild Chamomiles). — Dried flower-heads of Matricaria Chamomilla, L. Compositæ. — *Habit.:* Europe; Western Asia; cultiv. in U. S.—*Etymol.:* Fr. Lat. "matrix," "matrice," womb, *i.e.*, it was formerly used because of its supposed action on the womb. For "chamomilla" see "Anthemis."—*Constit.:* Volat. oil; anthemic acid; anthemidine; extractive; tannin.— Diaphor.; Antispasm.; Emoll.; Tonic; Emmenag.; Carmin.; Anthelm.—*Uses:* Emetic in large doses. In small doses to expel worms, or to "sweat out" colds. In very small doses, appetizer.—*Extern.*, appl. to indol. ulcers & sores.—*Doses:* 15–60 grains (1–4 Gm.), usually in infus.—Alcoh. extr., 2–8 grains (0.12–0.5 Gm.).—Fld. extr., 15–60 ♏ (1–4 Cc.).

May Apple.—see **Podophyllum**

Mayer's Alcoholic Acid Carmine

4 Gm. carmine, 15 Cc. W., 30 drops HCl, & 95 Cc. 85% A., w. ammonia added until persistent ppt.; then filter.—*Uses:* Staining nuclei.

Mayer's Hemacalcium

(Mayer's Hematoxylin-Alum-Calcium).—Solut. 1 Gm. hematein (or ammon. salt. prepar. by evapor. a solut. 1 Gm. hematoxylin & 1 Cc. ammonia in 20 Cc. W.) & 1 Gm. alumin. chloride in 600 Cc. 70% alcohol, with addit. of 10 Cc. acetic acid & 50 Gm calc. chloride.—*Uses:* Staining nuclei.

Mayer's Picrocarmine

Solut. 8 Gm. carmine in 100 Cc. ammonia, w. satur. aqu. solut. picric acid added until format. of a ppt.—*Uses:* As of Ranvier's Picrocarmine.

Mayer's Picro-Hydrochloric Acid

100 Cc. satur. aqu. solut. picric acid w. 3 Cc. conc. hydrochloric acid.—*Uses:* Fixing tissue elements (excepting those containing calcium carbonate).

Mayer's Picro-Nitric Acid

Satur. solut. picric acid in 5 Cc. nitric acid (Sp. Gr. 1.185) & 100 Cc. W.—*Uses:* Fixing all tissue elements (except those containing $CaCO_3$).

Mayer's Reagent.—For alkaloids

(Solution Mercury & Potassium Iodide). — Solut. 13.55 Gm. mercuric chloride & 50 Gm. potass. iodide in 1000 Cc. W. Gives a wh. ppt. w. most alkaloids in slightly acidulated solutions; may also be used for quantitative estim. alkaloids. (See Winckler's [Tanret's] Reagent).

Maytenus

(Palta; Colquiyuyu; Chaplan; Capia Gangona; Sombra de Toro Carape).—Lvs. of Maytenus Vitis Idæi, Molina. Celastraceæ.—*Habit.:* Argentine Republic.—*Etymol.:* Fr. "mayten," the Chilian name of the plant. "Vitis," fr. the Celtic "gwid," shrub, & "viere," to bind, *i.e.*, the plant climbs about others. "Idæi," fr. Lat. "idæus," fr. Mount Ida, in Crete.—*Uses:* Ringing in the ears, cataract, gingivitis.

Meadow Sweet.—see **Spiræa**

Meconin Merck.—Pure, cryst. (400

(Anhydride of Meconinic [not Meconic] Acid; Opianyl).—Neutral substc. fr. opium, & also in Hydrastis canadensis, L. — $C_{10}H_{10}O_4$. — Colorl. cryst.—*Sol.* A., E., B., C., amyl alcohol, & hot W.—*Melt.* 102° C.

Méhu's Reagent.—For albumin

Solut. 1 part phenol & 1 part glacial-acetic acid in 2 parts alcohol.—Precipitates albumin from its solutions in the presence of HNO_3 or H_2SO_4.

Melampyrit.—see **Dulcit**

Melanin Merck (40000

Pigment fr. choroid coat of eye & fr. melanotic ulcers.—Black powd.—*Sol.*, sl. in dil. alkalies.

Meldola's Blue.—see **Phenyl Blue**

Melegueta Pepper.—see **Amomum Melegueta**

Meletin.—see **Quercetin**

Melia.—see **Azedarach**

Melilotus

(Sweet Clover; Yellow Melilot; Yellow Sweet Clover).—Herb of Melilotus officinalis, Lam. Papilionaceæ.—*Habit.:* Europe; Asia; natur. to some extent in U. S.—*Etymol.:* Grk. "meli," honey, & "lotos," lotus, clover, *i.e.*, honey-clover.—*Constit.:* Cumarin; resin; volat. oil.—Emoll.; Loc. Anod. (in resolv. plasters & poultices).

Melissa

(Balm; Lemon Balm; Bee or Garden Balm; Honey Plant).—Lvs. of Melissa officinalis, L. Labiatæ.—*Habit.:* Southern Europe; Asia Minor. —*Etymol.:* Fr. Grk. "melissa," bee, *i.e.*, the melissa attracts the bees.—*Constit.:* Volat. oil; bitter substance; tannin; gum.—Diaphor.; Stim.; Carmin.; Emmen.; Antispasm.; Antipyr. — *Uses:* With other remedies to check fever & promote perspiration.—*Dose* 15–60 grains (1–4 Gm.).—Fld. extr., 15–120 ♏ (1–8 Cc.).

Mellimide, or *Mellitimide.*—see **Paramide**

Mellitose, or *Mellitriose.*—see **Raffinose**

Menispermum

(Yellow Parilla; Canadian Moonseed). — Rhizome & roots of Menispermum canadense, L. Menispermaceæ. — *Habit.:* North America (Canada to South Carolina). — *Etymol.:* Grk. "mene," moon, & "sperma," seed, referring to the crescent-shaped fruit or seed. "Canadense" refers to its habitat, Canada.—*Constit.:* Berberine; menispine; starch; resin; tannin. —Tonic; Alter.; Laxat.; Diuret.—*Uses:* Particularly useful in gastric & syphilitic affections. —*Doses:* 15–60 grains (1–4 Gm.).—Fld. extr., 15–60 ♏ (1–4 Cc.).

Mentha Aquatica.—see **Watermint**

Mentha Crispa.—see **Crispmint**

Mentha Piperita.—see **Peppermint**

Mentha Pulegium.—see **Pulegium**

Menthene.—see **Pinene, Dextrogyrate**

Menthene Merck (35

Fr. menthol by dehydration. (Not the terpene [$C_{10}H_{16}$] formerly called "menthen," or "menthene," which is ident. w. pinene).—$C_{10}H_{18}$.—Clear, colorl. liq.; pleas. odor.—Sp. Gr. 0.8226 at 0° C. — *Sol.* A., E. — *Boil.* 165° C. — See also Pinene.

Menthol Merck.—Highest Purity, Medicinal.—Recryst. (5

(Hexahydrothymol; Methylpropylphenyl Hexahydride; Peppermint Camphor). — Secondary alcohol fr. essential oil of Mentha piperita, L., or other peppermint oils.—$C_{10}H_{20}O$, or, $C_{10}H_{19}$-OH.—Colorl. cryst.; peppermint odor.—*Sol.* A., E., carbon disulphide, oils, acetic acid; v. sl. in W. — *Melt.* 43° C. — *Boil.* 212° C. — Analg.; Anesth.; Antisep.; Stim.—*Uses: Intern.*, tuberculosis, phth. fever, nerv. diar., & vomit.—*Extern.*, toothache, headache, neural., insect bites, & prurit. By brush, tampon, or atomizer: hay fever, nasal diphth., catarrh, asthma, & chronic bronch.—*Techn.*, in perfumery.—*Dose* 3–5 grains (0.2–0.3 Gm.).—*Max. D.* 90 grains (6 Gm.) daily in tuberculosis, in doses of 15 grains (1 Gm.) each.—*Appl.*, tampons 1 in 5 of oil; 1:10 oint. For toothache: put a crystal into cavity. — *Incomp.*, butyl-chloral hydrate, camphor, carbolic acid, hydrated chloral, chromium trioxide, euphorin, exalgine, naphthol, resorcinol, or thymol; potass. permangan.; pyrogallol.

do. Merck.—Japanese (5

Fr. Japanese or Chinese oil of peppermint.

Menthol Benzoate Merck (25

Mixt. of menthol & benzoic acid.—Wh., cryst. masses.—*Sol.* A., E.—*Uses:* As of menthol.

Menthol-Iodol (30

Iodol mixed w. 1% menthol.—Antisep.—*Uses:* Rhino-laryngology & dentistry; locally as dusting powd.

Menthol Valerate.—see **Validol**

Menyanthes

(Bogbean; Buckbean; Marsh-trefoil; Water-shamrock).—Lvs. & root of Menyanthes trifoliata, L. Gentianaceæ.—*Habit.:* Europe; Asia; N. America south to Penn., Minn., & Calif.—*Etymol.:* Fr. Lat. "tres," three, & "folium," leaf. "Menyanthes," probably derived fr. Grk. "men," mouth, & "anthos," flower, indicating its use as an emmen.; or fr. "minyntha," a short time, fr. the short duration of the flowers.—*Constit.:* Menyanthin, $C_{33}H_{50}O_{14}$.—Bitter Tonic; Astring.; Purgat.; Emet.; Emmen.—*Doses: Lvs.* or *Root:* 10–25 grains (0.6–1.6 Gm.) in powd., or fld. extr., as tonic; 60 grains (4 Gm.) cath.

Menyanthin.—see **Inulin**

Mercurial Ointment.—see **Ointment Mercurial**

Mercurialis

(Mercury Herb; French Mercury; Girl's Mercury).—Herb of Mercurialis annua, L. Euphorbiaceæ. — *Habit.:* Europe; adv. in U. S. — *Etymol.:* Lat. "mercurialis," *i.e.,* mercurial herb.—*Constit.:* Mercurealine (ident. w. monomethylamine, $CH_3.NH_2$?); trimethylamine. — Purg.; Diuret.; Emmen.; Antisyphil.; Emoll. —*Uses:* Amenor., dysmenor., scrofula, & syphilitic affect.—*Dose:* Fld. extr., 5–30 ♏ (0.3–2 Cc.).

Mercuric Potassium Iodide-Citric Acid Paper.—see **Citro-Potassium Mercuric Iodide Paper**

Mercuric & Mercurous Salts.—see under **Mercury**

Mercurio-vegetal.—see **Manaca**

Mercurius Vitæ.—see **Antimony Oxychloride**

Mercuro-iodo-hemol.—see **Hemol, Mercuro-iodo-**

Mercurol (30

(Mercury Nucleide).—Compound of mercury & nucleinic acid.—Abt. 10% Hg.—Light brownish-wh. powd.—*Sol.* W.; insol. A.—Antisep.; Astring.; Bactericide.—*Uses:* Chron. conjunctivitis, suppurative otitis media, ophthalmia neonatorum, infect. inflammations, gonor., &c. —*Appl.,* gonor., 0.5–3% solut.; opthalm., 3–5% solut.; otitis, 5–10% solut. — *Dose* 3 grains (0.2 Gm.) 3 t. p. d.—*Caut.* Solutions should be freshly prepared.

Mercury (1

(Quicksilver). — Metal. — Hg. — *Etymol.:* So named by the alchemists in honor of the planet Mercury. "Hydrargyrum," the Lat. name fr. the Grk. "hydrargyros," water-silver, because the metal is liquid.—V. mobile, heavy, silvery, lustr. liq.—Sp. Gr. 13.596 at 0° C.—*Sol.,* nitric acid; hot sulphuric acid.—*Boil.* 357° C.—Antiseptic. — *Uses: Intern.,* in form of salts, as specific in syphilis. — *Pharm.,* for preparing mercurial oint., mercury with chalk, &c. — *Techn.,* barometers, thermometers, pyrometers, mirrors, extraction of gold & silver fr. ores, making amalgams, in gas analysis & physical & chemical experiments, manuf. mercury salts, dentistry, & electrotechn.—*Antid.,* see Mercury Bichloride.—*Caut.* Mercuric salts are mostly poisonous, some extremely so. Mercurous salts are less poisonous, some hardly at all.

Mercury.—Redistilled (2

do. Merck.—By electrolysis (4

Mercury Merck.—Reagent (6

Hg.—*Tests:* (*Foreign Met.*) *a:* heat 20 Gm. in porcel. dish under a good draught – no wghble res.; *b:* boil 5 Gm. + 5 Cc. H_2O + 4.5 Gm. $Na_2S_2O_3$ for abt. 1 min. in test-tube – Hg should retain lustrous appearance, & acquire at most but sl. yellow tinge.—*Uses:* In eudiometers; determ. N; detect. albumen; extemporaneous prep. mercury salts.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Mercury Acetate Merck.—Mercuric (6

$Hg(C_2H_3O_2)_2$.—Wh., cryst. powd.—*Sol.,* eas. W.—Antisyphil.—*Uses: Intern.,* syphilis.—*Extern.,* freckles.—*Dose* $^1/_{10}$–1 grain (0.006–0.06 Gm.). —*Appl.,* solut. 1–1.5 : 100 rose water for freckles. —*Antid.* See Mercury Bichloride.

Mercury Acetate Merck.—Mercurous (6

$Hg_2(C_2H_3O_2)_2$.—Wh., cryst. powd.—*Sol.,* sl. in W.—Antisyphil.—*Dose* $^1/_{10}$–1 grain (0.006–0.06 Gm.) 2–3 t. p. d.—*Max. D.* 1 grain (0.06 Gm.) single; 3 grains (0.2 Gm.) per day.—*Appl.,* in 1–2 : 25 oint.—*Caut.* Keep well stp'd, fr. light.

Mercury Alanin.—see **Mercury Aminopropionate**

Mercury Albuminate Merck.—Dry (4

(Albumin w. 0.4% mercuric chloride).—Wh. to grayish-wh. powd. — *Sol.* W. with turbid. — Antiseptic.—*Uses: Extern.,* triturated w. milk-sugar (1.5:100) as antisep. dress. for wounds. —*Caut.* Soluts. do not keep well.

Mercury Alginate.—Mercuric

(Alginoid Mercury[ic]). — Fr. sod. alginate & solut. mercuric nitrate. — Grayish-wh. powd. —*Sol.,* ammonia; solut. does not attack surgic. instruments.—Decomp. in intestines.

Mercury Alginate.—Mercurous

(Alginoid Mercury[ous]).—Fr. sod. alginate & solut. mercurous nitrate.—Gray powd.; 33% Hg.—Is blackened by ammonia.—Decomp. in intestines.

Mercury Amidoacetate.—see **Mercury Glycocholate**

Mercury Aminopropionate Merck (100

(Mercuric Alanin).—$Hg(C_3H_6NO_2)_2$.—Wh. need. —*Sol.* 3 W.—Alter.; Antisyph.—*Uses:* Hypoderm., or by mouth in syph.—*Dose* $^1/_{12}$–$^1/_6$ grain (0.005–0.01 Gm.).

Mercury Ammoniated Merck.—Lumps (2

(Ammoniated Mercury Chloride; White Precipitate; Mercury & Ammon. Chloride; Amidomercuric Chloride).—By precip. solut. mercuric chloride w. ammonia in excess.—$HgNH_2Cl$.—Wh., pulverulent lumps; earthy, styptic, metal. taste.—*Sol.*, warm acids; cold solution amm. carbonate, & in sod. thiosulphate.—Antisep.; Alter.—*Uses: Extern.*, as white-precipitate oint. (1:10) in syph. erup. & sores, iritis (0.1–0.2:10 lanum & petrolatum), skin dis., &c. *Not used internally.*—*Caut.* Poison! French "White Precipitate" (*Precipité Blanc*) is *calomel*. Do not confound the two when French prescriptions are to be compounded.

do. Merck.—Powder (2

Mercury, Ammoniated Nitrate.—see **Mercury Oxide Black, Hahnemann**

Mercury Anilinate

$Hg(C_4H_4.NH_2)_2$. — Loose, wh., odorl., tastel., cryst. powd.; 52.1% Hg. — Insol. W. — *Uses:* Syphilitic sores, &c.—*Dose* $^1/_4$ grain (0.015 Gm.) 3–4 t. p. d.—*Appl.*, by inunct. in 30–35% oint.; to sores in 0.5–3% oint.—*Inj.*, intramuscularly in 30–35% susp. in liq. petrolatum.

Mercury Arsenate Merck (8

(Mercuric Arsenate).—$Hg_2H_2(AsO_4)_2$.—Yellow powd.—*Sol.*, acids; insol. W.—*Uses:* Syph. dis.

Mercury Arsenite Merck.—Pure (5

(Mercurous Arsenite).—Hg_3AsO_3.—Brownish powd.—*Sol.*, acids; insol. W.

Mercury Asparaginate Merck (30

(Asparagin-mercury).—Fr. mercuric oxide & hot aqu. solut. asparagin.—$Hg(C_4H_7N_2O_3)_2$.—Yellowish powd.—*Sol.*, acids; insol. W.—Alter.; Antisep.—*Uses:* Syph.; said to produce no local disturbance & to be wholly eliminated fr. system in 24 hours.—*Dose* $^1/_{12}$–$^1/_6$ grain (0.005–0.01 Gm.) p. day, hypoderm.

Mercury Benzoate Merck.— Mercuric.—Soluble (6

$Hg(C_7H_5O_2)_2+H_2O$.—Wh. cryst.—*Sol.*, sl. A., eas. in solut. sodium chloride & in ammon. benzoate.—Alter.; Antisep.—*Uses:* Syph., & skin dis. —*Dose* $^1/_{30}$–$^1/_{10}$ grain (0.002–0.006 Gm.).—*Inj.*, hypoderm., 15 ♏ (1 Cc.) of solut. of 0.25 merc. benz., 0.25 sod. chloride, & 30 water, per day.

Mercury Benzoate Merck.—Mercurous (5

$Hg_2(C_7H_5O_2)_2$.—Wh., cryst. powd.—Insol. W., A.

Mercury Betanaphthol (or *-naphtholate*).—see **Mercury Naphtholate**

Mercury Bichloride Merck.—Lump, cryst., gran., or powd. (2

(Mercuric Chloride; Corrosive Sublimate; Mercury Perchloride; Corrosive Mercury Chloride). —$HgCl_2$.—Wh., transp., heavy, cryst. masses, or lustr. cryst.; acrid, persistent, metal. taste. —*Sol.* 3 A.; 4 E.; 16 W. at 15° C. (13 W., 3 A., 14 G. at 25° C.; 2 boil. W., & 1.2 boil. A., U.S.P.). —*Melt.* 265° C.—*Subl.* 300° C.—Alter.; Tonic; Antisep.; Germicide; Eschar.—*Uses: Intern.*, syph., chronic rheum., & skin dis.—*Extern.*, in collodion as caustic: nevi, &c.; in alc.: ringworm; in W.: collyrium in vener. ophthal., for leprosy, ulc., & var. skin dis., antisep. dress. in surg. operat., in diphth., disinf., &c.—*Techn.*, preserving wood (kyanising) and anatomical specimens, also embalming; disinfect.; etching steel and iron; white reserve in fabric printing; chemical reagent; freeing gold fr. lead; browning iron & steel; magic photograms; mordant for rabbit- & beaver-furs in hat-making; staining wood & vegetable ivory pink; manuf. ink for mercurography.—*Dose* $^1/_{100}$–$^1/_8$ grain (0.0006–0.008 Gm.).—*Inj.*, hypoderm.: Mercuric chloride $1^1/_2$ grains (0.1 Gm.), sodium chloride, 15 grains (1 Gm.), & W., 1,550 ♏ (100 Cc.). Use 8–15 ♏ (0.5–1 Cc.). — *Appl.* (wash), 1:1,000–5,000. —*Max. D.* $^1/_3$ grain (0.02 Gm.), single 1 grain (0.06 Gm.), p. day.—*Antid.*, zinc sulphate, emetics, stomach siphon, white of egg, milk in abundance, chalk mixture, castor oil, table salt, reduced iron, iron filings. White of egg & milk 2 or 3 t. p. d. for a week.—*Incomp.*, reduced iron, sulphurous acid, formic acid, hypochlorites, albumen, alkalies, carbonates, alkaloidal salts, ammonia, antimonous & arsenous salts, bromides, borax, copper salts, ferrous salts, gelatin, hypophosphites or hypophosphorus acid; infusions cinchona, colombo, oak bark, & senna; lead salts, lime-water, phosphates, silver nitrate, potass. or sodium sulphate, sulphides, tannic acid, vegetable astringents, zinc salts. — *Caut.* Exceedingly poisonous!

do. Merck.—Recryst. (2

Mercury Bichloride Merck.—Reagent (4

(Mercuric Chloride; Corrosive Sublimate).— $HgCl_2$.—Wh., transluc., prism. cryst.—*Sol.* 16 cold, 3 boil., W.; 3 A.; 12–14 anhydr. E. at 15° C.—*Tests:* (*Impur. Not Pptd. by* H_2S) 5 Gm. + 100 Cc. H_2O + 5 Cc. HCl (sp. gr. 1.124); pass in H_2S gas till all Hg pptd.; filter; evap. colorl. filtrate to dryness on W.-bath – no wghble res. —(*As*) shake the HgS just obtained w. 5 Cc. NH_4OH + 45 Cc. H_2O; filter; acidul. w. HCl– no yellow color, & no ppt.—(*Hg_2Cl_2; o. Impur. Insol. in E.*) 1 Gm. powd. compl. solub. in 25 Cc. E. — *Uses:* Determ. Fe; detect. formic, hydriodic, & phosphorous acids, tin, various alkaloids; fixing agent in microscopy; in reagents for albumen, ammonia & acetone.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Mercury Bichloride, Ammoniated.—see **Mercury & Ammonium Bichloride**

Mercury Bichloride Carbamidated Merck (12
(Mercury-urea Chloride). — $HgCO(NH)_3Cl_2$.—Colorl. cryst.—*Sol.*, hot A.—Alter.; Antisep.—*Uses: Extern.*, syph., scrof., & chronic rheum.; subcutan. in 1% aqu. solut.—*Dose* 8–15 ♏ (0.5–1 Cc.) of solut.

Mercury Bichloride, Peptonized.—see **Mercury Peptonized**

Mercury Bichromate.—see **Mercury Dichromate**

Mercury Biniodide.—see **Mercury Iodide, Red**

Mercury Bisulphate.—see **Mercury Sulphate, Mercuric**

Mercury Bitartrate Merck (6
(Mercurous Bitartrate). — $HgHC_4H_4O_6$. — Wh., cryst. powd.—Insol. W.

Mercury Bromide.—Mercuric (6
(Mercury Dibromide).—$HgBr_2$.—Silvery, lustr. scales.—*Sol.* W., A., & E.—Alterative; Antisyphil.—*Uses:* As of mercury bichloride.—*Dose* $^1/_{15}$–$^1/_4$ grain (0.004–0.015 Gm.).

Mercury Bromide Merck.—Mercurous (6
Hg_2Br_2.—Wh. powd.—Insol. W.—Alter.; Antisep.—*Uses:* Mild mercurial, greatly resembling calomel in action. — *Dose* 1 grain (0.06 Gm.) in divided doses grad'ly increased up to 8 grains (0.5 Gm.) per day.

Mercury Cacodylate Merck (20
(Mercuric Cacodylate). — $Hg([CH_3]_2AsO_2)_2$. — Wh. cryst.—*Sol.* W.—*Uses:* Syphilis.—*Dose* $^1/_2$ grain (0.03 Gm.) p. d. injected intramuscul.

Mercury Carbolate.—see **Mercury Phenate**

Mercury Carbonate, Basic.—see **Mercury Carbonate, Mercuric**

Mercury Carbonate Merck.—Mercuric (8
(Basic Mercury Carbonate).—$HgCO_3+3HgO$.—Reddish powd.—*Sol.*, acids; insol. W.

Mercury Carbonate Merck.—Mercurous (6
Hg_2CO_3. — Yellow to yellowish-brown powd.; loses carbon dioxide on expos.—Insol. W.

Mercury Chloride, Ammoniated.—see **Mercury Ammoniated**

Mercury Chloride Corrosive.—see **Mercury Bichloride**

Mercury Chloride Mild Merck.—Sublimed (2
(Mercurous Chloride; Calomel; Mercury Monochloride). — Hg_2Cl_2. — Impalp., yellowish-wh., heavy powd.—Insol. W., A., E.—*Subl.*, 400–500° C., without melt.—Cath.; Alter.; Diuret.; Antisep.; Anthelm.—*Uses: Intern.*, constip., cholera, dysent., cardiac dropsy, pleurisy, malign. fever, malaria, syph., gout, worms.—*Extern.*, smallpox pitting, pruritus, diphth.; membr. croup (fumigation), condyloma, warts. Effect of dose not prop. to size. Small, well-triturated doses better than large, coarse ones. Larger dose in prop. to age of children than w. o. medic.—*Techn.*, the sublimed prep. is used in dark-green Bengal lights, calomel paper, mixed w. gold in painting on porcelain, &c.—*Dose:* Cath., 2–15 grains (0.12–1 Gm.); antisyph., $^1/_3$–1 grain (0.02–0.06 Gm.); diuret., 2–3 grains (0.12–0.2 Gm.) 3 t. p. d.; intern. antisep., $^1/_8$–$^1/_4$ grain (0.008–0.015 Gm.); cholag., $^1/_4$–$^1/_2$ grain (0.015–0.03 Gm.).—*Appl.* 1:5 oint. in pruritus vulvæ, & pruritus ani fr. hemorrhoids.—*Incomp.*, sulphurous acid, hydrocyanic acid, alkali chlorides, bromides, iodides, sulphates, sulphites, carbonates, hydroxides, organic acids, lime-water, acacia, airol, alkalies, ammonia, golden antimony sulphide, cocaine, cyanides, copper salts, hydrogen peroxide, iodine, iodoform, lead salts, silver salts, soap, sulphides.

Mercury Chloride Mild Merck.—Steam condensed (2
Wh. powd.—Insol. W.—*Uses:* Dusting-powd. in ophthalmology, in blennor., granular inflam. of eye, corneal opacities, &c.

do. Merck.—Precipitated (2
Uses: More active than sublimed calomel. Usually given in doses $^1/_3$ those of the latter.

do.—English, "M. & B." (2

Mercury Chloroiodide.—see **Mercury Iodochloride**

Mercury Cholalate.—see **Mergal**

Mercury Chromate Merck (5
(Mercuric Chromate).—$HgCrO_4$.—Yellow powd.—*Sol.*, acids; insol. W.

Mercury Citrate Merck (5
(Mercurous Citrate).—$Hg_3C_6H_5O_7$.—Wh. powd.—*Sol.*, v. sl. W.

Mercury, Colloidal.—see **Hyrgol**

Mercury Cyanide Merck (5
(Mercuric Cyanide).—$Hg(CN)_2$.—Colorl., transp. prisms; bitter, metal. taste. Darkened by light.—*Sol.* W., A.—Alter.; Antisyphil.; Antisep.; Tonic, &c.—*Uses:* Inst. of corrosive sublimate; much less irritating. Recom. in diphth., membr. croup & syph. — *Techn.*, in manuf. cyanogen gas (by heating), & as reagent for palladium.—*Dose* $^1/_{12}$–$^1/_6$ grain (0.005–0.01 Gm.) in solut.—*Inj.* $^1/_{12}$–$^1/_6$ grain (0.005–0.01 Gm.) hypoderm.—*Extern.*, as gargle 1:10,000 solut.; in fibr. rhinitis, tampons impregn. w. 0.04% aqu. solut.—*Max. D.* $^1/_3$ grain (0.02 Gm.) single; 1 grain (0.06 Gm.) per day.—*Antid.*, 0.1% solut. sulphurated potassa intern.; also as in mercury bichloride. —*Caut.* Very poisonous! Keep in dark amber bottle.

Mercury Diammonium Chloride.—see **Mercury & Ammonium Bichloride**

Mercury Dibromide.—see **Mercury Bromide, Mercuric**

Mercury Dichromate Merck.—Precipitated (6

(Mercuric Bichromate). — $HgCr_2O_7$. — Heavy, red, cryst. powd.—*Sol.*, acids; insol. in usual solvents.

Mercury Diethide (240

(Mercuric Diethide; Mercury-ethyl).—React.-prod. ethyl iodide w. sodium amalgam in presence of acetic ether.—HgC_4H_{10}, or, $Hg(C_2H_5)_2$. —Transp., colorl. liq.; faint ether. odor.—Sp. Gr. 2.46.—*Sol.*, sl. in A., E.—*Boil.* 159° C.—*Caut.* Very poisonous!

Mercury Diiodoparaphenolsulphonate. — see **Sozoiodole-Mercury**

Mercury Diiodosalicylate Merck (85

(Mercuric Diiodosalicylate).—$Hg(C_7H_3I_2O_3)_2$.—Yellow, amorph. powd.; 20.5% mercury, 52% iodine.—*Sol.* A.—*Uses:* As o. insol. mercury comp., in 10% oily suspension with liq. petrolatum, for intramuscular injections.

Mercury Dimethide (300

(Mercuric Dimethide; Mercury-methyl).—React.-prod. sodium amalgam w. methyl iodide in presence of acetic ether.—$Hg(CH_3)_2$.—Colorl. oil; peculiar odor & taste.—Sp. Gr. 3.069.—*Sol.* A., E.—*Boil.* 95° C.—*Caut.* Poisonous!

Mercury Diphenyl (140

(Mercury-phenyl; "Hydrargyrum Diphenylatum" [see caution at Mercury Phenate]). — A mercury substit. deriv. of phenol.—$Hg(C_6H_5)_2$. —Wh. cryst.—Sp. Gr. 2.318.—*Sol.* B., C., carbon disulphide, E. & hot A.—*Melt.* 120° C.—*Caut.* Very poisonous!—Not Mercury Phenate.

Mercury-ethyl.—see **Mercury Diethide**

Mercury Ethylchloride (150

Fr. mercuric chloride w. mercury ethide.—Colorl., shin. scales; unpleas. ether. odor.—*Sol.*, sl. in W., A.—*Uses:* As inj. inst. of mercuric chloride; indifferent to albumen.

Mercury Ethylenediaminesulphate.—see **Sublamine**

Mercury Ferrocyanide Merck (12

(Mercuric Ferrocyanide).—$Hg_2Fe(CN)_6$.—Brown powd.—Insol. W., A., & acids.

Mercury Formamidate Merck.—1%, 2%, & 10%, solut. (2

Solutions of 1, 2, & 10% respectively of mercuric oxide in formamide.—Antisyph.—*Uses:* Hypoderm. in syphil.; better adapted for use than corrosive sublimate, because inject. less painful.—*Dose* 15 ♏ (1 Cc.) of 1% solut. (=$^1/_6$ grain [0.01 Gm.] HgO) every 2d day.

Mercury Gallate Merck (6

(Mercuric Gallate). — $Hg(C_6H_2[OH]_3CO_2)_2$. — Grayish-brown, amorph. powd.; 37% mercury. —*Sol.*, alkalies; insol. W., A.—Alter.; Antisyph. —*Uses:* Said not to produce salivation or stomatitis. — *Dose* $^3/_4$–$1^1/_2$ grains (0.05–0.1 Gm.) daily in pills.

Mercury Glycocholate Merck.—1% Solut. (4

(Mercury Amidoacetate).—Stable solut. mercury glycocholate, $Hg(C_{26}H_{42}NO_6)_2$, containing 1% mercuric oxide.—Antisyph.—*Dose* 8–15 ♏ (0.5–1 Cc.) (=$^1/_{12}$–$^1/_6$ grain [0.005–0.01 Gm.] HgO), every 2d day, hypoderm.

Mercury, Hahnemann's Soluble. — see **Mercury Oxide, Black**

Mercury Herb.—see **Mercurialis**

Mercury Imidosuccinate.—see **Mercury Succinimide**

Mercury Iodate Merck (18

(Mercuric Iodate).—$Hg(IO_3)_2$.—Wh., amorph. powd. — *Sol.* W., containing sodium chloride or potassium iodide.—*Uses:* Syphilis.—*Dose* $^1/_6$–$^1/_4$ grain (0.01–0.015 Gm.) subcut. ev. 2–4 d.

Mercury Iodide, Green.—see **Mercury Iodide, Yellow**

Mercury Iodide Red Merck (4

(Mercuric Iodide; Mercury Biniodide).—HgI_2. — Heavy, scarlet-red, amorph. powd. — *Sol.*, solut. soluble iodides, mercuric chloride, hot alkali chlorides, & sod. thiosulphate; insol. W.; 130 A. at 15° C.; (116 A., 85 E., & 1,340 C. at 25° C.; 15 boil. A., U. S. P.).—*Melt.* 253° C.—Alter.; Germic.; Antisep.; Antisyph.; Emmen. —*Uses: Intern., & Extern.*, in syph., scrof., lupus, & skin dis., espec. when obstinate. Oint., 1–5% in fat.—*Dose* $^1/_{15}$–$^1/_4$ grain (0.004–0.015 Gm.) in pills or in W. with potass. iodide.—*Max. D.* $^1/_3$ grain (0.02 Gm.) single; 1 grain (0.06 Gm.) daily.

Note.—This preparation is particularly desirable for general use, on account of its uniformity & freedom from corrosive sublimate.

Mercury Iodide Yellow (or Green) Merck (4

(Mercurous Iodide; Green Mercury Iodide or Protoiodide).—HgI.—Bright yellow, or light greenish-yellow, amorph. powd.; darkens on expos. to light —Insol. W., A., E.—Antisyph.; Emmen.; Alter.—*Uses:* Advanced syph., scrof., &c. *Never prescribe* this w. a soluble iodide, since mercuric iodide (highly poisonous) is formed.—*Dose* $^1/_2$–2 grains (0.03–0.12 Gm.).—*Incomp.*, iodides.—*Caut.* Keep in amber bot.

Note.—This particularly pure article is specially prepared for use in scrofula & syphilis.

Mercury Iodochloride Merck (12

(Mercuric Chloroiodide).—$2HgCl_2.HgI_2$.—Red, cryst. powd.—*Sol.* A.—Antisyph.—*Dose* $^1/_6$–$^1/_3$ grain (0.01–0.02 Gm.).—*Appl.*, as 1:80 oint.

Mercury Lactate Merck (7

(Mercurous Lactate). — $Hg_2(C_3H_5O_3)_2$. — Wh., cryst. powd.—*Sol.*, sl. W.—*Uses:* Syphilis.—

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Dose 4 fl. dr. of 1:1000 aqu. solut.—*Subcut.*, inject. of 15 ♏ (1 Cc.) of 1% aqu. solut. daily.

Mercury, Mass of (1

(Blue Mass; Blue Pill).—33% finely divided mercury.—Cath.; Alter.—*Uses:* Constip., incr. biliary secret., & disinf. alim. tract; prob'ly mildest merc. sialag.—*Dose* 3–15 grains (0.2–1 Gm.).

do.—Powder (1

Mercury-methyl.—see **Mercury Dimethide**

Mercury Monochloride.—see **Mercury Chloride**

Mercury Naphtholacetate Merck (13

(Mercuric Naphtholacetate).—$HgC_{10}H_7O.C_2H_3O_2$.—Yellowish powd.—*Sol.*, dil. alkalies.

Mercury Naphtholate Merck (10

(Mercuric Naphtholate; Mercury Betanaphthol).—$Hg(C_{10}H_7O)_2$.—Grayish-wh. powd.—Abt. 30% mercury.—Antiseptic.—*Uses: Intern.*, typhoid condit.—*Extern.*, wounds & skin dis.—*Dose* 1 grain (0.06 Gm.).

Mercury Nitrate Merck.—Mercuric (4

Fr. mercuric oxide & warm nitric acid.—$Hg(NO_3)_2$.—Wh., deliq. powd.—*Sol.* W.—Antisyph.; Antisep.; Alter.—*Uses: Intern.*, syph., scrof.—*Extern.*, appl. to freckles, & oint. to abort boils.—*Techn.*, in milk analysis (by Ladé's method), titrating urea, & in solut. as Millon's reagent.—*Dose* $^1/_{15}$–$^1/_4$ grain (0.004–0.015 Gm.).—*Caut.* Poison!

do.—Solution.—*U. S. P.*

Abt. 60% mercuric nitrate, $Hg(NO_3)_2$, & abt. 11% free nitric acid.—Clear, colorl. liq.—Sp. Gr., abt. 2.086 at 25° C.—Caustic; Antisep.—*Uses: Extern.*, caustic for cancers, chancres, ulc. of cervix, boils, & var. skin dis.

Mercury (-ic) Nitrate Paper

Used in urinalysis for detection of albuminoids.

Mercury Nitrate Merck.—Mercurous, Basic (4

(Mercurous Subnitrate).—Yellow powd.—*Sol.*, nitric acid.—*Uses & Doses:* Instead of mercuric oxide in France.

do. Merck.—Mercurous, Normal (4

Fr. excess of mercury & cold nitric acid of Sp. Gr. 1.2.—$Hg(NO_3)+H_2O$.—Colorl. cryst.—*Sol.*, v. dil. nitric acid; sm. quant. W.; decomp. much W.—Antisyph.; Antisep.; Caustic.—*Dose* $^1/_{30}$–$^1/_4$ grain (0.002–0.015 Gm.) several t. p. d.—*Max. D.* $^1/_3$ grain (0.02 Gm.) single; 1 grain (0.06 Gm.) p. day.

do.—Solution

Abt. 10% $Hg(NO_3)$.—Colorl. liq.—Sp. Gr. 1.10 at 15° C.—*Misc.* W. w. turbid.—Caustic; Antisyph.—*Uses:* Cancerous & syphil. ulcers.—*Dose* 1–2 ♏ (0.06–0.12 Cc.), well diluted 1–2 t. p. d.—*Appl.*, pure to cancerous & syph. ulcers; as compress & wash in 1–4:200 solut. w. W.—*Max. D.* $1^1/_2$ ♏ (0.1 Cc.) single; 8 ♏ (0.5 Cc.) p. d.

Mercury Nitrate Merck.—Mercurous.—Reagent (5

$Hg(NO_3)+H_2O$.—Colorl., monoclin. tablets or prisms.—*Sol.* 2 warm W.—Solut. is acid, & is decomp. by much W.—*Tests:* (*Rcs.*) ignite 2 Gm.—none wghble.—(*Mercuric Salts*) 1 Gm.+5 Cc. H_2O+3–5 drops HNO_3 (sp. gr. 1.153)+15 Cc. H_2O+excess HCl; filter; add aqu. H_2S to filtrate—only trace of ppt.—*Uses:* Test for easily oxidizable subst'cs (*e.g.*, formic acid); in reagents for phenol & leucin.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Mercury Nitrate, Ammoniated.—see **Mercury Oxide, Black**

Mercury Nucleide.—see **Mercurol**

Mercury Oleate Merck.—5%, 10%, 15%, & 20% (2

Solut. of yellow mercuric oxide in oleic acid.—Yellow to reddish liq., semi-solid, or solid mass.—*Sol.* E. & oils.—Antisep.; Alter.; Antisyph.; Antiparasitic.—*Uses: Extern.*, skin dis., pediculi, & for administration of mercury by inunction.—*Appl.*, as liniments & oint. 1–2 (of 10% prep.): 5 w. olive oil, lanum, or lard. Pain following inunctions is avoided by adding 1–2% morphine oleate. In alopecia areata, mixt. of 7 mercury oleate (10%) & 1 acetic ether is used.

do. Merck.—25%.—*U. S. P.* (3

A firm, yellow mass of butter-like consist.—Alter.; Antisep.; Antisyph.—*Uses:* Hereditary syph., inflamed joints, syph. swellings, skin dis., & scrof. inflam.—*Dose*, by inunct., 10–15 grains (0.6–1 Gm.) in syph. in children.—*Max. D.*, when given intern., $^1/_3$ grain (0.02 Gm.) single; 1 grain (0.06 Gm.) daily.

do. Merck.—40% (3

Mercury Oxide Black Hahnemann-Merck (4

(Hahnemann's Soluble Mercury; Ammoniated Mercury Nitrate; Black Precipitate; Oxydimercurous Ammonium Nitrate).—Approx.: $Hg_2O+NH_2Hg_2NO_3$.—Black or grayish-black powd.—*Sol.*, acetic acid; insol. W., A.—*Uses:* Syphilis.—*Dose* $^1/_4$–3 grains (0.015–0.2 Gm.).—*Appl.*, in 1–5:25 oint.—Now obsolete.—*Caut.* Sensitive to light; keep in dark amber bot.

Mercury Oxide Red Merck (2

(Red Mercuric Oxide; Red Precipitate).—HgO.—Heavy, bright, orange-red powd.—*Sol.*, hydrochl. acid, nitric acid; insol. W., A.—Stim.; Escharotic, &c.—*Uses: Extern.*, chancres, indol. ulc., ringworm, pediculi, & in 0.5–1% oint. as eye salve in contagious ophthal.—*Techn.*, for prepar. other mercurials, as paint for ships' bottoms, diluting pigments for painting on porcelain, & in chem. analysis.—*Antid.*, see Mercury Bichloride.—*Incomp.*, chlorides.—*Caut.* Very poisonous!

Mercury Oxide Red Merck.—Powd. (2

do. Merck.—Levigated (2

Mercury Oxide Red Merck.—Reagent (5

HgO.—Heavy, yellowish-red powd.—*Sol.*, eas. dil. HCl or HNO_3.—*Tests:* (*Res.*) ignite 2 Gm. – none wghble.—(*Cl*) 1 Gm.+5 Cc. HNO_3 (sp. gr. 1.153)+15 Cc. H_2O+solut. $AgNO_3$–not more than sl. opalesc. turb.—(*H_2SO_4*) 1 Gm.+5 Cc. HNO_3+15 Cc. H_2O+solut. $Ba(NO_3)_2$ – no turb. —(*HNO_3*) 1 Gm.+2 Cc. H_2O+2 Cc. H_2SO_4; overlay w. 1 Cc. solut. $FeSO_4$ – no color zone even on long standing.—*Uses:* Ultimate organic analysis; in reagents for dextrose & acetone.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Mercury Oxide Yellow Merck.—Wet process (3

(Yellow Mercuric Oxide; Yellow Precipitate).—HgO.—Orange-yellow, amorph. powd.—*Sol.*, in nitric acid.—Antisep.; Antisyph., &c.—*Uses:* Inst. of red oxide in inflam. of eye & for intramuscular inject. in syph. Preferred to the red oxide because of its being in much finer powder. —*Dose:* As intramusc. inject., 1 Cc. of 1:30 olive oil every 8 days.—*Appl.*, 1:100 oint.

Mercury Oxide Yellow Merck.—Reagent (6

HgO.—Heavy yellow powd.—*Tests:* As of mercury oxide, red.—*Uses:* Volumetr. determ. HCN; in reagents for coal-tar dyes.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Mercury Oxycyanide Merck (7

(Mercuric Oxycyanide).—$HgO.HgCN_2$.—Wh., cryst. powd.—*Sol.*, hot W.—Antiseptic.—*Uses: Extern.*, diphth., erysip., & skin dis.; said superior as antisep. dress. to mercury bichloride because six times more active as germicide & less easily absorbed.—*Appl.* 0.6% solut. for wounds & in surg. operat. In blennor. neonat. (in which it is preferred to corros. sublim. & silver nitrate) the conjunctiva is washed 2 t. p. d. with a 0.2% solut., ice compresses being applied during the intervals. In other acute dis. of conjunctiva 1–2% solut. are used.

Mercury Paraphenolsulphonate. — see **Hydrargyrol**

Mercury Paraphenolsulphonate-Ammonium Tartrate.—see **Asterol**

Mercury Peptonate.—see **Mercury Peptonized**

Mercury Peptonate, Paal.—see **Glutin-Peptone-Sublimate Hydrochloride**

Mercury Peptonized Merck.—Dry, 10% (4

("Mercuric Peptonate," Mercury Bichloride, Peptonized). — Yellowish-brown powd.; 10% mercury bichloride. — *Sol.* W. — *Dose* $^1/_2$–$1^1/_2$ grains (0.03–0.1 Gm.).

Mercury Peptonized Merck.—Solution, 1% (2

Yellowish-brown, clear liq.; 1% mercury bichloride.—*Uses:* Hypoderm. in syph., 15 ♏ (1 Cc.), equiv. to $^1/_6$ grain (0.01 Gm.) corros. subl., properly diluted, per day.

Mercury Perchloride.—see **Mercury Bichloride**

Mercury Persulphate.—see **Mercury Sulphate, Mercuric**

Mercury Phenate Schadeck-Merck (10

(Mercuric Carbolate, Phenylate, or Phenolate; Phenol-mercury).—$Hg(C_6H_5O)_2+H_2O$.—Grayish-wh. to reddish-gray powd.—Contains abt. 61.5% Hg.—*Sol.* E., hot A., A.+E., glacial acetic acid.—Antisyph.; Alter.; Antisep.—*Uses:* Syph., particularly in secondary syph., & after previous treatment with inunctions.—*Dose* $^1/_3$–$^1/_2$ grain (0.02–0.03 Gm.); children, $^1/_{15}$–$^1/_{12}$ grain (0.004–0.005 Gm.).—*Caut. Not* "Hydrargyrum Diphenylatum," the very poisonous Mercury diphenyl (which see).

Mercury Phenolate or *Phenylate.*—see **Mercury Phenate**

Mercury-phenyl.—see **Mercury Diphenyl**

Mercury Phosphate Merck.—Mercuric (5

$HgHPO_4$.—Heavy, wh. to yellowish powd.—*Sol.*, acids.—*Uses:* Antisyph.—*Dose* $^1/_6$–1 grain (0.01–0.06 Gm.).

Mercury Phosphate Merck.—Mercurous (6

$Hg_2HPO_4+^1/_2H_2O$.—Heavy, wh. powd.—*Sol.*, nitric acid; insol. W., A., & phosphoric acid.—*Uses, Doses, &c.*. As of mercuric phosphate.

Mercury-potassium Nitroparaphenolsulphonate. —see **Phenegol**

Mercury Protoiodide.—see **Mercury Iodide, Yellow**

Mercury Resorcinolacetate Merck (12

(Resorcinol-mercury Acetate).—Yellow, cryst. powd. — 69% mercury. — *Sol.*, solut. potass. hydrox., hydrochloric acid, & hot glac. acetic acid; insol. W., A.—Antisyphilitic.—*Dose:* Recom. for hypoderm. use: 3 ♏ (0.2 Cc.) of a solut. of 85 grains (5.6 Gm.) of the salt in 85 grains (5.6 Gm.) of liquid paraffin, & 30 grains (2 Gm.) anhydrous lanum, twice weekly, the mixture being warmed to 25° C. before use.

Mercury Rhodanide.—see **Mercury Sulphocyanate**

Mercury Salicylarsenate.—see **Enesol**

Mercury Salicylate Merck (5

(Secondary [or Basic] Mercuric Salicylate).—$C_6H_4.CO.O.Hg$.—Wh. powd.—Abt. 59% mercury.—*Sol.*, in solut. of sodium chloride, dilute alkalies; insol. W., A.—Antisyph.; Antigonor.; Alter., &c.—*Uses: Extern.*, Chancre, gonor., & vener. affect.; 1% powd. or oint.; inj. in ure-

thra (1:300 W. w. a little acacia), 15 ♏ (1 Cc.) being injected every 2 to 3 d.—Reported eas. borne by the stomach, & to produce no salivation.—*Dose* $^1/_3$ grain (0.02 Gm.).—*Max. D.* 1 grain (0.06 Gm.) per day.

Note.—This article is prepared & purified specially for hypodermic use; it may, however, be used for other purposes as well.

Mercury Santoninate Merck (25

(Mercurous Santoninate). — $Hg_2(C_{15}H_{19}O_4)_2$. — Wh. powd.—*Sol.*, sl. A.

Mercury Sesquiiodide Merck (20

Hg_2I_3.—Yellow powd.—Decomp. by W. & A.

Mercury, Soluble, Hahnemann's.—see **Mercury Oxide Black**

Mercury Sozoiodolate.—see **Sozoiodole-Mercury**

Mercury Stearate Merck (5

(Mercuric Stearate). — Yellowish-wh., gran. powd.—*Sol.*, v. sl. A., & fatty oils.

Mercury Subnitrate.—see **Mercury Nitrate, Mercurous, Basic**

Mercury Subsulphate Merck (2

(Basic Mercuric Sulphate; Turpeth Mineral; Oxymercuric Sulphate). — $HgSO_4.2HgO$. — Heavy lemon-yellow powd.; odorl.; alm. tastel. —*Sol.*, acids; partially in W.—Alter.; Emetic; Antiseptic.—*Dose* $^1/_4$–$^1/_2$ grain (0.015–0.03 Gm.) several t. p. d. in pill or powder as an alterative; as emet., $1^1/_2$–3 grains (0.1–0.2 Gm.).—*Max. D.* $^3/_4$ grain (0.05 Gm.) single; 3 grains (0.2 Gm.) p. day.

Mercury Succinate Merck (18

(Mercuric Succinate). — $Hg(C_4H_4O_4)_2$. — Wh. cryst.—*Sol.*, solut. of sodium chloride.

Mercury Succinimide Merck (30

(Mercuric Succinimide; Mercury [or Mercuric] Imidosuccinate). — $Hg(C_2H_4[CO]_2N)_2$. — Wh., cryst. powd.—*Sol.* 25 W. w. aid of heat, 50–75 cold W.—Antisyph.; Alter.; Antisep.—*Uses:* Hypoderm. in aqu. solut. Said to be free from disagre. local & secondary effects.—*Dose* $^1/_5$–$^1/_3$ grain (0.012–0.02 Gm.) hypoderm.

Mercury Sulphate, Basic.—see **Mercury Subsulphate**

Mercury Sulphate Merck.—Mercuric (1

(Normal or Neutral Mercuric Sulphate; Mercury Persulphate or Bisulphate). — $HgSO_4$. — Wh., cryst. powd.—*Sol.*, hot dil. H_2SO_4; decomp. by warm W.—*Uses:* In chemical industry for making corros. sublim. & calomel; mixed w. sod. chloride for extracting gold & silver fr. roasted pyrites; also mixed with potassium bisulphate for filling galvanic batteries.—*Max. D.* $^1/_3$ grain (0.02 Gm.) single; $^3/_4$ grain (0.05 Gm.) daily.

Mercury Sulphate Merck.—Mercurous (3

(Normal Mercurous Sulphate).—Hg_2SO_4.—Wh., cryst. powd.; turns gray on expos. to light.—*Sol.*, dil. nitric acid; sl. W.—*Uses:* In electrotechn. for making normal elements.

Mercury Sulphate, Normal.—see **Mercury Sulphate, Mercurous**

Mercury Sulphide Black Merck (1

(Black Mercuric Sulphide; Ethiops Mineral).—Mercuric sulphide containing uncombined mercury & free sulphur.—Black powd.; once supposed to be mercurous sulphide.—Alter.; Anthelm.—*Uses:* Obsolete remedy for scrof. & worms.—*Techn.*, as pigment for horn, horn combs, &c.—*Dose* 3–8–15 grains (0.2–0.5–1 Gm.).

Mercury Sulphide Red Merck.—Powder, or lumps (2

(Mercuric Sulphide; Artificial Cinnabar; Red Mercury Sulphuret; Vermilion).—HgS.—Fine, bright, scarlet powd., or lumps.—Insol. W., A., & hydrochloric acid.—Sialag. & Alter.—*Uses:* Mostly techn. for coloring wafers, sealing wax, & combined with ferrous sulphate for marking linen; also in manuf. of fancy colored papers. Somet. used by fumigation in syph. cases where immed. effects are required.—*Dose* 30 grains (2 Gm.) on red-hot iron & inhale fumes.

Mercury Sulphocyanate Merck (5

(Mercuric Sulphocyanide or Rhodanide).—$Hg(SCN)_2$.—Wh. powd.—*Sol.* A., & in solut. chlorides & potass. sulphocyanate; sl. in W.—*Uses:* Pharaoh's serpents, & in photography.

Mercury Sulphocyanide.—see **Mercury Sulphocyanate**

Mercury Sulphuret, Red.—see **Mercury Sulphide, Red**

Mercury Tannate Merck (4

(Mercurous Tannate).—Compos. variable, but usually $2Hg_2.3(C_{14}H_9O_9).OH$. — Greenish-brown powd.; about 50% mercury.—Insol. in usual solvents.—Antisyph.—*Dose* 1–2 grains (0.06–0.12 Gm.) in pills or in wafers.

Mercury Tartrate Merck.—Mercurous (7

$Hg_2C_4H_4O_6$.—Yellowish, cryst. powd.—Insol. W., & acids.

Mercury Thymolacetate Merck (10

(Mercuric Thymolacetate).—$Hg(CH_3COO)_2.Hg(CH_3COO.C_{10}H_{13}O)$.—Colorl. powd.—Insol. W. —Antisyph.; Antituberc.; Alter.—*Uses:* Tuberculosis, syph., scrof., &c., by intramusc. inject., us'y into gluteal muscles.—*Dose* $1^1/_2$ grains (0.1 Gm.), every 3–5 days in liq. paraffin or glycerin. Cocaine may be added.

Mercury Thymolate Merck (15

(Mercuric Thymolate).—Basic salt of variable comp., but usually $HgC_{10}H_{13}.OH$. — Reddish-yellow powd. — Insol. W. — Antisyph. — *Uses:* As of mercury thymolacetate; the thymolacetate is better, however, being more stable.

Mercury Thymolnitrate Merck (15
(Mercuric Thymolnitrate).—Wh. to reddish-wh. amorph. powd.—Insol. W.—Antisyphilitic. —*Uses:* As of mercury thymolacetate.

Mercury Thymolsalicylate Merck (20
(Mercuric Thymolsalicylate).—Wh. to reddish powd.; darkens on exposure.—Insol. W.—*Uses:* As of mercury thymolacetate.—*Caut.* Keep fr. light.

Mercury Thymolsulphate Merck (20
(Mercuric Thymolsuphate).—Wh. to reddish powd.—Insol. W.—Antisyphilitic.

Mercury Tribromphenolacetate Merck (85
(Mercuric Tribromphenolacetate).—Yellow, microcryst. powd. — About 30% mercury. — Insol. W.—Sp. Gr. 1.59.—Antisyph.; Antisep., &c.—Hypoderm. in syph., dis. of the joints, scrof. & tuberculosis.—*Dose* 8 ♏ (0.5 Cc.) of a mixt. of 100 grains (6.5 Gm.) mercury tribromphenolacetate, & liquid paraffin $4^1/_2$ fl. dr. (18 Cc.) once a week.

Mercury Urate Merck (35
(Mercuric Urate). — $HgC_5H_2N_4O_3$. — Yellowish powd.—Insol. W.

Mercury-urea Chloride.—see **Mercury Bichloride, Carbamidated**

Mercury Valerate Merck (20
(Mercurous Valerate). — $Hg_2(C_5H_9O_2)_2$. — Wh., cryst. powd.—Insol. W.

Mercury & Ammonium Bichloride Merck (4
(Mercuric Diammonium Chloride; Fusible White Precipitate; Alembroth Salt; Sal Sapientiæ).— $HgCl_2.(NH_4Cl)_2 + H_2O$.—Wh. cryst., like amm. chloride.—*Sol.* W.—Antisep.; Alter.—*Uses:* Hypoderm. in syph.; also pharm.—*Techn.*, in gilding.—*Dose* $^1/_3$ grain (0.02 Gm.) in 8 ♏ (0.5 Cc.) W.—*Appl.*, on cotton, gauze, &c.

Mercury & Ammonium Chloride.—see **Mercury, Ammoniated**

Mercury & Ammonium Sulphate Merck (4
(Mercuric-ammonium Sulphate).—Wh., gran. powd.—*Sol.*, acids; decomp. by much water.

Mercury & Antimony Sulphide Merck (3
(Ethiops Antimonialis).—Mixt. of black mercury sulphide & gray antimony sulphide.—Black powd.—Insol. W., & dil. acids.—*Uses:* Scrofula.—*Dose* 2–4 grains (0.12–0.25 Gm.).

Mercury & Barium Bromide Merck (25
(Mercuric Barium Bromide).—$HgBr_2.BaBr_2$.—Colorl. cryst.—*Sol.*, eas. W.

Mercury & Barium Iodide Merck (30
(Mercuric Barium Iodide). — $HgI_2.BaI_2$. — Yellowish cryst.—*Sol.*, sl. W., & A.

Mercury & Barium Iodide Merck.— **Solution** (20
(Rohrbach's Solution).—Conc. solut. of mercury & barium iodide.—Sp. Gr. 3.5.—*Uses:* Separating minerals of different sp. gr.

Mercury & Copper Iodide Merck (25
(Mercuric-cuprous Iodide).—$2HgI_2.Cu_2I_2$.—Red, cryst. powd.—Insol. W., A.

Mercury & Lithium Iodide Merck (35
(Mercuric Lithium Iodide).—$HgI_2.2LiI$.—Red, gran. powd. — *Sol.* A., W.—Antisyph.; Antilithic; Alter.—*Uses:* Recom. in gravel, espec. complicated w. syph.

Mercury & Morphine Oleate
20% yellow mercuric oxide & 5% morphine in oleic acid.—*Sol.* E., & oleic acid.—Alter.; Antisep.; Anod.—*Uses:* As of the official oleate of mercury, espec. in pain.

Mercury & Potassium Cyanide Merck.—**Cryst.** (6
(Mercuric Potassium Cyanide).—$Hg(CN)_2.2KCN$.—Colorl. cryst.—*Sol.* W.—Antiseptic.—*Uses:* Techn., in manuf. of mirrors to prevent the silver coating from becoming yellow.

Mercury & Potassium Hyposulphite.—see **Mercury & Potassium Thiosulphate**

Mercury & Potassium Iodide Merck (11
(Mercuric Potassium Iodide). — $HgI_2.2KI$. — Yellow cryst.—*Sol.* W.—*Uses:* Alkaloidal reag.

do.— **Solution.**—*N. F.*
(Channing's Solution).—Fr. 2.5 Gm. red mercury iodide, 2 Gm. potass. iodide, & 250 Cc. W. —*Dose* 3 ♏ (0.2 Cc.).

Mercury & Potassium Iodide Merck.—**Reagent** (20
HgI.2KI.—Sulphur-yellow, cryst. pieces; deliquesc. in moist air.—*Test:* (*Solub.*) 5 Gm. + 10 Cc. H_2O – clearly & compl. solub.; solut. clear even on add. 80 Cc. H_2O.—*Uses:* Alkaloidal reagent; in Thoulet's solut. for separ. minerals; detect. alkali hydroxides in alkali carbonates.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Mercury & Potassium Nitroparaphenolsulphonate.—see **Phenegol**

Mercury & Potassium Tartrate Merck (5
(Mercurous Potassium Tartrate).—$HgKC_4H_4O_6$. —Wh., cryst. powd.—Insol. W., A.

Mercury & Potassium Thiosulphate Merck (15
(Mercuric Potassium Thiosulphate or "Hyposulphite").—$3Hg(S_2O_3)_2.5K_2S_2O_3$.—Colorl. cryst. —31.4% mercury.—*Sol.* W.—Antisyph.—*Dose* $^1/_6$–$^1/_2$ grain (0.01–0.03 Gm.), hypoderm.

Mercury & Thallium Iodide Merck (110
(Mercuric Thallium Iodide).—$HgI_2.TlI_3$.—Reddish-yellow, gran. powd.—*Sol.*, sl. W.

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Mercury & Zinc Acetate Merck (12
(Mercuric Zinc Acetate).—Wh. powd.—*Sol.* W. —Antisep.; Antisyph.

Mercury & Zinc Cyanide Lister-Dunstan-Merck (8
(Mercuric Zinc Cyanide).—Not a chemical compound; mixt. of zinc cyanide w. varying quantities of mercury cyanide.—Wh. powd.; mercury cyanide may be removed fr. it by treatment w. W.—Antiseptic.—*Uses: Extern.*, dust.-powd. in surgery; also for impregnating dressings.

Mercury with Chalk Merck.—*U. S. P.* (1
Mixt. of mercury, honey & chalk.—38% mercury.—Antisyph.; Hepatic Stim.; Oxytocic; Antisep.; Anthelm.—*Uses:* Diar. & dysent., worms, amenor., tuberculosis, & syph.—*Dose* 3–10 grains (0.2–0.6 Gm.) several t. p. d.

Mergal
(Mercury Cholalate).—$Hg(C_{24}H_{39}O_5)_2$.—Yellowish powd.—*Sol.*, sl. in solut. NaCl; alm. insol. W. —Antisyphil.—*Dose* $^3/_4$ grain (0.05 Gm.) 3–5 t. p. d.

Merkel's Chromic-Platinum Chloride
Solut. 1 Gm. chromic acid & 1 Gm. platinic chloride in 800 Gm. W.—*Uses:* Fixing specimens.

Merkel's Indigocarmine-Oxalic Acid
Consists of two soluts.—(1) sat. solut. indigocarmine in 3-% aqu. oxalic-acid solut.; (2) 1 Gm. carmine, 1 Gm. ammonia, & 50–100 Cc. W.—*Uses:* Staining specimens of ossification.

Mescal Buttons.—see **Anhalonium**

Mescaline Sulphate Merck (7500
$(C_{11}H_{17}NO_3)_2.H_2SO_4+2H_2O$.—Sulphate of alkaloid fr. Anhalonium Lewinii (Mescal buttons).—Colorl. cryst.—*Sol.*, eas. in hot, but diffic. in cold, W.—The toxic symptoms of Mescal-buttons poisoning, as well as the remarkably beautiful visual color hallucinations, are ascribed to this alkaloid.

Mesityl Oxide Merck (65
(Methylisobutenylketone; Isopropylideneacetone).—By acetone by sulphuric acid.—$C_6H_{10}O$, or, $(CH_3)_2C:CH.CO.CH_3$.—Colorl., oily liq.; peppermint odor.—Sp. Gr. 0.8612 at 15° C.—*Sol.* A., E.—*Boil.* 129–130° C.

Mesitylene Merck (90
(Trimethylbenzene; or Trimethylbenzol [symmetric]).—By distil. acetone w. sulphuric acid. —C_9H_{12}, or, $C_6H_3(CH_3)_3$[1:3:5].—Colorl., oily liq.; peculiar odor.—*Sol.* A., E., benzene.—Sp. Gr. 0.869 at 10° C.—*Boil.* 164° C.

Mesotan (10
(Methoxylmethylester of Salicylic Acid; Ericin). —$C_6H_4(OH).COOCH_2.OCH_3$.—Yellow liquid.—75% salicylic acid.—*Sol.* A., E., fixed oils, B., C.; v. sl. W.—Sp. Gr. 1.2 at 15° C.—Local Antirheumatic.—*Uses:* Gout, rheumatism, &c.—*Appl.*, 1 fl. dr. (4 Cc.) of a mixture of equal parts mesotan & olive or other bland oil.

Mesoxalylurea.—see **Alloxan**

Meta-aminotoluene (or, *-ol*).—see **Toluidine, Meta-**

Metabenzaminocarbazide.—see **Cryogenine**

Metacetone.—see **Diethylketone**

Metachloral.—see **Chloral, Meta-**

Metachloronitrobenzene (or, *-zol*).—see **Chloronitrobenzene, Meta-**

Metacresalol.—see **Cresalol, Meta-**

Metacresolanytol.—see **Metasol**

Metacymol.—see **Methylpropylbenzene, Meta-**

Metadiaminobenzene (or, *-zol*).—see **Phenylenediamine, Meta-**

Metadiiodaniline.—see **Diiodaniline**

Metadimethylbenzene (or, *-zol*).—see **Xylene, Meta-**

Metadinitrobenzene.—see **Dinitrobenzene, Meta-**

Metadioxyazobenzene (or, *-zol*).—see **Sudan Yellow G**

Metadioxybenzene (or, *-zol*).—see **Resorcinol**

Metal Fusible D'Arcet-Merck (10
Alloy of bismuth (50%), lead (25%) & tin (25%). —Whitish-gray metal.—*Melt.*, abt. 94° C.—*Uses:* Techn.

do. Rose-Merck (10
Bismuth (50 pts.), lead (28.1 pts.) & tin (24.1 pts.).—Whitish-gray metal.—*Melt.*, abt. 95° C. —*Uses:* Techn.

do. Wood-Merck (10
Bismuth (50%), lead (25%), tin (12.5%) & cadmium (12.5%).—Whitish-gray metal.—*Melt.*, abt. 70° C.

Metaldehyde Merck (30
$(C_2H_4O)_3$.—Wh. prisms.—*Sol.* C., B.; sl. in A., E.—*Subl.* 112–115° C.—Sed.; Hypn.—*Uses:* Insom. & hyst.—*Dose* 2–8 grains (0.12–0.5 Gm.).

Metamethylphenol.—see **Cresol, Meta-**

Metamethylpropylbenzene (or, *-zol*).—see **Methylpropylbenzene, Meta-**

Metamidoparaoxybenzoic-acid Methyl Ester.—see **Orthoform, New**

Metamine Blue.—see **Phenyl Blue**

Metanitraniline.—see **Nitraniline, Meta-**

Metanitrobenzaldehyde.—see **Nitrobenzaldehyde, Meta-**

Metanitroparatoluidine Merck (75
$C_6H_3(CH_3)(NO_2)NH_2$[1:3:4].—Red need. or prisms.—*Sol.* A.—*Melt.* 114° C.

Metanitrophenol.—see **Nitrophenol, Meta-**

Metanitrotoluene (or, *-ol*).—see **Nitrotoluene, Meta-**

Metaoxydiphenylamine.—see **Oxydiphenylamine, Meta-**

Metaoxytoluene (or, *-ol*).—see **Cresol, Meta-**

Metaphenylenediamine.—see **Phenylenediamine, Meta-**

Metaphenylenediamine Paper.—see **Griess's Paper, Yellow**

Metasol

(Metacresolanytol).—40% metacresol & 60% anytin.

Metastyrene (or, *-ol*).—see **Styrene, Meta-**

Metatoluylenediamine.—see **Toluylenediamine**

Metatolylhydrazine Carbaminate.—see **Maretin**

Metaxylene (or, *-ol*)—see **Xylene, Meta-**

Metaxylenol.—see **Xylenol, Meta-**

Metaxylenolsalol.—see **Xylenol (Meta-) Salicylate**

Metaxylidine, Ordinary.—see **Xylidine (Meta-), Asymmetric**

Methacetin Merck (20

(Para-acetanisidin; Paraoxymethylacetanilide; Acetanisidin).—Homologue of phenacetin.—$C_9H_{11}NO_2$, or, $C_6H_4(O.CH_3).NH.C_2H_3O$.—Wh., micro-cryst. powd.; fbl., bitter taste.—*Sol.* A., acetone, C., dil. acids, alkalies; sl. W.—*Melt.* 127° C.—Antipyretic; Antineural.; Antisep.; Antiferment.—*Uses:* Pneumonia, typhoid fever, phth., scarlet fever, rheum., neural., &c.—*Doses:* Adults, 4–8 grains (0.25–0.5 Gm.). Children 2–5 grains (0.12–0.3 Gm.).

Methaform (12

(Dimethylcarbinolchloroform).—White, acic. cryst.; sl. camphor. taste & odor.—*Sol.*, eas. A., C., E.; sl. W.—Hypnot.; Analges.; Antisep.—*Dose* 3–10 grains (0.2–0.6 Gm.).

Methanamide.—see **Formamide**

Methanethiomethane.—see **Methyl Sulphide**

Methemoglobin Merck (750

Abnormal blood pigment.—Conversion product of & isomeric with oxyhemoglobin.—Brownish-red cryst.—*Sol.* W.

Methenyl Tribromide.—see **Bromoform**

Methoxyacetphenetidin.—see **Kryofine**

Methoxycaffeine Merck (400

$C_9H_{12}N_4O_3$, or, $C_8H_9(OCH_3)N_4O_2$.—Wh., bulky powd.—*Melt.* 177° C.—*Sol.* sl. W.; more readily in dil. A.—Antineural.; Anesth.—*Uses: Intern.*, headache, neural.—*Extern.*, hypoderm., 15 ♏ (1 Cc.) of 2% solut. for local anesth.—*Dose* 4 grains (0.25 Gm.).

Methyl Acetate Merck (5

$C_3H_6O_2$, or, $CH_3.COOCH_3$.—Colorl., fragrant liq.—Sp. Gr. 0.964 at 15° C.—*Sol.* W., all prop. A., E.—*Boil.* 56° C.

Methyl Acetoacetate Merck (40

Fr. methyl acetate by metallic sodium.—$C_5H_8O_3$, or, $CH_3.CO.CH_2COO.CH_3$.—Colorl., transp. liq.—*Sol.* A., E.—Sp. Gr. 1.037 at 9° C.—*Boil.* 170° C.

Methyl Acetylsalicylate Merck (12

(Methyl Ester of Acetylsalicylic Acid; Methylrhodin; Methyl-aspirin).—$O.CO.CH_3.C_6H_4.CO-OCH_3$.—Colorl. cryst.—*Sol.* A., E., oils, G.; insol. W.—*Melt.* 54° C.—Antineuralgic.—*Dose* 8–15 grains (0.5–1 Gm.); 75–120 grains (5–8 Gm.) p. d.

Methyl Anisate Merck (30

$C_6H_4.OCH_3.COOCH_3$.—Colorl. scales.—*Sol.* A.—*Melt.* 45–46° C.—*Boil.* 255° C.

Methyl Benzoate Merck (5

(Methyl Ester of Benzoic Acid; Essence Niobé).—By distill'g wood-spirit, benzoic acid & sulphuric acid together.—$C_8H_8O_2$, or, $C_6H_5.COO-CH_3$.—Colorl., transp. liq.—Sp. Gr. 1.088 at 17° C.—*Sol.* A., E.—*Boil.* 199° C.—*Uses:* In perfumery, under the name "Peau d'Espagne."

Methyl Betanaphtholate Merck (20

(Nerolin; Yara-Yara; Methyl Ester of Betanaphthol).—Fr. betanaphthol by boil. w. methyl alc. & zinc chloride.—$C_{11}H_{10}O$, or, $CH_3O.C_{10}H_7$.—Wh., cryst. scales.—*Sol.* E.—*Melt.* 72° C.—*Boil.* 274° C.—*Uses:* Perfumery.

Methyl Bichloride Richardson-Merck (25

Mixt. of 1 vol. methyl alcohol & 4 vols. chloroform.—Colorl. liq.—*Uses:* Anesthesia by inhal.—*Caut.* Keep fr. light.—*N. B.:* Do not confound this with *Methylene* Bichloride (which see).

Methyl Blue Merck (20

(Brilliant Cotton, or Greenish, Blue; "Methyl Blue M B I for cotton").—The sodium salt of triphenylpararosanilinetrisulphonic acid.—$C_{37}-H_{28}N_3S_3O_{10}Na_3$, or, $C(OH):([1]C_6H_4.[4]NH.C_6H_4.-SO_3Na)_3$.—Dark-blue powd.—*Sol.* W. w. blue color.—Antiseptic.—*Uses:* Recom. as a local appl. in diphtheria, mixt. of 2 pts. methyl blue & 98 pts. sugar.—*Techn.*, as a coloring, & as dye for cotton & silk.—*Caut.* Do not confound this w. *Methylene* Blue.—*Tests:* Sodium hydroxide w. *methyl blue* changes color to reddish-brown; w. *methylene blue*, changes color to violet.

Methyl Bromide Merck (35

(Bromomethane).—Fr. wood-spirit, by bromine w. phosphorus.—CH_3Br.—Colorl., transp. liq.; burning taste; chloroform-like odor.—Sp. Gr. 1.732 at 0° C.—*Misc.* A., E., C., & carbon disulphide.—*Boil.* 4.5° C.

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Methyl Butyrate Merck (6

(Methyl Ester of Butyric Acid).—Fr. methyl alcohol, by distil. w. sulphuric acid & a normal butyrate.—$C_5H_{10}O_2$, or, $CH_3.(CH_2)_2.COOCH_3$.—Colorl., mobile liq.—Sp. Gr. 0.919 at 0° C.—*Sol.* A.—*Boil.* 102° C.

Methyl Butyrate (Iso-) Merck (45

(Methyl Ester of Isobutyric Acid).—By distil. methyl alcohol w. isobutyric & sulphuric acids.—$C_5H_{10}O_2$, or, $(CH_3)_2CH.COOCH_3$.—Colorl., mobile liq.—*Sol.* A.—Sp. Gr. 0.911 at 0° C.—*Boil.* 92° C.

Methyl Carbonate Merck (75

(Dimethyl Carbonate).—Fr. methyl chlorocarbonate, by boil. w. lead oxide.—$C_3H_6O_3$, or, $(CH_3)_2CO_3$.—Colorl. liq.—Sp. Gr. 1.069 at 22° C.—*Sol.* A., E.—*Melt.* 0.5° C.—*Boil.* 91° C.

Methyl Chloracetate Merck (30

Fr. solut. chloracetic acid in methyl alcoh. w. HCl gas.—$C_3H_5O_2Cl$, or, $CH_2Cl.COOCH_3$.—Colorl., transp. liq.—*Sol.* A.—Sp. Gr. 1.22 at 15° C.—*Boil.* 130° C.

Methyl Chloride

(Chloromethane).—By distil. methyl alcohol, NaCl, & sulphuric acid.—CH_3Cl.—Gas of an ethereal odor compressed to liquid in cylinders.—Local Anesthetic.—*Uses:* Severe neural., pruritus, & spinal pains. Also techn.

Methyl Chlorocarbonate (45

(Methyl Ester of Chloroformic, or Chlorocarbonic, Acid; Methyl Chloroformate).—Fr. gaseous methyl formate, by chlorine.—$ClC_2H_3O_2$, or, $CH_3.CClO_2$.—Colorl., oily liq.—Sp. Gr. 1.236 at 15° C.—*Sol.* C., E.—*Boil.* 71° C.

Methyl Chloroformate.—see **Methyl Chlorocarbonate**

Methyl Cinnamate Merck (60

(Methyl Cinnamylate; Methyl Ester of Cinnamic Acid).—Fr. methyl alc., by distil. w. sodium cinnamate & sulph. acid.—$C_{10}H_{10}O_2$, or, $C_6H_5.CH:CH.COOCH_3$.—Colorl. cryst.—*Sol.* A., E.—*Melt.* 34° C.—*Boil.* 263° C.—*Uses:* In confectionery because of its strawberry-like odor; & in perfum. because of its power to fix other odors.

Methyl Cyanide Merck (65

(Acetonitrile).—Fr. acetamide w. glacial acetic acid, by heat.—C_2H_3N, or, $CH_3.CN$.—Colorl., limpid liq.; aromatic odor.—Sp. Gr. 0.789 at 15° C.—*Sol.* W., A.—*Boil.* 81–83° C.

Methyl Formate Merck (10

(Methyl Ester of Formic Acid).—Fr. wood-spirit by distil. w. sodium formate & hydrochloric acid.—$C_2H_4O_2$, or, $CH_3.COOH$.—Colorl. liq.; agre. odor.—Sp. Gr. 0.9797 at 15° C.—*Sol.* A.—*Boil.*, about 33° C.

Methyl Gallate Merck (50

(Methyl Ester of Gallic Acid; Gallicin).—By heating methyl. alcoh. solut. gallic or tannic acid w. hydrochl. acid gas or conc. sulphuric acid.—$C_8H_8O_5$, or, $C_6H_2(OH)_3.COOCH_3$.—Rhombic prisms.—*Sol.* W., ethyl & methyl A., E.—*Melt.* 192° C.—Anticatarrhal.—*Uses: Extern.*, catarrh of conjunctiva & eye dis.—*Appl.*, powd., by camel's-hair brush.—See also Gallicin.

Methyl Green Merck (8

(Paris, Light, or Double, Green).—Zinc-chloride double salt of chlormethylhexamethylpararosaniline hydrochloride.—Fr. methyl chloride w. methyl violet, followed by zinc chloride.—$C_{26}H_{33}N_3Cl_2 + ZnCl_2$, or, $C(C_6H_4.N[CH_3]_2)_3CH_3Cl_2 + ZnCl_2$.—Green cryst. or powd.—*Sol.* W. w. bluish-green color.—*Uses:* Green dye f. silk; also as stain.

Methyl Hexane.—see **Heptane**

Methyl Hydrate or *Hydroxide.*—see **Alcohol, Methylic**

Methyl Iodide Merck (18

(Iodomethane).—React.-prod., methyl alc. w. iodine & phosphorus.—CH_3I.—Colorl., transp. liq.; turns brown on expos. to light.—Sp. Gr. 2.279 at 15° C.—*Sol.* A.—*Boil.* 42° C.—Vesicant.—*Uses:* Inst. of cantharides; also in microscopy, because of its high index of refraction (1.743), as an imbedding material for examining diatoms.—*Caut.* Keep from light.

Methyl Isobutyrate.—see **Methyl Butyrate, Iso-**

Methyl Lactate Merck (35

(Methyl Ester of Lactic Acid).—By distil. methyl alc. w. sodium lactate & sulphuric acid.—$C_4H_8O_3$, or, $CH_3.CHOH.COOCH_3$.—Colorl., transp. liq.—*Sol.* A.—Sp. Gr. 1.094 at 15° C.—Decomp. by W.—*Boil.* 145° C.

Methyl Malonate Merck (20

(Methyl Ester of Malonic Acid).—Fr. silver malonate w. methyl iodide.—$C_6H_8O_4$, or, $CH_2:(COOCH_3)_2$.—Colorl. liq.—Sp. Gr. 1.16 at 15° C.—*Sol.*, oils, A., E.—*Boil.* 181° C.

Methyl Mustard Oil.—see **Methyl Thiocarbimide**

Methyl Orange Merck (14

(Dimethylaniline Orange; Gold Orange; Tropæoline D; Orange III; Helianthine; Poirrier's Orange 3 P).—Sod. (or amm.) dimethylaminoazobenzenesulphonate.—$C_{14}H_{14}N_3SO_3Na$, or, $(CH_3)_2:N.C_6H_4.N:N.C_6H_4.SO_3Na$.—Ochre-yellow powd.—*Sol.* W.—*Uses:* Dyes wool orange fr. an acid bath; indicator in alkalimetry.

Methyl Orange Merck.—Reagent (22

Sod. salt of paradimethylaminoazobenzenesulphonic Acid.—$(CH_3)_2:N.C_6H_4.N:N.C_6H_4.SO_3Na$.—Orange-yellow powd.—*Sol.*, eas. W.—Indicator solut.: 0.1 Gm. + 100 Cc. H_2O.—*Test:* (*Sensitiveness*) 1 drop solut. + 100 Cc. H_2O in Jena flask; add 1 drop decinorm. HCl – light-yellow should change to red; on further add. 1 drop decinorm. KOH, light-yellow color restored.

—*Uses:* Indicator, especially w. mineral acids, alkalies, alkali carbonates & bicarbonates, morphine, & quinine. Not reddened by carbonic acid.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Methyl Orange Paper

(Helianthine Paper; Tropæolin D. Paper).—Wh. paper, charged w. methyl orange.—*Uses:* Test for acids & alkalies (acids = red; alkalies = yellow).

Methyl Oxalate Merck (11

(Dimethyl Ester of Oxalic Acid). — Fr. dried oxalic acid w. boil. methyl alc.—$C_4H_6O_4$, or, $(CH_3)_2C_2O_4$.—Colorl. cryst.—*Sol.* W., A., E.—*Melt.* 54° C.—*Boil.* 163° C.

Methyl Propionate Merck (15

(Methyl Ester of Propionic Acid).—Fr. methyl alc. by distil. w. sulphuric acid & a propionate. —$C_4H_8O_2$, or, $C_2H_5.COOCH_3$.—Colorl. liq.—*Sol.* A.—Sp. Gr. 0.937 at 0° C.—*Boil.* 79.5° C.

Methyl Rhodanide.—see **Methyl Sulphocyanate**

Methyl Salicylate Merck (1

(Methyl Ester of Salicylic Acid; Synthetic or Artificial Oil of Wintergreen [Gaultheria]).—Fr. methyl. alc. by distil. w. salicylic & sulphuric acids.—$C_8H_8O_3$, or, $C_6H_4(OH).COOCH_3$ [1:2].—Colorl., or sl'y yellowish, oily liq.; odor & taste of oil of gaultheria.—*Sol.* A.; CS_2; glac. acet. acid; spar. W.—Sp. Gr. 1.183–1.188 at 15° C.; (1.180–1.185 at 25° C., U. S. P.).—*Boil.* 219–221° C.—Antirheum.; Antisep.—*Uses:* Chiefly in inflamm. artic. rheum. Also readily absorbed by the skin, and hence applied in quantities of 50–120 ♏ (3.3–8 Cc.) externally to parts affected twice daily, in subacute & chronic rheumatism. The evaporation of the remedy is prevented by applying an air-tight bandage; also in gonor. rheum. & in acute gonor.—*Dose* 5–10 ♏ (0.3–0.6 Cc.), grad. incr. — *Extern.*, in acute gonor., inject (1:100 liq. petrolatum) 3 t. p. d. w. bismuth subnitrate.

Methyl Sebacate Merck (45

(Methyl Ester of Sebacic Acid; Methyl Sebacinate). — $C_{12}H_{22}O_4$, or, $C_8H_{16}(COOCH_3)_2$. — Colorl. liq.; solidifies w. cold.—*Sol.* A.—*Melt.* 38° C.—Sp. Gr. 0.886 at 15° C.

Methyl Sulphide Merck (100

(Dimethyl Sulphide; Methanethiomethane).—Fr. solut. potass. sulphide in methyl alc. by methyl chloride.—C_2H_6S, or, $(CH_3)_2S$.—Colorl. liq.; disagre. odor.—Sp. Gr. 0.845 at 21° C.—*Boil.* 37.5° C.—*Uses:* Solvent for anhydrous mineral salts.

Methyl Sulphocyanate Merck (50

(Methyl Rhodanide or Thiocyanate). Fr. KSCN w. calc. methylsulphate by distil.—C_2H_3NS, or, $CH_3.SCN$.—Colorl. liq.; onion odor.—Sp. Gr. 1.088 at 0° C.—*Sol.* A., E.; sl. W.—*Boil.* 133° C.

Methyl Thiocarbimide Merck (250

(Methyl Mustard Oil). — Fr. methyl sulphocyanate by heat.—C_2H_3NS, or, $CH_3.N:CS$.—Wh. cryst.; strong horseradish odor. — *Sol.* A.—*Melt.* 35° C.—*Boil.* 119° C.

Methyl Thiocyanate.—see **Methyl Sulphocyanate**

Methyl Valerate Merck (7

(Methyl Valerianate).—$C_6H_{12}O_2$, or, $CH_3.C_4H_9.COO$.—Colorl. liq.; valerian odor.—*Sol.* A.—Sp. Gr. 0.900 at 0° C.—*Boil.* 116.5° C.

Methyl Violet B Merck (7

(Also 5 B; 4 B; 3 B; 2 B; B; B B [for intern. use.—Highest Purity]; B N; R; 2 R; 3 R)

Essentially mixt's of hydrochl's of pentamethylpararosaniline & hexamethylpararosaniline.—Metal., glistening lumps.—*Sol.* W., A.—*Uses:* Dyes silk & wool violet direct, cotton after mord. with tannin. Satur. alcoh. solut. for staining tubercle bacilli.—The "B B" highly pure grade may also be used for medicinal purposes.

Methyl Violet 7 B

(Acid Violet).—Sodium salt of tetramethylparatolyltriamidoethoxytriphenylcarbinolsulphonic acid.—Dark-violet powd.—*Sol.* W., A. —*Uses:* Bacterial stain.

Methylacetone.—see **Methylethylketone**

Methylacetopyronone.—see **Acid Dehydracetic**

Methylacetyl.—see **Acetone**

Methylal Merck.—Pure (27

(Methylenedimethyl Ester; Formal; Methylenedimethylate).—By distil. together methyl alcoh., W., sulphuric acid & manganese dioxide.—$C_3H_8O_2$, or, $CH_2(OCH_3)_2$.—Colorl., volat. liq.; chlorof. odor; pungent taste.—Sp. Gr. 0.855 at 15° C.—*Sol.*, eas. W., A., oils.—*Boil.* 42° C.—Anesth.; Nerve Sed.; Hypn.; Antispasm.; Anod. —*Uses: Intern.*, delir. trem., strychnine poison., tet., gastric & intest. pain, & in insom.—*Dose* 8–15–75 grains (0.5–1–5 Gm.) at night, in W.; or syrup.—*Inj.*, for insom., 10% aqu. solut., give 1 syringeful every 2 or 3 hours. As sedat., $1^1/_2$ grains (0.1 Gm.) every 2 or 3 hours.—*Appl.* 10% linim. or oint. as local anesth.

do. Merck.—Commercial (10

Uses: Techn., in perfumery for extracting odors, even those that are highly sensitive.

Methylamine Merck (1500

(Amidomethane).—Fr. methyl cyanurate, by distil. w. KOH & W. — CNH_5, or, CH_3NH_2.—Colorl. gas liquefied in tubes; strong ammonia odor; rapidly absorbed by W.—*Sol.* W.—*Boil.*, *minus* 6° C.

Methylamine Merck.—33% (60
Aqu. solut. methylamine.—Colorl. liq.—*Misc.* W., & A.

Methylamine Hydrochloride Merck (120
(Methylamine Hydrochlorate).—CH_3NH_2HCl.—Large, colorl., deliq. plates.—*Sol.* W., A.—*Melt.* 222° C.—*Caut.* Keep dry, fr. air.

Methylaniline Merck (18
(Monomethylaniline). — React.-prod. methyl iodide w. aniline.—C_7H_9N, or, $C_6H_5.NH(CH_3)$.—Reddish-brown, oily liq.—*Boil.* 190–191° C.—Sp. Gr. 0.976 at 15° C.—*Sol.* E., C.

Methylaspirin.—see **Methyl Acetylsalicylate**

Methylatropine Bromide.—see **Atropine Methylbromide**

Methylatropine Nitrate.—see **Eumydrine**

Methylbenzene (or, *-zol*).—see **Toluene**

Methylbenzoylecgonine.—see **Cocaine**

Methylcinnamyl Ketone.—see **Benzylideneacetone**

Methyldiphenylamine Merck (10
(Diphenylmethylamine).—By methylating diphenylamine w. methyl iodide & heat.—$C_{13}H_{13}N$, or, $(C_6H_5)_2N(CH_3)$.—Colorl. liq.—*Sol.* A., E.—Sp. Gr. 1.0476 at 20° C.—*Boil.* 282° C.—*Tests.* Violet color w. nitric acid.

Methyldisodium Arsenate.—see **Sodium Methylarsenate**

Methylene Bichloride.—see **Methylene Chloride**

Methylene Blue Merck.—Highest Purity, Medicinal (16
(Methylthionine, or Tetramethylthionine, Hydrochloride).—Purified dye-stuff, free fr. zinc chloride.—$C_{16}H_{18}N_3SCl$.—Dark-green, cryst. powd.—*Sol.*, eas. W.; less read. A.—Anod.; Antiper.; Antipyr.—*Uses:* Rheum., malaria, cystitis, pyelitis, carcinoma, black-water fever, diabetes, gonor., & neuralgia.—*Dose* 2–4 grains (0.12–0.25 Gm.) in capsules.—*Inj.* 1 grain (0.06 Gm.) in aqu. solut.—*Max. D.* 15 grains (1 Gm.) single, or p. day.—*Appl.*, dusting powd. in blennorrhagic vaginitis & metritis; as enema (0.1–0.2:500–1000 W.) in dysentery; intramuscularly, $1^1/_2$ grains (0.1 Gm.) in mania; also as diagnostic means of determining the degree of permeability of renal tissue by inject. of 15 ♏ (1 Cc.) of 5% solut.—During treatment w. methylene blue the urine acquires a green color. By-effects (*e.g.*, irritation of bladder) are removed or prevented by administering a pinch or so of powd. nutmegs.

Note.—Long since established in use, & of unimpeachable quality, the U. S. P. now recognizes this preparation, which is free from arsenic & zinc.

do. B (& BB) Merck (12
(Hydrochloride or Zinc-chloride double salts of Tetramethylthionine).—Dark-blue or red-brown powd. w. bronze reflect.—*Sol.*, eas. W., w. blue color; sl. A.—*Uses:* Techn., in manuf. of paper as substitute for ultramarine, dyeing cotton, & in cotton printing.—*Caut. Not* for intern. use; for this purpose only the "Highest Purity, Medicinal" grade should be used!

Methylene Blue BX Merck (10
Commercial grade of methylene blue.—Dark-blue or reddish-brown powd.; bronze reflect.—*Sol.* W., A.—*Uses:* Dye f. cotton.—*Caut. Not* for intern. use; for this purpose only the "Highest Purity, Medicinal" grade should be used!

Methylene Bromide Merck (140
(Dibromomethane).—CH_2Br_2.—Colorl. to yellowish liq.—*Sol.* A., E.—Sp. Gr. 2.4985 at 15° C.—*Boil.* 98.5° C.

Methylene Chloride Merck.—Highest Purity (12
(Methylene Bichloride; Dichloromethane).—Fr. mixt. alc. & chlorof., by zinc & aqu. hydrochloric acid.—CH_2Cl_2.—Colorl. liq.—Sp. Gr. 1.377 at 15° C.—*Sol.* A., E.—*Boil.* 40° C.—Anesthetic.—*Uses:* As spray to produce local anesthesia, partic. in dentistry.—*Caut.* Use carefully. Dangerous as inhalant.—*N. B.:* Do not confound with the *so-called* "Methyl Bichloride Richardson" (which see).

Methylenecreosote.—see **Pneumin**

Methylene Diacetate Merck (5
(Oxymethylene Acetate; Formaldehyde Acetate).—Fr. silver acet. by methylene iodide.—$C_5H_8O_4$, or, $CH_2(C_2H_3O_2)_2$.—Heavy, colorl. liq.—*Sol.* A., W. w. decomp.—*Boil.* 170° C.—Antisep.

Methylenediantipyrine.—see **Formopyrine**

Methylene Green Merck (8
(Nitromethylene Green).—Action of nitrous acid on methylene blue.—Dark-brown powd.—*Sol.*, eas. in W. w. greenish-blue color; sl. A.—*Uses:* Dyeing cotton.

Methylene Iodide Merck (45
(Diiodomethane).—Fr. iodoform, by alcoh. solut. sod. acetate.—CH_2I_2.—Leaflets at 0°C.; yellow liq. at ord. temp.—*Sol.* A., E.—Sp. Gr. 3.33 at 15° C.—94.9% of iodine.—Heaviest organic liquid known.—*Melt.* (leaflets) 4° C.—*Boil.* 180° C., with decomp.—*Uses:* Separating mixtures of minerals.

Methylene Violet Merck (15
(Dimethylsafranine Chloride).—Black powd.—*Sol.* W., & A., w. violet-red color.—*Uses:* Dyeing cotton.

Methylenediantipyrine Tetrabromide.—see **Salubrol**

Methylenedicotoïn.—see **Fortoin**

Methylenediguaiacol
(Geoform; Guaiaform; Pulmoform).—$CH_3O.OH:C_6H_3.CH_2.C_6H_3:CH_3O.OH$.—Condens. prod. of formaldehyde & guaiacol.—Yellow, odorl., tastel. powd.; on warming develops vanilla-like

odor.—95.38% guaiacol.—*Sol.* A., E., & caustic-alkali soluts.; insol. W.—Antitubercular.—*Dose* 5–15 grains (0.3–1 Gm.).

Methylenediguaiacol, Acetylated. — see **Euguform**

Methylenedimethyl Ester. } —see **Methylal**
Methylenedimethylate. }

Methylenetetramine, Hexa-.—see **Formin**

Methyleosine Red Merck (10

Potassium salt of tetrabromofluoresceïne-methyl ester.—Green, lustrous powd.—*Sol.*, hot W. & A.—*Uses:* Dyeing silk.

Methylethyl Carbinol. — see **Alcohol Butylic, Secondary**

Methylethylketone Merck (15

(Methylacetone).—Fr. methyl acetoacetate, by KOH.—C_4H_8O, or, $CH_3.CO.C_2H_5$.—Colorl. liq.; acetone-like odor.—Sp. Gr. 0.824 at 0° C.—*Misc.* W., A.—*Boil.* 77–78° C.

Methylglycocoll.—see **Sarcosin**

Methylglycocyamidine.—see **Creatinine**

Methylglycocyamine.—see **Creatin**

Methylglyoxalidine.—see **Lysidine**

Methylguanidine Merck (2250

(Methyluramine).—Ptomaine, fr. creatin, by mercuric oxide w. dil. sulphuric acid.—$C_2H_7N_3$, or, $NH:C(NH_2).NH(CH_3)$.—Colorl., deliq., str. alkaline mass.—*Sol.* W.—*Caut.* Poison! Kills rabbits with symptoms of dyspnea & spasms.

Methylguanidine Hydrochloride Merck (2250

$C_2H_7N_3.HCl$.—Prism. cryst.—*Sol.* W.

Methylguanidineacetic Acid.—see **Creatin**

Methylhexylketone. — see **Aldehyde, Caprylic; Methyloenanthone**

Methylisobutenylketone.—see **Mesityl Oxide**

Methylisopropylphenanthrene.—see **Retene**

Methylmorphine.—see **Codeine**

Methyloenanthone Merck (85

(Methylhexylketone).—Fr. sodium ricinoleate with sodium hydroxide, by distil.—$C_8H_{16}O$, or, $CH_3.CO(CH_2)_5CH_3$.—Colorl. liq.; apple odor; camphor. taste.—Sp. Gr. 0.835 at 0° C.—*Sol.*, A., E.—*Boil.* 172° C.

Methyloxyethylpyridinetetrahydride.—see **Tropine**

Methylpara-amidometacresol Sulphate (or *Hydrochloride*).—see **Metol**

Methylparaoxybenzaldehyde. — see **Aldehyde Anisic**

Methylphenacetin

Fr. phenacetin-sodium dissolved in xylene, by methyl iodide.—$C_{11}H_{15}NO_2$, or, $C_6H_4(OC_2H_5)N(CH_3)CH_3CO$.—Colorl. cryst.—*Sol.* A., E.; sl. in W.—*Melt.* 40° C.—Hypnotic.

Methylphenylester.—see **Anisol**

Methylpropylbenzene (Meta-) Merck (60

(Cymene fr. Oil Turpentine; Metacymol).—$C_{10}H_{14}$, or, $C_6H_4.CH_3[1].C_3H_7[3]$.—By treating mixt. of metabromotoluene & propyl bromide w. sodium.—Colorl. liq.—*Sol.* A., E., B.—Sp. Gr. 0.863 at 15° C.—*Boil.* 175–177° C.

Methylpropylcarbinolurethane.—see **Hedonal**

Methylpropylketone Merck (90

Fr. calcium butyrate & acetate, by distil.—$C_5H_{10}O$, or, $CH_3.CO.C_3H_7$.—Colorl. liq.—Sp. Gr. 0.812 at 15° C.—*Sol.* A.; v. sl. W.—*Boil.* 102° C.

Methylpropylphenol, Normal.—see **Thymol**

Methylpropylphenyl Hexahydride.—see **Menthol**

Methylprotocatechuic Aldehyde.—see **Vanillin**

Methylpseudobutylketone.—see **Pinacoline**

Methylquinoline.—see **Lepidine**

Methylresorcinol.—see **Orcin**

Methylrhodin.—see **Methyl Acetylsalicylate**

Methylstrychnine Merck (1500

(Strychninemethylammonium Hydroxide). — Fr. strychnine, by methyl iodide, & removal of iodine. — $CH_3.N:OC_{20}H_{22}(NH).CO.O + 4H_2O$. — Yellow powd.—*Sol.* W., A.—*Uses, &c.:* As of curare.

Methylstrychnine Iodide Merck (1500

(Strychninemethylammonium Iodide). — Fr. strychnine, by action of methyl iodide in closed tube.—$C_{21}H_{22}(CH_3)N_2O_2.I$, or, $CH_3I.N:OC_{20}H_{22}(NH).COOH$.—Wh., shin. cryst.—*Sol.*, sl. in W.—*Caut.* Poison!

Methylstyrylketone.—see **Benzylideneacetone**

Methylsulfonal. — see **Sulphonethylmethane; Trional**

Methyltheobromine.—see **Caffeine**

Methylthionine Hydrochloride Merck.—Highest Purity, Medicinal (16

(Methylene Blue, Medicinal; Tetramethylthionine Hydrochloride).—Purified dye-stuff, free fr. zinc chloride.—$C_{16}H_{18}N_3SCl$.—Dark-green, cryst. powd.—*Sol.*, eas. W.; less read. A.—Anod.; Antiper.; Antipyr.—*Uses:* Rheum., malaria, cystitis, pyelitis, carcinoma, black-water fever, diabetes, gonor., & neuralgia.—*Dose* 2–4 grains (0.12–0.25 Gm.) in capsules.—*Inj.* 1 grain (0.06 Gm.) in aqu. solut.—*Max. D.* 15 grains (1 Gm.) single, or p. day.—*Appl.*, dusting powd. in blennorrhagic vaginitis & metritis; as enema (0.1 - 0.2:500 - 1000 W.) in dysentery; intramuscularly, $1^1/_2$ grains (0.1 Gm.) in mania; also as diagnostic means of determining the degree of permeability of renal tissue by inject. of 15 ♏

(1 Cc.) of 5% solut.—During treatment w. methylene blue the urine acquires a green color. By-effects (*e.g.*, irritation of bladder) are removed or prevented by administering a pinch or so of powd. nutmegs.

Methyltrihydroxyanthraquinone.—see **Emodin**

Methyluramine.—see **Methylguanidine**

Methylurethane.—see **Urethylane**

Methysticin Merck (1500

(Kawaïne).—Non-nitrogenous substance fr. root Macropiper (Piper) methysticum, Forst. (Kava Root).—$C_{16}H_{18}O_5$.—Wh., prismatic need.; tastel. — *Sol.*, v. eas. hot A., B., C.; sl. in W., E., ligroin.—*Melt.* 137° C.—Physiologically inactive.

Methysticum.—see **Kava-Kava**

Metol (15

(Monomethylpara-amidometacresol Sulphate [or Hydrochloride]).—$(C_6H_3[OH]CH_3[NHCH_3)_2 \cdot H_2SO_4$.—Wh. powd.—*Sol.* W.—*Uses:* Photog. develop., & dyeing hair & furs.

Metozin.—see **Antipyrine**

Metternicht's Night Green.—see **Iodine Green**

Meum

(Spignel; Spignet; Mew; Bearwort).—Root of Meum athamanticum, Jacq. Umbelliferæ. — *Habit.:* Europe. — *Etymol.:* Grk. "meion," smaller, because this plant is smaller than the other members of the order. "Athamantica," fr. "Athamas," one of the Bœotian kings, for whom the plant was named.—*Constit.:* Volat. oil; resin.—Arom.; Tonic (in hysteria); Carminat.; Stomach.; Emmen.

Mezereum.—*U. S. P.*

(Mezereon; Olive Spurge; Dwarf Bay; Magell; Paradise Plant; Spurge Flax; Wild Pepper).—Dried bark (also seed, though not official) of Daphne Mezereum, L., & o. European spec. of Daphne. Thymelaceæ.—*Habit.:* Mountainous Europe; Siberia; Canada; New England.—*Etymol.:* Fr. Grk. "daphne," the laurel or bay tree; or "daio," to burn, & "phone," sound, *i.e.*, it crackles when burning. "Mezereum" fr. Persian "mazeriyn," the name of the plant; or according to some fr. the Italian "ammazare," to kill.—Long, thin bands, usually folded or rolled into disks; extern., yellowish or brownish-yellow; underneath light-greenish; inner surface whitish, silky; inodorous; very acrid taste.—*Constit.: Bark:* Mezerein (acrid resin); daphnin, $C_{15}H_{16}O_9$; umbelliferon; acrid, volat. oil.—*Seed:* Volat. oil; fixed oil; acrid resin.—*Bark:* Sialagogue; Stim.; Rubef.; Diuret.; Antisyphilitic; Alter.; Vesicant.—*Uses: Seed:* Diuret.; also used in alcoh. tinct. in toothache.—*Bark:* in second. syphilis, chron. rheumat., & obstin. skin diseases.—*Extern.*, as irrit. oint., or blister, & for indol. ulcers.—*Doses: Bark:* 2–10 grains (0.12–0.6 Gm.).—Alcoh. extr., 1–3 grains (0.06–0.2 Gm.).—Fld. extr., 5–15 ♏ (0.3–1 Cc.).—*Antid.*, emetics, stomach siphon, demulcents, large quantities warm water.

Michler's Ketone. — see **Tetramethyldiaminobenzophenone**

Microcidin (10

(Betanaphthol-Sodium; Sodium-Naphthol; Sodium Betanaphtholate).—75% sodium naphtholate.—Grayish-wh. powd.—*Sol.* 3 W.—Antisep. — *Uses:* In 3–5% aqu. solut. as surg. antisep. in compresses; in ear diseases in 0.3–0.4% solut.; & in nose affect. in 0.1% solut.

Microcosmic Salt.—see **Sodium & Ammonium Phosphate**

Micromeria

(Yerba Buena).—Lvs. of Micromeria Douglasii, Benth. Labiatæ.—*Habit.:* U. S. (Pacific coast). —*Etymol.:* Grk. "mikros," small, & "meros," part, referring to the smallness of the various parts of the plant. "Yerba buena" is the Spanish name for mint.—Arom.; Carmin.; Anthelm., & Refrig.—*Uses:* Nausea, spasm. pains in stomach and bowels, fever, & worms. —*Dose:* Fld. extr., 30–120 ♏ (2–8 Cc.).

Migrainin

Mixt. of antipyrine, caffeine, & citric acid.—Antineuralgic.—*Uses:* Migraine, influenza, & conditions following alcoholic excesses.—*Dose* 15 grains (1 Gm.).

Mikania Guaco.—see **Guaco**

Milfoil.—see **Achillea**

Milk Sugar Merck.—Highest Purity, powd. (1

(Lactose).—Fr. milk whey; highly purified.—$C_{12}H_{22}O_{11}+H_2O$.—Impalp., wh. powd.; sweetish taste.—*Sol.* 6 W. at 15° C.—Diuretic.—*Uses:* Consumption, cardiac dropsy, & wasting dis.—*Dose* 1–6 oz. (30–180 Gm.) dissolved in $^1/_2$ gal. (abt. 2 liters) water, per day, all other drink being avoided.—Also used in pharmacy as base for pills, tablets, &c.; & in preparing milk for infants.

Note.—This milk sugar finds constant & enthusiastic demand whenever an extra pure article is needed, as in infants' foods, &c.

do. Merck.—Highest Purity, cryst., & granular (1

do. Merck.—Highest Purity, impalpable powd. (1

Milk of Sulphur.—see **Sulphur, Precipitated**

Milk Thistle.—see **Carduus Marianus**

Milk Vine.—see **Periploca**

Milkweed.—see **Asclepias Syriaca**

Millon's Reagent.—For albuminoids

Solut. mercury in equal vol. conc. nitric acid & then diluted w. 2 vols. W.—Affords a brick-red ppt. on warming with albumen, urea, &c.

Mineral Blue.—see **Iron Ferrocyanide**

Mineral Carbon.—see **Graphite**

Mineral Green.—see **Copper Carbonate, Green**

Mineral Pitch.—see **Asphaltum**

Mineral Wax.—see **Ceresin, White & Yellow**

Minium.—see **Lead Oxide, Red**

Mio-Mio.—see **Baccharis**

Mirbane, Essence or *Oil.*—see **Nitrobenzene**

Mistletoe.—see **Viscum**

Mitchella

(Partridge Berry; Squaw Vine). — Herb of Mitchella repens, L. Rubiaceæ.—*Habit.:* Canada to Florida, west to Texas & Minnesota; Japan. —*Etymol.:* Named for Dr. John Mitchell, botanist, of Virginia (18th century). "Repens," Lat., creeping, refers to the plant's habit.—*Constit.:* Saponin-like substance; resin; wax; gum.—Diuret.; Alter.; Refrig. Parturifacient.—*Uses:* Employed in febrile condit., & to facilitate labor.—*Dose:* Fld. extr., 30–60 ♏ (2–4 Cc.).

Mohr's Salt.—see **Iron & Ammonium Sulphate, Ferrous**

Mollin

A potash soap cont. abt. 17% of uncombined fat acid fr. cocoanut oil, w. glycerin.—Yellowish-wh., smooth, soft, oint.-like mass; does not become rancid.—*Sol.* W.—*Uses:* Oint. base.

Molucca Grains.—see **Tiglium**

Molybdenum Merck.—Highest Purity (50

Etymol.: Fr. Grk. "molybdaina," graphite, for which it was long mistaken. Discovered by Scheele to be a new element, & first obtained pure by Hjelm in 1780.—Metal.—Mo.—Dark-gray or black powd.; metal. luster on being rubbed.—Sp. Gr., about 8.56.

do. Merck.—Pure, fused (220

Mo.—Gray pieces; cryst. fracture.

Molybdenum Anhydride.—see **(Acid) Molybdic Anhydride**

Molybdenum Disulphide.—see **Molybdenum Sulphide**

Molybdenum Oxide Merck.—Pure (40

(Molybdenum Sesquioxide). — Mo_2O_3+aq. — Gray powd.—*Sol.*, hydrochloric acid.

Molybdenum Sesquioxide. — see **Molybdenum Oxide**

Molybdenum Sulphide Merck (40

(Molybdenum Disulphide; Molybdic Sulphide). —MoS_2.—Glist., black powd.—Insol. W.; dil. acids.

Molybdenum Trioxide. — see **(Acid) Molybdic Anhydride**

Monarda

(American Horsemint; Wild Bergamot).—Lvs. of Monarda punctata, L. Labiatæ. — *Habit.:* New York to Florida, west to Texas & Wisconsin. —*Etymol.:* Named for N. Monardés, a Spanish botanist (16th century). "Punctata" refers to its punctate lvs.—*Constit.:* Volat. oil.—Antiper.; Diaph.; Carmin. — *Uses:* Intermittent fever, flatul. colic, cholera infantum, & as appl. in local paral.—*Dose:* Fld. extr., 15–60 ♏ (1–4 Cc.).

Monesia

(Buranhem; Guaranham).—Bark Chrysophyllum glyciphlœum, Casaretti. Sapotaceæ.—*Habit.:* Brazil. —*Etymol.:* An extract of the drug was first employed in Paris in 1838, under the name "monesia." Grk. "chrysos," gold, & "phyllon," leaf, *i.e.*, golden leaf; Grk. "glykos," sweet, & "phloios," bark, *i.e.*, the bark has a sweetish taste.—Thin fragments, $^1/_4$–$^1/_2$ in. (6–12 Mm.) thick, nearly smooth; intern. cinnamon colored; taste at first sweetish; then acrid & astring.; odorless. — *Constit.:* Saponin (monesin?); monesia-tannic acid; hiourahein (lucumin); glycyrrhizin. — Expector.; Tonic; Emmen.; Alterat.; Astring.; Stom.—*Uses:* Chiefly for preparing the extract; also known as "monesia," which is employed in chron. diarrh., bronch., dyspeps., chron. catarrh., scrofula, scurvy, & menorrhagia. — *Extern.*, in leucor., spongy gums, ulcer. mouth, carious teeth, &c. —*Doses:* 2–20 grains (0.12–1.3 Gm.); extract 2–10 grains (0.12–0.6 Gm.).—Aqu. extr. 2–5 grains (0.12–0.3 Gm.).

Monkshood.—see **Aconite**

Monoamidodiphenylamine Hydrochloride.—see **Diphenylhydrazine**

Monobenzoyl-arbutin.—see **Cellotropin**

Monobromantipyrine.—see **Bromopyrine**

Monobromethane.—see **Ethyl Bromide**

Monobromobenzene (or, *-zol*).—see **Benzene, Monobromo-**

Monobromomalonic-Acid Diethylester. — see **Ethyl Bromomalonate**

Monobromophenol (Ortho-) Merck (50

C_6H_5BrO, or, $C_6H_4Br(OH)[2:1]$.—Oily, yellow to red liq. — *Sol.* E., C.; 100 W. — *Boil.*, abt. 195° C. — Antiseptic. — *Uses: Extern.*, wounds, injuries, erysip., &c.—*Appl.* 1–2% in petrolatum, twice p. d.

Monobromopropylene.—see **Allyl Bromide**

Monobromopropylphtalimide.—see **Propylphtalimide Bromide**

Monobromphenylacetamide.—see **Bromacetanilide, Mono-**

Monocalcium Orthophosphate. — see **Calcium Phosphate, Monobasic**

Monochloracetone.—see **Chloracetone**

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Monochlorethane.—see **Ethyl Chloride**

Monochlorethylene Chloride.—see **Ethylene Chloride, Monochloro-**

Monochlorhydrin Merck (30

(Chloropropyleneglycol; Asymmetric, or Alpha-propenylchlorhydrin). — Fr. glycerin, by HCl. —$C_3H_7ClO_2$, or, $CH_2Cl.CH(OH).CH_2(OH)$.—Yellowish, syrupy liq. — Sp. Gr. 1.338 at 0° C.—*Misc.* W., A., E.

Monochlorobenzene (or, *-zol*). — see **Benzene, Monochloro-**

Monochlorophenol (Meta-) Merck (350

$C_6H_4Cl(OH)$[3:1].—Colorl. cryst.—*Sol.* A., E.—*Melt.* 28° C.—*Boil.* 214° C.

Monochlorophenol (Para-) Merck (7

Fr. para-aminophenol by displacing NH_2 w. chlorine. — $C_6H_4Cl(OH)$[4:1].—Colorl. cryst. — *Sol.* E., alkalies; sl. W. — *Melt.* 37° C. — *Boil.* 217° C. — Antiseptic. — *Uses: Extern.*, erysip., syphilitic dis. of the eyes, tuberc. dis. of throat, chron. swell. & hyperpl. of muc. membr. of mouth & throat: 5–20% solut. in glycerin w. brush. In lupus, apply it heated to 40° C., & afterwards use 25% salve. After 12 hours this paste is removed with cotton, & salicylated or iodoform ointment substituted. This treatment is repeated every 2 days. Spengler recommends 2% solutions as the best remedy for disinfecting tuberculous sputa. In keratitis & iritis, subconjunct. inject. of 1–2% aqu. solut.; in bronchitis & phthisis, inhal. of 16–30 drops; in dentistry, pure (in cavity), & as caustic in alveolar pyorrhea.

do. Merck.—Liquid (4

Yellowish liq.—*Misc.*A.—Sp.Gr.,abt.1.3 at 15° C.

Monocitrylparaphenetidin.—see **Apolysin**

Monoethyl Sulphate.—see **Acid Ethylsulphuric**

Monoethylamine Chloride. — see **Ethylamine Chloride**

Monoethylamine Hydriodide.—see **Ethylamine Iodide**

Monoethylamine Sulphate.—see **Ethylamine Sulphate**

Monoethylaniline.—see **Ethylaniline**

Monoiodobenzene (or, *-zol*). — see **Benzene, Iodo-**

Monoiododibismuthmethylene Dicresotinate. — see **Biodal**

Monoiodoelhane.—see **Ethyl Iodide**

Monol.—see **Calcium Permanganate**

Monomagnesium Phosphate. — see **Magnesium Biphosphate**

Monomethylaniline.—see **Methylaniline**

Monomethylcatechol.—see **Guaiacol**

Monomethylpara-amidometacresol Sulphate (or *Hydrochloride*).—see **Metol**

Mono[para]phenetidin-citric Acid (or *Citrate*).—see **Apolysin**

Monosalicylic-acid Glycerin Ester.—see **Glycosal**

Monsel's Salt.—see **Iron Sulphate, Basic**

Monsel's Solution.—see **Iron Sulphate, Basic, Solution**

Monsonia

(Nceta; Geita; i-Cquita).—Herb of Monsonia ovata, Cav. Geraniaceæ.—*Habit.:* Cape of Good Hope.—*Etymol.:* Named for Lady Anna Monson, who sent many plants from India to Linnæus.—Astring.; Sedat. — *Uses:* Especially in dysent. —*Dose* 2–4 fl. dr. (8–15 Cc.) of 1:8 alcoholic tinct. every 4–6 hrs.

Moonseed.—see **Menispermum**

Morchella

(Morel).—Fungus, Morchella esculenta, Pers. Discomycetes.—*Habit.:* Germany.—*Etymol.:* Perhaps fr. the low-German "mor," tender, soft.—*Uses:* Popular edible fungus.

Mormon Tea.—see **Ephedra**

Morphine Merck.—Alkaloid (70

(Morphia).—Alkaloid fr. opium.—$C_{17}H_{19}NO_3 + H_2O$.—Wb. prisms; silvery luster; bitter taste.—*Sol.*, amyl alcohol; 300 A.; 4,000 E.; 5,000 W. at 15° C.; (3,330 W.; 100 lime-water; 168 A.; 4,464 E.; 1,800 C.; 113.5 amyl alcohol, & 525 acetic ether, at 25° C., U. S. P.).—*Melt.*, at abt. 200° C. w. beginning decomp.; when rap. heated, melts at 242–247° C. w. pronounced darkening (254° C., U. S. P.).—Hypn.; Sed.; Nar.—*Uses:* Relieve pain, nerv. excitem., &c. Aged & children v. susceptible, & need smaller doses than usual rules would require. Continued use establishes tolerance, & requires larger dose. Sulphate us'y prescribed.—*Doses:* For pain, $^1/_8$–$^1/_2$ grain (0.008–0.03 Gm.); hypnotic, $^1/_4$ grain (0.015 Gm.) in solution or pill.—*Max. D.* $^1/_2$ grain (0.03 Gm.), single; 2 grains (0.12 Gm.), p. day; subcut. in 2% solut., 15–30 ♏ (1–2 Cc.) being injected.—*Appl.*, in oint., 1–5:100; as enema, $^1/_{12}$–$^1/_6$ grain (0.005–0.01 Gm.); as supposit., $^1/_6$–$^1/_2$ grain (0.01–0.03 Gm.).—In dentistry, mixed w. oil cloves as appl. to painful, exposed pulp in carious teeth. —*Antid.*, emetics, stomach siphon, potass. permanganate (15 ♏ [1 Cc.]) of a 1:20 aqu. solut. hypodermically, & a small tablespoonful per os every 2 hrs. of a 1:100 solut.; paraldehyde, picrotoxin, atropine sulphate ($^1/_{120}$–$^1/_{60}$ grain [0.0005–0.001 Gm.]) hypoderm.; strychnine, caffeine, cocaine, strong coffee, ice to head & heat to the hands & feet, mustard plasters, vinegar enemas, exercise, electric shock, &c.—*Incomp.*, alkalies, tannic acid, iodic acid, potass. permangan., borax, chlorates, ferric chloride, iodides, lead acetate, lead subacet., magnesia, spt. nitrous ether, silver nitrate, mercury bichloride, gold & sod. chloride.—*Caut.* Poison!

Morphine Acetate Merck (60

$C_{17}H_{19}NO_3.C_2H_4O_2 + 3H_2O$. — Yellowish-white powd.; sl. acetic acid odor; decomposes with

age.—*Sol.* (when recently made) 2.5 W.; 5 G.; 47.6 A.; 1,700 E.; 2,100 C. at 15° C.; (2.25 W.; 21.6 A.; 480 C.; 5.2 G., at 25° C., U. S. P.).—*Melt.*, abt. 200° C.—Formerly salt most used.—*Max. D.* $^1/_2$ grain (0.03 Gm.) single; $1^1/_2$ grains (0.1 Gm.) p. day.—*Caut.* Keep fr. air & light.

Morphine Bimeconate.—see **Morphine Meconate**

Morphine Bromide.—see **Morphine Hydrobromide**

Morphine Citrate Merck (160

$(C_{17}H_{19}NO_3)_3.C_6H_8O_7$+aq.—Wh., cryst. powd.—*Sol.* W.

do.—Solution.—*N. F.*

Fr. 3.3 Gm. morphine alkaloid, 2.75 Gm. citric acid, 0.1 Gm. cochineal, 12.5 Cc. alcoh., & dist. W. to make 100 Cc.—*Dose* 5 ♏ (0.3 Cc.).

Morphine Hydriodide Merck (150

$C_{17}H_{19}NO_3.HI+2H_2O$. — Wh., cryst. need. — *Sol.*, hot W.

Morphine Hydrobromide Merck (67

(Morphine "Bromide," or Hydrobromate).—$C_{17}H_{19}NO_3.HBr+2H_2O$.—Sm., wh., cryst. need.—*Sol.* W.—*Uses:* Nerv. affect. & delir. trem.; pref. to o. morphine salts.

Morphine Hydrochloride Merck (60

(Morphine Hydrochlorate, or Muriate).—$C_{17}H_{19}NO_3.HCl+3H_2O$.—Wh. cryst., or cryst. powd.; bitter taste.—*Sol.* 24 W.; 62 A. at 15° C.; (17.2 W. & 42 A. at 25° C., U. S. P.); insol. E., C.—*Uses:* This is the salt us'y prescribed in Great Britain & Germany, but less often in United States.—*Doses:* Hypoderm. $^1/_4$ to 1 syringeful of 2% solution. Enema, or suppository, $^1/_{12}$–$^1/_6$ grain (0.005–0.01 Gm.). Children: $^1/_{200}$ grain (0.0003 Gm.) for each year of age.

Morphine Lactate Merck (150

$C_{17}H_{19}NO_3.C_3H_6O_3$.—Wh., cryst. powd.—*Sol.* W.; sl. A.

Morphine Meconate Merck (68

(Morphine Bimeconate).—Form in which morphine chiefly exists in opium.—$(C_{17}H_{19}NO_3)_2.C_7H_4O_7+5H_2O$.—Yellowish-wh., cryst. powd.—*Sol.* A., 25 W.—*Uses:* Said to have less disagreeable effect on brain, stomach, & intest. than o. morphine salts.

Morphine Muriate.—see **Morphine Hydrochloride**

Morphine Nitrate

$C_{17}H_{19}NO_3.HNO_3$.—Wh., cryst. need.—*Sol.* W.—*Caut.* Keep in dark amber bot.

Morphine Oleate Merck.—20% (35

Pure, precipitated morphine in oleic acid.—*Sol.* A.—*Uses:* Oint. where stomach rejects medicine.—*Appl.* 0.1–0.5 : 10 lanum & o. fat; linim., 1–2 : 30 oil.—*N. B.:* All the oleates change on long keeping, but Oleate of Morphine appears to change most rapidly of all, and therefore it is suspected that its occasional failure to relieve pain may be due to having been kept too long.

Morphine Phtalate Merck (126

$(C_{17}H_{19}NO_3)_2.C_8H_6O_4$.—Wh., cryst. powd.—77% morphine.—*Sol.* W.—*Uses:* Recommended for hypodermic use (Bombelon).

Morphine Sulphate Merck.—Cubes, flakes, cryst., & powd. (55

$(C_{17}H_{19}NO_3)_2.H_2SO_4+5H_2O$.—Fine, wh., cryst. need.; silky luster; bitter taste.—*Sol.* 21 W., 702 A. at 15° C.; (15.3 W. & 465 A. at 25° C.; 0.6 W. at 80° C.; 187 A. at 60° C.; insol. E., C., U. S. P.).—*Melt.* 255° C.—At 250° C. bec. brown, then chars without melt. (U. S. P.).—Antispasm.; Hypn.; Analg.; Nar.—*Uses:* Most important salt of morphine in this country. Relieve pain, produce sleep, check diar. & dysent.; to relieve nervousn. in delir. trem., &c. — *Dose* $^1/_{12}$–$^1/_2$ grain (0.005–0.03 Gm.) 3–4 t p. d. in solut., pill, or powder.—*Max. D.* $^1/_2$ grain (0.03 Gm.) single; 2 grains (0.12 Gm.) p. day.—*Incomp. & Antid.*, as of morphine alkaloid.

Note.—Its unique quality, determined by both chemical & physiological tests, adapts this salt for general use in all cases where prompt & reliable results are desired.

Morphine Tannate

Approx.: $C_{17}H_{19}NO_3.(C_{14}H_{10}O_9)_3$+aq. — Brown, amorph. powd.—*Sol.* A.

Morphine Tartrate Merck (120

$(C_{17}H_{19}NO_3)_2.C_4H_6O_6+3H_2O$.—Wh., cryst. powd.—*Sol.* A., 10 W.—*Uses:* Hypoderm.

Morphine Valerate Merck (80

(Morphine Valerianate).—$C_{17}H_{19}NO_3.C_5H_{10}O_2$.—Wh., cryst. powd.; darkens w. age & expos.—*Sol.* W. — Sedative. — *Uses:* Hyst., nervousn., delir. trem., &c.—*Dose:* As of morphine.—*Caut.* Keep fr. air & light.

Morrhenia

(Tasi).—Root of Morrhenia brachystephana, Gr. Asclepiadaceæ.—*Habit.:* Argentine Republic & Brazil.—*Etymol.:* Named for Charles François Morren, a Belgian botanist (1807–1858). Grk. "brachys," short, & "stephanos," ring, or wreath, referring to the flowers. — *Constit.:* Morrenine (alkaloid).—Galactag.—*Dose:* 1 oz. (30 Gm.) daily in 1:1,000–2,000 infus.—Fld. extr., 1 fl. oz. (30 Cc.) daily with much water.

Morrhuol.—see **Gaduol**

Morsus Diaboli.—see **Succisa**

Morus Tinctoria

(Old Fustic; Yellow Brazil Wood). — Yellow dye-wood fr. Morus (Broussonetia) tinctoria, L. Moraceæ. — *Habit.:* South America; Central America; Cuba.—*Constit.:* Morin & maclurin (two coloring matters).—*Uses:* Dyeing yellow.

Mosaic Gold.—see **Tin Disulphide**

Motherwort.—see **Leonurus**

Mountain Blue.—see **Copper Carbonate, Blue**

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Mountain Geranium.—see **Geranium Robertianum**

Mountain Grape.—see **Berberis Aquifolium**

Mountain Laurel.—see **Kalmia**

Mountain Parsley.—see **Oreoselinum**

Mountain Sage.—see **Artemisia Frigida**

Muavine Hydrobromide Merck (4000

(Muawine Hydrobromide).—Alkaloid of "muawi," bark fr. a Mozambique tree used as an ordeal poison.—Yellowish powd.—*Sol.* W., A.—Cardiac Stimulant.—*Uses:* As of erythrophleine & digitalin.—*Caut.* Poison!

Mucin Merck.—From Bile (1000

Glucoproteid found in the bile, & in the submaxillary gland & o. organs; probably a mixt. of serum-globulin, & salts of true mucin & bile.—Greenish-gray or yellow powd.—*Sol.*, dil. alkalies; insol. W.—*Uses: Intern.*, in round gastric ulcer, in order to afford a protective coating for the corroded gastric mucosa.—*Dose* 10 grains (0.6 Gm.) with an equal quant. sod. bicarb. at beginning of each meal.

Mucuna

(Cowage; Cowitch; Cowhage). — Hairs of the pods of Mucuna (Dolichos, L.) pruriens. De C. Leguminosæ, Papilionaceæ.—*Habit.:* Tropical Africa, America, & Asia.—*Etymol.:* "Mucuna" is the Brazilian name for the plant; Grk. "dolichos," long, *i.e.*, the pods are long.; Lat. "prurio," to itch, *i.e.*, the pod hairs irritate.—Straight hairs abt. $^1/_8$ in. (3 Mm.) long; brown & glossy; readily penetrate the skin, causing intense itching.—*Uses:* Irrit. (in oint.); Anthelm. (in honey).—*Dose* 1–3 grains (0.06–0.2 Gm.).

Mucuna Urens.—see **Cali**

Mugwort.—see **Artemisia Vulgaris**

Muira Puama

Wood of Liriosma ovata, Miers, Oleaceæ, or, according to Rebourgeon, Acanthea virilis. Acanthaceæ.—*Habit.:* Brazil.—*Etymol.:* Fr. Brazilian "muira," wood, & "puama," strength, power, referring to the use made of the wood by the natives as an aphrodisiac.—*Constit.:* Aromat. resin; muira-puamine; fat; two resinous acids.—Powerful Aphrodisiac; Antidysenteric; Antirheum.—*Uses:* Sexual debil., senile weakness, dysentery, impotence, dyspep., rheum., menstrual colic, & paralysis.—*Doses:* In rheum., 5–8 ♏ (0.3–0.5 Cc.) of 1:5 alcoh. tinct.; as an aphrod., 15–60 ♏ (1–4 Cc.) fld. extr. 3 t. p. d.

Mukogen

(Dimethylphenylpara-ammoniumbetaoxynaphthoxazime Chloride). — $C_{18}H_{15}N_2O_2Cl$. — Blue cryst.—*Sol.* A., alkal. soluts.; alm. insol. W.—Cathart.—*Dose* $1^1/_2$–5 grains (0.1–0.3 Gm.).

Mulder's Reagent.—For glucose

Solut. indigocarmine rendered alkaline w. sod. carbonate On adding the reagent to saccharine liquids & heating, a color-change fr. green to red & yellow takes place.

Mullein.—see **Verbascum**

Müller's Solution.—Hardening Fluid

1 Gm. sod. sulphate, 2 Gm. potass. dichromate, & 100 Cc. W. — *Uses:* Hardening histological specimens, & also as a maceration fluid.

Murexane.—see **Uramil**

Murexid Merck (50

(Acid Ammonium Purpurate).—Color. matter fr. guano, or synthet. fr. uric acid by nitric acid.—$C_8H_8N_8O_6 + H_2O$, or, $NH_4.C_8H_4N_5O_8 + H_2O$.—Purple powd.—*Sol.* W.—*Uses:* Techn.

Mururé

(Vegetable Mercury). — Bark of Urostigma cystopodum, Migg. Urticaceæ.—*Habit.:* Brazil.—*Etymol.:* "Mururé" is the Brazilian name of the drug.—Bark is brick-red, w. darker patches on outer surface; intern., fibrous, grayish, & rather hard; acid, syrupy liquid exudes on incision.—*Constit.:* Fixed oil; alkaloid (?).—Drastic Purg.; Antisyph.; Antirheum.—*Dose* 2–4 dr. (4–8 Gm.).

Muscle Fibrin.—see **Syntonin**

Musk.—*U. S. P.* (600

Dried secretion fr. preputial follicles of Moschus moschiferus, L. Artiodactyla. Mammalia. Ruminantia. — *Habit.* Northern Asia; Tonquin; Thibet.—*Etymol.:* Grk. "moschos," fr. Sanskrit "mushka," testicle, originally a little mouse. "Moschiferus," fr. Lat. "moschus," musk, & "ferre," to bear, *i.e.*, musk producing.—*Constit.:* Volat. odorous substc.; cholesterin; ammonia; fat; wax; gelatinous & albuminous principles. — Stim.; Antispasmodic; Nervine; Anodyne; Aphrodisiac.—*Uses:* Collapse, & nerv. affect.—*Techn.*, in perfumery.—*Doses:* 1–10 grains (0.06–0.6 Gm.).—Tinct., 30–120 ♏ (2–8 Cc.).

Musk Artificial

(Trinitrobutyltolylazoimide; Musk "Baur").—Wh., cryst. powd.; made by a patented process. Other & similar substances obtained by synthesis, as dinitrobutylxylylazoimide (*melt.* 89° C.), trinitroisobutyltoluene, &c., are also marketed as "Artificial Musk."—*Sol.* A., E.—*Melt.* 146° C.—*Uses:* Techn., in perfumery.

Musk Mallow or *Seed.*—see **Abelmoschus**

Musk Root.—see **Sumbul**

Mussanin

Fr. Albizzia anthelmintica, Brogn.—Anthelm.—*Uses:* Worms; reported superior to kousso.—*Dose* 1 to 2 oz. (30–60 Gm.), in infusion.

Mustard, Black.—see **Sinapis Nigra**

Mustard, White.—see **Sinapis Alba**

Muthmann's Liquid.—see **Acetylene Tetrabromide**

Mydrine Merck (1568

Combination of ephedrine & homatropine.—Wh. powd.— *Sol.* W. — Mydriatic.— *Uses:* Where evanescent mydriasis desired; visual disturbance lasts only abt. 1 hr. Espec. valuable in diagnosis.—*Appl.*, 2–3 drops of 10% aqu. solut.

Mydrol

(Iodomethylphenylpyrazolon). — Wh., odorl., bitter powd.—*Sol.* W., A.; insol. E.—Mydriatic. —*Appl.*, in 5–10% solut.

Mylabris

(Chinese Cantharides; Chinese Blistering Flies). —Dried insect, Mylabris Cichorii, Fabr. Coleoptera.—*Habit.:* China & East. India.—*Etymol.:* Fr. Grk. "mylabris," fr. "myle," a mill.—Rather smaller than cantharides; black cylindrical body, rounded above, flattish below; black wing cases marked with a spot at point of insertion, & has two yellow bands, all downy.—*Constit.:* Cantharidin (quantity larger than in cantharides, 1–1.2%); odor & taste as of cantharides. —*Uses, Dose, & Antid.:* As of cantharides.

Myosin Merck (650

(Muscle Fibrin).—Albuminoid fr. muscle plasma of lean meat.—Yellowish-wh. powd.—*Sol.*, dil. solut. sod. chloride, dil. acids & alkalies. — Myosin is believed to be the substance which, on coagulating in the muscular fiber, causes rigor mortis.

Myrica

(Candleberry; Bayberry; Wax Myrtle; Wax Berry; Tallow Shrub).—Bark of Myrica cerifera, L. Myrtaceæ. — *Habit.:* Maryland to Florida, west to Texas & Arkansas.—*Etymol.:* Grk. "myrike," the tamarisk of the ancient Greeks. "Cerifera," fr. Lat. "cera," wax, & "fero," to bear, *i.e.*, the plant yields wax.— *Constit.:* Acrid resin; astring. resin; myricinic acid; tannin; gallic acid; red coloring matter; gum; starch, &c. Bayberry wax consists of palmitin, palmitic acid, myristin, & lauric acid. —Alter.; Cholag.; Astring.—*Uses:* Diar., scrof., & jaundice.—*Extern.*, in ulcers, sore throat, & leucor.—*Dose:* Fld. extr., 20–60 ♏ (1.3–4 Cc.).

Myristica.—*U. S. P.*

(Nutmeg; Nux Moschata; Nuces Nucistæ).—Kernel of ripe seed of Myristica fragrans. Houttuyn, Myristicaceæ, deprived of its testa. —*Habit.:* Southern Asia; Moluccas; cultiv. in many tropical countries.—*Etymol.:* Grk. "myron," balsam; "myristikos," belonging to ointments.—*Constit.:* Fixed & volat. oils.—Carmin.; Digestive.—*Uses:* Flatulence & intest. catarrh.; also as spice in cookery.—*Dose* 5–20 grains (0.3–1.3 Gm.).—Fld. extr., 5–20 ♏ (0.3–1.3 Cc.).

Myristin Merck (100

(Glyceryl Ester of Myristic Acid). — $C_3H_5O_3$.-$(C_{14}H_{27}O)_3$.—Fatty substance fr. fat, obtained by expression fr. seed kernels of Myristica moschata (Oil-nut).—Wh. to yellowish-gray powd.—*Sol.*, warm A.; E., B., C.—*Melt.* 55° C.

Myrobalan

(Myrobalans). — Fruit of Terminalia Chebula, Retzius. Combretaceæ.—*Habit.:* East Indies.— *Etymol.:* Grk. "myron," balsam, & "balanos," oak, or nut, fr. which balsam is obtained.—Ovoid or oblong, abt. size of prune; color yellow-brown; single white seed.—*Constit.:* Tannin; resin; gallic acid; mucilage. — Astring.; Cathart. — *Uses:* Intest. catarrh & diarrh. — *Techn.*, in tanning & dyeing.—*Doses:* 2–15 grains (0.12–1 Gm.).— Aqu. extr., 4–10 grains (0.25–0.6 Gm.).

Myrrh.—*U. S. P.*

(Gum-resin Myrrh). — Gum-resin fr. Commiphora Myrrha (Nees) Engler. Burseraceæ.— *Habit.:* Nubia; Somali-land; Arabia.—*Etymol.:* Grk. "myron," balsam, & "rheein," to flow. Derived fr. Arabic "murr," Hebrew "mar," bitter, *i.e.*, the gum resin has a bitterish taste. "Commiphora" fr. Grk. "kommi," gum, & "phoros, pherein," bears, to bear, *i.e.*, gum-yielding.—*Constit.:* Volat. oil; bitter principle (glucoside); resin (myrrhin), $C_{48}H_{32}O_{10}$; gum.— Tonic; Stomachic; Stim.; Expector.; Emmen.; Astring.; Carmin.; Vulnerary.—*Uses:* Catarrh, phthisis, amenor., chlorosis, & debility. — *Extern.*, in spongy gums, aphthous sore throat, & unhealthy ulc. — *Techn.*, in dentifrices. — The oil is used internally in bronchitis.—*Doses:* 5–30 grains (0.3–2 Gm.).—Aqu. extr., 5–15 grains (0.3–1 Gm.).—Fld. extr., 10–30 ♏ (0.6–2 Cc.). —Tinct., 15–60 ♏ (1–4 Cc.).

Myrtle.—see **Myrtus**

Myrtol Merck (22

Fr. essential oil of Myrtus communis, L., by fractional distil., 160–180° C. — Mixt. dextropinene, eucalyptol, & a not fully known camphor.—Clear, color. liq.; agre., ether. odor.— *Sol.* A.—Sp. Gr. 0.88–0.89 at 15° C.—Antisep.; Sed.; Stim.—*Uses:* Chronic bronch., tonsil., pulm. gangrene, cyst., & pyelitis.—*Dose* 1–2 ♏ (0.06–0.12 Cc.) several t. p. d.

Myrtus

(Common Myrtle; European Myrtle; Myrtle). —Lvs. of Myrtus communis, L. Myrtaceæ.— *Habit.:* Mediterranean region; Western Asia.— *Etymol.:* Fr. Grk. "myrtos," myrtle, fr. "myron," balsam.—*Constit.:* Volat. oil; bitter extractive; tannin; myrtol. — *Uses:* Bronch. & vesical catarrhs, leucor., gonor., & piles. — *Dose* 75–150 grains (5–10 Gm.) per quart (abt. 1 liter) of decoct.—*Extern.*, 4–8 dr. (15–30 Gm.) per quart (abt. 1 liter).

Myrtus Chekan.—see **Eugenia Chequen**

N

Naegeli's Solution.—see **Zinc Chloroiodide, Solution**

Naphtha.—see **Benzin**

Naphtha, Coal.—see **Benzene**

Naphtha, Vinegar.—see **Ethyl Acetate**

Naphthalene Merck.—Highest Purity, Medicinal, cryst. or powder (4

(Naphthalin; Tar Camphor).—Hydrocarbon fr. coal-tar. — $C_{10}H_8$. — Wh. scales or powd.; str. coal-tar odor.—*Sol.* A., C., paraffin, E.—*Melt.* 79–80° C.—*Boil.* 218° C.—Antisep.; Antidiar.; Anthelm.; Antipyr.—*Uses: Intern.*, chronic & acute intest. catarrhs, worms, intest. inflam., cholera, typhoid fever, & chronic bronch.—*Extern.*, oint. (1:15) in skin dis.—*Dose* 2–8–15 grains (0.12–0.5–1 Gm.) in powder or capsule. For tapeworms 15 grains (1 Gm.), followed some hours later by castor oil.—*Max. D.* 90 grains (6 Gm.) p. day.

do. Merck.—Resublimed (1

Silky, wh. flakes.—*Uses:* In manuf. celluloid.

do.— Crude, flakes (1

Yellowish to brownish cryst., or round balls.—*Sol.* A., E., C., B.—*Uses:* Techn., in manuf. dyes, phthalic acid, & naphthalene compounds; also for carburetting illuminating gas (as Albocarbon), destroying moths, in mixture w. oil rape seed as lubricant, & in manuf. of lampblack.

Naphthalene (Alpha-) Dibromo- Merck (10

$C_{10}H_6Br_2$[1:3].—Wh. to yellowish powd.—*Sol.* A.—*Melt.* 64° C.

Naphthalene (Alpha-) Dichloro- Merck (35

$C_{10}H_6Cl_2$[1:2].—Yellowish, cryst. powd. — *Sol.* A., E.—*Melt.* 35° C.—*Boil.* 280–282° C.

Naphthalene (Alpha-) Monobromo- Merck (10

Fr. naphthalene in carbon disulphide, by bromine. — $C_{10}H_7Br$. — Yellowish liq.; high refractive power.—Sp. Gr. 1.5 at 15° C.—*Misc.* A., E., B.—*Boil.* 277° C.—*Uses:* As imbedding material in microscopy, because of its high index of refraction (1.658), for examining diatoms.

Naphthalene (Alpha-) Monochloro- Merck (15

By passing chlorine through boiling naphthalene. —$C_{10}H_7Cl$.—Yellowish liq.—*Sol.* A., B., & carbon disulphide.—*Boil.* 251–263° C.

Naphthalene (Beta-) Dibromo- Merck (6

$C_{10}H_6Br_2$[1:4].—Wh. cryst.—*Melt.* 81–82° C.—*Boil.* 310° C.—*Sol.* A.

Naphthalene (Beta-) Monochloro-

By action of phosphorus pentachloride upon betanaphthol.—$C_{10}H_7Cl$.—Wh., lustr. scales.—*Melt.* 56° C.—*Boil.* 265° C.

Naphthalene (Beta-) Sulphochloride Merck (70

$C_{10}H_7SO_2Cl$.—Colorl. leaflets.—*Sol.* A., E., B.—*Melt.* 66° C.

Naphthalene Red, Rose, or *Scarlet.*—see **Magdala Red**

Naphthalene Tetrachloride Merck (30

Fr. alphadichloronaphthalene-alphatetrachloride by alcoholic potassa.—$C_{10}H_8Cl_4$.—Colorl. cryst. —*Sol.*, sl. A., E.—*Melt.* 182° C.

Naphthalene Yellow.—see **Martius Yellow**

Naphthalidine.—see **Naphtylamine, Alpha-**

Naphthalin.—see **Naphthalene**

Naphthalol.—see **Betol**

Naphtindophenol.—see **Indophenol**

Naphthol, Alpha-.—see **Alphanaphthol**

Naphthol, Beta-.—see **Betanaphthol**

Naphthol Black.—see **Brilliant Black**

Naphthol Camphor. —see **Betanaphthol, Camphorated**

Naphthol Green B Merck (6

(Ferro-sodium salt of nitrosobetanaphtholmonosulphonic Acid).—Green powd.—*Sol.* W., w. yellowish-green color.—*Uses:* Coloring & painting.

Naphthol Yellow.—see **Martius Yellow**

Naphthol Yellow S Merck (5

(Citronin A.; Sulphur Yellow S.; Acid Yellow S.).—Potass. or sod. salt of dinitroalphanaphtholsulphonic acid.—Orange-yellow powd.—*Sol.*, eas. W.—*Uses:* Coloring; also for dyeing wool & silk.

Naphthol-aristol.—see **Iodonaphthol**

Naphtholbenzeïn, Alpha-.—see **Alphanaphtholbenzeïn**

Naphtholquinoline.—see **Quinoline-betanaphthol**

Naphtoquinone (Alpha-) Merck (350

Fr. naphthalene, by oxidation in acetic acid. —$C_{10}H_6O_2$, or, $C_6H_4.O[1]C_4H_2O[4]$. — Yellowish cryst.—*Sol.* A., E., C., B., acetic acid; sl. W. —*Melt.* 125° C.

Naphtoquinone (Beta-) Merck (250

$C_6H_4.O[1]C_4H_2O[2]$.—Orange-red powd.—*Sol.* A., E., B.—Decomp. at 115–120° C. without melt.

Naphthosalol.—see **Betol**

Naphtylamine (Alpha-) Merck.—Pure, white (6

(Naphthalidine).—Fr. reduct. nitronaphthalene by alcoholic ammon. sulphide. — $C_{10}H_9N$, or, $C_{10}H_7.NH_2$.—Fine, wh. need.—*Sol.* A., E.—*Melt.* 50° C.—*Boil.* 300° C.—*Uses:* In form of hydrochloride with sulphanilic acid as reagent for nitrous acid.

do. Merck.—Crude (2

Reddish, cryst. mass.—*Uses:* Techn., in manuf. of Martius Yellow & Magdala Red.

Naphtylamine (Alpha-) Hydrochloride Merck (6

$C_{10}H_7NH_2.HCl$. — Wh. to gray, cryst. powd. —

Sol. W., A., E.—*Uses:* With sulphanilic acid as test for nitrous acid.

Naphtylamine (Alpha-) Sulphate Merck (6

$(C_{10}H_7NH_2)_2.H_2SO_4+2H_2O$.—Yellowish, cryst. powd.—*Sol.* W., A.

Naphtylamine (Beta-) Merck.—Pure (8

By heating betanaphthol w. ammonium & zinc chloride. — $C_{10}H_9N$, or, $C_{10}H_7.NH_2$. — Wh. to reddish cryst.—*Sol.* A., E.; sl. in W.—*Melt.* 112° C.—*Boil.* 294° C.—*Uses:* Techn., in manuf. coal-tar dyes.

do. Merck.—Crude (4

Naphtylamine (Beta-) Hydrochloride Merck (10

$C_{10}H_9N.HCl$.—Colorl. to yellowish plates.—*Sol.* W., A.; sl. in hydrochl. acid.

Naphtylated Camphor.—see **Betanaphthol, Camphorated**

Naphtylene Blue.—see **Phenyl Blue**

Naphtylene-ethylene.—see **Acenaphtene**

Naphtylhydrazine (Alpha-) Hydrochloride Merck.—Powder (55

$C_{10}H_{11}N_2Cl$, or, $C_{10}H_7NH.NH_2.HCl$. — Reddish powd.—*Sol.* W.

Naphtylhydrazine (Beta-) Hydrochloride Merck.—Powder (55

$C_{10}H_{11}N_2Cl$, or, $C_{10}H_7NH.NH_2.HCl$. — Reddish powd.—*Sol.* A., E.; sl. in W.

Naples Yellow.—see **Lead Antimonate**

Napus

(Rape).—Flowers & seed of Brassica Napus, L. Cruciferæ. — *Habit.*. Europe. — *Etymol.:* Grk. "napus," turnip, *i.e.*, the genus yields the turnip. "Brassica," fr. Celtic "bresic," cabbage, *i.e.*, the genus Brassica yields the cabbage.—*Constit.:* *Seed*, volat. & fixed oils.—*Uses: Flowers:* Domestic remedy.—*Seed:* Source of rape-seed oil.

Narceine Merck (200

Alkaloid from opium.—$C_{23}H_{27}NO_8+3H_2O$, or, $N(CH_3)_2.CH_2.CH_2.(CH_2O_2)C_6H(OCH_3).CH_2.CO.C_6H_2.CO_2H.(OCH_3)_2+3H_2O$.—Wh. cryst.—*Sol.* A.; hot W.—*Melt.*, at various temp., acc. to content of water of crystallization, *e.g.*, when anhydrous, at 145° C.; with 3 equiv. aq. at 171° C.—Hypn.; Sed.; Analg.; Nar. — *Uses:* Insom. & pain, as morphine; effect similar but milder & free fr. disagre. after-effects. Some authors claim it possesses no action whatever. —*Doses:* $^1/_3$–$^3/_4$ grain (0.02–0.05 Gm.) several t. p. d.; *subcut.*, $^1/_4$ grain (0.015 Gm.); in enema & in supposit., $^1/_6$–$^3/_4$ grain (0.01–0.05 Gm.).

Narceine Hydrobromide Merck (450

$C_{23}H_{27}NO_8.HBr+aq$.—Wh. to yellowish, gran., cryst. powd.—*Sol.* A.; hot W.

Narceine Hydrochloride Merck (360

$C_{23}H_{27}NO_8.HCl+3H_2O$.—Wh., granular powd. —*Sol.* A.; boiling W.—*Dose* $^1/_6$–1 grain (0.01–0.06 Gm.).

Narceine Meconate Merck.—True Salt (400

True salt, not the French Meconarceine.—$C_{23}H_{27}NO_8.C_7H_4O_7+aq$.—Lemon-yellow, cryst. need. —*Sol.*, hot W.—*Melt.* 126° C.

Narceine-sodium & Sodium Salicylate.—see **Antispasmin**

Narceine Sulphate Merck (400

$C_{23}H_{27}NO_8.H_2SO_4+11H_2O$. — Yellowish, cryst. powd.—*Sol.* A.

Narcotine Merck.—Pure (35

(Anarcotine).—Alkaloid fr. opium, & having a v. weak basic power.—$C_{22}H_{23}NO_7$, or, $(CH_3.O)_2C_6H_2.COO.CH.CH.(N.CH_3).(CH_2)_2.C_6H(O.CH_3):(O_2:CH_2)$.—Colorl. prisms.—*Sol.* C.; hot A.; sl. cold A., & E.; insol. W.—*Melt.* 171° C.—Antiperiodic.—*Uses:* Reported as better than quinine in some cases of interm. fever.—*Dose* $1^1/_2$–3 grains (0.1–0.2 Gm.) in form of its salts. —*Max. D.* 15–23 grains (1–1.5 Gm.) per day.

Narcotine Hydrochloride Merck.—Pure (35

$C_{22}H_{23}NO_7.HCl$.—Wh. powd.—*Sol.* W.—*Dose:* As of narcotine.

Narcyl

(Ethylnarceine Hydrochloride Merck).—$C_{25}H_{31}NO_8.HCl$.—Prism. need.—*Sol.* 120 W. at 15° C.; eas. A., C.; sl. E., B., benzin.—*Melt.* 205–206° C. — Antispasm.; Analg. — *Uses:* Nerv. cough, whoop.-cough, asthma.—*Dose* 1 grain (0.06 Gm.) p. d.; hypoderm., $^1/_6$–$^1/_3$ grain (0.01–0.02 Gm.).

Naregamia

(Goanese Ipecac; Tinapani).—Root of Naregamia alata, Wight & Arnott. Meliaceæ.—*Habit.:* East Indies; West Indies.—*Etymol.:* "Naregamia" is the Indian name of the plant.—*Constit.:* Naregamine (alkaloid); wax; fixed oil. —Mild Expector.; Hepat. Stim.; Emetic.—*Uses:* Coughs & colds, & in catarrh. — *Doses:* 5–10 ♏ (0.3 to 0.6 Cc.) of 1:4 tinct. as expector.; 15–30 ♏ (1–2 Cc.) as emetic. — Fld. extr., 1–2 ♏ (0.06–0.12 Cc.) as expector.

Nargol (34

Compound of silver & nucleinic acid.—10% Ag. —*Sol.* W.—*Uses:* As of silver nitrate in 1:5 solut. in gonor.; 5% solut. in conjunctival inflam.; 5–10% oint. as stim. to slow-healing ulcers, &c.

Narra.—see **Pterocarpus Pallidus**

Nasturtium

(Water-cress; Water Radish; Nasturtion).—Herb of Nasturtium officinale, R. Brown. Cruciferæ.—*Habit.:* Europe; Northern Asia; natur. in U. S. & elsewhere.—*Etymol.:* Lat. "nasus," nose, & "torquere," to twist, referring to the irritation of the nose the herb causes when chewed. —*Constit.:* Volat. oil.—Febrif.; Antineural.; Antiscorbut.; Depurat.; also used as salad.

Natri

Herb of Solanum Tomatillo. Solanaceæ.—*Habit.* Chili.—*Etymol.:* "Natri" is the Chilian name

of the drug.—*Constit.:* Natrine (alkaloid).—Antipyretic.—*Uses:* Measles, scarlet fever, & o. eruptive fevers, in 1:10 decoct.

Neeta.—see **Monsonia**

Nepeta

(Catnip; Catmint).—Herb of Nepeta Cataria, L. Labiatæ.—*Habit.:* Europe; Asia; natur. in U. S. —*Etymol.:* Fr. "Nepete," the name of an Etrurian town, where the plant grew. "Cataria" was the Lat. name for the plant (catmint).—Carmin.; Sed.; Emmen.—*Uses:* Infantile colic, hyster., chlorosis, amenor., dysmenor., &c.—*Dose:* Fld. extr., 30–120 ♏ (2–8 Cc.).

Nerium.—see **Oleander**

Nerolin.—see **Methyl Betanaphtholate**

Nessler's Reagent Merck. — For ammonium salts

(Alkaline Solution Mercury & Potassium Iodide).—Solut. 10 Gm. potass. iodide, 5 Gm. mercuric chloride, & 32 Gm. KOH, in W. to make 200 Cc.—Gives a yellow color w. traces of ammonia or ammonium salts; w. larger quantities a ppt.

Nettle.—see **Lamium**

Nettle, Horse.—see **Solanum Carolinense**

Nettle, Stinging.—see **Urtica**

Neurine Merck.—25% Solution (400

(Vinyltrimethyl Hydroxide).—Ident. w. Trimethylvinyl Ammonium-Hydroxide.—25% aqu. solut. of an oxygen-containing ptomaine.—Constant decomp. prod. of decomposing animal tissue.—$C_5H_{13}NO$, or, $OH.N(CH_3)_3.CH:CH_2$.

Neurine Chloride Merck (3000

$C_2H_3.N:(CH_3)_3Cl$.—Yellowish mass.—*Sol.* W.

Neurodin (40

(Acetylparaoxyphenylurethane Merck).—Deriv. of amidophenol & ethylurethane).—$C_{11}H_{13}NO_4$, or, $C_6H_4.(OCO.CH_3).NH.CO.OC_2H_5$. — Colorl. cryst.—*Sol.*, sl. W.—*Melt.* 87° C.—Antineural.; Antipyr.—*Uses:* Sciatica, rheumatic pains, migraine, tic douloureux, locomotor ataxia, &c. As antipyr. in var. forms of fever.—*Dose* 15–23 grains (1–1.5 Gm.) as antineural.; 5–10 grains (0.3–0.6 Gm.) as antipyr., several t. p. d.

Neuronal

(Bromdiethylacetamide; Diethylbromacetamide).—$Br(C_2H_5)_2CO.NH_2$.—Wh., cryst. powd.; camph. odor; bitter, cooling taste.—*Sol.* A., E., oils, abt. 115 W.—*Melt.* 66–67° C.—Hypn. —*Uses:* Insomnia, conditions of great excitement.—*Dose* 8–30 grains (0.5–2 Gm.).

Neurosin.—see **Calcium Glycerinophosphate**

Neutral Red Grübler-Merck (100

(Toluylene Red; Dimethyldiamidotoluphenazine Hydrochloride).—Dark-green powd.—*Sol.* A., & W.—*Uses:* Dyeing cotton.

Neutral-Red Stain.—see **Ehrlich's Neutral-Red Stain**

New Blue.—see **Phenyl Blue**

New Green.—see **Malachite Green**

New Victoria Green.—see **Brilliant Green**

New Yellow.—see **Diphenylamine Orange**

Nickel Merck.—Highest Purity (30

Etymol.: Copper-nickel (native arsenical nickel) received the name "nickel," meaning "worthless," in disgust because it resembled copper in appearance, but instead of yielding copper, evolved vapors of arsenic.—Metal.—Ni.—Lustr. sl'y grayish, wh. metal; hard, ductile, malleable, tenacious.—Sp. Gr. 8.97–9.26.

do. Merck.—Anodes, cast

Sizes: $4\times4\times{}^1/_8$ in. (100×100×3 Mm.); $6\times3{}^1/_5\times{}^1/_6$ in. (150×80×4 Mm.); $8\times4\times{}^1/_5$ in. (200×100×5 Mm.).

do. Merck.—Anodes, forged

Sizes: $12\times8\times{}^1/_{12}$ in. (300×200×2 Mm.); $12\times8\times{}^1/_{25}$ in. (300×200×1 Mm.); $8\times4\times{}^1/_{12}$ in. (200×100×2 Mm.); $8\times4\times{}^1/_{25}$ in. (200×100×1 Mm.).

do. Merck.—Cubes, or granulated, 98 to 99% (2

Both cubes & granulated are used in electrodepositing nickel, making alloys such as argentan, Chinese silver, ferronickel, German silver, &c.; also in manuf. nickel vessels, nickel-plating sheet iron, medals, lightning-rod tips, type-metal casts, magnets for telegraph instruments, coins, &c.

do. Merck.—Sheets or Wire (4

Nickel Acetate Merck (6

(Nickelous Acetate). — $Ni(C_2H_3O_2)_2+4H_2O$. — Dark-green, cryst. crusts.—*Sol.* W.

Nickel Arsenate Merck (10

(Nickelous Arsenate). — $Ni_3(AsO_4)_2+8H_2O$. — Yellowish-green powd.—*Sol.*, in acids; insol. W.

Nickel Benzoate Merck (5

(Nickelous Benzoate). — $Ni(C_7H_5O_2)_2+$aq. — Light-green powd.—*Sol.*, in ammonia.

Nickel Borate Merck (10

(Nickelous Borate).—$Ni(BO_2)_2+2H_2O$.—Apple-green powd.—Insol. W.—*Melts* to a hyacinth-colored glassy mass.

Nickel Bromide Merck (6

(Nickelous Bromide).—$NiBr_2$.—Yellow powd.—*Sol.* W., A., E.—Nerve Sed.—*Uses:* Epilepsy. —*Dose* 5–10 grains (0.3–0.6 Gm.).—*Max D.* 10 grains (0.6 Gm.) single; 23 grains (1.5 Gm.) p. d.

Nickel Carbonate Merck (3

(Nickelous Carbonate).—$NiCO_3$+more or less $Ni(OH)_2$. — Light-green powd.—*Sol.*, acids.—*Uses:* Techn., in nickel-plating.

do. Merck.—Highest Purity (6

Nickel Chloride Merck (3

(Nickelous Chloride). — $NiCl_2+6H_2O$. — Green,

monocl. cryst.—*Sol.* W., A.—Antisep.—*Uses:* Nickel-plating cast zinc; manuf. sympathetic ink.

Nickel Chloride Merck.—Pure cryst. (3

do. Merck.—Highest Purity, free fr. Cobalt (10

Nickel Citrate Merck

(Nickelous Citrate). — $Ni_3(C_6H_5O_7)_2$+aq. — Green, deliq. powd.—*Sol.* W.—*Uses:* Techn., in nickel-plating.—*Caut.* Keep dry, fr. air.

Nickel Cyanide Merck (8

(Nickelous Cyanide). — $Ni(CN)_2$+aq. — Apple-green powd.—*Sol.*, solut. potass. cyanide.

Nickel Hydroxide Merck.—Pure (9

(Nickelous Hydroxide). — $Ni(OH)_2+H_2O$. — Apple-green powd.—*Sol.*, acids, ammonia, & soluts. ammonium salts; insol. W.

Nickel Iodide Merck (17

(Nickelous Iodide).—NiI_2.—Black, cryst. powd. —*Sol.* W., & in A. w. green color.

Nickel Monoxide.—see **Nickel Oxide, Green**

Nickel Nitrate Merck.—Pure (3

(Nickelous Nitrate).—$Ni(NO_3)_2+6H_2O$.—Emerald-green, monocl. prisms.—*Sol.* 2 W., 2 A.—*Uses:* In nickel-plating.—*Caut.* Keep well stop.

do. Merck.—Highest Purity, free fr. Cobalt (8

Nickel Oxalate Merck (5

(Nickelous Oxalate). — NiC_2O_4. — Light-green powd.—*Sol.*, acids; insol. W.

Nickel Oxide Black Merck.—Highest Purity (20

(Nickelic Oxide; Nickel Peroxide, or Sesquioxide).—Ni_2O_3.—Gray-black powd.—*Sol.*, acids. —*Uses:* In manuf. of oxygen.

do. Merck (4

Nickel Oxide Green Merck.—Commercial (2

(Nickelous Oxide; Nickel Monoxide, or Protoxide).—NiO.—Green powd.; yellow when hot.—*Sol.*, acids.—*Uses:* Techn., in manuf. of nickel salts, & in painting on porcelain.

Nickel Peroxide.—see **Nickel Oxide, Black**

Nickel Phosphate Merck (4

(Normal Nickel Orthophosphate).—$Ni_3(PO_4)_2+7H_2O$.—Green powd.—*Sol.*, acids; insol. W.—*Uses:* On ignition yields "nickel yellow," a valuable yellow pigment used in oil- & water-colors; also for depositing a dark nickel coating on iron, copper, brass, & zinc.

Nickel Protoxide.—see **Nickel Oxide, Green**

Nickel Sesquioxide.—see **Nickel Oxide, Black**

Nickel Sulphate Merck.—Highest Purity (3

(Nickelous Sulphate).—$NiSO_4+7H_2O$.—Emerald-green cryst.; sweet, astring. taste.—*Sol.* 3 W. —Tonic; Sed.; Soporific.—*Uses:* Periodic headache.—*Dose* $^1/_2$–1 grain (0.03–0.06 Gm.) 3 t. p. d.—*Caut.* Keep well stoppered.

Nickel Sulphate Merck (2

Techn., in nickel-plating, as mordant in dyeing & printing fabrics; blackening zinc & brass.

Nickel Tartrate Merck (5

(Nickelous Tartrate). — $NiC_4H_4O_6+5H_2O$. — Light-green powd.—Alm. insol. W.

Nickel & Ammonium Chloride Merck (3

$NiNH_4Cl_3$+aq.—Yellow powd.—*Sol.* W.—*Uses:* Techn., electro-plating metallic objects; also as mordant in dyeing.

Nickel & Ammonium Citrate Merck (8

$Ni(NH_4)_4(C_6H_5O_7)_2+4H_2O$.—Green powd.—*Sol.* W.—*Uses:* Techn., electro-plating, & as mordant in dyeing.

Nickel & Ammonium Nitrate Merck (6

$Ni(NO_3)_2.4NH_3+2H_2O$.—Dark-blue cryst., loses ammon. in air.—*Sol.* W.—*Uses:* Techn., electroplating metallic objects; in comb. w. gallic acid for dyeing hair & furs.—*Caut.* Keep well stop'd.

Nickel & Ammonium Sulphate Merck (1

$NiSO_4.(NH_4)_2SO_4+6H_2O$. — Monoclinic, green prisms. — *Sol.* W.—*Uses:* Techn., nickel salt most commonly used for electroplating.

Nickel & Ammonium Tartrate Merck (5

$Ni(NH_4)_2(C_4H_4O_6)_2$.—Green powd.—*Sol.*, hot W.

Nickel & Cobalt Sulphate Merck (7

(Cobalto-nickelous Sulphate).—$NiSO_4.CoSO_4$.—Cryst. mixt. of nickel sulphate & cobalt sulphate. —Orange-red powd. or cryst.

Nickel & Potassium Cyanide Merck (4

$Ni(CN)_2.2KCN$.—Orange-yellow, cryst. powd.—*Sol.* W.

Nickel & Potassium Sulphate Merck (4

$NiSO_4.K_2SO_4+7H_2O$.—Green powd.—*Sol.* W.

Nickel & Thallium Sulphate Merck (1500

$NiSO_4.Tl_2SO_4$+aq.—Green cryst.—*Sol.* W.

Nickelic & Nickelous Salts.—see under **Nickel**

Nicker Seed.—see **Bonduc**

Nicotiana.—see **Tabacum**

Nicotine Merck.—Highest Purity (80

(Betapyridyl-alpha-*n*-methylpyrrolidin; Nicotia). — Alkaloid fr. lvs. Nicotiana Tabacum, L. (Tobacco).—$C_{10}H_{14}N_2$, or, $N.C_5H_4.\underline{CH.(CH_2)_3.N}(CH_3)$. — Yellowish liq.; brown on expos.; exceedingly acrid, burning taste (*dangerous* to taste pure).—Sp. Gr. 1.011 at 20° C.—*Sol.* W., A., E., oils, &c.—*Boil.* 247° C.—Local Irritant; Sed.—*Uses: Intern.*, functional disturb. of heart, & chronic dermatoses.—*Extern.*, hypoderm. in paral. of bladder. Antid. to strychnine.—*Dose* $^1/_{60}$–$^1/_{20}$ grain (0.001–0.003 Gm.) 1–2 t. p. d. in alcoh. solut.—*Inj.* in paral. of bladder, in form of solut. $^1/_2$ grain: 5 fl. dr. (0.03 Gm.: 20 Cc.) of acacia mucilage 2 t. p. d.—*Antid.*, emetics,

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

stomach siphon, tannic acid (5 grains [0.3 Gm.] every 15 minutes), strychnine, external warmth, friction, brandy, ether (hypoderm.), &c.—*Caut.* Poison!

Nicotine Merck.—Crude (60

Abt. 75% alkaloid.—Brown liq.—*Sol.* W., A., E., C.—Antiparasitic.—*Uses:* Exterminating plant lice (using a 1.33% solut.); in itch-mite of sheep (in 13% solut. diluted w. 80 vol. water; to destroy the itch-mite ova, the 13% solut. of nicotine is diluted w. 50 vol. water).

Nicotine Hydrochloride Merck (225

$C_{10}H_{14}N_2.2HCl$.—Long, fibrous, deliq. cryst.—*Sol.* W., A.

Nicotine Salicylate Merck.—White, cryst. (225

$C_{10}H_{14}N_2.C_7H_6O_3$.—Wh. cryst.—*Sol.* W., A.—*Melt.* 118° C.—*Uses:* Scabies, & other parasitic, acute & chronic, itching skin diseases, in 0.1% oint. w. lanum. In veter. medicine in 1% oint. in sarcoptes itch.

Nicotine Tartrate Merck (225

$C_{10}H_{14}N_2(C_4H_6O_6)_2+2H_2O$.—Reddish-wh., conglomerated, bunched cryst.—*Sol.* W.—Pref. to o. nicotine salts; more solub. & stable.—*Dose:* As of nicotine.

Nigella Damascena

(Fennel Flower; Bishop's Wort; Ragged Lady; Magnolia Seeds).—Seed of Nigella damascena, L. Ranunculaceæ.—*Habit.:* Levant; cultiv. in Europe.—*Etymol.:* Lat. "niger," black, referring to the color of the seeds.—*Constit.:* Volat. & fixed oils; damascenine.—*Uses:* Galactag.

Nigella Sativa

(Nutmeg Flower; Small Fennel Flower; Black Cumin; Black Caraway).—Seed of Nigella sativa, L. Ranunculaceæ.—*Habit.:* Germany; Mediterranean Region.—*Etymol.:* Lat. "niger," black, referring to the color of the seeds.—Rough, triangular, ovate; two surfaces flat & the third convex; extern., dull-black; intern., white & oleaginous; acrid, somewh. spicy & pungent taste; aromat., nutmeg-like odor.—*Constit.:* Volat. & fixed oils; nigellin; melanthin; tannin.—Galactag.; Carmin.—*Uses:* In medicine, also in veterinary practice, & techn., as an ingredient in snuff tobacco.

Nigrosine Merck.—Alcohol-soluble (6

Variable acc. to process.—Black powd.—*Sol.* A.—*Uses:* Techn., dyeing silk, wool, leather, &c., blue-black color.—See also Induline, Alcohol-soluble.

do. Merck.—Benzin-soluble (8

(Blue Black).—Black powd.—*Sol.*, benzin.—*Uses:* Techn., in black spirit lacquers, varnishes, &c.

do. Merck.—Water-soluble (6

Sodium salts of various spirit-soluble indulinsulphonic acids.—Black mass or powd.—*Sol.* W. & A.—*Uses:* Nigrosine ink & dyeing wool, silk, & leather. Str. aqu. solut. used for stain. bacteriol. sections after washed in alcohol.—See also Induline, Water-soluble.

Nikiforoff's Borax-Carmine

15 Gm. carmine, 500 Cc. 5% aqu. solut. borax, & ammonia, the whole boiled down to 250 Cc., & acetic acid added to just discharge the cherry-red color.—*Uses:* Staining nuclei & whole tissue.

Niobium Merck (8500

(Columbium).—*Etymol.:* So named by H. Rose in 1844 for Niobe, the daughter of Tantalus, in order to denote the similarity of the element to tantalum.—Metal.—Nb.—Steel-gray, lustr. metal.—Sp. Gr. 7.0–7.37.—Of no technical value as yet.

Niobium Chloride Merck.—Sublimed (2500

(Niobium Pentachloride).—$NbCl_5$.—Yellowish-wh., v. deliq., cryst. powd.; evolves fumes of hydrochl. acid on expos.—*Sol.* A., conc. hydrochl. acid.—*Caut.* Keep well stoppered.

Niobium Pentachloride.—see **Niobium Chloride**

Niobium Pentoxide.—see **(Acid) Niobic Anhydride**

Niobium & Potassium Fluoride Merck (450

$NbOF_3.2KF.H_2O$.—Wh., glistening, mono-symmetric leaflets; fatty to touch.—*Sol.*, eas. in W.

Nirvanin (70

(Diethylglycocollparamido - oxybenzoylmethyl-ester Hydrochloride). — $(OH)C_6H_3(COOCH_3).NH.CO.CH_2.N:(C_2H_5)_2.HCl$). — Colorl. cryst. — *Sol.*, eas. W.—Local Anesthetic; stated less toxic than orthoform.—*Appl.*, mostly in 0.2–0.5% solut.; in dentistry, 5% solut.; also by injection (up to 8 grains [0.5 Gm.] per dose).

Niter.—see **Potassium Nitrate**

Nitraniline (Meta-) Merck.—Pure (18

Fr. aniline by nitration.—$C_6H_6N_2O_2$, or, $C_6H_4(NO_2)NH_2$ [3:1].—Yellow need.; sweet, burning taste.—*Sol.* A., B.; sl. W.—*Melt.* 110° C.—*Boil.* 285° C.—*Uses:* Color test for pine wood, &c.

do. Merck.—Commercial (6

Yellow powd.—*Sol.* A.; sl. W.

Nitraniline (Ortho-) Merck (35

$C_6H_6N_2O_2$, or, $C_6H_4(NO_2)NH_2$ [2:1].—Orange-red need.—*Sol.* A., E.; hot W.—*Melt.* 71° C.

Nitraniline (Para-) Merck.—Pure (25

$C_6H_6N_2O_2$, or, $C_6H_4(NO_2)NH_2$ [4:1].—Long, yellow, monocl. need.—*Sol.* W., A.—*Melt.* 147° C.

do. Merck.—Commercial (6

Yellow powd.—*Sol.* W., A.

Nitranisol (Ortho-) Merck (20

(Methyl Ester of Orthonitrophenol).—Fr. nitrating anisol, or methylating orthonitrophenol.—$C_7H_7NO_3$, or, $C_6H_4(NO_2)(OCH_3)$ [2:1].—Yellow-

ish, oily liq. at ordinary temp.—*Sol.* A., E.—*Solidif.* at 0° C.—*Melt.* 9° C.—*Boil.* 277° C. at 734 Mm.

Nitrobenzaldehyde (Meta-) Merck (20

Fr. solut. benzoic aldehyde in mixt. fum. HNO_3 & H_2SO_4.—$C_7H_5NO_3$, or, $C_6H_4(NO_2).CHO$[3:1].—Lustr. need.; odor of benzaldehyde.—*Sol.* A., E., C.—*Melt.* 58° C.

Nitrobenzaldehyde (Ortho-) Merck (50

$C_7H_5NO_3$, or, $C_6H_4(NO_2).CHO$[2:1]. — Yellow need.—*Sol.* A., E., B.; sl. W.—*Melt.* 45–46° C.

Nitrobenzaldehyde (Ortho-) Merck.—Reagent (75

$C_6H_4(NO_2)CHO$.—Light-yellow need.—*Sol.*, eas. A., E.—*Melt.* 45–46° C.—*Uses:* Detect. urea, acetone, &c.

Nitrobenzaldehyde (Para-) Merck (35

$C_6H_4(NO_2).CHO$[4:1].—Colorl. prisms.—*Sol.* A.; sl. in W. & E.—*Melt.* 106° C.

Nitrobenzene Merck (1

(Nitrobenzol; Essence of Mirbane; Oil of Mirbane).—Fr. benzene, by nitric acid.—$C_6H_5NO_2$.—Colorl. to yellowish, oily liq.; odor & taste of oil of bitter almonds.—Sp. Gr. 1.187 at 15° C.—*Sol.* A., E., oils, &c.—*Boil.* 209° C.—*Uses:* Techn., perfumery instead of essent. oil almonds, & aniline industry in manuf. fuchsine, nitrotoluene, &c.—*Caut.* Poison! Never use internally.—*Antid.*, stomach pump. artif. respir., &c.

do. Merck.—From Benzene, cryst. (2

Nitrocarbol (or *-inol*).—see **Nitromethane**

Nitrochloroform.—see **Chloropicrine**

Nitrodioxyquinoline.—see **Acid Quinolic**

Nitroethane Merck (375

React.-prod. cold ethyl iodide w. silver nitrite.—$C_2H_5NO_2$.—Oily liq.; pleas. odor.—*Sol.* A., E., C.—Sp. Gr. 1.0561 at 15° C.—*Boil.* 114° C.

Nitroglucose

Fr. glucose, by nitric & sulphuric acids. — Marketed in 1:20 alcoholic solut., because substance very explosive.—Arterial Stimulant.

do. Merck.—Solution (4

5% aqu. solut.—Arterial Stimulant.—*Uses:* Epilepsy, angina pectoris, & cardiac weakness. — *Dose* $^1/_4$–1 ♏ (0.015–0.06 Cc.).

Nitroglycerin, Solution. — see **Spirit Glyceryl Trinitrate**

Nitroguanidine Merck (30

$NH:C(NHNO_2).NH_2$. — Yellowish need. — *Sol.*, eas. solut. KOH; sl. W., & A.; insol. E.

Nitromethane Merck (125

(Nitrocarbol; Nitrocarbinol). — $CH_3.NO_2$. — Heavy, colorl. liq.; peculiar odor.—*Sol.* A., E.—Sp. Gr. 1.144 at 15° C.—*Boil.* 101° C.

Nitromethylene Green.—see **Methylene Green**

Nitron Merck.—Reagent (150

(1.4 Diphenyl-3.5 endanilodihydrotriazole).—$C_{20}H_{16}N_4$, or, $C_6H_5.\underline{N.CH}:(N.C_6H_5)_2:C:\underline{N}$.—Yellow, lustrous leaflets or amorph. powd.—*Sol.* 5% acetic acid; C., acetone, acetic ether; in A. w. part. decomp.; insol. W.—*Melt.* 189° C. w. decomp.—*Uses:* In chem. analysis for determining nitric acid (with which it yields an insoluble nitrate) according to Busch's method.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Nitronaphthalene (Alpha-) Merck.—Pure (2

(Alphamononitronaphthalene). — Fr. naphthalene, by direct nitration.—$C_{10}H_7NO_2$.—Yellow cryst.—*Sol.* A.—*Melt.* 56° C.—*Boil.* 304° C.

do. Merck.—Commercial (1

Yellow, crumbly mass.—*Sol.*, eas. A., liquid paraffin oil, petroleum, &c.—*Uses:* To deprive oils, particularly petroleum, of their fluorescence; 2–3 parts suffice for 1000 parts oil.

Nitropentane Merck (700

Fr. isoamyl iodide, by silver nitrate.—$C_5H_{11}NO_2$, or, $CH(CH_3)_2CH_2.CH_2.NO_2$.—Colorl. liq.; odor of fusel oil.—*Sol.* A., E.—*Boil.* 150–160° C.

Nitrophenol (Meta-) Merck (225

(Metanitrophenol).—Fr. metanitroaniline, by the diazoreact.—$C_6H_5NO_3$, or, $C_6H_4(NO_2)OH$[3:1].—Yellow cryst.—*Sol.*, hot W., A., & benzene.—*Melt.* 96° C.—*Boil.* 194° C. at 70 Mm.

Nitrophenol (Ortho-) Merck (5

(Orthonitrophenol).—$C_6H_5NO_3$, or, $C_6H_4(NO_2)$-HO[2:1].—Light-yellow need. or prisms; peculiar arom. odor.—*Sol.* A., E.; hot W.—*Melt.* 45° C.—*Boil.* 214° C.

Nitrophenol (Ortho-) Merck.—Reagent (12

$C_6H_4(OH).(NO_2)$. — Sulphur-yellow need. or prisms.—*Sol.*, eas. A., E.; freely hot W.; sl. cold W.—*Melt.* 44–45° C.—*Uses:* Detect. K; indicator in water analysis.

Nitrophenol (Para-) Merck (4

(Paranitrophenol).—Fr. nitrating phenol in cold. — $C_6H_5NO_3$, or, $C_6H_4(NO_2)OH$[4:1]. — Colorl. cryst.—*Sol.* A., E., & benzene.—*Melt.* 114° C.

Nitrophenol (Para-) Merck.—Reagent (12

Colorl. need., or monoclin. prisms.—*Sol.*, eas. A.; moderately in W.—*Melt.* 112° C.—*Uses:* Indicator (alkalies = yellow; acids = colorless).

Nitropropane Merck (500

Fr. propyl iodide, by silver nitrite.—$C_3H_7NO_2$, or, $CH_2.CH_2.CH_3.NO_2$. — Oily liq. — Sp. Gr. 1.0108 at 15° C.—*Sol.* E., A.—*Boil.* 125–127° C.

Nitrosobetanaphthol Merck (25

(Alphanitrosobetanaphthol). — React.-prod. of betanaphthol, sodium nitrite & zinc chloride.—$C_{10}H_7NO_2$, or, $C_{10}H_6(NO)OH$. — Orange-brown cryst.—*Sol.* E.; hot A., & B.—*Melt.* 109° C.

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Nitrosobetanaphthol Merck.—Reagent (30

$C_{10}H_6(NO).(OH)$.—Orange-brown cryst.—*Sol.*, v. eas. E., B., hot A.; v. diffic. boil. W.; insol. cold W.—*Melt.* 109.5° C.—*Uses:* Quantitative separ. metals, *e.g.*, Ni & Co.

Nitrosodiethylin Merck (140

(Diethylnitrosamine).—Deriv. of diethylamine. —$C_4H_{10}N_2O$, or, $(C_2H_5)_2N(NO)$.—Yellowish oil. —*Sol.* A., E.—Sp. Gr. 0.951 at 17° C.—*Boil.* 177° C.

Nitrosodimethylaniline Merck (25

(Paranitrosodimethylaniline). — Fr. dimethylaniline hydrochloride, by nitrous acid.—$C_6H_{10}N_2O$, or, $C_6H_4(NO)N(CH_3)_2$.—Green plates or leaflets.—*Sol.* A., E.—*Melt.* 85° C.

Nitrosodimethylaniline Hydrochloride Merck (20

$C_8H_{10}N_2O.HCl$.—Pale-yellow need.—*Sol.* W.

Nitrosodimethylin Merck (140

(Dimethylnitrosamine). — Deriv. of dimethylamine.—$C_2H_6N_2O$, or, $(CH_3)_2N(NO)$.—Yellowish oil.—*Sol.* A., E.—*Boil.* 148° C. at 724 Mm.

Nitrosoethylaniline Merck (90

Fr. ethylaniline, by nitrous acid.—$C_6H_{10}N_2O$, or, $C_6H_5.N(C_2H_5).NO$.—Yellowish oil; odor of bitter almonds.—*Sol.* A.

Nitrosophenol (Para-) Merck (150

(Quinone Monoxime; Paranitrosophenol).—Fr. phenol, by nitrous acid.—$C_6H_4(NO)OH$, or, $O.C_6H_4N.OH$.—Brownish or greenish leaflets.—*Sol.* E., acetone, aqueous alkal. solut.—Decomp. 125° C., without melt.

Nitrotoluene (Meta-) Merck.—Highest Purity (20

(Metanitrotoluol).—Fr. ortho-, or para-, toluidine by nitration followed by elim. of NH_2.—$C_7H_7NO_2$, or, $C_6H_4.CH_3(NO_2)$ [1:3]. — Yellow cryst., or liquid above 16° C.—Sp. Gr. 1.164 at 17° C.—*Sol.* A., E., B.—*Boil.* 230° C.

do. Merck.—Commercial (4

Nitrotoluene (Ortho-) Merck.—Liquid (4

(Orthonitrotoluol).—Fr. toluene by nitration. —$C_7H_7NO_2$, or, $C_6H_4.CH_3(NO_2)$ [1:2].—Yellowish liq.—Sp. Gr. 1.168 at 15° C.—*Sol.* A., E., B., C., & petroleum ether.—*Boil.* 218° C.

Nitrotoluene (Para-) Merck (4

(Paranitrotoluol).—Fr. toluene by nitration.—$C_7H_7NO_2$, or, $C_6H_4.CH_3(NO_2)$ [1:4].—Yellowish cryst.—*Sol.* A., E., B.—*Melt.* 54° C.—*Boil.* 234–238° C.

Njimo

(Doundaké; Guinea Peach; African Cinchona). —Wood of Sarcocephalus esculentus, Sab. Rubiaceæ.—*Habit.:* Trop. West Africa (Senegal; Kamerun; Congo States).—*Etymol.:* "Njimo" is the African name of the plant.—*Constit.:* Bitter principle; resin; tannin.—Febrif.; Stomachic; Astring.

Nosophen (30

(Tetraiodophenolphtaleïn; Iodophen). — From phenolphtaleïn, by act. of iodine.—$C_{20}H_{10}I_4O_4$, or, $(C_6H_2I_2OH)_2.C.C_6H_4.CO.O$. — Light-yellow powd.; odorl.; tastel.—60% I.—*Sol.*, alkal. solut., E., C.; insol. W., & acids.—*Melt.* 225° C., with decomp.—Antiseptic, like iodoform.—*Uses: Extern.*, rhinitis, balanoposthitis, eczema, diph., & local syphilitic affections in the mouth.—*Intern.*, in intest. catarrh.—*Dose* 5–8 grains (0.3–0.5 Gm.).—*Appl.*, powd., pure or diluted.

Nosophen-Sodium.—see **Antinosin**

Novargan (25

A silver albuminate, cont. 10% Ag.—Fine yellow powd.—*Sol.*, eas. W.—Antisep.; Bactericide. —*Uses:* Asof o.organic silver compounds (largin, protargol, &c.).

Novocaine (65

(Para-aminobenzoyldiethylaminoethanol Hydrochloride). — $NH_2.C_6H_4.COO.C_2H_4.N(C_2H_5)_2.HCl$.—Colorl. cryst.—*Sol.* 1 W.; 30 A.—*Melt.* 150° C.—Local Anesth. like cocaine.—*Uses:* Minor surgery, dentistry, &c.—*Appl.* 0.25–2% solut., somet. w. suprarenal preparations.—*Inj.*, $^1/_6$–$1^1/_2$ grains (0.01–0.1 Gm.) in 1–2% solut.

Nucite.—see **Inosite**

Nuclein Merck.—From Yeast (110

Fr. cell-substc. of plants & animals, or fr. yeast. —$C_{20}H_{49}N_9P_3O_{22}$(?).—Amorph. substc. rich in phosphorus. Most probably a compound of nucleinic acid & albumin, but containing also carbohydrates. Phosphoric acid is set free by boiling w. alkalies. — Grayish-wh., amorph. powd.—*Sol.*, dil. alkal. soluts.; sl. in W., & in mineral acids; insol. A., E.—Antisep.; Germicide. Possesses antipyretic properties like tuberculin Koch, & causes hyperleucocytosis. —*Uses:* Indol. ulc. of leg, tonsil., false diphth., masked tuberculosis, typhoid, pneum., & puerperal infection.—*Inj.*, hypoderm., 8–15 ♏ (0.5–1 Cc.) of 0.5% aqu. alkal. solut. (w. carbolic acid added) in lupus.—*Dose* 8 grains (0.5 Gm.) 4–6 t. p. d.

do. Horbaczewski-Merck (100

From the spleen substance by digestion w. pepsin & hydrochloric acid.—Brownish-gray powd.—*Sol.*, in alkal. solut.—*Uses, &c.:* As of nuclein fr. yeast.

Nucleohiston Merck (2500

Fr. thymus glands of calves.—Yellowish powd. —*Sol.*, alkal. soluts.—Considered to be the physiologically active constituent of the leucocytes.

Nutgall.—*U. S. P.*

(Galla; Galls; Aleppo-, Turkey-, or Mecca Galls).—Excrescence on Quercus lusitanica, Lamarck (Q. infectoria Oliv.), Cupuliferæ, caused by the punctures and deposited ova of Cynips tinctoria, Olivier. — *Habit.:* Levant

(Syria; Turkey).—*Etymol.:* Fr. Lat. "galla" (Pliny). "Lusitanica," of or pertaining to Lusitania, ancient name of the countries bordering the Mediterranean where the tree is native. —*Constit.*. Gallic, tannic, & ellagic acids; mucilage; sugar; resin.—Astring.—*Uses: Techn.*, for manuf. of tannin, ink, & for dyeing, & tanning.—*Doses:* 5–30 grains (0.3–2 Gm.).—Tinct., 20–40 ♏ (1.3–2.6 Cc.); also applied to frostbites, & in 2–5:100 solut. as inject. in atonic ulcers.

Nutgall, Chinese

Excrescence on the leaf or leaf-stalk of Rhus semialata, Murray (Anacardiaceæ) caused by the punctures of Aphis chinensis, Bell (Hemiptera). —*Habit.:* China.—*Etymol.:* See preceding.—*Constit.:* Tannin.—*Uses:* Manuf. tannin, ink, &c.

Nutmeg.—see **Myristica**

Nutmeg Butter.—see **Oil Nutmeg, Expressed**

Nutmeg Flower.—see **Nigella Sativa**

Nutrose (5

(Casein-Sodium).—Sodium compound of casein. —Wh. powd.—*Sol.* W.—Dietetic.—*Uses:* As nutrient like peptone.—*Dose:* Teaspoonful several t. p. d. in milk, chocolate, or bouillon.

Nux Moschata.—see **Myristica**

Nux Vomica.—*U. S. P.*

(Quaker Buttons; Bachelor's Buttons; Poison Nut; Dog Buttons; Vomit Nut).—Dried, ripe seed of Strychnos Nux-Vomica, L. Loganiaceæ. —*Habit.:* Southern Asia; northern Australia.—*Etymol.:* Grk. "strychnos," night-shade, the equivalent of the Lat. "solanum," used anciently for several poisonous plants. Or, perhaps, fr. Grk. "strephein," to twist or turn, referring to the contortions caused by the plant. Lat. "nux," nut, & "vomica," emetic, refer to the action of the drug.—*Constit.:* Strychnine; brucine; loganin; igasuric acid; proteids.—Tonic; Motor Excitant; Spinant; Stomachic; Cardiac, Muscular, & Nervous Stim.—*Uses:* Atonic dyspep., neurasthenia, chron. constip., neural., paralysis, &c.—Antidote to poison by opium, chloral, & o. narcotics.—*Doses:* $^1/_2$–5 grains (0.03–0.3 Gm.).—Alcoh. extr., $^1/_8$–$^1/_2$ grain (0.008–0.03 Gm.).; *Max. D.* 1 grain (0.06 Gm.) single, 3 grains (0.2 Gm.) daily.—Fld. extr., 1–4 ♏ (0.06–0.25 Cc.).; *Max. D.* 6 ♏ (0.36 Cc.) single, 12 ♏ (0.75 Cc.) daily.—Aqu. extr., $^1/_2$–3 grains (0.03–0.2 Gm.).—Tinct., 5–15 ♏ (0.3–1 Cc.).—*Antid.*, As of strychnine.

Nylander-Almen's Reagent.—For glucose

Solut. 2 Gm. bismuth subnitrate & 4 Gm. Rochelle salt in 100 Gm. 8% solut. NaOH.—On boiling reagent w. a solut. cont. glucose, a black ppt. forms.

Nyssa Aquatica.—see **Tupelo**

O

Oak Acorns.—see **Acorn**

Oak Agaric.—see **Polyporus**

Oak, White.—see **Quercus**

Oat, Common.—see **Avena**

Obermayer's Reagent.—For indican

Solut. (1), 20% solut. lead acetate.—Solut. (2), solut. 1–2 ferric chloride in 500 fuming HCl.—The chloroformic extract of the suspected urine is shaken w. the soluts. in succession; if indican present, a blue ppt. of indigo-blue forms.

Ocimum

(Sweet Basil; Basil).—Lvs. & tops of Ocimum Basilicum, L. Labiatæ.—*Habit.:* Asia; Africa; cultiv. in gardens.—*Etymol.:* Fr. Grk. "basilikon," royal, referring to the beauty, & curative power, of the plant. "Ocimum," fr. "okimon," the Grk. name of the plant.—*Constit.:* Volat. oil; tannin.—*Uses:* Cold-water infus. used as a mucilaginous demulcent in catarrhal inflam.

Octene.—see **Caprylene**

Octyl Iodide Merck.—Secondary (50

Fr. methylhexylcarbinol, by iodine w. phosphorus.—$C_8H_{17}I$, or, $CH_3.CHI.C_6H_{13}$.—Oily liq. —*Sol.* A., E.—Sp. Gr. 1.310 at 16° C.—*Boil.* 200° C., w. decomp.—*Caut.* Keep in amber bot.

Octylene, Normal.—see **Caprylene**

Oculi Cancrorum.—see **Crabs' Eyes**

Odda

Infant food & nutrient (for invalids & debilitated persons as well) prepared fr. skim-milk, sugar, & oat- & wheat flours. The butter is replaced by cacao butter & the fat of egg yolks.—Well borne & eas. digested.

Oenanthal Merck (35

(Heptoic Aldehyde; Oenanthol; Oenanthaldehyde; Heptanal).—Fr. castor oil by heat. & fract. distil.—$C_7H_{14}O$, or, $C_6H_{13}.CHO$.—H'ly refracting, colorl. liq.; aromatic odor.—Sp. Gr. 0.822 at 15° C.—*Sol.* A., E.; sl. W.—*Boil.* 155° C.—*Caut.* Keep well stoppered.

Oenanthaldehyde. } —see **Oenanthal**
Oenanthol. }

Oenothera

(Evening Primrose; Cure-all; Sundrop).—Lvs. of Œnothera biennis, L. Onagraceæ.—*Habit.:* Labrador to Florida, west to Rocky Mts.—*Etymol.:* Grk. "oinothera," night candle, referring to the spiked, yellow, nocturnal flowers. "Biennis" refers to the biennial character of the plant.—*Constit.:* Oenotherin(?); tannin; mucilage.—Sed.; Antispasm.—*Uses: Intern.*, in whoop.-cough, & spasm. asthma.—*Extern.*, in tetter & other cutan. affect. of infants, & in ulcers.—*Dose:* Fld. extr., 30–60 ♏ (2–4 Cc.).

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Oesipos = Adeps Lanæ.—see **Lanum, Anhydrous**

Ohio Buckeye.—see **Æsculus Glabra**

Oil Absinthium

(Oil Wormwood).—Volat. oil fr. lvs. & tops Artemisia Absinthium, L.—Brownish-green liq. —*Constit.:* Pinene, $C_{10}H_{16}$; absynthol, $C_{10}H_{16}O$. —Sp. Gr. 0.925–0.955.—*Sol.* A., E.—Anesth.; Analg.; Tonic.—*Uses: Intern.*, cerebral exhaustion, debility, & dyspep.—*Extern.*, in rheum. & neural.—*Dose* 1–3 ♏ (0.06–0.2 Cc.).

Oil Allspice.—see **Oil Pimenta**

Oil Almond, Bitter-, Merck.—True (9

Essential oil fr. seed of Amygdalus communis, L., var. Amara (bitter almonds) & other seeds containing amygdalin. Contains 2–4% hydrocyanic acid. —Yellowish, v. refractive liq.; aromatic odor; bitter, acrid, burning taste.—*Sol.*, all prop., A., E.; 300 W. at 15° C.—Sp. Gr. 1.045–1.060 at 25° C.—*Boil.*, abt. 180° C.—Opt. inactive.—Nerve Sedative.—*Uses: Intern.*, cough remed. —*Extern.*, as appl. in torpid corneal ulcers; in neuralgia, to allay severe itching. Also as flavor for cosmetics; the oil free fr. HCN is preferably used, particularly in liqueurs.—*Dose* $^1/_6$–$^1/_2$ ♏ (0.01–0.03 Cc.).—*Max. D.* $^3/_4$ ♏ (0.05 Cc.) single; $2^1/_2$ ♏ (0.15 Cc.) p. day.—*Antid.*, emetics, stomach siphon, ammonia, brandy, iron persulphate.—*Caut.* Poison!

do. Merck.—Free fr. HCN (16

Free fr. hydrocyanic acid.—Less poison. substit. for official prep.—*Dose* $^1/_2$–2 ♏ (0.03–0.12 Cc.). —*Caut.* Does not keep well.

Oil Almond, Essential, Artificial.—see **Benzaldehyde**

Oil Almond, Expressed.—*U. S. P.*

(Sweet Oil Almonds).—Fixed, non-drying oil fr. seeds of Amygdalus communis, bitter or sweet. —Sp. Gr. 0.915–0.920 at 15° C.; (0.91–0.915 at 25° C.–U. S. P.).—*Misc.* E., C., B.; sl. A.—Demulc.; Cath.; Nutrient. — *Uses: Intern.*, bronch. in mucilage or egg-yolk emulsion; as cath. to children.—*Extern.*, slight burns, blisters or injuries.—*Techn.*, in perfumery, & as lubricant for delicate mechanisms (watches, &c.).—*Dose* 1–8 dr. (4–30 Cc.).

Oil Almond, Sweet.—see **Oil Almond, Expressed**

Oil Amber.—Rectified

Fr. the crude oil.—Yellowish-brown, volat. oil; penetrating odor.—*Sol.* 10–12 A.—Sp. Gr. 0.920 at 15° C.—Antispasm.; Stim.; Diur.; Rubefacient.—*Uses: Intern.*, hyst., intest. irritat., infantile convuls., amenor., whoop.-cough, &c.—*Extern.*, linim.; rheum.; also for toothache & earache.—*Dose* 5–15 ♏ (0.3–1 Cc.).—*Caut.* Keep fr. air. Turns dark w. age.

do.—Crude

Tar-like product fr. amber by destruct. distil. —Brown oil; very disagreeable odor.—*Sol.* A., E.—Rubef.—*Uses: Extern.*, rheum. & neural.

Oil Angelica.—30-fold, free fr. terpenes

Terpene-free oil fr. root of Angelica Archangelica, L.—Yellow liq.—Sp. Gr. 0.85–0.90 at 15° C.—*Uses:* Arom. Stim.—*Dose* 1–3 ♏ (0.06–0.2 Cc.).

Oil Aniline.—see **Aniline**

Oil Animal Merck.—Twice rectified (5

(Dippel's Oil).—Obtained by destruct. distil. of bones, horn, gristle, &c.—Composed of hydrocarbons, pyridine bases, & amines.—Brown liq. of repulsive odor.—*Sol.* 80 W.—*Uses: Extern.*, for parasitic skin dis.—*Intern.*, occasionally as vermifuge, & in hysteria.—*Dose* 5–20 ♏ (0.3–1.3 Cc.) in gelat. caps. or gelat.-coated pills.—Formerly employed in veterinary medicine as an antisep., stim., anthelmint. & carminative. —Chiefly used f. keeping flies fr. food of cattle.

Oil Anise

Essential oil fr. fruit Pimpinella Anisum, L. (Anise), or fr. fruit of Illicium verum, Hook. fil. (Star Anise).—Chief constit., Anethol, $C_{10}H_{12}O$. —Colorl. or pale-yellow, thin liq.—Sp. Gr. 0.980–0.990 at 15° C.; (0.975–0.988 at 25° C., U. S. P.). —Solidifies at +14° to +19° C.—*Sol.* A., E., C. —Carmin.; Antisep.—*Uses:* Increase flow of milk, & relieve flatulent colic. — *Dose* 1–5 ♏ (0.06–0.3 Cc.).

do.—2-fold, free fr. terpenes

Terpene-free essential oil anise.—*Uses:* Perfumery, & in manuf. liqueurs.

Oil Anise, Star

Essential oil fr. fruit of Illicium anisatum, L.—Colorl. liq.—*Sol.* A., E.—Sp. Gr. 0.980–0.990 at 15° C.—Solidif. at 10–15° C.—Known constituents: Anethol, $C_{10}H_{12}O$ (chiefly), with pinene, phellandrene, safrol, hydroquinone ethyl-ester. —*Uses:* Chiefly in manuf. of liqueurs.

do.—2-fold, free fr. terpenes

Terpene-free essent. oil fr. fruit Illicium anisatum, L.—Chief constit., Anethol, $C_{10}H_{12}O$.

Oil Anthemis

(Oil Roman Chamomile).—Volat. oil fr. flr. heads Anthemis nobilis, L.—Yellow liq.—*Sol.* A.—Sp. Gr. 0.905–0.915 at 15° C.—*Constit.:* Angelica-tiglin, isobutyric-acid ester, & anthemol. —Tonic; Arom.; Stomachic.—*Uses:* Enfeebled digest. & for flatulent colic.—*Dose* 1–2 ♏ (0.06–0.12 Cc.).

Oil Ants, Artificial.—see **Furfural**

Oil Apple.—see **Amyl Valerate**

Oil Arachis

(Peanut Oil).—Expressed fr. fruit Arachis hypogæa, L.—Bland, straw-yellow to wh. oil; nutty odor & taste; cont. arachic acid.—*Sol.* B., E., C., CS_2, CCl_4, petrol. E.; oils; sl. A.—Sp. Gr. 0.916–0.922 at 15° C.—*Uses:* Pharm. & techn.

Oil Arbor Vitæ.—see **Oil Thuja**

Oil Arnica Flowers.—True

Essential oil fr. flr. of A. montana, L.—Yellowish-red liq.—*Sol.* A., E.—Sp. Gr. 0.905 at 15° C.—Solidif. in the cold.—Chief constit., laurinic & palmitic acids & paraffin. — Diuret.; Diaph.; Emmen.—*Uses: Extern.*, rheum., gout, burns, injuries, &c.—*Intern.*, in sequelæ of apoplexy.—*Dose* $^1/_2$–2 drops, several t. p. d.—*Appl.*, w. lime-water & egg-yolk in burns.

Oil Artemisia

Fr. fl'g herb A. maritima, L. (Roman Wormwood).—Antisep.; Astring.—*Uses:* Skin dis. & inflamed surf.

Oil Asarum

(Oil Canada Snakeroot).—Essential oil fr. the rhizome Asarum canadense, L. — Antisep.; Arom.; Stim.—*Uses:* Flavor. for u. remed.—*Dose* 1–2 ♏ (0.06–0.12 Cc.).

Oil Balm.—German, true

(Oil of Melissa; Oil of Lemon Balm).—Essential oil fr. lvs. & tops Melissa officinalis, L.—Yellow liq.—*Sol.* A.—Sp. Gr. 0.89–0.925 at 15° C.—Chief constit. citral, $C_{10}H_{16}O$.—Diaph.; Antispasm.—*Uses:* Agre. flavor. for antispasm. & diaph. medic.—*Extern.*, as liniment.—*Dose* 1–3 ♏ (0.06–0.2 Cc.).

Oil Barbadoes Nuts.—see **Oil Jatropha Curcas**

Oil Basil

Essential oil fr. lvs. Ocimum Basilicum, L. (Sweet Basil).—Solidifies when long kept.—Antisep.; Arom.; Stim. — *Uses:* Flavoring other remedies & in perfumery.—*Dose* 1–2 ♏ (0.06–0.12 Cc.).

Oil Bay.—see **Oil Myrcia**

Oil Bay, Sweet.—see **Oil Laurel, Volatile**

Oil Benne.—see **Oil Sesame**

Oil Bergamot

Essential oil fr. rind fresh fruit Citrus Bergamia (var. Vulg.), Risso & Poiteau.—Yellowish-green liq.—*Sol.* A., E., C.—Sp. Gr. 0.883–0.886 at 15° C.—Known constit., limonene, dipentene, linalool, & linalyl acetate.—*Uses:* Perfumery, in hair oils & pomades, & for masking odors of ill-smelling substances (*e.g.*, iodoform, naphthalene).—*Caut.* Keep well stoppered, cool, & dark.

do.—2½-fold, free fr. terpenes

Oil Betula Merck (4

(Oil Sweet Birch; commercially known as "Oil Wintergreen").—Volat. oil obt. by macerat. & distil. fr. bark Betula lenta, L. (Sweet Birch).—Nearly pure methyl salicylate, $CH_3.C_7H_5O_2$, (abt. 99.8%); almost identical w. oil of wintergreen.—Colorl. liq.—*Sol.* A., E., C., CS_2.—Antirheum.; Antisep.—*Uses: Intern. & Extern.*, in rheum., gout, & neural.—Also as perfume & for flavoring. — *Dose* 5–30 ♏ (0.3–2 Cc.).

Oil Birch, Sweet.—see **Oil Betula**

Oil Birch Wood Merck.—Empyreumatic

(Empyreumatic Birch Oil; Oleum Rusci).—I Betula alba, L. (White Birch), by destruct. dist —Black, viscid liq.; odor of Russia leather. Contains oil turpentine, other isomeric hydı carbons, various empyreumatic resins, & betuli —Antiseptic.—*Uses:* Inst. of tar, or oil of ca for skin dis.—*Techn.*, preserv. wood & leath

do. Merck.—Distilled

Fr. fractional distil. of the empyreumatic oil Betula alba, L. (White Birch).—Brownish-bla liq.—*Sol.* A.—Antiseptic.—*Uses:* Oint. 5% simple oint., or w. olive oil in parasitic skin d

Oil Cade Merck

(Empyreumatic Oil Juniper Tar).—Empyre matic oil fr. destruct. distil. of wood of Juniper Oxycedrus, L.—Dark, opaque, tarry liq.; smok acrid, disagre. taste.—Sp. Gr. 0.990 at 15° C.-*Sol.* E., C., carbon disulphide. — Antiseptic.-*Uses: Extern.*, in psoriasis, gout, rheum., favı &c.—*Intern.*, very rarely as anthelmintic & chronic skin dis.—*Veter.*, oint. & in soap f parasitic skin dis. of sheep, horses, dogs, & —*Dose* 2–5 drops 3–4 t. p. d.

Oil Cajuput

Volatile oil fr. fresh lvs. & twigs of Melaleu Leucadendron, L.—Thin, colorl., or greeni liq.—Sp. Gr. 0.92–0.93 at 15° C.; (0.915–0.9 at 25° C.–U. S. P.).—*Sol.* A., E., C., carbo disulphide. — Slightly levogyrate. — *Consti* Cineol, terpinol.—Stim.; Diaph.—*Uses: Intern* dyspep., cardialgia, colic, flatulence, asthm tapeworm, low fevers, cholera, rheum., gou bronch., catarrh., toothache, rheumat. earach &c.—*Extern.*, in pityriasis, psoria., acne, chro rheum. & neural., &c., in 1–5:10 oint. or linir —*Dose* 1–3 drops several t. p. d.

Oil Calamus

(Oil Sweet Flag). — Essential oil fr. rhiz. Acorus Calamus, L. (Sweet Flag).—Yellowisl brown liq.—Sp. Gr. 0.960–0.970 at 15° C.—*S* A.—Opt. Rot. +15° to + 21°.—Stoma.; Carmi —*Uses:* Dyspep.—*Dose* $^1/_2$–2 ♏ (0.03–0.12 Cc.

Oil Camphor

(Formosa, or Japanese Oil of Camphor).—Vola oil fr. Camphor officinarum, Nees.—*Sol.*, oils, E C.—Stim.; Antisep.; Rubefacient.—*Uses: E tern.*, spasmodic cholera, & w. olive oil as linir in rheum., neural., bruises, & sprains.—*Dose* 2-♏ (0.12–0.2 Cc.).

Oil, Camphorated

Solut. of camphor in cottonseed oil 1:5.—Rub facient.; Stim.—*Uses: Intern.*, collapse.—*E tern.*, rheum., neural., &c.—*Dose* 5–10 ♏ (0.3 0.6 Cc.) hypoderm. in collapse.

Oil Canada Snakeroot.—see **Oil Asarum**

Oil Cananga.—see **Oil Ylang-Ylang**

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potas sium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sul phate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Oil Canella

Fr. bark C. alba, Murray.—Arom.; Stim.—*Uses:* Flavor. o. remed.—*Dose* 1–2 ♏ (0.06–0.12 Cc.).

Oil Caraway

Essential oil fr. fruit Carum Carvi, L.—Colorl. or pale-yellow liq.; darkens & thickens w. age.—Chief constit., carvol, $C_{10}H_{14}O$; limonene.—Sp. Gr. 0.900–0.910 at 25° C.—*Sol.* A., E., C.—Opt. Rot. +75° to +85° in a 100 Mm. tube.—Stim.; Carmin.—*Uses:* Colic, anorexia, digestive disturbances, to improve taste of bitter remed. & to correct griping cathartics; also in manuf. liqueurs.—*Dose* 1–10 ♏ (0.06–0.6 Cc.).

do.—Extra strong

(Carvol).—Pure carvol fr. oil of caraway.—$C_{10}H_{14}O$.

do.—2½-fold, free fr. terpenes

Oil Cardamom

Volat. oil fr. fruit Elettaria repens (Sonnerat), Baillon.—Arom.; Carmin.; Stim.—*Uses:* Flavor.—*Dose* 1–2 ♏ (0.06–0.12 Cc.).

Oil Cascarilla

Volat. oil fr. bark Croton Eluteria, Bennet.—Stim.; Tonic; Arom.—*Uses:* Adjuvant in bitter tonics.—*Dose* 1–2 ♏ (0.06–0.12 Cc.).

Oil Cassia.—see **Oil Cinnamon, Chinese**

Oil Castor

Fixed oil expressed fr. seeds Ricinus communis, L.—Mainly ricinoleïn $C_3H_5(C_{18}H_{33}O_3)_3$, w. some palmitin, stearin, & myristin.—Yellow, oleaginous liq.—Sp. Gr. 0.950–0.970 at 15° C.; (0.945–0.965 at 25° C., U. S. P.).—*Sol.* A., E., glacial acetic acid.—Cathartic.—*Uses: Intern.*, constip., colic, diar., & dysent.—*Extern.*, in hair restorers.—*Techn.*, in manuf. Turkey-red oil, soap, regenerating caoutchouc, as lubricant, &c.—*Dose* 4–8 dr. (15–30 Cc.) as mild laxat.; for children, 1–3 dr. (4–12 Cc.).

Oil Cedar Leaves

(Oil of Red Cedar Leaves).—Volat. oil fr. lvs. Juniperus virginiana, L.—Sp. Gr., abt. 0.885.—Antisep.; Emmen.—*Uses:* Perfume.

Oil Cedar, White.—see **Oil Thuja**

Oil Cedar Wood

(Oil of Red Cedar Wood).—Volat. oil fr. wood Juniperus virginiana, L., & other spec. of cedar.—Yellowish, viscid liq.—Sp. Gr. 0.906–0.985, varying according to source.—*Constit.:* Cadinene, cedar camphor.—*Uses: Intern.*, rarely, in gonor. like santalwood oil.—*Techn.*, perfumery; manuf. liqueurs; in microscopy as clearing agent & for use w. immersion lens.

Oil Cedrat

(Oil of Citron).—Volat. oil fr. rind of fruit Citrus medica, Risso.—Arom.; Stim.; Antisep.—*Uses:* Perfume & flavor.—*Dose* 1–2 ♏ (0.06–0.12 Cc.).

Oil Celery

Volat. oil. fr. seed Apium graveolens, L.—Stim.; Arom.; Carmin.; Antispasm.—*Uses:* Headache, hyst., nerv. affect., & as flavor. for unpleas. remed.—*Dose* 1–2 ♏ (0.06–0.12 Cc.).

Oil, Chabert's

Distillate fr. fetid animal oil, & turpentine oil.—Brown liq.—Teniafuge.—*Dose* 15–20 drops several t. p. d. in tapeworm.

Oil Chamomile, German.—see **Oil Matricaria**

Oil Chamomile, Roman.—see **Oil Anthemis**

Oil Champaca

Volat. oil fr. flr. Michelia Champaca, L.—*Uses:* Perfume.

Oil Chaulmoogra Merck (4

(Gynocardia Oil).—From seeds of Gynocardia odorata, R. Br.—Yellowish-wh., fatty oil; gran. mass when cold.—Sp. Gr. 0.930 at 15° C.—*Sol.* E., C., B., carbon disulphide; partly in A.—*Melt.* 42° C.—*Uses:* Claimed specific in elephantiasis or Eastern leprosy.—*Extern.*, bruises, sores, & injuries.—*Dose* 4 grains (0.25 Gm.) w. gradual incr. to 20 grains (1.3 Gm.).—*Hypoderm.*, 75 ♏ (5 Cc.) of sterilized oil.

Oil Chenopodium

(Oil American Wormseed).—Volatile oil obtained from the fruit of Chenopodium anthelminticum.—Thin, colorl., or yellow liq.—Sp. Gr. 0.97 at 15° C.—*Sol.* A., E.—Anthelmintic.—*Dose* 4–8 ♏ (0.25–0.5 Cc.) for children, followed by a cathartic.

Oil Cherry Laurel

Volat. oil fr. lvs. Prunus Laurocerasus, L.—Pale-yellow oil; odor & physical properties of essential (bitter) oil almond.—*Sol.* A., E., C., B.—Sp. Gr. 1.055–1.065 at 15° C.—*Constit.:* Hydrocyanic acid, benzaldehyde, & benzyl alcohol.—Sedative.—*Uses:* Cough remed., pulmon. affect.—*Dose* $^1/_6$–$^1/_2$ ♏ (0.01–0.03 Cc.).—*Antid.*, emetics, stomach siphon, ammonia, brandy, & iron persulphate.—*Caut.* Poison!

Oil Cinnamon, Ceylon.—True

Volat. oil fr. inner bark of shoots, Cinnamomum zeylanicum, Breyne.—*Constit.:* Chiefly cinnamic aldehyde; also, a little eugenol & phellandrene.—Sp. Gr. 1.025–1.035.—*Sol.* A., E., C.—Stim.; Arom.—*Uses:* Flavor is finer than that of oil of Chinese cinnamon.

Oil Cinnamon, Chinese

(Oil of Cassia).—Volat. oil fr. bark Chinese Cinnamon.—Yellow or brownish liq.—*Constit.:* Cinnamic aldehyde (70%); also cinnamyl acetate & eugenol.—Sp. Gr. 1.055–1.070; (1.045–1.055 at 25° C., U. S. P.).—*Sol.* A., E., C.—Stim.; Arom.—*Uses:* Flavor. & perfume. Frequently employed inst. of oil of Ceylon cinnamon in colic, gastrodynia & gastric debil; also in chocolate manuf.—*Dose* 1–3 ♏ (0.06–0.2 Cc.).

do.—2-fold, free fr. terpenes

Oil Citron.—see **Oil Cedrat**

Oil Citronella

Volat. oil fr. Andropogon nardus.—Yellow liq.—*Constit.:* Camphene, citronellal, borneol, geraniol, & dipentene.—*Uses:* Perfume; also in veter. medicine as liniment.

Oil Cloves (2

Volat. oil fr. unexpanded flr. buds Eugenia aromatica, O. Kuntze.—Yellowish to brownish liq.—*Constit.:* Mainly eugenol, $C_{10}H_{12}O_2$, & caryophyllene.—Sl. levorot.—Sp. Gr. 1.060–1.067 at 15° C.; (1.040–1.060 at 25° C., U. S. P.).—*Sol.* A., E., C.—*Boil.* 247° C.—Antisep.; Anod.—*Uses: Extern.*, toothache; also flavor.—*Dose* 1–2 ♏ (0.06–0.12 Cc.).

do.—2-fold, free fr. terpenes

Oil Cochlearia

Volat. oil fr. C. officinalis, L. (Scurvy-grass).—*Constit.:* Chiefly secondary butyl thiocarbamide, C_4H_9CSN.—Stim.; Aper.; Diur.—*Uses:* Scurvy, rheum., & dyspep.—*Dose* 2–5 ♏ (0.12–0.3 Cc.).

Oil Cocoanut

Fr. nut Cocos nucifera, L.—Wh., semi-solid, lard-like fat.—*Sol.* A., E.—Liquid at abt. 20–25° C.—Alter.; Nutrient.—*Uses:* Substit. for cod-liver oil in phth. & as oint. base.—*Dose* 2–4 dr. (8–15 Cc.).

Oil Cod-liver

Fr. livers of Gadus Morrhua, L. (Cod).—Pale-yellow liq.—Sp. Gr. 0.926–0.931 at 15° C.; (0.918–0.922 at 25° C., U. S. P.).—*Sol.* E., C., CS_2, 2.5 acetic ether; sl. in A.—Alter.; Tonic; Nutrient.—Action believed to depend upon its iodine content, & also upon its easy digestibility, due to the biliary constituents & the free fatty acids present.—*Uses: Intern.*, tuberculosis, scrofula, rheum., carious ulc., cutan. erup., &c.—*Extern.*, in certain cutaneous eruptions, corneal opacities (1–2 drops), & in enema (1–2 tablespoonfuls).—*Dose* 4 fl. dr. (15 Cc.), in emulsion, in the froth of porter, &c.—A suitable corrigent is peppermint oil, added in the proportion of abt. 1 drop to the fl. oz. (30 Cc.).—*Caut.* Keep from air & light.

Oil Cod-liver, Ferrated

Cont. 1% iron benzoate.—Tonic; Alter.; Nutrient.—*Uses:* Scrof. & anemia.—*Dose:* For children, 60–180 ♏ (4–12 Cc.) per day.

Oil Cognac.—see **Ethyl Oenanthate**

Oil Copaiba

Volat. oil fr. balsam of copaiba (us'ly Maracaibo).—Colorl., or pale-yellow liq.—*Constit.:* Chiefly caryophyllene, $C_{15}H_{24}$.—Sp. Gr. 0.890–0.910 at 15° C.; (0.895–0.905 at 25° C., & increas. w. age, U. S. P.).—*Sol.* A., E., carbon disulphide.—Antiseptic.—*Uses:* Gonor., gleet, & o. dis. of muc. membr.—*Dose* 5–20 ♏ (0.3–1.3 Cc.).

Oil Coriander.—Free fr. terpenes

Volat. oil fr. fruit Coriandrum sativum, L.—Colorl., or sl. yellow liq.—*Constit.:* Chiefly linalool, $C_{10}H_{18}O$, & pinene.—Sp. Gr. 0.870–0.855; (0.863–0.878 at 25° C., U. S. P.).—*Sol.* A., E., C., glacial acetic acid.—Stomachic; Arom.; Tonic.—*Uses:* Correct the nausea & griping of o. remed.; also in manuf. liqueurs, & in chocolate industry under the name "theobrominat" to improve taste of inferior grades of cacao; also in baking.—*Dose* 1–5 ♏ (0.06–0.3 Cc.) with sugar or dissolved in A.

Oil Cotton Seed

Fixed oil fr. seeds Gossypium herbaceum, L., & o. spec. G.—Pale-yellow, oily, odorl. liq.—Sp. Gr. 0.920–0.930 at 15° C.; (0.915–0.921 at 25° C.).—*Sol.* E., C., carbon disulphide; sl. in A.—*Uses:* Inst. of olive or almond oil.

Oil Crispmint.—see **Oil Mint, Curled-**

Oil Croton Merck (2

Fixed oil obtained by expression fr. seeds Croton Tiglium, L.—Brownish-yellow liq.—Sp. Gr. 0.940–0.960 at 15° C.; (0.935–0.950 at 25° C., U. S. P.).—*Sol.*, absolute A., E., C., carbon disulphide, oils; 55–60 A., increas. w. age.—Drastic Purgative; Rubefacient.—*Uses: Intern.*, obstinate constip., amenor., & dropsy.—*Extern.*, rheum., neural., & indol. swell.; hypoderm. to nevi.—*Dose* $^1/_2$–2 ♏ (0.03–0.12 Cc.) in pills.—*Max. D.* 2 ♏ (0.12 Cc.), single; $2^1/_2$ ♏ (0.15 Cc.) p. day.—*Antid.*, stomach siphon, oils, mucilage, opium, morphine hypoderm., cocaine, &c.—Also used in veter. medicine with castor oil in following doses: Cattle, 15–30 drops; horses, 10–20 drops; sheep, 8–12 drops; pigs, 5–10 drops; dogs, 1–5 drops; cats & fowls, $^1/_4$–1 drop.—*Caut.* Poison!

Oil Cubeb

Volat. oil fr. fruit Piper Cubeba, L. fil.—Colorl., pale-green, or yellow liq.—*Constit.:* Dipentene, cadineen, cubeb-camphor.—Sp. Gr. 0.910–0.930; (0.905–0.925 at 25° C., U. S. P.).—*Sol.* 30 A., E., C.—Antiseptic.—*Uses:* Gonor. & gleet.—*Dose* 5–15 ♏ (0.3–1 Cc.).

Oil Cumin

Volat. oil fr. fruit Cuminum Cyminum, L.—Yellow liq.—*Constit.:* Chiefly cymol, $C_{10}H_{14}$, & cumin aldehyde, $C_{10}H_{12}O$.—Sp. Gr. 0.890–0.930.—Carminative.—*Uses: Extern.*, with expressed oil nutmeg 1:10 in spasmodic pains, particularly in children.—*Dose* 1–3 ♏ (0.06–0.2 Cc.).

Oil Cypress (14

Fr. fresh lvs. & tender shoots of Cupressus sempervirens, L.—Volat., colorl., oily liq.—Antisep.; Antispasm.—*Uses:* Whoop.-cough; sprinkle around the patient's room.

Oil Dill

Volat. oil fr. fruit Peucedanum graveolens, Benth. & Hook. fil.—*Constit.:* Chiefly carvol,

$C_{10}H_{14}O$, & limonene, $C_{10}H_{16}$.—Sp. Gr. 0.905–0.915.—Carminative.—*Uses:* Flavor. o. remed., &c.—*Dose* 3–10 ♏ (0.2–0.6 Cc.).

Oil, Dippel's.—see **Oil Animal**

Oil Egg Yolk

Fatty oil obtained by expression fr. the yolks of fresh eggs.—*Uses:* In lotions, & as popular remedy abroad in corneal opacities.

Oil Erechtites

(Oil Fireweed).—Volat. oil fr. Erechtites hieracifolia, Raf.—Arom.; Tonic; Stim.—*Uses:* As an appetizer, & to check colic.—*Dose* 2–6 ♏ (0.12–0.36 Cc.).

Oil Ergot Merck (1

Fixed oil fr. sclerotium of Claviceps purpurea, Tulasne.—Brown liq.—*Constit.:* Cholesterin, & olein- & palmitin-triglycerides with small quant. butyric & acetic acids.—Sp. Gr., abt. 0.924.—*Sol.* A., alkal. solut.—Lax.; sl'y Emmen.

Oil Erigeron

(Oil of Canada Fleabane).—Volat. oil fr. fresh, flowering herb Erigeron canadensis, L.—Sp. Gr. 0.850; (0.845–0.865 at 25° C., U. S. P.).—*Sol.* A., E., C.—Antisep.; Hemostatic.—*Uses:* Diar., dysent., hemorrhages of intern. org., uremic poison., cyst., Bright's dis., & epist.—*Dose* 10–30 ♏ (0.6–2 Cc.).

Oil Ethereal

Volat. liq.; equal vols. ether & heavy oil wine (U. S. P.).—Sp. Gr. 0.905 at 25° C., U. S. P.—*Sol.* A., E., C.—Calmative; Antispasm.

Oil Ethyl Mustard.—see **Ethyl Thiocarbimide**

Oil Eucalyptus Merck (2

Volat. oil fr. var. spec. Eucalyptus.

Oil Eucalyptus Globulus Merck (2

Volat. oil fr. lvs. E. globulus, Labill.—Colorl., or yellowish liq.—*Constit.:* Chiefly eucalyptol, or cineol, $C_{10}H_{18}O$, & valeraldehyde, butyraldehyde, capronicaldehyde, & pinene. — Sp. Gr. 0.91–0.93 at 15° C.; (0.905–0.925 at 25° C., U. S. P.).—Opt. Rot. +1° to +10° in a 100 Mm. tube.—*Misc.* A., E., carbon disulphide.—*Boil.*, abt. 175° C. — Antisep.; Antipyr.; Disinf. — *Uses: Intern.*, intermit. & remit. fever, bronch., cyst., & dysent., & by inhal. in asthma or catarrh.—*Extern.*, skin dis. (1:5 oil).—*Dose* 5–15 ♏ (0.3–1 Cc.) in emulsion.

Oil Fennel

Volat. oil fr. fruit Fœniculum vulgare, Mill.—Colorl., or pale-yellow liq.—*Constit.:* Pinene, phellandrene, limonene, dipentene, fenchone, anethol.—Sp. Gr. 0.965–0.975; (0.953–0.973 at 25° C., U. S. P.).—*Sol.* A., E., C.—Carmin.; Corrigent.—*Uses:* Cover taste of unpleas. remed., quiet babies, & relieve flatus.—*Dose* 1–5 ♏ (0.06–0.3 Cc.).

do.—2-fold, free fr. terpenes

Oil Fir Cones

Volatile oil fr. cones of Picea excelsa, Link (Pinus Abies, Duroi).—Colorl., limpid liq.; balsamic odor; terebinthinate taste.—*Sol.* A., E.—Antisep.; Alter.—*Uses: Extern.*, and by inhalation in various bronchial affections, rheumatism, &c.

Oil Fir, European Silver.—see **Oil Pinus Abies**

Oil Fir, Scotch.—see **Oil Pine-Needles**

Oil Fir, Spruce.—see **Oil Pinus Picea**

Oil Fir-wood.—see **Oil Pine-Needles**

Oil Fireweed.—see **Oil Erechtitis**

Oil Flaxseed.—see **Oil Linseed**

Oil Fleabane, Canada.—see **Oil Erigeron**

Oil Garlic

Volat. oil fr. bulb Allium sativum, L.—*Constit.:* Chiefly $C_6H_{10}S_2$, $C_6H_{12}S_2$, $C_6H_{10}S_3$, & allied bodies, but no allyl sulphide.—Stim.; Expector.; Diur.; Diaph.—*Uses:* Hyst., nerv. affect., delir. trem., &c.—*Dose* 2–6 ♏ (0.12–0.36 Cc.).—See also Allyl Sulphide.

Oil Gaultheria

(Oil of Wintergreen).—Volat. oil fr. lvs. Gaultheria procumbens, L.—Colorl., or alm. colorl. liq.—Abt. 99% methyl salicylate, $CH_3.C_7H_5O_3$.—Sp. Gr. 1.177 at 15° C.; (1.172–1.180 at 25° C., U. S. P.).—*Sol.* A., E., C., carbon disulphide.—*Boil.* 218–221° C.—Analg.; Antirheum.; Antisep.—*Uses: Intern.*, Rheumatic affect., pleurisy, pericard. & scarlat.—*Extern.*, orchitis, epididymitis, articular rheum., &c.—*Techn.*, perfumes & flavor.—*Dose* 5–20 ♏ (0.3–1.3 Cc.).—*Appl.*, in orchitis & epididym., 20 drops rubbed in 2–3 t. p. d.; in chorea, 6–10 drops rubbed in on the thigh & leg.

Oil Gaultheria, Synthetic or *Artificial.* — see **Methyl Salicylate**

Oil Geranium

(Oil of Rose Geranium). — Volat. oil fr. lvs. Pelargonium odoratissimum, L., & allied species.—*Constit.:* Chiefly geraniol, $C_{10}H_{18}O$.—*Sol.* A., E.—*Uses:* Perfume.

Oil Geranium, Turkish.—Rectified

(Palmarosa Oil).—Fr. Andropogon Schœnanthus, L., & allied sp., grown in India (not Turkey).

Oil Ginger

Volat. oil fr. rhizome Zingiber officinale, Roscoe.—Yellowish liq.—Sp. Gr. 0.875–0.885.—*Constit.:* Camphene & phellandrene. — Opt. Rot., −20° to −40°.—*Sol.* A., E., C.— Stomachic; Carmin.; Digestive. — *Uses:* Dysent., flatulent colic, dyspep.; & in tooth washes, ginger essence, &c.—*Dose* 1–3 ♏ (0.06–0.2 Cc.) on sugar or in alcoh. solut.

Oil Goldenrod

Volat. oil fr. fresh fl. herb Solidago odora, Aiton. —Sp. Gr., abt. 0.960.—*Uses:* Perfume.

Oil Guaiac-wood

Essential oil fr. wood, Guaiacum officinale, L.—Semi-solid or crystalline at ord. temp., intense tea-like odor.—*Uses:* Perfume.

Oil Gynocardia.—see **Oil Chaulmoogra**

Oil, Haarlem.—see **Oil Linseed Sulphurated, Terebinthinated**

Oil Hedeoma

(Oil of American Pennyroyal).—Volat. oil fr. lvs. & flowering tops of Hedeoma pulegioides, L., Persoon.—Pale-yellow liq.—Sp. Gr. 0.930–0.940 at 15° C.; (0.920–0.935 at 25° C., U. S. P.). —*Sol.* E., C., carbon disulphide, A., glacial acetic acid.—Tonic; Carmin.; Emmen.—*Uses:* Amenor., flatulent colic, nausea, &c.—*Dose* 2–10 ♏ (0.12–0.6 Cc.).

Oil Hops

Volat. oil fr. strobiles of Humulus Lupulus, L. —Brownish liq.—Sp. Gr. 0.855–0.880 at 15° C. —*Constit.:* Terpene & humulene.—*Sol.* A., E., C.—Sed.; Tonic; Nar.—*Uses:* Nerv. debil., insom., & delirium.—*Dose* 1–5 ♏ (0.06–0.3 Cc.).

Oil Horsemint

Volat. oil fr. Monarda punctata, Willd.—Arom.; Stim.; Carmin.—*Uses:* Flatulent colic, dyspep., & diar. affect.—*Dose* 1–10 ♏ (0.06–0.6 Cc.).

Oil Hyoscyamus Merck.—Boiled (1

Olive or o. fixed oil heated w. fresh hyoscyamus leaves.—Brownish-green, oily liq.; odor & taste of hyoscyamus.—Sedative.—*Uses:* Relieve the cough of phth. patients.—Chiefly extern., for inunctions with mercurial oint., camphor liniment, chloroform, & the like, in rheumatic affect.; also as instillation in the external ear, & in enemas.—*Dose* 1–5 ♏ (0.06–0.3 Cc.).

do. Merck.—Expressed (1

Fixed oil obtained by expression fr. seeds Hyoscyamus niger, L.—Not narcotic; possesses only the properties of a fatty oil.

Oil Hyssop

Volat. oil fr. Hyssopus officinalis, L.—Sp. Gr., abt. 0.930.—Carmin.; Stim.; Sud.—*Uses:* Diar., flatulent colic, dyspep., &c.—*Dose* 1–5 (0.06–0.3 Cc.).

Oil Indian Melissa.—see **Oil Lemon Grass**

Oil Jatropha Curcas

(Oil of Barbadoes Nuts).—Fr. nuts Jatropha Curcas, L.—Purg., similar to croton oil.—*Uses:* Antid. to alcohol & in obstinate constip.—*Dose* 2–8 ♏ (0.12–0.5 Cc.).

Oil Juniper Berries Merck (2

Volat. oil fr. fruit Juniperus communis, L.—Colorl. to pale-yellow liq.—*Constit.:* Chiefly pinene, $C_{10}H_{16}$, & cadinene.—Sp. Gr. 0.860–0.880 at 25° C., U. S. P.—*Sol.*, carbon disulphide, E., A.—Diur.; Carmin.; Stim.—*Uses: Intern.*, dropsy & suppression of urine.—*Techn.*, in manuf. liquors (gin, &c.).—*Surg.*, preserving surg. ligatures.—*Dose* 5–15 ♏ (0.3–1 Cc.).

Oil Juniper Berries.—20-fold, free fr. terpenes

Preceding, deprived of less odorous constit.

Oil Juniper Tar, Empyreumatic.—see **Oil Cade**

Oil Juniper Wood

Volat. oil fr. leafy branches of Juniperus communis, L., distil. w. water.—Colorl. to yellowish, turpentine-like liq.; weak odor of juniper.—*Sol.* A.—*Uses:* Popularly as liniment in rheum. & paralysis, & in veterinary medicine. —*Caut.* Not to be used for preserv. catgut or silk.—*N. B.:* Not "Oil of Cade" (which see).

Oil Lard

Fixed oil expressed fr. lard at a low temperat.—Sp. Gr. 0.910–0.925 at 15° C.; (0.905–0.915 at 25° C., U. S. P.).—*Sol.* A., E., C.—*Uses:* Pharm.

Oil Laurel.—Expressed

Fixed oil obtained by expression fr. the fresh, crushed fruit of Laurus nobilis, L.—Greenish, fatty substance consisting of a mixt. of laurostearin with a volat. oil, & the so-called laurel camphor; green color due to presence of chlorophyll.—*Sol.* E.—*Melt.* 40° C.—*Uses:* In resolvent embrocations; also in veter. medicine as appl. to swellings.

do.—Volatile

(Oil of Sweet Bay).—Volat. oil fr. fruit Laurus nobilis, L.—Greenish liq.—*Constit.:* Pinene, cineol.—Sp. Gr. 0.924–0.925 at 15° C.—*Sol.* A., E., C.—Excitant; Nar.—*Uses:* Perfume for external remedies. Rarely used intern.—*Dose* $^1/_3$–3 ♏ (0.02–0.2 Cc.).

Oil Lavender Flowers

Volat. oil fr. fresh flowering tops of Lavandula officinalis, Chaix.—Colorl. to slightly yellowish liq.—*Constit.:* Chiefly linalyl acetate, $C_{10}H_{17}.C_2H_3O_2$; also pinene, cineol, & geraniol.—Sp. Gr. 0.885–0.895 at 15° C.; (0.875–0.910 at 25° C., U. S. P.).—*Sol.*, all prop. A.; glacial acetic acid, carbon disulphide, &c.—Stim.; Tonic.—*Uses:* Perfume & flavor.—*Dose* 1–5 ♏ (0.06–0.3 Cc.).

do.—2½-fold, free fr. terpenes

Preceding, deprived of less odorous portions. —*Constit.:* Cineol, linalool, linalyl acetate, & geraniol.—*Uses:* Almost exclusively in cosmetics & as addition to liqueurs.

Oil Lemon—Fr. fresh peel

Volat. oil expressed fr. fresh rind of Citrus Limonum, Risso (Lemon).—Pale-yellow liq.—*Constit.:* Pinene, citral, & limonene.—Opt. Rot. +60° to +64° in a 100 Mm. tube.—Sp. Gr. 0.858–0.861; (0.851–0.855 at 25° C., U. S. P.). —*Sol.* A., E.—Stim.; Carmin.—*Uses:* Perfume & flavor.

Oil Lemon.—30-fold, free fr. terpenes

Colorl., transp., fragrant oil; pung., arom., pleas. taste.—*Uses:* Perfume.

Oil Lemon Balm.—see **Oil Balm**

Oil Lemon Grass

(Oil Verbena; Indian Melissa Oil).—Volat. oil fr. one or more sp. of Andropogon, particularly A. citratus. — Yellowish-brown liq. — *Constit.:* Citral, $C_{10}H_{16}O$, methyl-heptenone, & geraniol, $C_{10}H_{18}O$.—Sp. Gr. 0.905–0.920.—Stim.; Carmin. —*Uses:* Perfume, & for veter. liniments.

Oil Limes

(Oil of Limetta).—Volat. oil fr. rind of fruit, Citrus Limetta, Risso.—Carmin.; Stim.; Tonic. —*Uses:* Flavor. unpalatable remed. & perfume.

Oil Linaloe

Volatile oil distil. fr. a Mexican wood of uncertain origin, supposed species of Amyris.—Sp. Gr. 0.875–0.890.—*Sol.* A.—*Uses:* Perfume.

Oil Linseed

(Flaxseed Oil).—Fixed oil obtained by expression fr. the seed Linum usitatissimum, L.—Yellowish or yellow, oily liq.—*Constit.:* Stearin, palmitin, myristin, isolinolenin, linolein, & olein. —Sp. Gr. 0.930–0.940 at 15° C.; (0.925–0.935 at 25° C., U. S. P.).—*Sol.* 10 absol. A., E., C., B., carbon disulphide, oil turpentine.—Laxative.—*Uses: Intern.*, mild cathartic & for piles; enemas for constip.—*Extern.*, w. lime-water (Carron Oil) for burns.—*Techn.*, in varnishes, paints, &c.

do.—Boiled

Uses: Techn.

Oil Linseed Sulphurated

(Sulphurated Linseed Oil; "Haarlem Oil"; Thiolinic Acid; Balsam Sulphur).—Solut. sulphur in linseed oil, prepared by aid of heat.—Brownish-red, thick oil.—*Sol.*, oil turpentine.—Antisep.—*Uses:* Scabies, pruritus, torpid ulcers, & parasitic skin dis.

Oil Linseed Sulphurated, Terebinthinated

(Haarlem Oil; Dutch Oil; Dutch Drops).—Oily preparation fr. mixing sulphurated linseed oil w. oil of turpentine (1:3).—Antiseptic.—*Uses: Intern.*, lithiasis, cyst., &c.—*Extern.*, skin dis., atonic & indol. ulc.—*Dose* 5–15 ♏ (0.3–1 Cc.) in milk.—*Caut.* Do not confound w. "Dutch Liquid," which is Ethylene Chloride.

Oil Mace

Volat. oil fr. mace, arillode of Myristica fragrans, Houttuyn. — *Constit.:* Pinene, dipentene, & myristicin, $C_{12}H_{14}O_2$. — Sp. Gr. 0.910–0.930. — Closely resembles oil of nutmeg.—*Uses:* Flavor.

Oil Male Fern Merck (1100

Volat. oil fr. rhizome Dryopteris Filix-mas, Schott, & D. marginalis, A. Gray.—Yellow liq.—Sp. Gr. 0.85–0.86 at 15° C.—Believed to be the active constituent of the male-fern rhizoma.—*Sol.* A., E.—Anthelmintic.—*Uses:* Recom. for tape-worms.—*Dose* 12–25 ♏ (0.75–1.5 Cc.).—*Caut.* Not the oleoresin of male fern, in common use for tape-worm.

Oil Marjoram

Volat. oil fr. Origanum Majorana, L.—Yellow liq. — Sp. Gr. 0.890–0.910. — *Sol.* A. — Tonic; Carmin.; Arom. — *Uses:* Hasten eruption in measles, scarlat., &c. Also perfume.—*Dose* 1–2 drops.—*Caut.* The oil commonly called "Oil of Origanum" is oil of thyme.

Oil Marjoram, Wild.—see **Oil Origanum**

Oil Matico

Volat. oil fr. lvs. Piper angustifolium, R. & P. —Yellow liq.—*Sol.* A.—Sp. Gr. 0.93–1.13.—*Constit.:* Matico camphor. — Antisep.; Stim.; Tonic.—*Uses:* Dis. of urin. passages, dysent., & bronch. affect.—*Dose* $^1/_2$–1 ♏ (0.03–0.06 Cc.).

Oil Matricaria

(Oil German Chamomile).—Volat. oil from flr. Matricaria Chamomilla, L.—Bluish, thick oil; butter-like on expos. to cold; agre. odor of chamomile. — Sp. Gr. 0.930–0.945 at 15° C. — *Sol.* 10 A. — Tonic; Arom.; Carmin.; Stim. — *Uses:* Cramps, colic, dyspep., &c.—*Dose* 1–2 ♏ (0.06–0.12 Cc.).

Oil Melaleuca.—see **Oil Niaouli**

Oil Melissa.—see **Oil Balm**

Oil, Methyl Mustard. — see **Methyl Thiocarbimide**

Oil Milfoil.—see **Oil Yarrow**

Oil, Mineral, Crude.—see **Petroleum**

Oil Mint, Curled-.—2-fold, free from terpenes

(Oil Crispmint).—Volat. oil fr. lvs. Mentha crispa, L.—Alm. colorl. liq.—*Sol.* A.—*Constit.:* Chiefly carvone.—*Uses:* As of oil peppermint.—*Dose* 1–3 drops.

Oil Mirbane.—see **Nitrobenzene**

"Oil Mullein" Merck (9

Practically a tincture prep. fr. Mullein flowers (Verbascum thapsus).

Oil Murure

Dark-brown, fatty oil fr. Urostigma cystopodium, a Brazilian Moraceæ.—*Uses: Intern.*, syphilis. —*Extern.*, rheum. & syph.—*Dose:* Teaspoonful.

Oil Muscatel Sage

Volat. oil fr. Salvia Sclarea, L.—Sp. Gr. abt. 0.928.—*Uses:* Perfume.

Oil Mustard Merck.—Artificial (4

(Allyl Isothiocyanide; Allyl Sulphocyanide).—Fr. allyl iodide by potass. thiocyanide.—C_4H_5SN, or, $C_3H_5.SCN$.—Sp. Gr. 1.020 at 15° C.

do. Merck.—True, distilled (8

Volat. oil fr. seeds Brassica nigra, Koch.—Colorl.

or pale-yellow liq.; v. pung. odor; acrid, burning taste.—Sp. Gr. 1.018–1.025 at 15° C.; (1.013–1.020 at 25° C., U. S. P.).—*Constit.:* Chiefly allyl-mustard oil, C_3H_5SCN (allyl isothiocyanate), w. traces of carbon disulphide & allyl cyanide, $C_3H_6.CN$. — *Sol.* A., E., carbon disulphide. — *Boil.* 148–152° C.—Rubefacient; Stim.—*Uses:* Substit. for mustard poultices & leaves in pleuritic neural. or rheumat. pains. Best vehicle for administration is W. — *Dose* $^1/_8$–$^1/_4$ ♏ (0.008–0.015 Cc.).—*Appl.*, as rubefac., in 1:50 alcoh. solut.

Oil Mustard.—Expressed

Expressed from mustard seed.—Straw-color., v. limpid oil. — Sp. Gr. 0.921–0.923 at 15° C. — *Uses:* Malnutrition.—*Techn.*, in manuf. oleomargarine, soap, &c.; also as table oil.—*Dose* 1–2$^1/_2$ fl. oz. (30–75 Cc.) daily.

Oil Myrcia

(Oil of Bay).—Volat. oil fr. lvs. Myrcia acris, De C.—*Constit.:* Chiefly eugenol, $C_{10}H_{12}O_2$; also myrcene, $C_{10}H_{16}$, chavicol, $C_9H_{10}O$, methyl-eugenol, methylchavicol, citral, & *l*-phellandrene.—Sp. Gr. 0.975–0.990 at 15° C.—*Sol.* A., E., C.—*Uses:* Bay rum.

Oil Myrtle

Volat. oil fr. lvs. Myrtus communis, L.—Brownish-yellow, fragr. liq.—*Sol.* A., E., C.—Sp. Gr., abt. 0.91 at 15° C.—*Constit.:* Pinene, cineol, & dipentene.—Antisep.; Arom.; Astring.—*Uses:* Chronic bronch., cyst., pyelitis, & stim. to muc. membr. of lungs & gen.-urin. org.—*Dose* $^1/_2$–4 ♏ (0.03–0.25 Cc.).

Oil Neatsfoot

Fixed oil fr. feet of neat cattle.—Sp. Gr. 0.915 at 15° C.—Alter.; Lax.; Nutrient.—*Uses:* Substit. for cod-liver oil; also techn.—*Dose* 4–8 dr. (15–30 Cc.).

Oil Neroli.—see **Oil Orange Flowers**

Oil Niaouli

Volat. oil fr. lvs. Melaleuca viridiflora, Soland. (Niaouli), = M. Leucadendron, L.—Cont. 66% eucalyptol.—Sl'y yellow oil; arom. odor; pung., thin, refreshing taste, like peppermint; dextrogyre.—Sp. Gr. 0.922.—*Sol.* A., E., benzin; insol. W., G.—*Uses:* Bronch., tuberculosis.—*Dose* 4 ♏ (0.25 Cc.), 6 t. p. d., in capsules.— *Inj.* 15 ♏ (1 Cc.), in sterilized olive oil.—See also Gomenol.

Oil Nutmeg.—Expressed

(Nutmeg Butter).—Fixed oil fr. nutmegs, & obtained by expression.—Mixt. of palmitin, olein, & myristin with ethereal oil & a little coloring matter.—Yellowish to orange-yellow, soft, solid; odor & taste of nutmeg.—Sp. Gr. 0.99–0.995 at 15° C.—*Melt.* 45–51° C.—*Sol.*, hot A., E.—Nar.; Carmin.—*Uses:* Weak appetite, flatulent colic; & flavor. for o. remed.—*Extern.*, as liniment & oint. in intestinal colic.—*Dose* 2–5 grains (0.12–0.3 Cc.).

Oil Nutmeg.—Volatile

Volat. oil dist. fr. nutmegs.—Thin, colorl., or pale-yellowish liq.—Sp. Gr. 0.870–0.900 at 15° C.; (0.862–0.910 at 25° C., U. S. P.).—*Sol.* A., glac. acetic acid, & carbon disulphide.—Opt. Rot. +14° to +28°.—*Constit.:* Pinene, dipentene, myristicol, $C_{10}H_{14}O$, myristicin, $C_{12}H_{14}O_2$, myristic acid, $C_{14}H_{28}O_2$.—Carminative.—*Uses:* Flavor.—*Dose* 2–3 drops.

Oil Olive

(Sweet Oil).—Fixed oil expressed fr. ripe fruit Olea europæa, L.—Pale-yellow, or greenish-yellow, oily liq.—Sp. Gr. 0.915–0.918 at 15° C.; (0.910–0.915 at 25° C., U. S. P.).—*Constit.:* Chiefly olein & palmitin, with arachin, stearin, linolein, & cholesterin, $C_{26}H_{48}.OH$.—*Sol.* E., C., carbon disulphide; spar. in A.—Lax.; Nutrient.—*Uses: Intern.*, constip., worms, poisons, gallstones, &c.—*Extern.*, blistered or injured surf. Constit. of ointments, liniments, &c., & food; also as enema in chronic constip. in women (8–16 fl. oz. [abt. 250–500 Cc.] at a time, before retiring; the enema to be retained as long as possible, & repeated every 2–5 days). Also largely used in cooking, & on salads, &c.—*Dose* 1–2 oz. (30–60 Cc.) as laxat.; in gallstones, 1$^1/_2$–6 fl. oz. (abt. 50–200 Cc.).—*Caut.* Rancid on expos.

Oil Orange Flowers

(Oil of Neroli).—Volat. oil fr. fls. Citrus vulgaris, Risso. — Reddish-yellow liq. — Sp. Gr. 0.880–0.890 at 15° C.—*Sol.* A., E., C.—*Uses:* Perfume & flavor.—*Caut.* Keep cool & fr. air.

do.—Bigarade

(Oil of Neroli, Bigarade).—Volat. oil fr. fls. & lvs. Citrus Bigaradia, Duham., & prob., also C. vulgaris, Risso.

do.—Petals

(Oil of Neroli, Pétale).—Volat. oil fr. petals Citrus vulgaris, Risso, & prob., also C. Aurantium, Risso.

do.—Petit Grain

(Oil of Neroli, Petit Grain).—Fr. lvs. & unripe fruit Citrus Bigaradia, Duham., & o. sp. of Citrus.

Oil Orange Peel

Volat. oil expressed fr. fresh rind of Citrus vulgaris, Risso, C. Aurantium, L., or C. Bigaradia, Duham. — Light-yellow liq. — *Constit.:* Chiefly limonene, $C_{10}H_{16}$.—Sp. Gr. 0.850 to 0.860 at 15° C.; (0.842–0.846 at 25° C., U. S. P.).—*Sol.*, carbon disulphide, A., glacial acetic acid; v. sl. W. —Carminative.—*Uses:* Perfume, flavor, &c.—*Caut.* Keep cool & well stoppered.

do.—30-fold, free fr. terpenes

Oil Origanum

(Oil Wild Marjoram).—Volat. oil fr. fl. tops of Origanum vulgare, L.—Yellowish or reddish-yellow liq. — *Constit.:* Carvacrol, & terpenes. — Sp. Gr. 0.87–0.91.—Antisep.; Tonic; Excitant;

Emmen.—*Intern.*, amenor., dysmenor., flatulent colic.—*Extern.*, skin dis., toothache.—*Dose* 2–10 ♏ (0.12–0.6 Cc.).—*Caut.* The oil commonly called "Oil of Origanum" is oil of thyme.

Oil Origanum.—Cretan

Volat. oil fr. Origanum creticum. — Yellowish-red liq.—*Sol.* A.—Sp. Gr. 0.95 at 15° C.—*Boil.* 161° C.—*Uses:* Clearing specimens in microsc.

Oil Orris

Volat. oil fr. rhizome of Iris florentina, L., & of o. sp. of I.—Yellowish, semi-solid fatty substc. —*Uses:* Perfume.

Oil Palm.—From Fruit

(Palm Butter).—Fixed, butter-like oil obtained fr. fruit Elæis guineensis, Jacq. (E. Melanococca), by boiling & expressing.—Reddish-yellow, fatty mass; faint odor of violet.—Sp. Gr. 0.920–0.927 at 15° C.—*Melt.* 27–42.5° C.—Saponification No. 202.—Reichert No. 0.5.—Iodine No. 51.5.—Emollient.—*Uses:* Pharm., & techn. in manuf. of soap & candles.

do.—From Seed

Fatty oil obtained fr. seed of Elæis guineensis, Jacq., by expression.—Yellowish oil.—Sp. Gr. 0.952.—*Melt.* 26–30° C.—Saponification No. 247.6.—Iodine No. 13.4–13.6.—*Uses:* As appl. in liniments & oint.—*Techn.*, in manuf. soap.

Oil Palmarosa.—see **Oil Geranium, Turkish**

Oil Paraffin

(Liquid Paraffin).—Principally high-boil. hydrocarbons of the C_nH_{2n+2} series dist. fr. petroleum & obtained fr. the fraction boiling above 300° C., the product being decolorized & treated w. sulphuric acid.—Colorl. to yellowish, limpid oil; thickens with cold.—Sp. Gr., abt. 0.880.—*Boil.*, not below 360° C.—*Sol.* E., amyl alcohol, benzin, B., C., oils, &c.; insol. W., A.—*Uses:* Pharm. in oints. & making Unguentum Paraffini; also as vehicle for various dermics insol. in W., *e.g.*, thymol, iodoform, mercurials, &c.

Oil Patchouli

Volat. oil fr. lvs. Pogostemon Patchouly, Pellet (P. Heyneanus, Benth.). — Brownish-yellow, thick, oily liquid; fragr. odor.—Sp. Gr. 0.970–0.990.—*Uses:* Perfume.

Oil Peach.—Expressed

Fixed oil expressed fr. seed Amygdalus persica, Willd., & allied spec.—Sp. Gr. 0.915 at 15° C. —*Sol.* E., C., CS_2; partly in A.—Cath.; Nutrient.—*Uses:* As of almond or olive oil.

do.—Volatile

Mixt. of ethereal oils used in the manuf. of peach liqueur.

Oil Peanut.—see **Oil Arachis**

Oil Pennyroyal.—see **Oil Hedeoma**

Oil Pepper Merck (1

(Oil of Black Pepper).—Volat. oil fr. unripe fruit Piper nigrum, L. — Yellowish liq. — *Constit.:* Phellandrene, cadinene.—Sp. Gr. 0.870–0.905. —*Sol.* A., E., C.—Carmin.; Stim.; Antipyr.—*Uses:* Flatulent colic, intermit. fever; & as condiment.—*Dose* 1–3 ♏ (0.06–0.2 Cc.).

Oil Peppermint

Volat. oil fr. fresh or partly dried lvs. & flowering tops of Mentha piperita, Smith.—Colorl. to pale-yellow liq.—*Constit.:* Chiefly menthol, $C_{10}H_{20}O$, w. menthene, limonene, & menthone.—Sp. Gr. 0.900–0.910 at 15° C.; (0.894–0.914 at 25° C., U. S. P.).—*Sol.* A., E., C.—Opt. Rot. −20° to −32° (−20° to −33° in a 100 Mm. tube at 25° C., U. S. P.).—Carmin.; Stim.; Antisep.; Anod.—*Uses: Intern.*, flatulence, colic, dysent., nausea, & nerv. affect.—*Extern.*, headache, toothache, rheum., neural., catarrh, hay fever, asthma, &c. Also flavor. for ill-tasting medicines, & tooth-powders, -pastes, & -washes, &c.; also in manuf. liqueurs.—*Dose* 1–5 ♏ (0.06–0.3 Cc.).

do.—2-fold, free fr. terpenes

Colorl. liq.—*Constit.:* Chiefly menthol & menthone.—*Uses:* Chiefly in cordials.

do.—Hotchkiss

Volat. oil fr. plants cultivated in Wayne Co., New York.—*Uses:* As of oil peppermint, preced.

do.—Japanese

(Oil of Poho). — The liquid portion remaining after the separation of the menthol fr. Japanese & Chinese peppermint oils fr. Mentha arvensis, L.—Yellow liq.—*Sol.* A., E., oils.—*Uses: Extern.*, in liniments in neuralgia, & in toothache.

do.—Mitcham

Volat. oil fr. peppermint cultivated at Mitcham, Surrey, England.

Oil Phenylmustard

(Thiocarbanil).—$C_6H_5.N.CS$.—Yellowish liq.—*Sol.* A., E.—Sp. Gr. 1.135 at 15° C.—*Boil.* 222° C.

Oil Phosphorated

1% solut. phosphorus in almond oil & ether.—*Sol.* E., C., & oils.—Nerve Stim.; Tonic.—*Uses:* Sexual exhaust., mental failure, melancholia, cerebral softening, chronic skin affect., neural., &c.—*Dose* 3–5 ♏ (0.2–0.3 Cc.).—*Antid.*, old oxidized oil of turpentine, copper sulphate, stomach siphon, mucilaginous drinks, brandy.

Oil Pimenta

(Oil of Allspice, or of Pimento).—Volat. oil fr. ripe fruit Pimenta officinalis, Lindley.—Colorl. to pale-yellow or reddish liq.; arom. odor; pung., spicy taste.—*Constit.:* Chiefly eugenol, $C_{10}H_{12}O_2$. —Sp. Gr. 1.045–1.055 at 15° C.; (1.033–1.048 at 25° C., U. S. P.).—*Sol.* A., E., C., glac. acetic acid, carbon disulphide.—Carmin.; Stim.; Tonic. —*Uses:* Flatulent colic, & as flavor.—*Dose* 1–5 ♏ (0.06–0.3 Cc.).

Oil Pine, Mountain.—see **Oil Pinus Pumilio**

Oil Pine Needles Merck (2

(Oil Scotch Fir; Fir-wood Oil; Oil Pinus Sylvestris).—Volat. oil fr. lvs. Pinus sylvestris, L.

—Yellowish liq.—Sp. Gr. 0.884–0.886 at 15° C. —*Constit.:* Dipentene, pinene, sylvestrene, & occasionally also bornyl acetate & cadinene.—Op. Rot. +10°.—Antisep.; Antirheum.—*Uses: Extern.*, chron. rheum.—*Intern.*, stim. expector.; by inhal. w. steam in pulmonary dis.

Oil Pine, Silver.—see **Oil Pinus Abies**

Oil Pinus Abies

(Oil Silver Pine; Oil European Silver Fir).—Volat. oil fr. the needles of Abies pectinata, De C.—Yellowish liq.—Sp. Gr. 0.865–0.875 at 15° C. — *Constit.:* Pinene, limonene, bornyl acetate, & cadinene.—Opt. Rot. -20° to -50°.

Oil Pinus Picea

(Oil Spruce Fir; Oil Norway Spruce).—Volat. oil fr. needles of Picea vulgaris, Lam.—Yellowish liq. — Sp. Gr. 0.808 at 15° C. — *Constit.*. Pinene, dipentene, phellandrene, bornyl acetate, & cadinene.—Opt. Rot. -21°.

Oil Pinus Pumilio Merck (10

(Oil of Mountain Pine).—Volat. oil fr. lvs. Pinus Pumilio, Haenke. — V. fragr., yellowish oil; terebinthinate taste. — *Constit.:* Pinene, phellandrene, sylvestrene, bornyl acetate, & cadinene.—Opt. Rot. -5° to -10°.—Sp. Gr. 0.865–0.870.—*Sol.* A., E., C.—Antisep.; Expector.—*Uses:* Inhalation in bronch. & pectoral affect., or in capsules as stim. expectorant; lately employed in glandular enlargements, boils, & skin dis.—*Dose* 5–10 ♏ (0.3–0.6 Cc.).

Oil Pinus Sylvestris.—see **Oil Pine Needles**

Oil Pogostemon.—see **Oil Patchouli**

Oil Poho.—see **Oil Peppermint, Japanese**

Oil Poppy

Expressed fr. seeds of Papaver somniferum, L. —Pale-yellow liq.—*Uses:* Linim. & as substit. for olive, or almond, oil; also techn. (paints, &c.).

Oil Pumpkin Seed

Expressed fr. seeds Cucurbita Pepo, L.—Thick, reddish, oily liq.; rank taste.—Sp. Gr. 0.928.—Anthelmintic(?).

Oil Rhodium

(Oil of Rosewood).—Volat. oil fr. wood Convolvulus Scoparius, L.—*Uses:* Perfume.

Oil, Rock.—see **Petroleum**

Oil Rose

(Otto, Essence, or Attar, of Rose).—Volat. oil distilled fr. fresh fls. Rosa damascena, Miller. —Pale-yellowish, transp. liq.—*Constit.:* Chiefly the odorous geraniol, $C_{10}H_{18}O$, w. citronellol & stearopten. — Sp. Gr. 0.855–0.865 at 25° C., U. S. P.—*Sol.* E.; 33 A.—Solidifies in the cold. —*Uses:* Perfume.

Oil Rose Geranium.—see **Oil Geranium**

Oil Rosemary

Volat. oil fr. fresh flowering tops of Rosmarinus officinalis, L.—Colorl. or pale-yellow liq.—Sp. Gr. 0.895–0.915 at 15° C. (0.894–0.912 at 25° C., U. S. P.).—*Sol.* A., E., glac. acetic acid.—*Constit.:* Camphor., borneol, cineol, *d-* & *l-* pinene, & camphene.—Opt. Rot., not above +15° in a 100 Mm. tube at 25° C.—Stim.; Emmen.; Rubefacient. — *Uses:* Chiefly for liniments; somet. in amenor.—*Dose* 3–6 ♏ (0.2–0.36 Cc.).

Oil Rosewood.—see **Oil Rhodium**

Oil Rue.—French

Volat. oil fr. Ruta graveolens, L.—Yellowish to greenish liq.—Sp. Gr. 0.830–0.840.—*Sol.* A.—*Constit.:* Methylnonylketone. — Sl. dextrorotatory.—Irritant; Emmen.; Rubefacient; Anthelmintic; Antiepileptic.—*Uses: Extern.*, amenor., menor., & as vesicant & rubefacient; v. irritating to intestines, when swallowed. — *Dose* 2–5 ♏ (0.12–0.3 Cc.) on sugar.

Oil "Rusci."—see **Oil Birch Wood**

Oil Santalwood.—East-Indian

(Oil of White, or Yellow, Sandalwood).—Volat. oil dist. fr. wood Santalum album, L.—Yellowish, or pale straw, somewh. thick liq.; arom. odor; spicy taste.—*Sol.*, eas. A.—*Constit.:* Santalol, $C_{15}H_{26}O$, & santalal, $C_{15}H_{24}O$.—Sp. Gr. 0.975–0.985 at 15° C.; (0.965–0.975 at 25° C., U. S. P.).—Opt. Rot., not less than -16° or more than -20° in a 100 Mm. tube at 25° C.—Antiseptic.—*Uses:* Gonor., gleet, bronch., & inflam. of muc. membr. generally; also perfume.—*Dose* 10–20 ♏ (0.6–1.3 Cc.) in capsules or mixture.

do.—West-Indian

Volat. oil fr. an undetermined tree (probably Amyris balsamifera, L., a Rutacea) of Venezuela.—Sp. Gr. 0.963–0.967 at 15° C.—Yellow to pale straw-color., thick oil.—Opt. Rot. +26°.—*Sol.*, sl. A.—*Uses:* As of the East-Indian oil.

Oil Sassafras

Volat. oil fr. root & root-bark Sassafras variifolium, O. Kuntze.—Yellowish to reddish-yellow liq.—*Constit.:* Chiefly safrol, $C_{10}H_{10}O_2$, w. eugenol, pinene, phellandrene, & camphor.—Sp. Gr. 1.065–1.075 at 25° C. (U. S. P.).—Opt. Rot. +1° to +4° in a 100 Mm. tube at 25° C. —*Sol.* 4–5 A., carbon disulphide, & glacial acetic acid.—Tonic; Arom.; Carmin.—*Uses:* Flavoring.—*Extern.*, as appl. to insect bites & stings, & to correct odor of ill-smelling remedies.—*Dose* 1–2 ♏ (0.06–0.12 Cc.).

do.—2-fold, free fr. terpenes

Oil Savine

Volat. oil fr. fresh tops Juniperus Sabina, L. (Savin). — Colorl. or yellowish liq. — Sp. Gr. 0.905–0.930 at 15° C.; (0.903–0.923 at 25° C., U. S. P.).—*Constit.:* Pinene, cadinene, sabinol, $C_{10}H_{15}O$.—Opt. Rot. +40° to +60° in a 100 Mm. tube at 25° C. — *Sol.* A., glacial acetic acid.—Irritant; Rubefacient; Emmen.—*Uses: Intern.*, amenor. & menor.—*Extern.*, rheum. &

alopecia pityroides.—*Dose* $^1/_2$–2 ♏ (0.03–0.12 Cc.).—*Appl.*, in 1:10 alcoh. sol. in alopecia.—*Antid.*, emetics, stomach siphon, oils, mucilage, opium, & brandy.—*Caut.* Poison!

Oil Seneca.—see **Petroleum**

Oil Sesame

(Benne Oil; Teel Oil).—Fixed bland oil fr. seeds Sesamum indicum, L.—Yellow liq.—Sp. Gr. 0.921–0.923 at 15° C.—*Constit.:* Olein, stearin, palmitin, myristin, linolein, sesamin, $C_{11}H_{12}O_3$.—*Sol.* E., C., carbon disulphide.—Lax., Nutrient.—*Uses:* As of olive oil or almond oil.—*Techn.*, in manuf. oleomargarine, soap, & cosmetics.—*Dose* 4–8 dr. (15–30 Cc.).

Oil Sesame, Iodized.—see **Iodipin**

Oil Spearmint

Volat. oil fr. Mentha viridis, L.—Colorl., yellowish, or greenish-yellow liq.—Sp. Gr. 0.930–0.940 at 15° C.—Opt. Rot., up to −43°.—*Constit.*. *l*- carvone, $C_{10}H_{14}O$, carvene, $C_{10}H_{16}$, pinene.—*Sol.* A., E., C., glac. acetic acid, carbon disulphide.—Carmin.; Stim.; Antisep.—*Uses:* Flatulence, colic, dysent., rheum., neural., &c.—*Dose* 2–6 ♏ (0.12–0.36 Cc.).

Oil Sperm

Fr. fat of Physeter macrocephalus, L. (Sperm Whale).—Yellow liq.—Sp. Gr., abt. 0.879.—*Uses:* Pharm. & techn.

Oil Spike

Volat. oil fr. lvs. & tops Lavandula Spica, Cav.—Sp. Gr. 0.905–0.920.—Opt. Rot. +3°.—*Sol.* A., oil turpentine.—*Constit.:* Camphor, cineol, pinene(?), camphene, linalool, borneol, & perhaps also geraniol & terpineol.—Carmin.; Stim.; Rubefacient.—*Uses: Extern.*, rheum., neural., &c. Also techn.

Oil Spruce, Norway.—see **Oil Pinus Picea**

Oil Storax

Volat. oil fr. storax.—Sp. Gr. 0.890–0.900.—*Uses:* Perfume.

Oil Sumbul

Volat. oil fr. root Ferula Sumbul, Hook. fil.—Sp. Gr., abt. 0.954.—Tonic; Carmin.; Antispasm.—*Uses:* Perfume.

Oil Sweet Flag.—see **Oil Calamus**

Oil Tansy

Volat. oil fr. lvs. & tops Tanacetum vulgare, L.—Yellow liq.—Sp. Gr. 0.925–0.950 at 15° C.—*Constit.:* Thujon, $C_{10}H_{16}O$, borneol, camphor.—Opt. Rot. +30 to +45°.—*Sol.* A., E., C.—Anthelm.; Antisep.; Emmen.—*Uses:* Amenor., dysmenor., worms, & hyst.—*Extern.*, in liniments & oints.—*Dose* 1–3 ♏ (0.06–0.2 Cc.).—*Max. D.* 10 ♏ (0.6 Cc.).—*Caut.* Poison!

Oil Tar

Volat. oil fr. wood tar.—Reddish-brown liq.—Sp. Gr., abt. 0.970 at 15° C.—*Sol.* A., E.—Antiseptic.—*Uses: Intern.*, bronch. affect.—*Extern.*, skin dis.—*Dose* 1–5 ♏ (0.06–0.3 Cc.).

Oil Teel.—see **Oil Sesame**

Oil Theobroma

(Cacao Butter).—Fixed oil expressed fr. roasted seeds Theobroma Cacao, L.—Yellowish, brittle solid; choc. odor & taste.—Sp. Gr. 0.995 at 15° C.; (0.970–0.976 at 25° C., U. S. P.).—*Constit.:* Stearin, olein, & glycerides of other fatty acids.—*Sol.* E., C., B.; 100 cold absol. A.; 20 boil. absol. A.; oils.—*Melt.* 30–35° C. or higher.—*Uses: Pharm.* in supposit. & oints.—*Techn.*, in manuf. chocolates, &c.

Oil Thuja

(Oil of Arbor Vitæ or of White Cedar).—Essential oil fr. lvs. Thuja occidentalis, L.—Emmen.; Tonic; Antisep.—*Uses: Extern.*, skin dis. & perfume.

Oil Thyme

(Often misnamed "Oil of Origanum").—Volat. oil fr. lvs. & fl. tops Thymus vulgaris, L.—Colorl. liq.—Chief constit., thymol, $C_{10}H_{14}O$; also carvacrol, $C_{10}H_{14}O$; somet. the latter alone; also pinene, linalool, cymol, & bornyl acetate.—Sp. Gr. 0.900–0.930 at 25° C.—Opt. Rot., not above −3° in a 100 Mm. tube at 25° C.—*Sol.* A., E., C., carbon disulphide.—Antisep.; Stim.—*Uses: Intern.*, collapse, bronch. affect., colic, catarrh.—*Extern.*, pruritus, skin dis.; fragr. antisep. for the bath.—*Dose* 3–15 ♏ (0.2–1 Cc.).

do.—5-fold, free fr. terpenes

Contains chiefly thymol.

Oil Tobacco

(Empyreumatic Oil of Tobacco).—Volat. oil fr. lvs. Nicotiana Tabacum, L.—Dark-brown liq.; disagre. tobacco odor; acrid taste.—Sedative.—*Caut.* Poison!

Oil Turpentine Merck.—Rectified—Highest Purity, Medicinal (1

Colorl. oil; freed fr. unpleas. odor & taste by treatm. w. NaOH & distillation.—Colorl. liq.—Sp. Gr. 0.860–0.865 at 25° C.—*Boil.* 155–162° C.—*Sol.* C., B., E., oils; alm. insol. W.—Anthelm.; Antisep.; Diurst.; Stim.; Rubefac.; Hemostat.—*Uses: Intern.*, rheum., sciatica, pulmon. & uterine hemorrhages (as hemostatic); in gonor. & vesical catarrh (to check secretion); in dropsy (as diuret.); in typhoid (as stim.); also in dysentery, puerperal fever, tenia (as anthelm.), lumbago, gleet, leucor., whoop.-cough, calculi, retention of urine, amenor., & as antidote in phosphorus poisoning.—*Extern.*, in linim. or oint. (1:3).—*Dose* 10–30 ♏ (0.6–2 Cc.) every 4 hrs., best in emuls. or in gelat. caps.—For tapeworm, 1–2 fl. dr. (4–8 Cc.).—For *internal* use only the *rectified* oil should be used.

do.—Crude (1

(Spirit of Turpentine).—*Uses:* Techn., in paints, varnishes, & as solvent for oils, resins, &c.

Oil Urostigma.—see **Oil Murure**

Oil Valerian

Volat. oil fr. rhizome & root Valeriana officinalis, L.—Brownish liq.—Sp. Gr. 0.94–0.95.—*Constit.:* Pinene, limonene, borneol, bornyl formate, bornyl acetate, bornyl isovalerate.—*Sol.* A., E., C.—Stimulant.—*Uses:* Hyst., chorea, restlessness, epilepsy, low fevers, headache, hypochondriasis, & var. nerv. disturbances.—*Dose* 1–5 ♏ (0.06–0.3 Cc.) several t. p. d. in hysteria; up to 20 ♏ (1.3 Cc.) in epilepsy.

Oil Verbena.—see **Oil Lemon Grass**

Oil Vitriol.—see **Acid Sulphuric**

Oil Wax.—Colorless, Rectified

Volat. empyreumatic oil fr. destruct. distil. of yellow wax.—Colorl. only when fresh; darkens by age.—*Uses:* Formerly as embrocation in rheumatism.

do.—Dark, Rectified

Oil Wine Merck.—True.—Heavy (8

(So-called "Heavy" Oil of Wine).—A final prod. of distil. wine-yeast & water w. large excess of sulphuric acid, & also by-product in manuf. sulphuric ether.—*Constit.:* Ethyl sulphate, etherin, & etherol.—Yellowish, oily liq.; penetrating odor; sharp, bitter taste.—Sp. Gr. 1.095–1.130.—*Sol.* A., E.; sl. in W.—*Boil.* 280° C.—*Uses: Pharm.*, for preparing Oil Ethereal (*q.v.*).—*Techn.*, for flavoring brandy.

do. Merck.—Light (5

Oil Wintergreen.—see **Oil Betula; Oil Gaultheria**

Oil Wintergreen, Synthetic or *Artificial.*—see **Methyl Salicylate**

Oil Wormseed, American.—see **Oil Chenopodium**

Oil Wormseed, Levant

Volat. oil fr. fls. Artemisia Cina, Berg et Schmidt (A. pauciflora, Weber).—Yellowish-green liq.—*Constit.:* Chiefly cineol, $C_{10}H_{18}O$.—Sp. Gr., abt. 0.930.—*Sol.* A., E.—Anthelm.; Tonic.—*Dose* 1–3 ♏ (0.06–0.2 Cc.).

Oil Wormwood.—see **Oil Absinthium**

Oil Yarrow

(Oil of Milfoil).—Volat. oil fr. lvs. & tops of Achillea Millefolium, L.—Blue liq.—*Constit.:* Cineol.—Sp. Gr. 0.910–0.920.—*Sol.* A., E.—Tonic; Astring.; Emmen.—*Uses:* Amenor., colds, dysmenor., &c.—*Dose* 1–5 ♏ (0.06–0.3 Cc.).

Oil Ylang Ylang

(Oil Cananga).—Volat. oil distil. in the Philippine Islands, fr. fls. Cananga odorata, Hook. fil. & Thomp.—Sp. Gr., abt. 0.940–0.955.—Antiseptic.—*Uses:* Perfume.

Ointment Mercurial (1

Mixt. mercury & fats.—50% metallic mercury in state of very fine subdivision.—Alter.; Antisep.; Antisyph.—*Uses:* Vener. sores, gland. swellings, skin dis., pediculi, chilbl., ulc., smallpox pustules, inflamed eyes, syphilis (inunction cure).—*Appl.* 20–40 grains (1.3–2.6 Gm.) by inunction 20 to 30 times, in syphilis, the inunction being made every other day on another part of the body, beginning with the leg, then on the thigh, forearm, upper arm, & abdomen. In eye affections, as oint. (1:9) combined w. narcotic extracts & opium.—*Dose: Intern.*, as pills, $1^1/_2$–3 grains (0.1–0.2 Gm.) 2–3 t. p. d.

Ointment Mercurial Merck.—Dilute (1

(Blue Ointment).—$33^1/_3$% metal. mercury.—*Uses:* As preceding.

Oleander

(Laurier Rose).—Lvs. & bark of Nerium Oleander, L. Apocynaceæ.—*Habit.:* Mediterranean region, & cultiv. in subtropical countries.—*Etymol.:* Fr. "nerion," the ancient Grk. name for the oleander. "Oleander" is a corruption of Lat. "olea," olive tree, & "laurus," laurel.—*Constit.: Lvs.:* Oleandrin; neriin (nerein); nerianthin.—*Bark:* Rosaginin; neriin; volat. oil; fluorescent substc. like umbelliferon.—Cardiac Tonic & Diur.—*Uses:* Epilepsy, valvular affect.—*Doses: Bark:* 1–3 grains (0.06–0.2 Gm.).—Tinct. (1:10) 25–50 ♏ (1.6–3.3 Cc.).—*Lvs.:* Tinct., 20 ♏ (1.3 Cc.).

Oleandrin

Glucoside fr. lvs. Nerium Oleander, L.—Wh., cryst. powd.—Heart Stim.—*Uses:* Instead of digitalin.—*Caut.* Poison!

Oleates.—see **Aconitine, Ammonium, Atropine, Barium, Bismuth, Calcium, Cocaine, Copper, Iodoform, Iron, Lead, Manganese, Mercury, Mercury & Morphine, Morphine, Nickel, Potassium, Quinine, Sodium, Strychnine, Veratrine, & Zinc, Oleate**

Olein.—see **Triolein**

Oleocreosote

(Creosote-oleic Ester; Creosote Oleate).—Yellowish, oily liq.—Sp. Gr. 0.950 at 15° C.—*Sol.* E., C., B.—Antiseptic.—*Uses:* Catarrhal affect. of respir. org., chronic bronch., scrof., & tuberculosis.—*Doses:* Adults, 40–160 grains (2.6–10.6 Gm.) p. d.; children, 8–45 grains (0.5–3 Gm.) p. d., administered as emulsion.

Oleoguaiacol

(Guaiacol Oleate; Guaiacol-oleic Ester).—React.-prod. oleic acid, guaiacol, & phosphorus trichloride.—*Misc.*, fatty oils, E., B., C., &c.—*Sol.* A.; insol. W.—Antisep.; Antituberc.—*Dose* 5–10 ♏ (0.3–0.6 Cc.), 3 t. p. d., in capsules.

Oleoresin Aspidium.—see **Oleoresin Male Fern**

Oleoresin Capsicum Merck.—*U. S. P.* (25

Fr. fruit Capsicum fastigiatum, Blume (Cayenne, or African, Pepper), by acetone.—Contains the active constituent of capsicum (capsaïcin).—*Sol.* A., E.—Rubefacient; Stim.—

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Uses: Intern., flatulence, & to arouse appetite.—*Extern.*, dil. w. soap linim. or olive oil in lumbago, neural., & rheumat. affect.—*Techn.*, imparting a pungent taste to liquors for mixed pickles, &c. —*Dose* $^1/_4$–1 ♏ (0.015–0.06 Gm.), highly diluted once or twice daily.

Oleoresin Cubeb Merck.—*U. S. P.* (5

Fr. fruit Piper Cubeba, L. fil., by alcohol.—*Sol.* A., E.—Antiseptic; Expector.—*Uses:* Gonor., bronch., & dis. of muc. membr.—*Dose* 5–30 ♏ (0.3–2 Cc.) several t. p. d. in pills or caps.

Oleoresin Ginger.—*U. S. P.*

Fr. rhizome Zingiber officinale, Roscoe, by acetone.—*Sol.* A., E.—Carmin.; Stim.—*Uses:* Dysent., colic, dyspep., chills, colds, &c.—*Dose* $^1/_2$–2 ♏ (0.03–0.12 Cc.), highly diluted.

Oleoresin Lupulin.—*U. S. P.*

Fr. glandular powd. fr. strobiles of Humulus Lupulus, L., by acetone.—Nar.; Tonic; Sed.; Antispasm.—*Uses:* Insom., nervousn., delir. trem., dyspep.—*Dose* 2–5 grains (0.12–0.3 Gm.).

Oleoresin Male Fern Merck (3

(Extract Aspidium or Male Fern).—Ether. (or acetone) extr. of rhizome Dryopteris Filix-mas, Schott, & D. marginalis, Asa Gray.—Thick, greenish-brown liq.; bitter, unpleas. taste.—Effic. & safe Anthelm.—*Doses:* In *Tænia solium* (the *usual* kind of tapeworm) $2^1/_2$–3 dr. (10–12 Gm.), in *Tænia mediocanellata* 3–4 dr. (12–16 Gm.); taken in 3 portions at intervals of $^1/_2$ hr., in capsules, followed if necessary in 1–2 hours by calomel and jalap.—*Caut.* Shake well before dispensing.—*N. B.:* Merck's Oleoresin of Male Fern *exceeds* the requirements of the U. S. P., and conforms to the stricter demands of the Ph. G. III. Merck's preparation is made from rhizomes of a *pistachio-green* color inside, and only the crop of each current year is used.

Oleoresin Matico

Ether. extr. fr. lvs. Piper angustifolium, R. & P. —Stim.; Tonic; Astring.; Hemost.—*Uses:* Gonor. gleet, cystitis, inflam. of kidneys, & gen.-urin. org., catarrh, epistax. & hematuria.—*Dose* 3–15 grains (0.2–1 Gm.).

Oleoresin Mezereon

Ether. extr. of bark Daphne Mezereum, L., & o. sp.—Alter.; Stim.; Rubef.—*Uses: Intern.*, syph., scrof. affect., &c.—*Extern.*, chiefly as a counter-irritant.—*Dose* $^1/_2$–1 ♏ (0.03–0.06 Cc.).

Oleoresin Pepper.—*U. S. P.*

Acetone extr. of fruit Piper nigrum, L.—Carmin.; Stim.; Antipyr.—*Uses:* Adjuvant to antipyretics & tonics; also for flatulence, dyspep., & ague.—*Dose* $^1/_4$–1 ♏ (0.015–0.06 Cc.).

Olibanum

(Frankincense; Gum Thus).—Gum resin fr. Boswellia Carterii Birdwood, & other spec. of Boswellia. Burseraceæ.—*Habit.:* Nubia; Egypt; Somaliland. — *Etymol.:* Medieval Lat. "olibanum," fr. Grk. "libanos," incense, fr. Arabic "lubin."—*Constit.:* Volat. oil; resin; bitter principle; gum.—Stim.; Expector.—*Uses:* Chiefly in plaster, or fumigations.—*Dose* 15–30 grains (1–2 Gm.) in emuls.

Olut-Kombul Juice

Fr. bark of Abroma angustum.—Emmen.—*Uses:* Congestive & neuralgic dysmenor., & in mixed forms of this disease.—*Dose* 30 grains (2 Gm.) daily for a week, beginning at the appearance of the hemorrhage.

Omal = Trichlorophenol.—see **Trichlorophenol**

Omegachlorotoluene.—see **Benzyl Chloride**

Ononin Merck ('700

Glucoside fr. root Ononis spinosa, L. (Rest Harrow).—$C_{25}H_{26}O_{11}$.—Wh., cryst. powd.—*Sol.*, hot A., & sl. in hot W.—*Melt.*, above 200° C.

Ononis

(Rest Harrow).—Herb & root of Ononis spinosa, L. Papilionaceæ.—*Habit.:* Europe.—*Etymol.:* Grk. "onos," ass, donkey, *i.e.*, the plant is a favorite food of the ass. "Spinosa," spiny, thorny, *i.e.*, the ends of the young shoots are spiny.—*Constit.:* Root contains volat. oil; ononin, $C_{25}H_{26}O_{11}$; ononid, $C_{18}H_{22}O_8$; onocerin, $C_{26}H_{42}(OH)_2$; tannin.—Diuret.; Aper.; Lithontriptic.—*Dose* 2 fl. oz. (60 Cc.) of 1–2 : 16 decoct. of root.

Opianyl.—see **Meconin**

Opium.—*U. S. P.*

(Gum Opium; Crude, or Natural, Opium).—Concrete milky exudation from unripe caps. Papaver somniferum, L. Papaveraceæ; cont. not less than 9% morphine.—*Habit.:* Asia Minor; Persia; China; Africa; India; cultiv. in Greece, England, U. S., &c.—*Etymol.:* Grk. "opion," diminutive of "opos," poppy juice (so named by Pliny), fr. the Persian name for opium, "abe-oon."—*Constit.:* Opium alkaloids; meconin; meconic acid; meconoisin; glucose; pectin; caoutchouc; wax.—Nar.; Sed.; Anod.; Antispasm.; Hypn.; Diaphor.—*Uses:* Pain, diar., dysent., cough, pneum., bronch., pleurisy, peritonitis, enteritis, typhlitis, &c.—*Techn.*, as source of morphine and o. opium alkaloids, & for manufacturing powdered, granulated, & smoking opiums.—*Extern.*, in 1:10–20 oint.; & in suppositories & vaginal ovules.—*Doses:* $^1/_4$–3 grains (0.015–0.2 Gm.) in powd., pill, or tinct. —*Max. D.* 3 grains (0.2 Gm.) single; 8 grains (0.5 Gm.) daily.—Aqu. extr., $^1/_4$–1 grain (0.015–0.06 Gm.); *Max. D.* 2 grains (0.12 Gm.) single, 5 grains (0.3 Gm.) daily.—Tinct., 5–15 ♏ (0.3–1 Cc.).—*Antid.*, emetics, stomach siphon, potass. permang., atropine, tannin, strong black coffee, brandy, oxygen, friction, electricity. Keep in constant motion.—*Caut.* Poison!

Opium Granulated Merck.—*U. S. P.*

Opium dried at not above 85° C. & reduced to coarse powd.; cont. 12–12.5% morphine.

Opium Powder Merck.—*U. S. P.*

Opium dried at not above 85° C. & reduced to v. fine powd.; cont. not less than 12% or more than 12.5% morphine. Desired strength obt. by blending powders of higher & lower morphine percentage strengths, or by add. milk sugar. — Stim.; Nar.; Antispasm.; Hypn.; Anod. — *Uses:* Insom., neural., colic, spasms, dyspep., rheum., diabetes, pleurisy, peritonitis, cancer, tetanus, delirium tremens; cholera, dysent., restlessness, consumption, &c.; ease pain, give rest & sleep, check morbid secretions, relieve cough, & allay irritability.—*Doses:* Powd.: $^1/_2$–2 grains (0.03–0.12 Gm.).—Extr., $^1/_4$–1 grain (0.015–0.06 Gm.); Pills, 1 grain (0.06 Gm.); Dover's Powder, 5–20 grains (0.3–1.3 Gm.); Tinct., 5–20 ♏ (0.3–1.3 Cc.); Camph. Tinct. 1–4 fl. drs. (4–15 Cc.); Troches Liquorice & Opium ($^1/_{12}$ grain [0.005 Gm.] O.); Vinegar, 5–20 ♏ (0.3–1.3 Cc.); Wine, 5–20 ♏ (0.3–1.3 Cc.).—*Incomp.* (of liq. opiates), alkalies; alkaloidal precipitants; alkaline carbonates; cinchona; copper & iron salts; kino; lime-water; mercury bichloride; nutgall; silver nitrate.—*Antid.*, warm coffee; atropine or strychnine hypoderm.; emetics, stomach siphon, warm drinks, artif. respir.; potass. permangan.; constant motion.

Note.—As the strength & quality of this powder are constantly controlled by assay, the action of the drug is always to be relied upon.

do. Merck.—Deodorized.—*U. S. P.*

(Denarcotized Opium).—Powd. opium deprived of its narcotine by macerating w. successive quant. of purif. petrol. benzin, & containing 12–12.5% morphine.—*Uses:* As of opium, but free from the disagreeable effects of latter.—*Doses:* $^1/_4$–2 grains (0.015–0.12 Gm.).—Tinct., 5–15 ♏ (0.3–1 Cc.—*Caut.* Poison!

Opobalsam.—see **Balsam Tolu**

Opocerebrin

Fr. gray brain matter.—*Uses:* Chorea, hysteria, insomnia, chron. alcoholism, anemia, chlorosis, w. pronounced symptoms of cerebral disturbance, epilepsy (in period of excitement), & bradycardia.—*Dose* 3 grains (0.2 Gm.) 3 t. p. d. —In epilepsy, the opocerebrin medication is conjoined w. the Toulouse-Richet dietetic treatm.

do. Poehl.—For hypodermic use

Uses: As of preced.—*Dose* 1–2 injections p. d.

Opohepatoidin

Fr. the liver. — *Uses:* Jaundice, hemoptysis, epistaxis, & hepatic cirrhosis.—*Dose* 8 grains (0.5 Gm.) single; 25–60 grains (1.6–4 Gm.) daily.

Opohypophysin

Fr. pituitary bodies. — *Uses:* Acromegaly. — *Dose* 1 grain (0.06 Gm.).

Opolienin

Fr. spleen.—*Uses:* Splenic hypertrophy, malarial cachexy, leukemia, & pseudoleukemia.—*Dose* 30–90 grains (2–6 Gm.) single; 60–180 grains (4–12 Gm.) p. d.

Opomedullin

Fr. red bone marrow.—*Uses:* Pernicious anemia, pseudoleukemia, chlorosis, & neurasthenia.—*Dose* 3–15 grains (0.2–1 Gm.) single; up to 90 grains (6 Gm.) p. d.

Opoörchidin

Fr. testes of bullocks.—*Uses:* Affect. of spinal cord, & o. nerv. diseases.—*Dose* 8–12 grains (0.5–0.8 Gm.) single; 25–45 grains (1.6–3 Gm.) p. d.

Opoössiin

Fr. yellow bone marrow.—*Uses:* Rachitis & osteomalacia.—*Dose* 3–15 grains (0.2–1 Gm.) single; up to 90 grains (6 Gm.) p. d.

Opoövulin

Fr. ovaries.—*Uses:* Climacteric affect. of all kinds, & particularly after ovariotomy; also hysteria & chlorosis.—*Dose* 3–12 grains (0.2–0.8 Gm.) single; 10–45 grains (0.6–3 Gm.) p. d.

Opoprostatin

Fr. prostate gland.—*Uses:* Prostatic hypertrophy.—*Dose* 3 grains (0.2 Gm.) single; 12 grains (0.8 Gm.) p. d.

Oposuprarenalin

Fr. suprarenal capsules.—*Uses:* Diabetes insipidus, Addison's disease, menopause, & neurasthenia.—*Dose* 3–6 grains (0.2–0.36 Gm.) single; 6–12 grains (0.36–0.8 Gm.) p. d.

Opothyreoidin

Fr. thyroid gland.—*Uses:* Myxedema, cretinism, cachexia following excision of thyroid gland, obesity, skin diseases (psoriasis, eczema, &c.), agalactia, hemophilia, torticollis, &c.—*Dose* 1–2 grains (0.06–0.12 Gm.) single; $2^1/_2$–10 grains (0.15–0.6 Gm.) p. d.

Orange I.—see **Tropæoline OOO No. 1**

Orange II.—see **Orange R F; Tropæoline OOO No. 2**

Orange III.—see **Methyl Orange**

Orange IV.—see **Diphenylamine Orange**

Orange Berries (Peas)

(Orangettes; Orange Peas).—Immature fruit of Citrus Aurantium, L. Aurantiaceæ.—*Habit. & Etymol.:* See Orange Peel, Bitter.—*Constit.:* Volat. oil; hesperidin, $C_{22}H_{26}O_{12}$.—Bitter Tonic; also as issue peas.—*Techn.*, in manuf. liquors.

Orange Extra.—see **Tropæoline OOO No. 2**

Orange Flowers

Dried flowers of Citrus Aurantium, L. Rutaceæ. Aurantiaceæ. — *Habit.:* Mediterranean basin; cultiv. in tropical and sub-tropical countries. —*Etymol.:* See Orange Peel, Bitter.—*Constit.:* Volat. oil; bitter principle.—*Uses:* Nervine. Chiefly for making orange-flower water.

Orange G G Merck (8

(Sodium Anilineazobetanaphtholdisulphonate).—Yellowish-red powd.—*Sol.* W. w. orange-yellow color.—*Uses:* Dyeing wool.

Orange G S.—see **Diphenylamine Orange**

Orange Leaves

Lvs. of Citrus Aurantium, L. Rutaceæ. Aurantiaceæ.—*Habit.:* See Orange Flowers.—*Etymol.:* See Orange Peel, Bitter.—*Constit.:* Volat. oil; hesperidin.—Tonic; Antispasm.

Orange N.—see **Diphenylamine Orange**

Orange Peel, Bitter.—*U. S. P.*

(Curaçao Orange; Seville Orange).—Dried rind of the fruit of Citrus vulgaris, Risso. Rutaceæ. Aurantiaceæ.—*Habit.:* N. India; cultiv. near Mediterranean Sea, Spain, W. Indies, Florida, California, &c.—*Etymol.:* "Orange" fr. Sanskrit "nagarange," fr. Arab "naranj," or E. Indian "naranja" (elephant's fruit). "Citrus" fr. Grk. "kitrion," after "Kitron," a town in Judea where the fruit formerly flourished.—*Constit.:* Ethereal oil; hesperidin, $C_{22}H_{26}O_{12}$; narangin, $C_{21}H_{26}O_{11}.4H_2O$; aurantiamarin; isohesperidin, $C_{22}H_{26}O_{12}.2H_2O$; acrid resin; a tasteless acid, $C_{44}H_{28}O_{14}$; gum; tannin(?).—Stim.; Tonic; Carmin.; Stomachic.—*Uses:* Chiefly as a flavoring and corrig.—*Doses:* 15–30 grains (1–2 Gm.).—Fld. extr., 15–60 ♏ (1–4 Cc.).—Alcoh. extr., 2–10 grains (0.12–0.6 Gm.).

Orange Peel, Sweet.—*U. S. P.*

(Sweet Orange; Portugal Orange; China Orange).—Rind of fresh fruit of Citrus Aurantium, L. Rutaceæ. Aurantiaceæ.—*Habit. & Etymol.:* See Orange Peel, Bitter.—Closely resembles bitter orange peel, but has an orange-yellow color; sweetish, fragrant odor; arom., slightly bitter taste.—*Constit.:* Volat. oil; hesperidin, $C_{22}H_{26}O_{12}$; fixed oil; resin; gum; tannin.—*Uses:* Arom.; solely for flavoring.

Orange R.—see **Orange T**

Orange R F (7

(Orange II).—Sodium salt of azobetanaphtholsulphanilic acid.—Reddish-brown powd.—*Sol.* W.—*Uses:* Techn., as dye.

Orange T Merck (6

(Mandarin G. R.; Orange R.; Kermesin Orange).—Sod. salt of sulpho-orthotolueneazobetanaphthol.—Brick-red powd.—*Sol.* W.—*Uses:* Techn., to dye wool orange fr. an acid bath.

Orangettes.—see **Orange Berries**

Orcanette.—see **Alkanna**

Orcein Merck (100

Color. matter fr. orcin, by ammonia, water & air.—$C_{28}H_{24}N_2O_7$.—Brownish-red cryst.—*Sol.* A., alkaline W.—The alcoh. solut. has a purple color, & is used in microscopy as a mordant in staining flagella, & as a test for the presence of elastic tissue in sputum.—The alkaline solutions are violet.

Orchil

(Archil; Orseille).—Coloring matter obtained fr. var. spec. of lichens, Roccella tinctoria, Acharius, Parmeliaceæ, &c., by fermentation.—*Habit.:* Mediterranean region; Canary Islands; Azores, &c.—*Etymol.:* Fr. "Oricellari," an Italian dyer (abt. 1300 A.D.) who introduced the dye.—*Constit.:* Orcin, $C_7H_8O_2.H_2O$; orcein, $C_{28}H_{24}N_2O_7$.—*Uses:* Dye for wool & silk, both in weakly acid & weakly alkaline baths; particularly useful for production of mixed colors; not adapted for cotton.

Orcin Merck.—Cryst. (35

(Dioxytoluene; Methylresorcinol; Orcinol).—Phenolic substance fr. various spec. of Roccella.—$C_7H_8O_2+H_2O$, or, $CH_3.C_6H_3(OH)_2$ [1:3:5] + H_2O.—Wh. cryst.; intens. sweet, but unpleas. taste; redden in air.—*Sol.* W., A., E.—*Melt.* 58–59° C.—Antiseptic.—*Uses:* Skin dis.—*Techn.*, as reagent for pentoses & pentosan (Bertrand's reaction).

Orcinol.—see **Orcin**

Oregon Grape Root.—see **Berberis Aquifolium**

Oreoselinum

(Mountain Parsley).—Herb of Athamanta (Peucedanum) Oreoselinum, L. Umbelliferæ.—*Habit.:* Europe.—*Etymol.:* Grk. "oros," mountain, & "selinon," parsley, referring to the preference shown by the plant for mountainous localities.—*Constit.:* Volat. oil.—*Uses:* Diuret., as decoct. (10–20:100).

Orexine (20

(Phenyldihydroquinazoline Tannate Kalle).—Fr. quinoline.—$C_{14}H_{12}N_2.(C_{14}H_{10}O_9)$, or, $C_6H_5.N.CH_2.C_6H_4.N:CH.(C_{14}H_{10}O_9)$.—Yellowish-wh., odorl., pract. tastel. powd.—*Sol.*, dil. hydrochloric acid; sl. in A.; insol. W.—Appetizer; Antiemetic.—*Uses:* Anorexia w. no gastric dis.; restore appetite in phth., chlorosis, cardiac dis., surg. operat., &c., also for vomit. of pregn. Contraindic. in excess. acidity stomach & in gastric ulc.—*Dose* 8–12 grains (0.5–0.8 Gm.) 2 t. p. d., in wafers, powd., or 4 grain tabl. (orexoids), w. half a glass water.—*Incomp.*, iron preparations.

Origanum

(Common Marjoram; Wild Marjoram).—Herb of Origanum vulgare, L. Labiatæ.—*Habit.:* Europe; natur. in U. S.—*Etymol.:* Grk. "oros," mountain, & "ganos," beauty, referring to its favorite place of growth, handsome appearance, & aromatic odor.—*Constit.:* Volat. oil; tannin.—Antiscorbut.; Stim.; Tonic; Emmen.—*Uses:* *Extern.*, in fomentations.

do.—Cretan

(Spanish Hop).—Herb of Origanum creticum, L. Labiatæ.—*Habit.:* Mediterranean region.—

Etymol.: See Origanum.—*Constit.:* Volat. oil; bitter principle; tannin.—*Uses:* In toothache.

Origanum Dictamnus.—see **Dictamnus**

Ormosia

(Jamaica Bread Tree; Necklace Tree; Large Coral Bean).—Seed of Ormosia dasycarpa, Jacks. Papilionaceæ.—*Habit.:* Venezuela; West Indies.—*Etymol.:* Grk. "ormos," necklace, referring to the use of the pods; & "dasys," rough, raw, & "karpos," fruit, referring to the character of the fruit.—*Constit.:* Ormosine, a narcotic alkaloid.

Ormosine Hydrochloride Merck (4000

Hydrochloride of alkaloid fr. fruit Ormosia dasycarpa, Jacks.—Yellowish, coarse powd.—*Sol.* A., C.—*Melt.* 80° C.—Hypn.; Sed.; Nar.

Orphol (16

(Betanaphtholbismuth; Bismuth Betanaphtholate).— $Bi_2O_3(OH).C_{10}H_7O$. — Grayish-yellow powd.; darkens somewh. in time.—*Sol.*, sl. A.; insol. W.—Abt. 76–77% Bi_2O_3.—Antisep., like salol.—*Uses:* Affect. of intest.—*Dose* 8–15 grains (0.5–1 Gm.) 3 t. p. d.; half these doses for childr.

Orpiment.—see **Arsenic Sulphide, Yellow**

Orpiment, Red.—see **Arsenic Sulphide, Red**

Orris.—see **Iris Florentina**

Orseille.—see **Orchil**

Orth's Lithium-Carmine

1 Gm. lithium carbonate, 2–3 Gm. carmine, & 100 Cc. W.—*Uses:* Staining nuclei.

Orth's Picrolithium-Carmine

Orth's lithium-carmine (*q.v.*) w. picric acid added.—*Uses:* As of lithium-carmine, & stains like latter; may be used w. fresh material, or on that hardened by any process whatever.

Orthoaminophenylglyoxalic Lactim.—see **Isatin**

Orthoaminotoluene (or, *-ol*).—see **Toluidine, Ortho-**

Orthochloronitrobenzene (or, *-zol*).—see **Chloronitrobenzene, Ortho-**

Orthocresalol.—see **Cresalol, Ortho**

Orthodiamidotolyl.—see **Tolidin**

Orthodihydroxyanthraquinone.—see **Alizarin**

Orthodimethylbenzene (or, *-zol*). — see **Xylene, Ortho-**

Orthodioxybenzene.—see **Pyrocatechin**

Orthodiphenylene-ethylene.—see **Phenanthrene**

Orthoethoxyanamonobenzoylamidoquinoline. — see **Analgen**

Orthoethylphenol.—see **Phlorol**

Orthoform (28

(Methyl Ester of Para-aminometaoxybenzoic Acid).—$COOCH_3[1].C_6H_4.OH[3].NH_2[4]$.—Wh., odorl., cryst. powd.—*Sol.* A., E.; sl. W.—*Melt.* 120–122° C.—Local & intern. Anesth.; Anod.; Antisep.—*Uses:* Chiefly extern., on painful wounds, burns, toothache, &c.—*Appl.*, pure or in 10–20% mixtures with starch, talcum, &c., or in 10–20% oint.; w. equal quantity of arsenic, as appl. in epithelial carcinoma (1 part to 45–70 parts A. & W.).—*Intern.*, in round gastric ulcer. —*Dose* 8–15 grains (0.5–1 Gm.) several. t. p. d. —*Incomp.*, antipyrine, bismuth subnitr., formaldehyde, mercury bichloride, potass. permangan., silver nitrate, zinc chloride.

Orthoform "New" (30

(Methyl Ester of Metaminoparaoxbenzoic Acid). —$COOCH_3[1].C_6H_3.OH[4].NH_2[3]$.—Wh., cryst. powd.—*Sol.*, hot W., A., E.—*Melt.* 141–143.5° C.—Anod.; Antisep., & Local Anesthetic.—*Uses:* As of orthoform.

Orthoform "New" Hydrochloride (35

$COOCH_3[1].C_6H_3.OH[4].NH_2[3].HCl$.—*Uses:* As of orthoform.

Orthomethylaminophenol.—see **Anisidine, Ortho-**

Orthomethylphenol.—see **Cresol, Ortho-**

Orthomonobromophenol.—see **Monobromophenol, Ortho-**

Orthomonobromotoluene (or, *-ol*).— see **Toluene, Bromo-, Ortho-**

Orthonitraniline.—see **Nitraniline, Ortho-**

Orthonitranisol.—see **Nitranisol, Ortho-**

Orthonitrobenzaldehyde.—see **Nitrobenzaldehyde, Ortho-**

Orthonitrophenol.—see **Nitrophenol, Ortho-**

Orthonitrophenol Methyl-ester.—see **Nitranisol, Ortho-**

Orthonitrotoluene (or, *-ol*).— see **Nitrotoluene, Ortho-**

Ortho-oxybenzaldehyde.—see **Acid Salicylous**

Ortho-oxybenzylalcohol. — see **Diathesin; Saligenin**

Ortho-oxytoluene (or, *-ol*).—see **Cresol, Ortho-**

Orthosiphon

(Java Tea).—Herb of Orthosiphon stamineus, Benth. Labiatæ.—*Habit.:* East Indies.—*Etymol.:* Grk. "orthos," straight, & "siphon," tube, *i.e.*, the corona usually has a straight tube. "Stamineus," fr. Lat. "stamen," fr. Grk. "stemon," thread, also has reference to the staminate corona.—Small, oval, green leaves, finely toothed, & rolled like ordinary tea.—*Constit.:* Orthosiphonin (glucoside); volat. oil; considerable potass. salts.—*Uses:* Diuret. in urinary diseases & in renal gravel.—*Doses:* 15–20 grains (1–1.3 Gm.) daily.—Fld. extr., 15–30 ♏ (1–2 Cc.); *Max. D.* 120 ♏ (15 Cc.) p. day.

Orthotolidin.—see **Tolidin**

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Orthotoluic Nitrile.—see **Toluic Nitrile, Ortho-**

Orthotoluylenediamine Hydrochloride.—see **Toluylenediamine (Ortho-) Hydrochloride**

Orthotolylacetamide.—see **Acetorthotoluide**

Orthoxylene (or, *-ol*).—see **Xylene, Ortho-**

Orthoxylenol.—see **Xylenol, Ortho-**

Orthoxylenolsalol.—see **Xylenol (Ortho-) Salicylate**

Ortol (15

(Methylorthoamidophenol).—Accord. to Vogel, a combin. of 2 mol. methylorthoamidophenol & 1 mol. hydroquinone.—*Uses:* Photogr. develop.

Osmic-Acetic Acid.—see **Hertwig's Osmic-Acetic Acid**

Osmic Anhydride.—see **(Acid) Osmic Anhydride**

Osmic-Silver Nitrate.—see **Golgi's Osmic-Silver Nitrate**

Osmic & Osmous Salts.—see under **Osmium**

Osmium Merck (3750

Etymol.: Fr. Grk. "osme," odor, because of the powerful odor of its highest oxide. Discovered in 1803 by Tennant.—Metal.—Os.—Bluish-wh., lustr. metal like platinum.—Sp. Gr. 22.477 at 17° C., highest known.—*Uses:* Techn., in electric incandescent bulbs.

Osmium Chloride Merck (3250

(Osmous Chloride; Osmium Dichloride).—$OsCl_2$.—Dark-green, deliq. need.—*Sol.* W., A., E.—*Caut.* Keep fr. air.

Osmium Dichloride.—see **Osmium Chloride**

Osmium-Iridium Alloy Merck (1750

(Iridium-Osmium Alloy).—Native in the Andes, Urals, Rocky Mountains, & Australia.—Lustr., steel gray, diffic. mall., metal. mass.—Sp. Gr. 19.3–21.1.—*Uses:* Techn., pointing gold pens.

Osmium Tetroxide.—see **(Acid) Osmic Anhydride**

Osmium & Ammonium Chloride Merck (2500

(Ammonium-Osmic Chloride).—$OsCl_6(NH_4)_2$.—Red powd., or dark-red octahedral cryst.—*Sol.* W., A.—43.5% osmium.

Osmium & Potassium Chloride Merck (2000

(Potassium-Osmic Chloride).—K_2OsCl_6.—Dark-red, alm. black octahedral cryst.—*Sol.*, eas. W., A.—40.6% osmium.

Osmium & Sodium Chloride (2250

(Sodium-Osmic Chloride).—$Na_2OsCl_6.2H_2O$.—Red, rhomb. prisms.—*Sol.*, eas. W., A.—40.3% osmium.—Soluts. osmium salts are v. unstable.

Ostruthin Merck (500

Cryst. subst. fr. root Imperatoria Ostruthium, L. (Masterwort).—Yellowish cryst.—*Sol.* A., E.; insol. W.—*Melt.* 119° C.

Ostrya

(Ironwood; Hop-hornbeam; Lever-wood).—Heart wood of Ostrya virginica, Willd. Betulaceæ.—*Habit.:* Canada & eastern U. S.—*Etymol.:* "Ostrya" is the ancient classical Grk. name for the plant. "Virginica" refers to the habitat of this species.—Tonic; Alter.; Antiper.—*Uses:* Intermit. fevers, neural., dyspep., & scrofula.—*Dose:* Fld. extr., 30–60 ♏ (2–4 Cc.).

Ouabain

$C_{30}H_{46}O_{12}$. — Glucoside fr. ouabaio root, an Acocanthaceæ, & also found in one of the strophanthus species (S. gratus).—Nacreous plates.—*Sol.*, abt. 160 W.; more eas. sol. hot W., A.; insol. C., absol. A., E.—*Melt.* 185–200° C.—*Uses:* As of strophanthin.—*Dose* $^1/_{1006}$ grain (0.00006 Gm.) 4 t. p. d. in whoop.-cough in children.—*Caut.* Exceed. poisonous!—See also **Strophanthin Cryst., Thoms**

Ovaraden (26

(Standardized Dried Extract Ovary, Knoll).—1 part = 2 parts fresh gland.—Grayish powd.—Nervine; Alter.—*Uses:* Disorders accomp. menopause or following ovariotomy; also chlorosis.—*Dose* 15–30 grains (1–2 Gm.) 3 t. p. d.

Ovarlin Merck (40

Dried ovaries of the cow; 1 part = 8 parts of fresh cow's ovary.—Coarse, brownish powd.—Nervine; Alter.—*Uses:* Disorders accomp. menopause or following ovariotomy; amenor., chlorosis, & affections due to atrophy & lesions of the genitals.—*Dose* 3–6 grains (0.2–0.36 Gm.) 3 t. p. d., in pills or tablets.

Ovolecithin.—see **Lecithin**

Ovovitellin.—see **Vitellin, from Eggs**

Oxalylurea.—see **Acid Parabanic**

Oxamethane Merck (20

(Ethyl Ester of Oxamic Acid). — Fr. oxalic ether, by dry or alcoholic ammonia.—$C_4H_7NO_3$, or, $CO(NH_2).CO(OC_2H_5)$.—Wh. cryst.—*Sol.* A.—*Melt.* 115° C.

Oxamide Merck (15

(Ethane-diamide). — $C_2H_4N_2O_2$, or, $CO(NH_2).CO(NH_2)$.—Wh. powd.—Insol. W., A., E.

Oxammonium Sulphate. — see **Hydroxylamine Sulphate**

Oxanilide Merck (15

(Diphenyloxamide).—By decomp. aniline oxalate by heat.— $CO(NHC_6H_5).CO(NHC_6H_5)$.—Nacreous scales.—*Sol.*, sl. in hot A.; insol. W.—*Melt.* 245° C.

Oxaniline Hydrochloride. — see **Amidophenol (Ortho-) Hydrochloride**

Oxaphor (30

50% alcoh. solut. of oxycamphor. — *Uses & Doses:* See Oxycamphor.

Ox-Bile Typhoid Diagnostic.—see **Typhoid Ox-Bile Diagnostic**

Ox-Gall.—see **Gall, Ox-**

Ox-tongue.—see **Bugloss**

Oxyacanthine Merck (2500

Alkaloid found together w. berberine in root Berberis vulgaris, L.—$C_{19}H_{21}NO_3$, or, $C_{19}H_{20}NO_2.OH$.—Wh. to yellowish, cryst. powd.—*Sol.* A., E., C., B.—*Melt.* 210° C.

Oxyacanthine Sulphate Merck.—Cryst. (1100

$(C_{19}H_{21}NO_3)_2.H_2SO_4+4H_2O$.—Wh., cryst. powd.—*Sol.*, hot W.—Paralyzes brain & spinal cord.—Subcut. lethal dose for rabbits, $1^1/_2$–3 grains (0.1–0.2 Gm.).

Oxybenzaldehyde (Para-) Merck (80

(Paraoxybenzoicaldehyde).— Fr. phenol, by chloroform w. caustic soda & heat.—$C_7H_6O_2$, or, $C_6H_4(OH)CHO$[4 : 1].—Colorl. need.—*Sol.* W., A., E.—*Melt.* 115° C.

Oxycamphor

$CHOH.C_8H_{14}.CO$.—Oxid'n-product of camphor.—Wh., cryst. powd.—*Sol.* 50 cold W.; more eas. hot W.; v. eas. A., E., C.—Sedative.—*Uses:* Chiefly cardiac dyspnea & asthma; also kidney affections.—Marketed as 50% alcoh. solut.—*Doses* (50% *solut.*): 5–20 ♏ (0.3–1.3 Cc.) 3 t. daily; 45–60 ♏ (3–4 Cc.) per day.—*Max. D.* 120 ♏ (8 Cc.) daily.

Oxychlordiphenylquinoxaline.—see **Luteol**

Oxyconiine.—see **Conhydrine**

Oxycymol.—see **Carvacrol**

Oxydendron

(Sourwood; Sorrel Tree).—Leaves of Oxydendron arboreum, D. C. (Andromeda arborea L.), Ericaceæ.—*Habit.:* Pennsylvania to Florida.—*Etymol.:* Grk. "oxys," sour, & "dendron," tree, referring to the sour taste of the leaves.—Diur.; Refrig.; Tonic.—*Uses:* Dropsy; dis. of genito-urin.organs.—*Dose:* Fld.extr.,30–120♏(2–8Cc.).

Oxydimercurous-Ammonium Nitrate.—see **Mercury Oxide, Black**

Oxydimethylquinizine.—see **Antipyrine**

Oxydiphenylamine (Meta-)

(Phenylaminophenol).—Obt. by heat. resorcinol w. aniline & calcium chloride—$C_{12}H_{11}NO$, or, $C_5H_5NH.C_6H_4(OH)$.—Wh., pearly scales.—*Sol.* A.—*Melt.* 82° C.—*Boil.*, about 340° C.

Oxyethylacetanilide.—see **Acetphenetidin; Phenacetin**

Oxyethyltrimethylammonium Hydroxide.—see **Choline**

Oxyhematin.—see **Hematin**

Oxyhydrastinine Merck.—Cryst. (800

Fr. hydrastinine, along w. hydro-hydrastinine, by potass. hydroxide.—$C_{11}H_{11}NO_3$.—Wh., cryst. powd.—*Sol.* A., E., C.—*Melt.* 98° C.

Oxymercuric Sulphate.—see **Mercury Subsulphate**

Oxymethylconiferin.—see **Syringin**

Oxymethylene.—see **Formaldehyde**

Oxymethylene Acetate.—see **Methylene Diacetate**

Oxyneurine Hydrochloride.—see **Betaine Hydrochloride**

Oxyphenylbenzylketone.—see **Benzoin**

Oxysantonin.—see **Artemisin**

Oxysparteine Merck (325

Fr. sparteine, by slight oxid'n.—$C_{15}H_{24}N_2O$.—Wh. to yellowish cryst.—*Sol.* W., A., E., C.—*Melt.* 84° C.—Cardiac Stimulant.—*Uses:* Heart-failure. Tolerance is soon established for incr. doses.—*Dose* $^3/_4$–$1^1/_2$ grains (0.05–0.1 Gm.), hypoderm.

Oxysparteine Hydrochloride Merck (225

$C_{15}H_{24}N_2O.HCl+4H_2O$.—Wh. cryst.—*Sol.* W., A.—*Melt.* 48–50° C.—Cardiac Tonic.—*Uses:* Hypoderm. in heart dis.—*Dose* $^3/_4$–$1^1/_2$ grains (0.05–0.1 Gm.).—*Caut.* Narcotic!

Oxysparteine Sulphate Merck (225

$(C_{15}H_{24}N_2O)_2.H_2SO_4$.—Wh. cryst.—*Sol.* W., A.

Oxytoluoltropine.
Oxytoluylatropeine. } —see **Homatropine**

Oyster Shell, Prepared

(Concha Preparata; Testa Preparata).—The boiled, cleaned, & powdered shell of the oyster, Ostrea edulis. Mollusca, Lamellibranchiata. Ostreidæ.—*Habit.:* Coasts of Atlantic & Indian Oceans.—*Etymol.:* Fr. Grk. "ostreon," oyster, & Lat. "edulis," edible.—*Constit.:* Chiefly calcium carbonate; also combined phosphoric acid, 0.09%; iodine, 0.003%; bromine, 0.005%; animal matter, 0.5–4.5%; and small quantities H_2SO_4, MgO, Al_2O_3, Fe_2O_3, & SiO_2.—*Uses: Medic.*, antacid.—*Techn.*, in toothpowd.; for polishing, &c.—*Dose* 5–30 grains (0.3–2 Gm.).

Ozamin 4 B.—see **Benzopurpurine**

Ozokerite.—see **Ceresin**

Ozonized Ether.—see **Hydrogen Peroxide, Ethereal Solution**

P

Pacara

Bark & fruit of Enterolobium Timboivum, Mart. Acaciaceæ.—*Habit.:* Brazil; Uruguay.—*Etymol.:* Most probably related to "pachira," the name by which wild cacao is known in Guiana.—*Constit.:* Saponin.—Fruit used as fish-poison.

Pacini's Solution.—Nos. 1 & 2

No. 1: 2 Gm. mercuric chloride, 4 Gm. sod. chloride, 26 Gm. G., & 226 Gm. W.—No. 2: 1

Gm. $HgCl_2$, 2 Cc. acetic acid, 115 Cc. W., & 43 Gm. G.—*Uses:* Preserv. nerves, retina, &c.

Pæonia

(Piney; Peony).—Flowers, root, & seed of Pæonia officinalis, L. Ranunculaceæ.—*Habit.:* Southern Europe; cultiv. in gardens.—*Etymol.:* Named for the Macedonian province "Pæonia," where the plant grew wild. Or, named for "Pæon," the physician of the Greek gods.—*Constit.: Flowers:* tannin, coloring matter; *root:* volat. oil, tannin, fat; *seed:* fixed oil, resin, tannin.—*Uses: Flowers:* Antispasm.; Tonic; used in chorea, epilepsy, & nervous affections; abortifacient.—Also as ingredient in fumigating powders.—*Root:* Antiepileptic; Antispasm.—*Seeds:* Worn as bracelets & necklaces by children, as they are popularly believed to facilitate dentition.

Pæonine.—see **Coralline**

Palatin Black B (also 4 B; 5 B N; 6 B E) Merck (6

These belong to the so-called "acid dyes," & are members of the class known as "azo" dyes.—*Sol.*, eas. in hot W.—*Uses:* Dyeing wool & silk with addition of sod. sulphate, preparations of tartar, & acids (best H_2SO_4).

Pale Rose.—see **Rosa Centifolia**

Palicourea.—see **Coto**

Palladium Merck.—Sheet, Wire, or Powder (2500

Etymol.: Discovered in 1804 by Wollaston, & named by him after "Pallas," the planet discovered in 1802 by Albers.—Metal.—Pd.—Mall., ductile, hard, silver-wh.—Sp. Gr. 11.4–11.8 at 15° C.—*Sol.*, nitric acid.—*Uses:* Techn. in form of gold & silver alloys in dentistry, & as gold-, silver-, or copper-alloy for journal bearings for springs & in balance wheels in watches; also for palladium-coating silvered vessels, & making lancets & palladium mirrors for astronomical instruments.

do. Merck.—Precipitated (2000

(Palladium Black or Mohr).—*Uses:* Anal. & techn.

do. Merck.—Sponge (2500

(Spongy Palladium).—By igniting palladium & ammonium chloride.—Pd.—Spongy masses; white, metallic luster, on rubbing.—*Sol.*, in nitric acid w. access of air.—*Uses:* Anal. & techn.; in gas analysis for separating hydrogen fr. mixtures of gases; also in combustion of hydrogen or hydrocarbons w. oxygen

Palladium Merck.—Reagent (3000

Pd.—Foil or wire, greatly resembl. platinum; & as palladium sponge, a gray, spongy mass.—Compact metal sol. in nitrohydrochl. acid; pallad. sponge also sol. in HCl in presence of air.—*Tests:* (*Different. bet. Pd & Pt Foil*) place 1 drop. alcoh. solut. I on pallad. foil & allow to evap. spontan. – black spot remains, but disapp. on heat. foil to redness. With Pt foil no black spot.—(*Cu; Fe*) diss. in nitrohydrochl. acid; evap. excess acid on W.-bath; diss. res. in H_2O; add NH_4OH till ppt. of $PdCl_2.2NH_4Cl$ rediss.; pass in H_2S gas till all Pd pptd.; filter; add NH_4OH excess to filtrate – no color or ppt.—*Uses:* Analysis of illum. gas, iodine, &c.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Palladium Asbestos Merck.—10% (400

do. Merck.—50% (1600

Palladium precip. upon asbestos.—*Uses:* Anal. & techn. for absorbing hydrogen in gas anal.

Palladium Black.—see **Palladium, Precipitated**

Palladium Chloride Merck.—Dry (1800

(Palladium Dichloride; Palladious Chloride).—$PdCl_2$.—Dark-brown, deliq., pulverulent concretions.—*Sol.* W. acidul. w. HCl; sod.-chloride solut.—*Uses: Medic.*, in phthisis & bronchitis.—*Techn.*, in photography for preparing & transferring pictures to porcelain, & in toning solutions; also galvano-coating parts of clocks & watches, & in manuf. indelible ink.—*Dose* 5–10 ♏ (0.3–0.6 Cc.) of a 3% aqu. solut. bef. meals.

Palladium Chloride Merck.—Reagent (2200

(Palladious Chloride).—$PdCl_2$.—Dark-brown mass.—*Sol.*, eas. W.—*Uses:* Analysis illum. gas; detect. moisture.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Palladium Dichloride.—see **Palladium Chloride**

Palladium Iodide Merck (2000

(Palladious Iodide).—PdI_2.—Black powd.—*Sol.*, solut. potass. iodide; insol. W.

Palladium Mohr.—see **Palladium, Precipitated**

Palladium Nitrate Merck (1200

(Palladious Nitrate).—$Pd(NO_3)_2$.—Brown, deliq. salt.—*Sol.* W., with turbid.; w. much W., brown, basic salt precipitates.

Palladium Nitrate Merck.—Reagent (1800

(Palladious Nitrate).—$Pd(NO_3)_2$.—Brown, deliquesc. salt.—*Sol.* W. w. turb. (due to alm. constant presence of some basic salt).—*Uses:* Quantitatively separ. Cl & I; also detecting ptomaines.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Palladium Paper

Wh. paper, charged w. palladious chloride.—*Uses:* Test for carbon monoxide, hydrogen sulphide, illuminating gas, ozone, methane, ethane, &c.; a black color develops due to formation of metallic palladium.

Palladium & Potassium Chloride Merck (1000
(Potassium Palladious Chloride). — K_2PdCl_4. — Prisms, red or green, as scen across or along axis of cryst.—*Sol.* W.; sl. in A.

Palladium & Sodium Chloride Merck (950
(Sodium Palladious Chloride). — Na_2PdCl_4. — Red, deliq. salt.—*Sol.* W., A.

Palladium & Sodium Chloride Merck. — Reagent (1200
(Sodium Palladious Chloride).—$PdCl_2$+2NaCl. —Red, deliquesc. salt.—*Sol.* W., A.—*Uses:* Analysis as reagent for various gases (illuminating gas & carbonic oxide), & particularly for iodine.
Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Palm Butter.—see **Oil Palm, Solid**

Palmitin.—see **Tripalmitin**

Pambotano
(Panbotano; Calaya).—Bark of Calliandra Houstoni. Mimosæ. Leguminosæ.—*Habit.:* Mexico. — *Etymol.*. Fr. Grk. "kallos," beautiful, & "aner," man, or anther, *i.e.*, beautiful anthers. Named also for Wm. Houston, an English surgeon & naturalist (abt. 1695–1733). "Pambotano" is the native Mexican name.—*Constit.:* Saponin; alkaloid; resinous substance; tannin. —*Uses:* Febrif. instead of quinine.—*Doses:* 2–$2\frac{1}{2}$ oz. (60–75 Gm.) daily in 4 doses, & in form of decoct.—Fld. extr., 4 fl. dr. (15 Cc.) 4 t. p. d.; must never be taken on a full stomach.

Panax.—see **Ginseng**

Pancreatin Merck.—Pure, powd. (7
Mixt. of enzymes fr. the pancreas of warm-blooded animals, usually fr. fresh pancreas of the hog, or ox, & consist. chiefly of myopsin, amylopsin, trypsin & steapsin. — Yellowish, amorph. powd.—*Sol.*, partly in W.; insol. A.—Amylolytic; Proteolytic; Emulsifiant.—*Uses:* Aid to duodenal digestion.—*Dose* 5–15 grains (0.3–1 Gm.).—Pancreatin is decomp. in stomach, hence should be given in keratinized pills. —*Incomp.*, alc., acids.
Note.—Special purification & complete conformity with the U. S. P. requirements make this preparation particularly desirable for use in making the Comp. Pancreatic Powd. of the *N. F.*, intended for making Humanized Milk for infants. This pancreatin, moreover, keeps unusually well.

do. Merck.—Pure, scales (8
Perm. & perf. sol. prep.—Yellowish, transp. scales.—*Sol.* W.

do. Merck.—Saccharated (6
Pancreatin & milk sugar.—Wh. powd.—*Sol.* W., with turbid.

Pancreatin with Sodium Bicarbonate Merck (8
Mixt. pancreatin, sodium bicarb., & milk sugar.

Pancreatin with Starch Merck (6
Mixt. pancreatin w. starch.—5 parts=1 part pancreatin pure.

Pancreatin-Pepsin Merck (10
Pancreatin w. pepsin, diastase, milk sugar, & lactic & hydrochloric acids.—Yellow powd.—*Sol.* W., with turbid.—*Uses:* To digest in alkaline or acid medium.—*Dose* 15 grains (1 Gm.) several t. p. d. after meals.

Pankreon (35
Tannin-pancreatin comp. obt. by act. of tannin on pancreatic subst.; abt. 10% tannin.—Dry, grayish, odorl. powd.; sl. acidulous taste.—*Sol.*, alkal. liq.; insol. W. & acid liq.—Strong Tryptolytic; Amylolytic, & Emulsifiant. — *Uses:* Diar., constip., hyperemesis, achylia, nerv. dyspep., gastritis, gastr. carcinoma, intest. strict., tabes, &c.—Rapidly develops its action in the alkal. intest. fluids.—*Doses:* Adults, 5–8 grains (0.3–0.5 Gm.) 3 t. p. d.; children, $1\frac{1}{2}$ grains (0.1 Gm.) several t. p. d.

Pannum
(Inkomankomo; Uncomocomo).—Rhizome of Aspidium athamanticum, Kunze. Polypodiaceæ. —*Habit.:* South Africa (the Cape, & Natal).—*Etymol.:* Fr. "panna," the name under which the drug was introduced abt. the middle of the last century, as a remedy for tapeworm. "Inkomankomo" or "uncomocomo" is the Kaffir name of the drug.—*Constit.:* Pannic acid; resin; tannin; volat. & fixed oils.—*Uses:* Teniafuge.

Pansy.—see **Viola Tricolor**

Pao-Pereira
(Pereiro).—Bark of Geissospermum Vellozii, Allem. Apocynaceæ.—*Habit.:* Brazil.—*Etymol.:* "Pereiro" is the Brazilian name for the drug.—*Constit.:* Geissospermine, $C_{19}H_{24}N_2O_2.H_2O$; pereirine, $C_{19}H_{24}N_2O$; vellosine, $C_{23}H_{28}N_2O_4$; resin; wax.—*Uses:* Antiperiodic.—*Dose* 30 grains (2 Gm.) in powd. or 3:100 decoct.

Papain Merck (12
(Papayotin; Vegetable Pepsin).—Conc. active prin. of juice of fruit & lvs. of Carica Papaya, L. (Papaw). An enzyme similar to pepsin, but acting best in weak alkal. solut.—Whitish, sl. hygros. powd.; digestive power on blood fibrin is 1 to 200.—*Sol.* W., G.; insol. A., C., E.—Digestive.—*Uses:* For dissolving false membr. in diphtheria, & aiding digestion.—*Dose* 2–5 grains (0.12–0.3 Gm.) w. sod. bicarb. — *Appl.* 5% solut. of equal parts G. & W. for diphth. & croup; 16% in fissured tongue.

Papaver
(Poppy Heads; Poppy Capsules).—Capsules & seed of Papaver somniferum, L. Papaveraceæ. —*Habit.:* Europe; Asia.—*Etymol.:* "Papaver," fr. Lat. "papa," pap or thick milk, *i.e.*, it was used to add to the food of children in order to cause sleep; the last syllable perhaps fr. "ve-

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

rura," true, *i.e.*, true sleep-producer. "Somniferum," fr. Lat. "somnus," sleep, & "ferre," to bring, *i.e.*, sleep-producing.—*Constit.: Capsules:* Opium bases combined with meconic acid. Very small quantities are present, however, at all events not over 0.12% alkaloids or 0.03% morphine (in the seedless capsules).—*Seed:* Fixed oil; albuminoids.—*Uses: Capsules:* Nar.; Hypn.; Sed., instead of opium.—*Extern.*, in decoct. as demulcent in sprains, bruises, &c.—*Seeds:* Pharmaceutically for preparing emulsions (5–15:100). Only the white seeds should be used for this purpose; the bluish-black seeds are used in baking.—*Doses:* Alcoh. extr., 1–4 grains (0.06–0.25 Gm.); *Max. D.* 8 grains (0.5 Gm.) single, 30 grains (2 Gm.) daily.—Fld. extr., 10–30 ♏ (0.6–2 Cc.).

Papaver Rhoeas.—see **Rhoeados**

Papaverine Merck.—Pure, cryst. (40

Alkaloid fr. opium.—Discovered in 1848 by G. Merck.—$C_{20}H_{21}NO_4$, or, $(OCH_3)_2C_6H_3.CH_2.NC_5H_2.C_4H_3(OCH_3)_2$.—Wh. prisms.—*Sol.* A., E., C., & hot B.; sl. cold B.—*Melt.* 147° C.—Nar.; Sed.—*Uses:* Diar. of children.—*Dose* (for children) $^1/_{12}$–$^1/_8$ grain (0.005–0.02 Gm.) several t. p. d.

Papaverine Hydrochloride Merck (50

$C_{20}H_{21}NO_4.HCl$.—Colorl. cryst., or white, cryst. powd.—*Sol.* W.—*Dose* (children) $^1/_{12}$–$^3/_4$ grain (0.005–0.05 Gm.) 3–4 t. p. d.

Papaw

(Carica; Pawpaw; Papaya; Melon Tree; Mamaeiro).—Lvs. of Carica Papaya, L. Passifloreæ. Papayaceæ.—*Habit.:* Tropical America & Asia.—*Etymol.:* "Carica," Lat. name for fig, fr. "Caria," in Asia Minor (its habitat); "papaya," fr. "papaia-maram," the Malabar name for the plant.—*Constit.:* Papain (vegetable ferment); carpaine ($C_{14}H_{25}NO_2$); carposide (a glucoside).—*Uses:* Digestant (like pepsin).—*Techn.*, manuf. carpaine & papaine.

Papaw Juice Merck.—Dry (7

Fr. fruit Carica Papaya, L.—Proteolytic (1:80).—*Uses:* As of pepsin in dyspep.; & as solv. false membr.—*Dose* 8–15 grains (0.5–1 Gm.) with sod. bicarbonate.

Papaya.—see **Papaw**

Papayotin.—see **Papain**

Papers, Test.—see under **Azolitmin, Brazilin, Congo Red, Dahlia, Griess, Hematoxylin,** &c.

Para-acetanisidin.—see **Methacetin**

Para-acetphenetidin.—see **Acetphenetidin; Phenacetin**

Para-amidophenol.—see **Amidophenol, Para-**

Para-aminobenzoyldiethylaminoethanol Hydrochloride.—see **Novocaine**

Para-aminotoluene (or, *-ol*).—see **Toluidine, Para-**

Paracaxi Beans.—see **Impigem**

Parachloral.—see **Chloral, Meta-**

Parachloralose Merck (135

(Betachloralose).—By-product of chloralose.—$C_8H_{11}Cl_3O_6$.—Wh. cryst.—*Sol.* A.; sl. W.—*Melt.* 227–229° C.—*Uses:* First considered hypnotic, but U. Mosso says it is emetic.

Parachloronitrobenzene (or, *-ol*).—see **Chloronitrobenzene, Para-**

Para-Coto Bark.—see **Coto, Para-**

Paracotoin Merck.—Highest Purity, free fr. Leucotin (700

Fr. Para-coto bark (source unknown).—$C_{12}H_8O_4$.—Yellow, cryst. substc.—*Sol.* E., A., C., B.; sl. W.—*Melt.* 149–151° C.—*Uses, &c.* As of true cotoin; only half as strong as latter.

do. Merck.—Commercial (50

Fr. Para-coto bark; mixt. of paracotoin, methylhydrocotoin, & methylprotocotoin. — Yellow cryst.—*Sol.* E., C., A.

Paracresalol.—see **Cresalol, Para-**

Para Cress.—see **Spilanthes**

Paracuminaldehyde.—see **Cuminol**

Paracymene.—see **Cymene**

Paradiaminobenzene (or, *-ol*). — see **Phenylenediamine, Para-**

Paradiaminodiphenyl.—see **Benzidine**

Paradibromobenzene (or, *-ol*).—see **Benzene, Dibromo-**

Paradichlorbenzene (or, *-ol*). — see **Benzene, Dichloro-, Para-**

Paradiethoxyethenyldiphenylamine Hydrochloride.—see **Holocaine Hydrochloride**

Paradimethylbenzene (or, *-ol*).—see **Xylene, Para-**

Paradioxybenzene (or, *-ol*). —see **Hydroquinone**

Paradise Seed.—see **Amomum Melegueta**

Paraethoxyformanilide.—see **Formyl-phenetidin**

Paraethoxyphenylsuccinimide.—see **Pyrantin**

Paraethoxyphenylurea.—see **Sucrol**

Paraffin Merck.—Hard (1

(Paraffin Wax; Ceresin).—Mixt. of members of paraffin series of hydrocarbons, chiefly $C_{22}H_4$, $C_{24}H_{50}$, & $C_{27}H_{56}$, obtained by treating ozokerite with sulphuric acid, & then bleaching the resulting product w. the residues fr. the manuf. of ferri- & ferro-cyanides.—Wh., odorl. mass.—*Sol.* E., C., benzin, carbon disulphide, oils, turpentine.—Sp. Gr. 0.877.—*Solidif.* 74–76° C.—*Misc.*, w. aid of heat w. wax, spermaceti, oils, &c.—*Uses:* Pharm. as oint. base not prone to rancidity; also prepar. bandages by impregnating the rolls w. melted paraffin; also manuf.

paraffin-paper (so-called wax-paper), in manuf. candles, as size, fixing drawings, &c., on muslin, prepar. so-called starch polish; water-proofing wood, cork, paper, & tissues; manuf. varnishes; in brewing & distilling for impregnating wooden vessels, in lubricants, preserving meat & eggs, & particularly as a succedaneum for wax.

Paraffin Merck (1
Solidif. 52–53° C.

do. Merck (1
Solidif. 46–48° C.

do. Merck.—Soft (1
Solidif. 40–42° C.—*N. B.:* The name is somet. applied to Petrolatum, which see.

Paraffin, Liquid or *Oil.*—see **Oil Paraffin**

Paraform.
Paraformaldehyde. } —see **Trioxymethylene**

Paraform-collodion.—see **Collodion, Paraform-**

Paraglobulin.—see **Globulin, Para-**

Paraguay Tea.—see **Maté**

Paraiodaniline.—see **Iodaniline, Para-**

Paraiodanisol.—see **Isoform**

Paraiodophenol.—Cryst.
(Phenol Iodide, Para-).—C_6H_4OHI.—Colorl. or reddish cryst.; charact. odor.—*Melt.*, abt. 92° C.—*Uses: Extern.*, pure or w. glycerin as appl. in diphth., & in lupus, cancer; & intrauterine treatment of leucor.; indurations, uterine subinvolution, & ringworm of scalp.—*Caut.* The designation "Phenol Iodide," or more properly "Iodized Phenol," is also applied to a solut. of 1 part iodine in 4 parts phenol, used in whoop.-cough, & given in doses of 1 teaspoonf. every 3 hrs., of a 1:60 solut.

Paraldehyde Merck.—Highest purity, medicinal (2
(Polymer of Acetic Aldehyde).—Fr. aldehyde, by hydrochl., or sulphuric, acid w. sulphur dioxide or zinc chloride.—$C_6H_{12}O_3$, or, $(CH_3.CHO)_3$.—Colorl. liq.; cryst. below 10.5° C.; peculiar, arom., suffoc. odor & warm taste.—Sp. Gr. 0.995–0.998 at 15° C.—*Sol.* A., E., oils, C.; 10 W.—*Boil.* 121–125° C.—Hypn.; Antispasm.; Stim.—*Uses:* Insom. & as antid. for morphine, & to obviate dangers of chloroform narcosis. Where small bulk is required, give in equal vol. expressed oil almonds.—*Dose* 30–90 ♏ (2–6 Cc.) well dil., w. elixir, sweet water, brandy, or rum.—*Max. D.* 150 ♏ (10 Cc.).

Note.—Physicians are impelled to prescribe this paraldehyde because of its uniformly excellent quality and constant conformity to the strictest standards of purity.

Parallylanisoïl.—see **Anethol, Solid**

Parameria vulneraria.—see **Tagulaway**

Paramethoxybenzaldehyde.—see **Aldehyde, Anisic**

Paramethoxypropenylbenzene (or, *-ol*).—see **Anethol, Solid**

Paramethylphenol.—see **Cresol, Para-**

Paramethylpropylbenzene (or, *-ol*).—see **Cymene**

Paramide Merck (450
(Triimide; Mellitimide; Mellimide).—$C_{12}H_3N_3O_6$, or, $C_6([CO]_2NH)_3$.—Wh. mass.—*Sol.* H_2SO_4.

Paramidoazobenzene (or, *-ol*).—see **Amidoazobenzene**

Paramidobenzoic-acid Ethyl Ester.—see **Anaesthesin**

Paramidodimethylaniline.—see **Dimethylparaphenylenediamine**

Paramidodiphenylimide.—see **Amidoazobenzene**

Paramidometaoxybenzoic-acid Methyl Ester.—see **Orthoform**

Paramonobromotoluene.—see **Toluene, Bromo-, Para-**

Paramonochlorotoluene (or, *-ol*).—see **Toluene, Chloro-**

Paramorphine.—see **Thebaine**

Paranaphthalene.—see **Anthracene**

Paranephrin Merck.—Sterilized solution, 1:1000
Substc. fr. suprarenal capsules obt. without aid of acids or alkalies; fully represents the unchanged, blood-pressure-raising principle of the capsules, while free fr. even traces of albumoses & peptones.—Yellow, friable, v. hygrosc. mass.—*Sol.* W., methyl A.; insol. absol. A., E., benzin.—Supplied as a 1:1000 aqu. sterilized solut. containing 0.6% sod. chloride but no chloretone.—Hemost.—*Uses: Intern.*, for the suppression of intestinal hemor. occur. in the course of typhoid, also in gastric hemor. & scarlatinous forms of hemorrhagic nephritis.—*Doses:* 8–20 ♏ (0.5–1.3 Cc.) at intervals of 4 hours; children, 2–4 ♏ (0.12–0.25 Cc.).—Used externally alone or in combination with cocaine hydrochloride in general surgery, gynecol., urology, rhinol., laryngol., ophthalmol., dentistry, &c.—Marketed only in bots. ea. cont'g 150 ♏ (10 Cc.) solut.

Paranitraniline.—see **Nitraniline, Para-**

Paranitrobenzaldehyde.—see **Nitrobenzaldehyde, Para-**

Paranitrophenol.—see **Nitrophenol, Para-**

Paranitrosodimethylaniline.—see **Nitrosodimethylaniline**

Paranitrosophenol.—see **Nitrosophenol, Para-**

Paranitrotoluene (or, *-ol*).—see **Nitrotoluene, Para-**

Paraoxybenzoicaldehyde.—see **Oxybenzaldehyde, Para-**

Paraoxymetamethoxyallylbenzene.—see **Eugenol**

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Paraoxymethylacetanilide.—see **Methacetin**

Paraoxyquinone.—see **Phorone**

Paraoxytoluene.—see **Cresol, Para-**

Parapeptone.—see **Syntonin**

Paraphenetolcarbamide.—see **Sucrol**

Paraphtalein.—see **Phenolphtalein**

Parapropylmetacresol.—see **Thymol**

Paratoluic Nitrile.—see **Toluic Nitrile, Para-**

Paratolylacetamide.—see **Acetparatoluide**

Paratolyldimethylpyrazole.—see **Tolypyrine**

Paratolyldimethylpyrazole Salicylate.—see **Tolysal**

Paraxylene (or, *-ol*).—see **Xylene, Para-**

Paraxylenol.—see **Xylenol, Para-**

Paraxylenolsalol.—see **Xylenol (Para-) Salicylate**

Pareira.—*U. S. P.*

(Pareira Brava; Abutua).—Dried root of Chondrodendron tomentosum, Ruiz et Pavon. Menispermaceæ. — *Habit.:* Brazil; Peru. — *Etymol.:* Portuguese "pareira brava," wild vine. Grk. "chondros," granule, & "dendron," tree, referring to the warty protuberances on the bark. Lat. "tomentosus," woolly, *i.e.*, the under side of the lvs. has gray hairs.—*Constit.:* Buxine (pelosine, bebeerine), $C_{19}H_{21}NO_3$; tannin.—Diur.; Emmen.; Febrif.; Aper.—*Uses:* Gonor., gleet, pyelitis, chron. cystitis, dropsy; leucor., rheumat., &c.—*Doses:* 30–60 grains (2–4 Gm.).—Fld. extr., 30–60 ♏ (2–4 Cc.).

Parietaria

(Wall Pellitory; Wallwort).—Herb of Parietaria officinalis, L. Urticaceæ.—*Habit.:* Europe.—*Etymol.:* Lat. "paries," wall, referring to its habit of growing on old walls.—*Constit.:* Bitter prin.; tannin.—Diur.; Astring.; Lithontriptic.

Parillin.—see **Smilacin**

Paris Blue.—see **Iron Ferrocyanide**

Paris Green.—see **Copper Acetoarsenite; Methyl Green**

Paris Violet.—see **Gentian Violet BBB**

Paris Yellow.—see **Lead Chromate, Precipitated**

Parisol

Condens. prod. of formaldehyde & saponified naphthaquinones. — Clear liq.; pleas. odor. — *Misc.*, eas. w. W. — Bactericide; Antisep.; Disinf. — *Uses:* Purulent wounds, vaginal & uterine catarrh, &c.—*Appl.* 0.3–5% solut.

Parme Violet Merck (10

(Dimethylphenylammoniumchloride-dioxyphenoxazincarbonic-acid Methyl Ester). — Brown, lustr., cryst. powd., or paste. — *Sol.*, eas. in W. & A., w. bluish-violet color.

Parodyne.—see **Antipyrine**

Parotid Gland Merck.—Dried, powder (80

Fr. parotid gland of sheep. — 1 part=10 parts fresh gland.—*Uses:* Ovarial diseases, dysmen. & pelvic exudates.—*Dose* 2 grains (0.12 Gm.) 3–6 t. p. d.

Parsley.—see **Petroselinum**

Parsley Camphor.—see **Apiol, Cryst., White**

Parsley, Marsh.—see **Selinum**

Parthenium

(Feverfew; Featherfew; Herba Matricaria).—Herb of Pyrethrum (Chrysanthemum) Parthenium, Smith. Compositæ.—*Habit.:* Europe; cultiv. in U. S.—*Etymol.:* Grk. "parthenios," maidenly, pure. "Pyrethrum," fr. Grk. "pyr," fire, & "athros," strong, *i.e.*, parts of the plant have a burning taste.—*Constit.:* Volat. oil; bitter principle.—Tonic; Carmin.; Emmen.; Vermif.; Stim.—*Uses: Extern.*, in severe colicky pains, &c.—*Dose:* Fld. extr., 30–60 ♏ (2–4 Cc.).

Partridge Berry.—see **Mitchella**

Parvoline Merck.—Fr. Cinchonine (275

(Beta-parvoline).—Homologue of pyridine.—Fr. cinchonine by distil. w. KOH.—$C_9H_{13}N$.—*Boil.* 220° C.

Pasque Flower.—see **Pulsatilla**

Passiflora

(Passion Flower; May Pops).—Flowers & root of Passiflora incarnata, L. Passifloraceæ.—*Habit.:* Southeastern U. S.—*Etymol.:* Lat. "flos passionis," a translation of "fior della passion," the flower of the passion, the Italian name early applied to the flower fr. a fancied resemblance of its parts to the implements of the crucifixion. "Incarnata," Lat. for flesh-colored, referring to the color of the flower.—*Constit.:* Alkaloid (in very small quantity).—Nar.; Anod.—*Uses:* Root is employed by Eclectics in neural., sleeplessness, dysmenor., & diar.; also used in epilepsy, tetanus, erysipelas, syphilis, &c.—*Dose: Root:* Fld. extr., 10–30 ♏ (0.6–2 Cc.).

Passion Flower.—see **Passiflora**

Patchouli

Lvs. of Pogostemon Patchouly, Pelletier, Labiatæ.—*Habit.:* East Indies; West Indies.—*Etymol.:* "Pogostemon" fr. Grk. "pogon," beard, & "stemon," thread, or stamen. "Patchouli" is the East Indian name (Bengal) of the leaves.—*Constit.:* Volat. oil.—*Uses:* In perfumery.

Pauçine Hydrochloride Merck (1000

Fr. pauçine, an alkaloid fr. seeds of Pentaclethra macrophylla (Owalá Grains), found in the Congo States.—$C_{27}H_{39}N_5O_5.2HCl+6H_2O$. — Wh. needles.—*Sol.*, sl. W.—*Melt.* 245–247° C.—Physiologically inactive.

Paullinia Pinnata.—see **Timbó**

Paullinia Sorbilis.—see **Guarana**

Paullinia Thalictrifolia.—see **Quamacai**

Pavy's Solution.—For glucose

(1) 120 Cc. Fehling's solut., 300 Cc. ammonia (Sp. Gr. 0.880), 100 Cc. 10% solut. NaOH, & water, to make 1000 Cc.—(2) Make cold solut. 21.6 Gm. Rochelle salt & 18.4 Gm. NaOH (or 25.8 Gm. KOH) in abt. 300 Cc. dist. water; add to solut. 4.157 Gm. $CuSO_4$ in abt. 200 Cc. dist. water, then add 300 Cc. ammonia (Sp. Gr. 0.880) & enough water to make 1000 Cc.—10 Cc. solut. (=1 Cc. Fehling's solut.) = 0.005 Gm. glucose.

Pear Oil.—see **Amyl Acetate**

Pearlash.—see **Potassium Carbonate, Crude**

Pearl White.—see **Bismuth Oxychloride**

Pectin Sugar.
Peclinose. } —see **Arabinose**

Pelletierine Merck (1750

(Punicine).—Mixture of pelletierine, $C_8H_{15}NO$, & isopelletierine, $C_8H_{15}NO$, both alkaloids, fr. root-bark Punica Granatum, L. (Pomegranate).—Brown, oily liq.—Sp. Gr. 0.988 at 0° C.—*Sol.* A., C.—*Boil.*, abt. 195° C.—*Uses:* Possesses teniafuge properties, but usually used in form of sulphate or tannate.

Pelletierine Benzoate Merck (1500

(Punicine Benzoate).—Brown, visc. masses.—*Sol.* A.

Pelletierine Hydrobromide Merck (1500

(Punicine Hydrobromide).—Brown, visc. masses.—*Sol.* W., A.—*Uses:* Paralysis of ocular muscle having its origin in the 3d & 6th pair of nerves.—*Dose* 2 grains (0.12 Gm.) 4 t. p. d.

Pelletierine Hydrochloride Merck (1500

(Punicine Hydrochloride).—Brown, syrupy mass.—*Sol.* W.

Pelletierine Nitrate Merck (1500

(Punicine Nitrate).—Brown, syrupy mass.—*Sol.* W.

Pelletierine Salicylate Merck (1500

(Punicine Salicylate).—Brown, extract-like mass.—*Sol.* A.

Pelletierine Sulphate Merck.—Medicinal (1018

(Punicine Sulphate).—Free fr. pseudopunicine.—Brown, syrupy liq.; somet. cryst. mass.—*Sol.* W., A.—Anthelmintic.—*Dose* 6 grains (0.36 Gm.) w. 8 grains (0.5 Gm.) tannin in 1 fl. oz. (30 Cc.) of water. Give brisk cathartic half an hour later.—*Max. D.* 8 grains (0.5 Gm.) single & p. d.—*Antid.*, alcoh. liquids, mustard plasters, friction.

Pelletierine Tannate Merck.—Medicinal (228

(Punicine Tannate).—Mixt. of punicine, isopunicine, methylpunicine, & pseudopunicine tannates.—Grayish-brown, hygros., tastel. powd.—*Sol.* 80 A., 700 W. at 15° C.; (235 W., 12.6 A., 300 E., at 25° C., U. S. P.); also in warm, dil. acids; insol. C.—Anthelmintic.—*Uses:* Principal & most efficacious salt of pelletierine.—*Dose* 3–8 grains (0.2–0.5 Gm.) in 1 oz. (30 Cc.) W., followed in half an hour by cathartic.

Note.—This article is specially prepared with a view to securing proper teniafuge action, & it is most satisfactory to use, because it is both efficient & tasteless.

Pelletierine Valerate Merck (1500

Brown, extract-like mass.—*Sol.* A.

Pellet's Solution.—For glucose

Solut. 68.7 Gm. cryst. copper sulph., 200 Gm. sod. chloride, 100 Gm. anhydr. sod. carbonate, & 7 Gm. ammon. chloride, in W. to 1000 Cc.—1 Cc. solut. = 0.005 Gm. glucose.

Pellitory.—see **Pyrethrum**

Pellote.—see **Anhalonium**

Pellotine Hydrochloride Merck (2500

Salt of alkaloid fr. Anhalonium Williamsii, (Pellote), a Mexican Cactaceæ.—$C_{11}H_{13}NO(OCH_3)_2.HCl$.—Colorl. cryst.—*Sol.* W.—Hypn.—*Uses:* Psychic disturbances.—*Dose:* Subcut., $^1/_6$–$^1/_3$ grain (0.01–0.02 Gm.).—*Max. D., Intern.*, $^3/_4$–$1^1/_3$ (0.05–0.08 Gm.); in maniacal excitement, 1 grain (0.06 Gm.).

Pelosine.—see **Bebeerine**

Penghawar Djambi (8

(Golden Moss).—Chaffy hairs fr. base of stipes of Cibotium Baromez. J. E. Smith. Filicineæ. Cyatheaceæ.—*Habit.:* Sunda Isles.—*Etymol.:* "Penghawar Djambi" is the Malayan name of the drug.—Long, silky, yellow or brownish, very soft hairs.—*Uses:* Hemostat., & for styptic bandages.

Pennyroyal.—see **Hedeoma**

Pentadecyltolylketone Merck (650

(Tolylpentadecylketone).—$CH_3.C_6H_4.CO.C_{15}H_{31}$.—Yellowish cryst.—*Sol.*, v. sl. cold A.—*Melt.* 60° C.—*Boil.* 262° C. at 15 Mm.—The fused & solidified substance emits a bluish-green light on breaking or attrition.—*Uses:* In investigations with cathode rays.

Pental Merck (30

(Trimethylethylene; Betaisoamylene).—Fr. amylene hydrate, by water w. sulphuric acid & heat.—C_5H_{10}, or, $(CH_3)_2.C:CH.CH_3$.—Colorl., inflam. liq.—Sp. Gr. 0.6783 at 0° C.—*Misc.* A., E., C.; insol. W.—*Boil.* 38° C.—Anesthetic.—*Uses:* Minor surg. cases, tooth-extraction, &c.—*Dose* 150–300 ♏ (abt. 10–20 Cc.) by inhalation.—See also Amylene.

Pentamethylenediamine (2000

(Cadaverine; Animal Coniine).—Ptomaine formed in albumen by putrefaction.—$C_5H_{14}N_2$, or, $NH_2.CH_2.CH_2.CH_2.CH_2.CH_2.NH_2$.—Syrupy liq.; odor of piperidine & spermine; fumes & attracts carbon dioxide on expos.—*Sol.* W., A.; sl. in E.—*Boil.* 178–179° C.—*Remarks:* Prod. of

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

the comma bacilli; always found in cholera discharges; can be converted into piperidine.—*Caut.* Keep fr. air.

Pentamethylenediamine Hydrochloride Merck.—Cryst. (1800

(Cadaverine Hydrochloride).—$C_5H_{14}N_2.2HCl$.—Colorl. to brownish need.—*Sol.* W., A.—*Caut.* Poison!

Pentane Merck (10

(Amyl Hydride).—Fr. coal-tar or petroleum.—C_5H_{12}, or, $CH_3.CH_2.CH_2.CH_2.CH_3$.—Colorl., inflam. liq.; pleas., fruity odor.—Sp. Gr. 0.6337 at 15° C.—*Sol.* A., E.—*Boil.* 35–40° C.—*Uses:* Proposed as anesthetic.

Pentaphylli.—see **Potentilla**

Peony.—see **Pæonia**

Pepo.—*U. S. P.*

(Pumpkin Seed).—Ripe seed of Cucurbita Pepo, L. Cucurbitaceæ. — *Habit.:* Southern Asia; Europe; America.—*Etymol.:* "Cucurbita," fr. Lat. "cucumis, cucuma," a hollowed-out vessel, fr. the Celtic "kukh," hollow; & "orbis," a ring, or round, referring to the spherical form of the fruit. "Pepo," fr. Grk. "pepon," pumpkin, meaning ripe, mellow, *i.e.*, not eaten till ripe.—*Constit.:* Fixed oil; acrid resin; proteids (myosin & vitellin); sugar.—*Uses:* Teniafuge; Vermifuge.—*Dose* 1–2 oz. (30–60 Gm.).—Fld. extr., 4 fl. dr. (15 Cc.).

Pepper.—see **Piper**

Peppermint.—*U. S. P.*

(Brandy Mint; Lamb Mint).—Dried lvs. & flowering tops of Mentha piperita, L. Labiatæ.—*Habit.:* Asia; Europe; North America; cultiv. in gardens.—*Etymol.:* "Mentha," fr. Grk. "Mintha," daughter of Cocytus; she was supposed to have been changed into this plant by Proserpine in a fit of jealousy. "Piperita" has reference to the "peppery" or pungent qualities of the plant.—*Constit.:* Volat. oil; tannin; resin; gum.—Arom.; Carmin.; Nervine; Antispasm.—*Uses:* Colic, flatulence, cholera, & diar.—*Dose* 15–60 grains (1–4 Gm.) in powd.

Peppermint Camphor.—see **Menthol**

Pepsin Merck.—*U. S. P.*—Gran., scales, or powd. (6

Proteolytic ferment or enzyme fr. glandular layer of fresh stomach of hog; diss. 3,000 times its wt. of albumen (freshly coagulated & disintegrated egg-wh.).—Wh., or yellowish-wh., transp. or transluc. scales, grains, or amorph., hygros. powd.; mild acid or saline taste.—*Sol.* 50 W., with opalescence; dil. hydrochl. acid; insol. A., E., C.—Proteolytic.—*Uses: Intern.*, dyspep.; peptonizing milk for invalids; digesting false membr. (in diphth).—*Extern.*, digest. gangr. tissue fr. unhealthy wounds; for this purpose the stronger grades are used. Large doses may be taken w. impunity.—*Dose* 1–15 grains (0.06–1 Gm.), or more, 3 t. p. d. in solut. or powd.—*Incomp.*, alcohol, tannin, alkali carbonates, or chlorides.

Note.—This article always conforms in every respect with the U. S. P. requirements, & is hence fully to be depended upon where an active & reliable preparation is necessary.

Pepsin Merck.—*Ph. G. III.*—Scales (6

Sol. W.

do. Merck.—*Ph. G. IV.*—Powder, soluble (4

1 part diss. 100 parts coagulated egg albumen.

do. Merck.—Saccharated, 1:300 (3

Pepsin reduced w. sugar of milk until it digests 300 times its own weight of albumen.—*Dose* 60–120 grains (4–8 Gm.).

Pepsin Aromatic.—*N. F.*

Sacch. pepsin 97 Gm., arom. fluid extr., 6 Cc., tart. acid, 1.5 Gm., & sod. chlor., 1.5 Gm.

Peptone Merck.—From Albumen.—Dried (15

Fr. white of egg by pepsin w. a sm. quant. of hydrochl. acid at 38–40° C.—Wh., to light yellow powd.—*Sol.* W.—Nutrient.—*Uses:* Food in some forms of dyspepsia.—*Incomp.*, alcohol, tannin, & many metallic salts.

do.—From Blood Fibrin

Prepared by digesting blood fibrin with pepsin.

do. Merck.—From Meat.—Dried (5

Pancreatic peptone fr. beef.—Light-brown powd.—*Sol.* W.—*Uses, &c.:* As in the following; also specially recommended for bacteriological work.

do. Merck.—From Meat.—Soft (4

Albuminoid obtained by pancreatic digestion of beef, & capable of direct assimilation by the animal organism.—*Uses:* Both the dry & soft peptones are given internally, as well as by enema, in malnutrition, *e.g.*, in dyspep., gastric ulcer, &c.; also prepar. nutrient media for bacteriological work.

Peptone-Pepsin Phosphate Merck (10

Beef peptone with phosphoric acid.

Perchlorethane.—see **Carbon Trichloride**

Perchlorethylene.—see **Carbon Dichloride**

Perchloromethane.—see **Carbon Tetrachloride**

Pereirine Merck.—Pure (175

Alkaloid found, together w. geissospermine, in bark of Geissospermum Vellosii, Alem. (Pao Pereiro Bark).—$C_{19}H_{24}N_2O$.—Brownish, amorphous powd.—*Sol.* A., E., C.—*Melt.* 124° C.—Antiper.; Antipyr.—*Uses:* Remit. & intermit. fevers inst. of quinine.—*Dose* 8 grains (0.5 Gm.).

Pereirine Hydrochloride Merck (175

$C_{19}H_{24}N_2O.HCl$.—Brown, amorph. powd.—*Sol.* W., A.—*Dose* 8–30 grains (0.5–2 Gm.).

Pereiro.—see **Pao-Pereira**

Perenyi's Chromo-nitric Acid

0.15 Gm. chromic acid, 30 Cc. W., 30 Cc. alcohol, & 40 Cc. 10% nitric acid.—*Uses:* For fixing delicate vegetable & animal specimens.

Perezon. } —see **Acid Pipitzahoic**
Perezol. }

Perhydrol (16

(Hydrogen Peroxide Merck).—Abt. 30% by wt. (or 100% by vol.) H_2O_2.—Perfectly pure solut. H_2O_2.—Sp. Gr. abt. 1.115 at 15° C.—Preferable to the 3% H_2O_2 for medicinal purposes.—*Misc.*, all proport. w. W. or A.—Disinfect.; Antisep.; Deod.; Styptic; Antizym.—*Uses:* Chiefly extern., in diphth., sore throat, wounds, gonor., abscesses, &c.—*Intern.*, in flatulence, gastric affect., phthisical sweats, &c.—*Hypoderm.* (0.2% solut.), in cyanide poisoning.—*Dose* of 3% H_2O_2 (Perhydrol 1, water 9) 1–4 fl. drs. (4–15 Cc.), well dil.—*Extern.*, in 2–10% solut.; 3% solut. is as powerful antiseptically as a 1:1000 corros. sublim. solut.; also in eye lotions & eye drops (as 0.3% solut.), & in gynecol. (3% solut., & tampons moistened w. a 12% solut.); also in dentistry for bleaching teeth & as inject. (10% solut.) in alveolar pyorrhea. Counteracts poisonousness of diphth. & tetanus toxins, & also of abrin.—*Incomp.*, alkalies, albumen, ammonia, arsenous salts, balsam Peru, carbolic acid, charcoal, chlorides, chlorine water, citrates of alkalies, ferric salts, glycerin, gold salts, hydrocyanic acid, hypophosphites, iodides, lime-water, manganese dioxide, mercurous salts, nitrates, potassium bromide, permanganates, sulphates, solution chlorinated soda, tartrates, tinctures.—*Caut.* Keep cool.

Perhydrol.—Reagent (16

(Hydrogen Peroxide Merck).—30% by wt. H_2O_2.—Sp. Gr. 1.115–1.119.—Liq. acid to litmus paper (due ent'ly to high H_2O_2 cont.).—*Tests:* (H_2SO_4) 1 Cc. + 20 Cc. H_2O + 1 Cc. HCl (sp. gr. 1.124); boil; add solut. $BaCl_2$ – no ppt. within 12 hrs.—(*Res.* [H_2SO_4; H_3PO_4, &c.]) heat 10 Cc. on W.-bath – none wghble.—($H_2C_2O_4$) 2 Cc. + 10 Cc. H_2O + solut. $CaCl_2$ – no react.—(*HCl*) 1 Cc. + 20 Cc. H_2O + 1 Cc. HNO_3 (sp. gr. 1.153) + solut. $AgNO_3$ – no turb.—(*HF*) concentrate 10 Cc. + few drops solut. NaOH on W.-bath; transf. to watch-glass, & dry on latter; pour on res. conc. H_2SO_4; let stand 2–3 hrs. in warm place – glass not etched.—(H_3PO_4) concentrate 5 Cc. on W.-bath; diss. res. in 3 Cc. H_2O; add 1 Cc. magnesia mixt. + 3 Cc. NH_4OH (sp. gr. 0.96) – no ppt. within 12 hrs.—*Uses:* Partic. desirable oxidizer in analysis, *e.g.*, in oxidiz. sulphur in sulphides, sulphurous & hyposulphurous acids, of tin & the metals of the iron group, chromic acid, nitric acid, formaldehyde; analysis of MnO_2, conversion of iodates & bromates into iodides & bromides. Determ. HCl, HI, & HNO_3; standardizing permanganate soluts.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Perhydrol Zinc.—see **Zinc-Perhydrol**

Periodothalline Sulphate.—see **Thalline Periodide**

Periploca

(Milk Vine; Climbing Dogs-bane; Scammony Senna; Smyrna Scammony).—Herb of Periploca græca, L. Asclepiadaceæ.—*Habit.:* Europe (Greece; Caucasus).—*Etymol.:* Grk. "peri," around, & "plekein," to wind about, referring to the twining habit of the plant.—*Constit.:* Periplocin (glucoside).—*Uses:* Cardiac Tonic (properties like those of digitalis).—*Dose:* Fld. extr. (of bark & stems), 5–10 ♏ (0.3–0.6 Cc.).

Periplocin Merck (1250

Glucoside fr. bark of Periploca græca, L. (Milk Vine).—Yellow, amorph. powd.—*Sol.* A., W.—Cardiac Tonic.—*Uses:* Cardiac diseases.—*Max. D.*, hypoderm., $^1/_{60}$ grain (0.001 Gm.) dissolved in physiolog. salt solut. The injections may be given daily, or at intervals of 2–3 days.

Pernambuco

(Fernambuco; Brazil Wood; Nicaragua Wood; Lima Wood; Red-Wood).—Wood Cæsalpinia echinata, Lam. Cæsalpiniaceæ.—*Habit.:* Tropical America (Brazil).—*Constit.:* Brazilin, $C_{16}H_{14}O_5$.—*Uses:* Techn., in dyeing red, & in manuf. of a red lake pigment.—As indicator (in form of decoct.) in volumetr. analysis (alkalies = purplish-red; acids = yellow.)

Pernambuco Paper.—see **Brazilin Paper**

Peronin Merck (500

(Benzylmorphine Hydrochloride).—$C_{17}H_{18}NO_2$.-$O.C_6H_5.CH_2.HCl$.—Wh. powd.—*Sol.* W.; dil. A.; insol. E., C.—Narcotic; somewh. weaker than morphine, but free fr. the disturbing by-effects of the latter.—*Uses:* Succedaneum for morphine, particularly where latter contraindicated, or where idiosyncrasy exists. Also to relieve the annoying cough in phthisis, & in bronchial catarrh, asthmatic affections, as well as rheumatic & neuralgic pains.—*Dose* $^1/_3$–$^2/_3$ grain (0.02–0.04 Gm.).—*Max. D.* 1 grain (0.06 Gm.) single; 3 grains (0.2 Gm.) p. d.

Perosmic Anhydride.—see **(Acid) Osmic Anhydride**

Persian Red.—see **Lead Chromate, Basic**

Persimmon.—see **Diospyros**

Persoz' Reagent.—For silk & wool

Solut. 10 Gm. zinc chloride in 10 Cc. W., w. 2 Gm. zinc oxide added & shaken w. solut.—Silk dissolves on warming w. solut. to 45° C.; wool does not.

Pestilence Weed.—see **Petasites**

Petasites

(Pestilence Weed; Umbrella-leaf; Bog Rhubarb).—Herb & root of Petasites vulgaris, Desf. Com-

positæ. Synantheræ.—*Habit.:* Europe; northern Asia; adv. in U. S.—*Etymol.:* "Petasites," umbrella-plant, fr. Grk. "petasos," a hat with a big brim.—*Constit.:* Root contains volat. oil.—Aper.; Diaphor.; Emmen.; Antispasm.

Petrolatum.—*U. S. P.*

(Soft Petroleum Ointment [Vaseline; Saxoline; Cosmoline, &c., are proprietary brands]).—The more or less purified residue fr. the distill. of petroleum.—Mixt. various hydrocarbons, chiefly of the methane series, w. high carbon content.—C_nH_{2n+2}.—Light yellowish or yellow semi-solid; oint. consistence.—Sp. Gr. 0.820–0.850 at 60° C.—*Sol.* E., C., benzin, CS_2, B., oils; sl. A.; insol. W., G.—*Melt.* 45–48° C.—Antisep.; Emollient.—*Uses: Extern.*, chapped hands, excoriated surf.; oint. base, &c.—*Techn.*, in modeling clay, as leather grease, lubricating firearms & machinery, shoe polish, greasing hoofs, rust preventative, soap, putz pomade, &c.

do.—Liquid.—*U. S. P.*

The purified residue, a mixt. of hydrocarbons chiefly of the methane series, fr. the distillation of petroleum; liquid at ord. temp.—Colorl. to sl. yellowish, transp. liq.; odor of petroleum when warm.—Sp. Gr. 0.870–0.940 at 25° C.—*Sol.* E., C.; carbon disulphide, B., benzin, oils, boil. A.; insol. W.; scarcely sol. cold or hot A.—Emollient; Antisep.—*Uses: Intern.*, chronic bronch. catarrh.—*Extern.*, as spray in dis. of throat, larynx, bronch. tubes, & nasal passages. Vehicle for antiseptic remed.—*Dose* 60–180 ♏ (4–12 Cc.).

do.—Veterinary

Unfiltered, or imperfectly filtered, petroleum residue.—Dark-yellow, semi-solid mass.—Antisep.; Emollient.—*Uses: Veter.*, as oint. base.

do.—White.—*U. S. P.*

Yellow petrolatum, deprived of color by bleaching (Wh. Vaseline, Albolene, &c., are proprietary brands).—Mixt. various hydrocarbons w. high carbon content.—C_nH_{2n+2}.—Wh. semi-solid; oint. consistence.—*Sol.*, eas. benzin, C., E., CS_2, oils; sl. A.; insol. W., G.—*Melt.* 40–45° C.—Very stable, hence used as oint. base & cosmetic; also in extracting perfumes, modeling clay, softening leather, greasing firearms, lubricating machinery, shoe polish, soaps, rust preventative, putz pomades, &c.

Petroleum.—Crude

(Crude Mineral Oil; Rock Oil; Seneca Oil).—Dark-yellow, brownish, or greenish-black, oily liq.—*Sol.* E., C.—Antisep.—*Uses: Extern.*, skin dis.

Petroleum Saponated.—Liquid.—*N. F.*

Fr. 100 liquid petrolatum, 50 oleic acid, & 25 spirit. ammonia.

do.—Solid.—*N. F.*

Fr. 100 petrolatum, 50 oleic acid, & 25 spirit. ammonia.

Petroleum Ether.—see **Benzin**

Petroleum Ether, Light.—see **Canadol**

Petroleum Naphtha.—see **Benzin**

Petroselinum

(Parsley; Common Parsley).—Herb, root, & seed of Petroselinum sativum. Hoffman. Umbelliferæ.—*Habit.:* Europe (Russia; France; Germany); cultiv. everywhere.—*Etymol.:* Grk. "petros," rock, & "selinon," parsley. "Sativum," fr. Lat. "sativus," cultivated.—*Constit.: Herb*, volat. oil; apiin, $C_{24}H_{28}O_{13}$; apiolin.—*Root*, volat. oil.—*Seed*, volat. & fixed oils; apiol; apiolin; apiin; tannin.—*Uses: Herb* employed in cooking chiefly; also extern. as vulnerary.—*Root* is diuret.—*Seeds* are Diuret.; Febrif.; Emmen.; Insecticide.—All three are employed in dropsy, amenor., cystitis, & derangements of genito-urin. tract.—*Doses: Root:* 30–60 grains (2–4 Gm.).—Fld. extr., 30–120 ♏ (2–8 Cc.).—*Seed:* Fld. extr., 30–60 ♏ (2–4 Cc.).

Peucedanin Merck (280

(Imperatorin).—Bitter prin. fr. root Peucedanum officinale, L.—$C_{16}H_{16}O_4$, or, $CH_3O.C_6H_4.O.C_6H_4.O.CH_2.CO.CH_3$(?)—Wh. cryst.—*Sol.* E., petroleum ether, & solut. KOH; sl. cold A.—*Melt.* 95–99° C.—The conc. alcoh. solut. on being warmed w. conc. HCl affords a cryst. precip. of oroselon.

Peucedanum

(Hog Fennel; Sow Fennel; Sulphur-wort).—Root of Peucedanum officinale, L. Umbelliferæ.—*Habit.:* Europe.—*Etymol.:* Fr. Grk. "peukedanos," sharp, incisive, referring to the odor of the root.—*Constit.:* Peucedanin, $C_{16}H_{16}O_4$; oxypeucedanin; resin; volat. oil.—Tonic; Diuret.; Emmen.

Peucedanum Palustre.—see **Selinum**

Peumus.—see **Boldo**

Phalaris

(Canary Seed).—Seed of Phalaris canariensis, L. Gramineæ.—*Habit.:* Europe; Canary Islands.—*Etymol.:* Grk. "phalaris," shining grass.—*Constit.:* Resin.—*Uses:* In vesicular affections; also as bird seed.

Phaoretin Merck (210

Resinous extr. fr. rhubarb-root.—$C_{16}H_{16}O_7$.—Yellowish-brown powd.—*Sol.* A., alkalies; sl. W.

Phaseolus (Bean)

(Haricot; Common Bean; French String or Pole Bean; Kidney Bean).—Bean & pod of Phaseolus vulgaris, L. Papilionaceæ.—*Habit.*. India; introduced early into Europe, & now widely cultivated.—*Etymol.:* Fr. Grk. "phagein," to eat, *i.e.*, the bean is used as a food. Or, more probably, fr. Grk. "phaselos," a boat, referring to the shape of the seeds.—*Constit.:* Starch; legumin; gum; sugar. Pod also contains inosite.—*Uses:* Nutrient, & as cataplasm. Pod also used as diuret. in diabetes, nephritis, &c.—

Dose: Pod: Decoct. of 200–250 : 1000 Cc. W. boiled down to 500 Cc. & taken within 24 hours.

Phaseomannite.—see **Inosite**

Pheasant's Eye.—see **Adonis Æstivalis**

Phellandrium

(Water Fennel; Water Dropwort; Horsebane; Fine-leaved Water Hemlock).—Fruit of Œnanthe Phellandrium, Lamarck. Umbelliferæ.—*Habit.:* Europe; Northern Asia.—*Etymol.:* Probably fr. Grk. "phellos," cork, & "andreios," vigorous, because the stems float on water like cork.—*Constit.:* Volat. & fixed oils; phellandrin (?).—Diaph. & Expector. (in bronch. catarrhs); Narcot. Stim.; Alter.; Diur.—*Doses:* 4–10 grains (0.25–0.6 Gm.).—Alcoh. extr., 2–5 grains (0.12–0.3 Gm.).—Fld. extr., 10–30 ♏ (0.6–2 Cc.).

Phenacetin (7

(Para-acetphenetidin; Acetphenetidin; Oxyethylacetanilide).—$C_{10}H_{13}NO_2$, or, $C_6H_4(OC_2H_5)(NH.CH_3.CO)[1:4]$.—Wh., tastel., cryst. powd.—*Sol.* 925 W., 12 A., 63 E., 20 C., at 25° C.; 70 boil. W.; 2 boil. A.—*Melt.* 134–135° C.—Antipyr.; Analg.; Antirheum.—*Uses: Intern.*, neural., rheum., pleurisy, whoop.-cough, polyuria, diabetes, chorea, influenza, tonsil., scarlat.—*Extern.*, painful ulc.; hastens healing of wounds. Effect lasts 8–10 hrs.; maximum in four hrs. (Dujardin-Beaumetz).—*Doses: Antipyr.*, 8–10 grains (0.5–0.6 Gm.); *antineural.*, 15–24 grains (1–1.5 Gm.); children: $2^1/_2$–5 grains (0.15–0.3 Gm.).—*Caut.* Use carefully in phth.

Phenacetolin Merck (30

(Degener's Indicator).—React.-prod., sulphuric acid, phenol & glacial acetic acid w. heat.—Yellowish-brown powd.—*Sol.* A.; sl. in W.

Phenacetolin Merck.—Reagent (50

Brown dye obt. by act. conc. H_2SO_4 on glac. $C_2H_4O_2$ & $C_6H_5.OH$.—*Sol.* A.—Indicator Solut.: digest 1 Gm. w. A. by heat., then add A. to make 100 Cc.; filter.—*Test:* (*Sensitiveness*) 100 Cc. H_2O+2 drops indicator solut.; add 0.05 Cc. decinorm. KOH – light-brown color should change to pink; on further add. 0.05 Cc. decinorm. HCl color should change to golden yellow.—*Uses:* Indicator, useful w. carbonates (caustic alkalies = pale-yellow; alkali carbonates = red).

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Phenamin.—see **Phenocoll**

Phenanthrene Merck.—Highest Purity (20

(Orthodiphenylene-ethylene).—Constit. coal-tar isom. w. anthracene.—$C_{14}H_{10}$, or, $(C_6H_4.CH)_2$.—Sm., colorl. plates.—*Sol.* E., B., acetic acid, carbon disulphide; sl. in A.—*Melt.* 100° C.

do. Merck.—Purified (8

Phenanthrenequinone Merck (60

Fr. phenanthrene by oxid'n.—$C_{14}H_8O_2$, or, $(C_6H_4.CO)_2$.—Orange-red cryst.—*Sol.* E., B., acetic acid, hot A.—*Melt.* 202° C.—Affords a dark-green color with concentrated sulphuric acid.

Phenazone.—see **Antipyrine**

Phenegol

(Mercury-potassium Nitroparaphenolsulphonate).—$C_6H_5(O.NO_2.SO_3K) : Hg:(KSO_3.NO_2.O)C_6H_5$.—Reddish-brown, odorl., tastel. powd.—Abt. 33% Hg.—*Sol.* W.—Antisep.—*Uses:* Sterilizing surgic. instruments.

Phenetidin Aceiosalicylate.—see **Phenosal**

Phenetidin Amygdalate.—see **Amygdophenin**

Phenetidin Quininecarbonic-acid Ester.—see **Chinaphenin**

Phenetidin Salicylacelate.—see **Phenosal**

Phenetol Merck.—Pure (15

(Ethylic Ester of Phenol; Ethyl Phenate, or Carbolate).—By heat. sodium sulphovinate w. sodium phenylate.—$C_8H_{10}O$, or, $C_6H_5O.C_2H_5$.—Oily liq.—Sp. Gr. 0.9822 at 0° C.—*Sol.* A., E.—*Boil.* 172° C.

Phenetolcarbamide, Para-.—see **Sucrol**

Phenocoll

(Aminoacetophenetidin; Glycocollphenetidin; Phenamin).—Phenacetin deriv.—$C_{10}H_{14}O_2N_2 + H_2O$, or, $C_6H_4(OC_2H_5).NHCOCH_2NH_2 + H_2O$.—Wh., matted need.—*Sol.* A.; sl. in W.—*Melt.* 95° C.—Antipyr.; Antirheum.; Analg.; Diaph.—*Uses:* Phthisis, pneum., rheum., neural., influenza, malaria, &c. The sweating is checked by atropine.—*Dose* 10–15 grains (0.6–1 Gm.).—*Max. D.* 15 grains (1 Gm.) single; 75 grains (5 Gm.) p. day.

Phenocoll Hydrochloride (35

$C_{10}H_{14}O_2N_2.HCl$.—Wh., cryst. need.—*Sol.* A., 16 W.—*Uses, Doses, &c.:* As of phenocoll. Salt most frequently used.

Phenocoll Salicylate (25

(Salocoll).—Fr. phenocoll by salicylic acid.—$C_{17}H_{20}N_2O_5$, or, $C_6H_4(OC_2H_5).NHCOCH_2NH_2.C_7H_6O_3$.—Fine, wh. need.; sweetish taste.—*Sol.*, hot W.—Antipyr.; Antisep.; Analg.—*Uses:* Rheum., gout, chorea, pleurisy, & fevers.—*Dose* 10–15 grains (0.6–1 Gm.) several t. p. d.

Phenol Merck.—Colorl. cryst., fused.—"Silver Label" (1

(Carbolic, Phenic, or Phenylic, Acid; Phenyl Hydrate; Hydroxybenzene [or -ol]).—Coal-tar constit., in fract. boil. bet. 170° & 230° C.—C_6H_6O, or, C_6H_5OH.—Colorl. cryst.; charact. odor; when h'ly dil., sweetish taste. Deliq. in moist air.—*Sol.* A., E., C., G.; abt. 20 W. at 25° C.; 2 olive oil.—*Melt.* 40° C.—*Boil.* 178–182° C.

(U.S.P.).—Antisep.; Antipyr.; Caustic; Top. Anesth.—*Uses:* For disinf. solut's or mixt's. For solut's to abort boils or carbuncles; dress. wounds; keep flies fr. horses & cattle. In ulcers, inflam., vener. veget., nevi, hemorrhoids, toothache, whoop.-cough, diphth., &c. To prev. spread of zymotic dis.—(*N. B.*—Dangerous to infants; poisoning occurs by absorption.) —*Dose* $^1/_4$–2 grains (0.015–0.12 Gm.), h'ly diluted with W., or in pills, several t. p. d., in abnorm. gastric and intest. fermentations.—*Max. D.* 2 grains (0.12 Gm.) single; 8 grains (0.5 Gm.) daily.—*Inj.*, in urethra or bladder 1:500–1000.—*Appl.*, by spray, 1% aqu. solut.; as wash, 0.2–0.5% solut.; as caust., in substance, or conc. solut.; as disinf., 0.5–5% aqu. solut.; in carbolized gauze; for utensils and rooms, 1% aqu. solut.; mouth wash and gargle, 1% solut.; also employed as glycerite (20%), oint. (5%), or w. lanum and petrolatum (3%); carbolized glycerin (10%). — *Antid.*, any soluble nontoxic sulphate, after provoking vomiting with zinc sulphate; uncooked white of egg in abundance; milk-of-lime; calcium saccharate; olive & castor oils with magnesia in suspension; ice; washing the stomach w. equal parts water & vinegar; give alcohol or whiskey, or abt. 4 fl. oz. (120 Cc.) camphorated oil at one dose, & injections of stimulants to avoid collapse.—*Incomp.*, hydrated chloral, ferrous sulphate; triturated w. acetanilide, butyl-chloral hydrate, camphor, monobromated camphor, hydrated chloral, lead acetate, menthol, naphthalene, naphthol, pyrogallol, resorcinol, salol, sodium phosphate, thymol, urethane, chloralamide, or terpin hydrate, it yields a liquid or soft mass; coagulates collodion. — *Caut.* Poisonous. External applications & injections have proved fatal, & therefore should be used with great caution. Keep in dark amber, well-stoppered bottles.

Note.—MERCK's phenol is *guaranteed not to redden,* under the usual precautions of keeping.

Phenol Merck.—Highest Purity, Medicinal, loose cryst. (2

Wh., cryst. mass.—*Melt.* 40° C.—*Boil.*, not above 188° C.—*Uses, Doses, &c.* As of phenol, colorl. cryst., fused.

Note.—MERCK's phenol is *guaranteed not to redden,* under the usual precautions of keeping.

do. Merck.—Fused (1

Wh., cryst. mass. — *Melt.* abt. 42° C. — *Uses, Doses, &c.:* as of phenol, colorl. cryst., fused.

do. Merck.—Synthetic.—Colorless, Highest Purity, cryst. (2

Fr. aniline, by diazo-reaction.—C_6H_6O, or, C_6H_5OH.—*Melt.* 41–42° C.—Properties, etc., as of phenol, colorl. cryst., fused.

do. Merck.—*U. S. P.*—Liquid, Medicinal, 86.4% cryst. (1

do.—Crude.—90% (1

Fr. coal-tar.—Mixture chiefly of cresol & phenol. —Dark, oily liq.; str. tar odor.—*Sol.*, partly W. —Disinf.— *Uses:* Gen'l disinf., either in solut. (1 in 50 to 200), or mixed w. chlorinated lime, slaked lime, &c., for urinals, toilets, stables, etc. Not adapted for wounds.

Phenol.—Crude.—30% (1

Phenol Benzoate Merck (20

(Phenyl Benzoate).—Fr. phenol, w. benzoic acid & phosphorus oxychloride.—$C_{13}H_{10}O_2$, or, $C_7H_5O_2.C_6H_5$.—Monocl., wh. prisms.—*Sol.* A., E.—*Melt.* 68° C.—*Boil.* 314° C.

Phenol-Bismuth.—see **Bismuth Phenate**

Phenol-Camphor.—see **Camphor Phenolated**

Phenol-Cocaine.—see **Cocaine Phenate**

Phenol Ethylate.—see **Phenetol**

Phenol Iodide, Para-.—see **Paraiodophenol**

Phenol Iodized Merck.—*N. F.*

(Iodized Carbolic Acid).—Solut. of iodine in glycerin-carbolic acid.—(*Nat. Form.* directs.: Iodine 20, Phenol 60, Glycerin 20 parts.)—Antisep.; Counter-irrit.; Eschar.—*Uses:* Uterine dilatation.—*Appl.*, by inj., pure.

Phenol-Lithium.—see **Lithium Phenate**

Phenol-Mercury.—see **Mercury Phenate**

Phenol, Orthomonobromo-.—see **Monobromophenol, Ortho-**

Phenol Salicylate.—see **Salol**

Phenol Sulphoricinate Merck (25

(Phenolsulphoricinic Acid).—Mixt. phenol & sodium sulphoricinate.—Colorl. to yellowish liq. —*Misc.* W.—*Uses:* In form of sodium compound (see Phenol & Sodium Sulphoricinate).

Phenol & Sodium Sulphoricinate Heryng-Merck. —25% & 30% (25

Both preparations are soluts. of synthetic phenol (25% & 30% respectively) in sodium sulphoricinate Berlioz (which see).—Thick, syrupy, yellowish liq.—*Misc.* W.—Sp. Gr. of 25% prep., 1.049–1.050; of 30% prep., 1.051–1.052.—Caustic, Antisep., & Rubefac.—*Uses: Extern.*, pure in tuberculosis, chron. affect. of throat & nose, diphth., laryngeal papilloma (by painting), & warts. In ozena, friction of nasal mucosa with 25% prep. 1:2–3 water, once daily. —In France, the prep. is known as "Phénol Sulforiciné."

Phenolphtalein Merck.—Pure (7

(Dihydroxyphtalophenone; Dioxytriphenylphtalide; Paraphtalein).—Fr. phtalic anhydride, by conc. sulphuric acid. — $C_{20}H_{14}O_4$ or, $(C_6H_4.OH)_2.CO.C_6H_4.CO$. — Yellowish-wh. or alm. wh. microcryst. powd. — *Sol.* 10 A.; sl. W.—*Melt.*, abt. 250° C.—The 1:100 alcoh. solut. is colorl.—*Uses: Medic.*, as laxative.—*Dose* 1–8 grains (0.06–0.5 Gm.); up to 30 grains (2 Gm.) may be given if necessary.

Phenolphtalein Merck.—Reagent (15

$C_{20}H_{14}O_4$.—Wh., or yellowish-wh. powd.—*Sol.*, eas. A.—*Melt.* 250–253° C.—Indicator Solut.: 1 Gm.+100 Cc. 85% A.—*Tests:* (*Res.*) ignite 0.5 Gm. on platin. foil – none wghble.—(*Sol. in A.*) 1 Gm.+10 Cc. 85% A.–clear solut.; the 1:100 solut. colorl.—(*Sensitiveness*) 3–5 drops solut.+ 250 Cc. well-boiled & cooled H_2O should require not more than 0.05 Cc. decinorm. KOH to effect color-change fr. colorl. to violet (not red).—(*Fluorane*) 0.5 Gm. should compl. diss. in 1 Cc. solut. NaOH (sp. gr. 1.168–1.172)+50 Cc. H_2O. —*Uses:* Indicator for caustic alkalies in presence of alkali carbonates; also determining alkali carbonates in presence of alkali bicarbonates, titrating organic acids, &c. (acids= colorless; alkalies=pink to rose-red); testing margarine.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Phenolphtalein Paper

Wh. paper, charged w. phenolphtalein.—*Uses:* Indicator in alkalimetry (alkalies=red; acids= colorless).

Phenolphtalin Merck (100

(Phtalin; Dioxytriphenylmethanecarboxylic Acid).—Fr. phenolphtalein by reduct. w. Zn & NaOH.—$(C_6H_4.OH)_2.CH.C_6H_4.COOH$.—Cryst. powd.—*Melt.* 225° C.

Phenolquinine.—see **Quinine Phenate**

Phenopyrine

(Antipyrine Phenate or Carbolate).—Equal parts of carbolic acid & antipyrine.—Colorl., oily liq.; odorl.—*Sol.* E., C.—Antisep.; Antipyr.; Analg. —*Uses:* Dysent., rheumatic affections, typhoid, pneumonia, &c.

Phenoresorcinol Merck (10

Mixt. 67 parts phenol & 33 parts resorcinol.—*Sol.* W.—Antiseptic.

Phenosal (20

(Phenetidin Salicylacetate or Acetosalicylate).—$C_2H_5O.C_6H_4.NH.CO.CH_2O.C_6H_4.COOH$.—Colorl., cryst. powd.—*Sol.* A., E. sl. W.—*Melt.* 182° C. —Antipyr.; Antineural.—*Uses:* Sciatica, acute artic. rheumat.—*Dose* 5–15 grains (0.3–1 Gm.).

Phenosalyl

9 pts. carbolic acid, 1 pt. salicylic acid, 2 pts. lactic acid, & 0.1 pt. menthol mixed by heat.—Antiseptic.—*Uses: Extern.*, conjunctivitis, in 0.2–0.4% solut.; ecz. in 1%.

Phenoxycaffeine Merck (500

$C_{14}H_{14}O_3N_4$, or, $C_8H_9(OC_6H_5)N_4O_2$.—Wh., cryst. powd.—*Sol.* A.—*Melt.* 142° C.—Anesthetic; Antineur.; Nar.—*Uses:* Hypoderm. in migraine, sciatica, rheum., &c.—*Dose* 4 grains (0.25 Gm.).

Phenyl Benzoate.—see **Phenol Benzoate**

Phenyl Blue

(New Blue; Dimethylphenylammoniumbetanaphtoxazine Hydrochloride; Meldola's Blue; Naphtylene, or Metamine, Blue; Cotton Blue R).—$C_{18}H_{15}N_2ClO$, or, $Cl.N.(CH_3)_2.C_6H_3(N.O)-C_{10}H_6$.—Dark-violet powd. (free fr. arsenic).—*Sol.* W., A.—*Uses:* Dye. cotton indigo blue, w. tannin & tartar emetic.

"Phenyl Chloride."—see **Benzene, Monochloro-**

Phenyl Chloroform.—see **Benzotrichloride**

Phenyl Cyanide.—see **Benzonitrile**

Phenyl Formamide.—see **Formanilid**

Phenyl Hydride.—see **Benzene**

Phenyl Hydroxide.—see **Acid Carbolic; Phenol**

Phenyl Salicylate Merck (2

(Phenylic Ester of Salicylic Acid; Salol).—React.-prod., salicylic acid w. phenol & phosphorus pentachloride.—$C_{13}H_{10}O_3$, or, $C_6H_4(OH).-COOC_6H_5[1:2]$.—Wh., cryst. powd.; faint aromatic odor.—*Sol.* 0.3 E., C., 10 A., B., fatty oils; alm. insol. W.; (2,333 W., 5 A. at 25° C., U. S. P.).—*Melt.* 42–43° C.—Antisep.; Antirheum.; Antipyr., &c.—*Uses: Intern.*, typhoid fever, diar., dysent., ferment. dyspep., rheum., grip, & cystitis.—*Extern.*, wounds, burns, sores, &c.—Also coating enteric pills; such pills should be taken one hour or more after meals & no oil w. them. The remedy should not be given in gelat. capsules, because it is apt to crystallize in the intestines & form salol concretions.—*Doses:* 3–15 grains (0.2–1 Gm.); as antipyr.: 30–45 grains (2–3 Gm.).

Phenyl Urethane.—see **Euphorin**

Phenylacetamide.—see **Acetanilide; Antifebrin**

Phenylacetic-acid Nitrile.—see **Benzyl Cyanide**

Phenylacetyl Chloride Merck (135

C_8H_7OCl, or, $C_6H_5.CH_2.COCl$.—Colorl., fum. liq.

Phenylamine.—see **Aniline**

Phenylaminophenol.—see **Oxydiphenylamine, Meta-**

Phenylamyl Ether.—see **Amyl Phenate**

Phenylaniline.—see **Diphenylamine**

Phenylbenzamide.—see **Benzanilide**

Phenylbenzoylcarbinol.—see **Benzoïn**

Phenylcarbamide Merck (40

(Phenylurea).—$CO(NH_2).NHC_6H_5$.—Colorl. cryst.—*Sol.*, hot W.; A., E.—*Melt.* 144° C.

Phenyldihydroquinazoline Tannate.—see **Orexine**

Phenyldimethylpyrazole. } —see **Antipyrine**
Phenylene. }

Phenylene Brown.—see **Bismarck Brown**

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Phenylenediamine (Meta-) Merck.—Pure (25
(Metadiaminobenzene [or -zol]).—From metadinitrobenzene, by reduct.—$C_6H_8N_2$, or, $C_6H_4(NH_2)_2$[1:3].—Crystals.—*Sol.* A., E.

Phenylenediamine (Meta-) Hydrochloride Merck.—Pure (25
(Lentin; Metadiaminobenzene Hydrochloride).—$C_6H_4(NH_2)_2.2HCl$.—Colorl. to reddish cryst. powd.—*Sol.* W.—*Uses:* In acute diar. caused by contaminated food, tuberculosis, amyloid condition of intest. walls, &c.—*Doses:* $1^1/_2$–5 grains (0.1–0.3 Gm.) 3 t. p. d.; children, $^1/_6$ grain (0.01 Gm.).—*Max. D.* 5 grains (0.3 Gm.).

Phenylenediamine (Meta-) Hydrochloride Merck.—Reagent (30
(Metadiaminobenzene Hydrochloride).—$C_6H_4(NH_2)_2.2HCl$.—Wh., or sl. reddish-wh., cryst. powd.—*Sol.*, eas. W.—Used as reag. in 1:200 solut.; if solut. has a color, decolorize by heat. w. previously ignited animal charcoal.—*Uses:* Detect. nitrites in water, aldehyde, & H_2O_2.
Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Phenylenediamine (Meta-) Sulphate Merck (25
$C_6H_4(NH_2)_2.H_2SO_4$.—Colorl. to reddish cryst.—*Sol.* W., A.—*Uses:* Photography.

Phenylenediamine (Para-) Merck.—Pure (25
(Paradiaminobenzene [or, -zol]).—Fr. acetanilide by nitration & reduct. w. tin & hydrochloric acid.—$C_6H_8N_2$, or, $C_6H_4(NH_2)_2$[1:4].—Reddish, cryst. leaflets.—*Sol.* W., A., E.—*Melt.* 140° C.—*Boil.* 267° C.—*Uses:* A 2% aqu. solut. paraphenylenediamine with 1.4% solut. KOH has been recom. as a proprietary hair dye. To develop a black color 3% hydrogen peroxide is added; for brown, 5% ferric-chloride solut. The dye must be used with caution, as toxic symptoms may develop! The mixtures described are used technically for dyeing dead hair, &c., according to patented processes.

Phenylenediamine (Para-) Hydrochloride Merck.—Powder (25
(Paradiamidobenzene[or,-zol]Hydrochloride).—Fr. paradinitrobenzene by reduct. w. tin & hydrochloric acid.—$C_6H_4(NH_2)_2.2HCl$.—Reddish, cryst. powd.—*Sol.* W., A., E.—*Melt.* 147° C.

Phenylethyl Carbamate.—see **Euphorin**

Phenylethylene.—see **Styrene**

Phenylglucosazone Merck (150
Fr. phenylhydrazine hydrochloride, by dextrose w. heat.—$C_{18}H_{22}N_4O_4$.—Fine, yellow need.—*Sol.*, hot A.—*Melt.* 204–205° C.

Phenylglycolantipyrine.—see **Tussol**

Phenylglycolyl-n-methyl-β-vinyldiacelonalkamine Hydrochloride.—see **Euphthalmine Hydrochloride**

Phenylhydrazine Merck (10
Fr. aniline by diazo-reaction & subseq. reduct.—$C_6H_8N_2$, or, $C_6H_5.NH.NH_2$.—Yellowish to red-brown liq.; faint arom. odor; absorbs oxygen fr. air & reddens.—*Sol.* A., E.; sl. in W.—Solidif. by cold, to plates melt. at 23° C.—*Boil.* 241–242° C. at 750 Mm.—*Caut.* Keep well stoppered.

Phenylhydrazine Merck.—Reagent (15
$C_6H_6.NH.NH_2$.—Colorl. or sl. yellowish, highly refract. liq.—*Sol.*, sl. cold, more read. hot, W.; eas. A., E.—*Boil.* 233° C.—Solidif. when cold to plates melt. at 23° C.—*Tests:* 2 Cc. + 20 Cc. 2% $C_2H_4O_2$-solut. should be clear.—*Uses:* Detect. aldehydes, ketones (sugars), & CS_2; determ. carbonyl oxygen in ketones & aldehydes; also in form of salts, & particularly in urinalysis, for sugars which reduce Fehling's solut.
Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Phenylhydrazine Acetate (30
$C_6H_8N_2.C_2H_4O_2$.—Scales.—*Sol.* W.

Phenylhydrazine Hydrochloride Merck (10
$C_6H_8N_2.HCl$.—Minute, colorl. to yellowish cryst.—*Sol.* W., A.—Salt most frequently used in analysis for differentiating various sugars.

Phenylhydrazine Oxalate Merck (15
$(C_6H_8N_2)_2.C_2H_2O_4$.—Colorl. leafl.—*Sol.*, eas. hot W.; diff. cold W.; alm. insol. A. & E.

Phenyllactosazone Merck (250
Reaction-prod. of phenylhydrazine & lactose.—$C_{24}H_{32}N_4O_9$.—Yellow, granular mass.—*Sol.* 80–90 of hot W.—*Melt.*, abt. 200° C.

Phenylmethane.—see **Toluene**

Phenylmethylketone.—see **Hypnone**

Phenylmethylpyrazolon Merck (70
Fr. phenylhydrazine, by acetoacetic ether.—$C_{10}H_{10}N_2O$, or $C_6H_5.N(CO.CH_2).N:C.CH_3$.—Wh., cryst. powd., or prisms.—*Sol.* A.; hot W.—*Melt.* 127° C.

Phenylmustard Oil.—see **Oil Phenylmustard**

Phenylone.—see **Antipyrine**

Phenylsulphocarbamide.—see **Phenylthiocarbamide**

Phenylthiocarbamide Merck (25
(Phenylthiourea; Phenylsulphocarbamide).—Fr. phenylmustard oil, by amm.—$C_7H_8N_2S$, or, $NH_2.CS.NH(C_6H_5)$.—Colorl. need; v. bitter taste.—*Sol.* A.; sl. in W.—*Melt.* 54° C.

Phenylthiourea.—see **Phenylthiocarbamide**

Phenylurea.—see **Phenylcarbamide**

Phesin (30
Sulpho-derivative of phenacetin.—$(O.C_2H_5)$. $C_6H_3(NH.CO.CH_3).SO_3Na$.—Pale, reddish-

brown, light, odorl. powd.; sl. caustic & saline taste.—*Sol.*, eas. W.—Antipyr.; Antineural.—*Uses:* As of acetphenetidin.—*Dose* 8–15 grains (0.5–1 Gm.).

Phloretin Merck.—Cryst. (250

(Phloretic Acid).—Fr. phloridzin by boil. dil. H_2SO_4. — $C_{15}H_{14}O_5$, or, $(OH)_2C_6H_3O.C_6H_4.CH.(CH_3)COOH$.—Yellowish powd.—*Sol.*, alkalies, A.—*Melt.* 180° C.

Phloridzin Merck (60

(Phlorizin; Phlorrhizin).—Glucoside fr. root-bark apple, pear, plum, & cherry trees.—$C_{21}H_{24}O_{10}+2H_2O$.—Sm., light, wh., silky need.; sweet w. bitter after-taste.—*Sol.* A., hot W.—*Melt.*, at 108° C., then solidifies, & then again melts at 170° C.—On boil. w. dil. mineral acids decomp. into glucose & phloretin.—Antipyr.; Tonic, Antiper.—*Uses:* Remit. & intermit. fever. Large doses produce severe glycosuria.—*Dose* 10–15 grains (0.6–1 Gm.) several t. p. d.

Phloroglucinol Merck (80

(Trioxybenzene [or -benzol]; Phloroglucin).—Fr. resorcinol, by fusing w. caustic soda.—$C_6H_6O_3.+2H_2O$, or, $C_6H_3(OH)_3[1:3:5]+2H_2O$.—Wh. or yellowish cryst.—*Sol.*, abt. 100 W.; A., E.—*Melt.*, when rapidly heated, at 217–219° C.; when slowly heated, at 200–209° C.—Antisep.; Antipyr.; Tonic.—*Uses:* Chem.; also as decalcifying agent for bones.

Phloroglucinol Merck.—Reagent.—Free fr. diresorcinol (160

$C_6H_3(OH)_3+2H_2O$.—Wh., or sl'y yellowish, cryst. powd.—*Sol.*, eas. W., A., E.—*Melt.* 200–209° C. when slowly heat.; 217–219 when rapid. heat.—Loses water of cryst. at 100° C.—*Test:* (*Diresorcinol*) heat a few milligr. w. 1 Cc. conc. H_2SO_4 + 1–2 Cc. acetic anhydride 5–10 min. in boil. W.-bath – no blue-violet color.—*Uses:* Determ. pentoses. Chiefly w. vanillin (as Guenzburg's reagent) as reagent for free HCl in gastric juice, & in microscopy for detecting wood tissue.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Phloroglucinol-Vanillin Merck

Mixt. phloroglucinol w. vanillin.—*Uses:* As Guenzburg's solution (*q. v.*).

Phloroglucinol-Vanillin Paper

(Guenzburg's Paper).—Paper impregnated w. phloroglucin-vanillin.—*Uses:* Detecting free HCl in gastric juice.

Phlorol Merck (175

(Orthoethylphenol).—Fr. orthoaminophenylethane by the diazo-reaction.—$C_6H_4.C_2H_5.OH$.—Colorl. liq.; odor of phenol.—*Sol.* A., E.; sl. in W.—*Boil.* 211° C.

Phloxin RBN Merck (12

Sodium salt tetrabromotetrachlorofluoresceïn.—Red powd.—*Sol.* A. & W. w. bluish-red color.—*Uses:* As a dye.

Phorone Merck (300

(Diisopropylideneacetone; Paraoxyquinone).—Fr. acetone by quicklime or conc. HCl.—$C_9H_{14}O$, or, $CO(CH:C[CH_3]_2)_2$.—Yellow prisms.—Insol. W.—*Melt.* 28° C.—*Boil.* 196° C.

Phosphine.—see **Chrysaniline Yellow**

Phosphonium Iodide Merck (90

(Iodophosphine).—Fr. hydriodic acid gas w. dry phosphine.—PH_4I.—Colori. cryst.; decomp. w. W.—*Uses:* Chem.

Phosphoric Anhydride or *Oxide.*—see **(Acid) Phosphoric Anhydride**

Phosphoric & Phosphorous Salts.—see under **Phosphorus**

Phosphorus

Etymol.: Fr. Grk. "phos," light, & "pherein," to bear or carry; because of its luminosity. Discovered in 1669 by Brandt.—Non-metal. element—P.—Yellowish, semi-transp. sticks; waxy luster when cut; luminous in dark on expos.—Sp. Gr. 1.83 at 10° C.; 1.82 at 25° C.—*Sol.* 350 absol. A. at 15° C.; 240 boil. absol. A.; 80 absol. E., abt. 50 fixed oils, abt. 25° C.; v. sol. CS_2; alm. insol. W.—*Melt.* 44° C.—Stim. to nerv. system.—*Uses:* Mania, melancholia, sexual exhaust., cerebral softening, neural., rachitis, osteomalacia, osseous fractures, caries, & in var. skin dis. Gen'ly administered in elixir, oil, pill, or tinct.—*Techn.*, phosphorus is used largely in manuf. matches, rat poison, manuf. various phosphorus salts, & phosphor-bronze for ordnance, bearings, packings, screws, &c.—*Doses:* $^1/_{100}$–$^1/_{30}$ grain (0.0006–0.002 Gm.) 3 t. p. d. in solution or pill; never in substance. For children, $^1/_{120}$–$^1/_{60}$ grain (0.0005–0.001 Gm.) p. day in chocolate pastilles, or as phosphorized cod-liver oil. In epilepsy after sunstroke $^1/_{20}$ grain (0.003 Gm.) 3 t. p. d.—*Extern.*, in oily solut. or oint. 1:50–100 in paralytic seizures.—*Antid.*, emetics & stomach siphon, 0.5–1% solut. potass. permang., charcoal, lime-water. No oils or fatty matters must be given.—*Incomp.*, sulphur, iodine, oil of turpentine, potass. chlorate, &c.—*Caut.* Inflammable! Keep under water.

do. Merck.—Amorphous (2

(Red, or Allotropic, Phosphorus).—P.—Brown to red powd.; not spontaneously inflam. in air.—Insol. in ordinary solvents of phosphorus.—Does not melt.—Sp. Gr. 2.1 at 17° C.—*Uses:* Techn., safety matches.—Not poisonous.

Phosphorus Bromide.—see **Phosphorus Pentabromide; Phosphorus Tribromide**

Phosphorus Chloride.—see **Phosphorus Pentachloride; Phosphorus Trichloride**

Phosphorus Iodide.—see **Phosphorus Triiodide**

Phosphorus Oxychloride Merck (8

(Phosphoryl Chloride).—$POCl_3$.—Str'ly fum., clear, colorl. liq.; pung. odor.—Sp. Gr. 1.7 at 12° C.—Solidif. at −10° C. to crystalline form. —*Boil.* 110° C.—*Uses:* As solvent in cryoscopy.

Phosphorus Pentabromide Merck (10

(Phosphoric Bromide or Perbromide).—PBr_5.—Yellow, cryst. mass.—Decomp. by W.—*Melt.*, under 100° C., w. decomp.—*Uses:* Synthetic org. chem.—*Caut.* Keep hermetically sealed.

Phosphorus Pentachloride Merck.—Pure (8

(Phosphoric Chloride or Perchloride).—PCl_5.—Fum., yellow, cryst. masses; decomp. on contact w. air or W.—*Uses:* Org. chem. for replacing hydroxyl groups by Cl, particularly for converting acids into acid chlorides.

Phosphorus Pentasulphide Merck (8

(Phosphoric Sulphide; Thiophosphoric Anhydride; Phosphorus Persulphide).—P_2S_5.—Yellow, radiate, cryst. masses; peculiar odor.—*Sol.*, carbon disulphide. — Decomp. by W. — *Melt.* 274–276° C.—*Uses:* Org. chem.—*Incomp.* W.—*Caut.* Keep in sealed vessels!

Phosphorus Pentoxide.—see **(Acid) Phosphoric Anhydride**

Phosphorus Perbromide.—see **Phosphorus Pentabromide**

Phosphorus Perchloride.—see **Phosphorus Pentachloride**

Phosphorus Persulphide.—see **Phosphorus Pentasulphide**

Phosphorus Sulphide.—see **Phosphorus Pentasulphide, & Trisulphide**

Phosphorus Tribromide Merck (12

(Phosphorous Bromide).—PBr_3.—Colorl., fum. liq.; v. penetrating odor.—Sp. Gr. 2.9249 at 0° C.—*Boil.* 175° C.—Decomp. by W.

Phosphorus Trichloride Merck (6

(Phosphorous Chloride).—PCl_3.—Clear, colorl., fum. liq.; quickly decomp. in moist air.—Sp. Gr. 1.616 at 0° C.—*Misc.* E., C., carbon disulphide, B.—*Boil.* 78° C.

Phosphorus Triiodide Merck (20

PI_3.—Red cryst.—*Melt.* 55° C.—Decomp. w. W. & forms phosphorous acid, hydrogen phosphide, hydriodic acid, & solid, yellow hydrogen phosphide, P_4H_2.

Phosphorus Trisulphide Merck (8

(Phosphorous Sulphide; Thiophosphorus Anhydride).—P_2S_3, or, P_4S_6.—Grayish-yellow, odorl., tastel. masses.—*Sol.*, carbon disulphide.—*Melt.*, eas. at abt. 200° C.; sublimes when strongly heated.—*Uses:* Org. chem.—*Incomp.* W.—*Caut.* Keep sealed.

Phosphoryl Chloride.—see **Phosphorus Oxychloride**

Phosphotal.—see **Creosote Phosphite**

Photophor.—see **Calcium Phosphide**

Phtalamide. / *Phtaldiamide.* —see **Phtalyldiamide**

Phtalic Anhydride.—see **(Acid) Phtalic Anhydride**

Phtalide Merck (150

(Anhydride of Ortho-oxymethylbenzoic Acid).—Fr. phtalyl chloride, by phosphorus w. HI. —$C_8H_6O_2$, or, $C_6H_4.CO.O.CH_2$.—Colorl. need.; cinnamon-like odor.—*Melt.* 73° C.—*Boil.* 290° C.—*Sol.*, eas. A.; sl. W.

Phtalimide Merck (25

Fr. amm. phtalate, by heat.—$C_8H_5NO_2$, or, $C_6H_4(CO)_2NH$.—Colorl. prisms.—*Sol.* E.—*Melt.* 238° C.

Phtalimide-Potassium.—see **Potassium Phtalimide**

Phtalin.—see **Phenolphtalin**

Phtalyl Chloride Merck (60

Fr. phtalic acid, by phosphorus chloride w. heat. —$C_8H_4O_2Cl_2$, or, $C_6H_4.CO.O.CCl_2$.—Oily, colorl. liq.—*Sol.* E.—*Boil.* 275° C. at 726 Mm.

Phtalyldiamide Merck (50

(Phtaldiamide; Phtalamide).—Fr. phtalmalonic ester, by amm.—$C_8H_8N_2O_2$, or, $C_6H_4(CO.NH_2)_2$. —Microcryst. powd.—Insol. cold W., A., E.—*Melt.* 219–220° C.

Phycite.—see **Erythrol**

Physalis.—see **Alkekengi**

Physic Nut.—see **Curcas**

Physostigma.—*U. S. P.*

(Calabar Bean; Ordeal Bean; Chop Nut; Split Nut).—Seed of Physostigma venenosum, Balfour. Leguminosæ. Papilionaceæ.—*Habit.:* West Africa (near mouths of Niger & Old Calabar rivers). Introd. into India & Brazil.—*Etymol.:* Fr. Grk. "physa," bladder, or air, & "stigma," stigma, *i.e.*, the stigmatic appendage is hollow & inflated. Lat. "venenosus," poisonous, *i.e.*, the action of the plant. "Calabar" is the name of the district whence the bean is obtained. —Oblong, somewhat reniform beans, $^3/_5$–$1^1/_5$ in. (15–30 Mm.) long, $^2/_5$–$^4/_5$ in. (10–20 Mm.) broad, & $^2/_5$–$^3/_5$ in. (10–15 Mm.) thick; chocolate-brown color; inodor.; bean-like taste.—*Constit.:* Physostigmine (eserine), $C_{15}H_{21}N_3O_2$; calabarine; eseridine, $C_{15}H_{23}N_3O_3$; eseramine, $C_{16}H_{25}N_4O_3$; phytosterin; proteids.—Myotic; Sialag.; Antineural.; Antispasm.; Sed.; Diaphor.; Motor Depressant; Purgat.; Antitetanic; Nerve Tonic. —*Uses:* Tetanus, strychn. & atropine poisoning, neural., convuls., chron. bronch., muscul. atony of bowels, chron. constip.—A 1:15 glycerinic solut. of the alcoh. extr. is also used to cause

myosis by instilling into the eye in atropine mydriasis.—*Doses:* 1–3 grains (0.06–0.2 Gm.). —Alcoh. extr., $^1/_{12}$–$^1/_4$ grain (0.005–0.015 Gm.); *Max. D.* $^1/_3$ grain (0.03 Gm.) single, $^3/_4$ grain (0.05 Gm.) daily.—Fld. extr., 1–3 ♏ (0.06–0.2 Cc.).—Tinct., 5–10 ♏ (0.3–0.6 Cc.).—*Antid.*, evacuants, atropine, hydrated chloral, strychnine, stimulants, tannin, emetics, stomach siphon, electricity, artif. respiration.

Physostigmine Merck (1313

(Eserine). — Alkaloid fr. seeds Physostigma venenosum, Balfour. (Calabar Bean).—$C_{15}H_{21}N_3O_2$, or, $CH_3NH.CO.NH.C_{13}H_{15}N.OH$.—Colorl., v. hygros. cryst., readily changing to red, resin-like mass.—*Sol.*, eas. A., E., C., B.; sl. in W.—Spinal depressant; Antitetanic; Peristaltic; Stim.; Laxat.; Analg.; & Myotic.—*Uses:* Usually in form of its salts, particularly the salicylate & sulphate, in traumatic tetanus, tonic convulsions, strychnine poison., neural., constip., muscular rheum., phantom tumor, chronic bronch., &c.—*Doses:* $^1/_{120}$–$^1/_{60}$ grain (0.0005–0.001 Gm.) in pill or solut., sev. t. p. d.; children, $^1/_{2400}$–$^1/_{1200}$ grain (0.000025–0.00005 Gm.).—*Max. D.* $^1/_{30}$ grain (0.002 Gm.) single; $^1/_{20}$ grain (0.003 Gm.) p. d.—*Appl.*, in 0.2–0.5% solut. as eye drops in ophthal. neonatorum, overcoming the mydriasis of atropine, breaking posterior adhesions in prolapsus of the iris, in cataract, in glaucoma, & in corneal ulcers.—*Antid.*, emetics, stomach siphon, artif. respir., stimulants, hydrated chloral, & atropine subcut. ($^1/_{120}$ grain [0.0005 Gm.] 3 t. p. d.).—In veter. med., as lax. in colic & chron. gastric & intest. catarrh of horses, usually as sulphate, in doses of $1^1/_2$ grains (0.1 Gm.) in 30–150 ♏ (2–10 Cc.) cold water subcut.; in cattle, $1^1/_2$–3 grains (0.1–0.2 Gm.).—*Caut.* Poison! Keep dry, and from light.

Physostigmine Benzoate Merck (1750

(Eserine Benzoate). — $C_{15}H_{21}N_3O_2.C_7H_6O_2$. — Hard, wh. cryst.—*Sol.* W., A.; sl. in E.—*Uses: Doses, &c.:* As of physostigmine.

Physostigmine Bisulphate

$(C_{15}H_{21}N_3O_2).H_2SO_4$.—Obt. by interact. of physostigmine & H_2SO_4 in ether. solut.—Bulky, wh., v. hygrosc. cryst. powd.

Physostigmine Borate Merck (1750

(Eserine Borate).—Wh., cryst. powd.—*Sol.* W. —Myotic.—Soluts. are permanent & do not bec. irrit.—*Uses, Doses, Antid., &c.:* As of physostigmine.—*Caut.* Keep dry, fr. light.

Physostigmine Citrate Merck (1750

(Eserine Citrate).—$(C_{15}H_{21}N_3O_2)_3.C_6H_8O_7$.—Wh., microcryst. powd. — *Sol.* W., A. — *Caut.* Keep dry, fr. light.

Physostigmine Hydrobromide Merck (1750

(Eserine Hydrobromide).—$C_{15}H_{21}N_3O_2.HBr$.—Wh. cryst.—*Sol.* W.

Physostigmine Hydrochloride Merck (1750

(Eserine Hydrochloride). — $C_{15}H_{21}N_3O_2.HCl$. — Wh. cryst.—*Sol.* W.

Physostigmine Nitrate

(Eserine Nitrate). — $C_{15}H_{21}N_3O_2.HNO_3$. — Wh., cryst. powd.; readily becomes red.—*Sol.* W.

Physostigmine-Pilocarpine Merck (1167

(Eserine-Pilocarpine).—Obt. by cryst. a mixt. physostigmine salicylate 1, & pilocarpine hydrochloride 2.—Wh., cryst. powd.—*Sol.* W., A.—Anod.; Lax.—*Uses: Veter.*, in colic of horses.—*Inj.* (veter.) 6 grains (0.36 Gm.) in 5 Cc. of water.

Physostigmine (Pseudo-) Merck (15000

Fr. Cali nuts or false Calabar bean (seed of a Mucuna species).—Identical with physostigmine.—*Uses & Doses:* As of physostigmine.

Physostigmine Salicylate Merck (1111

(Eserine Salicylate). — $C_{15}H_{21}N_3O_2.C_7H_6O_3$. — Colorl. or sl'y yellowish, lustr. cryst.—*Sol.* 85 W.; 15 A.; (72.5 W., 12.7 A., 175 E., 8.6 C. at 25° C.; 15 W. at 80° C.; 4 A. at 60° C., U. S. P.). —Soluts. easily redden.—*Melt.* 178–180° C.—Most serviceable physostigmine salt. — *Uses:* 0.5% aqu. solut. is used to contract pupil; other actions, uses, doses, &c., as of physostigmine.—*Caut.* This salt is but little affected by light, but must be kept dry. Red solut's have lost power.

Physostigmine Sulphate Merck (1111

(Eserine Sulphate).—$(C_{15}H_{21}N_3O_2)_3.H_2SO_4$.—Wh. or sl'y yellowish, deliq., microcryst. powd.; bitter taste; easily reddens on expos. to air & light.—*Sol.* W., A., C.; (1200 E. at 25° C., U. S. P.).—*Melt.* 140–142° C. w. decomp.—*Uses, Doses, &c.:* As of physostigmine. Favorite w. veter. surgeons for hypodermic use for colic in horses: $1^1/_2$ grains (0.1 Gm.).—*Caut.* Keep dry, fr. light.

do. Merck.—Scales (1111

Physostigmine Sulphite Merck (1750

(Eserine Sulphite). — $(C_{15}H_{21}N_3O_2)_2.H_2SO_3$. — Wh., apparently amorph. powd.—*Sol.*, eas. W., A.—*Uses:* As of o. physostigmine salts, but possesses the v. desirable property of afford. a solut. that remains colorl. for many weeks.—*Dose:* As of physostigmine.

Physostigmine Tartrate Merck (1750

(Eserine Tartrate). — $(C_{15}H_{21}N_3O_2)_2.C_4H_6O_6$.—Colorl. to yellowish cryst.—*Sol.* W.—*Uses, Doses, &c.:* As of physostigmine.

Phytolacca.—*U. S. P.*

(Poke Root; Garget).—Dried root (also berries, though not official) of Phytolacca decandra, L. Phytolaccaceæ, collected in autumn.—*Habit.:* North America; natur. in southern Europe.—*Etymol.:* Grk. "phyton," plant, & Lat. "lacca," lake color, red, *i.e.*, the juice of the fruit is red. Grk. "deka," ten, & "andros," stamen, *i.e.*, the flower has 10 stamens. "Poke" is a corruption

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

of "pokan," its former Virginian name.—*Constit.:* Resin; tannin; phytolaccin; asparagin.—Emet.; Purgat.; Alter.; Anod.; Resolvent.—*Uses:* Chron. rheum., gout, & obesity, tonsilitis, chorea, scrofula, syphilis, &c.—*Extern.*, as oint. in ulcers, psoriasis, tinea capitis, eczema, & to arrest flow of milk.—*Doses: Root:* Alterat., 5–30 grains (0.3–2 Gm.); emet., 15 grains (1 Gm.).—Extr., $^1/_4$–1 grain (0.015–0.06 Gm.) alterat., 3–6 grains (0.2–0.36 Gm.) emetic.—Fld. extr., 1–5 ♏ (0.06–0.3 Cc.) alterat.; 30 ♏ (2 Cc.) emetic.—*Berries:* Fld. extr., 5–15 ♏ (0.3–1 Cc.) in skin diseases & syphilitic affect., & as an antifat.

Phytolaccin (15

Alcoh. resinoid fr. root Phytolacca decandra, L. (Poke Root).—*Sol.* A.—Emetic; Purg.; Narcot.; Alter.—*Uses:* Chronic rheum., cancer, & syph.—*Dose* 1–3 grains (0.06–0.2 Gm.).

Pichi

Lvs., branches, & wood of Fabiana imbricata, Ruiz & Pavon. Solanaceæ. — *Habit.:* Chili; Peru.—*Etymol.:* "Pichi-Pichi" is the Chilian name of the plant. — *Constit.:* Fabianine.—Diuret.; Anticatar.; Cholag. — *Uses:* Specific in cystitis & vesical catarrh; contraindicated in albuminuria; also used in catarrhal inflam. of genito-urinary organs, renal & vesical calculi, &c.—*Doses:* 5–60 grains (0.3–4 Gm.).—Alcoh. extr., 3–12 grains (0.2–0.8 Gm.).—Fld. extr., 15–60 ♏ (1–4 Cc.).

Picoline Merck (25

(Alphamethylpyridine; Alphapicoline).—Fr. dry distil. of bones or coal.—C_6H_7N, or, $C_5H_4.N(CH_3)$.—Colorl. liq.—Sp. Gr. 0.952 at 10° C.—*Misc.* W., A.—Nerve Sedative.—*Uses:* Lessen heart's action when diseased.

Picramnia.—see **Cascara Amarga**

Picratol (25

(Silver Trinitrophenolate).—Yellow cryst.—*Sol.* A.—30% Ag.—Antisep.; Alter.; Antigonorrheic.—*Uses:* As of other silver compounds in gonor., catarrhal affect. of nose & throat, &c.

Picrocarmine. — see **Bizzozero's, Friedlander's, Klemensiewicz's, Mayer's, Ranvier's, & Weigert's, Picrocarmine**

Picrocarmine-Eosine.—see **Lang's Picrocarmine-Eosine**

Picrocarmine-Sodium.—see **Gedölst's Picrocarmine-Sodium**

Picro-Citric Acid Paper.—see **Citro-Picric Acid Paper**

Picrol

(Potassium Diiodoresorcinolmonosulphonate).—$KC_6HI_2(OH)_2SO_3$.—Wh., cryst. powd.; odorl.—52.8% iodine.—*Sol.* A., E.—Antiseptic.—*Uses:* Substit. for iodoform.

Picrolithium-Carmine.—see **Orth's Picrolithium-Carmine**

Picro-Nitric Acid.—see **Mayer's Picro-Nitric Acid**

Picro-Sulphuric Acid.—see **Kleinenberg-Mayer's Picro-Sulphuric Acid**

Picrotoxin Merck (100

(Cocculin).—Neutral prin. fr. seed of Anamirta paniculata, Colebrooke (Cocculus indicus; C. palmatus).—$C_{45}H_{50}O_{19}$; most probably consists of two molecules of picrotoxinin, $C_{15}H_{16}O_6$, & one molecule picrotin, $C_{15}H_{18}O_7$.—Colorl. cryst.; v. bitter taste.—*Sol.*, alkalies & acids; 9 A., 240 W.—*Melt.* 192° C.—Antihidr.; Nervine; Antispasm.—*Uses:* Night sw. of phth., paral., epilepsy, chorea, flatulent dyspep., & dysmenor.; also antid. to chloral & strophanthin.—*Dose* $^1/_{100}$–$^1/_{80}$ grain (0.0006–0.002 Gm.) subcut. or per os.—*Max. D.* $^1/_{10}$ grain (0.006 Gm.) single; $^1/_3$ grain (0.02 Gm.) p. d.—*Antid.*, emetics, stomach siphon, tannin, hydrated chloral, & stimulants.—*Caut.* Poison!

Pigment Brown.—see **Sudan Brown, Fat Dye**

Pilocarpidine Nitrate Harnack-Merck (2500

Salts of alkaloid fr. lvs. Pilocarpus Jaborandi, or P. microphyllus.—$C_{10}H_{14}N_2O_2.HNO_3$.—Wh. cryst.—*Sol.* W., A.—Does not exhibit specific jaborandi effect even in 7 grain (0.4 Gm.) doses.

Pilocarpine Merck.—Pure (850

Active alkaloid fr. lvs. Pilocarpus Jaborandi, Holmes, or P. microphyllus, Stapf. (Jaborandi).—$C_{11}H_{16}N_2O_2$, or, $C_5H_4N.C(CH_3).N(CH_3)_3.O.CO$.—Colorl. to yellow, syrupy liq.—*Sol.*, eas. W.; A., C.—Sialagogue; Myotic; Diaph.; Diuret., Galactagogue.—*Uses: Intern.*, Dropsy, coryza, laryngitis, bronch., asthmatic dyspnea, uremic convuls., rheum., obesity, scarlat., croup, diab., syph., &c. Expedites resolution in pneum.; hastens labor. Antid. to atropine. Contraindic. in heart failure & during fasting. Less irrit. to eye than physostigmine.—*Extern.*, 1–2% aqu. solut. for eye wash; pomades & hair washes to promote growth of hair.—*Doses:* $^1/_6$–$^1/_4$ grain (0.008–0.015 Gm.) in W., hypoderm. or by mouth; children, under 2 yrs., $^1/_{30}$ grain (0.002 Gm.); infants, $^1/_{60}$ grain (0.001 Gm.).—*Max. D.* $^1/_3$ grain (0.02 Gm.) single; $^2/_3$ grain (0.04 Gm.) p. day.—*Antid.*, emetics, stomach siphon, atropine hypoderm. ($^1/_{120}$–$^1/_{60}$ grain [0.0005–0.001 Gm.]), tannin (5 grains [0.3 Gm.] every 15 min.), ammonia, brandy.—*Incomp.*, silver nitrate, corros. sublimate, iodides, gold salts, potass. permang., alkalies, &c.—*Caut.* Poison! Keep well stoppered.

Pilocarpine Borate Merck (850

$(C_{11}H_{16}N_2O_2)_2.B_4O_7$. — Wh., deliq. lumps.—*Sol.* W., A.—Diaph.; Myotic; Sialag.—*Uses:* Chronic iritis, glaucoma & other eye dis.; also in renal affect.—*Dose* $^1/_8$–$^1/_3$ grain (0.008–0.02 Gm.).

Pilocarpine Hydrobromide Merck (850

$C_{11}H_{16}N_2O_2.HBr$. — Wh. cryst. — *Sol.* W., A. — *Melt.* 178° C. after previous sintering. — *Uses, Doses, &c.:* As of pilocarpine.

Pilocarpine Hydrochloride Merck. — Highest Purity (140

(Pilocarpine Muriate).—Perf'ly free fr. jaborine. —$C_{11}H_{16}N_2O_2.HCl$.—Wh., hygros. cryst.; sl'y bitter taste.—*Sol.* 0.3 W., 2.3 A., 540 C. at 25° C.; 1.1 A. at 60° C.; insol. E. (U. S. P.).—*Melt.* 193–195° C.; (when dried at 100° C., melts at 195.9° C., U. S. P.).—Sialag.; Myotic; Diaph.; Diur.—*Uses:* As of pilocarpine.—*Dose* $^1/_8$–$^1/_4$ grain (0.008–0.015 Gm.), in water, & given hypodermically or by the mouth.—*Max. D.* $^1/_3$ grain (0.02 Gm.) single; $^2/_3$ grain (0.04 Gm.) p. day.—*Antid.*, emetics, stomach siphon, atropine, tannin, ammonia, brandy.—*Incomp.*, silver nitrate, corrosive sublimate, tannin, calomel, gold salts, potass. permangan., iodides, alkalies, &c. —*Caut.* Poison! Keep in small, well-stp. bot.

Note.—The highest attainable purity, insuring absence of all therapeutically active impurities, makes this article to be preferred by the prescriber & dispenser.

Pilocarpine Nitrate Merck (140

$C_{11}H_{16}N_2O_2.HNO_3$.—Wh. cryst. or cryst. powd. —*Sol.* W.; sl. A.; alm. insol. cold absol. A.; (4 W., 60 A., at 25° C.; 16 A. at 60° C.; insol. E., C., U. S. P.).—*Melt.* 170.9° C., U. S. P.—*Uses, Doses, Antid., &c.:* As of pilocarpine.

Pilocarpine Phenate Merck (850

$C_{11}H_{16}N_2O_2.OHC_6H_5$.—Oily liq.—*Sol.* A., W.—*Uses:* Tuberculosis & malaria.—*Dose*, hypoderm., 1 fl. dr. (4 Cc.) of a 0.02% aqu. solut. to which 2.75% carbolic acid is added; the inject. is made once daily, & the quantity gradually increased by 8 ♏ (0.5 Cc.) until the max. d. of 2 fl. dr. (8 Cc.) is reached. In malaria, 45–90 ♏ (3–6 Cc.) of the above solut. is injected daily; after a week, the injections are made only every third day.

Pilocarpine Salicylate Merck (850

$C_{11}H_{16}N_2O_2.C_7H_6O_3$.—Wh. cryst.—*Sol.* W., A.—*Melt.* 120° C. after previously sintering.—*Uses & Doses:* As of pilocarpine.

Pilocarpine Sulphate Merck (850

$(C_{11}H_{16}N_2O_2)_2.H_2SO_4$.—Wh. cryst.—*Sol.* W., A.

Pilocarpine Tannate Merck (850

Grayish-wh. powd.—*Sol.* A.—*Uses, &c.:* As of pilocarpine.

Pilocarpine Valerate Merck (850

(Pilocarpine Valerianate).—$C_{11}H_{16}N_2O_2.C_5H_{10}O_2$. —Wh. cryst.—*Sol.* W., A.—*Uses, Doses, &c.:* As of pilocarpine.

Pilocarpus.—*U. S. P.*

(Jaborandi).—Leaflets of Pilocarpus microphyllus, Stapf, & P. Jaborandi, Holmes. (Also of P. pinnatifolius, Lam. [P. Selloanus, Eng.]). Rutaceæ.—*Habit.:* Brazil; Paraguay.—*Etymol.:* Fr. Lat. "pilus," hair, or Grk. "pilos," a cap, & "karpos," fruit, *i.e.*, the fruit is hat-shaped. "Microphyllus," fr. Grk. "mikron," small, & "phyllon," leaf. "Jaborandi" is the South American name of the plant. "Pinnatifolius," fr. Lat. "pinnatus," feathered, & "folium," leaf, fr. the character of the latter. "Selloanus" after Prof. Sello, a German botanist.—*Constit.:* Volat. oil; jaborine, $C_{22}H_{32}N_4O_4$; pilocarpine, $C_{11}H_{16}N_2O_2$; pilocarpidine, $C_{10}H_{14}N_2O_2$; jaboridine; jabonine, $C_9H_{14}N_2$; jaboric acid, $C_{19}H_{25}N_3O_5$; pilocarpic acid.—Myotic; Sialag.; Diaphor.; Cardiac Depress.; Emet.; Diur.; Galactag.—*Uses:* Dropsy, pulmon. edema, pleurisy w. effus., inflam., chron. irritation, catarrh of muc. membranes, rheumat., & coryza.—*Doses:* 15–60 grains (1–4 Gm.).—Alcoh. extr., 2–5 grains (0.12–0.3 Gm.); 5–10 grains (0.3–0.6 Gm.) as purgat.—Fld. extr., 15–30 ♏ (1–2 Cc.).

Pimenta.—*U. S. P.*

(Allspice; Jamaica Pepper; Semen Amomi).—Dried nearly ripe fruit of Pimenta officinalis, Lindley. Myrtaceæ.—*Habit.:* East Indies; West Indies; Central- & South America.—*Etymol.:* Lat. fr. the Spanish "pimienta," pepper, *i.e.*, the first European name for allspice.—*Constit.:* Volat. oil; resin; tannin; fixed oil; sugar; gum. —Stomachic; Stim.; Carminat.; Condiment.—*Uses:* As of cloves.—*Doses:* 5–30 grains (0.3–2 Gm.).—Fld. extr., 10–30 ♏ (0.6–2 Cc.).

Pimpernel.—see **Pimpinella Saxifraga**

Pimpinella Magna

(Small Burnet Saxifrage; Radix Tragoselini Majoris).—Root of Pimpinella magna, L. Umbelliferæ.—*Habit.:* Germany.—*Etymol.:* Lat. "bis," twice, & "pinnula," small wings, *i.e.*, the leaves are bipinnate.—*Constit.:* Volat. oil. —*Uses: Intern.*, in chron. catarrh, & angina.—*Extern.*, in mouthwashes, toothpowder, confections, pills, & for chewing.

Pimpinella Saxifraga

(Pimpernel; Burnet Saxifrage; Small Saxifrage). —Root of Pimpinella Saxifraga, L. Umbelliferæ.—*Habit.:* Europe; advent. in U. S.—*Etymol.:* For "pimpinella," see preceding. "Saxifraga," fr. Lat. "saxum," stone, & "frangere," to break, *i.e.*, a remedy for gravel.—*Constit.:* Volat. oil; resin; benzoic acid; pimpinellin. —Diaph.; Diur.; Tonic; Stim.; Sialag.—*Uses: Intern.*, in chron. catarrhs of muc. membr., amenor., dropsy, & angina.—*Extern.*, as mouthwash (1:20) for toothache.—*Doses:* Alcoh. extr., 5–15 grains (0.3–1 Gm.).—Fld. extr., 20–60 ♏ (1.3–4 Cc.).

Pinacoline Merck (150

(Methylpseudobutylketone).—$CH_3.CO.C(CH_3)_3$. —Yellowish liq.; pepperm. odor. — *Sol.* A.; insol. W.—Sp. Gr. 0.7999 at 16° C.—*Boil.* 106° C.

Pinacone Merck (75

(Hexyleneglycol; Tetramethylethyleneglycol). — Fr. aqueous acetone, by sodium amalgam.— $C_6H_{14}O_2$, or, $(CH_3)_2.C(OH).C(OH).(CH_3)_2$.—Colorl. need.—*Sol.* A., E.; sl. carbon disulphide & W. —*Melt.* 42° C.—*Boil.* 171–172° C.

Pinene Merck.—Dextrogyrate (35

(Australene; Laurene; so-called "Menthene").—Constit. of many essent. oils. Chief constit. of oil of turpentine.—$C_{10}H_{16}$, or, $(CH_3.CH).CH_2.CH.CH:C(CH_3).C.CH_3).CH_2$.—Colorl., transp. liq. —*Sol.* A.; scarcely in W.—Sp. Gr. 0.86 at 0° C.—*Boil.* 160° C.—*Caut.* Do not confound w. menthene obt. fr. menthol by dehydration!

do. Merck.—Levogyrate (80

(Terebentene).—Chief constit. of French turpentine.

Pinene Hydrochloride.—see **Terpene Hydrochloride**

Pinguin.—see **Alantol**

Pini-Pini

(Arra Diabo[?]).—Bark of Jatropha urens, var. Markgravii Müll.-Argent. Euphorbiaceæ. —*Habit.:* Brazil.—*Etymol.:* "Pini-Pini" is the South American name for the plant. Jatropha fr. Grk. "iatros," physician, & "trophe," nourishment; "urens" fr. "uro," to burn, *i.e.*, it blisters the skin.—*Uses:* Caustic.

Pinkroot.—see **Spigelia**

Piper.—*U. S. P.*

(Pepper; Black Pepper).—Dried unripe fruit of Piper nigrum, L. Piperaceæ. (White pepper constitutes the decorticated ripe fruit of Piper nigrum).—*Habit.:* India; Malabar coast; Philippines; Sumatra; Java; Ceylon; Borneo, &c.—*Etymol.:* Lat. "piper," fr. Grk. "piperi," fr. "pepto," to digest. Sanskrit "pipala"; Bengalese "pippul"; Arabic "babary."—*Constit.:* Volat. oil; piperine, $C_{17}H_{19}NO_3$; piperidine, $C_5H_{11}N$; chavicin; fat; proteids; resin.—Stim.; Febrif.; Rubefac.; Tonic; Irritaut; Carmin.; Antipyret.—Used also as spice. White pepper is used the same way.—*Doses:* 5–20 grains (0.3–1.3 Gm.).—Alcoh. extr., 2–8 grains (0.12–0.5 Gm.).—Fld. extr., 5–20 ♏ (0.3–1.3 Cc.).—Oleoresin, $^1/_4$–1 ♏ (0.015–0.06 Cc.).

Piper Longum

(Long Pepper).—Immature fruit of Piper officinarum, Piperaceæ, dried in the sun.—*Habit.:* East India; Molucca; Java; Ceylon; Philippines. —*Etymol., Constit., & Uses:* As of piper.

Piper Methysticum.—see **Kava-Kava**

Piperazidine.—see **Piperazine**

Piperazine (85

(Pyrazine Hexahydride; Diethylenediamine; Piperazidine; Ethyleneimine).—Fr. ethylene bromide, or chloride, by ammonia.—$C_4H_{10}N_2$, or, $NH(CH_2)_2:(CH_2)_2NH$. — Colorl., transp., deliq. need.; absorbs carbon dioxide fr. air.—*Sol.*, eas. W.—*Melt.* 104–107° C.—*Boil.* 145° C.—Antipodagric; Antirheum.—*Uses:* Gout, lithiasis, & rheum.; good solv. of uric acid.—*Dose* 5–10 grains (0.3–0.6 Gm.) several t. p. d.; hypoderm., $^3/_4$–$1^1/_2$ grains (0.05–0.1 Gm.).—For washing out the bladder, a 1–2% solut.—*Incomp.*, acetanilide, alkaloidal salts, ferric chloride, ferrous sulphate, mercuric chloride, phenacetin, phenocoll hydrochlor., picric acid, potass. permang., quinine, silver nitrate, solut. arsenic & mercury iodide, sod. salicyl., spt. nitrous ether, tannic acid.—*Caut.* Keep fr. air.

Piperazine Quinate.—see **Sidonal**

Piperidine Merck (50

(Hexahydropyridine).—By heating piperine w. potash-lime.—$C_5H_{11}N$, or, $CH_2(CH_2)_4NH$.—Colorl. liq.; odor of pepper & ammonia; caustic taste.—Sp. Gr. 0.875 at 15° C.—*Misc.* W., A.—*Boil.* 107–110° C.

Piperidine Bitartrate Merck (50

$C_5H_{10}NH.C_4H_6O_6$.—Colorl. cryst.—*Sol.* W.—*Uses:* Uric-acid solvent in uratic diathesis.—*Dose* 10–15 grains (0.6–1 Gm.) 3 t. p. d. in carbonic-acid water.

Piperidine Guaiacolate.—see **Guajaperol**

Piperidine Hydrochloride Merck (50

$C_5H_{10}NH.HCl$.—Wh. cryst.—*Sol.* W., A.—*Melt.* 237° C.

Piperine Merck (10

Alkaloid fr. fruit Piper nigrum, L. (Black Pepper).—$C_{17}H_{19}NO_3$, or, $CH_2O_2.C_6H_3.CH:CH.CH:CH.CON.C_5H_{10}$.—Colorl. or pale-yellow, monocl. prisms; tasteless at first, w. burning after-taste. —*Sol.* 30 A.; E., C., B., & volat. oils; (15 A., 36 E., 1.7 C. at 25° C.; 4.4 A. at 60° C., U. S. P.). — *Melt.* 130° C. — Antipyr.; Antiper. — *Uses:* Substit. for quinine in remit. & intermit. fevers, & dyspep.—*Techn.*, for imparting a pungent taste to brandy.—*Doses:* As antipyr., 6–8 grains (0.36–0.5 Gm.); as stomachic, 1 grain (0.06 Gm.) several t. p. d.

Piperonal.
Piperonyl Aldehyde. } —see **Heliotropin**

Piperonylphloroglucindimethyl-ester.—see **Protocotoin**

Pipsissewa.—see **Chimaphila**

Piscidia

(White Dogwood; Jamaica Dogwood).—Bark of Piscidia Erythrina, Jacquin (Ichthyomethia Piscipula, Kze). Papilionaceæ.—*Habit.*: West Indies; Florida.—*Etymol.:* Fr. Lat. "piscis," fish, & "cædere," to kill, *i.e.*, a fish poison; & Grk. "erythros," red.—Quills or curved pieces 2–4 in. (5–10 Cm.) long, 1–2 in. (25–50 Mm.) wide, & $^1/_8$ in. (3 Mm.) thick; extern. dark grayish-brown to yellowish-brown; corky layer vivid orange; intern., bluish-green or brownish-green; inner surface dark-brown; opium-like odor when broken; bitter, acrid taste.—*Constit.:* Piscidin, $C_{29}H_{24}O_8$; tannin; resin; caoutchouc; wax.—Nar.; Hypn.; Anod.; Sed.; Alter.; Diur.—*Uses:* Neural., toothache, dysmenor., whoop.-cough, nerv. insomn.; also as fish poison.—*Doses:* 5–60 grains (0.3–4 Gm.).—Alcoh. extr., 2–8 grains

(0.12–0.5 Gm.).—Fld. extr., 15–60 ♏ (1–4 Cc.). —Tinct., 10–50 ♏ (0.6–3.3 Cc.).

Pitayin.—see **Quinidine**

Pitch, Burgundy

(Resin Burgundy).—Prepared resinous exudation of Abies excelsa, Poiret, & o. species of Abies. Coniferæ.—*Habit.*. France (Burgundy province).—Yellowish-brown, opaque or translucent, brittle masses, softened by heat; aromat. terebinthinate odor; sweetish, not bitter, arom. taste.—*Sol.*, entirely in glac. acetic acid & in boil. A.; partly in cold A.—*Constit.:* Volat. oil; resin (chiefly abietic acid); pimaric acid.—Stim.; Irritant.—Used in plasters.

Pittylen

Condens. powd. pine-tar & formaldehyde.—Fine, brownish-yellow powd.; sl't odor.—*Sol.*, soluts. of alkalies, phenols; also in A.; acetone, collodion, & terpineol.—Dermic.—*Uses:* Acute, subacute, & chron. eczem., &c.—*Appl.* 2–10% oint., or as dust.-powd.

Pituitary Gland Merck.—Dried, powder (200

(Hypophysis Cerebri).—Fr. pituitary glands of cattle.—1 part = abt. 6.5 parts fresh organ.—*Uses:* Acromegaly.—*Dose* $1^1/_2$–5 grains (0.1–0.3 Gm.) several t. p. d.

Pix Liquida.—see **Tar**

Plant Casein.—see **Legumin**

Plant Fibrin.—see **Fibrin, from Plants**

Plantago

(Plantain; Rib Grass; Ripple-grass; Ribwort).—Herb of Plantago major, L. Plantaginaceæ.—*Habit.:* Europe; Asia; natur. in U. S.—*Etymol.:* Lat. "planta," sole, & "agere," to carry or bear, *i.e.*, fr. the resemblance the leaves bear to the shape of the sole of a foot. "Major," large, great, *i.e.*, the leaves are large.—*Constit.:* Bitter substance; tannin.—Febrif.; Stypt.; Antispasm.; Alter.; Diuret.; Antisep.; Antisyphilitic.; Antiscrofular.—*Uses: Extern.*, appl. in wounds, ulcers, eczema, erysipelas, & in ophthalmia; also in toothache.—*Dose:* Aqu. extr., 30–75 grains (2–5 Gm.).

Plantago Psyllium.—see **Psyllium**

Plantain.—see **Plantago**

Plasma.—see **Glycerite Starch**

Plaster-of-Paris.—see **Calcium Sulphate**

Platinic or *Platinous* Salts.—see under **Platinum**

Platinum Merck.—Foil or Wire (2750

Etymol.: Fr. the Spanish "platina," the diminutive of "plata," silver, because of the resemblance of the metal to silver (Antonio de Ulloa, 1736).—Metal.—Pt.—Wh., mall., ductile metal; softer than silver; grayish tinge.—Sp. Gr. 21.48–21.50.—*Sol.*, aqua regia.—*Uses:* Manuf. vessels & apparatus for scientific purposes, chemical & industrial operations, alloys, coin, jewelry, &c. In wire form for spirals & tissues for increasing luminosity of various gases & pyrometers; in foil for platinoplating copper, in electrolytic operations, thermocauteries, in dentistry, &c.

Platinum Merck.—Black (3600

(Platinum Mohr).—By reducing platinum solut. w. zinc, magnesium, &c.—Black powd.; metal-like & lustr. when rubbed.—Sp.Gr. 15.8–17.6.—*Uses:* As oxidizer in organic chemistry, as substitute for cupric oxide in elementary organic analysis, in manuf. acetic acid, &c.

do. Merck.—Sponges

Obt. by ignit. plat. & ammon. chloride.—*Uses:* Catalyzer in manuf. chemicals, autoigniter in Döbereiner lamps & gas jets, &c.

do. Merck.—Spongy (3600

(Spongy Platinum).—Fr. double chloride platinum & ammonium by heat.—Porous mass.—*Uses:* Döbereiner lamps, igniters for gas jets, &c.

Platinum Merck.—Reagent (3300

Pt.—Silver-white metal; used in form of foil or wire, & in v. fine subdivision as platinum sponge & platinum black.—*Tests:* (*Res.*) diss. 1 Gm. metal in nitrohydrochloric acid, evap. solut. to dryness on W.-bath; convert res. of $PtCl_4$ into plat. sponge by intense ignit.; treat sponge w. dil. HNO_3 (sp. gr. 1.153); filter; evap. filtrate—not more than trace of res.—(*Ag*) diss. in nitrohydrochloric acid; evap. solut. on W.-bath; diss. res. in H_2O—no wh. res.—*Uses:* Prepar. platin. chloride, &c.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

do. Merck.—Black.—Reagent (4400

(Platinum Mohr).

Platinum Bichloride.—see **Platinum Chloride, Platinous**

Platinum Chloride Merck.—Platinic (1500

(Platinum & Hydrogen Chloride . Chloroplatinic Acid; Platini-chloride).—$PtCl_4.2HCl+6H_2O$, or $H_2PtCl_6+6H_2O$.—Brown solid, or red cryst.—*Sol.* W.—*Uses:* Techn. in galvano-platinoplating, photogr., platinum mirrors, platinum luster on glass & porcelain, platinized carbon for acetic-acid manuf., platinizing pumice stone or asbestos (as catalyzer) in manuf. sulphuric anhydride, indelible ink, relief etching of zinc for artistic & commercial purposes, fixing microscopic preparations, &c.

do. Merck.—5% solution (55

do. Merck.—10% solution (100

Platinum Chloride Merck.—Reagent (1800

(Chloroplatinic Acid).—$PtCl_4+2HCl+6H_2O$.—Brownish-red, cryst., v. hygrosc., saline mass.—*Sol.* W., A., E.—Aqu. solut. acid to litmus paper.

—*Tests:* (*Solub. in Absol. A.*) 1 Gm.+10 Cc. abs. A. should compl. diss. & give clear solut.; also clear solut. w. H_2O (yellow color, free fr. red or dark-brown tinge = absence of $PtCl_2$ or Ir). — (*Exam. Ignition Res. for Impur. Sol. in HNO_3*) strongly ignite 2 Gm. – res. should weigh 0.752 Gm.; digest res. w. dil. HNO_3 (5 Cc. HNO_3 [sp. gr. 1.153]+20 Cc. H_2O) on W.-bath 15 min.; filter; evap. filtrate on W.-bath; ignite – wt. of res. not more than 0.005 Gm.—(*H_2SO_4*) 1 Gm.+20 Cc. H_2O+solut. $BaCl_2$ – no ppt. ($BaSO_4$) within 3 hrs. — (*HNO_3*) 2 Cc. of 1:10 solut.+2 Cc. conc. H_2SO_4; overlay w. 2 Cc. solut. Fe_2SO_4 – no brownish zone even on long standing.—(*Ba*) 1 Gm.+20 Cc. H_2O +few drops H_2SO_4 – no ppt. ($BaSO_4$) within 3 hrs.—*Uses:* Determ. potass. & ammon. salts; precip. alkaloids; catalytic agent.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Platinum Chloride Merck.—Platinous (2250

(Platinum Bi- or Dichloride, or Platinochloride). —By heating platinic chloride to abt. 230° C.— $PtCl_2$.— Grayish-green to brown powd.—*Sol.*, hot hydrochl. acid; insol. W.

Platinum Chloride Ammoniated Merck (1750

$PtCl_2.2NH_3$. — Yellowish-green powd. — *Sol.*, ammonia water; v. sl. W.

Platinum Cyanide Merck (2350

(Platinous Cyanide).—$Pt(CN)_2$.—Yellow powd. —*Sol.*, in solut. alkali cyanides.

Platinum Dichloride.—see **Platinum Chloride, Platinous**

Platinum Diiodide.—see **Platinum Iodide**

Platinum Iodide Merck (1500

(Platinous Iodide; Platinum Diiodide, or Platinoiodide).—PtI_2.—Heavy, black powd.—*Sol.*, sl. in hydriodic acid; insol. W. & alkalies.

Platinum Mohr.—see **Platinum, Black**

Platinum Nitrate Merck (1750

(Platinic Nitrate).—$Pt(NO_3)_4$.—Brown powd., or black mass.—*Sol.* W.

Platinum Sulphate Merck (1800

(Platinic Sulphate). — $Pt(SO_4)_2$. — Greenish-black, deliq. mass.—*Sol.* W.—*Uses:* Microchemical investigations for differentiating the haloids chlorine, bromine, & iodine.

Platinum & Ammonium Chloride Merck.—Platinic. —Cryst. (2000

(Platinic Chloride with Ammonium Chloride; Platinic Sal-ammoniac). — $PtCl_4.2NH_4Cl$, or, $(NH_4)_2PtCl_6$.—Orange-red cryst.—*Sol.* W.

do. Merck.—Dry, powder (1500

Yellow powd.—*Sol.* W.—Both salts used techn. in platinum plating.

Platinum & Ammonium Chloride Merck.—Platinous.—Cryst. (2000

(Platinous Chloride with Ammonium Chloride; Platinous Sal-ammoniac).—$PtCl_2.2NH_4Cl$, or, $(NH_4)_2PtCl_4$.—Dark, ruby-red cryst.—*Sol.* W.

Platinum & Ammonium Cyanide Merck (3000

(Ammonium Platinocyanide).—$Pt(CN)_2.2NH_4CN+H_2O$, or, $(NH_4)_2Pt(CN)_4$.—Yellow cryst.—*Sol.* W.

Platinum & Ammonium Sulphocyanate.—Platinic. —Cryst.

(Ammonium Sulphocyanoplatinate; Ammonium Platinisulphocyanide).— $Pt(SCN)_4.2NH_4(SCN)$, or, $(NH_4)_2Pt(SCN)_6$.—Carmine-red cryst.—*Sol.*, sl. W.

Platinum & Ammonium & Copper Cyanide

(Ammonium Platinocyanide & Cupric Cyanide; Ammonio-platino-cupric Cyanide).—$PtCu(CN)_4\text{-}2NH_3+H_2O$.—Blue cryst.—*Sol.* W.

Platinum & Barium Chloride Merck (1500

(Barium Platinochloride).—$PtCl_2.BaCl_2+4H_2O$, or, $PtBaCl_4+4H_2O$.—Orange-red cryst.—*Sol.*, sl. W.

Platinum & Barium Cyanide Merck (1650

(Barium Platinocyanide).—$Pt(CN)_2.Ba(CN)_2+4H_2O$, or, $PtBa(CN)_4+4H_2O$.—Large, dichroic cryst.; yellowish-green by transmitted light, & bluish-violet by reflected light.—*Sol.*, abt. 35 cold W.; eas. hot W.—Sp. Gr. 3.054 at 15° C. —An aqueous solut. mixed w. some adhesive, & painted on paper or wood exhibits phosphorescence when exposed to the invisible ultra-violet rays of the spectrum or to the Roentgen rays, hence the salt is used in radiography.

Platinum & Barium Sulphocyanate.—Cryst.

(Barium Sulphocyanoplatinate; Barium Platinisulphocyanide).—$Pt(SCN)_4.Ba(SCN)_2$, or, $PtBa(SCN)_6$.—Red need.—*Sol.* W., A.

Platinum & Calcium Chloride Merck (1500

(Calcium Platinochloride).—$CaCl_2.PtCl_2+8H_2O$, or, $PtCaCl_4+8H_2O$.—Orange-yel. cryst.—*Sol.* W.

Platinum & Calcium Cyanide Merck (1900

(Calcium Platinocyanide).—$Pt(CN)_2.Ca(CN)_2+5H_2O$, or, $CaPt(CN)_4+5H_2O$.—Greenish-yellow cryst.; bluish fluoresc.—*Sol.* W.

Platinum & Calcium & Ammonium Cyanide

(Calcium and Ammonium Platinocyanide).— $Pt(CN)_2.Ca(CN)_2.2NH_4CN$, or, $(NH_4)_2PtCa(CN)_6$. —Yellow cryst.; bluish reflect.—*Sol.* W.

Platinum & Cerium Cyanide Merck (1900

(Cerium Platinocyanide). — $Ce_2[Pt(CN)_4]_3+18H_2O$.—Yellow cryst.—*Sol.* W.

Platinum & Copper Cyanide

(Platinocupric Cyanide; Copper Platinocyanide). —$Pt(CN)_2.Cu(CN)_2$+aq., or, $PtCu(CN)_4$+aq.— Green powd.—*Sol.*, sl. W.

Platinum & Hydrogen Chloride.—see **Platinum Chloride, Platinic**

Platinum & Iron Cyanide Merck (4000
(Ferroplatinous Cyanide; Iron Platinocyanide). —$Fe(CN)_2.Pt(CN)_2$, or, $FePt(CN)_4$.—Yellowish-red powd.—Insol. W.

Platinum & Lead Cyanide Merck (2300
(Lead Platinocyanide).—$Pb(CN)_2.Pt(CN)_2$, or, $PbPt(CN)_4$.—Grayish-yellow, cryst. powd.

Platinum & Lithium Chloride Merck (1650
(Lithium Platinic Chloride; Lithium Platinichloride).—$PtCl_4.2LiCl+6H_2O$, or, $Li_2PtCl_6+6H_2O$.—Orange-yellow cryst.; effloresee in air.—*Sol.* W., A.

Platinum & Lithium Cyanide Merck (3000
(Lithium Platinocyanide).—$Pt(CN)_2.2(LiCN)+3H_2O$, or, $Li_2Pt(CN)_4+3H_2O$.—Greenish-yellow cryst.—*Sol.*, sl. W.—*Uses:* Photography with Roentgen rays.

Platinum & Lithium & Rubidium Cyanide
(Lithium & Rubidium Platinoeyanide).—$Pt(CN)_2.Li(CN).Rb(CN)+aq.$, or, $PtLiRb(CN)_4+aq$.—Greenish-yellow, cryst. needles.—*Sol.* W.—More strongly fluorescent in Roentgen rays than platinum & barium eyanide, & henee used instead of latter in Roentgen-ray experiments.

Platinum & Magnesium Cyanide Merck (1750
(Magnesium Platinoeyanide). — $Pt(CN)_2.Mg(CN)_2+7H_2O$, or, $MgPt(CN)_4+7H_2O$.—Large, red, dichroic prisms, the sides showing beetle-green & the ends blue or purple.—*Sol.* W.

Platinum & Potassium Bromide Merck (1800
(Potassium Bromoplatinate; Potassium Platinibromide).—$PtBr_4.2KBr$, or, PtK_2Br_6.—Brownish-red eryst.—*Sol.* W.

Platinum & Potassium Chloride Merck.—Platinic. —Cryst. or powder (1300
(Potassium Chloroplatinate, or Platinichloride). —$PtCl_4.2KCl$, or, PtK_2Cl_6.—Sm., orange-yellow cryst., or yellow powd.—*Sol.*, hot W.

Platinum & Potassium Chloride Merck.—Platinous (400
(Potassium Chloroplatinite or Platinochloride). —$PtCl_2.2KCl$, or, PtK_2Cl_4.—Ruby-red cryst.—*Sol.* W.—*Uses:* Photography (in acid toning baths).

Platinum & Potassium Chlorocyanide Merck. —Cryst. (2000
(Potassium Chloroplatinieyanide).—$Pt(CN)_4.2KCl+2H_2O$.—Large, rhomb., yellowish, v. efflorescent plates.—*Sol.* W., A.—*Caut.* Keep from air.

Platinum & Potassium Cyanide Merck (1900
(Potassium Platinocyanide).—$Pt(CN)_2.2KCN+3H_2O$, or, $PtK_2(CN)_4+3H_2O$.—Alm. colorl., rhombic prisms; blue in direction of principal axis.—*Sol.*, hot W.—*Uses:* Analysis.

Platinum & Potassium Iodide Merck (2000
(Potassium Iodoplatinate, or Platinic Iodide). —PtK_2I_6.—Black eryst.; graphite-like luster.—*Sol.* W.

Platinum & Potassium Sesquicyanide Merck. —Cryst. (1800
(Potassium Platinicyanide).—$Pt(CN)_3.2KCN+3H_2O$, or, $K_2Pt(CN)_5+3H_2O$.—Cryst., w. eoppery luster.—*Sol.* W.

Platinum & Potassium Sulphocyanate Merck. —Cryst. (2000
(Potassium Sulphoeyanoplatinate, or Platinithioeyanate). — $Pt(SCN)_4.2KSCN$ or, $K_2Pt(SCN)_6$.—Deep earmine-red cryst.—*Sol.* W.

Platinum & Potassium & Lithium Cyanide Merck. —Cryst. (2500
(Potassium & Lithium Platinoeyanide).—$Pt(CN)_2.K(CN).Li(CN)$, or, $PtKLi(CN)_4$.—Orange-red cryst.—*Sol.* W.

Platinum & Potassium & Sodium Cyanide Merck. —Cryst. (2250
(Potassium & Sodium Platinocyanide).—$Pt(CN)_2.K(CN).Na(CN)+2H_2O$, or, $PtKNa(CN)_4+2H_2O$.—Yellow eryst., w. bluish reflect.—*Sol.* W.

Platinum & Rubidium Cyanide Merck (2100
(Rubidium Platinoeyanide). — $Pt(CN)_2.2Rb(CN)$, or, $PtRb_2(CN)_4$. — Greenish-yellow, sl. fluoresc., monoel. prisms.—*Sol.* W.

Platinum & Sodium Chloride Merck. — Platinic. —Dry (1200
(Sodium Platiniehloride, or Chloroplatinate).—$PtCl_4.2NaCl+4H_2O$, or, $PtNa_2Cl_6+4H_2O$.—Yellow powd.—*Sol.* W., A.

Platinum & Sodium Chloride Merck.—Platinous. —Cryst. (2200
(Sodium Platinochloride, or Chloroplatinite).—$PtCl_2.2NaCl+4H_2O$, or, $Na_2PtCl_4+4H_2O$.—Dark-red eryst.—*Sol.*, eas. W.

Platinum & Sodium Cyanide Merck (2400
(Sodium Platinocyanide).—$Pt(CN)_2.2Na(CN)+3H_2O$, or, $Na_2Pt(CN)_4+3H_2O$.—Colorl. eryst.—*Sol.* W., A.

Platinum & Strontium Cyanide Merck.—Cryst., with $5H_2O$ (2100
(Strontium Platinoeyanide).—$Pt(CN)_2.Sr(CN)_2+5H_2O$, or, $PtSr(CN)_4+5H_2O$.—Wh. eryst., w. violet reflect.—*Sol.* W.

do. Merck.—Cryst., with $4H_2O$ (2100
$Pt(CN)_2.Sr(CN)_2+4H_2O$, or, $PtSr(CN)_4+4H_2O$. —Pale-violet, cryst. powd.—*Sol.* W.

Platinum & Thorium Cyanide Merck (2500
(Thorium Platinocyanide). — $Pt(CN)_2.Th(CN)_2+16H_2O$, or, $ThPt(CN)_4+16H_2O$. — Yellow cryst.—*Sol.* W.—*Uses:* As of platinum & barium eyanide for fluoreseent sereens.

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Stryehnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Platinum & Yttrium Cyanide Merck (3000

$Y_2(Pt[CN]_4)_3 + 21H_2O$. — Ruby-red cryst., w. green reflect.—*Sol.* W.

Platosammonium Sulphate Merck.—Cryst.(2000

(Diplatosamine Sulphate). — $Pt(NH_3)_2SO_4$. — Wh., cryst. powd.—*Sol.*, in ammonia water w. formation of platosotetramine sulphate.

Plessy's Green.—see **Chromium Phosphate**

Plugge's Reagent.—For gum ammoniac

Solut. 3 Gm. sod. hydroxide, 2 Gm. bromine, & W., to 100 Cc.—An alkaline, alcoholic extr. of ammoniac on being shaken w. the reagent affords a transitory violet color.

Plumbago.—see **Graphite**

Plumbic Sulphite, Normal.—see **Lead Sulphite**

Plumbo-plumbic Oxide.—see **Lead Oxide, Red**

Plumbous Oxide.—see **Lead Oxide, Yellow**

Plumbous Sulphide.—see **Lead Sulphide**

Plumeria Fallax.—see **Amapa-Milk**

Plumiera

(Pagoda Tree; Sucuuba Bark).—Bark of Plumiera (Plumeria) Sucuuba, Spruce. Apocynaceæ.—*Habit.:* Brazil; Java.—*Etymol.:* Named for the French botanist, Chas. Plumier (1646–1706).—*Constit.:* Plumierid (agoniadin), $C_{21}H_{26}O_{12} + H_2O$; plumieric acid, $C_{20}H_{24}O_{12}$(?).—Febrif.; Anthelm.; Emmen.

Plumierid Merck (500

Crystalline glucoside fr. Plumiera acutifolia, Poiret. — Identical w. Peckolt's agoniadin. — $C_{21}H_{26}O_{12} + H_2O$.—Wh., cryst. powd.; v. bitter taste.—*Sol.* W.—*Melt.* 155–158° C., after previous sintering, & with evolution of gas.

Pneumin (20

(Methylenecreosote).—Condens. prod. of creosote & formaldebyde.—Yellowish, odorl., tastel. powd.—Antitubere.—*Dose* 8 grains (0.5 Gm.) 4–8 t. p. d. in powd. or tabl.

Podophyllin.—see **Resin Podophyllum**

Podophyllotoxin Merck (120

Active resin. princ. of podophyllum.—$C_{23}H_{24}O_9 + 2H_2O$.—Whitish-yellow powd.; v. bitter taste. —*Sol.* A.; part. E. & C.—Drastic Cathartic.—*Uses:* Purg. in severe constip.—*Dose* $^1/_{12}$–$^1/_6$ grain (0.005–0.01 Gm.).—Hypoderm. inject. not advisable because of their painfulness.—*Max. D.* $^1/_6$ grain (0.01 Gm.) p. d.

Podophyllum.—*U. S. P.*

(May Apple; Mandrake; Devil's Apple; Indian Apple; Vegetable Calomel).—Dried rhizome of Podophyllum peltatum, L. Berberidaceæ.—*Habit.:* North America.—*Etymol.:* Grk. "pous," foot, & "phyllon," leaf, *i.e.*, the shape of the leaf is like that of a duck's foot. "Peltatum" has reference to the peltate leaf. "May apple," fr. the fact that the plant blossoms in May, thus starting the fruit.—*Constit.:* Podophyllin; podophyllotoxin, $C_{23}H_{24}O_9.2H_2O$; picropodophyllin; picropodophyllinic acid; podophyllic acid, $C_{15}H_{26}O_7$; podophylloresin.—Purgat. (in habitual constip.); Cholagogue; Alter.; Hydragogue Cathart.; Tonic.—*Uses:* Hepat. congest., constip., rheum., scrofula, & bilious fevers.—*Doses:* 5–15 grains (0.3–1 Gm.).—Fld. extr., 8–30 ♏ (0.5–2 Cc.). — Hydro-alcoh. extr., 1–3 grains (0.06–0.2 Gm.).

Podophyllum Emodi

Rhizome & roots of Podophyllum Emodi, Wallich. Berberidaceæ.—*Habit.:* Himalaya Mountains; Cashmere.—*Etymol.:* For "podophyllum" see preceding. "Emodi" fr. "emodin," the purg. prin. of rhubarb, which resembles that found in this plant.—*Constit.:* Podophyllin; berberin; resin; podophyllotoxin.—*Uses:* Drastic Purgat.

Pogostemon.—see **Patchouli**

Poirrier Blue C 4 B Merck (40

Dye resembling Gentian Blue, used especially in microscopy, & as indicator in aqu. 0.2% solut. —The blue color of the solut. is changed to red by caustic alkalies.

Poirrier's Orange 3 P.—see **Methyl Orange**

Poison Ivy. }
Poison Oak. } —see **Rhus Toxicodendron**

Poke Root.—see **Phytolacca**

Pole Reagent Paper

Unsized paper impregnated w. a solut. phenolphtalein & sodium sulphate & dried.—*Uses:* For recognizing the negative poles of batteries, as the negative current colors the paper red.

Polishing Powder.—see **Tin Oxide, Stannic, Gray**

Polka Paper.—see **Lead-Carbonate Paper**

Pollantin

Hay-fever antitoxin prep. fr. pollen of goldenrod & o. plants.—*Appl.*, by instil. into eye, or insuffl. into nose.—Also marketed in powd., prep. by evap. serum w. milk sugar in vacuo.

Polychrome.—see **Esculin**

Polychromine.—see **Primuline Yellow**

Polygala

(Bitter Milkwort; European Bitter Polygala).—Herb & root of Polygala amara, L. Polygalaceæ.—*Habit.:* Europe.—*Etymol.:* Grk. "polys," much, & "gala," milk, *i.e.*, referring to its supposed strong galactagogue properties. "Amara," Lat. for bitter.—*Constit.:* *Herb* contains mucilage; resin.—*Root* contains bitter substc. (polygamarin); volat. oil; polygalite.—*Uses:* *Herb:* Expector. (in pulmonary phthisis), Tonic, & Diaphor.—*Root:* Bitter Tonic (also used in tuberculosis).—*Dose:* *Herb:* Aqu. extr., 3–10 grains (0.2–0.6 Gm.).

Polygonatum

(Solomon's Seal).—Rhizome of Polygonatum officinale, Allioni, Convallariaceæ. Smilaceæ.—*Habit.:* Europe; Asia.—*Etymol.:* Grk. "polys," many, & "gone," knee, referring to the many-jointed rhizome.—*Constit.:* Convallarin; asparagin; pectin; sugar; starch; mucilage.—Diuret.; Alter.; Cathart.—*Uses:* Gout, rheumat., & skin dis.—*Dose:* Fld. extr., 5–20 ♏ (0.3–1.3 Cc.).

Polygonum Aviculare

(Knot-grass; Door-weed; Bird-weed; Cow-grass; Goose-grass).—Herb of Polygonum aviculare, L. Polygonaceæ.—*Habit.:* Europe; Asia; North America.—*Etymol.:* See preceding.—*Constit.*. Mucilage; tannin.—Diuret.; Antipodagr.; Antirheum.; Vulnerary.—*Uses:* Formerly in pulmonary affect., under the name "Homeriana."

Polygonum Bistorta.—see **Bistort**

Polygonum Hydropiper

(Smartweed).—Lvs. of Polygonum Hydropiper, L. Polygonaceæ.—*Habit.:* Europe; natur. in U. S.—*Etymol.:* See Polygonatum. Grk. "hydor," water, & "peperi," pepper, referring to its growing in marshy ground, & to the biting taste of all parts of the plant.—*Constit.:* Polygonic acid; resin; wax; gum.—Astring.; Emmen.; Aphrodis.; Diuret.—*Uses:* Diar., funct. impot., amenor.—*Dose:* Fld. extr., 15–30 ♏ (1–2 Cc.).

Polygonum Punctatum

(Water Smartweed; Water Pepper).—Herb of Polygonum punctatum, Elliot. Polygonaceæ.—*Habit.:* British America; U. S.—*Etymol.:* See Polygonatum. Lat. "punctatum" refers to the conspicuously punctate lvs.—Diaphor.; Diuret.; Emmen.; Counter-Irrit. — *Uses: Intern.*, in amenor., fevers, & dyspep. affect.—*Extern.*, in rheumat., gout, & neural.—*Dose:* Fld. extr., 15–30 ♏ (1–2 Cc.).

Polymnia

(Yellow Leaf Cup; Bear's Foot; Leaf-Cup; Uvedalia).—Root of Polymnia Uvedalia, L. Compositæ.—*Habit.:* Eastern U. S.—*Etymol.:* Fr. "Polyhymnia," one of the Muses, for whom the plant was named.—*Constit.:* Resins; tannin.—Alter.; Antiper.; Stim.—*Uses:* Rheumat., scrof., hepatic enlargem., tonsilitis, pleurisy, malar., splenic enlargem., &c.—*Dose:* Extr., 1/2–3 grains (0.03–0.2 Gm.).—Fld. extr., 3–20 ♏ (0.2–1.3 Cc.).

Polypodium.—see **Calaguala**

Polypody

(Polypodium; Fern Root).—Rhizome of Polypodium vulgare, L. Polypodiaceæ.—*Habit.:* Europe; northern Asia; North America.—*Etymol.:* Grk. "polys," many, & "pous," foot, referring to the numerous rootstocks.—*Constit.:* Volat. oil; resin; tannin, glycyrrhizin; mannite; dextrose; malic acid.—Diuret. (in liver affections & gout); Demulc.; Purgat.; Anthelmint.—*Dose* 1–4 dr. (4–15 Gm.).

Polyporus

(Oak Agaric; Surgeon's Agaric; Spunk; Punk; Touchwood; Tinder; Amadou).—The fungus Polyporus fomentarius, Fries. Hymenomycetes.—*Habit.:* Southern & Central Europe.—*Etymol.:* Fr. Grk. "polys," many, & "poros," holes, *i.e.*, the fungus is very spongy. "Fomentarius," Lat., adapted for fomentations.—Hoof-shaped, obliquely triangular, sessile fungus found on oak & beech trees, freed fr. its hard rind & hymenial, tubular spores, cut into slices, & washed & cleaned until soft & pliable.—*Uses:* Local Hemostatic; Absorbent.

Polytrichum

(Golden Maidenhair; Bear Moss; Golden Moss; Herba Adianti Aurei).—Polytrichum commune, L. Bryoideæ. Musci.—*Habit.:* Europe; U. S.—*Etymol.:* Fr. Grk. "polys," many, & "thrix," hair. "Adiantum," fr. Grk. "a," not, without, & "diainein," to make wet, *i.e.*, the plant is not easily made wet.—*Constit.:* Fat; tannin; resin.—Astring.; Diaphor.; Tonic.—*Uses:* Scrofula, bronchial catarrh, & profuse menstruation.

Pomegranate.—see **Granatum**

Pomona Green.—see **Iodine Green**

Ponceau.—see **Biebrich Scarlet; Scarlet Red**

Ponceau Red R Merck (8

(Sodium Xylidinazobetanaphtholdisulphonate).—Brownish-red powd.—*Sol.* W.—*Uses:* Dyeing wool, & manuf. lakes.

Poplar Buds

Buds of Populus nigra, L. Salicaceæ.—*Habit.:* Europe.—*Etymol.:* Fr. Grk. "paipallomai," to tremble, because of the constant trembling of the leaves.—*Constit.:* Volat. oil; salicin; populin; chrysin.—Antinephritic; Antirheumat. (intern. as tinct., & extern. as oint. or linim.); Expector.; Antisep.; Tonic; Discutient.—*Uses: Intern.*, bronchitis, nephritis, intest. catarrh.—*Extern.*, in rheumat.—*Dose:* Alcoh. extr., 3–10 grains (0.2–0.6 Gm.).

Poppy.—see **Papaver**

Populin Merck (1500

(Benzoylsalicin).—Glucoside fr. bark & lvs. of Populus nigra & P. tremula.—$C_{20}H_{22}O_8 + 2H_2O$, or, $C_{13}H_{17}(C_6H_5.CO)O_7 + 2H_2O$. — Wh. powd.; bitter, then sweetish taste, like licorice.—*Sol.*, hot A., acetic acid, dil. mineral acids; v. sl. W.—*Melt.* 180° C.—Antipyretic.—*Uses:* Fever.—*Dose* 2–4 grains (0.12–0.25 Gm.).

Populus Nigra.—see **Poplar Buds**

Porphyrine Merck (3500

Alkaloid fr. bark Alstonia constricta, F. Muell. (Australian fever bark). — $C_{21}H_{25}N_3O_2$. — Wh., amorph. substc.; acid solut's fluoresce blue.—*Sol.*, hot W., A., E.—*Melt.* 97° C.—Antipyretic.

Potash, Caustic.—see **Potassium Hydroxide**

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Potash, Prussiate, Red.—see **Potassium Ferricyanide**

Potash, Prussiate, Yellow.—see **Potassium Ferrocyanide**

Potassa.—see **Potassium Hydroxide**

Potassa-Lime.—see **Potassium Hydroxide with Lime**

Potassa Sulphurated Merck (1

(Liver of Sulphur; so-called "Potassium Sulphide"; Hepar Sulphuris). — Fr. potass. carbonate w. sublimed sulphur, by fusion.—Mixt. containing potassium trisulphide & potass. thiosulphate.—Yellowish-brown lumps; faint hydrogen-sulphide odor; alkaline, bitter taste. —*Sol.* 2 W. at 15° C.—Alter.; Antacid; Emetic; Local Irritant. — *Uses: Intern.*, sm. doses: increase frequency of pulse; large doses: rheum., gout, scrof., painters' colic, skin dis., catarrh, croup, & lead & mercury poisoning.—*Extern.*, lotion in parasitic skin dis.—For baths in skin affect. $1^3/_4$–$3^1/_3$ ounces (50–100 Gm.) to one bath.—*Dose* 2–10 grains (0.12–0.6 Gm.).—*Antid.*, emetics, stomach siphon, lead or zinc acetate, brandy. — *Incomp.*, acids, alcohol, carbonated waters, acid salts. Even carbon dioxide precip. sulphur fr. solut.—*Caut.* Avoid metal bath-tubs, metal spoons & water w. much carbon dioxide.

do. Merck.—Pure (2

Fr. purified potass. carbonate & sulphur.

Potassio- & Ammonio-ferric Tartrate.—see **Iron & Potassium Tartrate with Ammonium Tartrate**

Potassium Merck (28

Etymol.: "Potassium" fr. "potash," the alkali first obtained fr. "pot ashes." The Lat. "kalium" fr. the Arabic "kaljan," ash; or perhaps fr. Hebrew "kal," light. — First isolated in metallic form by Davy in 1807.—Metal.—K.—Sm. balls, of consistence of wax; fresh cut surface has silvery luster, rapidly passing to bluish or gray.—*Melt.* 58° C.—*Uses:* Chem.—*Caut.* Keep covered with B., benzin, or o. liquid free fr. oxygen.

Potassium Acetate Merck.—Highest Purity (1

$KC_2H_3O_2$.—Wh., cryst., hygros. powd.; saline taste.—*Sol.* 0.4 W., 2 A. at 25° C., U. S. P.—*Melt.* 292° C.—Diur.; Aper.; Cath.—*Uses:* Gout, lithiasis, rheum., dropsy, ecz., & psoria.—*Techn.*, as dehydrating agent.—*Dose* 10–60 grains (0.6–4 Gm.).—*Caut.* Keep well stoppered.

do. Merck.—Pure (1

do. Merck.—Pure, fused (2

do.—50% Solution (1

Clear, colorl. liq.—Sp. Gr. 1.20.—Diur.; Diaph.; Antipyr.; Cath.—*Uses:* Cystitis, fevers, dropsy, rheum., skin dis., & in the uric acid diathesis to render urine alkaline.—*Dose* 30–120 ♏ (2–4 Cc.).

Potassium Acetate.—33% Solution (1

Colorl. liq.—Sp. Gr. 1.176–1.18.—*Dose* 45–180 ♏ (3–12 Cc.).

Potassium Acetate Merck.—Reagent.—33% Solution (1

Clear, colorl., neutr. or at most sl'tly acid liq.; 33% $KC_2H_3O_2$. — Sp. Gr. 1.176–1.18. — *Tests:* (*Cl*) 5 Cc. + 20 Cc. H_2O + 5 Cc. HNO_3 (sp. gr. 1.153) + solut. $AgNO_3$ – at most only sl't opalesc. turb.—(*H_2SO_4*) 10 Cc. + 10 Cc. H_2O + 5 Cc. HCl + solut. $BaCl_2$ – no turb.—(*Heavy Met.*) *a:* 15 Cc. + 15 Cc. H_2O + aqu. H_2S – no ppt. or coloration; *b:* 5 Cc. + 20 Cc. H_2O + 1 Cc. HCl + solut. KSCN – no red color.—(*Ca*) 10 Cc. + 10 Cc. H_2O + solut. $(NH_4)_2C_2O_4$ – no ppt. within 3 hrs.—*Uses:* Chiefly detect. tartaric acid.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Potassium Acetotungstate Merck (6

(Potassium Acetowolframate). — Double salt prep. fr. potass. tungstate & potass. acetate.—Wh., lustr. cryst.—*Sol.* W.—*Uses:* Photography.

Potassium Alum.—see **Aluminum & Potassium Sulphate**

Potassium Amylsulphate Merck (6

(Potassium Isoamylsulphate). — $2KC_5H_{11}SO_4 + H_2O$.—Warty, wh. cryst.—*Sol.* W.; sl. A.

Potassium Anhydrosulphate.—see **Potassium Pyrosulphate**

Potassium Anthranilate Merck (250

(Potassium Orthoaminobenzoate).—$KC_7H_6NO_2$, or, $C_6H_4NH_2.COOK$.—Wh. to gray, cryst. powd. —*Sol.* W.

Potassium Antimonate Merck (2

(Acid Potassium Metantimonate or "Pyroantimonate"). — $K_2H_2Sb_2O_7 + 6H_2O$. — Gran., wh., cryst. powd.—*Sol.*, sl. cold W.; more eas. (1:90) hot W.

do. Merck.—Pure (2

(Diaphoretic Antimony; "White Oxide of Antimony").—Mixt. neutral & acid potass. antimonates w. antimony antimonate & oxide.—Wh. powd.—Diaphoretic.—*Uses:* Hemorrhage of lungs, pneum., & puerperal fever.—*Dose* 8–25 grains (0.5–1.6 Gm.).

Potassium Antimonate Merck.—Reagent (3

(Acid Potassium Pyroantimonate).—$H_2K_2Sb_2O_7 + 4H_2O$.—Gran., cryst., wh. powd.—*Sol.* 250 cold W.; 90 boil. W.—*Tests:* 1 Gm. + 100 Cc. boil. H_2O – solut. neutral to litmus paper.—20 Cc. of 1% aqu. solut. + solut. 1 Gm. KCl in 10 Cc. H_2O – no ppt. within 15 min.—20 Cc. 1% aqu. solut. + solut. 1 Gm. NH_4Cl in 10 Cc. H_2O + 2–3 drops NH_4OH (sp. gr. 0.96) – no ppt. within 15 min.—*Uses:* Detect. Na.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by

D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Potassium Arsenate Merck.—Pure, cryst. (2

KH_2AsO_4.—Colorl. cryst.—*Sol.* W.—Antiper.; Alter.—*Uses:* Skin dis. & malaria.—*Dose* $^1/_{20}$–$^1/_{10}$ grain (0.003–0.006 Gm.).—*Max. D.* $^1/_{10}$ grain (0.006 Gm.), single; $^1/_3$ grain (0.02 Gm.), p. day.—*Antid.*. As of arsenic trioxide.—*Caut.* Keep dry. Very poisonous!

do. Merck.—Crude (1

Uses: Techn., for fly-paper.

Potassium Arsenite Merck.—Pure (2

$KAsO_2+H_3AsO_3$.—Whitish-gray to wh. powd.—*Sol.* W.—*Uses:* As of the arsenate.—*Techn.*, as reducer for silver in manuf. of mirrors.—*Dose* $^1/_{30}$–$^1/_{15}$ grain (0.002–0.004 Gm.).—*Antid.*, as of arsenic trioxide.

do. Merck.—Crude (1

Gray powd.—*Sol.* W.—*Uses:* Techn.

Potassium Aurobromide.—see **Gold & Potassium Bromide**

Potassium Aurochloride.—see **Gold & Potassium Chloride**

Potassium Benzenedisulphonate Merck (25

$C_6H_4(SO_3K)_2$.—Thin, wh. plates.—*Sol.* W.

Potassium Benzoate Merck (3

$KC_7H_5O_2+3H_2O$.—Wh., cryst. powd.—*Sol.* W., A.—*Uses:* As of sodium benzoate.—*Dose* 5–20 grains (0.3–1.3 Gm.).—*Caut.* Keep fr. air.

Potassium Biborate.—see **Potassium Borate**

Potassium Bicarbonate Merck.—Highest Purity, Medicinal, cryst. or powd. (1

(Acid Potassium Carbonate).—Fr. solut. potass. carbonate, by carbonic acid.—$KHCO_3$.—Colorl., transp. or transl. cryst., or wh. powd.; sl'y alkal., saline taste.—*Sol.*, abt. 3 W. at 25° C.; 1.9 W. at 50° C.; alm. insol. A. (U. S. P.).—Diur.; Antilithic; Antacid.—*Uses:* Dyspep., dropsy, lithiasis, sour stom., jaund., &c. Us'y taken effervesc. w. tartaric or citric acid.—*Techn.*, for making potass. carbonate of highest purity.—*Dose* 10–60 grains (0.6–4 Gm.).

do. Merck.—Pure, cryst., gran., or powd. (1

Potassium Bicarbonate Merck.—Reagent (2

$KHCO_3$.—Colorl., transp., rhomb. prisms or plates.—*Sol.* 4 W.—*Tests:* (H_2SO_4) 3 Gm.+50 Cc. H_2O+6 Cc. HCl (sp. gr. 1.124); boil sev. min.; add solut. $BaCl_2$–no ppt. ($BaSO_4$) within 12 hrs.—(*Cl*) 3 Gm.+50 Cc. H_2O+10 Cc. HNO_3 (sp. gr. 1.153)+solut. $AgNO_3$–at most sl. opalesc.—(HNO_3) 3 Gm.+20 Cc. H_2O+10 Cc. dil. H_2SO_4 +1 drop 1:1000 indigo solut.+10 Cc. conc. H_2SO_4–blue color should not disappear.—(*Si*) 5 Gm.+20 Cc. H_2O+15 Cc. HCl (sp. gr. 1.124); evap. on W.-bath in platin. dish; dry res. $^1/_2$ hr. at 120° C. & diss. in 3 Cc. HCl (sp. gr. 1.124) +25 Cc. H_2O–solut. perf. clear.—(*Ca; Al; Heavy Met.*) 5 Gm.+25 Cc. H_2O+15 Cc. dil. $C_2H_4O_2$+5 Cc. NH_4OH (sp. gr. 0.96); heat $^1/_2$ hr. on W.-bath–no flocks or ppt. Add solut. $(NH_4)_2C_2O_4$+$(NH_4)HS$–no react.—(H_3PO_4) 5 Gm.+50 Cc. H_2O+50 Cc. HNO_3 (sp. gr. 1.153)+25 Cc. solut. ammon. molybd.; heat to 30–40° C.–no yellow ppt. within 2 hrs.—(*Fe*) 1 Gm.+3 Cc. HCl (sp. gr. 1.124)+10 Cc. H_2O+solut. KSCN–no red color.—(*Res.*) ignite 100 parts–wt. of res. 69 parts.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Potassium Bichromate.—see **Potassium Dichromate**

Potassium Bifluoride Merck (2

(Acid Potassium Fluoride).—KF.HF.—Colorl. cryst.—*Sol.* W.—*Uses:* Antisep. in brewing.

Potassium Biniodate Merck.—Cryst. (25

(Acid Potassium Iodate).—KHI_2O_6, or, KIO_3.HIO_3.—Small, white, lustrous cryst.—*Sol.*, v. dil. acids.

Potassium Biniodate Merck.—Reagent (35

$KIO_3.HIO_3$.—Sm., wh. cryst.—*Sol.* 20 cold W.—*Uses:* Replaces iodine in volumetric soluts.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Potassium Binoxalate Merck (1

(Acid Potassium Oxalate; Sal Acetosella; Salt of Sorrel; Essential Salt of Lemons).—KHC_2O_4 +H_2O.—Wh., monocl. prisms.—*Sol.* W.—*Uses: Intern.*, as of oxalic acid.—*Techn.*, removing ink stains, scour. metals, clean. wood, & in photo. Somet. in dil. solut. as drink.—*Dose* $^1/_8$–$1^1/_2$ grains (0.008–0.1 Gm.).—*Max. D.* 5 grains (0.3 Gm.) single; 10 grains (0.6 Gm.) p. d.—*Caut.* Keep dry.

Potassium Biphosphate.—see **Potassium Phosphate, Monobasic**

Potassium Bisaccharate Merck (75

$(COOH).C_4H_4(OH)_4.(COOK)$. — Yellowish-wh. cryst.—*Sol.*, abt. 100 W.

Potassium Bisulphate Merck.—Highest Purity, Medicinal, cryst. (1

(Acid Potassium Sulphate; Potassium Hydrogen Sulphate).—$KHSO_4$.—Colorl. cryst.—*Sol.* W.—Aper.; Tonic.—*Uses:* Constip. w. weak appetite; give w. equal wt. sod. carbonate.—*Extern.*, w. acetates for smelling salts.—*Dose* 60–120 grains (4–8 Gm.).

do. Merck.—Highest Purity, Medicinal, fused (1

Wh., deliq. plates.—*Caut.* Keep fr. air.

do. Merck.—Pure, cryst. (1

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Potassium Bisulphate Merck.—Pure, fused (1

Wh., deliq. plates.—*Uses:* W. sod. bicarbonate for baths.

do. Merck (1

(Sal Enixum; Potash Salt Cake).

Potassium Bisulphate Merck.—Reagent (2

$KHSO_4$. — Colorl. cryst. — *Sol.* 2 W. — *Tests:* (*Heavy Met.*) 1 Gm. + 20 Cc. H_2O + aqu. H_2S – no react.; add sl. excess NH_4OH + $(NH_4)HS$ – no react.—(*Cl*) 20 Cc. 1:20 aqu. solut. + solut. $AgNO_3$ – no turb.—(*As*) 1 Gm. finely powd. + 3 Cc. solut. $SnCl_2$ – no dark color within 1 hr.—*Uses:* Flux, &c.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Potassium Bisulphite.—Highest Purity, Medicinal (2

(Acid Potassium, or Potassium Hydrogen, Sulphite).—$KHSO_3$.—Wh., cryst. powd.—*Sol.* W. —Antiseptic.—*Uses:* Techn. as sulphurous acid in brewing.—*Dose* 5–30 grains (0.3–2 Gm.).

Potassium Bisulphite Merck.—Reagent (2

$KHSO_3$. — Wh., cryst. powd.; odor of SO_2. — *Sol.*, eas. W.—*Tests:* (*Heavy Met.; As*) 5 Gm. + 5 Cc. conc. H_2SO_4 (sp. gr. 1.84); evap. to dryness on sand-bath; diss. res. in 20 Cc. H_2O; *a:* to 10 Cc. of this solut. add aqu. H_2S – no react.; *b:* to 10 Cc. solut. add solut. ammon. molybd. in HNO_3, & heat to 70–80° C. – no yellow color or ppt.—*Uses:* Reducer; also determ. aldehydes.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Potassium Bitartrate Merck.—Highest Purity, Medicinal, cryst., or powd. (2

(Acid Potassium Tartrate; Cream of Tartar).—$KHC_4H_4O_6$.—Colorl., or sl'y opaque, cryst. or wh. powd.; pleas., acid. taste.—*Sol.* 200 W. at 25° C.; solut. of borax or boric acid; 16.7 boil. W.; v. spar. A. — Cath.; Diur.; Aper. — *Uses:* Dropsy, & as refrigerant drink in febrile affect. —*Dose* $^1/_2$–8 drams (2–30 Gm.).

do.—Pure, powder (1

Wh., cryst. powd.—*Uses & Dose:* As preceding.

Potassium Bitartrate Merck.—Reagent (6

$KHC_6H_4O_6$.—Wh., cryst. powd.—*Sol.* 192 cold W., 20 boil. W.; solut. NaOH & K_2CO_3; insol. A. —*Tests:* (H_2O) dry 5 Gm. at 100° C. – no loss of wt.—(*Cl*) 1 Gm. + 20 Cc. H_2O + 5 Cc. HNO_3 (sp. gr. 1.153) + solut. $AgNO_3$ – at most sl. opalesc.—(H_2SO_4) 1 Gm. + 20 Cc. H_2O + 5 Cc. HNO_3 (sp. gr. 1.153) + solut. $BaCl_2$ – no ppt. within 12 hrs. —(*Ca*) 1 Gm. + 5 Cc. dil. $C_2H_4O_2$ + 25 Cc. H_2O; heat; allow to cool; filter; add to filtrate few drops solut. $(NH_4)_2C_2O_4$ – no turb. within 10 min.—(NH_4 *Compounds*) heat 2 Gm. w. 10 Cc. solut. NaOH – no NH_3 vapors evolv. (test. w. litmus paper).—(*Heavy Met.*) 1 Gm. + 25 Cc. H_2O + 25 Cc. NH_4OH (sp. gr. 0.96) + aqu. H_2S – no react.—*Uses:* Starting material for prepar. volumetric soluts. of the alkalies.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Potassium Borate Merck (3

(Potassium Biborate, Tetraborate, or Pyroborate).—$K_2B_4O_7 + 5H_2O$.—Wh. powd.; alkal. taste.—*Sol.* W.

Potassium Borotartrate Merck (4

Equal parts of potassium metaborate & potassium bitartrate.—Wh., cryst. powd.—*Sol.*, sl. in W.—Antiseptic.—*Uses:* Photo. as addition to alkaline developers as retarder; has also been used to adulterate Spanish saffron.

Potassium Bromate Merck.—Pure (5

$KBrO_3$.—Wh., cryst. powd.—*Sol.*, hot W.

Potassium Bromate Merck.—Reagent (7

$KBrO_3$. — Colorl. cryst., or cryst. powd. — *Sol.* 15 cold, 2 boil., W.—*Test:* (*KBr*) 2 Gm. + 20 Cc. H_2O + 5 Cc. dil. H_2SO_4 – no immed. yellow color. — *Uses:* Determ. phenol, & sulphurous, hydrosulphuric, & oxalic acids.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Potassium Bromide Merck.—Cryst., gran., & powd. (1

KBr. — Wh., gran. powd., or medium-sized cryst.; pung., saline taste.—*Sol.*, abt. 1.5 W., 180 A., at 25° C.; less than 1 boil. W.; 16 boil. A. (U. S. P.).—*Melt.*, abt. 700° C.—Antiepileptic; Sed.; Hypn.—*Uses:* Epilepsy, neurasth., convuls., delir. trem., tetanus, strychnine poison., syph., scrof., semi-impotence, nymphomania, urethral fever, iodoform poison.—*Dose* 20–60 grains (1.3–4 Gm.), increased to 120 grains (8 Gm.) p. d., in solution. In tetanus or strychnine poison. up to $^1/_2$ oz. (15 Gm.).

Note.—The uniformly high purity of this bromide indicates the desirability of prescribing & dispensing only of this grade.

do.—Effervescent.—*N. F.*

11% potass. bromide.—Wh., gran. powd.; effervesc. with W.—*Uses:* Soporific & pleasant drink in headache.—*Dose* 60–120 grains (4–8 Gm.).

Potassium Bromide Merck.—Reagent (2

KBr.—Wh., cubic., lustr. cryst.; perman. in air. —*Sol.* 2 W.; abt. 200 A.—*Tests:* (K_2CO_3) aqu. 1:20 solut. neutral; should not turn red litmus paper blue; should not be redd. by 1 drop solut. phenolphtalein.—($KBrO_3$) spread some powd. KBr on wh. porcelain, & add few drops dil. H_2SO_4 – no immed. yellow color.—(*Heavy Met.; K_2SO_4;*

Ba Salts) treat 20 Cc. ea. 1:20 aqu. solut. w.: *a:* aqu. H_2S – no react.; *b:* solut. $Ba(NO_3)_2$ – no react.; *c:* dil. H_2SO_4 – no react.—(*Iodide*) 20 Cc. 1:20 solut. + 2–3 drops solut. $FeCl_3$ + 5 Cc. chlorof.; shake – chlorof. should not acquire violet color.—(*Excess of KCl*) dry at 100° C.; diss. 3 Gm. in 100 Cc. H_2O; to 10 Cc. of solut. add few drops solut. K_2CrO_4 + decinorm. $AgNO_3$ – not more than 25.4 Cc. silver solut. should be required to develop perman. redness.—*Uses:* Determ. phenol.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Potassium Bromide with Caffeine.—Effervescent. —*N. F.*

11% potass. bromide, & 1.1% caffeine.—Wh., gran. powd.; effervesc. with W.—Sedative.—*Uses:* Headache, insom., nervousn., &c.—*Dose* 90 grains (6 Gm.), in W.

Potassium Bromoarsenite Merck (35

Mixture of potassium bromide & arsenic bromide, in molecular prop.—Wh. to gray-wh. powd.—*Sol.* W.

Potassium Bromoplatinate.—see **Platinum & Potassium Bromide**

Potassium Bromortho-oxybenzoate.—see **Potassium Bromosalicylate**

Potassium Bromosalicylate Merck (150

(Potassium Bromortho-oxybenzoate).—$KC_7H_4BrO_3$, or, $C_6H_3Br(OH).COOK$. — Wh., cryst. powd.—*Sol.* W.—Antirheumat.; Hypn.—*Uses:* Rheumatism & neuralgia.

Potassium Butylsulphate (Iso-) Merck (10

$KC_4H_9SO_4$.—Wh. mass.—*Sol.* W.

Potassium Butyrate Merck (12

$KC_4H_7O_2$.—V. deliq., wh., cryst. powd.—*Sol.* W.—*Caut.* Keep well stoppered.

Potassium Butyrate (Iso-) Merck (25

$KC_4H_7O_2$.—Deliq., wh., cryst. powd.—*Sol.* W.—*Caut.* Keep fr. air.

Potassium Cacodylate Merck (15

$K(CH_3)_2AsO_2$ + aq.—Wh. cryst.—*Sol.*, sl. A.

Potassium Camphorate Merck.—Cryst. (35

$K_2C_{10}H_{14}O_4$.—Wh., deliq. cryst.—*Sol.* W.—Antiseptic.—*Uses:* Night sw. of phth., bronch., cyst., pyelitis, gonor., sore throat, ulc. mouth, &c.—*Dose* 10–30 grains (0.6–2 Gm.).—*Caut.* Keep dry & fr. air.

Potassium Cantharidate Merck (1500

$K_2C_{10}H_{12}O_5 + 2H_2O$. — White amorph. powd. — *Sol.* W.—*Uses:* Hypoderm., in v. attenuated solut. (0.6:1000) for tuberculosis (Liebreich).—*Dose* of solut., 3–6 ♏ (0.2–0.36 Cc.) hypoderm.

Potassium Carbolate.—see **Potassium Phenate**

Potassium Carbonate Merck.—Highest Purity (1

K_2CO_3.—Wh., deliq., gran. powd.—*Sol.* 0.91 W. at 25° C.; 0.65 boil. W.; insol. A.—*Melt.*, bright red heat.—Antacid; Solv.—*Uses: Intern.*, acid stom., lithiasis, dropsy, jaundice.—*Extern.*, as 15% oint., or 1% aqu. solut. as bath in cutan. affect.—*Dose* 10–30 grains (0.6–2 Gm.) several t. p. d.—*Antid.*, emetics, acids, fixed oils.—*Caut.* Keep well stoppered.

do. Merck.—Pure (1

do. Merck (1

(Crude Potassium Carbonate; Pearlash; the purified salt is known as "Salts of Tartar").—Fr. ash of plants, & espec. of beet-root.—K_2CO_3.—Wh., deliq., gran. powd.—*Sol.*, in eq. wt. W.—*Uses:* Techn., in dyeing, bleaching, & in manuf. of soap, glass, smalts, potass. cyanide, potass. ferrocyanide, & other potass. salts.

Potassium Carbonate Merck.—Reagent (2

K_2CO_3.—Wh., gran., hygrosc. powd.; alkal. react.—*Sol.* 1 W.; insol. absol. A.—At least 99% K_2CO_3.—*Tests:* (*Heavy Met.*) 20 Cc. aqu. 1:20 solut. both w. & without HCl + aqu. H_2S – no react.—(*Cl*) 1 Gm. + 20 Cc. H_2O + HNO_3 + solut. $AgNO_3$ – at most sl. opalesc.—(*H_2SO_4*) 20 Cc. 1:20 solut. + HCl; boil; add solut. $BaCl_2$ – no ppt. ($BaSO_4$) within 12 hrs.—(*HNO_3*) 0.2 Gm. + 2 Cc. dil. H_2SO_4 + 2 Cc. conc. H_2SO_4; cool; overlay w. 1 Cc. solut. $FeSO_4$ – no reddish-brown zone.—(*KCN*) 5 Cc. 1:20 solut. + solut. 0.5 Gm. $FeSO_4$ in 5 Cc. H_2O + 1–2 drops solut. $FeCl_3$; heat to 60–70° C.; add HCl – no green color or blue ppt.—(*Sulphide; SO_2; Thiosulphate*) pour 1 Cc. 1:20 solut. into 10 Cc. decinorm. $AgNO_3$ – yellowish-wh. ppt., which should not darken to gray, brown, or black, on heat. to 68–70° C.—(*H_3PO_4*) 5 Gm. + 50 Cc. H_2O + 50 Cc. HNO_3 (sp. gr. 1.153) + 25 Cc. solut. ammon. molybd. – no yellow ppt. on stand. 2 hrs. at abt. 40° C.—(*Si*) 5 Gm. + 20 Cc. HCl (sp. gr. 1.124) + 20 Cc. H_2O; evap. in platin. dish to dryness; dry res. $^1/_2$ hr. at 120° C.; diss. in 3 Cc. HCl (sp. gr. 1.124) + 25 Cc. H_2O – solut. perf. clear.—(*Al; Ca*) 5 Gm. + 25 Cc. dil. $C_2H_4O_2$ (sp. gr. 1.041) + 12 Cc. NH_4OH (sp. gr. 0.96); heat $^1/_2$ hr. on W.-bath – no flocks or ppt. should form; add solut. $(NH_4)_2C_2O_4$ – no react.—*Uses:* Chiefly as flux.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

do. Merck.—Reagent.—Solution (1

Clear, colorl., alkal. liq.; abt. 33% K_2CO_3.—Sp. Gr. 1.330–1.334.—*Tests:* As of preceding, using, however, 3 Cc. solut. instead of 1 Gm. K_2CO_3.—*Uses:* Prepar. solut. potass. acetate; iodometric determ. arsenous acid.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. These reagents conform to the standard therein given.

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Potassium Chlorate.—Highest Purity, cryst. or powder (1

$KClO_3$.—Transp., colorl., shin. prisms or plates, or wh. powd.; cooling, saline taste.—*Sol.* 16.7 W. at 15° C.; (16 W. at 25° C.; 1.7 boil. W.; sl. sol. dil. A.; insol. absol. A., U. S. P.).—*Melt.* 334° C.; decomp. above 352° C.—Antiseptic.—*Uses: Intern.*, all forms of stomatitis, diphth., merc. ptyalism, & dis. of muc. membr.—*Extern.*, satur. solut., w. laudanum, per enema, for painful hemorrhoids; 3–5% aqu. solut. in mouth-washes & gargles in stomatitis, angina, tonsilitis, aphthæ, &c.; powder on ulc. & badly healing wounds. It should never be given on an empty stomach.—*Doses:* 10–20 grains (0.6–1.3 Gm.) in lozenges, tablets, or chalk mixt.—*Max. D.* 20 grains (1.3 Gm.) p. d. for children 1 yr. old; 30 grains (2 Gm.) p. d. for children 2–3 yrs. old; 90–120 grains (6–8 Gm.) p. d. for adults.—*Incomp.*, iron iodide, tartaric acid.—*Antid.*, diuretics, ice, opium, pilocarpine, alkali carbonates, prolonged baths, caffeine-sodium benzoate hypodermically, salt transfusions, analeptics.—*Caut.* Do not triturate w. sulphur, phosphorus, or organic or combustible compounds. Inflames or explodes w. sulphuric acid & any organic powd.—Keep carefully, in dry place.

do. Merck.—Pure, granulated (1

do. Merck.—Cryst. or powder (1

(Potassium Oxymuriate).—*Uses:* As a source of oxygen; pyrotech.; matches; printing fabrics, &c.

Potassium Chlorate Merck.—Reagent (2

$KClO_3$.—Colorl., lustr., tabul. cryst.—*Sol.* 16 cold, 2 boil. W.; 130 A. (85%); insol. absol. A., E.—*Tests:* (*Earthy Alkalies; Cl*) 20 Cc. ea. 1:20 solut. + *a:* solut. $(NH_4)_2C_2O_4$; *b:* solut. $AgNO_3$ – no react. in either case.—(*Heavy Met.*) 3 Gm. + 30 Cc. warm H_2O – solut. perf clear; add aqu. H_2S – no react.—(HNO_3) 1 Gm. + 5 Cc. solut. NaOH (sp. gr. 1.3) + 0.5 Gm. Zn dust + 0.5 Gm. powd. Fe; heat – no NH_3 evolv. (test w. moist litmus paper).—(H_2SO_4) 20 Cc. 1:20 solut. + solut. $BaCl_2$ – no ppt. ($BaSO_4$) within 12 hrs.—(*As*) 20 Gm. + 100 Cc. HCl (sp. gr. 1.124) in capacious porcel. dish; when evol. Cl slackens, evap. on W.-bath to dryness; diss. res. in 50 Cc. H_2O, & introduce solut. in sm. quant. into Marsh appar. started w. 20 Gm. As-free gran. Zn & dil. (1:5) H_2SO_4 – no As deposit should be visible in reduct. tube within 2 hrs.—*Uses:* Forensic & ultimate analysis; oxidizer; determ. sulphur.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Potassium Chloride Merck.—Highest Purity (1

KCl.—Wh., cubical cryst.; saline taste.—*Sol.* W.—*Uses:* Chem.

do.—Crude (1

Uses: Techn.

Potassium Chloride Merck.—Reagent (2

KCl.—Colorl., cubic. cryst., or wh., cryst. powd.—*Sol.* 3 cold W.; more solub. boil. W.; insol. absol. A., E.—Aqu. solut. neutral.—*Tests:* (*Heavy Met.; Alkaline Earths*) 3 Gm. + 50 Cc. H_2O + *a:* solut. $(NH_4)_2C_2O_4$; *b:* solut. Na_2CO_3; or *c:* solut. $(NH_4)HS$ – no react. in any case.—(H_2SO_4) 20 Cc. 1:20 solut. + solut. $BaCl_2$ – no ppt. within 12 hrs.—*Uses:* Determ. H_2SiF_6.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Potassium Chloriridate.—see **Iridium & Potassium Chloride**

Potassium Chlorochromate Merck (3

$KClCrO_3$.—Red cryst.; evolve chlorine w. heat.—*Sol.* W., with decomp.—*Uses:* Oxidizer.—*Incomp.* W.

Potassium Chloroplatinate.—see **Platinum & Potassium Chloride, Platinic**

Potassium Chloroplatinicyanide.—see **Platinum & Potassium Chlorocyanide**

Potassium Chloroplatinite.—see **Platinum & Potassium Chloride, Platinous**

Potassium Chromate Merck.—Highest Purity (1

(Neutral, or Yellow, Potassium Chromate).—K_2CrO_4.—Yellow cryst.—*Sol.* W.—*Uses: Medic.*, rarely as antisyphilitic.—*Max. D.* 1/2 grain (0.03 Gm.) single; 1 grain (0.06 Gm.) p. d.

do. Merck (1

Uses: Techn., in dyeing, manuf. inks, &c.

Potassium Chromate Merck.—Reagent (2

K_2CrO_4.—Yellow, rhomb. cryst.; perman. in air.—*Sol.* 2 cold W.; insol. A.—1:20 aqu. solut. sl'tly alkal. to litmus paper.—*Tests:* (*Free Alkali*) 0.1 Gm. + 25 Cc. H_2O + few drops solut. phenolphtalein – no red color.—(H_2SO_4) 3 Gm. + 100 Cc. H_2O + 30 Cc. HCl (sp. gr. 1.124) + solut. $BaCl_2$ – no ppt. within 12 hrs.—(*Cl*) 1 Gm. + 20 Cc. H_2O + 10 Cc. HNO_3 (sp. gr. 1.153); heat to abt. 50° C.; add solut. $AgNO_3$ – no turb. or ppt. within 5 min.—(*Al; Alkaline Earths*) 2 Gm. + 30 Cc. H_2O + 5 Cc. NH_4OH (sp. gr. 0.96) + solut. $(NH_4)_2C_2O_4$ – no ppt. within 12 hrs.—*Uses:* Detect. Pb, Hg, Ag, Ba; indicator & determ. Ba & Pb.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Potassium Cinnamate Merck (20

(Potassium Cinnamylate).—$KC_9H_7O_2$.—Wh., cryst. powd.; str. aromatic odor.—*Sol.* W.

Potassium Citrate Merck.—Highest Purity, Medicinal (1

(Tribasic Potassium Citrate).—$K_3C_6H_5O_7 + H_2O$.—Colorl. cryst., or wh., deliq. powd.; cooling,

saline taste.—*Sol.* 0.6 W. at 15° C.; sl. in A. (0.5 W. at 25° C.; v. sol. boil. W., U. S. P.).—Begins to decomp. at 230° C.—Diaph.; Refrigerant.—*Uses:* Rheum., lithiasis, fevers, bronch. affect., &c.—*Dose* 20–25 grains (1.3–1.6 Gm.).—*Max. D.* 8 dr. (30 Gm.) p. day

Potassium Citrate Merck.—Pure (1

do.—Effervescent.—*U. S. P.*

Mixt. potass. citrate, citric & tartaric acids, & sod. bicarbonate.—Wh. powd.—*Sol.* W., with effervesc.—Refrigerant; Diaph.—*Uses:* Agre. drink in fevers, rheum., lithiasis, bronch., &c.—*Dose* 30–90 grains (2–6 Gm.).

Potassium Citrate Merck.—Monobasic (5

(Monopotassium Citrate).—$KC_6H_7O_7$.—Wh., cryst. powd.—*Sol.* W.

Potassium Cobalticyanide.—see **Cobalt & Potassium Cyanide**

Potassium Cobaltinitrite.—see **Cobalt & Potassium Nitrite**

Potassium Cobaltosulphate.—see **Cobalt & Potassium Sulphate**

Potassium Cyanate Merck.—Pure (11

KCNO.—Sm., wh., odorl. cryst.—*Sol.* W.

Potassium Cyanaurate.—see **Gold & Potassium Cyanide**

Potassium Cyanide Merck.—Highest Purity (5

KCN.—Wh., amorph., deliq. pieces; odor of hydrocyanic acid.—*Sol.* 2 W. at 25° C.; 1 boil. W. w. decomp.; sl. in A.—*Melt.*, at low red heat.—Sed.; Antispasm.; Anod.—*Uses: Intern.*, dyspnea, asthma, phth., catarrh, whoop.-cough, &c.—*Extern.*, 0.2–0.8% aqu. solut. in neural. & local pains; 0.6–1.2% aqu. solut., removes silver-nitrate stains fr. conjunctiva.—*Dose* $^1/_8$ grain (0.008 Gm.).—*Max. D.* $^1/_3$ grain (0.02 Gm.) p. d.—*Antid.*, chlorine water, solution chlorinated soda; hydrogen peroxide hypoderm.; ammonia; 10 grains iron sulphate with 1 dram tincture iron in 1 oz. water; cobalt nitrate, cold affusions, emetics, artificial respiration, freshly precipitated ferric hydroxide with sod. carbonate.—*Incomp.*, acids & acid syrups; alkaloids, hydrated chloral; iodine; lead, mercurous, & silver salts, permanganates, potass. chlorate or nitrate.—*Caut.* Keep well stoppered.

do. Merck.—98-100% pure (1

do. Merck.—Gran., abt. 60% (1

do. Merck.—Fused, 30%, 40%, & 60% (1

Potassium Cyanide Merck.—Reagent (12

KCN.—Wh. powd.; 96–98% KCN.—*Sol.* 2 W.—Aqu. solut. neutral to litmus paper.—*Tests:* (*K_2S*) 1 Gm. + 20 Cc. H_2O + solut. $Pb(C_2H_3O_2)_2$—pure wh. ppt.—(*K_2CO_3; KSCN; $K_4Fe[CN]_6$*) 1 Gm. + 20 Cc. H_2O + 5 Cc. HCl (sp. gr. 1.124) *v. cautiously*—only sl't effervesc.; add 1 drop solut. $FeCl_3$—no red or blue color.—(*K_2SO_4*) 20 Cc. 1:20 solut. + 5 Cc. HCl (sp. gr. 1.124) + solut. $BaCl_2$—no react.—*Uses:* Reducer in determ. Sb, Sn, As, Ni, Zn, Co, Cu; in electrolysis.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Potassium Dichromate Merck.—Highest Purity, cryst. & powd. (1

(Potassium Bichromate; Acid or Red Potassium Chromate).—$K_2Cr_2O_7$.—Large, orange-red, transl. cryst.; bitter, metal. taste.—*Sol.* 10 W. at 15° C.; (abt. 9 W. at 25° C.; 1.5 boil. W.; insol. A., U. S. P.).—Corros.; Astring.; Alter.—*Uses: Intern.*, syph.—*Extern.*, sweat. feet, tuberc. elevations, syph. veget., & warts; also to harden anatomical specimens.—*Dose* $^1/_{12}$–$^1/_6$–$^1/_3$ grain (0.005–0.01–0.02 Gm.); 5% solut. for sweat. feet; 10% solut., caustic.—*Antid.*, emetics & stomach siphon, followed by soap, magnesia, or alkal. carbonates; calcium saccharate.

do. Merck.—Highest Purity, fused (2

Dark-red tablets.

do. Merck.—Commercial, cryst. or powd. (1

Orange-red cryst.—*Sol.* 10 W.—*Uses:* Techn., in tanning, electrotechn., dyeing, painting, printing, painting on porcelain, heliography, photolithography, pigment process in photography, Albert-type; bleaching palm oil, wax, sponges; removing fusel oil fr. alcohol; waterproofing fabrics, purifying pyroligneous acid, &c.—*Antid.*, as above.

do. Merck.—Caustic pencils

Dark-red pencils.—*Uses:* Cauterize superabundant granul., diphth. & syph. patches.

Potassium Dichromate Merck.—Reagent (2

$K_2Cr_2O_7$.—Dark yellowish-red, triclinic prisms or plates.—*Sol.* 10 cold, & abt. 1.5 boil., W.; insol. A.—Aqu. solut. reddens blue litmus paper.—*Tests:* (*H_2SO_4*) 3 Gm. + 100 Cc. H_2O + 30 Cc. HCl (sp. gr. 1.124) + solut. $BaCl_2$—no ppt. within 12 hrs.—(*Cl*) 1 Gm. + 20 Cc. H_2O + 10 Cc. HNO_3 (sp. gr. 1.153); heat to abt. 50° C.; add few drops solut. $AgNO_3$—no turb. or ppt. within 5 min.—(*Al; Alkaline Earths*) 2 Gm. + 30 Cc. H_2O + 10 Cc. NH_4OH (sp. gr. 0.96) + solut. $(NH_4)_2C_2O_4$—no ppt. within 12 hrs.—*Uses:* Detect. aniline, cantharidin, alkaloids, phenol, strychnine, & salicylic, tartaric & citric acids; determ. N, H, S, Br, U, Cu, Bi, alcohol, & aldehydes.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Potassium Diiodoparaphenolsulphonate.—see **Sozoiodole-Potassium**

Potassium Diiodoresorcinolmonosulphonate.—see **Picrol**

Potassium Dinitroaminophen(ol)ate.—see **Potassium Picraminate**

Potassium Dithionate.—see **Potassium Hyposulphate**

Potassium Ethyldithiocarbonate.—see **Potassium Xanthogenate**

Potassium Ethylsulphate Merck (3

(Potassium Sulphovinate).—$KC_2H_5SO_4$.—Colorl. cryst.—*Sol.* W., A.—*Caut.* Keep dry.

Potassium Ethylxanthogenate. — see **Potassium Xanthogenate**

Potassium Ferricyanide Merck.—Pure, cryst. or powder (2

(Potassium Ferridcyanide; Red Prussiate of Potash).—$K_3Fe(CN)_6$.—Large, red prisms, or red powd.—*Sol.* W.—*Uses:* Chem. & techn.—*Caut.* Keep dry & fr. light.

do. Merck (1

Uses: Techn., in dyeing wool, calico printing, etching liquid (Mercer's Liquor), heliography, temper. iron & steel, brown mordant for wood, &c.

Potassium Ferricyanide Merck.—Reagent (4

$K_3Fe(CN)_6$.—Ruby-red, lustr. cryst.—*Sol.* 2.5 cold, 1.5 boil., W.—*Tests:* (*Ferrous Salts*) wash off superficial layer w. W., then prepare 3% solut., & add few drops dil. solut. $FeCl_3$ – no blue color.—(H_2SO_4) 20 Cc. 1:20 solut. + 1 Cc. HCl (sp. gr. 1.124) + solut. $BaCl_2$ – no ppt. within 12 hrs.—(*Cl*) 0.5 Gm. + 1 Gm. KNO_3; deflagrate in sm. quant. in porcel. cruc. heated to redness; maintain mass in fusion a few min., allow to cool, & treat w. 20 Cc. H_2O; filter; to filtrate add 0.5 Gm. KNO_3 & evap. to dryness; fuse res. in porcel. cruc., cool, & diss. in 20 Cc. H_2O + 3 Cc. HNO_3 (sp. gr. 1.153); add solut. $AgNO_3$ – at most only sl't opalesc.—*Uses:* Detect. ferrous salts, H_2O_2, morphine; estim. saccharose, dextrose, & metals.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Potassium Ferrocyanide Merck.—Pure (1

(Yellow Prussiate of Potash). — $K_4Fe(CN)_6 + 3H_2O$.—Lemon-yellow, monocl., tabular cryst. or prisms; mild, saline taste; effloresc. on expos.—*Sol.* 4 W. at 15° C.; (4 W. at 25° C.; 2 boil. W.; insol. A., U. S. P.). — Sed.; Astring. — *Uses:* Night-sw. of phth. Also techn. — *Dose* 10–15 grains (0.6–1 Gm.).

do. Merck (1

Transl., or yellow, flat cryst.—Source, formula, solubility, &c., as in preceding.—*Uses:* Techn., dyeing, tempering iron, &c.

Potassium Ferrocyanide Merck.—Reagent (3

$K_4Fe(CN)_6 + 3H_2O$. — Lemon yellow, tabular cryst.; fairly perman.—*Sol.* 4 cold, 2 boil., W.; insol. A.—*Tests:* (K_2CO_3) 1 Gm. + dil. H_2SO_4 – no evol. of gas.—(H_2SO_4) 1 Gm. + 20 Cc. H_2O + 1 Cc. HCl (sp. gr. 1.124) + solut. $BaCl_2$ – no immed. turb. — (*Cl*) 0.5 Gm. + 1 Gm. KNO_3; deflagrate in sm. quant. in porcel. cruc. heated to redness; treat res. w. 20 Cc. H_2O; filter; to filtrate add 3 Cc. HNO_3 (sp. gr. 1.153) + solut. $AgNO_3$ – at most only sl't opalesc.—*Uses:* Detect. Fe, Cu, & heavy metals; determ. Zn, strychnine, &c.; in reagents for albumen, free acids.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Potassium Ferrocyanide-Citric Acid Paper.—see **Citro-Potassium Ferrocyanide Paper**

Potassium Ferrocyanide with Urea Merck (6

Mixt. of urea & potassium ferrocyanide. — Greenish-wh., cryst. powd.—Abt. 20% urea.—*Sol.* W.

Potassium Filicate Merck (750

$KC_{14}H_{15}O_5$.—Light-brown, cryst. powd.—*Sol.* W.

Potassium Fluoresceïnate Merck (35

Potass. salt of fluoresceïn.—$K_2C_{20}H_{10}O_5$.—Yellowish-red powd.—*Sol.* W.—*Uses:* To detect corneal defects. See Fluoresceïn.

Potassium Fluoride Merck.—Pure (2

$KF + 2H_2O$.—Wh., cryst., deliq. powd.; sharp, saline taste; free fr. arsenic.—*Sol.* W.—*Uses:* Brewing, as preservative, for etching glass, &c.—*Caut.* Keep fr. air.

do. Merck.—Purified, free fr. Arsenic (1

$KF + 2H_2O$. — Wh., deliq., cryst. powd. — *Sol.*, abt. equal part W.—*Uses:* Techn.

Potassium Fluoride, Acid.—see **Potassium Bifluoride**

Potassium Formate Merck (5

$KCHO_2$.—Colorl., deliq., cryst. mass.—*Sol.* W.—*Caut.* Keep well stoppered.

Potassium Glycerate Merck (175

$KC_3H_5O_4$.—Wh., deliq. powd.—*Sol.* W.

Potassium Glycerinophosphate Merck.—75% (5

Aqu. solut., $C_3H_7O_3PO(OK)_2$.—Colorl. to yellowish liq.—*Misc.* W. all proport.—Nerve Tonic.—*Uses:* Deficient nerve nutrition, neurasthenia, Addison's disease, phosphaturia, convalesc. fr. influenza, &c.—*Inj.* 4–5 ♏ (0.25–0.3 Cc.) daily in physiological salt solut.

do. Merck. 50% & 100% (5 & 10

Potassium Guaiacolsulphonate.—see **Thiocol**

Potassium Hippurate Merck (35

$KC_9H_8NO_3 + H_2O$.—Wh, cryst. powd.—*Sol.* A.; boil. W.

Potassium Hydrosulphide. — see **Potassium Sulphydrate**

Potassium Hydroxide Merck.—Highest Purity (4

(Potassium Hydrate; Caustic Potash; Potassa).—KOH + aq.—Wh., deliq. pieces. Abs. free fr. alumina, silica, & sulphuric acid. Absorbs carbon diox. fr. air.—*Sol.* W., A.—*Uses:* Chemical.

Potassium Hydroxide Merck.—Pure (Purified by Alcohol), sticks, lumps, & drops (1

Wh. sticks; cryst. fracture.—*Sol.* 0.4 W. at 25° C.; 2 A.; eas. boil. W. & boil. A.; sl. E., (U. S. P.).—Escharotic; Antacid; Diur.—*Uses: Intern.*, gout, lithiasis, gonor., cystitis, acid dyspep., & cutan. affect.—*Extern.*, caustic to destroy warts, gangr. tissue, &c.—*Dose* 1/4–1 grain (0.015–0.06 Gm.), h'ly dil. with W.—*Antid.*, vinegar, lemon juice, orange juice, oil, milk; opium if pain, & stim. in depression; ice-water enemas in bloody diar.—*Caut.* Keep well stoppered.

do. Merck.—Purified, sticks, lumps, drops, & powd. (1

Sticks.—*Uses:* Techn., in soap manuf., mordant for wood, manuf. oxalic acid, bleaching, absorbing gaseous CO_2, &c.

do.—Solution (1

5% potass. hydroxide in W.—Clear, colorl. liq.; acrid, caustic taste; alkal. react.—Sp. Gr., abt. 1.036 at 15° C.; (1.046 at 25° C., U. S. P.).—*Sol.* W.—Antilithic; Diuret.; Antacid.—*Uses: Intern.*, urethritis, cystitis, calculi, scrof., skin dis.—*Extern.*, stimulating lotion in arthritic swellings. Also chem.—*Dose* 10–30 ♏ (0.6–2 Cc.).—*Antid.*, mild acids & oils.—*Incomp.*, fats, organic matter, amm. salts.—*Caut.* Keep in rubber- or paraffin-stoppered bottles.

Potassium Hydroxide Merck. — Reagent. — Purest (5

KOH.—Wh. pieces; cryst. structure on fracture; 82–85% KOH.—*Tests:* (H_2SO_4) 3 Gm.+50 Cc. H_2O+10 Cc. HCl (sp. gr. 1.124); heat to boil; add solut. $BaCl_2$–no ppt. within 12 hrs.—(*Cl*) 1 Gm.+20 Cc. H_2O+5 Cc. HNO_3 (sp. gr. 1.153) +few drops solut. $AgNO_3$–at most sl't opalesc. turb. within 1 min.—(*HNO_3*) *a:* 2 Gm.+10 Cc. H_2O+10 Cc. dil. H_2SO_4 (sp. gr. 1.11)+1 drop 1:1000 solut. indigo+a granule NaCl+10 Cc. conc. H_2SO_4–blue color should not disapp. within 10 min.; *b:* 25 Gm.+100 Cc. H_2O; add 5 Gm. Zn-dust & 5 Gm. powd. Fe; let stand a few hours, then distil; collect abt. 25 Cc. distillate in U-tube cont. 3–5 Cc. fifthnorm. HCl+10 Cc. H_2O; titrate w. fifthnorm. KOH (methyl orange indic.)–at most 0.2 Cc. fifthnorm. HCl should be required to neutralize the NH_3.—(*H_3PO_4*) 5 Gm.+50 Cc. H_2O+50 Cc. HNO_3 (sp. gr. 1.153) +25 Cc. solut. ammon. molybd. in HNO_3–no yellow ppt. within 2 hrs. at abt. 40° C.—(*Si*) 5 Gm.+25 Cc. H_2O+25 Cc. HCl (sp. gr. 1.124); evap. in platin. dish on W.-bath to dryness; dry res. 1/2 hr. on sand-bath at abt. 120° C.; diss. in 10 Cc. HCl (sp. gr. 1.124)+90 Cc. H_2O; filter; ignite res.–wt. of res. should not exceed 0.0005 Gm.—(*Al; Ca; Heavy Met.*) 5 Gm.+10 Cc. H_2O–solut. clear; add 25 Cc. dil. $C_2H_4O_2$ (sp. gr. 1.041)+10 Cc. NH_4OH (sp. gr. 0.96)+55 Cc. H_2O; heat on W.-bath till NH_3 dissipated; add 2–3 drop NH_4OH & let stand 12 hrs.–no ppt.; if ppt. forms, collect, wash, & ignite–its weight should not exceed 0.0005 Gm. Test filtrate as follows: *a:* to 50 Cc. add few Cc. solut. $(NH_4)_2C_2O_4$–no react.; *b:* to 50 Cc. add few drops $(NH_4)HS$–no react.—(*Impur. Insol. in A.*[K_2CO_3 & *o. K Salts*]) 5 Gm.+25 Cc. 85% A.; warm–perf. clear & colorl. solut.—*Uses:* Determ. HNO_3 & S; organic synthesis, gas analysis, ultimate organic analysis, &c.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Potassium Hydroxide Merck.—Reagent.—Purified by Alcohol (2

Wh., v. hygroscop. rods or pieces; cryst. fract.; at least 80% KOH.—*Tests:* (*H_2SO_4; HNO_3*) as preceding.—(*Cl*) 1 Gm.+20 Cc. H_2O+5 Cc. HNO_3 (sp. gr. 1.153)+few drops solut. $AgNO_3$–at most sl't opalesc., but no ppt.—(*Si*) 5 Gm. +25 Cc. H_2O+25 Cc. HCl (sp. gr. 1.124); evap. in platin. dish on W.-bath to dryness; dry res. 1/2 hr. on sand-bath at abt. 120° C.; diss. in 10 Cc. HCl (sp. gr. 1.124)+90 Cc. H_2O; filter; wash res. & ignite–wt. of res. should not exceed 0.0025 Gm.—(*Al; Ca; Heavy Met.*) 5 Gm.+20 Cc. H_2O –solut. clear & colorl.; add H_2O to make 100 Cc.; add 10 Cc. NH_4OH (sp. gr. 0.96)–at most sl't turb. but no ppt. ($Al[OH]_3$) within 5 min.; & no immed. react. on add. solut. $(NH_4)C_2O_4$ & $(NH_4)HS$.—*Uses:* As of preceding.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

do. Merck.—Reagent.—Purified (2

Wh., v. hygrosc. sticks or pieces; cryst. fract.; at least 80% KOH.—*Tests:* (*HNO_3*) 2 Gm. +10 Cc. H_2O+10 Cc. dil. H_2SO_4+1 drop. 1:1000 indigo solut.+a granule NaCl+10 Cc. conc. H_2SO_4–blue color should not disapp. within 10 min.—(*Al; Ca; Heavy Met.*) 2.5 Gm. +10 Cc. H_2O–clear, colorl. solut.; H_2O to make 100 Cc.+15 Cc. dil. $C_2H_4O_2$ (sp. gr. 1.041)+10 Cc. NH_4OH (sp. gr. 0.96)–sl't turb. within 5 min. but no ppt. ($Al_2[OH]_6$). To filtered solut. add solut. $(NH_4)_2C_2O_4$–no immed. turb.; & w. $(NH_4)HS$–at most only sl't green color.—*Uses:* As of Potassium Hydroxide, Reagent, Purest.

Note—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

do. Merck.—Reagent.—Solution (1

(Potassa Lye).—Clear, colorl. liq.; abt. 32% KOH.—Sp. Gr. 1.3. (The solut. of sp. gr. 1.138–1.140 cont. abt. 15% KOH.)—*Tests:* As detailed under potass. hydroxide, purif. by alcohol, using, however, 2.6 Gm.=2 Cc. solut. KOH sp. gr. 1.3, or 5.7 Gm.=5 Cc. solut. KOH sp. gr. 1.138–1.140, inst. of 1 Gm. KOH purif. by alcoh.—*Uses:* Gen'l precipitant, &c.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by

D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Potassium Hydroxide with Lime Merck.—Powder, lumps or sticks (1

(Potassa with Lime; Vienna Caustic; Vienna Paste; Potassa-lime).—Mixt. equal parts of calc. & potass. hydroxides.—$KOH+Ca(OH)_2+aq.$—Deliq., grayish-wh. powd., or lumps; or sticks cont. 4 parts KOH & 1 part calc. hydroxide.—Caustic.—*Uses: Extern.*, cautery in paste w. alc.—*Caut.* Keep well stoppered.

Potassium Hyperchlorate.—see **Potassium Perchlorate**

Potassium Hypophosphite Merck (2

KPH_2O_2.—Wh., gran., deliq. powd., or opaque, wh. cryst.; pung., saline taste.—*Sol.*, abt. 0.5 W., & 7 A. at 25° C.; 0.3 boil. W., & 3.6 boil. A.; insol. E., (U. S. P.).—Nerve Stimulant.—*Uses:* Phth., scrof., & all cases of deficient nerve power.—*Dose* 2–30 grains (0.12–2 Gm.).—*Caut.* Explodes violently on trituration or heating w. any nitrate, chlorate, or o. oxidizer.

do. Merck.—Purified (2

do. Merck.—Highest Purity (12

Potassium Hyposulphate Merck (15

(Potassium Dithionate). — $K_2S_2O_6$. — Colorl. cryst.—*Sol.* W.

Potassium Hyposulphite.—see **Potassium Thiosulphate**

Potassium Indigodisulphonate Merck (35

(Potassium Sulphindigotate, or Indigosulphate). —$K_2C_{16}H_8N_2O_2(SO_3)_2$.—Dark-blue powd.—*Sol.* W.—*Uses:* Techn., in dyeing.

Potassium Indigomonosulphonate Merck (60

$KC_{16}H_9N_2O_2SO_3$.—Dark-blue powd.—*Sol.* W.—*Uses:* Techn., in dyeing.

Potassium Indigosulphate.—see **Potassium Indigodisulphonate**

Potassium Iodate Merck (11

KIO_3.—Wh. cryst.—*Sol.* W.—Antisep.; Alter.—*Uses:* Diphth., gangr. stomatitis, & ptyalism, inst. of potass. chlorate.—*Dose* 4–8 grains (0.25–0.5 Gm.) several t. p. d.

Potassium Iodate Merck.—Reagent (16

KIO_3.—Wh., cryst. powd.; 100% pure.—*Sol.* 13 cold, 3 boil., W.—Aqu. solut. clear, & free fr. acidity.—*Tests:* (*Free Acid*) 0.5 Gm.+20 Cc. boiled H_2O+sm., cryst., neutr. KI+few drops freshly prep. starch solut.–no immed. blue color. —(*Iodide*) 2 Gm.+20 Cc. H_2O+5 Cc. dil. H_2SO_4 +few drops starch solut.–no immed. blue color. —*Uses:* Prepar. volumetric soluts.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Potassium Iodate, Acid.—see **Potassium Biniodate**

Potassium Iodide Merck.—Crystals or granulated (4

KI.—Colorl., transp., or transl., cubical cryst., or wh., gran. powd.; pung., saline, bitter taste. —*Sol.* 0.75 W., 2.5 G., 18 A. at 15° C.; (0.7 W., abt. 12 A. at 25° C.; 0.5 boil. W., 0.6 boil. A., U. S. P.).—Alter.; Emmen.; Uric Acid Solv.—*Uses: Intern.*, pleuritis, rheum., pericarditis, syph., aneurisms, pneum., dyspnea, scrof. swellings, lead poison., chron. metritis, amenor., &c.—*Extern.*, ointm. 1:10; also 1:100 solut. in corneal opacities.—*Techn.*, as reag.—*Dose* 2–10 grains (0.12–0.6 Gm.).—*Antid.*, sodium bicarbonate, sodium sulphanilate, naphtionic acid.—*Incomp.*, hydrated chloral, tartaric acid, calomel, silver nitrate, potass. chlorate, metallic salts, acids, alkaloidal salts.

do. Merck.—Highest Purity (5

Potassium Iodide Merck.—Reagent (8

KI.—Wh., cubic. cryst.; not hygrosc. in air.—*Sol.*, abt. 0.75 W.; abt. 12 A. (85%); 40 absol. A.—*Tests:* (K_2CO_3) *a:* crush & place on moist red litmus paper–paper not immed. colored violet-blue; *b:* 0.5 Gm.+10 Cc. H_2O+1 drop solut. phenolphtalein–no red color.—(*Metals; H_2SO_4*) *a:* 20 Cc. 1:20 solut.+aqu. H_2S–no react.; *b:* 20 Cc. 1:20 solut.+solut. $BaCl_2$–no react.—(*KCN*) 20 Cc. 1:20 solut.+a granule $FeSO_4$+1 drop solut. $FeCl_3$+5 Cc. solut. NaOH (sp. gr. 1.3); heat to 50–60° C.; add 10 Cc. HCl (sp. gr. 1.124)–no blue color.—(*HIO_3*) 20 Cc. 1:20 solut. freshly prep. w. boiled & cooled H_2O+starch solut.+2–3 drops dil. H_2SO_4–no immed. blue color.—(*HNO_3*) 1 Gm.+5 Cc. solut. NaOH+0.5 Gm. Zn-dust+0.5 Gm. powd. Fe; heat–no NH_3 evolved (test w. moist litmus paper).—(*Cl; Br; Thiosulphate*) 0.2 Gm.+2 Cc. NH_4OH (sp. gr. 0.96)+13 Cc. decinorm. $AgNO_3$; shake; filter; add to filtrate excess HNO_3–solut. should not become so cloudy as to be opaque, nor should a dark color develop within 10 min.—*Uses:* Prep. volumetr. soluts.; detect. iodates; determ. Cl, Br, ferric salts, chromates, chromic acid, antimony, phenols; & peroxides of hydrogen, magnesium, zinc, & other metals.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

do. Merck.—Reagent.—Neutral (12

Test: (*Neutrality*) 10 Gm.+50 Cc. H_2O in stoppered bot.; overlay w. 30 Cc. ether; add 3 drops iodeosine solut.; shake vigorously–the aqu. layer acquires a pale-red color which disappears on add. 1 drop centinorm. HCl & shaking.—Other tests, & uses, as of preceding.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Potassium Iodide-Starch Paper

(Schönbein's Ozone Paper). — Wh. paper impregnated w. a potassium iodide-starch paste. —*Uses:* Detecting oxidizers, as chlorine, iodine, bromine, nitrous acid, & ozone (blue color).

Potassium Iodoplatinate.—see **Platinum & Potassium Iodide**

Potassium Iridichloride.—see **Iridium & Potassium Chloride**

Potassium Isoamylsulphate. — see **Potassium Amylsulphate**

Potassium Isobutylsulphate. — see **Potassium Butylsulphate, Iso-**

Potassium Isobutyrate.—see **Potassium Butyrate, Iso-**

Potassium Isopurpurate Merck (140

(Potassium Picrocyamate).—Fr. solut. potass. cyanide & picric acid.—$KC_8H_4N_5O_6$.—Brownish-red scales; greenish, metal. luster.—*Sol.*, sl. in W.—Explodes at 215° C.—*Incomp.*, sulphuric acid (caus. explosion).—*Caut.* Highly explosive!

Potassium Lactate Merck (7

$KC_3H_5O_3$+aq.—Colorl. to yellowish, syrupy liq. —*Sol.* W.

Potassium Lactophosphate Merck (15

(Potassium Phospholactate). — Potass. phosphate w. 51.8% potass. lactate.—Wh., or syrupy mass.—*Sol.* W.

Potassium Malate Merck (45

$K_2C_4H_4O_5$.—Colorl., viscid mass.—*Sol.*, eas. W. —*Caut.* Keep fr. air.

Potassium Manganate Merck.—Crude (1

K_2MnO_4.—Dark-green powd.—*Sol.* W.—*Uses:* Disinf., & purify. water courses.—*Techn.*, for bleaching & purify. oils, bleaching fibers & chamois skins, mordanting wood; in aniline dyeing as source of oxygen, in printing fabrics, manuf. odorl. batteries, washing CO_2 in manuf. mineral waters, disinf., exterminating Oïdium Tuckeri, photography, etc.

Potassium Metabisulphite.—see **Potassium Pyrosulphite**

Potassium Metaborate Merck (3

$K_2B_2O_4$.—Wh. powd.—*Sol.* W.

Potassium Metantimonate, Acid.—see **Potassium Antimonate**

Potassium Methylsulphate Merck.—Pure (4

$2KCH_3SO_4+H_2O$.—Wh. cryst.—*Sol.* W., A.—*Caut.* Keep fr. air.

Potassium Molybdate Merck (7

(Potassium Molybdenate).—$K_2MoO_4+5H_2O$.—Microcryst., wh. powd.—*Sol.* W.

Potassium Monophosphate. — see **Potassium Phosphate, Dibasic**

Potassium Monosulphide.—see **Potassium Sulphide**

Potassium Myronate Merck (1250

Fr. black mustard seed.—$KC_{10}H_{18}NS_2O_{10}$.—Sm., wh. to yellowish cryst.; bitter taste.—*Sol.* W.; dil. A.

Potassium Nitranilate Merck (170

$K_2C_6N_2O_8$, or, $C_6(NO_2)_2O_2(OK)_2$.—Greenish-yellow, microcryst. powd.; detonates violently when heated.—*Sol.*, sl. W.; insol. A.

Potassium Nitrate Merck.—Highest Purity, Medicinal, cryst. (1

(Saltpeter; Niter).—KNO_3.—Transp., colorl. prisms, or wh., cryst. powd.; cooling, saline, pung. taste.—*Sol.* 3.8 W. at 15° C.; (3.6 W. at 25° C.; 0.4 boil. W.; v. spar. A., U. S. P.).—Antisep.; Refrigerant; Diuret.; Diaph.—*Uses:* Fevers, dropsy, asthma, rheum., & dis. of muc. membr. Fumes of burning potass.-nitrate paper are inhaled in asthma.—*Extern.*, as gargle (1:100) in angina. Also chem.—*Dose* 10–60 grains (0.6–4 Gm.).—*Antid.*, opium, analeptics, iced water.

do. Merck.—Pure, powder (1

Uses: Pyrotechn., pickling meat, fire extinguishers, &c.

Potassium Nitrate Merck.—Reagent (2

KNO_3.—Colorl., transp., prism. cryst., or cryst. powd.; perman. in air.—*Sol.* 4 cold, & less than 0.5 boil., W.; alm. insol. A.—Aqu. solut. neutral to litmus paper.—*Tests:* (H_2SO_4) 3 Gm.+60 Cc. H_2O+1 Cc. HCl (sp. gr. 1.124)+solut. $BaCl_2$–no ppt. within 12 hrs.—(*Cl*) 1 Gm.+20 Cc. H_2O+1 Cc. HNO_3 (sp. gr. 1.153)+solut. $AgNO_3$–no react.—(*$HClO_3$; $HClO_4$*) gently ignite 1 Gm.; diss. res. in 20 Cc. H_2O; add 1 Cc. HNO_3 +solut. $AgNO_3$–no react.—(*Ca; Heavy Met.*) *a:* 3 Gm.+50 Cc. H_2O+aqu. H_2S–no react.; *b:* 3 Gm.+50 Cc. H_2O+*a:* NH_4OH; or *b:* $(NH_4)_2C_2O_4$; or *c:* $(NH_4)HS$–no react. in any case.—(*Fe*) 20 Cc. 1:20 solut.+1 Cc. HCl (sp. gr. 1.124)+KSCN solut.–no red color.—(*HNO_2*) 1 Gm.+20 Cc. H_2O+1 Cc. dil. H_2SO_4 (sp. gr. 1.11)+1 Cc. freshly prep. colorl. 1:200 solut. metaphenylenediamine hydrochloride–no yellow or yellowish-brown color.—*Uses:* Oxidizing flux in determ. halogens & S in organic substances; destroying organic matter in forensic analysis; detect. Cr & Mn.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Potassium Nitrate Paper

Unsized, wh. paper, dipped in 20% solut. potass. nitrate & dried.—*Uses:* Asthma: inhale fumes while paper is burning.

Potassium Nitrate with Potassium Sulphate.—Fused, drops

(Sal Prunelle).—Mixt. 80% of potass. nitrate w. 20% potass. sulphate.—Sm., wh., flat drops;

cryst. fracture.—*Sol.* W.—Antisep., Diur., &c. —*Uses:* Sore mouth & throat, colds, &c.

Potassium Nitrite Merck.—Pure, sticks (2

KNO_2.—Wh., amorph., deliq. sticks.—*Sol.*, eas. W.—Increases cerebral circul.—*Uses:* Asthma, epilepsy, hemicrania; also chem.—*Dose* $^1/_4$–2 grains (0.015–0.12 Gm.) several t. p. d.—*Antid.*, naphtionic acid, sodium sulphanilate.—*Caut.* Keep well stoppered.

do. Merck (1

Yellowish-wh., deliq. lumps.—*Sol.* W.—*Uses:* Org. chem., & in manuf. diazo-dyes & cobalt yellow.

Potassium Nitrite Merck.—Reagent (3

KNO_2.—Wh. or slightly yellowish, tough sticks; deliquesc. in moist air; at least 90% KNO_2.—*Sol.*, eas. W.—Aqu. solut. alkal. to litmus paper. —*Tests:* (*Heavy Met.*) 20 Cc. 1:20 solut.+few drops solut. $(NH_4)HS$–no react.—(H_2SO_4) 20 Cc. 1:20 solut.+5 Cc. HNO_3 (sp. gr. 1.153) +solut. $Ba(NO_3)_2$–no react.—*Uses:* Determ. urea, cobalt, amino acids; detect. I.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Test," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Potassium Nitroprusside Merck.—Cryst. (30

$K_2Fe.NO.(CN)_5+2H_2O$. — Garnet-red, deliq. cryst.—*Sol.* W., A.—*Uses:* Test for albumin in urine, & as reagent for sulphides.—*Caut.* Keep dry, fr. air.

Potassium Oleate Merck (5

$KC_{18}H_{33}O_2$. — Yellowish mass.—*Sol.* W., A.—Detergent; Emollient.—*Uses:* Cleansing & healing agent in abscesses, injuries, &c.

Potassium Orthoaminobenzoate.—see **Potassium Anthranilate**

Potassium Osmate.—see **Potassium Perosmate**

Potassium Oxalate Merck.—Highest Purity, neutral (1

$K_2C_2O_4+H_2O$.—Colorl., transp. cryst.—*Sol.* 3 W.—*Uses:* Phlegmonous inflam.—*Dose* 30 ♏ (2 Cc.) of 1% aqu. solut. hypoderm. The injections are made in 10 places around the seat of inflammation, & are repeated every 3–4 days.

do. Merck.—Pure, neutral, lumps & powd. (1

Uses: Photography.

Potassium Oxalate Merck.—Reagent (3

$K_2C_2O_4+H_2O$.—Rhomb. prisms.—*Sol.* 3 W.—Aqu. solut. neutral to litmus paper.—*Tests:* (H_2SO_4) 5 Gm.+200 Cc. H_2O; boil; add 10 Cc. HCl (sp. gr. 1.124)+solut. $BaCl_2$–no ppt. within 12 hrs.—(*Cl*) 1 Gm.+25 Cc. H_2O+10 Cc. HNO_3 (sp. gr. 1.153)+few drops solut. $AgNO_3$–no turb. on shak.—(*Heavy Met.*) 1 Gm.+25 Cc. H_2O+aqu. H_2S–no react.; add 5 Cc. NH_4OH (sp. gr. 0.96)–no green color, & no ppt.—*Uses:* Testing quinine, &c.

Note—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Potassium Oxalate, Acid.—see **Potassium Binoxalate**

Potassium Oxymuriate.—see **Potassium Chlorate**

Potassium Oxyquinolinesulphonate.—see **Quinosol**

Potassium Paratungstate Merck.—Pure (15

(Potassium Parawolframate).—$3K_2O.7WO_3+6H_2O$, or, $K_6W_7O_{24}+6H_2O$.—Wh., cryst. powd. —*Sol.* W.

Potassium Parawolframate.—see **Potassium Paratungstate**

Potassium Percarbonate Merck.—Pure (8

$K_2C_2O_6+H_2O$.—Wh. cryst.—*Sol.* W., w. evol. of oxygen.—*Uses:* In microscopy for detect. tubercle bacilli stained w. fuchsine in smears, instead of treatment w. acid; also in photogr. under the name "Antihypo" for removing last traces of sod. thiosulph.; also in discharge printing of wool dyed w. indigo.

Potassium Perchlorate Merck.—Pure (6

(Potassium Hyperchlorate).—$KClO_4$.—Wh. cryst.—*Sol.*, sl. in W.—Antipyr.; Antiper.; Sed.; Diur.—*Uses:* Pernicious fever & intermit. or remit. fevers. Also in pyrotechn.—*Dose* 5–15 grains (0.3–1 Gm.).

Potassium Perchlorate Merck.—Reagent (10

$KClO_4$.—Colorl., rhomb. prisms.—*Sol.*, abt. 65 cold, 8 boil., W.; insol. A.—*Tests:* (*Ca; Cl*) 20 Cc. 1:20 solut. prep. by heat.+solut. $(NH_4)_2C_2O_4$ +solut. $AgNO_3$–at most sl't opalesc.—(*Heavy Met.*) 20 Cc. 1:20 solut. prep. by heat.+aqu. H_2S–no react.—(HNO_3) 1 Gm.+5 Cc. solut. NaOH (sp. gr. 1.3)+0.5 Gm. Zn-dust+0.5 Gm. powd. Fe; heat–no NH_3 vapors (test w. moist litmus paper).—(H_2SO_4) 20 Cc. 1:20 solut. prep. by heat.+solut. $BaCl_2$–no react.—*Uses:* Oxidizer, used v. much like the chlorate.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Potassium Periodate Merck (35

KIO_4.—Sm., colorl. cryst.—*Sol.*, sl. W.

Potassium Permanganate Merck.—Large & small cryst. (1

$KMnO_4$.—Dark-purple, slender, opaque prisms; blue, metal. reflection; sweet, w. astring. aftertaste.—*Sol.* 16 W. at 15° C.; (15 W. at 25° C., U. S. P.); 3 boiling W.—Decomp. 240° C.—Disinf.; Deodorant; Emmen.—*Uses:* Amenor., dysmenor., periton. after labor, involution or atrophy of uterus, diphth., zymotic dis. generally, & morphine poison. 1% aqu. solut. as injection in gonor., gleet & leucor. & snake bites,

& as wash in cancer, gangr. & foul-smelling ulc., abscesses, otor., & as general germicide, as mouthwash in stomatitis in 1:200 solut.—*Dose* 1–3 grains (0.06–0.2 Gm.), in solut. or pills made with kaolin & petrolatum, or with cacao butter, after meals.—*Incomp.*, acids (mineral), alcohol, ammonia, arsenites, bromides, carbolic acid, chlorides, charcoal, fats, ferrous salts, glycerin, gums, hydrogen dioxide, hypophosphites, hyposulphites, mercurous salts, oils, organic substances, oxalic acid, oxalates, picric acid, piperazine, sulphites, tannic acid, tartaric acid.—*Stains* can be removed with $H_2C_2O_4$ or HCl.

Potassium Permanganate Merck.—Reagent (2

$KMnO_4$.—Dark-violet, alm. black prisms; steel-blue luster.—*Sol.* 16 cold, 3 boil., W.—Aqu. solut. neutral to litmus paper.—*Tests:* (*H_2SO_4; Cl*) 0.5 Gm.+2 Cc. 85% A.+25 Cc. H_2O; boil; filter–filtrate colorl.; add to filtrate 2 Cc. HNO_3 (sp. gr. 1.153)+*a:* solut. $Ba(NO_3)_2$; & *b:* $AgNO_3$–not more than sl't opalesc. in either case.—(*HNO_3*) 0.5 Gm.+5 Cc. H_2O+1 Gm. $H_2C_2O_4$ grad. added; heat to 50–60° C.; filter; mix 2 Cc. colorl. filtrate w. 2 Cc. H_2SO_4 & overlay w. 1 Cc. solut. $FeSO_4$–no dark-colored zone.—(*$HClO_3$*) heat 2 Gm. in platin. cruc., & grad. add sm. pieces of paraffin until glowing ceases; let cool; treat res. w. 20 Cc. H_2O; filter; to filtrate add 5 Cc. HNO_3 (sp. gr. 1.153)+solut. $AgNO_3$–at most only sl't opalesc.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

do. Merck.—Free from Sulphuric Acid (3

100% pure.—*Test:* (*H_2SO_4*) 3 Gm.+150 Cc. H_2O+15 Cc. 85% A.; heat till decolorized; filter; to filtrate add 2 Cc. HCl (sp. gr. 1.124) +solut. $BaCl_2$–no ppt. within 12 hrs.—Other tests as preceding.—*Uses:* Chiefly for prepar. volumetric soluts.; determ. N, Fe, Cu, Mo, Cd, Hg, potass. ferrocyanide, dextrose, uranium, H_2O_2 &o. peroxides, & HNO_3, $H_2C_2O_4$, & H_3BO_3.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Potassium Perosmate Merck (2750

(Potassium Osmate).—$K_2OsO_4+2H_2O$.—Violet cryst.—Alter.; Sed.—*Uses:* As of perosmic acid in epilepsy, neural., goiter, &c.—*Teehn.*, as reagent for nitrogenous matter in water analysis.—*Dose* $^1/_{15}$–$^1/_4$ grain (0.004–0.015 Gm.).

Potassium Perruthenate Merck (7500

Fr. ruthenium tetroxide w. potass. hydroxide.—$KRuO_4$.—Black, opaque cryst.—*Sol.*, sl. in W.

Potassium Persulphate Merck (3

$K_2S_2O_8$.—Wh. cryst.—*Sol.*, sl. W.—*Uses:* Bleaching; exceedingly powerful oxidizer, & antiseptic, in 0.5–1.5% solut.; in photography, under the name "Anthion" for removing last traces of thiosulphate from plates & paper.

Potassium Phenate Merck (4

(Potassium Phenylate, or Carbolate).—C_6H_5OK.—Colorl. cryst.—*Sol.* W.—Antiseptic.—*Uses:* Diar., dysent., &c.—*Dose* 1–5 grains (0.06–0.3 Gm.).—*Caut.* Keep fr. air.

Potassium Phenolsulphonate Merck (2

(Potassium Sulphocarbolate).—$C_6H_4(OH)SO_3K+H_2O$.—Wh. cryst.—*Sol.* W., A.—*Melt.* 400° C.—Antisep.; Antiparasitic; Germicide.—*Uses:* As an antiphylloxerin, to check ravages of grapevine parasite.

Potassium Phosphate Merck.—Dibasic.—Highest Purity (2

(Potassium Monophosphate; Dipotassium Orthophosphate).—K_2HPO_4.—Deliq., amorph., wh. powd.—*Sol.* W.—Alter.—*Uses:* Scrof., rheum., phth., &c.—*Dose* 10–30 grains (0.6–2 Gm.).

do. Merck.—Pure (1

Cont. traces of chlorine & sulphate.

Potassium Phosphate Merck.—Monobasic (1

(Potassium Biphosphate; Monopotassium Orthophosphate).—KH_2PO_4.—Colorl. cryst.—*Sol.* W.; insol. A.

Potassium Phosphite Merck (6

K_2HPO_3.—Wh. powd.—*Sol.*, hot W.

Potassium Phospholactate.—see **Potassium Lactophosphate**

Potassium Phtalimide Merck (30

Fr. alcoh. solut. phtalimide, by alcoh. KOH.—$KC_8H_4NO_2$.—Fine, wh. leaflets.—*Sol.*, sl. W.; insol. A., E.—Changes to potass. phtalimate by boil. in aqu. solut.—*Uses:* Antiseptic.

Potassium Picraminate Merck (70

(Potassium Dinitroaminophen(ol)ate).—$KOC_6H_2(NH_2)(NO_2)_2$.—Dark-brown cryst. mass.—*Sol.* W.; sl. A.

Potassium Picrate

(Potassium Trinitrophenate, or -phenolate).—$KC_6H_2(NO_2)_3O$.—Yellow, reddish, or greenish, shin. need.; explode when struck or heated.—*Sol.* 260 W. at 15° C.; 4 boil. W.—*Uses:* Techn.

Potassium Picrocyamate.—see **Potassium Isopurpurate**

Potassium Piperate Merck (65

Prep. by boil. piperine w. KOH & alc.—$KC_{12}H_9O_4$.—Yellow, cryst. powd.—*Sol.*, hot W.

Potassium Platinibromide.—see **Platinum & Potassium Bromide**

Potassium Platinichloride.—see **Platinum & Potassium Chloride, Platinic**

Potassium Platiniciodide.—see **Platinum & Potassium Iodide**

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Potassium Platinicyanide. — see **Platinum & Potassium Sesquicyanide**

Potassium Platinithiocyanate.—see **Platinum & Potassium Sulphocyanate**

Potassium Platinochloride.—see **Platinum & Potassium Chloride, Platinous**

Potassium Platinocyanide.—see **Platinum & Potassium Cyanide**

Potassium Propionate Merck.—Pure (30

$KC_3H_5O_2$.—Sm., colorl. cryst.—*Sol.* W.

do. Merck.—Crude (8

Potassium Propylsulphate Merck (50

$KC_3H_7SO_4$.—Fine, colorl. need.—*Sol.* W.

Potassium Pyroantimonate. — see **Potassium Antimonate**

Potassium Pyroborate.—see **Potassium Borate**

Potassium Pyrophosphate Merck (5

$K_4P_2O_7$.—Deliq., gran., cryst. mass.—*Sol.* W.

Potassium Pyrosulphate Merck (3

(Anhydrous Acid Potassium Sulphate; Potassium Anhydrosulphate).—$K_2S_2O_7$, or, $K_2SO_4.SO_3$.—Colorl. pieces.—*Sol.* W.

Potassium Pyrosulphite Merck (1

(Potassium Metabisulphite). — $K_2S_2O_5$. — Wh., cryst. crusts.—*Sol.*, sl. W.

Potassium Quadroxalate.—see **Potassium Tetroxalate**

Potassium Rhodanide.—see **Potassium Sulphocyanate**

Potassium Ruthenate Merck (4250

$K_2RuO_4 + H_2O$.—Brownish-black powd.—*Sol.* W.

Potassium-salicylaldehyde. — see **Potassium Salicylite**

Potassium Salicylate Merck (3

$KC_7H_5O_3$. — Wh. powd.—*Sol.* W., A. — Antirheum.; Antipyr.; Analg. — *Uses:* Rheum., pleurisy, pericarditis, lumbago, muscular pains, &c. — *Dose* 6–15 grains (0.36–1 Gm.) several t. p. d.—*Caut.* Keep well stoppered.

Potassium Salicylite Merck (600

(Potassium-salicylaldehyde; Potassium Ulmarate).—$C_6H_4.OK.COH$.—Yellow, v. deliq. powd. —*Sol.* W., A.—Antirheumatic.—*Uses:* Rheum., lumbago, muscular pain, &c.—*Dose* 3–15 grains (0.2–1 Gm.) several t. p. d.—*Caut.* Keep well stoppered.

Potassium Santoninate Merck.—Pure, dry (125

$KC_{15}H_{19}O_4$.—Wh., deliq., cryst. powd.—*Sol.* W., A.

do. Merck.—Syrupy (40

$KC_{15}H_{19}O_4$ + aq.—Colorl. to yellow, syrupy liq. —*Sol.* W.

Potassium Selenate Merck (450

K_2SeO_4.—Colorl. cryst., or wh. powd.—*Sol.* W.

Potassium Silicate Merck.—Pure, dry (2

(Soluble Glass; Water-glass).—$K_2Si_2O_5$.—Transl. to transp., sl'y deliq., glass-like pieces.—*Sol.* W. —*Uses:* Fixed dress. for dis. joints, fractures, &c.; also techn.

do.—Solution (1

(Water-glass Solution).—Abt. 10% of potass. silicate in W.—$K_2Si_2O_5$ + aq.—Colorl., sl'y turbid, syrupy liq.; odorl.; alkal. reac.—*Uses:* Pharm. & techn.—*Caut.* Stopper w. rubber or cork.

do.—Solution, 30–33° Bé.—Crude (1

Uses: Techn., in fireproofing fabrics, cementing stones, waterproofing walls, hydraulic mortars, dyeing & bleaching, painting on glass, cements, filling soaps, &c.

Potassium Silicofluoride Merck.—Pure (3

K_2SiF_6, or, $2KF.SiF_4$.—Fine, wh. powd.—*Sol.*, hot W.—*Uses:* Manuf. silicon.

Potassium Sozoiodolate. — see **Sozoiodole-Potassium**

Potassium Stannate Merck.—Pure (6

By fusing tin dioxide w. KOH.—$K_2SnO_3 + 3H_2O$. —Colorl. cryst.; alkal. taste.—*Sol.* W.—*Uses:* In dyeing & printing fabrics.

Potassium Stannosulphate Merck.—Reagent (10

(Marignac's Salt).—$K_2Sn(SO_4)_2$.—Wh. cryst.— *Sol.* HCl, dil. solut. KOH & NaOH.—*Uses:* Detect. Hg & Bi; volum. determ. HNO_3 by Longi's method.

Note. — For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Potassium Stearate Merck.—Pure (35

$KC_{18}H_{35}O_2$.—Wh., cryst. powd.—*Sol.*, hot W., w. part. decomp.; hot A.

Potassium Succinate Merck (15

$K_2C_4H_4O_4$.—Wh. powd.—*Sol.* W.—*Uses:* Delir. tremens.—*Dose* 5–10 grains (0.3–0.6 Gm.). sev. t. p. d.

Potassium Sulphate Merck.—Highest Purity, Medicinal, cryst. or powder (1

(Arcanum Duplicatum; Tartarus Vitriolatus).— K_2SO_4.—Colorl., transp. cryst., or wh. powd.; bitter, saline taste.—*Sol.* 9 W. at 25° C.; 4 boil. W.; insol. A., (U. S. P.).—Cath.; Diur.; Aper.— *Uses:* Constip. & as antigalactic.—*Dose* 15–60–240 grains (1–4–15 Gm.) several t. p. d.

do. Merck.—Purified, cryst. or powder (1

Potassium Sulphate Merck.—Reagent (2

K_2SO_4.—Wh., hard cryst.—*Sol.* 10 cold, 4 boil., W.; insol. A.—Aqu. solut. neutral to litmus paper.—*Tests:* (*Cl; Fe; Cu; Ca; Mg*) 20 Cc. each of 1:20 aqu. solut. not affected by: *a:* aqu. H_2S; *b:* $(NH_4)C_2O_4$; *c:* $AgNO_3$; *d:* Na_2HPO_4.— (*Fe*) 1 Gm. + 20 Cc. H_2O + few drops HCl + solut. KSCN – no red color.—*Uses:* Precip. Ba, &c.

Note. — For *complete* tests see "Chemical

Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Potassium Sulphate, Acid.—see **Potassium Bisulphate**

Potassium Sulphide Merck (2

(Potassium Monosulphide).—K_2S.—Yellow to yellowish-red, fused, cryst. plates.—*Sol.* W.

Potassium Sulphide Merck.—Reagent (3

Leather-brown or yellowish-green pieces; deliquesc. in moist air.—Solut. in 2 W. leaves but sl't res., & is alkal. & yellowish-green; on add. $C_2H_4O_2$, gaseous H_2S copiously evolved.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Potassium Sulphide Merck.—Reagent.—Solution. —For determining Nitrogen according to Kjeldahl (1

5% K_2S.—*Test:* (*N*) 100 Cc.+50 Cc. N-free solut. NaOH (sp. gr. 1.3)+1 Gm. Zn-dust; distil off abt. 50 Cc.; collect distillate in U-tube receiver cont. abt. 20 Cc. H_2O+2–3 Cc. decinorm. HCl; titrate w. decinorm. KOH (methyl orange indic.)–KOH solut. used should be at most 0.2 Cc. less than the quant. of decinorm. acid placed in receiver.—*Uses:* Determ. N.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Potassium Sulphindigotate.—see **Potassium Indigodisulphonate**

Potassium Sulphite Merck.—Pure (3

$K_2SO_3+2H_2O$.—Wh. to yellowish-wh. powd. —*Sol.* 4 W. at 15° C.; sl. in A.—Antisep.; Lax. —*Uses:* Acid ferment. of stom., hemorrhoids, & gastric ulc.—*Dose* 15–60 grains (1–4 Gm.).

do. Merck (1

Uses: Techn., dyeing & discharge print. fabrics.

Polassium Sulphite, Acid.—see **Potassium Bisulphite**

Potassium Sulphobenzoate Merck (15

$C_6H_5SO_3COOK + 5H_2O$. — Wh. to yellowish cryst.—*Sol.* W., A.—Antiseptic.—*Uses:* Skin dis. & eroded surf. in 0.4–0.5% solut.

Polassium Sulphocarbolate. — see **Potassium Phenolsulphonate**

Potassium Sulphocarbonate Merck (4

(Potassium Trithiocarbonate). — K_2CS_3. — Yellowish-red, v. deliq. cryst.—*Sol.* W.—*Uses:* For baths in skin dis.; also as sensitive reagent for detect. Co & Ni. Also as antiphylloxerin.

Potassium Sulphocyanate Merck.—Pure (2

(Potassium Thiocyanate or Rhodanide or Sulphocyanide).—KSCN.—Colorl. need.—*Sol.* W., A.—Sed.; Antispasm.; Anod.—*Uses:* Phth., cough, catarrh, dyspnea, mania, &c.—*Dose* $^3/_4$–3 grains (0.05–0.2 Gm.).—*Max. D.* 5 grains (0.3 Gm.) single; 24 grains (1.5 Gm.) p. d.

Potassium Sulphocyanate Merck.—Purified (2

Uses: In frigorific mixtures, & in manuf. artif. mustard oil.

do. Merck.—Commercial (1

do.—Solution

(Volhard's Solution).—9.653 Gm. of pure cryst. potass. sulphocyanate in 1 liter (U. S. P.).—*Uses:* In indirect determination of silver, or halogens.

Potassium Sulphocyanate Merck.—Reagent (4

KSCN.—Colorl., prism. cryst.; deliquesc. in air.—*Sol.*, eas. W., A.—*Tests:* (*Impur. Insol. A.*) 1 Gm.+10 Cc. boil. absol. A.–compl. solub.; clear solut.—(H_2SO_4) 1 Gm.+20 Cc. H_2O+few drops HCl+solut. $BaCl_2$–no react. within 5 min. —(*Heavy Met.*) 1 Gm.+20 Cc. H_2O+ few drops $(NH_4)HS$–no brown or green color, & no ppt.—(*Fe*) 1 Gm.+20 Cc. H_2O+0.5 Cc. HCl (sp. gr. 1.124)–no coloration.—*Uses:* Detect. Fe, Cu, & Ag; determ. halogens, Cu & Hg.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Potassium Sulphocyanide.—see **Potassium Sulphocyanate**

Potassium Sulphocyanoplatinate.—see **Platinum & Potassium Sulphocyanate**

Potassium Sulphostannate. — see **Potassium Stannosulphate**

Potassium Sulphovinate.—see **Potassium Ethylsulphate**

Potassium Sulphydrate Merck (5

(Potassium Hydrosulphide).—$2KHS+H_2O$.—Colorl., deliq. cryst.—*Sol.* W. (solut. decomp. on boil.).

Potassium Sulphydrate Merck.—Reagent (6

$2KHS+H_2O$. — Colorl., deliquesc. cryst.—*Sol.*, eas. W., A.—Solut. strongly alkaline to litmus paper; on boil., is decomp. w. evol. of H_2S, & form. of KOH.—*Test:* (*Polysulphide*) 1 Gm.+20 Cc. H_2O–solut. clear & colorl.; add HCl–H_2S copiously evolv. & liq. exhibits sl't opalesc. turb., but no separ. of S.—*Uses:* Separating heavy metals (Bi, Cd. Cu).

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Potassium Tannate Merck (9

Approx.: $KC_{14}H_9O_9$.—Brown powd.—*Sol.* W.

Potassium Tartrate Merck.—Pure, cryst., or powder (1

(Soluble Tartar).—$2K_2C_4H_4O_6+H_2O$.—Colorl., transp. cryst., or wh. powd.—*Sol.*, abt. 2 W. at

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

0° C.; 0.8 W. at 17.5° C.; 0.36 W. at 100° C.; alm. insol. A.—Diuret.; Lax.—*Uses:* Check griping effects of senna; also in fevers as refrigerant.—*Doses:* Diuret., 15–30 grains (1–2 Gm.) several t. p. d.; lax., 2–8 drams (8–30 Gm.).

Potassium Tellurate Merck (500

$K_2TeO_4 + 5H_2O$.—Wh. cryst.—*Sol.* W.—Antihidrotic.—*Uses:* Night sw. of phth.—*Dose* $^1/_2$–1 grain (0.03–0.06 Gm.), at night, in pills.

Potassium Tellurite Merck (500

K_2TeO_3.—Wh., amorph. powd.—*Sol.* W.

Potassium Tetraborate.—see **Potassium Borate**

Potassium Tetroxalate Merck (3

(Potassium Quadroxalate).—$KHC_2O_4.H_2C_2O_4 + 2H_2O$.—Transp., monocl. prisms.—*Sol.* 55 W.

Potassium Tetroxalate Merck.—Reagent (4

$KHC_2O_4 + H_2C_2O_4 + 2H_2O$. — Colorless, triclinic cryst.—*Sol.* 55 W.—Aqu. solut. acid to litmus paper.—*Tests:* (*Cl; H_2SO_4; Heavy Met.*) as for potassium oxalate.—*Uses:* Prepar. standard volumetric soluts.

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Potassium Thiocyanate.—see **Potassium Sulphocyanate**

Potassium Thiosulphate Merck (2

(Potassium Hyposulphite).—$2K_2S_2O_3 + 3H_2O$.—Wh., hygros. cryst.—*Sol.* W.—*Caut.* Keep well stoppered.

Potassium Trinitrophenate, or *-phenolate.*—see **Potassium Picrate**

Potassium Trithiocarbonate. — see **Potassium Sulphocarbonate**

Potassium Tritungstate.—see **Tungsten Bronze, Violet**

Potassium Tungstate Merck.—Purified (4

(Normal Potassium Wolframate).—$K_2WO_4 + 5H_2O$.—Heavy, deliq., cryst. powd.—*Sol.* W.; insol. A.—*Uses:* Techn., in manuf. magenta bronze, &c.—*Caut.* Keep fr. damp air.

Potassium Ulmarate.—see **Potassium Salicylite**

Potassium Urate Merck.—Pure (18

$K_2C_5H_2N_4O_3$.—Wh. powd.—*Sol.*, sl. in W.

Potassium Valerate Merck (7

$KC_5H_9O_2$.—Wh. to yellowish cryst.—*Sol.* W.—Stimulant.—*Uses:* Hyst., insanity, & low fevers.—*Dose* 2–5 grains (0.12–0.3 Gm.) several times per day.

Potassium Wolframate.—see **Potassium Tungstate**

Potassium Xanthate.—see **Potassium Xanthogenate**

Potassium Xanthogenate (8

(Potassium Ethyldithiocarbonate, or Ethylxanthogenate, or Xanthate).—Fr. carbon disulphide w. alcoh. solut. KOH.—$KC_3H_5S_2O$, or, $C_2H_5.O.CS.SK$.—Light-yellow cryst.—*Sol.* W., A.—Insecticide.—*Uses:* As an antiphylloxerin.

Potassium Zirconifluoride.—see **Zirconium & Potassium Fluoride**

Potassium & Ammonium Bimalate.—see **Ammonium & Potassium Bimalate**

Potassium & Ammonium Chromate.—see **Ammonium & Potassium Chromate**

Potassium & Ammonium Citrate.—see **Ammonium & Potassium Citrate**

Potassium & Ammonium Fluoride.—see **Ammonium & Potassium Fluoride**

Potassium & Ammonium Phosphate Merck (4

(Potassium Ammonium Hydrogen Orthophosphate).—KNH_4HPO_4.—Wh. powd.—*Sol.* W.

Potassium & Ammonium Tartrate Merck (4

Fr. cream of tartar w. amm. carbonate.—$NH_4.KC_4H_4O_6$. — Wh., cryst. powd. — *Sol.* W. — Cathartic.

Potassium & Antimony Sulphurated Merck.—Powder (2

(Hepar Antimony; Liver of Antimony).—Antimony oxide & sulphide, w. potass. sulphide, nitrate, & sulphate.—Brown powd.—*Sol.*, part. W.—*Uses:* Chronic metallic poisoning.—*Extern.*, in mouthwashes & lotions in 1% solut.; mixed w. water to paste as depilatory.—*Dose* 1–5 grains (0.06–0.3 Gm.).

Potassium & Copper Salts.—see under **Copper & Potassium**

Potassium & Lithium Platinocyanide. — see **Platinum & Potassium & Lithium Cyanide**

Potassium & Osmium Chloride.—see **Osmium & Potassium Chloride**

Potassium & Palladium Chloride.—see **Palladium & Potassium Chloride**

Potassium & Sodium Borotartrate Merck (2

(Soluble Cream of Tartar; Borated Tartar).—71.5% potass. bitartrate, & 28.5% borax.—Wh., deliq. powd.—*Sol.* W.—Cath.; Diur.; Antisep.—*Uses:* Constip. & diar. due to ferment. changes in intest.; particularly in urinary calculi & gravel.—*Doses:* Diur., 8–30 grains (0.5–2 Gm.); mild lax., 75–120 grains (5–8 Gm.) 3–4 t. p. d.

do. Merck.—Soluble, scales (2

Wh., lustr. scales.—*Sol.* W.

Potassium & Sodium Platinocyanide.—see **Platinum & Potassium & Sodium Cyanide**

Potassium & Sodium Tartrate Merck.—Highest Purity, cryst. or powder (1

(Rochelle, or Seignette, Salt).—$KNaC_4H_4O_6 + 4H_2O$.—Colorl., transp. cryst., or wh. powd.—

Sol. 1.4 W. at 15° C.; (abt. 1.2 W. at 25° C.; less than 1 boil. W.; alm. insol. A., U. S. P.).—*Melt.* 74° C.—Purg.; Refrig.; Diur.—*Uses:* Constip., headache, rheum., dropsy. Preferred as lax. in hemorrhoids.—*Doses:* Diur., 8–30 grains (0.5–2 Gm.) several t. p. d.; purg., 4–8 dr. (15–30 Gm.).

Potassium & Sodium Tartrate Merck.—Cryst. or powder (1

Potassium & Sodium Tartrate Merck.—Reagent.—Cryst. (2

$KNaC_4H_4O_6+4H_2O$. — Colorl., prism. cryst.—*Sol.* 1.4 W.—Solut. neutral.—*Tests: (Ca)* 1 Gm. + 10 Cc. H_2O + 5 Cc. dil. $C_2H_4O_2$; shake few min. – cryst. ppt. forms; filter; dil. filtrate w. equal vol. H_2O; add 8–10 drops solut. $(NH_4)_2C_2O_4$ – no turb. within 1 min.—*(Heavy Met.)* 1:20 solut. should not be affected by aqu. H_2S.—*(Cl; H_2SO_4)* 1 Gm. + 10 Cc. H_2O + 5 Cc. HNO_3 (sp. gr. 1.153) +: *a:* solut. $AgNO_3$ & *b:* solut. $Ba(NO_3)_2$ – no react. in either case.—*(NH_4 Compounds)* 1 Gm. + 10 Cc. H_2O + 10 Cc. solut. NaOH (sp. gr. 1.3); heat – no NH_3 evolved (test w. moist litmus paper).—*Uses:* Prepar. Fehling's & similar solnts.

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Potassium & Zinc Iodide Merck (60

$ZnI_2.KI$.—Colorl., v. hygros. cryst.—*Uses:* Reag. for detect. of alkaloids.

Prickly Ash.—see **Xanthoxylum**

Pride of India.—see **Azedarach**

Primrose.—see **Primula**

Primula

(Primrose; Cowslip; Cowslip Primrose; Culver-Keys; Lady's Fingers). — Flowers & root of Primula officinalis, Jacquin. Primulaceæ. — *Habit.:* Europe; Northern Asia.—*Etymol.*. Fr. Lat. "primus," first (early spring time), *i.e.*, the flower blooms early.—*Constit.: Flowers:* Fixed oil; resin.—*Root:* Bitter principle; cyclamin (arthanitin) $C_{20}H_{24}O_{10}$.—*Uses: Flowers:* Antispasm.; Nervine.—*Root:* Sternut.; Nervine; Diuret.; Astring.; Vermif.; Analgesic.—*Dose: Flowers:* 5–15 grains (0.3–1 Gm.).

Primuline Yellow Merck (8

(Carnotine; Polychromine; Thiochromogen; Aureoline; Sulphine).—Mixt. of sodium salts of the monosulphonic acids of the higher derivatives of dehydrothioparatoluidine, with some salt of dehydrothioparatoluidinsulphonic acid. — Dull, yellow powd.—*Sol.* W.—*Uses:* Dyeing unmord. cotton primrose-yellow, in alkal. or neut. bath.

Proferrin (10

(Iron Nucleoproteid).—Organic iron-phosphorus compound.—10% Fe; 1% P.—Reddish-brown powd.—Insol. W. & acids.—Hematinic.—*Uses:* Anemia.—*Dose* 5 grains (0.3 Gm.) 3 t. p. d.

Propanenitrile.—see **Ethyl Cyanide**

Propargyl Tribromide.—see **Allyl Tribromide**

Propenyl Oxide.—see **Allyl Oxide**

Propionamide Merck (80

Fr. ethyl propionate, by ammonia.—C_3H_7ON, or, $C_2H_5.CO.NH_2$.—Colorl. cryst.—*Sol.* W.—*Melt.* 79° C.—*Boil.* 213° C.

Propione.—see **Diethylketone**

Propionic Anhydride. — see **(Acid) Propionic Anhydride**

Propionic Glycocoll.—see **Alanin, Alpha-**

Propionitrile.—see **Ethyl Cyanide**

Propionyl Chloride Merck (95

Fr. propionic acid w. phosphorus trichloride & heat.—C_3H_5OCl, or, $C_2H_5.COCl$.—Colorl. liq.—Sp. Gr. 1.0646 at 20° C.—*Boil.* 78° C.

Propionylphenetidin.—see **Triphenin**

Proponal (100

(Dipropylbarbituric Acid Merck; Dipropylmalonylurea Merck). — $(C_3H_7)_2:C:(CO.NH)_2:CO$.—Colorl. cryst.—*Sol.* 1640 W. at 20° C.; abt. 70 boil. W.; eas. in A., E., B., C., & dil. alkalies.—*Melt.* 145° C. (corr.).—Hypnot.; Analges.—*Uses:* Insomn.—*Dose* $2^1/_2$–8 grains (0.15–0.5 Gm.); the higher dose is, however, rarely necessary.—Also marketed in tabl., each cont. $1^1/_2$ grains (0.1 Gm.).—Best given in powd., or w. W., tea, or some alcoholic beverage.

Propyl Acetate Merck (20

$CH_3COOC_3H_7$.—Colorl. liq.; like ethyl acetate; odor of pears.—*Sol.* A.—Sp. Gr. 0.909 at 0° C.—*Boil.* 102° C.

Propyl Bromide (Iso-) Merck (50

(Isopropyl Bromide).—Fr. isopropyl iodide by addition of bromine.—C_3H_7Br, or, $CH(CH_3)_2Br$.—Colorl. liq.—*Sol.* A.—Sp. Gr. 1.3583 at 0° C.—*Boil.* 60° C.

Propyl Bromide (Normal) Merck (40

Fr. normal propyl alc., by hydrobromic acid.—C_3H_7Br, or, $CH_2CH_2CH_2Br$.—Colorl. liq.—*Sol.* A.—Sp. Gr. 1.358 at 15° C.—*Boil.* 71° C.

Propyl Butyrate Merck (20

(Propyl Ester of Normal Butyric Acid).—$C_7H_{14}O_2$, or, $C_3H_7COOC_3H_7$.—Colorl. liq.—*Sol.* A.—Sp. Gr. 0.879 at 15° C.—*Boil.* 143° C.

Propyl Carbamate Merck (50

(Normal Propyl Ester of Carbamic Acid; Propyl Urethane). — $C_4H_9NO_2$, or, $C_3H_7.NH_2CO_2$.—Colorl. prisms.—*Sol.* A.—*Melt.* 53° C.—*Boil.* 195° C.

Propyl Carbinol.—see **Alcohol Butylic, Primary, Normal**

Propyl Chloride Merck (30

(Normal Propyl Chloride).—By chlorinating normal propyl alcohol. — C_3H_7Cl, or, $CH_3.CH_2$-

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

CH_2Cl.—Colorl., mobile liq.—*Sol.* A.—Sp. Gr. 0.9156 at 0° C.—*Boil.* 46.5° C.

Propyl Formate Merck (25

(Propyl Ester of Formic Acid).—$C_4H_8O_2$, or, $C_3H_7.CHO_2$.—Colorl. liq.; pleas. odor.—*Sol.* A.—Sp. Gr. 0.918 at 0° C.—*Boil.* 81–83° C.

Propyl Iodide (Iso-) Merck (12

(Isopropyl Iodide).—Fr. dil. glycerin, by iodine, w. phosphorus.—C_3H_7I, or, $CH(CH_3)_2I$.—Colorl. to yellow liq.—Sp. Gr. 1.7109 at 15° C.—*Sol.* E., C.—*Boil.* 89° C.

Propyl Iodide (Normal) Merck (12

Fr. propyl alcohol, by iodine w. amorph. phosphorus.—C_3H_7I, or, $CH_3.CH_2.CH_2I$.—Colorl. liq.—Sp. Gr. 1.747 at 15° C.—*Sol.* A.; insol. W.—*Boil.* 102° C.

Propyl Propionate Merck (65

(Propyl Ester of Normal Propionic Acid).—$C_6H_{12}O_2$, or, $C_2H_7.C_2H_5COO$.—Colorl. liq.—*Sol.* A.—Sp. Gr. 0.9022 at 0° C.—*Boil.* 122–124° C.

Propyl Urethane.—see **Propyl Carbamate**

Propyl Valerate Merck (75

(Normal Propyl Ester of Normal Valeric Acid).—$C_8H_{16}O_2$, or, $C_2H_7.C_4H_9COO$.—Colorl. liq.—Sp. Gr. 0.880 at 0° C.—*Sol.* E., C.—*Boil.* 167° C.

"Propylamine."—see **Trimethylamine**

Propylamine Merck.—True, anhydrous (300

By heat. propyl nitrate w. alcoholic 10% ammonia.—C_3H_9N, or, $CH_3.CH_2.CH_2.NH_2$.—Alkal. liq.; str. ammoniacal odor.—*Sol.* W.—*Boil.* 49–50° C.—Sed.; Antispasm.—*Uses: Intern.*, chorea, hysteria, &c.—*Dose:* In chorea, 30–60 grains (2–4 Gm.) p. day in dil. peppermint W.; in severe cases 75–150 grains (5–10 Gm.) p. d.; in rheumat., 2–5 grains (0.12–0.3 Gm.) sev. t. p. d.; in acute pneum., 15–45 grains (1–3 Gm.) p. d.

Propylamine Hydrochloride Merck.—True (250

$CH_3.CH_2.CH_2.NH_2.HCl$.—Deliq., colorl. cryst.—*Sol.*, eas. W.—*Melt.* 155–158° C.—*Uses:* As of preceding.

Propylamine Sulphate Merck (100

(So-called "Trimethylamine Sulphate").—$(CH_3.CH_2.CH_2.NH_2)_2.H_2SO_4$.—Well-formed cryst.—*Sol.*, eas. W.

Propylene Bromide.—see **Trimethylene Bromide**

Propylene Dibromide.—see **Trimethylene Bromide**

Propylphtalimide Bromide Merck (50

(Monobromopropylphtalimide).—$C_{11}H_{10}BrNO_2$, or, $CH_2Br.CH_2.CH_2.N:C_6H_4(CO)_2$.—Cryst. need.—*Sol.*, hot A.; E.—*Melt.* 72–73° C.

Prosopis

(Retortuna; Mastuerzo; Pata de Gallo).—Fruit of Prosopis strombulifera, Benth. Leguminosæ. Minosæ.—*Habit.:* Argentine Republic.—*Etymol.:* "Prosopis" was the name given by Dioscorides to burdock (Arctium Lappa), because it could be used for covering the face (Grk. "prosopon"). "Strombulifera" fr. Lat. "strombuliferus," top-shaped, refer. to shape of fruit.—Emmen.; Astring.—*Uses:* Diar. & gonor.

Prostate Gland Merck.—Dried (80

Fr. the steer.—1 part = 6 parts fresh gland.—*Uses:* Prostatic hypertrophy.—*Dose* 8 grains (0.5 Gm.) p. d.

Protagon Merck (*Not identical with* **Cerebrin** (2000

Physiological prep. fr. brain; cont. phosphorus.—$C_{160}H_{308}N_5PO_{35}$.—Wh. powd.—*Sol.* A., E.

Protalbumose Merck (110

Intermediate product of the hydrolytic decomp. of protein (proteose).—Grayish-yellow powd.—*Sol.*, cold & hot W., & in solut. sod. chloride.—Precipitated like globulins by saturation w. sod. chloride & magnesium sulphate.

Protan (10

Tannin nucleoproteid.—50% tannin.—Light-brown, tastel., odorl. powd.—Insol. W.—Intest. Astring.—*Uses:* Cholera morbus, chronic diar., chol. inf., &c.—*Dose* 10–30 grains (0.6–2 Gm.).

Protargol (27

Proteid compound of silver; 8.3% Ag.—Yellow powd.—*Sol.*, eas. W.—Antisep.; Bactericide.—*Uses:* Gonor., ophthalmia in the new-born, wounds, &c.—*Appl.*, in 0.5–2% soluts.

Protein Merck.—Fr. Grain Gluten (30

Pure proteid fr. aleuronat.—Horny mass or yellowish powd.—*Sol.*, sl. W.—Nutrient.—*Uses:* Scrof., rachitis, &c.—*Dose* 5–20 grains (0.3–1.3 Gm.) several t. p. d.

do. Merck.—Fr. Seeds (80

Proteid substc. fr. oil-seeds (nuts).—Yellowish powd.—*Sol.*, sl. W.

Protein Honl.—see **Pyocyaneus Protein**

Protocatechin Methyl Ester.—see **Guaiacol**

Protocatechuicaldehyde Methylene Ester.—see **Heliotropin**

Protocotoin Merck (90

(Piperonylphloroglucindimethyl Ester).—Cryst. prin. fr. para-cota bark.—$C_{16}H_{14}O_6$.—Yellow cryst.—*Sol.* A., E., C.—*Melt.* 140° C.

Protopine

Alkaloid fr. opium, in minute am't.—$C_{20}H_{17}NO_5$.—Wh., cryst. powd.—*Sol.* C., hot A.—*Melt.* 201° C.

Protosal

(Salicylic-acid Glycerin-formaldehyde Ester).—$OHC_6H_4.CO.O.CH_2.CHO(CH_2O):CH_2$.—Colorl., oily liq.—*Sol.* A., E., B., C., oils; insol. W., G.—Sp. Gr. 1.344.—*Boil.* 200° C. at 12 Mm.—Antirheum.—*Appl.*, by inunct. in 1:2–3 mixt. w. oil.

Prunella

(Heal-all; Self-heal; All-heal).—Herb of Prunella vulgaris, L. Labiatæ.—*Habit.:* Europe; Asia; North America.—*Etymol.:* Lat. "pruna," glowing coal, referring to its former use in croup.—*Constit.:* Resin; bitter substc.; tannin.—*Uses:* Domestic remedy in croup, hemorrhages, & as vulnerary (both given intern. & applied extern.).

Prunin.—see **Cerasin**

Prunus Padus

(Bird Cherry; Hag Cherry; Hag Berry; Fowl Cherry).—Bark of Prunus Padus, L. Rosaceæ.—*Habit.:* Europe.—*Etymol.:* Fr. Grk. "prounos," a plum tree.—*Constit.:* Tannin; amygdalin; laurocerasin.—Diuret.; Diaph.; Febrif.—*Uses:* Spasmodic cough, rheum., syph.

Prunus Spinosa

(Acacia Flowers; Sloe-Thorn; Wild Plum; Blackthorn Flowers).—Flowers of Prunus spinosa, L. Rosaceæ. Drupaceæ.—*Habit.:* Europe; sparingly natur. in U. S.—*Etymol.:* For "prunus" see preceding. Lat. "spinosa," spiny, thorny; also Grk. "akakia," fr. "ake," a point, *i.e.*, the branches are thorny.—*Constit.:* Amygdalin.—*Uses:* Blood purifier & mild laxative.—*Dose* 75 to 120 grains (5–8 Gm.) in infus.

Prunus Virginiana.—*U. S. P.*

(Choke Cherry; Wild Cherry).—Bark of Prunus serotina, Ehrhart, collected in autumn. Rosaceæ.—*Habit.:* North America.—*Etymol.:* Fr. Grk. "prounos," a plum tree; & "serotinus" fr. "serus," late, *i.e.*, late to ripen.—*Constit.:* Tannin; amygdalin; emulsin; bitter principle; resin.—Tonic; Febrif.; Pectoral; Sedat.—*Uses:* Bronchitis, gen'l or local irrit., debil., stom., scrof., tubercul., &c.—*Dose* 30–60 grains (2–4 Gm.) in powd., fld. extr., or infus.

Prussian Blue.—see **Iron Ferrocyanide**

Pseudoaconitinc.—see **Aconitine fr. Aconitum Ferox**

Pseudobutylene Bromide.—see **Butylene, Beta-, Bromide**

Pseudo-calabar Bean.—see **Cali**

Pseudocodeine.—see **Codeine, Pseudo-**

Pseudoconhydrine.—see **Conhydrine, Pseudo-**

Pseudocumene (or, *-ol*).—see **Cumene**

Pseudocumidine.—see **Cumidine, Pseudo-**

Pseudohyoscyamine.—see **Hyoscyamine (Pseudo-)**

Pseudopelletierine Merck (750

(Pseudopunicine; Granatonine).—Fourth alkaloid fr. root bark Punica Granatum, L. (Pomegranate).—$C_9H_{15}NO + 2H_2O$.—Yellowish cryst.—*Sol.* W., C.—*Melt.* 46° C.—Not a teniafuge.

Pseudopelletierine Hydrochloride Merck (600

(Pseudopunicine Hydrochloride).—$C_9H_{15}NO.HCl$.—Wh. cryst.—*Sol.* W.

Pseudopelletierine Sulphate Merck (500

(Pseudopunicine Sulphate).—$(C_9H_{15}NO)_2.H_2SO_4 + 4H_2O$.—Wh. cryst.—*Sol.* W.

Pseudopunicine.—see **Pseudopelletierine**

Psidium.—see **Araça; Guava**

Psyllium

(Fleawort; Fleaseed).—Seed of Plantago Psyllium, L. Plantagineæ.—*Habit:* Southern Europe.—*Etymol.:* Grk. "psylla," a flea, because of the resemblance of the seed to a flea.—Seeds are flea-colored, boat-shaped, & shiny on the convex surface.—*Constit.:* Mucilage.—Mucilaginous Demulc.; Aper.—*Uses: Techn.*, size for silk, printing fabrics, & in paper manuf.—*Dose*, tablespoonful, to relieve chronic constipation.

Ptarmica

(Sneezewort; White Tansy; Sneezewort Tansy or Yarrow).—Herb of Achillea Ptarmica, L. Compositæ. Synantheræ.—*Habit.:* Europe; Asia; natur. in U. S.—*Etymol.:* Grk. "ptarmikos," causing sneezing, referring to the effect produced by the plant. "Achillea" fr. Achilles, the reputed discoverer of Achillea millefolium, & who is said to have healed Telephus with it.—*Constit.:* Volat. oil.—Tonic; Sternut.; Sialagogue.—*Uses:* Epilepsy, catarrh, hematuria, & uterine bleeding.

Ptelea

(Hop Tree; Wafer Ash; Wing Seed).—Bark of root of Ptelea trifoliata, L. Rutaceæ.—*Habit.:* Ontario to northern Mexico, through eastern U. S.—*Etymol.:* Grk. "ptelea," elm. "Trifoliata" refers to the occurrence of three leaves in a cluster in this plant.—*Constit.:* Volat. oil, fixed oil, gum, albumin; berberine(?). The root contains arginine, $C_6H_{14}N_4O_2$.—*Uses:* Tonic in convalesc. & dyspep.; also as appetite restorer.—*Dose:* Fld. extr., 15–30 ♏ (1–2 Cc.).

Ptelein (40

Alcoh. extr. fr. root bark Ptelea trifoliata, L.—*Sol.* A.—Tonic; Stim.—*Uses:* Eclectic & domestic practice: dyspep. & tonic for convalesc.—*Dose* 1–3 grains (0.06–0.2 Gm.).

Pterocarpus Marsupium.—see **Kino**

Pterocarpus Pallidus

(Narra; Palo Nefritico; Asana).—Wood of Pterocarpus pallidus, Blanco. Leguminosæ. Papilionaceæ.—*Habit.:* Philippine Islands.—*Etymol.:* Grk. "pteros," wing, & "karpos," fruit, *i.e.*, the pod is winged. Lat. "pallidus," pale, referr. to the color of the fruit.—*Uses:* In gravel & calculi.

Ptyalin Merck (25

Amylolytic ferment fr. salivary glands of pigs.—Yellowish powd.—*Sol.* G.; partly in W.—*Uses:* Dyspep.; also for convert. starch into dextrin & maltose sugar.—*Dose* 10–30 grains (0.6–2 Gm.) several t. p. d.

Ptyalin Glycerite Merck (6

Solut. of ptyalin in glycerin.—Brownish liq.—*Misc.* W.

Ptyalin-pepsin Merck (35

Mixt. of ptyalin & pepsin.—Yellowish-wh. powd.—*Sol.* G.; partly in W.—Amylolyt.; Proteolyt.—*Uses:* Dyspep.—*Dose* 10–30 grains (0.6–2 Gm.).

Ptychosis Coptica.—see **Ajowan**

Pulegium

(European Pennyroyal; Brotherwort; Flea Mint).—Herb of Mentha Pulegium, L. Labiatæ.—*Habit.:* Europe.—*Etymol.:* Lat. "pulex," flea, *i.e.*, the plant is supposed to be disagreeable to fleas, & to drive them away.—*Constit.:* Volat. oil; tannin.—Carmin.; Emmen.; Abortifac.

Pulmoform.—see **Methylenediguaiacol**

Pulmonaria

(Lungwort; Spotted Lungwort).—Herb of Pulmonaria officinalis, L. Boraginaceæ.—*Habit.:* Europe.—*Etymol.:* Lat. "pulmo," lung, referring to its use in pulmonary affections.—*Constit.:* Mucilage.—Emoll.; Demulc.; Expector.; Pectoral.—*Uses:* Pulmon. dis., hemopt., &c.—*Dose:* Fld. extr., 30–60 ♏ (2–4 Cc.).

Pulsatilla

(Pasque Flower; Wind Flower; Meadow Anemone; Easter Flower).—Herb of Anemone Pulsatilla, L., & A. pratensis, L. Ranunculaceæ. Collected soon after flowering.—*Habit.:* Europe; Asia.—*Etymol.:* Lat. "pulsatilla," a small bell, referring to the shape of the corolla. "Anemone" fr. Grk. "anemos," wind, *i.e.*, it was supposed that the flowers required the assistance of the wind to expand.—*Constit.:* Anemonin, $C_{10}H_8O_4$; volat. oil; bitter substc.; tannin.—Sed.; Anod.; Mydriatic; Diur.; Diaph.; Emmen.; Expector.; Vesicant; Emet.—*Uses:* Syphilis, catarrhal inflam., dysmenor., ovaralgia, asthma, rheumat., coughs, coryza, orchitis, epididymitis, &c.—*Doses:* 2–5 grains (0.12–0.3 Gm.).—Alcoh. extr., $^1/_4$–1 grain (0.015–0.06 Gm.); *Max. D.* 2 grains (0.12 Gm.) single, 6 grains (0.4 Gm.) daily.—Fld. extr., 2–5 grains (0.12–0.3 Gm.); *Max. D.* 5 ♏ (0.3 Cc.) single, 15 ♏ (1 Cc.) daily.—Tinct. of recent herb, 5–15 ♏ (0.3–1 Cc.) in toothache.

Pulsatilla Camphor.—see **Anemonin**

Pumice

A light, porous stone of volcanic origin.—*Habit.:* Chiefly Lipari Island, & Grecian Archipelago.—*Constit.:* Chiefly silica with potassa & soda.—*Uses:* Abradant & polish. Also in chemical analysis when impregnated with dehydrating substances (H_2SO_4, etc.).

Pumpkin Seed.—see **Pepo**

Punicine (and *Salts*).—see under **Pelletierine**

Pure Blue (Aniline Blue) Merck (10

(Water Blue; China Blue).—Salts of triphenylrosaniline- & triphenylpararosaniline-trisulphonic acids & of the corresponding disulphonic acids.—Blue powd.—*Sol.* W.—Antimalarial, like methylene blue.—*Dose* 5 grains (0.3 Gm.) 3 t. p. d.—*Techn.*, dyeing cotton & silk.

Purgatin (17

(Purgatol; Anthrapurpurine Diacetate [or Diacetyl-ester]).—Yellow, tastel. powd.—*Sol.*, alkalies; insol. W., dil. acids.—Purgative.—*Dose* 8–30 grains (0.5–2 Gm.).

Purgen=Phenolphthalein.—see **Phenolphthalein**

Purging Nut.—see **Curcas**

Purple Boneset.—see **Eupatorium Purpureum**

Purple of Cassius.—see **Gold-Tin Purple**

Purpureocobaltic Chloride.—see **Cobalt (Purpureo-) Chloride**

Purpurine-Alum.—see **Ranvier's Purpurine-Alum**

Purpurine-Glycerin.—see **Grenacher's Purpurine-Glycerin**

Purpurine Red Merck.—Powder (50

(Trioxyanthraquinone; Isopurpurine; Anthrapurpurine).—Found in madder root, or prep. artif. fr. alizarin by oxid'n.—$C_{14}H_8O_6$, or, C_6H_4-$(CO)_2.C_6H(OH)_3$; [$(OH)_3$=1:2:4].—Brownish-yellow powd.—*Sol.* A., w. yellow color; in alkalies w. red color; E.; v. sl. cold W., but more so in hot W. Gives with boil. sat. solut. alum a yellowish-red, strongly fluorescent solut.—*Melt.* 253° C.—*Uses:* Dyeing.

do. Merck.—Paste (10

Reddish-brown paste.—*Sol.*, boil. W., A.—*Uses:* Dyeing cotton scarlet.

Pyocyaneus Protein Honl-Merck (10

(Protein Honl).—Extract fr. cultures of bacillus pyocyaneus.—Greenish, sl. alkaline liq.—*Uses:* Lotion in ulcer & purul. inflam. of upper jaw, &c.

Pyoktanin Blue (30

(Penta- & Hexa-methylpararosaniline Hydrochloride Merck).—Fr. oxid'n prod. of dimethylaniline.—Violet, cryst. powd.; nearly odorl.; solut. v. diffusible in animal fluids.—*Sol.* C., 12 90% A., 50 G.; 30 boil., 50 hot, & 75 cold, W.; insol. E.—Antisep.; Disinf.; Analg.—*Uses:* Surg., ophthalmiatric & otiatric practice, dis. of throat & nose, gonor., leucor., ulc., varicose ulc., burns, inflam., wounds, malignant & syph. neoplasms, conjunctivitis, &c. Unexcelled in veter. practice, & has specific healing effect in foot & mouth dis. of cattle. Stains removed by soap, rubbing well & washing with A. Powder is applied pure, or in 1:1000–100 solut. In pyloric carcinoma given in gelatin capsules.—*Dose* 1–5 grains (0.06–0.3 Gm.) in caps., at first once daily, then 2, finally 3 t. p. d.—

Inj., in carcinoma, 75–180 ♏ (5–12 Cc.) of 1% solut.—*Max. D.* 10 grains (0.6 Gm.) single; 20 grains (1.3 Gm.) p. day.—*Incomp.*, alkalies; mercuric chloride.—*Caut.* Keep solut. in dark-colored bot. & use only when recent.

Pyoktanin Blue Merck.—Pencils, large, in handles

Uses: Minor surgery, in cuts, sinuses, ulcers, sterilizing recent wounds, purulent wounds & ulcers, burns, inflam. of matrices of nails, &c.

do. Merck.—Pencils, small, in clasp-holders

Uses: Sterilizing corneal ulcers.

Pyoktanin-Mercury Dinkler-Merck (12

Pyoktanin w. mercuric chloride.—Violet powd. —*Sol.*, sl. W. & A.; insol. E.—Abt. 16% mercury.—Antisep.—*Uses:* Gonor. (1:2000 solut.), in burns (in powd. mixed w. equal weight starch), in favus (1:100 solut. in soap spirit, painted on affected part); preparing bandages, &c.

Pyoktanin Yellow (30

(Imino tetramethyldiamidodiphenylmethane Hydrochloride Merck; Apyonine; Medicinal Auramine).—Yellow powd.; somewh. resembling sulphur.—*Sol.* W., A.—Antisep.; Disinf.—*Uses:* Considerably weaker than the blue, & principally employed in dis. of skin & ophthalmiatric practice.—*Dose* 1–8 grains (0.06–0.5 Gm.).—*Max. D.* 15 grains (1 Gm.).

do. Merck.—Pencils, large, in handles

Uses: Cuts, sinuses, ulcers, &c.

do. Merck.—Pencils, small, in clasp-holders

Pyraloxin.—see **Pyrogallol, Oxidized**

Pyramidon (45

(Dimethylaminoantipyrine). — $C_{11}H_{11}N_2O.N(CH_3)_2$, or $C_6H_5N.N(CH_3).C(CH_3):C:N(CH_3)_2.CO$. —Colorl. cryst.—*Sol.* W., A.—*Melt.* 106–107° C. —Antipyr.; Anod.—*Uses:* Acute fevers, influenza, rheum., headache, tabetic pains, asthma, gastralgia, toothache, &c.—*Dose* 5–8 grains (0.3–0.5 Gm.).

Pyramidon Camphorate, Acid (30

$C_{13}H_{17}N_3O.C_{10}H_{16}O_4$.—Wh., cryst. powd.—*Sol.*, eas. hot & cold W., A., E.—*Melt.* 86° C.—Antihidrotic.—*Uses:* Chron. febrile conditions, & in phthisis to relieve excessive sweating.—*Dose* 8–15 grains (0.5–1 Gm.).

Pyramidon Camphorate, Neutral (35

$(C_{13}H_{17}N_3O_2)_2.C_{10}H_{16}O_4$.—Wh., cryst. powd.—*Sol.*, eas. cold & hot W., A., E.—*Melt.*, abt. 85° C.—Antipyr.—*Uses:* Chron. febrile conditions, phthisis, &c.—*Dose* 8–12 grains (0.5–0.75 Gm.).

Pyramidon Salicylate (30

$C_{13}H_{17}N_3O.C_7H_6O_3$.—Wh., cryst. powd.—*Sol.*, eas. W., A.—*Melt.* 74° C.—Antirheum.; Antineural.—*Uses:* Acute & chron. articular rheum., gout, neural.—*Dose* 8–12 grains (0.5–0.75 Gm.).

Pyrantin

(Paraethoxyphenylsuccinimide).—$(CH_2CO)_2.N.C_6H_4.OC_2H_5$. — By fusing paramidophenetol hydrochloride w. succinic acid, & extracting melt w. boil. A.—Colorl. need.—*Sol.* A.; v. diffic. in cold W., more readily in boil. W.; insol. E.—*Melt.* 155° C.—Antipyr.—*Dose* 15–45 grains (1–3 Gm.) p. d.

Pyrantin Soluble

Sodium salt of pyrantin.—*Sol.* W.—Antipyr.—*Dose* 15–45 grains (1–3 Gm.) daily.

Pyrazine.—see **Antipyrine**

Pyrazine Hexahydride.—see **Piperazine**

Pyrazoline.—see **Antipyrine**

Pyrethrum.—see **Parthenium**

Pyrethrum.—*U. S. P.*

(Pellitory; Spanish Pellitory; Spanish Chamomile; Bertram; Longwort).—Root of Anacyclus Pyrethrum, De C. Compositæ.—*Habit.:* North Africa.—*Etymol.*: "Anacyclus," fr. "ananthocyclus," the old generic name fr. Grk. "a," not, "anthos," flower, & "kyklos," a circle, *i.e.*, the outer circlet of ovaries is without flowers. "Pyrethrum" fr. Grk. "pyr," fire, & "athros," strong, *i.e.*, portions of the plants of the species have a burning taste. "Pellitory" is a corruption of "parietary." fr. Lat. "paries," a wall, *i.e.*, it grows on walls.—*Constit.:* Volat. oil; pyrethrin.—Sialag.; Rubefac.—*Uses:* Neural., toothache, rheum., relaxed uvula, &c.; root also chewed.—*Doses:* Alcoh. extr., 4–8 grains (0.25–0.5 Gm.).—Fld. extr., 30–60 ♏ (2–4 Cc.).

Pyrethrum Flowers

(Persian Insect Powder; Persian Pellitory).—Flowers of Pyrethrum roseum, M. B., & Pyrethrum carneum, M. B. Compositæ.—*Habit.:* Persia; Western Asia.—*Etymol.:* See preceding. —*Constit.:* Volat. oil; pyrethrosin; pyrethrosinic acid.—*Uses:* Insecticide.

Pyridine Merck.—Medicinal (4

By dry distil. of organic comp'ds cont'g nitrogen.—C_5H_5N.—Colorl. liq.; empyreumatic odor; sharp taste.—Sp. Gr. 1.0033 at 0° C.—*Misc.* W., A., E., benzin, fatty oils, &c.—*Boil.* 116–118° C.—Respiratory Sed.; Antigonor.; Antisep.—*Uses:* Asthma, angina pectoris, dyspnea, &c. Contraind. in heart weakness.—*Techn.*, as solvent for anhydrous mineral salts.—*Dose* 2–10 ♏ (0.12–0.6 Cc.) sev. t. p. d. in W.—Us'y by inhalation, 45–75 ♏ (3–5 Cc.), evaporated spontaneously in room, the inhalations lasting 1/2 hr. each, being repeated 3 t. p. d. As urethral inj., 0.3% solut.; & as paint in diphth., a 10% solut.

Pyridine Chloroiodide Merck (45

(Chloriodopyridine). — C_5H_3CHN. — Yellow, cryst. powd.—*Sol.* A.

Pyridine Chloromethylate.—see **Pyridine Methyl-chloride**

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Pyridine Citrate Merck.—Cryst. (12

$C_5H_5N.C_6H_8O_7$.—Wh. cryst.—*Sol.* W., A.

Pyridine Methylchloride Merck (75

(Pyridine Chloromethylate).—C_6H_8NCl, or, $C_5H_5N.CH_3Cl$.—Wh., cryst. need.—*Sol.* W., A.

Pyridine Nitrate Merck.—Cryst. (12

$C_5H_5N.HNO_3$.—Wh. cryst.—*Sol.* W., A.

Pyridine Sulphate Merck.—Cryst. (10

$C_5H_5N.H_2SO_4$.—Deliq., wh. cryst.—*Sol.* W., A. —*Caut.* Keep well stoppered.

Pyroacetic Ether.—see **Acetone**

Pyrocatechin Merck.—Resublimed (16

(Orthodioxybenzene; Pyrocatechuic or Oxyphenic, Acid; Catechol).—Occurs in nature; but us'y prep. fr. guaiacol.—$C_6H_8O_2$, or, $C_6H_4(OH)_2$. —Colorl. cryst.—*Sol.* W., A., E., B., C.—*Melt.* 104° C.—*Boil.* 240–245° C.—Antisep.; Antipyr. —*Uses: Extern.*, solut. & salve for dress. wounds, burns, injuries, &c. More powerful antiseptic than carbolic acid, resorcinol or hydroquinone. —*Techn.*, in photography.

Pyrocatechindimethyl Ester.—see **Veratrole**

Pyrocatechinmethylbenzyl Ester.—see **Brenzcaïn**

Pyrocatechinmonoethyl Ester.—see **Guaethol**

Pyrocatechinmonomethyl Ester.—see **Guaiacol**

Pyrodin.—see **Acetylphenylhydrazine**

Pyroform

Obt. by action of oxidized pyrogallol on bismuth oxyiodide.—Gray powd.—Insol. in ord. solvents.—*Uses:* As of pyrogallol, in skin dis.

Pyrogallol Merck.—Resublimed (3

(Pyrogallic Acid).—Fr. gallic acid by heat.—$C_6H_6O_3$, or $C_6H_3(OH)_3$[1 : 2 : 3].—White, lustr., bitter cryst.—*Sol.* 1.6 W., 1 A., & 1.1 E. at 25° C.; v. sol. boil. W. & boil. A. (U. S. P.).—*Melt.* 132° C. — *Boil.* 210° C. — *Uses: Extern.*, in psori. & skin dis.; oint. (1 in 10).—*Techn.*, in photo., in cosmetics, in manuf. of gallein, & in gas analysis as reagent.—*Caut.* Keep fr. light.

Pyrogallol Disalicylate.—see **Saligallol**

Pyrogallol Monoacetate.—see **Eugallol**

Pyrogallol Oxidized Merck (5

(Pyraloxin). — Oxidation prod. of pyrogallol, obtained by action of air & vapor of ammonia. —Brown powd.—Recomm. by Unna as stable, & efficient succed. for pyrogallol, & free fr. toxic & irritating effects of latter.—*Uses:* Psoriasis, chron. eczema, lupus erythemat., &c.—*Appl.*, in 10% oint. w. petrolatum & lanum.

Pyrogallolphtalein.—see **Gallein**

Pyrogallol Triacetate.—see **Lenigallol**

Pyrola

(Roundleaved Wintergreen; False Wintergreen; Canker Lettuce; Shin Leaf).—Herb of Pyrola rotundifolia, L. Ericaceæ.—*Habit.:* Europe; Asia; northern North America.—*Etymol.:* Lat. "pyrus," pear tree, *i.e.*, the leaves resemble those of the pear tree. Lat. "rotundus," round, & "folium," leaf, referring to the shape of the leaf.—*Constit.:* Arbutin; ericolin; resin; urson; tanniu; gallic & malic acids; volat. oil; coloring matter; gum, &c. — Diur.; Rubefac.; Tonic; Astring.; Antispasm.—*Uses:* Gravel, convuls., epilepsy, uter. dis., & as appl. to ulcers, sores, tumors, &c.—*Dose* 5–60 grains (0.3–4 Gm.).

Pyrolusite.—see **Manganese Dioxide, Natural**

Pyromucic Aldehyde.—see **Furfural**

Pyrosal (20

(Antipyrine Salicylacetate, or Acetylsalicylate). —$C_9H_8O_5.C_{11}H_{12}N_2O$.—Colorl. leaflets or cryst.; acid taste.—50% antipyrine; 37% salicylic acid. —*Sol.*, diffic. W., A., E.—*Melt.* 149–150° C.—Antipyr. — *Uses:* Pleurisy, polyarthritis, migraine, &c.—*Dose* 8 grains (0.5 Gm.).

Pyrosulphuric Oxychloride.—see **Pyrosulphuryl Chloride**

Pyrosulphuryl Chloride (12

(Disulphuryl Chloride; Pyrosulphuric Oxychloride; Chlorosulphonic Anhydride).—Fr. SO_3 by PCl_5.—$S_2O_5Cl_2$, or, $Cl.SO_2.O.SO_2.Cl$. — Colorl., mobile, v. refractive, fum. liq. — Sp. Gr. 1.858 at 0° C.—Decomp. by W.—*Boil.* 146° C.

Pyroxylin

(Collodion Cotton; Colloxylin; Soluble Gun Cotton; Xyloidin; Collodion Wool).—Fr. purified cotton, by nitric & sulphuric acids.—A mixt. of cellulose nitrates consist. chiefly of nitrocellulose $C_{12}H_{15}(ONO_2)_4O_5$. — Wh., flossy substc.; poss. physical appearance of ordinary cotton.—*Sol.* 25 parts of mixture of 1 vol. A. & 3 vol. E.; also acetone, glac. acetic acid.—*Uses:* Surg., photo., & techn.—*Caut.* Can be shipped with safety only when wet w. 30–33% water.

Pyrrhol.—see **Pyrrol**

Pyrrol Merck (220

(Pyrrhol).—Fr. bone-tar by fractional distil. w. sulphuric acid.—C_4H_5N, or, $NH(CH:CH)_2$.—Yellowish liq.; hot, pung. taste.—Sp. Gr. 0.9752 at 12.5° C.—*Sol.* A., E.—*Boil.* 133° C.

Pyrrol Red Merck (250

$C_{12}H_{14}N_2O$.— Brownish-black, amorph., insol. powd.—Obtained by boiling pyrrol w. acids.

Pyrrol Tetriodide.—see **Iodol**

Q

Quamacai

(Quamacai Cipo).—Wood of Paullinia thalictrifolia, Juss. Sapindaceæ. — *Habit.:* Brazil. — *Etymol.:* "Quamacai" is the Brazilian name of the plant. — *Uses:* In rheum. & beri-beri. — *Extern.*, in diaphor. baths.

Quassia.—*U. S. P.*

(Bitter Ash; Bitterwood Tree).—Wood (& bark) of Picrasma excelsa (Swartz) Planchon, Jamaica Quassia (& of Quassia amara, L., true Surinam Quassia). Simarubeæ.—*Habit.:* Jamaica; West Indies generally; Central America.—*Etymol.:* "Quassi," "Quassy," or "Quash," name of Surinam negro slave who first discovered the febrif. properties, & employed the drug. Grk. "pikros," bitter. Lat. "excelsus," surpassing, *i.e.*, highest spec. of Genus.—*Bark:* Flat or curved pieces, $^1/_5$ in. (5 Mm.) or more thick; extern., dark-gray; inner surface, yellowish-white & smooth; inodor; very bitter.—*Wood:* See U. S. P.—*Constit.: Wood:* Picrasmin, $C_{35}H_{46}O_{10}$; quassin, $C_{10}H_{12}O_3$, (or, $C_{32}H_{42}O_{10}$[?]); quassol, $C_{40}H_{70}O.H_2O$; alkaloid; resin; mucilage; pectin.—*Bark:* Quassin; alkaloid; resin; pectin. (Quassia amara contains 4 bitter principles; Picræna excelsa contains only 2); quassol.—Tonic Bitter; Febrif.; Anthelmint.; Antiparasitic.—*Uses:* To invigorate digestive organs, & create appetite; chron. constip., worms & fever.—*Techn.*, as fly poison, & as surrogate for hops.—*Doses: Wood:* 15–60 grains (1–4 Gm.), usually as decoct. or tinct.—Alcoh. extr., 1–5 grains (0.06–0.3 Gm.).—Fld. extr., 10–30 ♏ (0.6–2 Cc.).—Tinct., 1–3 fl. dr. (4–12 Cc.).—*Bark:* 15–30 grains (1–2 Gm.).

Quassin Merck.—Pure, cryst. (1283

(Quassiine).—Bitter prin. fr. Jamaica & Surinam Quassia.—$C_{10}H_{12}O_3$, or, $C_{32}H_{42}O_{10}$(?).—Wh., opaque, intens. bitter cryst.—*Sol.* A., C.; sl. in W.—*Melt.*, abt. 210° C.—Tonic; Stimulant.—*Uses:* Invigorate digestive org.—*Dose* $^1/_{30}$–$^1/_3$ grain (0.002–0.02 Gm.) before meals.

do. Merck.—Pure, powder (240

Pure, amorph., bitter principle found besides the cryst. quassin in wood of Picræna excelsa.—Light-yellow powd.—*Sol.* A.—*Uses & Doses:* As of quassin, cryst.

do. Merck.—Purified, lumps & powder (120

Mixt. of quassins.—Light-brown lumps or fine powd.—*Sol.* A.—*Uses & Doses:* As of French quassin.

do. Merck.—French (25

Light-yellow, amorphous powd., or lumps; odorl. & v. bitter.—Specially prepared for the French market.—*Sol.* W., E.; v. sol. A.—Bitter Tonic; Appet.—*Dose* $1^1/_2$–$2^1/_2$ grains (0.1–0.15 Gm.).

Quebrachamine Hesse-Merck (7000

Fr. bark of Aspidosperma Quebracho-blanco, Schlecht.—White to yellowish cryst., bitter scales.—*Sol.* A., E. & C.—*Melt.* 142° C.

Quebrachamine Sulphate Hesse-Merck (7000

Wh. to yellowish cryst.—*Sol.* W., A.

Quebrachine Hesse-Merck (5000

Fr. bark of Aspidosperma Quebracho-blanco, Schlecht.—$C_{21}H_{26}N_2O_3$.—Colorl. to yellowish cryst.; darken on expos.; bitter taste.—*Sol.* C., hot A., hot E., amyl alc.—*Melt.* 214–216° C., w. decomp.—Antiper.; Tonic.—*Uses:* Asthma & dyspnea fr. heart dis.—*Dose* 1–2 grains (0.06–0.12 Gm.) several t. p. d., in powd. & pills.

Quebrachine Hydrochloride Hesse-Merck (5000

$C_{21}H_{26}N_2O_3.HCl$.—Wh. to yellowish cryst.—*Sol.*, sl. W., A.—*Dose* $^3/_4$–$1^1/_2$ grains (0.05–0.1 Gm.).

Quebracho.—see **Aspidosperma**

Quebracho Colorado

(Red Quebracho).—Wood of Loxopterygium Lorentzii, Grisebach. Anacardiaceæ.—*Habit.:* Argentine Republic.—*Etymol.:* Portuguese "quebrahacho," axe-breaker, *i.e.*, the wood is exceedingly hard; Spanish "colorado," colored.—*Constit.:* Tannin; coloring matter; loxopterygine.—Antasthmatic; Astring.; Antispasm., in dysent. & asthma.—*Uses:* As of aspidosperma, but is weaker in action.—*Techn.*, in dyeing.—*Dose:* Aqu. extr., 3–5 grains (0.2–0.3 Gm.).

Quercetin Merck (450

(Meletin; Quercetinic Acid).—Fr. quercitrin, by dil. sulphuric acid.—$C_{15}H_{10}O_7+2H_2O$.—Brown, cryst. powd.—*Sol.*, in alkal. solut.; sl. in W.—*Uses:* Dye.

Quercimelin.—see **Quercitrin**

Quercit Merck (450

(So-called "Acorn Sugar").—Constit. of acorns.—$C_6H_7(OH)_5$.—Colorl. cryst.—*Sol.* W., A.—Sp. Gr. 1.5806 at 15° C.—*Melt.* 234° C.

Quercitannin.—see **Acid Quercitannic**

Quercitrin Merck (75

(Quercimelin; Quercitrinic Acid).—Glucoside (yellow coloring matter) fr. bark Quercus tinctoria, Bartram (Black Oak).—$C_{21}H_{22}O_{12}+2H_2O$.—Yellow, cryst. powd.—*Sol.* A., amyl alc., alkal. solut., acetic acid; sl. W.—*Melt.* 168° C.—Astring.; Tonic.

Quercus.—*U. S. P.*

(White Oak).—Dried bark of Quercus alba, L., fr. trunks & branches 10–25 yrs. old, & deprived of periderm (also fr. o. species of Quercus). Fagaceæ. Cupuliferæ.—*Habit.:* Canada, & eastern U. S.—*Etymol.:* Celtic "quer," handsome, & "cuez," tree, *i.e.*, handsome tree. "Alba," white, refers to the whitish appearance of the bark.—*Constit.:* Quercitannic acid; oak-red; resin; pectin; levulin; quercit; ellagic acid; gallic acid.—Astring.; Tonic; Antiper.—*Uses:* Catar. diar., maras., intermit. fever, leucor., &c.—*Doses:* Extr., 3–10 grains (0.2–0.6 Gm.).—Fld. extr., 15–60 ♏ (1–4 Cc.).

Quercus Pedunculata

(British Oak; English Oak; White Oak).—Bark of Quercus pedunculata, Ehrhart, & Q. sessiliflora, Martyn (Q. robur, Willd.). Cupuliferæ.—*Habit.:* Europe.—*Etymol.:* "Quercus," see preceding. "Pedunculata," fr. Lat. "pedunculus," diminutive of "pes," foot, *i.e.*, having a short

peduncle or foot; "sessiliflora" fr. Lat. "sessilis, sedere," to sit, & "flora," flower, *i.e.*, inserted directly on the axis.—*Constit.:* Tannin, $C_{17}H_{16}O_9$; gallic acid; quercin; quercit.—*Uses:* Astring.—*Techn.*, in tanning.—*Dose* 1–2 fl. oz. (30–60 Gm.) of 10–20:100 decoct.

Quillaja.—*U. S. P.*

(Soap Bark; Quillaia; Panama Bark; China or Murillo Bark).—Dried bark of Quillaja Saponaria, Molina, Rosaceæ, deprived of its periderm. —*Habit.:* South America (Peru; Chili); cultiv. in Northern Hindustan.—*Etymol.:* Fr. Chilian "quillai," "quillay," "cullay," or "quillaian," to wash; saponaria fr. Lat. "sapo," soap, *i.e.*, soapy.—Large, flat pieces abt. $^1/_5$ in. (5 Mm.) thick; extern., brownish-white; inner surface, whitish, smooth; splintery fract.; inodor.; persist. acrid taste; dust very sternutatory; the infus. foams like soap water.—*Constit.:* Quillaiac acid, $C_{19}H_{20}O_{10}$; quillaia-sapotoxin, $C_{17}H_{26}O_{10}$; tannin.—Expector.; Stim.; Diuret.; Irrit.; Detergent; Sternut. — *Uses: Intern.*, in bronch. — *Extern.*, chron. ulc., eczema, hyperidrosis, & skin dis.—*Techn.*, in manuf. of sapotoxin, saponin, & quillaiac acid; also in mineral-water industry, in shampoo liquids, &c., as foam producer.—*Doses:* 15–30 grains (1–2 Gm.) in powd. or infus. —Aqu. extr., 2–5 grains (0.12–0.3 Gm.).—Fld. extr., 15–30 ♏ (1–2 Cc.).—Tinct. (1:5 alcoh.) employed as emulsifiant for oils, balsams, & resins, & to produce foam in soda-water, &c.

Quinaldine Merck (125

(Alphamethylquinoline; Chinaldine).—Fr. aniline w. paraldehyde & hydrochloric acid, by heat. — $C_{10}H_9N$, or, $CH_3.C{:}N.C_6H_4.CH{:}CH$. — Oily, yellowish liq.; odor of quinoline; darkens to reddish-brown in air.—Sp. Gr. 1.052 at 15° C. —*Sol.* E., C.; sl. in W.—*Boil.* 240–246° C.

Quinaldine Sulphate Merck (150

$C_{10}H_9N.H_2SO_4$. — Reddish, cryst. powd. — *Sol.*, eas. W.—*Melt.* 211–213° C.

Quinaldylenephtalid.—see **Quinoline Yellow, Alcohol Soluble**

Quinalgen.—see **Analgen**

Quinaphthol (150

(Quinine Betanaphtholmonosulphonate; Chinaphthol). — $C_{20}H_{24}N_2O_2.(OH.C_{10}H_6.SO_3H)_2$. — Yellow, cryst. powd.—*Sol.*, sl. hot W. & A.—*Melt.* 185–186° C.—42% quinine.—*Uses:* Typhoid, intestinal tuberculosis, dysent., acute artic. rheumat., &c.—*Dose* 5–15 grains (0.3–1 Gm.) single; 30–45 grains (2–3 Gm.) p. d.

Quinaseptol.—see **Diaphtol**

Quince, Bengal.—see **Aegle**

Quince Seed.—see **Cydonia**

Quinetum Merck.—Pure (20

(Chinetum).—Mixt. of alkaloids in varying proportions, as they occur naturally, fr. bark Cinchona succirubra, Pavon. — Amorph., grayish-white to brownish powd.; 50 to 70% of cinchonidine w. quinine, cinchonine, & amorph. bases. — *Sol.*, dil. acids; sl. in W. — Antiperiodic. — *Uses:* Malaria & intermit. fevers. — *Dose* 1–8 grains (0.06–0.5 Gm.).

Quinetum Sulphate Merck (25

Neutral sulphate of preceding.—Grayish-wh. to brownish powd.—*Sol.* W.

Quinhydrone Merck (70

React.- prod., aqu. solut. quinone & hydroquinone.—$C_6H_4(OH)_2.C_6H_4O_2$.—Green prisms; red-brown by transmitted light; metal. luster; odor like quinone; pungent taste.—*Sol.*, hot W., A., E., amm.; sl. cold W.

Quinic Acid Anhydride.—see **Sidonal, New**

Quinidine Merck.—Pure, cryst. & precip. (17

(Chinidine; Conchinine; Beta-quinine; Cinchotine; Chinotine; Pitayin).—Alkaloid fr. some spec. of Cinchona bark.—$C_{20}H_{24}N_2O_2 + 2^1/_2H_2O$.—Colorl., lustr. prisms; effloresce on expos.—*Sol.*, abt. 20 A., 30 E., 2,000 W.—*Melt.* 168–170° C. —Antiper.; Antipyr.; Antisep.; Tonic.—*Uses:* Remit. & intermit. fevers, espec. of children. Substit. for quinine. Salts less agre. to take, but more prompt in action.—*Dose:* Children, $^1/_2$–5 grains (0.03–0.3 Gm.); adults, 3–30 grains (0.2–2 Gm.), in suspension in syrup.—*Max. D.* 40 grains (2.6 Gm.), single.

Quinidine Bisulphate Merck (20

(Acid Quinidine Sulphate).—$C_{20}H_{24}N_2O_2.H_2SO_4 + 4H_2O$.—Colorl. cryst.; bitter taste.—*Sol.* W., with fluoresc.—*Dose* 5–15 grains (0.3–1 Gm.).

Quinidine Citrate Merck (30

$C_{20}H_{24}N_2O_2.C_6H_8O_7$.—Wh. cryst.—*Sol.* A.—*Dose* $1^1/_2$–12 grains (0.1–0.75 Gm.).

Quinidine Hydrobromide Merck (30

$C_{20}H_{24}N_2O_2.HBr$.—Wh. cryst.—*Sol.* W., A.

Quinidine Sulphate Merck (15

(Neutral Quinidine Sulphate).—$(C_{20}H_{24}N_2O_2)_2.H_2SO_4 + 2H_2O$.—Wh. need.; v. bitter taste.—*Sol.* 8 A., 14 C., 100 W.—Antipyr.; Antiper.; Antisep.; Tonic.—*Doses:* As tonic: $^1/_2$–3 grains (0.03–0.2 Gm.) 3 t. p. d.; as antiper.: 20–60 grains (2–4 Gm.); for a cold: 5–10 grains (0.3–0.6 Gm.).—*Caut.* Prone to cause collapse in children, hence give cautiously.

Quinidine Tannate Merck (15

Amorph., yellow powd.; tastel.—*Sol.*, sl. A.—*Uses: Intern.*, dyspep., diar., albumin., malaria. —*Dose* 3–12 grains (0.2–0.8 Gm.). — *Veter.*, erysip. of swine, 25 grains (1.6 Gm.) 3 t. p. d.

Quinine Merck.—Alkaloid (11

Alkaloid fr. Cinchona bark.—$C_{20}H_{24}N_2O_2 + 3H_2O$, or, $CH_3O.C_6H_3.C_3H_2N.CH_2.CH(OH).CH_2.CH.(CH)_2.CH_2.CH_2.N.(CH_2)_2 + 3H_2O$.—Bulky, wh., amor-

phous, or cryst. powd.; v. bitter taste.—*Sol.* E., C., B., carbon disulphide, benzin, oils, 6 A., 240 G., 2,000 W. at 15° C.; (1,550 W., 0.6 A., 1.3 E., 1.6 C., 212 G., 166 B., 3,450 solut KOH 1:20, & 1,810 ammonia water, at 25° C. When anhydrous, *sol.* 1,750 W., 0.6 A., 4.5 E., 1.9 C., 158 G., 120 B., 3,450 solut. KOH 1:20, & 1,810 ammonia water, at 25° C., U. S. P.).—*Melt.* 57° C.; when anhydr. (by heat. to 125° C.) 174.9° C. (U. S. P.). —Antipyr.; Antiper.; Antisep.; Emmen.; Ecbolic; Tonic.—*Uses:* Reduce fever & hectic flush in phth.; yellow fever, typhus, & typhoid, remit. & intermit. fevers, malaria, amenor.; antisep. for intest. canal; hasten labor, & as general bitter tonic; locally, to prevent conception & as styptic. The salts are us'y prescribed. For hypodermic use, the bisulphate, ethylsulphate, quinate, hydrobromide, or carbamidated hydrochloride is to be preferred.—*Dose* 2–15 grains (0.12–1 Gm.).—*Max. D.* 25 grains (1.6 Gm.) single; 50 grains (3.3 Gm.) p. day.—*Caut.* Keep in dark, well-stoppered bottles.

Quinine Acetate Merck (12

$C_{20}H_{24}N_2O_2.C_2H_4O_2$.—Fine, wh. cryst.; acetic-acid odor.—*Sol.* 7 A. & hot W.—*Dose* 1–15 grains (0.06–1 Gm.).—*Caut.* Keep well stoppered.

Quinine Albuminate Merck (40

Yellowish-wh. scales.—*Sol.*, dil. hydrochl. acid, acid pepsin W.—Tonic.—*Uses:* Agrees w. delicate patients; nutrient as well as medicinal.—*Dose* 1–15 grains (0.06–1 Gm.).

Quinine Anhydro-oxymethylenediphosphate.—see **Quininephytin**

Quinine Anisate Merck (20

(Anetholquinine). — $(C_{20}H_{24}N_2O_2)_2.C_{10}H_{12}O + 2H_2O$.—Colorl. cryst.—*Sol.* E., hot A.—*Uses, &c.:* As of the sulphate.

Quinine Antimonate Merck (20

Wh. powd.—Insol. W.—Combined Febrifuge, Lax., & Diaph.—*Uses:* Rheum., gout, herpes, pernicious intermit. fever.—*Dose* $1^1/_2$–7 grains (0.1–4 Gm.).

Quinine Arrhenalate.—see **Quinine Methylarsenate**

Quinine Arsenate Merck (11

$2(C_{20}H_{24}N_2O_2).H_3AsO_4 + 8H_2O$. — Wh. cryst. — *Sol.*, hot W.—Antiperiodic.—*Uses:* Persistent intermit. fever. — *Dose* $^1/_{15}$–$^1/_8$ grain (0.004–0.008 Gm.).—*Max. D.* $^1/_8$ grain (0.008 Gm.), single.—*Antid.*, emetics, stomach siphon, hot milk & water w. mustard, then milk w. magnesia, saccharated iron oxide, dialyzed iron, &c. —*Caut.* Poison!

Quinine Arsenite Merck (11

Wh. powd.—13% As_2O_3. — *Sol.* A.; v. sl. W.—Antimalarial.—Accord. to Bénakz, may be given in comparatively large doses (2–4 grains [0.12–0.25 Gm.]!?), as quinine & arsenic are physiologically antagonistic. — *Dose* $^2/_3$ grain (0.04 Gm.) 3 t. p. d.

Quinine Benzoate Merck (15

$C_{20}H_{24}N_2O_2.C_7H_6O_2$.—Wh. cryst.—*Sol.* A., 350 W.—*Uses, &c.:* As of the sulphate.—*Dose* 2–20 grains (0.12–1.3 Gm.).

Quinine Betanaphtholmonosulphonate.—see **Quinaphthol**

Quinine Bimuriate.—see **Quinine Dihydrochloride**

Quinine Biniodate.—see **Quinine Diiodate**

Quinine Bisulphate (5

(Acid Quinine Sulphate). — $C_{20}H_{24}N_2O_2.H_2SO_4 + 7H_2O$.—58.12% quinine.—Colorl. cryst.; efflorescence rapidly & become opaque on expos.—*Sol.* 8.5 W., 18 A., 1770 E., 920 C., 18 G., at 25° C.; 0.68 W. at 80° C.; 0.5 A. at 60° C.; (U. S. P.).—*Melt.*, abt. 160° C., w. decomp.—*Uses: Intern.*, as of the sulphate, but used also subcut.—*Extern.*, chiefly in solut. for irrigating nose in hay-fever.—*Dose* 1–30 grains (0.06–2 Gm.).—*Nasal Inj.*, in hay-fever, 0.2% aqu. solut.

Quinine Bitartrate Merck (15

$C_{20}H_{24}N_2O_2.C_4H_6O_6 + H_2O$.—Wh. cryst.—*Sol.*, sl. W. & A.

Quinine Borate Merck (15

$C_{20}H_{24}N_2O_2.H_3BO_3$(?).—Wh. cryst.—*Sol.* W., A. —*Uses, &c.:* As of the sulphate.

Quinine Borosalicylate Merck (30

Wh., diffic. sol. powd.—*Uses, &c.:* As of the salicylate.

Quinine Bromate Merck (25

$C_{20}H_{24}N_2O_2.HBrO_3$.—Wh. cryst.—*Sol.* W., A.—*Uses, &c.:* As of the sulphate.

Quinine Bromide.—see **Quinine Hydrobromide**

Quinine Cacodylate Merck (30

$C_{20}H_{24}N_2O_2.(CH_3)_2AsO_2H$. — Wh. powd. — *Sol.*, cold W. & A.

Quinine Camphorate Merck (20

$(C_{20}H_{24}N_2O_2)_2.C_{10}H_{16}O_4$.—Wh. powd.—*Sol.* A.—*Uses, &c.:* As of the sulphate.

Quinine Carbolate.—see **Quinine Phenate**

Quinine Carbonate Merck (35

$C_{20}H_{24}N_2O_2.H_2CO_3 + H_2O$.—Colorl. cryst.—*Sol.* W., A.; in acids w. effervesc.; insol. E.—Effloresc. in air; above 110° C., decomp. w. evol. of CO_2.

Quinine Carbonic Ether (or *Esler*).—see **Euquinine**

Quinine Chlorate Merck (20

$C_{20}H_{24}N_2O_2.HClO_3 + 1^3/_4H_2O$. — Wh. cryst.; explode at h. temp.—*Sol.* W., A.—*Uses:* Malarial & o. fevers w. anginal symp.

Quinine Cinnamate Merck (20

$C_{20}H_{24}N_2O_2.C_9H_8O_2$. — Wh. cryst. — *Sol.* A. — *Uses, Doses, &c.:* As of the sulphate.

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Quinine Citrate Merck (11

$(C_{20}H_{24}N_2O_2)_2.C_6H_8O_7+7H_2O$.—Wh. cryst.—*Sol.* A., hot W.—*Uses, &c.:* As of the sulphate.—*Dose* 2–20 grains (0.12–1.3 Gm.).

Quinine Citrate with Iron Pyrophosphate Merck (8

Yellowish-green scales. — *Sol.* W. — *Uses:* Malarial affect. w. chlorosis, anemia, &c.

Quinine Citrosalicylate Merck (25

White powd.—*Sol.* A.—*Uses:* Especial value in malarial migraine.

Quinine Dibromide.—see **Quinine Dihydrobromide**

Quinine Dibromosalicylate, Acid.—see **Bromoquinol**

Quinine Dichloride.—see **Quinine Dihydrochloride**

Quinine Dihydriodide Merck (20

(Quinine "Diiodide").—$C_{20}H_{24}N_2O_2.2HI+5H_2O$.—Yellowish, wh. powd.—*Sol.* W., A.—*Uses, &c.:* As of the sulphate.

Quinine Dihydrobromide Merck (20

(Quinine "Dibromide"; Acid Quinine Hydrobromide, or Bihydrobromide). — $C_{20}H_{24}N_2O_2.2HBr+3H_2O$.—Yellowish powd.—*Sol.* W., A.—*Uses:* Chiefly hypoderm. in chron. malaria.—*Dose* 2–20 grains (0.12–1.3 Gm.) in 20 ♏ (1.3 Cc.) water, every second day, by inj.

Quinine Dihydrobromoguaiacolate.—see **Guaiaquinol**

Quinine Dihydrochloride Merck (11

(Quinine "Dichloride," or Bimuriate).—$C_{20}H_{24}N_2O_2.2HCl+2H_2O$.—Wh. cryst.—*Sol.* W., A.—Well adapted to subcut. inj., on account of solubility, partic. in whoop.-cough.—*Dose,* by inj., $1^1/_2$ grains (0.1 Gm.) for each year of the child's age, in 25–30% solut., 2 t. p. d.

Quinine Dihydrochloride, Carbamidated.—see **Quinine & Urea Hydrochloride**

Quinine Diiodate Merck (35

(Quinine Biniodate). — $C_{20}H_{24}N_2O_2.(HIO_3)_2$.—Wh., cryst. powd.—*Sol.* W.—*Dose* $1^1/_2$ grains (0.1 Gm.) hypoderm.

Quinine Diiodide.—see **Quinine Dihydriodide; Quinine Iodohydriodide**

Quinine Eosolate

Neutral quinine salt of trisulphoacetylguaiacol.—$(C_9H_7S_3O_{12})(C_{20}H_{24}N_2O_2)_3$. — Yellow, amorph., bitter powd.—*Sol.,* eas. A.; diffic. W.—Febrif.—*Uses:* Malaria, influenza.—*Dose* 8–10 grains (0.5–0.6 Gm.).

Quinine Ethylsulphate Merck (18

(Quinine Sulphovinate, or Sulphethylate).—Fr. hot alcoh. solut. of sodium sulphovinate & quininesulphate.—$C_{20}H_{24}N_2O_2.C_2H_8SO_4$.—Wh. cryst.—71% quinine.—*Sol.* 3 W.—*Uses:* Hypoderm. in severe malarial fever.—*Dose* 3–8 grains (0.2–0.5 Gm.), hypoderm.

Quinine Ferrichloride.—see **Iron & Quinine Chloride, Ferric**

Quinine Ferricyanide Merck (15

$C_{20}H_{24}N_2O_2.H_3Fe(CN)_6+1^1/_2H_2O$(?). — Yellow cryst.—*Sol.,* v. sl. W.

Quinine Ferrobromide.—see **Iron & Quinine Bromide**

Quinine Ferrochloride.—see **Iron & Quinine Chloride, Ferrous**

Quinine Ferrocitrate, Soluble.—see **Iron & Quinine Citrate, Soluble**

Quinine Ferrocyanide Merck (11

(Quinine Hydroferrocyanide).—$C_{20}H_{24}N_2O_2.H_4Fe(CN)_6+3H_2O$(?).—Yellow powd.—*Sol.* A.—*Uses:* Substit. for the sulphate & potass. ferrocyanide in fever & night sw. of phth.—*Dose* 5–10 grains (0.3–0.6 Gm.).

Quinine Ferroiodide.—see **Iron & Quinine Iodide**

Quinine Ferrolactate.—see **Quinine & Iron Lactate**

Quinine Ferrosulphate.—see **Quinine & Iron Sulphate**

Quinine Ferrotannate.—see **Quinine & Iron Tannate**

Quinine Flower or *Plant* or *Herb.* — see **Sabbatia**

Quinine Formate Merck (25

$C_{20}H_{24}N_2O_2.CH_2O_2$. — Wh., bitter cryst. — *Sol.* W., A., C.; alm. insol. E.—*Uses, &c.:* As of the sulphate. Well adapted for subcutaneous use.

Quinine Gallate Merck (28

Yellowish cryst.—*Sol.,* hot W., A.—*Uses, &c.*. As of quinine tannate.

Quinine Glycerinophosphate Merck (25

$C_3H_7O_3.PO_3.(C_{20}H_{24}N_2O_2)_2$.— Wh. powd. — *Sol.,* hot W. & A.—68% quinine.—Tonic.—*Uses:* Nervous debility following malaria.—*Dose:* As of quinine sulphate.

Quinine Glycyrrhizinate Merck (12

Brown powd.—*Sol.* A.—25% quinine.—*Uses:* Particularly adapted for children, because of but v. sl. bitter taste.—*Dose:* As of the sulphate.

Quinine Guaiacolbisulphonate.—see **Guaiaquin**

Quinine Hydriodide Merck (13

(Quinine "Iodide" or Hydriodate).—$C_{20}H_{24}N_2O_2.HI$. — Yellowish powder. — *Sol.* A. — *Uses:* Chronic scrof. affect.

Quinine Hydrobromide Merck (10

(Quinine "Bromide" or Hydrobromate).—$C_{20}H_{24}N_2O_2.HBr+H_2O$.—Silky, wh., light need.—*Sol.* 40 W., 0.67 A., 16 E., 8 G., v. eas. C. at 25° C.; 3 W. at 80° C.; (U. S. P.).—*Melt.,* abt. 200° C.—*Uses, Doses, &c.:* As of the sulphate.

Quinine Hydrochloride Merck (10

(Quinine Hydrochlorate). — $C_{20}H_{24}N_2O_2.HCl + 2H_2O$.—Wh., silky need.—*Sol.* 3 A., 9 C.; 34 W. at 15° C.; (18 W., 0.6 A., 240 E., 0.8 C., 8 G. at 25° C., 0.4 W. at 80° C.; U. S. P.).—*Melt.* 190° C.—*Uses, Doses, &c.:* As of the sulphate.

Quinine Hydrochlorophenate Merck (20

(Quinine Phenolhydrochloride).—Wh. need.—*Sol.* W., A.—*Uses:* As of quinine sulphate.

Quinine Hydrochlorophosphate Merck (28

(Quinine Phosphochloride). — $C_{20}H_{24}N_2O_2.HCl.2PO_4H_2 + aq$.—Yellow cryst.—*Sol.* W.—*Uses:* Nerv. headache & malaria.—*Dose:* As of quinine sulphate.

Quinine Hydrochlorosulphate Merck (15

(Quinine Sulphochloride).—$(C_{20}H_{24}N_2O_2)_2.HCl.H_2SO_4 + 3H_2O$. — Fine, wh. need. — 74% quinine.—*Sol.* 1 W.—*Uses:* Especially subcutan. in pernicious malaria.—*Dose* 15-30 ♏ (1-2 Cc.) of 10-30% solut. daily. Less pain hypoderm. than any o. salt of quinine.

Quinine Hydroferrocyanide.—see **Quinine Ferrocyanide**

Quinine Hydrofluoride Merck (30

$C_{20}H_{24}N_2O_2.HF$.—Colorl. cryst.—*Sol.* A.

Quinine Hydroiodide.—see **Quinine Hydriodide**

Quinine Hypophosphite Merck (11

$C_{20}H_{24}N_2O_2.HPH_2O_2$.—Wh. cryst.—*Sol.* A., W.

Quinine Iodate Merck (35

$C_{20}H_{24}N_2O_2.HIO_3$. — Wh. need.—*Sol.* A., W.—*Uses:* As of quinine diiodate.

Quinine Iodide.—see **Quinine Hydriodide**

Quinine Iodohydriodide Merck (28

(Quinine Diiodide). — $C_{20}H_{24}N_2O_2.I.HI$. — By precip. a solut. quinine bisulphate w. iodopotass. iodide solut.—Kermes-brown powd.—*Sol.* A.—*Uses:* Obstinate intermit. fevers, secondary & tertiary syphilitic symptoms.—*Extern.*, in enlarged spleen.—*Doses:* In syph., 40 grains (2.6 Gm.) p. d.; in malaria, 15-25 grains (1-1.6 Gm.).

Quinine Iodosulphate Merck (35

(Herapathite; Iodoquinine Sulphate).—$4C_{20}H_{24}N_2O_2.3H_2SO_4.2HI.I_4 + 3H_2O$. — Dichroic cryst.; red or green w. reflected or transmitted light; polarize like tourmaline.—*Sol.*, boiling A.

Quinine Lactate Merck (11

$C_{20}H_{24}N_2O_2.C_3H_6O_3$.—Wh. cryst.—*Sol.* A., W.—*Uses & Doses:* As of the sulphate.

Quinine Lactophosphate Merck (25

Wh. powd.—*Sol.* A.—*Uses, &c.:* As of quinine sulphate.

Quinine Lygosinate (40

Quinine salt of diorthocumarketone (or, diortho-oxydibenzylacetone), a condensation prod. of salicylic aldehyde & acetone.—$CO(CH{:}CH.C_6H_4.OH.C_{20}H_{24}N_2O_2)_2$.—Bright, orange-red powd.—*Sol.* A., B., C.; v. diffic. in W.—*Melt.* 114° C.—Bactericide; Styptic. — *Uses:* Cancer, caries, gland. swellings, gangren. wounds, parenchym. hemorrhage, &c. — *Appl.*, dusting powd., in glycerinic suspension, as 30% gauze, &c.

Quinine Methylarsenate

(Quinine Monomethylarsenate or Arrhenalate). — $(C_{20}H_{24}N_2O_2)_2.AsO.(OH)_2CH_3$. — Colorl., v. bitter cryst.—*Sol.*, v. diffic. cold, more eas. hot, W.—*Melt.* 139-141° C.—*Dose* 10 grains (0.6 Gm.) p. d.

Quinine Monomethylarsenate.—see **Quinine Methylarsenate**

Quinine Nitrate Merck (20

$C_{20}H_{24}N_2O_2.HNO_3 + H_2O$.—Colorl., bitter cryst.—*Sol.* W., A.—*Uses, &c.:* As of the sulphate.

Quinine Oleate Merck.—10% & 25% (30

Exsiccated quinine in oleic acid.—Brown, thick liq.—*Sol.* A., E., oils, & oleic acid.—Antipyr.; Antiper.—*Uses:* Administration of quinine by inunction in oint.

Quinine Oxalate Merck (15

$(C_{20}H_{24}N_2O_2)_2.C_2H_2O_4$.—Fine need.—*Sol.* A.; sl. W.

Quinine Peptonate Merck (17

80% peptone w. 20% quinine.—Brown powd.—Nutrient; Tonic; Antipyr.—*Uses:* Convalesc. fr. severe sickness & defect. nutrition w. intermit. or remit. fever.—*Dose* 5-60 grains (0.3-4 Gm.).

Quinine Phenate Merck (15

(Quinine Phenolate, or Carbolate; Phenolquinine).—$C_{20}H_{24}N_2O_2.C_6H_6O$.—Wh. powd.—*Sol.* 80 A., 400 W.—*Uses, &c.:* As of the sulphate.

Quinine Phenolhydrochloride. — see **Quinine Hydrochlorophenate**

Quinine Phenolsulphonate Merck (13

(Quinine Sulphocarbolate).—$(C_{20}H_{24}N_2O_2)_2.C_6H_4.OH.SO_3H$. —Wh. cryst. — *Sol.* A. — *Dose* 1-8 grains (0.06-0.5 Gm.).

Quinine Phosphate Merck (11

$(C_{20}H_{24}N_2O_2)_2.H_3PO_4 + 8H_2O$.—Fine, wh. need.—*Sol.* A., W.—*Uses & Doses:* As of the sulphate.

Quinine Phtalate Merck (35

$(C_{20}H_{24}N_2O_2)_2.C_8H_6O_4$. — Wh. powd.—*Sol.* A.—*Melt.* 70° C.—*Uses & Doses:* As of the sulphate.

Quinine Phosphochloride.—see **Quinine Hydrochlorophosphate**

Quinine Quinate Merck (35

$C_{20}H_{24}N_2O_2.C_7H_{12}O_6 + 2H_2O$.—Wh. to yellowish cryst.; v. bitter taste.—*Sol.* W. & A.—*Uses:* Chiefly by inj., inst. of o. Q. salts, on account of its great solubility.—*Dose:* As of the sulphate.

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Quinine Salicylate Merck (10

$2(C_{20}H_{24}N_2O_2).C_7H_6O_3$.—Wh., bitter cryst.—*Sol.* 77 W., 11 A., 110 E., 37 C., 16 G. at 25° C.; 35 W. at 80° C.; 11 A. at 60° C.; (U. S. P.).—*Melt.* 183–187° C., w. decomp. (U. S. P.).—Antisep.; Antipyr.; Analg. — *Uses:* Typhoid, sciatica, rheum., lumbago, & muscular pain fr. cold.—*Dose* 2–30 grains (0.12–2 Gm.).

Quinine Salicylic Ester.—see **Saloquinine**

Quinine Santonate Merck (120

$C_{20}H_{24}N_2O_2.C_{15}H_{20}O_4$. — Yellow, bitter powd.—*Sol.* A.

Quinine Stearate Merck (20

$C_{20}H_{24}N_2O_2.C_{18}H_{36}O_2$.—Wh., bitter cryst.—*Sol.* A.—*Uses:* As of the sulphate. Us'y employed extern. by inunction; mixes readily w. oint. & is easily absorbed.

Quinine Succinate Merck (20

$(C_{20}H_{24}N_2O_2)_2.C_4H_6O_4 + 8H_2O$.—Bitter, wh. need.—*Sol.* A., boil. W.

Quinine Sulphate Merck (7

$(C_{20}H_{24}N_2O_2)_2.H_2SO_4 + 7H_2O$. — Wh., lustr., or shin., eas. compressible, fragile need.; v. bitter; absorbs moisture fr. damp air; darkens in the light.—*Sol.*, dil. acids, 3 boil. A., 50 boil. W., 40 G., 65 A.; 740 W. & 680 C. at 15° C.; (720 W., 86 A., 400 C., 36 G., at 25° C.; 45 W. at 80° C.; 9 A. at 60° C.; eas. sol. in mixt. 2 C. & 1 absol. A.; v. diffic. sol. E.; U. S. P.).—*Melt.*, when dried over H_2SO_4, at 205° C.—Antipyr.; Antiper.; Antisep.; Emmen.; Ecbolic; Tonic; Germic.—*Uses: Intern.*, all fevers, espec. intermit. & remit.; antisep., & bitter tonic; also in whoop.-cough; bitter taste disguised by yerba santa, licorice, tannin, gymnema, or saccharin. — *Extern.*, on wounds, ulcers, &c.—*Doses:* As tonic: $^1/_2$–2 grains (0.03–0.12 Gm.); as antiper.: 5–15 grains (0.3–1 Gm.) 6 to 12 hrs. before paroxysm; in pernicious fever: 30–75 grains (2–5 Gm.) within 12 hrs.; in neural.: $1^1/_2$–3 grains (0.1–0.2 Gm.) every 1 or 2 hrs.; as antipyr.: 15–30 grains (1–2 Gm.) in the course of 1 hr.; in hectic fever: 2–3 grains (0.12–0.2 Gm.) every 2 hrs.; as prophylactic in malaria, 5–8 grains (0.3–0.5 Gm.) 1–2 t. p. d.; as prophylactic in influenza: 8 grains (0.5 Gm.) every day or two. For children, per day $^3/_4$–$1^1/_2$–3 grains (0.05–0.1–0.2 Gm.) per yr. of age, in 2 doses. As suppository 15–25 grains (1–1.6 Gm.).—*Techn.*, in brewing to obt. healthy yeast capable of vigorously fermenting, & in photography. —*Incomp.*, ammonia, alkalies, lime-water, tannin, Donovan's solution, iodine, potass. iodide, &c.—*Caut.* Keep dark & well stoppered.

Quinine Sulphethylate.—see **Quinine Ethylsulphate**

Quinine Sulphocarbolate.—see **Quinine Phenolsulphonate**

Quinine Sulphochloride.—see **Quinine Hydrochlorosulphate**

Quinine Sulphotartrate Merck (18

Fr. quin. sulphate & tartaric acid.—Wh. powd. —*Sol.*, hot W.—*Uses*, &c.. As of the sulphate.

Quinine Sulphovinate.—see **Quinine Ethylsulphate**

Quinine Tannate Merck.—Neutral, Tasteless (7

$C_{20}H_{24}N_2O_2.3C_{14}H_{10}O_9 + 8H_2O$. — Yellowish-wh., tastel. powd.—30–32% quinine. — *Sol.*, partly A.—*Uses, &c.:* As of the sulphate; commended for children, particularly in diar. & whoop.-cough, because tastel. Less active than the more solub. salts.—*Dose* 1–10 grains (0.06–0.6 Gm.).

Quinine Tartrate Merck (15

$(C_{20}H_{24}N_2O_2)_2.C_4H_6O_6 + H_2O$.—Wh., cryst. powd. —*Sol.* A., hot W., & sl. in cold W.—*Uses, Doses, &c.:* As of the sulphate.

Quinine Thiosulphate Merck (20

$C_{20}H_{24}N_2O_2.H_2S_2O_3$.—Wh. cryst.—*Sol.* A.; sl. W.

Quinine Urate Merck (35

$C_{20}H_{24}N_2O_2.C_5H_4N_4O_3$.—Wh., cryst. powd.—*Sol.*, hot W., hot A.

Quinine Valerate Merck.—Cryst. & powd. (11

$C_{20}H_{24}N_2O_2.C_5H_{10}O_2 + H_2O$. — Colorl. cryst. or powd; slight odor of valerian; bitter taste.—*Sol.* 5 A., 100 W., at 15° C.—*Melt.* 90° C.—Nerve Tonic, Antipyr., &c.—*Uses:* Hemicrania & debilitated or malarial condit. w. a nervous state or hyst. —*Dose* 2–6 grains (0.12–0.36 Gm.).

Quinine & Antipyrine Salicylate Merck (35

Mixt. quinine salicylate & antipyrine.—*Uses:* Neuralgia.—*Dose* $1^1/_2$–8 grains (0.1–0.5 Gm.).

Quinine & Antipyrine Valerate Merck (35

Mixt. of quinine valerate & antipyrine.—*Uses:* Neural., &c.—*Dose* $1^1/_2$–8 grains (0.1–0.5 Gm.).

Quinine & Uranium Chloride Merck (35

Yellow, cryst. powd.—*Sol.* W.

Quinine & Urea Hydrochloride Merck (13

(Carbamidated Quinine Dihydrochloride). — $C_{20}H_{24}N_2O_2.HCl + CO(NH_2)_2.HCl + 5H_2O$.— Wh. cryst.—*Sol.*, part. W.—70% quinine.—*Melt.* 70–71° C.—*Uses:* Inj.; the salt is v. soluble.—*Inj.* $1^1/_2$–8 grains (0.1–0.5 Gm.) in 50% aqu. solut.

Quininephytin

(Quinine Anhydro-oxymethylenediphosphate). —$C_{20}H_{24}N_2O_2.PO(OH)_2.(OH)CH.O.CH(OH).PO(OH)_2$. — Yellowish, bitter, cryst. powd. — *Sol.*, eas. W.; insol. A., E., B., C.; aqu. solut. is fluoresc.—Antimalarial; Tonic.—*Uses:* Malaria-cachexy, pneumon., &c.—*Dose* 8 grains (0.5 Gm.) sev. t. p. d.—Not adapted for hypoderm. use.

Quinium Merck (15

(Chinium; Crude Quinine).—Fr. recent cinchona bark w. KOH & alcohol, according to a French process.—Amorph., friable mass; contains all

the constit. of cinchona bark but the woody fiber.—*Uses:* Obstinate intermit. fever; said to act better than quinine. — *Dose* $1^1/_2$–8 grains (0.1–0.5 Gm.).

Quinoidine Merck.—Purified (3

(Chinoidine).—Mixed amo ph. alkaloids fr. cinchona bark that remain in solut. after the cryst. alkaloids have been removed.—V. bitter, brownish-black mass; lustrous, resinous appearance & conchoidal fracture.—*Sol.*, dil. acids, A., C. —Softens below 100° C. — Antipyr., Antiper., Tonic, &c.—*Uses:* Intermit. & remit. fever. Best taken between paroxysms.—*Dose* 2–8–15 grains (0.12–0.5–1 Gm.).

Quinoidine Borate Merck (5

Yellowish-brown powd.—*Sol.* W., A.—*Uses, &c.:* As of quinoidine, particularly for hypoderm. use, because of its easy solubility.—*Dose* 8–15 grains (0.5–1 Gm.).

Quinoidine Citrate Merck.—Scales (5

Reddish-brown scales.—*Sol.* W., A.—*Dose* 5–25 grains (0.3–1.6 Gm.).

Quinoidine Hydrochloride

Brownish-yellow sticks or mass.—*Sol.* W., A.

Quinoidine Sulphate Merck.—Dry (4

Amorph., brown mass or sticks.—*Sol.* W., A.

Quinoidine Tannate Merck (5

Amorph., yellow or brownish powd.—*Sol.*, partly in A.—Antipyr.; Antiper.; Astring.; Tonic.—*Uses: Intern.*, dyspep., diar., & albumin., intermit. & remit. fever. — *Veter.*, hog cholera. — *Doses:* 2–12 grains (0.12–0.8 Gm.); veter., 25 grains (1.6 Gm.) 3 t. p. d.

Quinoiodine Merck (30

(Chinoiodine). — C_9H_7NICl. — Chlorine-iodide addit. prod. of quinoline.—Yellow powd.—*Sol.* A.; insol. W.—Antisep.—*Uses:* Mixed w. talcum as dusting powd., or in oint. w. petrolatum, in skin diseases.

Quinol.—see **Hydroquinone**

Quinoldimethylester.—see **Dimethylhydroquinone**

Quinoline Merck.—Pure (9

(Chinoline; Leucoline).—A tertiary amine, naturally fr. coal-tar, or artificially fr. aniline, w. nitrobenzene, glycerin, sulphuric acid & heat. —C_9H_7N, or, $(\underline{CH:CH}).C_6H_4.N:\underline{CH}$.—Colorl. liq.; yellow w. age or on expos.; pecul. odor; absorbs moisture fr. air.—Sp. Gr. 1.090 at 15° C.—*Misc.* A., E., carbon disulphide.—Antisep.; Antipyr.; Antizymotic.—*Uses:* In alcoh. solut. as gargle in diphth.; as a tooth wash, intest. antisep. in dysent., & as preserv. of anatomical & o. specimens.—*Dose* 15–30 ♏ (1–2 Cc.).—*Caut.* Keep well stoppered.

do. Merck.—Fr. Cinchonine (250

do. Merck.—Synthetic (Boil. 230–234° C.) (10

Quinoline Bisulphate.—see **Quinoline Sulphate**

Quinoline Blue.—see **Cyanine**

Quinoline Chloriodide Merck (35

$C_9H_7N.ClI$.—Yellow need.—*Sol.* A.—*Melt.* 112°C.

Quinoline Chloriodomethylchloride.—see **Iodolin**

Quinoline Citrate Merck (30

$C_9H_7N.C_6H_8O_7$.—Wh. powd.—*Sol.* W.

Quinoline Hydrochloride Merck (30

$C_9H_7N.HCl$.—Deliq., wh. to yellowish cryst.—*Sol.* W., A., C.—*Melt.* 93–94° C.

Quinoline Methylchloride Merck (120

$C_9H_7N.CH_3Cl + H_2O$.—*Melt.* 126° C.

Quinoline Methyliodide Merck (100

$C_9H_7N.CH_3I$. — Yellow cryst. —*Melt.* 73° C.—*Sol.* W., A., C.

Quinoline Salicylate Merck (15

$C_9H_7N.C_7H_6O_3$.—Grayish-white, cryst. powd.—*Sol.* A., E., oils.—Antisep.; Antirheum.—*Uses: Intern.*, whoop.-cough.—*Dose* 8–15 grains (0.5–1 Gm.). — *Extern.*, inj. for gonor. — *Appl.* 0.7% aqu. solut.

Quinoline Sulphate Merck (20

(Quinoline Bisulphate). — $C_9H_7N.H_2SO_4$. — Wh. to grayish-white, cryst. powd.—*Sol.* W.—*Melt.* 164° C.—Antiseptic.—*Uses, &c.:* As of quinoline.

Quinoline Tannate Merck (25

Yellow powd.—*Sol.* A.

Quinoline Tartrate Merck (9

$(C_9H_7N)_3.(C_4H_6O_6)_4$.—Wh., cryst. powd.; pung. odor; sharp taste.—*Sol.* 80 W., 150 A., 300 E. —*Melt.* 125° C.—Antipyr.; Antisep.—*Uses:* Intermit. fever, the dose being given three hours before paroxysm; in gonor., inj. 0.7% aqu. solut. —*Dose* 5–15 grains (0.3–1 Gm.).—*Max. D.* 30 grains (2 Gm.), single 60 grains (4 Gm.) p. day.

Quinoline Yellow Merck.—Alcohol-soluble (35

(Quinaldylenephtalid; Quinophtalon).—Yellow powd. — *Sol.*, diffic. in A.; insol. W. — *Uses:* Coloring wax & lacquers.

do. Merck.—Water-soluble (10

Sodium salt of Quinophtalonsulphonic Acid.—Yellow powd.—*Sol.*, eas. W. & A.—*Uses:* Dyeing wool & silk.

Quinoline & Iron Citrate Merck.—20% Quinoline (12

(Ferrous Quinoline Citrate).—Greenish-brown scales.—*Sol.* W.

do. Merck. — 10% Quinoline (10

Quinoline-Betanaphthol Merck (25

(Naphtholquinoline).—$C_9H_7N.C_{10}H_7OH$.—Yellowish, cryst. powd.—*Sol.* A.—*Melt.* 57–58° C.

Quinoline-Bismuth Sulphocyanate [*Rhodanide*]. —see **Crurin**

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Quinoline-hydroquinone Merck.—Cryst. (100
(Dioxyquinoline). — Fr. quinoline-quinone, by reduct. w. SO_2.—$C_9H_7N+C_6H_4(OH)_2$.—Wh. to reddish cryst.—*Sol.* W., A., E.—Decomp. on heating to 220° C.

Quinoline-resorcinol Merck (90
$2C_9H_7N+C_6H_6O_2$. — Wh. to yellowish, cryst. powd.—*Sol.* A., hot W.—*Melt.* 102° C.—Antipyr.; Antisep.

Quinone Merck (60
(Benzoquinone; Chinone). — Fr. aniline & o. substc. by oxid'n. — $C_6H_4O_2$. — Yellow cryst.; character. odor.—*Sol.* A., E., alkal. solut.; sl. in W.—*Melt.*, abt. 115° C.

Quinone Monoxime.—see **Nitrosophenol, Para-**

Quinophtalon.—see **Quinoline Yellow, Alcohol-soluble**

Quinopyrine (125
(Chinopyrine; Antipyrine-quinine).—Comp. of 3 parts quinine (as hydrochloride) & 2 parts antipyrine.—Wh. powd.—*Sol.* W.—*Uses:* Malaria; adapted for hypoderm. use.—*Dose* 5–25 grains (0.3–1.6 Gm.).

Quinosol (15
(Chinosol; Potassium Oxyquinolinesulphonate). — $C_9H_6N.OSO_2K$. — Antisep.; Disinf. — *Uses:* Gynecology, & disinfecting hands & surg. instruments, in 1:2000–1000–100 solut. For preserving anatomical specimens, 5% solut. is inj. into arteries.

R

Rabelaisia Bark
This Philippine arrow-poison bark is considered byBoorsma identical with Abuhab Cahoy (*q. v.*).

Rabl's Chromo-Formic Acid
0.3 Gm. chromic acid, 2 drops formic acid, & 100 Cc. W.—*Uses:* Fixing animal tissues.

Rabl's Hematoxylin-Safranine
(*a*) Delafield's hematoxylin; (*b*) solut. 0.2 Gm. safranine in 100 Cc. 50% A.—*Uses:* Double-staining.

Rachitol Tablets Stültzner-Merck
Compressed tablets, each cont. $^1/_{12}$ grain (0.005 Gm.) dried suprarenal gland.—*Uses:* Rachitis. —*Dose:* Children, accord. to their weight: under 10 lbs., 1–2 tabl. daily; fr. 10–20 lbs. & upwards, 2–3 tabl. daily, increased to fr. 6–7 tabl. daily after several weeks.

Radium
Etymol.: Fr. Lat. "radius," a ray, referring to the luminous & o. rays given off by the element. Discovered in 1898 by Mme. Curie, in pitchblende.—Ra.—Radium has not been isolated as such in the free state. It is marketed chiefly as hydrobromide, the salt being of varying radioactive strength acc. to its purity. Its strength is denoted by numerals showing the relation to an absolutely pure salt, the radioactivity of which is designated arbitrarily as 1,000,000 or even higher. The salts of radium possess the power of imparting radioactivity to other substances by contact or exposure, the substances then also becoming radioactive.—*Uses:* Therapeutically, in lupus, cutan. tubercul., superficial epithelioma, cancer, &c. The salt, inclosed in a sealed glass tube, is brought near or fastened to the affected part, & the rays allowed to impinge for a sufficient time. On the healthy skin, the rays may cause severe & obstinate burns that heal very slowly.

Raffinose Merck (100
(Mellitose; Mellitriose; Gossypose).—Trisaccharide, fr. beets or cotton-seed cake.—$C_{18}H_{32}O_{16}+5H_2O$.—Wh., cryst. powd.; sweetish taste.—*Sol.* W.—*Melt.* 118–119° C.

Ragwort, Golden.—see **Senecio Aureus**

Ranvier's Picrocarmine
Add str. ammon. carmine to satur. solut. of picric acid until turbid; evap. to $^1/_5$; filter.; evap. filtrate dry; diss. in W. & add carbolic acid to prevent fermentation.—*Uses:* For double-staining. Nuclei are colored red; connective tissue, rose-red; keratohyalin, red; keratin & elastic fibers, yellow; muscular fiber, brownish-red.

Ranvier's Purpurine-Alum
Purpurine & alum boiled w. W. & added while hot to 90% A.—*Uses:* Staining sections.

Rape Flowers.—see **Napus**

Raspberry.—see **Rubus Idæus**

Rattlesnake Root.—see **Senega**

Realgar.—see **Arsenic Sulphide, Red**

Red Antimony. } —see **Antimony, Sulphurated**
Red Antimony Sulphide. }

Red Arsenic Glass.—see **Arsenic Sulphide, Red**

Red Bole.—see **Bole, Armenian**

Red Bud.—see **Cercis**

Red, Chrome or *Persian.*—see **Lead Chromate, Basic**

Red Lead.—see **Lead Oxide, Red**

Red Orpiment.—see **Arsenic Sulphide, Red**

Red Poppy.—see **Rhœados**

Red Precipitate.—see **Mercury Oxide, Red**

Red Rose.—see **Rosa Gallica**

Red Sandwort.—see **Arenaria**

Red Saunders.—see **Santalum Rubrum**

Reddish Blue Merck (10
Sod., amm., or calc., salt triphenylrosaniline- & triphenylpararosaniline-sulphonic acids comb. w. some corresp. disulphonic acids.—Dark-violet powd.—*Sol.* W.

Reddle.—see **Hematite**

Regulus of Antimony.—see **Antimony**

Renaden (26

Lactose trituration of extract prep. fr. kidneys of hogs.—1 part = 2 parts fresh organ.—*Uses:* Uremia, nephritis, &c. — *Dose* 90–120 grains (6–8 Gm.) p. d.

Renaglandin

Fr. suprarenal capsule.—Brown, syrupy liq.—1 fl. dr. (4 Cc.)=5 grains (0.3 Gm.) fresh capsule.

Renaut's Hematoxylin-Eosine

Mixt. of Ehrlich's hematoxylin-glycerin with solut. eosine (1%) in sod.-chloride solut., & solut. potassium alum (1%) in glycerin.—*Uses:* Stains nuclei violet; connective tissue pearl-gray; elastic fibers & blood corpuscles dark-red; protoplasm of cell & of axis cylinders rose-red, & that of mucous cells blue.

Renaut's Hematoxylin-Glycerin

1 Gm. hematoxylin, 1 Gm. alum, 50 Cc. A., 50 Cc. G., & 50 Cc. W.—*Uses:* Rapid. stain. nuclei.

Rennet Powder.—1: 100,000

Enzyme fr. stom. of calf.—Grayish-wh. to yellowish-wh. powd.; coagulating 100,000 times its own weight of milk.—*Sol.*, partly in W.—*Uses:* To coagulate milk & make it more easy of assimilation. Given to diabetics to convert the glucose of their food into lactic acid.—*Dose* 10–30 grains (0.6–2 Gm.).

do.—1: 20,000

Coagulates 20,000 times its own weight of milk.

Resaldol

Acetyl deriv. of condens. prod. of chlormethylsalicylic aldehyde w. resorcinol. — $C_{20}H_{14}O_5.(CH_3.CO)_2$.—Yellow, amorph., v. light powd.—*Sol.*, alkalies; insol. W. — Antituberc.; Intest. Antisep. — *Uses:* Intest. tuberculosis, & catarrhal & intest. ulcerative processes.—*Dose* 45–75 grains (3–5 Gm.) p. d.

Resalgin

(Antipyrine Resorcylate). — $(C_{11}H_{12}N_2O)_2.C_7H_6O_4$.—Fr. antipyrine & betaresorcylic acid.—Colorl. needl.—*Sol.* 20 boil. W.; more eas. A. —*Melt.* 115° C.—Antisep.

Resin Benzoin.—see **Benzoin**

Resin Buchu.—see **Barosmin**

Resin Burgundy.—see **Pitch, Burgundy**

Resin Cannabis Indica

Resinous extractive fr. Cannabis Indica.—Possesses the intoxicating & narcotic properties of the drug.—Brown powd.

Resin Copaiba Merck (3

Residue fr. distil. balsam copaiba.—Brown, amorph. mass. — Antiseptic. — *Uses:* Gonor., cystitis, & dis. of muc. membr. of gen.-urin. org. —*Dose* 10–20 grains (0.6–1.3 Gm.); as diuret. in dropsy, 15 grains (1 Gm.) several t. p. d.

Resin Copal.—see **Copal**

Resin Damar.—see **Damar**

Resin Elemi.—see **Elemi**

Resin Guaiac.—see **Guaiac**

Resin Jalap Merck.—*U. S. P.*—True (10

Unbleached resin fr. powdered root Exogonium Purga, Benth., by extract. w. A. — Consists chiefly of convolvulin.—Brown, amorph. mass or powd.—*Sol.*, all prop. A.; partly in E.; insol. CS_2, B., & oils.—Hydragogue; Drastic Cath.—*Uses:* Chronic constip., dropsy, &c.; us'y w. o. remed.—*Doses:* To increase peristalsis, 1–3 grains (0.06–0.2 Gm.); as drastic cath., 5–8 grains (0.3–0.5 Gm.).

Resin Kamala Merck (25

Fr. glands of Rottlera tinctoria (Kamala).—Brown, amorph. pieces.—Teniafuge.

Resin Kava-Kava Merck.—Mixed (200

(Kawaïn).—Arom., acrid, greenish-brown mass, cont. alpha- & beta-resins in the proportions in which they exist in Kava.—*Uses, &c.:* As of following.

Resin Kava-Kava (Alpha-) Merck (400

Fr. root Piper methysticum, Forst.—Brown mass.—*Sol.* A.—Local Anesth.; Antisep.—*Uses: Extern.*, inst. of cocaine, & also for gonor., leucor., & o. inflamed condit. of muc. membr. The alpha-resin is the more potent.

Resin Kava-Kava (Beta-) Merck (125

Brown resin.—*Uses:* As of preceding; effects less pronounced.

Resin Kino.—see **Kino**

Resin Kousso Merck (50

(Kossein of Martius). — Fr. female flowers of Hagenia abyssinica.—Brownish-black mass.

Resin Mezereum Merck (40

Acrid resin fr. bark of Daphne Mezereum. — Brown mass. — *Sol.* A. — Epispastic; produces blisters on the skin.—*Appl.*, in 1:4 alc. solut., or 1:8–24 oint.

Resin Podophyllum Merck (8

("Podophyllin").—Fr. rhizome & roots Podophyllum peltatum, L. (May Apple; Mandrake) by extract. w. A.—Light-yellow powd., or sm., yellowish, bulky, fragile lumps; faint odor; acrid, bitter taste. Irritates muc. membr.—Dust greatly inflames conjunctiva.—*Sol.*, clearly in 10 A. & in 100 ammonia; (75% resin sol. in E.; 65% in C. Not more than 25% in boil. W.; sol. KOH, or NaOH., U. S. P.).—*Constit.:* Podophyllotoxin, picropodophyllin, picropodophyllinic acid, podophyllinic acid, & podophyllo-quercetin; only the first two are active.—Hydragogue Cath.—*Uses:* With o. cath. to increase

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their energy.—Habitual constip., in combination w. extr. hyoscyamus to prevent colicky pains; sm., continued doses act best.—*Doses:* In acute constipation, $^3/_4$ – $1^1/_2$ grains (0.05–0.1 Gm.); in habitual constip., $^1/_8$–$^1/_2$ grain (0.008–0.03 Gm.).—Children: Under 1 yr. $^1/_{12}$ grain (0.005 Gm.); 1–4 yrs., $^1/_6$–$^1/_3$ grain (0.01–0.02 Gm.); older children, $^1/_2$ grain (0.03 Gm.).—*Max. D.* $1^1/_2$ grains (0.1 Gm.) single; 5 grains (0.3 Gm.) p. d.

Resin Quebracho Merck (35

Fr. bark of Aspidosperma Quebracho-blanco (Quebracho). — Grayish-brown pieces. — *Uses:* Diar.—*Dose* $1^1/_2$ grains (0.1 Gm.) in pill, sev. t. p. d.

Resin Rhubarb, Red.—see **Erythroretin**

Resin Scammony Merck.—Brown (5

(Scammonin).—Fr. tubers of Convolvulus Scammonia, L., by extract. w. A., & precip. with W.—Contains chiefly jalapin-scammonin.—Brown, amorph. mass.—*Sol.* A., E., C., alkalies (w. heat), oil turpentine.—Hydragogue Cathartic.—*Uses:* With o. cath. to increase their power.—*Doses:* $^1/_3$–1 grain (0.02–0.06 Gm.); as drastic cathart., 3–8 grains (0.2–0.5 Gm.).

do. Merck.—White, lumps or powder (15

("Scammonin").—The brown resin bleached.—Yellowish, amorph. masses or powd.—*Uses:* As of preceding.

Resin Sumbul Merck (60

Fr. root Euryangii Sumbul, Jatamansi.—Brown, mass.—Transient Stimulant.—*Uses:* Spastic disturbances, chorea, delirium tremens, vesical affections, typhoid, chlorosis, &c.—*Extern.*, as sinapism (in recent rheum.) in form of paper impregnated w. conc. alc. solut. sumbul resin.—*Dose* $1^1/_2$–8 grains (0.1–0.5 Gm.) p. d.

Resin Thapsia Merck (35

Fr. root Thapsia garganica, L. (Spanish Turpeth-root).—Brown, extract-like mass.—*Sol.* A., E.—Epispastic.—*Uses: Extern.*, in form of plaster (Sparadrap de Thapsia) as a counter-irritant to relieve pain. May cause severe erythema w. intense miliary eruption. Applied too long, leaves sore w. permanent scar.

Resin Tolu.—see **Balsam Tolu**

Resin Veratrum Viride Merck (40

A somewhat modified extract fr. root Veratrum viride.—Grayish-brown, amorph. mass.—Antipyretic.—*Uses:* Pneumonia.—*Dose* $^1/_6$–$^1/_3$ grain (0.01–0.02 Gm.).

Resina.—see **Rosin**

Resinates.—see under **Copper, Lead, Lead & Manganese, & Manganese**

These preparations serve for the rapid & convenient manuf. of varnishes without the employment of much heat, a temperature of 120–150° C. being sufficient.

Resineon Merck (4

Volat. oil fr. black tar-oil by distil.; free fr. carbolic acid.—*Boil.* 148° C.—Antiseptic.—*Uses: Extern.*, dress. for wounds or injuries, & in skin dis.; in 1:8 oint. by inunction in chron. eczema.

Resopyrin

React.-prod. fr. mix. aqu. solut. resorcinol & antipyrine in molecular prop. — Wh., opaque mass, or wh. powd.—*Sol.* A., E., C.—Antipyr.; Analg.; Antisep.—*Uses:* All febrile & painful condit. where antipyrine & resorcinol are indic.—*Dose* 5–10 grains (0.32–0.65 Gm.).

Resorbin (2

Ointment base consisting of expressed oil almonds, wax, & small quantities gelatin, soap, & lanolin.—Rapidly absorbed, hence adapted for introd. remedies into system by the skin.—The $33^1/_3$% mercury-resorbin partic. effective.

Resorcinol Merck.—Recryst.—Highest Purity, Medicinal (2

(Metadioxybenzene; Resorcin).—Diatomic phenol fr. benzenemetadisulphonic acid, by sodium hydroxide with heat.—$C_6H_6O_2$, or, $C_6H_4(OH)_2$ [1:3].—Perf. wh. cryst.; reddish on expos.; unpleas. sweet taste.—*Sol.* 0.5 A., 0.6 W., E., G.; v. sl. in C., CS_2, & B.—*Melt.* 109–111° C.—*Boil.* 276.5° C. (U. S. P.)—Antisep.; Antispasm.; Antipyr.; Antiemet.; Antizymotic.—*Uses: Intern.*, for vomiting, seasick., asthma, dyspep., emphysema, gastric ulcer, cholera inf., hay fever, diar., whoop.-cough, enteritis, cystitis, & diphth.—*Extern.*, inflammatory dis. of skin, eyes, throat, nose, mouth, urethra, vagina, & in erysipelas.—*Doses:* In seasick., chronic gastric catarrh, cholera nostras, or cholera morbus: 2–3 grains (0.12–0.2 Gm.), every 1–2 hours in solut. or powd.; ordinary: 5–10 grains (0.3–0.6 Gm.) several t. p. d.; antipyretic: 15–30 grains (1–2 Gm.).—*Appl.*, solut. 5–30%; as eyewash, 1:50 solut.; as enema, 1:200 solut.; as oint., 5–10:30.—*Max. D.* 45 grains (3 Gm.) single; 150 grains (10 Gm.) p. day.—*Caut.* Keep well-stoppered, in dark amber bottle.

do. Merck.—Powd. (2

do. Merck.—Impalpable powder (5

Uses: For insufflation.

do. Merck.—Resublimed.—Highest Purity, Medicinal (12

Resorcinol Merck.—Reagent (16

$C_6H_4(OH)_2$.—Colorl. cryst.; scarcely percept. but pecul. odor.—*Sol.*, abt. 1 W., 1 A.; eas. E., G.; diffic. C., CS_2.—Volat. on warm.—*Melt.* 110–111° C.—Aqu. solut. acid to litmus paper.—*Tests:* (*Res.*) volat. 1 Gm. by heat.–none wghble.—(*Diresorcinol; Phenol*) 1 Gm.+20 Cc. H_2O – perf. clear solut.; on warm. solut. no phenolic odor.—(*Free Acids* [*Salicylic Acid*]) 1 Gm.+10 Cc. A.+1 drop solut. lacmoid – wine-red solut.; add to solut. 1 drop decinorm. KOH – blue color.

—*Uses:* Detect. chloral, chlorof., HCl in gastric juice, lignified tissue, certain volat. oils, beet sugar & o. carbohydrates, nitrates, nitrites, iodoform, formaldehyde, tartaric acid; testing quality of some phenols.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

"Resorcinol" (25

(*Not* Resorcinol, $C_6H_6O_2$, called also "Resorcin").—Fr. resorcinol, by melting with equal part iodoform.—Amorph., brown, cryst. powd.; iodine odor; taste like iodoform.—Antiseptic.—*Uses: Extern.*, surg. dress. in wounds, chancres, ulc., &c.; scabies, psoriasis, eczema, erysip., & o. skin dis.—*Appl.*, dust. powd., 20–50% w. starch; or 5–15% oint. in skin dis.

Resorcinol Blue.—see **Lacmoid**

Resorcinol Monoacetate.—see **Euresol**

Resorcinol Yellow.—see **Yellow T**

Resorcinol-bismuth.—see **Bismuth Resorcinated**

Resorcinoldimethylester.—see **Dimethylresorcinol**

Resorcinol-eucalyptol Merck (35

Wh., cryst. powd.—*Sol.* A.—Antiseptic.—*Uses: Extern.*, dress. for wounds, ulcers, & skin. dis. in oint. or alcoh. solut.; also as inhalations in aqu. solut. in phthisis with putrid sputa.

Resorcinol-hexamethylenamine.—see **Hetralin**

Resorcinol-mercury Acetate.—see **Mercury Resorcinolacetate**

Resorcinolphtalein.—see **Fluoresceïn**

Resorcinolphtalin.—see **Fluorescin**

Resorcinol-salol Merck (70

Fr. resorcinol by phenyl salicylate.—Antiseptic.—*Uses:* Intest. inflam., diar., dysent., typhoid, rheum., &c.—*Dose* 3–10 grains (0.2–0.6 Gm.).

Resorcylalgin

(Betaresalgin).—Fr. betaresorcylic acid w. antipyrine.—Needles.—*Sol.* A., E., C.; 150 W.—*Melt.* 115° C.—Antipyr.; Anodyne.

Rest Harrow.—see **Ononis**

Retene Merck.—Highest Purity (30

(Methyl Isopropylphenanthrene).—Constit. wood-tar.—$C_{18}H_{18}$, or, $(CH_3)(C_3H_7)C_6H_2.(CH{:}CH).C_6H_4$.—Yellowish-wh., cryst. powd.—*Sol.* A., E., B., CS_2.—*Mett.* 98.5° C.—*Boil.* 394° C.

do. Merck.—Commercial (5

Retinol Merck (13

(Rosinol; Codoil; Rosin Oil).—Fr. rosin by distil'n.—$C_{32}H_{18}$.—Thick, viscid, yellow, oily liq.—*Sol.* E., oils, oil turpent.—*Boil.*, above 280° C.—Antiseptic.—*Uses: Intern.*, venereal affect.—*Extern.*, oint. or linim. in skin dis., & inj. in gonor.; also solv. of phosphorus, salol, camphor, naphthols, carbolic acid, &c. Recom. as excipient for phosphorus.—*Techn.*, as solvent of sulphur, in manuf. wagon-axle grease, lampblack for lithography & printing inks, in varnishes, retinol colors, lacquers, brewers' pitch, &c.—*Dose* 8 ♏ (0.5 Gm.) 4–6 t. p. d. in caps.

Reuniol Merck.—Crystallizable (110

(Rhodium de Pelargonium).—Fr. Réunion-geranium oil; possesses alcoholic functions.—$C_{10}H_{18}O$.—Alm. color., oily liq.—Sp. Gr. 0.873 at 15° C.—Opt. Rot. −1°.—*Boil.* 224–228° C.—*Uses:* Instead of oil rose in perfumery.

Rhabarbarin.—see **Erythroretin**

Rhamnose.—see **Isodulcit**

Rhamnus Cathartica

(Buckthorn).—Berries of Rhamnus cathartica, L. Rhamnaceæ.—*Habit.:* Europe; northern Africa to middle Asia.—*Etymol.:* Grk. "rhamnos," buckthorn. "Cathartica" refers to the action of the plant.—*Constit.:* Rhamnocathartin; rhamnotannic acid; rhamnin; rhamnetin. Cathart.; Alter.—*Uses:* Constip., rheumat.; dropsy, &c.—*Dose:* Fld. extr., 30–60 ♏ (2–4 Cc.).

Rhamnus Frangula.—see **Frangula**

Rhamnus Purshiana.—see **Cascara Sagrada**

Rhaphidophora.—see **Tonga**

Rhatany.—see **Krameria**

Rhein Merck (750

(Rheic Acid; True Chrysophanic Acid; Rhubarb Yellow).—Color.-matter fr. root Rheum officinale, Baillon (Rhubarb); oxidation prod. of chrysarobin.—$C_{15}H_{10}O_4$, or, $C_{14}H_6(CH_3)(OH)_2O_2$.—Yellow powd., or small, golden-yellow cryst.—*Sol.* C., B., carbon disulph.; sl. A.; v. sl. W.—Antiseptic.—*Uses:* 5–10% oint. in skin dis., inst. chrysarobin, in facial eczema, &c.—*Caut.* Keep fr. light & away fr. eyes.

Rheum.—see **Rhubarb**

Rheumatism Root.—see **Jeffersonia**

Rheumatism Weed.—see **Apocynum Androsæmifolium**

Rhinacanthus

(Tong-Pang; Chong-Ching; Ringworm Root).—Recent root of Rhinacanthus communis, Nees. Acanthaceæ.—*Habit.:* India to China.—*Etymol.:* Grk. "rhinos," nose, & "akanthos," a thorn, *i.e.*, the flowers of this thorny plant are shaped like a nose.—*Constit.:* Rhinacanthin, $C_{14}H_{18}O_4$.—*Uses: Extern.*, in form of fld. extr. in skin diseases like tinea circinata, ringworm, impetigo, &c., by painting on twice daily.

Rhodalline.—see **Thiosinamine**

Rhodamine B Merck (10

(Diethylmeta-amidophenolphtalein).—$C_{28}H_{31}N_2O_3Cl$.—Reddish-violet powd.—*Sol.*, eas. W., w.

bluish-red color; the dil. solut. fluoresc. strongly; also sol. A.—*Uses:* Dyeing wool & silk.

Rhodium

(Rose Wood).—Wood of Convolvulus (Rhodoriza) Scoparius, L. Convolvulineæ.—*Habit.:* Canary Islands; West Indies.—*Etymol.:* Named for the island of Rhodes, where found.—*Constit.:* Volat. oil.—*Uses:* Wood used in perfum., & fancy cabinet-making. The volat. oil as attractive bait for martens & foxes.

Rhodium Merck.—Powder (6000

Etymol.: Fr. Grk. "rhodios," rose-red, because the compounds of the element with acids possess a rose-red color (Wollaston, 1803).—Metal.—Rh. —Wh., bluish-gray, tinted hard metal, obtained from platinum ores; ductile & malleable like silver.—Sp. Gr. 12.1 at 15° C.—*Uses:* Techn. but little used; in manuf. alloys (rhodium steel).

Rhodium Chloride Merck (6000

(Rhodium Sesquichloride; Rhodorhodic Chloride). — Rh_2Cl_6. — Brownish-red, deliq. powd.—*Sol.* W.

Rhodium Sesquichloride.—see **Rhodium Chloride**

Rhododendron

(Rose Bay; Snow Rose; Siberian Rose; Yellow Rhododendron).—Lvs. of Rhododendron chrysanthemum, L. Ericaceæ.—*Habit.:* Northeastern Asia.—*Etymol.:* Fr. Grk. "rhodon," rose, & "dendron," tree; & "chrysos," golden, & "anthos," flower.—*Constit.:* Volat. oil; tannin; ericolin.—*Uses:* Antarthrit.; Antirheumat.—*Dose* 2 dr. (8 Gm.).

Rhodorhodic Chloride.—see **Rhodium Chloride**

Rhodoriza Scoparius.—see **Rhodium (Rose Wood)**

Rhœados

(Corn Poppy; Corn Rose; Copper Rose; African Rose; Red Poppy).—Papaver Rhœas, L. Papaveraceæ.—*Habit.:* Europe; cultiv. in U. S.—*Etymol.:* Fr. Grk. "rhein," to flow, *i.e.*, the plant freely & easily sheds its leaves. See also Papaver.—*Constit.:* Rhœadic acid; papaveric acid; rhoeadine; coloring-matter. — *Uses:* Demulc.; Anodyne.

Rhubarb.—*U. S. P.*

(Rheum).—Dried rhizome of Rheum officinale, Baillon, R. palmatum, L., & R. tanguticum, Maxim. Polygonaceæ. Other spec. yielding rhubarb are R. rhaponticum, &c.—*Habit.:* Central Asia; cultiv. in Europe; southern Siberia.—*Etymol.:* Grk. "Rha," the river Volga, on the banks of which it grows & was first found. Or, Grk. "rhon," "rhein," to flow, referring to the purgative action. "Officinale," fr. "officina," a shop or store. "Rhaponticum" fr. "Rha," see above, & "ponticus," pontic, *i.e.*, growing on the Pontic or Euxine sea. "Rhubarb" fr. "rheum," & "barbarum," *i.e.*, barbarian plant fr. the Rha, or Volga.—*Constit.:* Chrysophanic acid; emodin; cathartic acid; rheotannic acid; aporetin; erythroretin; phaoretin; methylchrysophanic acid; rhein; rhabarberon. R. rhaponticum contains rhabarberin; rhaponticin; tannin; starch.—Aper.; Purgat.; Astring.; Stomachic; Tonic.—*Uses:* Diar., constip., hepat. diseases, & to promote appetite. (R. rhaponticum used in veterin. practice).—*Doses:* 5–30 grains (0.3–2 Gm.) in powd.—Alcoh. extr., 1–2 grains (0.06–0.12 Gm.) tonic; 3–5 grains (0.2–0.3 Gm.) lax.; 8–10 grains (0.5–0.6 Gm.) purgat. —Fld. extr., 5–10 ♏ (0.3–0.6 Cc.) tonic; 15–20 ♏ (1–1.3 Cc.) lax.; 30–45 ♏ (2–3 Cc.) purgat.—Tinct., 1–4 fl. dr. (4–15 Cc.).—Aqu. tinct., 1–4 fl. dr. (4–15 Cc.).—Arom. tinct., 30–180 ♏ (2–12 Cc.).—Sweet tinct., 60–120 ♏ (4–8 Cc.).

Rhubarb Yellow.—see **Rhein**

Rhus Aromatica

(Sweet Sumach; Fragrant Sumach).—Bark of the root of Rhus aromatica, Aiton. Anacardiaceæ.—*Habit.:* Canada & eastern U. S.—*Etymol.:* Fr. Grk. "rhous," the sumach, or tanning tree; Celtic "rhudd," red, *i.e.*, the fruit is red, & so are the leaves in autumn.—Pieces abt. $^1/_8$ in. (3 Mm.) thick; extern., dark, rusty-brown, & walnut-color below the cork; inner bark permeated by small cavities containing a transp. balsam.—*Constit.:* Volat. oil; fixed oil; tannin; resin; wax.—Tonic; Diur.; Astring.—*Uses:* Diar.; also in renal & vesical diseases, noct. enuresis, diabetes, &c.—*Dose* 5–60 grains (0.3–4 Gm.) in powd. or fld. extr.

Rhus Glabra.—*U. S. P.*

(Sumach; Smooth Sumach).—Dried fruit (also bark) of Rhus glabra, L. Anacardiaceæ.—*Habit.:* British America south to Florida & Arizona.—*Etymol.:* For "rhus," see preceding. "Glabra," fr. Lat. "glaber," hairless, smooth, *i.e.*, the leaves & branches are smooth.—*Constit.: Fruit:* Malic acid; tannin; gallic acid; fixed & volat. oils; red coloring matter.—*Bark:* Soft resin; caoutchouc; volat. principle; albumen; gum; tannin; gallic acid, &c.—Astring.; Antidiar.; Refrig.—*Uses: Bark:* Diar., dysent., & catarrh. condit. of bowels.—*Fruit:* In diar., for gargles, washes & lotions, sore throat & sore mouth.—*Doses: Bark:* Fld. extr., 30–60 ♏ (2–4 Cc.).—*Fruit:* Fld. extr., 15–60 ♏ (1–4 Cc.).

Rhus Radicans.—see **Rhus Toxicodendron**

Rhus Toxicodendron

(Poison Ivy; Climbing or Three-leaved Ivy; Poison Vine; Poison Oak).—Fresh lvs. of Rhus radicans (Toxicodendron), L. Anacardiaceæ.—*Habit.:* North America.—*Etymol.:* For "rhus" see Rhus Aromatica. "Toxicodendron" fr. Grk. "toxicos," poisonous, & "dendron," tree.—*Constit.:* Toxicodendrol; toxicodendric acid; resin; gum; rhustannic acid; wax.—Irritant; Rubefac.; Nar.—*Uses:* In chronic eczema, incont. of urine, erysipelas, subacute rheum., paralysis of lower extremities, &c. — *Extern.*, in sprains, burns, stings, chilblains, gout, neural., & in eye affec-

tions.—*Techn.*, in tanning.—*Doses:* 2–15 grains (0.12–1 Gm.) in powd. or tinct.—Alcoh. extr., $^1/_6$–$^1/_2$ grain (0.01–0.03 Gm.).—Fld. extr., 1–5 ♏ (0.06–0.3 Cc.).—*Antid.*, extern. appl. of satur. solut. lead acetate in dil. alcohol, alkaline soluts., tinct. lobelia or grindelia, cocaine solut. (4–8%). Internally, opium or coffee.

Ribes

(Black Currant).—Lvs. of Ribes nigrum, L. Saxifragineæ.—*Habit.:* Europe; Siberia; cultiv. in U. S.—*Etymol.:* Fr. Arabic "ribus," which, however, designates Rheum Ribes.—*Constit.:* Malic, citric, & tartaric acids; sugar; pectin; gum; coloring matter; pecul. volat. principle. —Diur.; Diaph.—*Uses:* Dropsy, gout, bites of poisonous animals, &c. Now rarely used.

Rice's Bromine Solution

Sol. of 125 Gm. each, bromine & sod. brom. in W. to 1 liter.—*Uses:* With sodium hydroxide sol. (Sp. Gr. 1.250) for urea determination.

Ricin Kobert-Merck

Exceedingly poisonous agglutinin fr. seeds Ricinus communis, L., & closely allied to the bacteriotoxins; yields abt. 25–30% ash.—Wh. powd.—*Sol.* 10% solut. sodium chloride.—*Caut.* Handle very carefully; small particles in abrasions, eye or nose, may prove fatal; intraven. inject. of 3 grains (0.2 Gm.) are fatal.

Ricinus

(Castor-oil Plant; Palma Christi; Mexico Seed; Oil Plant; Castor Bean).—Seed & leaves of Ricinus communis, L. Euphorbiaceæ.—*Habit.:* East & West Indies; southern Europe; Africa; U. S.—*Etymol.*. Grk. "kikinos," a wood-tick, because of the great resemblance in appearance between the seeds & the insect. Or, perhaps fr. the Hebrew "kikar," round, *i.e.*, round seeds. —*Seed*, abt. $^1/_2$ in. (12 Mm.) long; grayish, marbled w. blackish spots or bands of various tints & shapes, smooth & shining.—*Constit.*. *Seed:* Fixed oil; ricin, a highly poisonous agglutinin; proteids (emulsin); albumen; mucilage.—Cathart.; Galactag.—*Uses: Seed:* As source of castor oil. The residual press-cake (after removal of the oil) is highly poisonous. Also in constip. & deficient lactation.—*Doses: Lvs.:* Fld. extr., 30–60 ♏ (2–4 Cc.).—*Seed:* Fld. extr., 10–30 ♏ (0.6–2 Cc.).

Riegel's Paper.—see **Congo Paper, Red**

Riegler's Reagent.—For albumen

Solut. 5 Gm. betanaphthalenesulphonic acid in 100 Cc. W.—Exceedingly sensitive reagent for albumin. Also gives ppt. w. albumoses & peptones; that caused by albumen does not disappear on warming, but those of albumoses & peptones do.—Sensitive 1:40,000.

Riegler's Reagent.—For nitrous acid & nitrites

Pulverulent mixt. equal parts naphtionic acid & betanaphthol.—Exceedingly sensitive reagent for nitrites.—1:100,000,000 still detected by pink coloration.

Ringworm Root.—see **Rhinacanthus**

Ripart's Solution

0.3 Gm. cupric chloride, 0.3 Gm. cupric acetate, 1 Gm. acetic acid, & 150 Cc. camphor water.—*Uses:* As preservative of algæ.

Robin

Albuminoid fr. bark Robinia Pseudacacia, L. (Locust).—V. poison. powd.—*Sol.*, partly in W. —*Caut.* Handle with care; similar in poisonous action to abrin & ricin.

Rochelle Salt.—see **Potassium & Sodium Tartrate**

Rock Oil.—see **Petroleum**

Rodinal.—see **Amidophenol, Para-**

Rohrbach's Solution.—see **Mercury & Barium Iodide, Solution**

Roman Wormwood.—see **Artemisia Pontica**

Rosa Canina

(Dog Rose; Hip Tree; Cynosbata; Wild Brier). —Fruit of Rosa canina, L. Rosaceæ.—*Habit.:* Europe; Northern Asia; U. S.—*Etymol.:* For "rose," see the following. "Cynosbata" (its usual German designation), fr. Grk. "kynosbatos," the Rosa sempervirens of old, & by which name De Candolle wished to show that the buds resembled those of the wild rose.—*Constit.:* Vanillin; tannin; coloring matter.—*Uses:* Mild Astring.

Rosa Centifolia

(Hundred-leaved Rose; Cabbage Rose; Moss Rose; Pale Rose).—Petals of Rosa centifolia, L. Rosaceæ.—*Habit.:* Western Asia.—*Etymol.:* Fr. Grk. "rhodon," fr. Celtic "rhodd" or "rhudd," red, referring to the color of the flowers.—*Constit.:* Volat. oil; coloring matter; mucilage; tannin; sugar; malates.—Mild Carmin.—*Uses:* Perfumery, in manuf. of rose water, rose oil, & honey of rose.—*Dose* 15–60 grains (1–4 Gm.).

Rosa Gallica.—*U. S. P.*

(French Rose; Dutch Rose; Provins Rose; Red Rose).—Dried petals of Rosa gallica, L. Rosaceæ, collected before expanding.—*Habit.:* Western Asia; Southern Europe; cult. widely (U. S., France, Holland, England, &c.).—*Etymol.:* See preceding. —*Constit.:* Volat. oil; mucilage; sugar; quercitrin; quercitannic acid. —Mild Astring.; Carmin.—*Uses:* Perfumery & flavoring.—*Techn.*, in manuf. oil rose & rose water.—Ingred. in confection of rose, pills of aloes & mastic, & fld. extr.—*Dose* 15–60 grains (1–4 Gm.).—Fld. extr., 30–120 ♏ (2–8 Cc.).

Rosaniline Merck (12

(Triaminodiphenyltolylcarbinol).—Base fr. mixt. aniline, & ortho- & paratoluidine, by oxid'n.—$C_{20}H_{21}N_3O$, or, $(C_6H_4.NH_2)_2.C(C_6H_3.NH_2.CH_3).$-

OH.—Brownish-red cryst.—*Sol.* E., aniline.—*Uses:* Techn., in manuf. coal-tar dyes.

Rosaniline Acetate Merck (12

$C_{20}H_{19}N_3.C_2H_4O_2+5H_2O$. — Cryst. w. greenish reflect.—*Sol.* W. & A.; most easily solub. of the rosaniline salts.

Rosaniline Hydrochloride Merck (12

$C_{20}H_{19}N_3.HCl+4H_2O$. — Chief constit. of commercial fuchsine.—Rhombic plates.—*Sol.*, sl. W.; more eas. in A.

Rosaniline Paper.—see **Fuchsine Paper**

Rose Bengal Merck (18

Alkali salt of tetraiododichlorofluoresceïn. — Brown powd.—*Sol.*, eas. in W. w. cherry-red color.—*Uses:* Dyeing wool.

Rose Bengal B

Potass. salt tetraiodotetrachlorofluoresceïn. — By act. of iodine on tetrachlorofluoresceïn, made fr. tetrachlorophtalic acid & resorcinol. —$C_{20}H_2Cl_4I_4O_5K_2$, or, $C_6Cl_2.CO_2.(C_6HI_2KO)_2CO$. —Brownish-red powd.—*Sol.* W.—*Uses:* Dyeing wool bluish-red.

Rose, Dog.—see **Rosa Canina**

Rose Naphtylamine.—see **Magdala Red**

Rose, Pale.—see **Rosa Centifolia**

Rose, Red.—see **Rosa Gallica**

Roseine.—see **Fuchsine**

Rosemary

(Garden Rosemary). — Flowers & lvs. of Rosmarinus officinalis, L. Labiatæ.—*Habit.:* Mediterranean Basin; cultiv. in gardens.—*Etymol.:* Fr. Lat. "ros," dew, & "marinus," sea, because of its maritime habit & glaucous appearance.—*Constit.: Flowers:* Volat. oil (1%); resin; tannin; bitter principle. — *Lvs.:* Volat. oil; tannin. — *Uses: Flowers:* Stim.; Antispasm.; Emmen.; Rubef.—*Techn.*, in perfumery, & in manuf. of oil rosemary.—*Lvs.:* Rubefac.; Carmin.— *Extern.*, in aromatic washes.

Rosemary, Wild Marsh.—see **Ledum**

Rosenstiehl's Green.—see **Barium Manganate**

Roseocobaltic Chloride. — see **Cobalt (Roseo-), Chloride**

Rosin.—*U. S. P.*

(Colophony; Abietic Anhydride; Yellow Resin; Resina). — Residue left on distil. volat. oil fr. turpentine fr. various sp. of Pinus Coniferæ.—*Habit.:* Rosin is chiefly supplied by the U. S. —*Etymol.:* "Rosin" fr. Lat. "resina," fr. Grk. "retine," pine resin. "Colophony," fr. Grk. "Kolophon," a city of Ionia (Greece), after which the resin was named.—Transp., amber-colored, hard, brittle pulverizable resin; poor grades are darker, even almost black; glossy & shallow-conch. fract.; faint., terebin. odor & taste. — Sp. Gr. 1.07–1.08. — *Melt.*, abt. 152.5° C.—*Sol.* A. (90%), E., B., CS_2, oils, & alkalies, acetic acid.—*Constit.:* Chiefly (80–90%) abietic acid, $C_{44}H_{64}O_5$, or, $C_{19}H_{28}O_2$, or its anhydride, $C_{44}H_{62}O_4$, or, $C_{19}H_{26}O$; also pinic & sylvic acids. —*Uses: Pharm.*, as ingred. in oints., plasters, cerates, &c.—*Techn.*, in varnishes, cements, & as source of rosin spirit & rosin oil, & pitch.—*Dose* 5 grains (0.3 Gm.) in powd. in chron. enteritis (very rarely used).

Rosinol.—see **Retinol**

Rosolic Acid Paper

Wh. paper impregnated w. rosolic acid.—*Uses:* As indicator (alkalies= red; acids = yellow).

Roth's Reagent.—For fatty oils

Sulphuric acid saturated w. gaseous nitrous acid. —*Uses:* For elaïdin test for olive oil.—The time required to solidify the oil after addition of reagent, is observed. If other oils are present, various color reactions may also occur.

Rotoine

Base, or mixt.(?) of bases, fr. Scopola japonica.

Rottlerin.—see **Kamalin**

Rourea.—see **Cangoura**

Rubber.—*U. S. P.*

(Elastica; Caoutchouc; Gum Elastic; India Rubber).—Prepared milk-juice of several spec. of Hevea, Aublet (Siphonia; Jatropha). Euphorbiaceæ, known in commerce as Para rubber.—*Habit.:* South America (Guiana; Para). — *Etymol.:* Lat. "elasticus," elastic, *i.e.*, its property. "Caoutchouc," fr. "cahuchu," the South American name for the substance. "Hevé" is the native name of the tree in S. America.—India rubber occurs in brownish-black cakes, balls, or hollow-shaped pieces; v. elastic; peculiar odor; alm. tastel.; heated w. 10% sulphur, bec. vulcanized. — Sp. Gr. when pure, less than 1.0.—*Sol.* CS_2 w. 5% absol. A.; C.; B.; benzin; oil turpentine. Insol. W.; dil. acids; alkalies. — *Melt.* 125° C. (after being melted it remains soft and sticky on cooling). —*Constit.:* Resin (abt. 32%); volat. oil; fat.—*Uses:* Techn., in plasters; lacquers; cements; waterproofing; insulating (electrical); dentistry.

Rubia

(Madder).—Root of Rubia tinctorum, L. Rubiaceæ. — *Habit.:* Orient; southern Europe. — *Etymol.:* Lat. "ruber," red, referring to the red color of the root. "Tinctorum," fr. "tinctor," dyer, *i.e.*, dyer's red. — *Constit.:* Ruberythrin; rubichloric acid; erythrozym; alizarin; purpurine; xanthine; munjistin; purpuroxanthine.—Diur.; Tonic; Emmen.— *Uses:* Amenorrh., dropsy, & rickets.—*Techn.*, in dyeing.—*Dose* 30 grains (2 Gm.).—Aqu. extr., 3–10 grains (0.2–0.6 Gm.).

Rubianite.—see **Fuchsine**

Rubidium Merck.—Pure (6000

Etymol.: Fr. Lat. "rubidus," red, because of the two characteristic red lines in the spectrum of

the element, & discovered by Bunsen & Kirchhoff in 1861.—Metal.—Rb.—Sm., gray lumps; freshly cut, present a lustrous, white, metal. surf.; faint tinge of yellow.—Sp. Gr., less than W.—*Melt.* 38.5° C.—*Caut.* Keep under benzene, petroleum, or o. liquid not cont. oxygen.

Rubidium Acetate Merck (60

$RbC_2H_2O_2$.—Colorl. cryst.—*Sol.* W.

Rubidium Alum.—see **Aluminum & Rubidium Sulphate**

Rubidium Bichromate.—see **Rubidium Dichromate**

Rubidium Bitartrate Merck.—Cryst. (70

$RbHC_4H_4O_6$.—Colorl., trimet. prisms.—*Sol.* W.

Rubidium Bromide Merck.—Cryst. (50

RbBr.—Colorl., cryst. powd.—*Sol.* W.—Sed.; Antiepilep.; Hypn.—*Uses:* Epilepsy, delir. trem., headache, & insom., like potass. bromide.—*Dose* 5–10 grains (0.3–0.6 Gm.) several t. p. d.

Rubidium Carbonate Merck (70

Rb_2CO_3.—Deliq. cryst., or deliq., wh. powd.—*Sol.* W., A.—Antacid.—*Caut.* Keep well stoppered.

Rubidium Chloride Merck.—Cryst. (70

RbCl.—Wh., cryst. powd.—*Sol.* W.

Rubidium Chromate Merck.—Neutral, cryst. (70

Rb_2CrO_4.—Yellow, trimet. cryst.—*Sol.* W.

Rubidium Dichromate Merck.—Cryst. (70

$Rb_2Cr_2O_7$.—Orange-red cryst.—*Sol.* W.

Rubidium Fluoride Merck (500

RbF.—Wh., deliq. powd.—*Sol.* W.—Antisep., like other fluorides.

Rubidium Hydroxide Merck (85

(Rubidium Hydrate).—RhOH.—Grayish-wh., deliq. mass.—*Sol.* W., A.—*Uses:* Manuf. glass.—*Caut.* Keep fr. air.

Rubidium Iodide Merck (20

RbI.—Wh., cubical cryst.—*Sol.* W.—Alter., Antisyph., &c.—*Uses:* As of sod. or potass. iodide. Does not act on heart or derange stom.—*Dose* 1–5 grains (0.06–0.3 Gm.) several times per day.

Rubidium Nitrate Merck (70

$RbNO_3$.—Colorl. need. or prisms.—*Sol.* W., conc. nitric acid.

Rubidium Platinocyanide.—see **Platinum & Rubidium Cyanide**

Rubidium Sulphate Merck.—Cryst. (70

Rb_2SO_4.—Large, rhombic cryst.; taste like that of potass. sulphate.—*Sol.* W.—Cathartic.

Rubidium Tartrate Merck (70

$RbC_4H_5O_6$.—Colorl. cryst.—*Sol.* W.—Sed.; Antiepilep.—*Uses:* Nervous palpitation.—*Dose* 3–5 grains (0.2–0.3 Gm.).

Rubidium & Ammonium Bromide Merck (55

$RbBr.3NH_4Br$, or, $(NH_4)_3RbBr_4$.—Wh., cryst. powd.; cooling w. pungent, saline after-taste.—*Sol.* W.—Antiepilep.; Sed.; Hypn.—*Uses:* Epilepsy, & as sedative, inst. of potass. bromide.—*Doses:* As antiepilep., 60–100 grains (4–6.5 Gm.) daily, in solut.; as hypn., 60–75 grains (4–5 Gm.).

Rubidium & Ammonium Chloride Merck (50

$RbCl.3NH_4Cl$, or, $(NH_4)_3RbCl_4$.—White, cryst. powd.—*Sol.* W.

Rubidium & Ammonium Iodide Merck (40

$RbI.3NH_4I$.—Wh, cryst. powd.—*Sol.* W.

Rubidium & Lithium & Platinum Cyanide.—see **Platinum & Lithium & Rubidium Cyanide**

Rubin S.—see **Ruby S**

Rubine.—see **Fuchsine**

Rubus.—*U. S. P.*

(Blackberry).—Dried root-bark of Rubus villosus, Aiton, R. nigrobaccus, Bailey, or of R. cuneifolius Pursh. Rosaceæ.—*Habit.:* Eastern U. S.—*Etymol.:* Fr. Lat. "rubere," to be red, referring to the color of the juice of the fruit. Lat. "villosus," hairy, shaggy, referring to the hairiness of the branches, petioles, & under side of leaves.—*Constit.:* Tannin; gallic acid; villosin (a saponin).—Astring.; Tonic.—*Uses:* Diar., dysent., &c.—*Doses:* Aqu. extr., 5–10 grains (0.3–0.6 Gm.).—Fld. extr., 30–60 ♏ (2–4 Cc.).

Rubus Fruticosus

(Common Bramble; Bumble-berry).—Herb of Rubus fruticosus, L. Rosaceæ. Fragariaceæ.—*Habit.:* Europe; North Africa to Central & Northern Asia.—*Etymol.:* "Rubus," fr. Lat. "ruber," red. "Fruticosus," shrub-like.—*Uses:* Astring. (in eye lotions).—*Intern.*, in diar. & hemorrhages.

Rubus Idæus

(Red Raspberry; Raspberry).—Fruit & herb of Rubus Idæus, L. Rosaceæ; Potentilleæ.—*Habit.:* Europe; Asia; cultiv. in Canada & U. S.—*Etymol.:* "Rubus" fr. Lat. "ruber," red. "Idæus" fr. "Ida," the name of a mountain in Phrygia, where the plant grew in abundance.—*Constit.:* Sugar; malic & citric acids.—*Uses:* As adjuvant, & flavoring. Dried raspberries are used in Russia as a remedy in biliousness.—Herb is astring. & hemostat.

Ruby Arsenic.—see **Arsenic Sulphide, Red**

Ruby S Merck (8

(Sodium Rosanilinesulphonate; Rubin S.; Acid Magenta; Fuchsine S.; Acid Fuchsine; Acid Roseine; Acid Rubine).—Mixture of sod. (or amm.) salts of trisulphonic acids of rosaniline & pararosaniline.—Fr. magenta, by fuming sulphuric acid.—Green powd., or granules; metal. luster.—*Sol.* W., w. bluish-red color.—*Uses:* Techn., color. & dye. wool & silk in acid bath.

Not for cotton. Satur. aqu. solut. used in microscopy for stain. bacteria. Improperly f. color. wines to imitate claret.

Rue.—see **Ruta**

Rufigallol.—see **Acid Rufigallic**

Rumex

(Yellow Dock).—Root of Rumex crispus, L., & of some other spec. of Rumex. Polygonaceæ.—*Habit.:* Europe; North America.—*Etymol.:* Lat. "rumex," a lance, referring to the shape of the leaves.—*Constit.:* Chrysophanic acid; emodin; tannin; calcium oxalate; rumicin; lapathin.—Astring.; Alter.; Tonic; Lax.; Antiscorbut.—*Uses:* Cutaneous diseases, diar., scrof., syph., &c.—*Doses:* 15–60 grains (1–4 Gm.) usually as fld. extr.—Extr., 3–10 grains (0.2–0.6 Gm.).

Rumin (Eclectic) (20

Alcoh. extr. fr. root Rumex crispus, L.—Brown powd.—*Sol.* A.—Alter.; Astring.—*Uses:* Scrof., syph., & cutan. affect.—*Dose* 1–3 grains (0.06–0.2 Gm.).

Ruptureworl.—see **Herniaria**

Rush.—see **Juncus**

Russow's Reagent.—For starch, alkaloids, &c.

Aqu. solut. iodo-potassium iodide.

Ruta

(Rue; Garden Rue).—Herb of Ruta graveolens, L. Rutaceæ.—*Habit.:* Southern Europe to the Orient.—*Etymol.:* Grk. "ryte," fr. "ryesthai," to save, referring to the curative properties of the plant. Lat. "graveolens," strong-smelling, *i.e.*, the whole plant has a heavy aromatic odor.—*Constit.:* Volat. oil; rutin.—Abortifac.; Rubefac.; Stim.; Emmen.; Nervine.—*Uses:* Amenor., flatul., hysteria, &c.—*Doses:* 5–20 grains (0.3–1.3 Gm.).—Alcoh. or aqu. extr., 2–5 grains (0.12–0.3 Gm.).—Fld. extr., 15–30 ♏ (1–2 Cc.).

Ruta-Muraria

(White Maidenhair; Wall-rue; Spleenwort; Stone-rue; Rue Fern).—Herb of Asplenium Ruta-muraria, L. Polypodiaceæ.—*Habit.:* Europe; widely distributed (U. S.).—*Etymol.:* For "ruta," see Ruta, above. "Muraria" fr. Lat. "murus," wall, referring to its habit of growing upon walls.—Aper.; Expector.

Ruthenium Merck.—Powd. & fused (7500

Etymol.: Fr. "russe," vulgo "ruthene," derived fr. the Scandinavian originally, & taken over into the Slavonic; the element is found in the Russian platinum ores, hence its derived name; element discovered by Claus in 1845.—Metal.—Ru.—Hard, heavy, wh., lustr., brittle pieces.—Sp. Gr. 11–11.4 at 15° C.—V. diffic. fusible.

Ruthenium Chloride Merck (2500

(Ruthenium Sesquichloride; Ruthenic Chloride).—Ru_2Cl_8.—Deliq., brownish-red, cryst. mass.—*Sol.* W.

Ruthenium Oxychloride, Ammoniated.—see **Ruthenium Red**

Ruthenium Red Merck (12500

(Ruthenium Oxychloride, Ammoniated).—$Ru_2(OH)_2Cl_4.7(NH_2)+3H_2O$.—Brownish-red powd.—*Sol.* W.—*Uses:* Micros. stain. & reagent for pectin, plant mucin, & gum. In 1: 5,000–10,000 solut. for stain. animal tissues & bacteria (w.add. of acetic acid when nuclei are to be stained).

Ruthenium Sesquichloride.—see **Ruthenium Chloride**

S

Sabadilla

(Cevadilla; Indian Barley-caustic).—Seeds of Asagræa officinalis, Schlechtendal & Chamisso (Sabadilla officinarum, Brandt). Melanthaceæ.—*Habit.:* Mexico to Guatemala & Venezuela.—*Etymol.:* Spanish "cebadilla," the diminutive of "cebada," barley grains, *i.e.*, the seeds of the plant are smaller than, but greatly resemble, barley.—Dark-brown to black, shining, flat, wrinkled, & slightly winged; inodorous; bitter, acrid taste; powder is strongly sternutatory.—*Constit.:* Veratrine, $C_{27}H_{52}NO_{11}$; cevadine, $C_{32}H_{49}NO_9$; sabadilline, $C_{34}H_{53}NO_8$; sabadine, $C_{29}H_{51}NO_8$; sabadinine, $C_{27}H_{45}NO_8$; angelic acid; cevadic (methylcrotonic, sabadillic) acid, $C_5H_8O_2$; veratric acid, $C_9H_{10}O_4$; fixed oil.—*Uses:* Emet.; Cathart.; Vermif.; Insecticide (for vermin in hair).—*Techn.*, as source of veratrine.—*Doses:* 5–15 grains (0.3–1 Gm.) as a teniaf. or vermif.—Fld. extr., 5–15 ♏ (0.3–1 Cc.).

Sabadine Merck.—Cryst. (4000

Alkaloid from seeds Asagræa officinalis, Schlecht. & Cham.—$C_{29}H_{51}NO_8$ (Merck).—Wh., cryst. need.—*Sol.*, sl. W., E.; eas. A.—*Melt.* 238–240° C., w. decomp.—Sternutatory.

Sabadine Hydrochloride Merck.—Cryst. (2500

$C_{29}H_{51}NO_8.HCl+2H_2O$.—Wh. need.—*Sol.* W., A.—*Melt.* 282–284° C., w. decomp.

Sabadine Nitrate Merck.—Cryst. (2500

$C_{29}H_{51}NO_8.HNO_3$.—Colorl. cryst.—*Sol.*, diffic. W.

Sabadine Sulphate Merck (2500

$(C_{29}H_{51}NO_8)_2.H_2SO_4$.—*Sol.* W., A.

Sabadinine Merck.—Cryst. (2500

Tertiary base (alkaloid) fr. seeds Asagræa officinalis, Schlechtendal & Chamisso.—Discovered in laboratory of E. Merck, in 1890.—$C_{27}H_{45}NO_8$.—Wh. need.—*Sol.* W., A., C.; sl. E.—Devoid of sternutatory properties.

Sabadinine Bisulphate Merck (1200

$C_{27}H_{45}NO_8.H_2SO_4+3H_2O$.—Wh. need.—*Sol.* W.

Sabadinine Hydrochloride Merck.—Cryst. (1200

$C_{27}H_{45}NO_8.HCl+$aq.—Wh. cryst.—*Sol.* W., A.

Sabal.—*U. S. P.*

(Saw Palmetto). — Partly dried ripe fruit of Serenoa serrulata, Hooker fil. (Sabal S., R. & S.). Sabalaceæ. Palmæ.—*Habit.:* South Carolina to Florida & West Indies.—*Etymol.:* Named for Prof. Sereno Watson, of Harvard University. "Serrulata," saw-shaped, refers to the character of the leaf margins.—*Constit.:* Fixed & volat. oil; resin; sugar.—Pectoral; Sed.; Diur.; Aphrodis.— *Uses:* Bronch., pneum., phth., & sex. debility.—*Doses:* Extr., 8–20 grains (0.5–1.3 Gm.).—Fld. extr., 60–120 ♏ (4–8 Cc.).

Sabbatia

(Quinine Flower; Quinine Plant; Quinine Herb). —Herb of Sabbatia Elliottii, Steudel. Gentianeæ. —*Habit.:* Southern U. S. (Florida).—*Etymol.:* Named for the Italian botanist, Liberato Sabbati (1745), & the American botanist Stephen Elliott (1771–1830).—*Constit.:* Sabbatin (glucoside).—Antiper.—*Uses:* Surrogate for quinine in malar. & o. febrile conditions, & as appetizer. —*Doses:* 1–2 fl. dr. (4–8 Cc.) of 1:4 tinct. (dil. alcoh.).—Fld. extr., 15–60 ♏ (1–4 Cc.).—Aqu. extr., 3–8 grains (0.2–0.5 Gm.).

Sabbatin Merck (800

Glucoside fr. Sabbatia Elliottii, Steudel (Quinine Flower). — Brownish powd. — *Sol.* W., alkalies.—Antiper.; Antipyr.—*Uses:* Substit. for quinine in intermit. & remit. fevers.

Sabina.—see **Savin**

Saccharated Lime.—see **Calcium Saccharate**

Saccharin Merck.—Refined (3

(Benzoylsulphonic Imide; Garantose; Glusidum; Gluside; Glycophenol; Glycosine; Saccharinol; Saccharinose; Saccharol; Saxin; Sykose; Zuckerin; Glusimide; Agucarina: Toluolsüss; Anhydroorthosulphaminebenzoic Acid; Benzosulphinide [U. S. P.]; Neo-saccharin).—Fr. toluene or fr. thiosalicylic acid.—$C_7H_5NO_3S$, or, $C_6H_4(CO).SO_2.NH$.— Wh., odorl., microcryst. powd.; intens. sweet. taste; 550 times as sweet as cane sugar; sweet taste still detected in 1:70,000 solut. —*Sol.* 40 E., 30 A., 400 W. at 15° C.; 28 hot W.; G.; (250 W., 25 A. at 25° C.; 24 W. at 100° C., U. S. P.); insol. C. & B. Alkal. carbonates increase solub. in W.—*Melt.* abt. 220° C.—*Uses:* Cystitis; sweeten food of diabetics & obese subjects, cover taste of bitter & acrid remed., &c ; also as sweetener in household economy, in manuf. champagne, sweetening oils & essences. —*Dose* 2–5 grains (0.12–0.3 Gm.) sev. t. p. d. in solut. w. sod. bicarb.

do. Merck.—"Crystal" (3

Abt. 500 times sweeter than sugar.

do. Merck.—"Soluble" (3

Abt. 500 times as sweet as sugar.

do.—Solution.—*N. F.*

Fr. 17.5 Gm. saccharin, 8.75 Gm. sod. bicarb., 62.5 Cc. A., & W. to make 250 Cc.

Saccharin Tablets Merck

Each tablet equal in sweetness to a large lump sugar.—*Uses:* Sweeten. tea, coffee, cocoa, &c.

Saccharinose. } —see **Benzosulphinide; Saccharin**
Saccharol. }

Saccharose Merck.—Highest Purity (5

(Sucrose; Cane Sugar).— Fr. Saccharum officinarum, L., Beta vulgaris, L., & o. plants.— $C_{12}H_{22}O_{11}$. — Wh., dry, hard, distinctly cryst. gran.; sweet taste. — *Sol.* 0.5 W., 175 A., 0.2 boiling W., 28 boil. A.—*Melt.* 185° C.—Demulcent; Lenitive.—*Uses:* Chem. & techn.

Sacchsse's Solution.—For glucose

Solut. 18 Gm. mercuric iodide, 25 Gm. potass. iodide, & 80 Gm. KOH in W. to 1000 Cc. — 40 Cc. solut. (=0.72 Gm. HgI_2) = abt. 0.15 glucose, or 0.1072 Gm. invert. sugar. — Solut. reduced by boiling.

Safflor-carmine. } —see **Carthamin**
Safflor-red. }

Safflor-yellow

Yellow coloring matter fr. Carthamus tinctorius, L.—$C_{24}H_{30}O_{15}$.—*Sol.* W., A.; aqu. soluts. rapidly decomp.

Safflower.—see **Carthamus**

Saffron.—see **Crocus**

Saffron, American.—see **Carthamus**

Saffron Bronze.—see **Tungsten Bronze, Orange**

Saffron Substitute.—see **Victoria Orange**

Safranine (12

(Aniline Rose, or Pink).—By oxid'g paratolylenediamine, aniline & orthotoluidine, in molec. prop.—Brown powd.—*Sol.* W., A.—*Uses:* Techn., dyeing cotton red, mord. w. tannin & tartar emetic; & to vary shade of alizarine-red in calico print.

Safranine T Merck (10

Mixture of tolusafranines & phenoltolusafranines. —Reddish-brown powd.—*Sol.* W. & A., w. red color. — *Uses:* Investigation of subterranean waters; dyeing cotton; printing calico.

Safrol Merck (5

The odorous constit. of oils sassafras, camphor-tree & o. oils. — Methylene ester of allyl pyrocatechol, $C_{10}H_{10}O_2$, or, $C_6H_3.C_3H_5(OOCH_2)$ [1:3:4].—Colorl., or sl. yellow liq.; pure sassafras odor.—Sp. Gr. 1.108 at 15° C. (1.105–1.106 at 25° C., U. S. P.).—*Sol.* A., E.—*Boil.*, abt. 233° C. (U. S. P.).—Solidif. at -20° C.—Tonic; Arom.; Carmin.—*Dose* 1–2 drops.—Also used in perfumery, & in manuf. heliotropin.

Sage.—see **Salvia**

Sage Bush.—see **Artemisia Frigida**

Sahli's Borax-Methylene Blue

0.8 Gm. borax, 0.75 Gm. methylene blue, & 80 Cc. W.—*Uses:* Staining nerve centers deep-

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

blue, cells of ganglia light-green, & glia cells blue. Adapted also for detecting any microbes that may be present.

Sajodin (25

(Calcium Iodobehenate). — $Ca(C_{22}H_{42}O_2I)_2$. — Colorl., odorl., tastel. powd.; 26% I; 4.1% Ca. —Insol. in W. & o. usual solvents.—*Uses:* As succed. for potass. iodide, where iodine or iodides are indicated.—*Dose* 15–45 grains (1–3 Gm.) p. d.

St. Ignatius' Bean.—see **Ignatia**

St. James' Wort.—see **Senecio Jacobæa**

St. John's Wort.—see **Hypericum**

St. Mary's Thistle.—see **Carduus Marianus**

Sal Acetosella.—see **Potassium Binoxalate**

Sal Alembroth.—see **Mercury & Ammonium Bichloride**

Sal Ammoniac.—see **Ammonium Chloride**

Sal Enixum.—see **Potassium Bisulphate**

Sal Prunelle.—see **Potassium Nitrate with Potassium Sulphate**

Sal Sapientiæ.—see **Mercury & Ammonium Bichloride**

Sal Soda.—see **Sodium Carbonate**

Salacetol

(Salicylacetol; Acetolsalicylic Ester). — Artif. glucoside by heat. monochloracetone w. sod. salicylate.—$C_{10}H_{10}O_4$, or, $C_6H_4(OH)CO_2CH_2COCH_3$. —Fine, wh. to faintly reddish, cryst. need.; bitter taste.—*Sol.* 15 A., CS_2, E., C., 30 olive oil; sl. W. — *Melt.* 71° C. — Antisep.; Antirheum. — *Uses:* Summer complaints, diar., dysent., rheum., gout, &c. — *Dose* 15–45 grains (1–3 Gm.), in castor oil, if desired.

Salen

Mixt. of ethyl- & methyl-glycollic esters of salicylic acid.—Wh. cryst. at −5° C.; oily liq. at ord. temp. — *Sol.*, eas. A., E., B., & castor oil; diffic. olive oil.—Antirheum.—*Uses:* Rheumat., &c.—*Appl.*, by inunct. in mixt. w. eq. part A., or olive- + castor-oil (2:1).

Salep

Dried tubers of several spec. of Orchis. Orchidaceæ.—*Habit.:* Europe; Asia Minor.—*Etymol.:* Persian "sahlep," which, according to Forskall, means "mucilaginous." — *Constit.:* Mucilage; starch.—Nutrient; Demulc.—*Uses:* Vehicle for acrid remedies.

Salibromin

$C_6H_2Br_2(OH).COOCH_3$.—Wh., tastel. powd. — *Sol.*, solut. alkalies; insol. W. & acids.—44.5% salicylic acid; 51.6% Br. — Intest. Antisep.; Antipyr.; Antirheum. — *Uses:* Rheum., fever, & in cases where salicylic acid & bromine indicated.—*Dose* 8 grains (0.5 Gm.) single; 30–75 grains (2–5 Gm.) p. d.

Salicin Merck (6

Glucoside fr. bark of sev. spec. Salix & Populus. —$C_{13}H_{18}O_7$, or, $(OH)_4.C_6H_7.O_2.C_6H_4.CH_2.OH$. — Lustr., wh. need.; v. bitter taste.—*Sol.* 21 W., 71 A. at 25° C.; 3.3 W. at 80° C.; 22 A. at 60° C.; insol. E., C., (U. S. P.).—*Melt.* 200–201.5° C. — Tonic; Antiper.; Antirheum. Acts like salicylic acid, but without unpleasant by-effects of latter. — *Uses:* Rheum., malaria, general malaise, & chorea. When taken it decomp. into saligenin & salicylic acid.—*Doses:* As antipyr., 20–30 grains (1.3–2 Gm.); as bitter tonic, 2–5 grains (0.12–0.3 Gm.).—*Max. D.* 150 grains (10 Gm.) p. day.

Salicylacetol.—see **Salacetol**

Salicylalphamethylphenylhydrazine. — see **Agathin**

Salicylamide Merck (35

Fr. methyl salicylate, by dry ammonia.—$C_7H_7NO_2$, or, $C_6H_4(OH)CONH_2$. — Colorl., cryst. plates; tastel. but gritty.—*Sol.* A., E., C., 250 W.—*Melt.* 138° C.—Antisep.; Analg.; Antipyr.—*Uses:* Rheum., fevers, chorea, gout, &c., like salicylic acid.—*Dose* 3–5 grains (0.2–0.3 Gm.) in solution every 3 hrs. — *Max. D.* 15 grains (1 Gm.) p. day.

Salicylanilide.—see **Salifebrin**

Salicylchloroform.—see **Chloroform Anschütz**

Salicylic-acid Glycerin-formaldehyde Ester.—see **Protosal**

Salicylic-acid Methyleneacetate.—see **Indoform**

Salicylic Aldehyde.—see **Acid Salicylous**

Salicylparaphenetidin.—see **Malakin**

Salicylquinine.—see **Saloquinine**

Salicylresorcinolketone Merck (400

(Trioxybenzophenone). — Fr. salicylic acid w. resorcinol by heat.—$C_{13}H_{10}O_4$, or, $C_6H_4(OH)CO.C_6H_3(OH)_2$[1:2:4].—Wh. to reddish-wh. leaflets. — *Sol.*, hot A., B.; sl. W.—*Melt.* 133° C.—Antisep.; Antipyr.; Analg. — *Uses:* Typhoid fever, diar.; rheum.; & malaria.—*Dose* 5–15 grains (0.3–1 Gm.).—*Max. D.* 15 grains (1 Gm.) single; 60 grains (4 Gm.) p. day.

Salifebrin

(Salicylanilide; Antifebrin Salicylate).—$C_6H_5NH(C_6H_4OH.CO)$ (?).—Obt. by heating together salicylic acid & acetanilide.—Wh. powd.—*Sol.* A.; insol. W. — Antipyr.; Analg. — *Dose* 5–15 grains (0.3–1 Gm.).

Saliformin (20

(Hexamethylenamine Salicylate Merck; Formin Salicylate). — $C_8H_{12}N_4.C_6H_4OH.COOH$. — Wh., cryst. powd.; pleasant acidulous taste. — *Sol.*, eas. in W. or A.—Uric-acid Solvent & genito-urinary Antisep.—*Uses:* Gout, gravel, cystitis, &c.—*Dose* 5–30 grains (0.3–2 Gm.).

Saligallol

(Pyrogallol Disalicylate Knoll).—Resinous solid; marketed only in 33% solut. in acetone.—*Sol.*, in acetone or C.—Skin varnish, of mild pyrogallol effect. — *Uses:* Chiefly as vehicle for eugallol, eurobin, & other dermics.—*Extern.*, 2–15% solut.

Saligenin (100

(Ortho-oxybenzylalcohol).—Fr. salicin by hydrolysis; also synthetically fr. phenol & formaldehyde.—$C_7H_8O_2$, or, $C_6H_4(OH)CH_2OH$.—Colorl. to yellowish cryst.—*Sol.* A., E.; hot W.—*Melt.* 86° C.—Antirheum.; Antipodagr.—*Uses:* As of salicylic acid in acute artic. rheum. & gout.—*Dose* 8–15 grains (0.5–1 Gm.) every 2–3 hrs. in powd. or hydro-alcoh. solut.

Salinaphthol.—see **Betol**

Salipyrine (16

(Antipyrine Salicylate).—Equiv. parts antipyrine & salicylic acid.—$C_{18}H_{18}N_2O_4$, or, $C_{11}H_{12}N_2O.C_7H_6O_3$.—Wh., cryst. powd.; odorl.; sweetish w. bitter after-taste.—*Sol.* A., B., C., E., hot W.—*Melt.* 92° C.—Antipyr.; Antisep.; Analg.—*Uses:* Sciatica, rheum., influenza, chorea, pleurisy, dysmenor.; metrorrhagia, espec. bef. the climacteric.—*Dose* 5–15 grains (0.3–1 Gm.); for metrorrhagia: 15 grains (1 Gm.) 3 t. p. d., before flow, in capsules w. starch.—*Max. D.* 60 grains (4 Gm.) p. day.—*Incomp.*, nitrites.

Salit (5

Salicylic-acid ester of borneol.—$C_{10}H_{17}O.CO.C_6H_4.OH$.—Oily liq.—*Sol.*, all prop. A., E., oils; sl. G.; insol. W.—Decomp. by alkalies, & in intestines, into its constituents.—Antirheum.; Antineural.—*Uses:* Muscular & artic. rheum., neuralg., pleurisy, &c.—*Appl.*, w. eq. part olive oil, twice p. d. on affected part.

Salitannol

Condens. prod. obt. by act. of $POCl_3$ on mixt. salicylic & gallic acids.—$C_{14}H_{10}O_7$.—Wh., amorph. powd.—*Sol.*, sl'y A.; insol. W., E., C., B.—*Melt.* 210° C. w. decomp.—Antisep.; Vulnerary.

Salithymol.—see **Thymol Salicylate**

Salix Fragilis

(Brittle Willow; Snap Willow; Crack Willow).—Bark of Salix fragilis, L. Salicaceæ.—*Habit.:* Europe; Southwestern Asia; naturalized in U. S.—*Etymol.:* Fr. Celtic "sal," near, & "lis," water, *i.e.*, its favorite place of growth; or, fr. Lat. "salio," to spring out, *i.e.*, its rapid growth.—*Constit.:* Salicin; tannin.—Astring.; Febrif.—*Dose:* Aqu. extr., 5–15 grains (0.3–1 Gm.).

Salix Nigra

(Swamp Willow; Pussy Willow; Black Willow).—Bark of Salix nigra, Marsh. Salicaceæ.—*Habit.:* Canada to Florida & California.—*Etymol.:* See preceding.—*Constit.:* Salicin; tannin.—Sexual Sedat.; Tonic; Antiper.; Astring.—*Uses:* Gonor., spermator., ovarialgia, dyspep., rheum., &c.—*Extern.*, as appl. to ulcers.—*Doses:* 45–90 grains (3–6 Gm.).—Fld. extr., 5–60 ♏ (0.3–4 Cc.).

Salochinin.—see **Saloquinine**

Salocoll.—see **Phenocoll Salicylate**

Salol Merck (2

(Phenylic Ester of Salicylic Acid; Phenyl Salicylate).—React.-prod., salicylic acid w. phenol & phosphorus pentachloride.—$C_{13}H_{10}O_3$, or, $C_6H_4(OH).COOC_6H_5$[1:2].—Wh., cryst. powd.; faint aromatic odor.—*Sol.* 0.3 E., C., 10 A., B., fatty oils at 15° C.; (2,333 W., 5 A. at 25° C., U. S. P.).—*Melt.* 42–43° C.—Antisep.; Antirheum.; Antipyr.; &c.—*Uses: Intern.*, typhoid fever, diar., dysent., ferment. dyspep., rheum., grip, & cystitis.—*Extern.*, wounds, burns, sores, &c. Coating for enteric pills; such pills should be taken one hour or more after meals & no oil w. them. The remedy should not be given in gelat. capsules, because it is apt to crystallize in the intestines & form salol concretions.—*Doses:* 3–15 grains (0.2–1 Gm.); as antipyr., 30–45 grains (2–3 Gm.).

Salol Camphorated Merck (12

Mixt. 3 parts salol w. 2 parts camphor.—Yellowish, oily liq.—*Sol.* A., E., C., oils.—Local Anesth.; Antisep.; Analg.—*Uses:* Toothache, earache, neural., rheum., typhoid fever, gastric affect., & skin diseases.—*Dose* 3–10 grains (0.2–0.6 Gm.).—*Caut.* Keep well stoppered.

Salophen (20

(Acetylparamidosalol; Acetamidosalol; Acetylparaminophenyl Salicylate).—$C_{15}H_{13}O_4N$, or, $C_6H_4.OH.COO.C_6H_4NH.COCH_3$.—Fine, white scales; odorl.; tastel.—51% salicylic acid.—*Sol.* A., E., alkal.; hot W.—*Melt.* 187–188° C.—Antisep.; Antipyr.; Analg.; Antirheum.; Keratolytic.—*Uses:* Rheum., gout, typhoid fever, diar., dysent., chorea, &c.—*Extern.*, psoriasis & other itching skin diseases, in 10% oint.—*Dose* 5–15 grains (0.3–1 Gm.).—*Max. D.* 20 grains (1.3 Gm.), single; 90 grains (6 Gm.) p. day.

Saloquinine Merck (25

(Salochinin; Salicylquinine; Quinine Salicylic Ester).—$C_6H_4.OH.CO.O.C_{20}H_{23}N_2O$.—Tastel., cryst. powd.—71.3% quinine.—*Sol.* A., E.; insol. W.—*Melt.* 130° C.—Antiper.; Antimycotic; Febrif.; Antineural.; Analg.—*Uses:* Typhoid & other fevers, neural., &c., instead of quinine. 2 grains (0.12 Gm.) saloquinine = 1 grain (0.06 Gm.) quinine.—*Dose* 8–30 grains (0.5–2 Gm.).

Saloquinine Salicylate Merck (25

$C_6H_4.OH.COO.C_{20}H_{23}N_2O.C_6H_4.OH.COOH$.—Wh. cryst.—*Sol.*, sl. W.—*Melt.* 179° C.—Antineural.; Antirheum.—*Uses:* Neural., neuritis, acute artic. rheumat., lancinating pains in tabes, gonorrheal inflammations, &c.—*Dose* 15 grains (1 Gm.) 3 t. p. d.

Salseparin.—see **Smilacin**

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Salt, Carlsbad.—True

(Sprudel Salt). — Fr. the Carlsbad water by evaporation.—Colorl. cryst.—*Sol.* W.—Cathartic.—*Uses:* Chronic constip., disorders of liver, diabetes, gout, &c.—*Dose* 1–8 dr. (4–30 Gm.) once or twice p. d. in W., at morning.

Salt, Carlsbad.—Artificial.—*N. F.*

1 (Dry): 44 sod. sulphate & 2 potass. sulphate w. 18 sod. chloride & 36 sod. bicarbonate.—2 (Cryst.): 2 potass. sulphate, 18 sod. chloride, 61 sod. carb. cryst., 88 sod. sulph. cryst., & 50 W.—*Sol.* W.—*Uses:* Chron. constip., disorders of liver, diabetes, gout, &c.—*Dose* 1–8 dr. (4–30 Gm.) in a glass of warm water.

do.—Artificial, Effervescent.—*N. F.*

18 artif. Carlsbad salt (dry), 41 saccharated sod. bicarb., & 41 saccharated tartaric acid.

Salt, Gregory's

Mixt. morphine hydrochloride (approx. 97.75%) & codeine hydrochloride (approx. 2.25 %).—Wh. powd. — *Sol.* W. — *Uses & Doses:* As of morphine hydrochloride.

Salt, Kissingen, Artificial.—*N. F.*

17 potass. chloride, 357 sod. chloride, 59 magn. sulph. (anhydr.), & 107 sod. bicarb.

do.—Effervescent.—*N. F.*

28 artificial Kissingen salt, 36 saccharated sodium bicarbonate, and 36 saccharated tartaric acid.

Salt, Microcosmic.—see **Sodium & Ammonium Phosphate**

Salt, Schleich's.—Tablets

	No. 1 Strong	No. 2 Normal	No. 3 Weak
Cocaine Hydrochloride	0.2	0.1	0.01
Morphine "	0.025	0.025	0.005
Sodium Chloride	0.2	0.2	0.2

Used in the infiltration-anesthesia by Schleich's method. Each tablet, before use, is dissolved in 100 Cc. sterilized water; the solution is then ready for use without further preparation.

Salt, Vichy.—Artificial.—*N. F.*

846 sod. bicarb., 38.5 potass. carb., 38.5 magn. sulph. (anhydr.), & 77 sod. chloride.

do.—Artificial, Effervescent.—*N. F.*

24 artif. Vichy salt, 38 saccharated sod. bicarb., & 38 saccharated tartaric acid.

Salt of Sorrel.—see **Potassium Binoxalate**

Salt of Tartar.—see **Potassium Carbonate**

Saltpeter.—see **Potassium Nitrate**

Salubrol

(Methylenediantipyrine Tetrabromide). — $C_{23}H_{24}O_2N_4Br_4$.—Orange-yellow powd.—*Sol.* A.—*Melt.* 155° C.—Antisep. instead of iodoform.—*Uses:* As gauze, or as dusting powd.

Salufer.—see **Sodium Silicofluoride**

Salumin.—see **Aluminum Salicylate**

Salumin, Soluble.—see **Aluminum Salicylate, Ammoniated**

Salvia.—*U. S. P.*

(Sage; Garden Sage).—Dried lvs. of Salvia officinalis, L. Labiatæ.—*Habit.:* Southern Europe; cult. Eng., France, U. S., Italy, &c.—*Etymol.:* Fr. Lat. "salvere," to save, refer. to its healing prop.—*Constit.:* Volat. oil, resin, tannin, bitter prin., gum.—Stim.; Tonic; Astring.; Vulner.; Condiment.—*Uses:* Chiefly as condiment.—*Extern.,* in form of infus. for ulcers of mouth & throat, in nasal sores, &c. Also as gargle.

Sambucus

(Elder; American Elder; Sweet Elder).—Flowers of Sambucus canadensis, L. Caprifoliaceæ.—*Habit.:* U. S., east of Rocky Mountains.—*Etymol.:* See Sambucus nigra.—*Constit.:* Volat. oil; resin; fat; mucilage; tannin.—Stim.; Carmin.; Diaphor.; Sudorif.; Diuret.—*Uses:* Febrile affect., scrof., rheum., syph., dropsy, &c. —*Extern.,* as fomentation, poultice, &c.—*Dose* 30–60 grains (2–4 Gm.) as infus., fld. extr., &c.

Sambucus Ebulus.—see **Ebulus**

Sambucus Juice Merck (2

(Elderberry Juice). — Fr. berries Sambucus nigra, L.; preserv. w. alc.—Diur.; Refrig.; Alter. —*Uses:* Kidney & heart dis. w. dropsy; refresh. drink in fever; also in syph., epilepsy, & var. o. chronic dis.—*Dose* 60–150 ♏ (4–10 Cc.).

Sambucus Nigra

(European Elder; Common Elder; German Elder; Parsley Elder).—Bark, berries, flowers, lvs., & root of Sambucus nigra, L. Caprifoliaceæ. —*Habit.:* Europe; Northern Africa to Middle Asia.—*Etymol.:* Fr. Grk. "sambyx," a red, minium-colored dye, & referring to the color of the juice of the berries. Or, fr. Lat. "sambuca," a term applied to various wind & string instruments, *i.e.,* the elder, freed fr. its soft pith, leaves a tube which was used as an instrument.—*Constit.: Bark:* Valeric acid; volat. oil; tannin; resin; gum.—*Berries:* Tannin; coloring-matter.—*Flowers:* Volat. oil; pectin.—*Lvs.:* Tannin; resin.—*Root:* Soft resin.—*Uses: Bark:* Diuret. in nephritis, & in affect. of heart & liver.—*Root:* Diur. & Emeto-cathartic.—*Berries:* Manuf. of vinegar & artif. wine.—*Doses: Bark:* 6 dr. (25 Gm.) in decoct.—Fld. extr., 5–8 fl. dr. (20–30 Cc.).

Sand Sedge.—see **Carex**

Sand Spurrey.—see **Arenaria**

Sandarac

Resin fr. Callitris quadrivalvis, Vent. Coniferæ. — *Habit.:* Morocco. — *Etymol.:* Grk. "sanda-

rake," by which name Aristotle had already designated the resin.—Brittle, elongated, light-yellow tears; transluc., w. vitreous fract.; crumble to powd. when masticated.—*Sol.* A., E., amyl alcohol, acetone, & in hot caustic alkalies; partly in C., volat. oils, oil turp., CS_2; insol. benzin, B.—*Constit.:* Volat. oil; 3 resins; bitter principle. — *Uses:* As incense, & techn. for tooth cements, lacquers, varnishes, &c.

Sandwort, Red.—see **Arenaria**

Sanguinaria.—*U. S. P.*

(Bloodroot; Red Puccoon; Red-root; Puccoon Root; Tetterwort). — Dried rhizome of Sanguinaria canadensis, L. Papaveraceæ, collected after the death of the foliage.—*Habit.:* North America.—*Etymol.:* Lat. "sanguis," blood, *i.e.*, all parts of the plant contain a blood-red juice. "Canadensis" refers to its habitat, Canada.—*Constit.:* Sanguinarine; chelerythrine, $C_{21}H_{17}NO_4$; protopine; beta-homochelidonine. — Expector.; Emmen.; Emetic; Alter.; Sialagogue; Sternut.; Tonic.—*Uses:* Coughs, & to produce emesis.—*Doses:* 1–8 grains (0.06–0.5 Gm.) in powd.—Aqu. extr., $^1/_6$–$^1/_3$ grain (0.01–0.02 Gm.) expector.; $1^1/_2$–3 grains (0.1–0.2 Gm.) emetic.—Fld. extr., 2–15 ♏ (0.12–1 Cc.).—Tinct., 15–30 ♏ (1–2 Cc.).—*Antid.*, stomach tube, diffusible stimulants, amyl nitrite, morphine, atropine.

Sanguinaria Herb

(Blood Geranium). — Geranium sanguineum, L. Geraniaceæ.—*Habit.:* Middle Europe.—*Etymol.:* Lat. "sanguis," blood, *i.e.*, the plant was formerly highly esteemed as a remedy in hemorrhages.—*Constit.:* Tannin.— Astring.; Styptic.—*Uses:* Diar. & dysent.

Sanguinarine Merck (456

Alkaloid fr. rhizome Sanguinaria canadensis, L.—$C_{20}H_{15}NO_4 + H_2O$, or, $C_{19}H_{12}NO_2.OCH_3 + H_2O$.—Reddish-gray, cryst. powd.—*Sol.* C., amylic alc.; sl. in A., E.; insol. W.—Stim.; Tonic; Expector.; Purg.; Emetic.—*Uses:* Dyspep., debil., colds, coughs, & to prod. vomiting. — *Doses:* Expector., $^1/_{12}$–$^1/_8$ grain (0.005–0.008 Gm.); emetic, $^1/_2$–1 grain (0.03–0.06 Gm.). Average dose, $^1/_4$ grain (0.015 Gm.).—*Caut.* Poison!

Sanguinarine Nitrate Merck (456

$C_{20}H_{15}NO_4.HNO_3$.—Orange-yellow, cryst. need.—*Sol.* W., A.—*Uses & Doses:* As of the alkaloid.

Sanguinarine Sulphate Merck (570

$(C_{20}H_{15}NO_4)_2.H_2SO_4$.—Orange-red, cryst. powd.—*Sol.* W., A.—*Uses & Doses:* As of the alkaloid.

Sanguis Draconis.—see **Dragon's Blood**

Sanicle.—see **Sanicula**

Sanicula

(European Sanicle; Wood Sanicle; Wood March; Self-Heal).—Herb & root of Sanicula Europæa, L. Umbelliferæ.—*Habit.:* Europe.—*Etymol.:* Lat. "sanare," to heal, *i.e.*, the plant was formerly used as a vulnerary. "Europæa" refers to its habitat, Europe.—*Constit.:* Bitter principle; tannin. — Vulnerary; Resolvent for sanguineous extravasations; Astring.

Sanoform

(Diiodosalicylic-acid Methyl-ester). — $C_8H_2I_2(OH)CO_2CH_3$. — Obt. by action of iodine on methyl salicylate.—Colorl., odorl., tastel. powd.—*Sol.* A., E.—*Melt.* 110–110.5° C.—Antisep.; Deodorant.—*Uses:* As dusting powd. in syphilitic ulcers, blennor., &c., or in 10% oint.

Santalin Merck (30

(Crude Santalic Acid). — Coloring-matter fr. wood Pterocarpus santalinus, L. fil. (Red Saunders). — $C_{15}H_{14}O_5$. — Red. powd. — *Sol.* A., E., acetic acid, alkalies.—*Uses:* Chem. analysis as indicator (alkalies = violet; acids = red).

Santalol Salicylic-acid Ester.—see **Santyl**

Santalum Album

(White Saunders; Yellow Saunders; Lignum Santalinum Citrinum).—Wood of Santalinum album, L., & other spec. of Santalum. Santalineæ.—*Habit.:* East India.—*Etymol.:* See Santalum Rubrum.—*Constit.:* Volat. oil; resin; tannin.—*Uses:* As incense, for fumigating, & as source of the oil (latter used in gonor.).

Santalum Rubrum.—*U. S. P.*

(Red Saunders; Ruby Wood; Red Santal Wood).—Heart-wood of Pterocarpus santalinus, L. fil. Leguminosæ. Papilionaceæ.—*Habit.:* East Indies.—*Etymol.:* Fr. "ssandal," the Arabic name for the wood; Malayan "tsjendan." Persian "sandul," useful.—*Constit.:* Santalin (santalinic acid), $C_{15}H_{14}O_5$; santol, $C_8H_6O_3$; pterocarpin, $C_{20}H_{18}O_5$; homopterocarpin, $C_{24}H_{24}O_5$; resin; tannin.—Tonic; Astring.—*Uses:* Chiefly techn. for coloring, tinctures, &c., & as a dye.

Santolina.—see **Iva Flowers**

Santonica.—*U. S. P.*

(Levant Wormseed; Semen Cinæ).—Dried, unexpanded flower heads of Artemisia pauciflora (A. maritima, var. pauciflora, Ledebour), Weber. Compositæ.—*Habit.:* Persia; Turkestan; Russia.—*Etymol.:* "Santonica" fr. Lat. "santonicus," fr. the Santoni, a tribe inhabiting southern Gaul (Aquitania). Grk. "santonion," their wormwood. "Artemisia" fr. Grk. "Artemis," the Roman goddess Diana, to whom Artemisia Absinthium was dedicated, owing to its use in hastening puberty.—*Constit.:* Santonin, $C_{15}H_{18}O_3$ (1–2%); volat. oil (2%); artemisin, $C_{15}H_{18}O_4$; resin; gum.—Anthelmintic; Stim.; Emmen.; also as source of santonin.—*Doses:* 10–40 grains (0.6–2.5 Gm.).—Alcoh. extr., 2–5 grains (0.12–0.3 Gm.).

Santonin Merck.—Cryst. & Powder (17

(Anhydrous Santoninic Acid). — Santoninic-acid lactone fr. unexpanded fl. heads Artemisia pauciflora, Weber (Santonica).—$C_{15}H_{18}O_3$, or, $\overline{C{:}C(CH_3).CO.CH_2.C(CH_3){:}C.CH_2.CH.O.CO.CH}\text{-}(CH_3).CH.CH_2$. — Lustr., rhomb., wh. to pale

straw-col. prisms or plates, or wh. to sl. yellowish powd., sl'y bitter taste.—*Sol.* 4 C., 44 A., 140 E., at 15° C.; (5,300 W., 34 A., 78 E., 2.5 C. at 25° C.; 800 W. at 80° C.; 5 A. at 60° C., U. S. P.). —*Melt.* 170.3° C. (U. S. P.). — Anthelmintic; Emmen.; Tonic.—*Uses:* Worms, amenor., epilepsy, lancinating pains in tabes, & as stim. to optic nerve in tobacco amaurosis.—*Doses:* 2–4 grains (0.12–0.25 Gm.); children of 2 yrs. $^1/_4$–$^1/_2$ grain (0.015–0.03 Gm.) cautiously administered, as large doses may develop toxic symptoms; in *tabes*, 1 grain (0.06 Gm.) 3 t. p. d.; *epilepsy*, $1^1/_2$ grains (0.1 Gm.) 3. t. p. d.—*Max. D.* 5 grains (0.3 Gm.) p. d. — *Antid.*, enemas of hydrated chloral; cold affusions.—*Caut.* Poison! Turns yellow in the light. Keep in the dark, or in amber bottles.

Note.—This is a perfectly pure article, free from the adulterations not uncommon to the ordinary santonins of the market; it is, hence, a superior preparation, & should be used to the exclusion of inferior products.

Santoninoxim Merck (250

Fr. santonin, by an alcoh. solut. of hydroxylamine hydrochloride & $CaCO_3$.—$C_{15}H_{18}O_2(NOH)$. —Wh., cryst. powd.; less toxic (acc. to Coppola) than santonin.—*Sol.* A.; sl. W.—*Melt.* 216–217° C. — Anthelm.; Antisep. — *Uses:* Vermicide. — *Dose:* Children, 2–3 years, $^3/_4$ grain (0.05 Gm.); 4–6 years, $1^1/_2$ grains (0.1 Gm.); 6–9 years, 2 grains (0.12 Gm.); adults, 5 grains (0.3 Gm.), divided into two doses & taken at intervals of 1 or 2 hours, followed by a cath. Repeat for 2 or 3 days. Give in wafers or suspended in water.

Santyl Knoll (30

(Santalol Salicylic-acid Ester).—Alm. odorl. & tastel., oily liq.; 60% santalol.—*Uses:* Gonor. —*Dose* 30 ♏ (2 Cc.) in milk.

Sapogenin Merck (750

(Sapogenol).—Fr. saponin by boil. w. dil. acids. —$C_{14}H_{22}O_2$.—Wh. need.—*Sol.*, sl. A., E.; insol. W.—*Melt.*, abt. 257° C.

Sapogenol.—see **Sapogenin**

Saponaria

(Soapwort; Soaproot; Fuller's-herb; Bruisewort; Bouncing Bet). — Herb & root of Saponaria officinalis, L. Caryophyllaceæ.—*Habit.:* Europe to middle Asia; natur. in U. S.—*Etymol.:* Lat. "sapo," soap, referring to the use of the root as a detergent.—*Constit.:* Saponin; sapotoxin.—*Herb.:* Emeto-cathartic; Antiherpetic; Antirheumat.; Antisyphil.; Antiscrof.; Emmen.—*Root:* Aper.; Diaphor.; Diuret.; Resolv.; Alter.; Expectorant. — *Uses:* Coughs, vener. & cutan. affect., scrof., gonor., &c.—*Techn.*, as detergent. —*Doses:* Alcoh. extr., 8–20 grains (0.5–1.3 Gm.); *Max. D.* 60 grains (4 Gm.) single; 3 dr. (12 Gm.) daily.—Fld. extr., 40–120 ♏ (2.5–8 Cc.).

Saponaria Alba.—see **Gypsophila**

Saponin Merck.—Highest Purity (40

Glucoside fr. Saponaria officinalis, L., & existing in o. plants, particularly in bark of Quillaja Saponaria, Saponaria officinalis, &c.—$C_{32}H_{54}O_{18}$ (Rochleder); $C_{17}H_{26}O_{10}+H_2O$ (Kruskal).—Wh., amorph. powd.; pung., disagre. taste; water foams when shaken with it. Consists probably chiefly of sapotoxin.—*Sol.*, eas. W.—Expector.; Emetic; Alter.—Acts like, but is less toxic than, sapotoxin.—*Uses:* Techn.—*Antid.*, cholesterin.

do. Merck.—Purified (12

do. Merck.—Crude (8

Extractive fr. Saponaria officinalis, L., & consisting chiefly of sapotoxin & lactosin besides salts, & having the general formula $C_nH_{2n-8}O_{10}$. — Yellowish-gray to brown powd. — *Sol.* W., with foaming. — *Uses:* As foam producer in beverages like lemonade, mineral waters, wines, & for emulsifying oil. The foaming of the commercial product is caused by either the sapotoxin alone or the quillajic acid. Also used as detergent in textile industries, as size, substitute for soap, paste, &c.

do. Merck.—Fr. Guaiac Bark (80

Sapota

(Sapotilla; Sapota Plum; Bully Tree).—Fruit of Achras Sapota, L. Sapotaceæ.—*Habit.:* South America; cultiv. in Arabia.—*Etymol.:* "Sapota" is the South American name of the plant.—*Constit.:* Tannin.—Antiper.; Diuret.

Sapotoxin Merck (300

Glucosidal subst'ce fr. commercial saponin, & also fr. inner bark Quillaja Saponaria, Molina. —The sapotoxins fr. Saponaria & Quillaja are identical.—$C_{17}H_{26}O_{10}+H_2O$.—Wh. powd.; h'ly poison.—*Sol.* W., dil. A.—The aqueous solut. foams strongly. Even 1:10,000 solut. capable of dissolving red blood corpuscles. On ingestion into stomach, acts as emetic.—*Caut.* Poison!

Sarcine Merck (5000

(Hypoxanthine; Sarkine).—Diureïd fr. the animal organism. Usually prep. fr. meat.—$C_5H_4N_4O$. — Wh., microcryst. powd. — *Sol.*, acids, alkalies, W., & A.

Sarcine Hydrochloride Merck (5500

$C_5H_4N_4O.HCl+H_2O$.—Wh. cryst.—*Sol.* W.

Sarcosin Merck (1400

(Methylaminoacetic Acid; Methylglycocoll).—Deriv. of creatine.—$C_3H_7NO_2$, or, $CH_3NH.CH_2.CO_2H$.—Deliq., transp. cryst.; sweetish taste.—*Sol.* W.; sl. A.—*Melt.* 210–215° C.—*Uses:* Uric-acid diathesis, rheumat., arthritis, Bright's dis., &c.—*Dose* 8–15 grains (0.5–1 Gm.) 2–4 t. p. d.

Sarkine.—see **Sarcine**

Sarracenia

(Pitcher Plant; Fly-trap; Side-saddle Plant; Huntsman's Cup; Water Cup).—Lvs. & root of

Sarracenia purpurea, L. Nymphеaceæ. Sarraceniaceæ.—*Habit.:* Canada; Eastern U. S.—*Etymol.:* Named for Dr. J. A. Sarrasin, of Quebec (1750).—*Constit.:* Sarracine; acrylic acid; tannin.—*Uses:* Diur.; Tonic; Lax.; Stim.; Prophylactic in smallpox.—*Dose: Lvs.:* 20–30 grains (1.3–2 Gm.) in powd. or infus.

Sarsaparilla.—*U. S. P.*

Dried root of Smilax officinalis, Kunth; S. ornata, Hooker; S. medica, Chamisso & Schlechtendal; S. papyracea, Duhamel; & o. spec. of S. Liliaceæ. Smilaceæ.—*Habit.:* Honduras; Jamaica; Mexico (Vera Cruz); Brazil; Guatemala.—*Etymol.:* Spanish "sarsa," Portuguese "zarza," a bramble, & Portug. "pareilha," dim. of "parra," vine, *i.e.*, a small, brambly, vine-like plant. Or, fr. "Parillo," the name of a physician who is said to have discovered & used it. "Smilax," fr. Grk. "smilax," the yew, fr. "smile," a scraper, *i.e.*, the stems have prickles. "Medica," fr. Lat. "medicus," medicinal, curative. "Papyracea," fr. Grk. "papyros," paper, *i.e.*, the leaves & pith were used to write upon.—*Constit.:* Smilacin (sarsaparilla-saponin); parillin; resin; saponin; volat. oil.—Antisyph.; Diur.; Alter.; Diaph.; Tonic.—*Uses:* As "blood purifier" in syph., scrof., rheumat., & skin diseases (usually w. mercury & potass. iodide).—*Doses:* 30–120 grains (2–8 Gm.).—Alcoh. extr., 5–20 grains (0.3–1.3 Gm.).—Fld. extr., 30–120 ♏ (2–8 Cc.).—Comp. Fld. Extr., 30–120 ♏ (2–8 Cc.).

Sassafras.—*U. S. P.*

(Saxifrax; Ague-tree; Cinnamon-wood; Saloop).—Dried bark of root of Sassafras variifolium (Salisb.), O. Kuntze. Lauraceæ, collected in early spring or autumn, & deprived of periderm.—*Habit.:* North America.—*Etymol.:* Fr. Spanish "salsafras," saxifrage, because of reputed gravel-resolvent properties. Or, fr. Lat. "saxum," a stone, & "frangere," to break, *i.e.*, the plant grows in crevices in rocks.—Irreg. fragm. deprived of gray corky layer; bright rust-brown, soft, fragile, w. short, corky fract.; inner surface smooth; strongly fragrant; sweetish, aromat., somewh. astring. taste.—*Constit.:* Volat. oil; sassafrid; tannin; gum; resin; wax.—Wood contains volat. oil, & tannin.—Aromat.; Stim.; Astring.; Diaph.; Diur.; Alter. (in syph.); also extern. in rhus poisoning.—Wood is used as Alter. & Diur.—*Doses:* 30–180 grains (2–12 Gm.).—Aqu. extr., 2–8 grains (0.12–0.5 Gm.).—Fld. extr., 30–60 ♏ (2–4 Cc.).

Sassafras Pith.—*U. S. P.*

Dried pith of Sassafras variifolium, O. Kuntze. Lauraceæ.—*Habit. & Etymol.:* See Sassafras.—More or less cylindric., oft. curved pieces; variab. length; abt. $^1/_5$ in. (5 Mm.) diam.; whitish, v. light & spongy; sl. odor; mucil. taste.—*Constit.:* Much gum; some volat. oil.—Demulc.—*Uses:* As mucil. in dysent., & inflam. of air passages & stomach; also as collyr. in acute conjunct., & as vehicle for active remedies.

Sassy Bark

(Saucy Bark; Mancona Bark; Ordeal Bark; Red-water-Tree Bark; Casca Bark; Saxon Bark; Doom Bark; Teli; Bondou).—Bark of Erythrophlœum guineense, Don. Mimosaceæ.—*Habit.:* Central & western Africa.—*Etymol.:* Fr. Grk. "erythros," red, & "phloios," bark.—Flat or curved pieces abt. $^1/_5$ in. (5 Mm.) thick; extern., warty, fissured, red-brown, & hard, with whitish spots; fract. coarsely granular & fibrous; inodor.; bitter, astring. & acrid taste.—*Constit.:* Erythrophleine, $C_{28}H_{42}NO_7$ (or, $C_{28}H_{45}NO_7$); tannin; gum; resin.—Cardiac tonic; Astring.; Diaph.; Nar.; Local Anesth.; Succed. for Digitalis; Sternut.—Natives use the bark in ordeals, & as an arrow poison.—*Uses:* Diar., dysent., & colic.—*Doses:* 15 ♏ (1 Cc.) of 1:4 tinct.; 5–10 ♏ (0.3–0.6 Cc.) of fld. extr.—*Antid.*, emetics, stomach siphon, stimulants.

Satureja

(Summer Savory).—Herb of Satureja hortensis, L. Labiatæ.—*Habit.:* Europe; widely cultiv. & natur.—*Etymol.:* Lat. "saturare," to saturate, to satisfy, *i.e.*, the herb was used by the ancient Romans as food.—*Constit.:* Volat. oil.—Stim.; Carmin.; Emmen.—*Uses:* Tuberculosis; also as spice, & in baths.—*Dose:* Fld. extr., 30–60 ♏ (2–4 Cc.).

Savin.—*U. S. P.*

(Sabina).—Tops of Juniperus Sabina, L. Coniferæ.—*Habit.:* Europe; northern Asia; North America south to New York & Montana.—*Etymol.:* Named for the Sabines of old, who are said to have used the branches of the plant as an abortifacient. "Juniperus," fr. Celtic "jeneprus," thorny, rough, referring to the leaves; & "parere," to produce, *i.e.*, the young shoots & leaves of the Juniper family continually replace the old.—*Constit.:* Volat. oil; resin; tannin.—Abortifac.; Emmen.; Diur.; Vermif.—*Uses: Intern.*, in amenor., rheumat., gout & worms.—*Extern.*, for warts, indol. ulcers, & tinea capitis.—*Doses:* 5–15 grains (0.3–1 Gm.).—*Max. D.* 15 grains (1 Gm.) single; & 45 grains (3 Gm.) per day.—Alcoh. extr., $^1/_2$–2 grains (0.03–0.12 Gm.).; *Max. D.* 3 grains (0.2 Gm.) single, 15 grains (1 Gm.) daily.—Fld. extr., 3–8 ♏ (0.2–0.5 Cc.).—*Antid.*, mustard, emetics, castor oil, brandy, &c.

Savory, Summer.—see **Satureja**

Saw Palmetto.—see **Sabal**

Saxin.—see **Benzosulphinide; Saccharin**

Saxoline.—see **Petrolatum**

Scabious

(Scabiosa; Pincushion Flower; Field Scabious; Blue Buttons; Gipsy Rose).—Scabiosa (Knautia) arvensis, L. Dipsaceæ.—*Habit.:* Europe; natur. in eastern U. S.—*Etymol.:* Lat. "scabies," scab, itch, mange, *i.e.*, the plant was used in skin dis. "Arvensis," pertaining to fields.—*Constit.:*

Bitter subst'ce; tannin.—*Uses:* In pulmonary & cutaneous diseases.

Scammonin.—see **Resin Scammony**

Scammony

Gum-resin exudate fr. root Convolvulus Scammonia, L.—*Etymol.:* See Scammony Root.—Irreg. angul. pieces or circ. cakes; greenish-gray or brownish-black; v. brittle; angular or splintery fract.; porous; resinous luster; intern. brownish-black; cheese-like odor; sl. acrid taste.—*Constit.:* Scammonin (up to 95%); gum.—Cathartic.—*Uses:* Dropsy, & in cerebral dis. w. o. remed.—*Dose* 10–20 grains (0.6–1.3 Gm.).

Scammony Root

Root of Convolvulus Scammonia, L. Convolvulaceæ.—*Habit.:* Asia Minor; Greece.—*Etymol.:* Arabic "scamunia," Grk. "scammonia," fr. "scamma," the substance unearthed or dug out, *i.e.*, the substance obtained fr. the root. Or, fr. Grk. "skambos," crooked, *i.e.*, the stems are crooked. "Convolvulus" fr. Lat. "convolvere," to roll together, to entwine, referring to the plant's habit.—*Constit.:* Scammonin (jalapin).—Drast. Purgat.; Hydragogue; Cholagogue.

Scammony Senna.—see **Periploca**

Scarlet Red.—see **Biebrich Scarlet**

Scarlet Red Merck (29

(Ponceau).—Sodium salt of amidoazobenzeneazobetanaphtholdisulphonic acid. — Reddish-brown powd.—*Sol.* W.; solut. yellowish-red.

Schan-Ki.—see **Eumenol**

Scheele's Green.—see **Copper & Hydrogen Arsenite**

Scheelium.—see **Tungsten**

Scheibler's Reagent.—For alkaloids & albumen

Mixt. of solut. sod. tungstate w. a 25% phosphoric acid.—Gives ppt's w. alkaloids & albumen.—Capable of detect. strychnine in 1:200,000 solut., & quinine in 1:100,000 solut.

Schiff's Reagent.—see **Ammonium Thioacetate**

Schinus

(Pepper Tree; Pepper Shrub; Peruvian Mastic Tree; Aro-Aira).—Seed of Schinus molle, L. Terebinthinaceæ. Anacardiaceæ.—*Habit.:* Brazil; Peru; Chile.—*Etymol.:* Grk. "schizein," to cut into, referring to the incisions made in the rind in order to allow the resin to exude.—*Constit.:* Volat. oil; resin; tannin.—*Uses:* As substitute for cubebs in gonor.

Schlagdenhauffen's Reagent.—For alkaloids

Mixt. eq. parts tinct. guaiac & satur. solut. mercuric chloride.—Affords a blue color w. alkaloids but not w. glucosides.

Schleich's Salt.—see **Salt, Schleich's**

Schlippe's Salt.—see **Sodium Sulphantimonate**

Schlossberger's Reagent.—For textile fibers

Solut. freshly pptd. nickelous hydroxide in conc. ammonia.—Dissolves silk, but not wool.

Schönbein's Ozone Paper.—see **Potassium Iodide-Starch Paper**

Schönbein-Pagenstecher's Paper.—see **Guaiac-Copper Sulphate Paper**

Schott's Paper.—see **Lead Carbonate Paper**

Schultze's Reagent.—For alkaloids

Solut. 10 Gm. antimony chloride in 40 Gm. sat. solut. sod. phosphate.—Reagent affords ppt's w. sulphates of alkaloids.

do.—For cellulose

Solut. 250 Gm. zinc chloride, & 80 Gm. potass. iodide in 85 Cc. W., saturated w. iodine.—Affords a blue color w. cellulose.

Schweinfurth's Green.—see **Copper Acetoarsenite**

Schweitzer's Reagent.—For wool, etc.

Satur. solut. freshly pptd. cupric hydroxide in conc. ammonia.—Reagent dissolves silk, cotton, & linen, but not wool.

Scilla.—see **Squill**

Scillain.—see **Scillitoxin**

Scillipicrin Merck (100

Active bitter prin. fr. bulb of Urginea maritima, Baker.—Yellow to yellowish-red, friable, hygros. mass. — *Sol.* W. — Diuretic. — *Uses:* Dropsy, cardiac & nephritic affect., &c.—*Dose,* subcut., $^1/_3$–1 grain (0.02–0.06 Gm.) once daily.

Scillitin Merck.—Dry (60

Bitter prin. fr. bulb of Urginea maritima, Baker. — Brownish-black mass. — Diuretic. — *Uses:* Dropsy due to dis. of heart & kidneys.—*Dose* $^1/_6$–$^1/_2$ grain (0.01–0.03 Gm.) per day, in pills.

do. Merck.—Soft (35

Scillitoxin Merck (1500

(Scillain).—Glucoside fr. bulb of Urginea maritima, Baker.—Brownish, amorph. powd.—*Sol.* A.—Diuretic.—*Uses:* Nephritis & o. dis. urin. org.—*Dose* $^1/_{60}$–$^1/_{30}$ grain (0.001–0.002 Gm.) several t. p. d.—*Max. D.* $^3/_4$ grain (0.05 Gm.), p. day.

Sclerocrystallin.—see **Ergotinine, Amorphous**

Sclarea

(Clarry; Clary Sage).—Flowers & lvs. of Salvia Sclarea, L. Labiatæ.—*Habit.:* Southern Europe; cultiv. in U. S.—*Etymol.:* Fr. Lat. "salvare," to heal; "sclarea," fr. Italian "schiarare" (scharlei or horminum), to make clear, fr. Lat. "clarus," clear, light, referring to the light color of Salvia Horminum.—*Constit.:* Lvs. contain volat. oil, bitter subst'ee, & tannin.—*Uses: Flowers:* Domestic remedy in eye diseases.—*Lvs.:* As antispasmodic.

Scolopendrium

(Hart's Tongue; Seaweed Fern; Snake Fern; Snake Leaves; Caterpillar Fern).—Scolopendrium (Asplenium) Scolopendrium, Karst. Polypodiaceæ.—*Habit.:* Widely distrib. in Old World; rare in U. S.—*Etymol.:* Grk. "skolopendra," centipede, because of the similarity in appearance between the plant & the centipede. —Astring.; Demule.—*Uses:* Pulmon. tuberculosis.—*Extern.*, as vulnerary.

Scoparin Merck (350

Bitter, phenolic prin. found, besides sparteine, in tops Cytisus Scoparius, Link.—$C_{20}H_{20}O_{10}+5H_2O$, or, $CH_3O.C_6H_3(OH).C_{13}H_3O_3(OH)_5+5H_2O$. —Pale-yellow, cryst. powd.; odorl.; tastel.—*Sol.*, dil. A., alkalies.—Diur.—*Uses:* Cardiac or nephritic dropsy.—*Dose* 8–15 grains (0.5–1 Gm.).—*Inj.* $^1/_2$–1 grain (0.03–0.06 Gm.), dissolved in W. with a trace of ammonia, or in glycerin 1 part, W. 3 parts.

Scoparius.—*U. S. P.*

(Broom; Green, Scotch, or Irish Broom; Hogweed; Bannal).—Dried tops (also seeds & flowers, though not official) of Cytisus Scoparius, Link. (Spartium [Sarothamnus] scoparium, L.). Leguminosæ. Papilionaceæ.—*Habit.:* Western Asia; Southern & Western Europe; cultiv. in gardens in U. S.—*Etymol.:* "Cytisus" fr. Grk. "Kytisos," classic name, after island of Cythrus, one of the Cyclades, where first found growing. "Scoparius," fr. Lat. "scopa," broom. "Spartium," fr. Grk. "sparton," broom. "Sarothamnus," fr. Grk. "saros," broom, & "thamnos," shrub.—Thin, flexible, branched twigs; extern., dark-green; intern., yellowish, nearly smooth, tough, usually free fr. leaves; odor peculiar wh. bruised; taste disagre. bitter; short-fibrous fract.—*Constit.:* Sparteine, $C_{15}H_{26}N_2$; scoparin, $C_{20}H_{20}O_{10}.5H_2O$; volat. oil; tannin; fat; wax; sugar; coloring-matter.—*Uses:* All parts of plant Diur.; Nar.; Large doses Emet. & Cathart.; Cardiac Tonic.—Flowers also used techn. as a dye.—*Dose: Tops:* 15–60 grains (1–4 Gm.) in infus. or fld. extr. — *Antid.*, like digitalis, strychnine, atropine, electricity, tannin, potassium iodide, diuretics, diluents.

Scoparius Juice Merck (3

(Broom Juice).—Fr. fresh herb Cytisus Scoparius, Link; preserv. w. alc.—Diur.; Cath.—*Uses:* Cardiac dropsy.—*Dose* 1–2 fl. dr. (4–8 Cc.).—Large doses cause colic, hence remedy is best given with other diuretics.

Scopola.—*U. S. P.*

(Japanese Belladonna).—Dried rhizome of Scopola Carniolica, Jacquin. Solanaceæ.—*Habit.:* Japan; Germany (Bavaria); Austro-Hungary (Carniola, Croatia, &c.); Russia.—*Etymol.:* Named for Johann Ant. Scopoli, an Austrian naturalist (1723–1788).—"Carniolica," fr. "Carniola," an Austrian province, the habitat of the plant.—More or less curved, cylindr. or sl. vertically flattened pieces 1–3 in. (25–75 Mm.) long & $^1/_3$–$^2/_3$ in. (8–16 Mm.) broad; extern., yellowish-brown to dark brownish-gray; wrinkled longitud.; short & sharp fract.; alm. inodor.; taste sweetish, then bitter & strongly aerid.—*Constit.:* Scopolamine (hyoscine); atropine; hyoscyamine.—Mydriatic; Hypn.; Analg.; Antiphlogistic.—*Uses:* As of belladonna.—*Extern.*, in rheumat.—*Doses:* 1–3 grains (0.06–0.2 Gm.). — Fld. extr., 1–3 ♏ (0.06–0.2 Cc.). — *Antid.*, As of belladonna.

Scopolamine Hydriodide Merck (1750

$C_{17}H_{21}NO_4.HI$.—Colorl. cryst.—*Uses, Doses, &c.:* As of the hydrobromide.

Scopolamine Hydrobromide Merck.—True (1750

Salt of alkaloid fr. roots of var. plants of Solanaceæ, chemically, physiologically, & clinically identical w. hyoscine.—$C_{17}H_{21}NO_4.HBr+3H_2O$. —Colorl., hygrosc. cryst. — Levorotatory. — *Sol.* W., A.—Mydr.; Sedat.—*Uses: Extern.*, in ophthalm. instead of atropine; subcut. for the insane.—*Inj.* $^1/_{240}$–$^1/_{60}$ grain (0.00025–0.001 Gm.); 6–7 drops of a 0.1–0.2 % solut. instilled into eye. — *Max. D.* $^1/_{60}$ grain (0.001 Gm.) single; $^1/_{20}$ grain (0.003 Gm.) p. d.—Recently advocated for producing general anesthesia, in doses of $^1/_{100}$–$^1/_{60}$ grain (0.0006–0.001 Gm.) together w. morphine hydrochloride $^1/_6$ grain (0.01 Gm.), by inj. every hour for 3 doses.—*Antid.*, emetics, stomach pump, muscarine, tannin, animal charcoal, catharties, &c.

Scopolamine Hydrochloride Merck (1750

$C_{17}H_{21}NO_4.HCl+2H_2O$.—Wh. cryst.—*Sol.* W.—*Uses, Doses, &c.:* As of the hydrobromide.

Scopolamine Methylbromide Merck (2000

Wh. cryst.—*Sol.*, eas. W. & dil. A.; diffic. cold absol. A.; insol. E. — *Melt.* 216–217° C. w. decomp.

Scopolamine Sulphate Merck (1750

$(C_{17}H_{21}NO_4)_2.H_2SO_4$.—Colorl., cryst. powd.—*Sol.* W.—*Uses, Doses, &c.:* As of the hydrobromide.

Scopoline Merck (1500

Decomp. prod. of scopolamine.—$C_8H_{13}NO_2$.—Wh. cryst.—*Sol.* W., A.—*Melt.* 110° C.—*Boil.* 241–243° C.—Devoid of mydriatic properties.

Scordium

(Water Germander; English Treacle; Wood Garlic).—Herb of Teucrium Scordium, L. Labiatæ. — *Habit.:* Europe. — *Etymol.:* Grk. "skordion," garlic, referring to the odor of the plant. "Teucrium" is the Grk. name of the plant.—Fresh herb has a garlicky odor, & a bitter, sharp taste.—*Constit.:* Scordein; volat. oil; tannin.—Diaph.; Tonic; Anthelmint.; Antifermentative; Antisyphilitic.

Scorzonera

(Viper's Grass; Winter Asparagus; Black Salsify).—Root of Scorzonera hispanica, L. Synan-

thereæ, Compositæ.—*Habit.:* Europe; Orient; extensively cultiv.—*Etymol.:* Italian "scorza," bark, & "nera," black. Or, fr. Spanish "escorzonera," fr. "escorzon," poison toad, as the plant is used in Spain as a certain remedy for bites of poisonous creatures.—*Constit.:* Starch; pectin.—Febrif.; Dietet.; Aper.

Scrophularia

(Figwort; Water Figwort; Pilewort; Scrofula Plant; Throatwort).—Herb & root of Scrophularia nodosa, L. Scrophulariaceæ.—*Habit.:* Europe.—*Etymol.:* Lat. "scrophula," scrofula, dim. of "scrofa," the hog, referring to the similarity in appearance of the tuberous roots to the swollen cervical glands of the hog.—*Constit.:* Bitter principle.—*Uses:* Domestic remedy in swellings, scrofula, & cutaneous dis.—*Dose:* Fld. extr., 30–60 ♏ (2–4 Cc.).

Scullcap.—see **Scutellaria**

Scurvy Grass, or *Scurvy Weed.*—see **Cochlearia**

Scutellaria.—*U. S. P.*

(Skullcap; Helmet Flower).—Dried plant of Scutellaria lateriflora, L. Labiatæ.—*Habit.:* British America, south to Florida & New Mexico.—*Etymol.:* Lat. "scutella," a small dish, referring to the shape of the appendage to the fruiting calyx. The appendage is also believed to resemble a cap in shape, hence its popular name, skullcap.—*Constit.:* Scutellarin, $C_{10}H_8O_2$; volat. oil; tannin.—Sed.; Antispasm.; Tonic.—*Uses:* Neural., delir. trem., nerv. exhaust., & chorea.—*Doses:* Extr., 5–10 grains (0.3–0.6 Gm.).—Fld. extr., 30–60 ♏ (2–4 Cc.).

Scutellarin (20

Non-toxic principle fr. root Scutellaria lateriflora, L.—$C_{10}H_8O_2$.—Flat, yellow need.—*Sol.* A., E., & alkalies.—*Melt.* 199° C.—Tonic, Nerve Sed.—*Uses:* Chorea & insomnia.—*Dose* $^3/_4$–4 grains (0.05–0.25 Gm.).

Sea Wrack.—see **Fucus**

Secale Cornutum.—see **Ergot**

Secornin

(Ergotin Keller).—An ergot extr. cont. the alkaloid in undecomp. form, & exceed. active.—15 grains (1 Gm.) = 60 grains (4 Gm.) ergot, or $^1/_8$ grain (0.008 Gm.) amorph. cornutine.

Sedatin.—see **Valerydin**

Sedatine.—see **Antipyrine**

Seignette Salt.—see **Potassium & Sodium Tartrate**

Seiler's Indigocarmine-Boraxcarmine

Consists of 3 soluts.: (*a*) 1 Gm. carmine, 3 Gm. borax, 150 Cc. W., & 330 Cc. A.; (*b*) 10 Cc. hydrochloric acid & 40 Cc. A.; (*c*) 4 drops satur. aqu. solut. indigo-carmine in 60 Cc. W.—*Uses:* Staining histological specimens. The sections are first stained with (*a*), then washed w. (*b*), & then placed in (*c*).

Selenic Hydroxide.—see **Acid Selenic**

Selenious (Selenous) Hydroxide.—see **Acid Selenous**

Selenium Merck.—Sticks (40

Etymol.: Fr. Grk. "selene," moon, because in the ores it accompanies tellurium, just as the moon does the earth. Discovered by Berzelius in 1817.—Non-metal. element.—Se.—Grayish-black sticks w. greenish reflect.—*Sol.*, v. sl. in CS_2 & in H_2SO_4.—*Uses:* Photometry, in glass making, & electrical experiments.

do. Merck.—Precipitated (80

Red, amorph. powd.—*Sol.* CS_2 & H_2SO_4.—*Uses:* Prurigo, pruritus, & eczema, in 1:15 oint.—*Techn.*, as imbedding material for diatoms in microscopy.

do. Merck.—Cryst. (900

Dark-red cryst.—*Sol.*, CS_2; H_2SO_4.—*Melt.* 217° C.

Selinum

(Marsh Parsley; Marsh Smallage).—Selinum (Peucedanum) palustre, L. Umbelliferæ.—*Habit.:* Europe.—*Etymol.:* Grk. "selene," moon, referring to the shape of the seeds. Lat. "paluster," swampy, referring to its frequenting swampy ground.—*Constit.:* Volat. oil; soft resin; gum; sugar.—Emmen.; Diur.; Antispasm.—*Uses:* Domestic remedy in epilepsy & whoop.-cough.

Selmi's Reagent.—For alkaloids

Satur. solut. iodic acid in sulphuric acid.—Affords various color reactions w. alkaloids.

Semecarpus

(Oriental Cashew-nut; Malacca-nut; Marany-nut; Marking-nut; Marsh-nut; Acajou-nut; Mangle).—Fruit of Semecarpus anacardium, L. Anacardiaceæ. See also Anacardium.—*Habit.:* East Indies.—*Etymol.:* Grk. "semeion," a mark, and "carpos," fruit, *i.e.*, the fruit yields an indelible stain.—Ovate, heart-shaped, flattish, 1 in. (25 Mm.) long, blackish-brown fruit; pericarp contains a brown acrid juice; seed is white, mild, & oily.—*Constit.:* Cardol; anacardic acid; tannin; resin; gum. Seeds contain bland fixed oil.—*Uses: Medic.: Intern.*, in neurasth., sciatica, paralys., &c.—*Extern.*, rubefac., epispas., & caust. (fr. presence of cardol in pericarp).—*Techn.*, manuf. indel. ink, coloring fats & oils black, & making the so-called "Silhet's varnish or lacquer" for iron & stone vessels.—*Dose:* Decoct. (1:16), 4 fl. dr. (15 Cc.) in neurasth., sciatica, paralysis, &c.

Semicarbazide Hydrochloride Merck (450

(Amidourea Hydrochloride).—$NH_2.CO.NH.NH_2.HCl$.—Wh., cryst. powd.—*Sol.* W.

Seneca Oil.—see **Petroleum**

Senecin (17

Eclectic resinoid fr. Senecio vulgaris, L.—Brown powd.—*Sol.* A.—Emmen.; Emetic; Astring.—

Uses: Amenor., dysmenor., hepatitis, & hemoptysis.—*Dose* 1–3 grains (0.06–0.2 Gm.).

Senecio Aureus

(Golden Ragwort; Squaw Weed; Life Root).—Root & herb of Senecio aureus, L. Compositæ.—*Habit.:* Canada & eastern U. S.—*Etymol.:* Fr. Lat. "senex," an old man, referring to the hoary appearance of some species, or to the white pappus. Lat. "aureus," golden, refers to the golden-yellow color of the flowers.—Diur.; Emmen.; Diaph.; Tonic.—*Uses:* Dysmenorrh., amenorrh., dropsy, & diseases of genito-urin. tract.—*Doses:* Extr., 2–10 grains (0.12–0.6 Gm.).—Fld. extr., 10–60 ♏ (0.6–4 Cc.).

Senecio Jacobæa

(Tansy Ragwort; Staggerwort; St. James'-wort).—Herb of Senecio Jacobæa, L. Compositæ. Synantherææ.—*Habit.:* Europe; Asia; advent. in U. S.—*Etymol.:* Lat. "senex," old, referring to the usually bald appearance of the receptacle after blossoming. Named for St. James (Lat. "St. Jacobus") because it blossoms toward the end of July (Jacobi).—*Constit.:* Senecin.—Antispasm.; Emmen.—*Uses:* Catamenial disorders; functional amenor.—*Dose:* Fld. extr., 20 ♏ (1.3 Cc.).

Senecio Vulgaris

(Groundsel; Birdseed; Chicken-weed; Sencion).—Herb of Senecio vulgaris, L. Compositæ.—*Habit.:* Europe; natur. in U. S.—*Etymol.:* "Senecio," see preceding. Lat. "vulgaris," common.—*Constit.:* Senecionine; senecin.—Emmen.—*Uses:* Dysmenor. & amenor.—*Doses:* Fld. extr., 30–60 ♏ (2–4 Cc.) in dysmenor.; 10–20 ♏ (0.6–1.3 Cc.) in amenor.

Senega.—*U. S. P.*

(Senega Snakeroot; Seneca Root; Rattlesnake Root).—Dried root of Polygala Senega, L. Polygalaceæ.—*Habit.:* North America (Canada to S. Carolina, & west to Wisconsin).—*Etymol.:* "Senega," fr. the Seneca tribe of American Indians who used the plant as a remedy in snake bites—hence also its name, rattlesnake-root. "Polygala," fr. Grk. "polys," much, & "gala," milk, *i.e.*, it is supposed to increase the secretion of milk.—Somewh. cylindr., tapering branches & a few rootlets; 3–6 in. (7–15 Cm.) long & $^1/_6$–$^1/_3$ in. (4–8 Cm.) thick; extern., yellowish-gray or brownish-yellow, longit. wrinkled; short fract.; wood, light yellow; sl. nauseous odor; sweetish, then acrid taste.—*Constit.:* Senegin (polygalin), $C_{32}H_{52}O_{17}$; saponin; polygalic acid; fixed & volat. oils; resin; polygalite; sugar.—Expector.; Diur.; Diaph.; Alter.; Sed.—*Uses: Intern.*, in coughs, colds, croup, rheumat., dropsy, asthma, &c.—*Extern.*, irritant.—*Doses:* 5–30 grains (0.3–2 Gm.).—Alcoh. extr., 1–3 grains (0.06–0.2 Gm.).—Aqu. extr., 1–3 grains (0.06–0.2 Gm.).—Fld. extr., 5–15 ♏ (0.3–1 Cc.).

Senegin Merck (425

(Senega Saponin; Polygalic Acid).—Saponin-like glucoside fr. root Polygala Senega, L.—$C_{32}H_{52}O_{17}$ (Hesse).—Yellowish-wh. to brown powd.; darkens on heating to 195° C.—*Sol.* W.—Expector.; Diur.; Emetic.—*Uses:* Catarrh, croup, dropsy.—*Dose* $^1/_2$–2 grains (0.03–0.12 Gm.).

Senna.—*U. S. P.*

Dried leaflets of Cassia acutifolia, Delile (Alexandria senna), or of C. angustifolia, Vahl (India or Tinnevelly senna). Leguminosæ. Cæsalpiniæ.—*Habit.:* Nubia; Barbary; Abyssinia; Egypt (Alexandria); Southern India (Tinnevelly).—*Etymol.:* Fr. "saena," the Arabian name of the drug.—*Constit.:* Cathartic acid; chrysophanic acid; sennacrol; sennapicrin; cathartomannite; emodin; anthraglucosennin; glucosennin; sennarhamnetin; sennanigrin.—Lax.; Purg.—*Uses:* Constip., & febrile condit.—*Doses:* 30–180 grains (2–12 Gm.).—Alcoh. extr., 10–40 grains (0.6–2.6 Gm.).—Fld. extr., 1–4 fl. dr. (4–15 Cc.).—Aqu. extr., 30–75 grains (2–5 Gm.).

Senna Pods

Pods of various spec. of senna (see latter).—*Habit. & Etymol.:* See Senna.—Pods are flat, elliptical, obtuse, membranous, smooth, grayish-brown; abt. 1 in. (25 Mm.) long & $^1/_2$ in. (12 Mm.) broad, but scarcely curved.—*Constit.:* Cathartic acid.—Purgative (milder than the leaves).

Sepia

(Cuttle-fish Bone).—Calcareous substc. under the skin of the back of Sepia officinalis, L. Cephalopoda.—*Habit.:* Mediterranean Sea; Atlantic & Pacific Oceans.—*Etymol.:* Grk. "sepia," the cuttle fish.—*Constit.:* Calcium carbonate & phosphate; gluten.—*Uses:* Polishing agent, & in tooth powders.

Serenoa.—see **Sabal**

Serge Blue.—see **Ethylene Blue**

Serpentaria.—*U. S. P.*

(Virginia Snakeroot; Snakeroot; Snakeweed; Sangrel; Birthwort).—Dried rhizome & roots of Aristolochia Serpentaria, L. (Virginia Serpentaria), & of A. reticulata, Nuttall (Texas Serpentaria). Aristolochiaceæ.—*Habit.:* U.S.—*Etymol.:* Lat. "serpens," snake, *i.e.*, the root is used in Virginia in snake bites. "Aristolochia," fr. Grk. "aristos," best, & "locheia," childbirth, *i.e.*, it was once thought to favor parturition. "Reticulata," fr. Lat. "reticulatus," netted, referring to the reticulate leaves.—*Constit.:* Aristolochine, $C_{22}H_{22}NO_{13}$(?); volat. oil; resin; tannin.—Diuret.; Diaph.; Tonic; Emmen.; Aphrodis.; Antiper.; Stim.; Expector.—*Uses:* Intermit. fever, w. or without quinine; in cutan. affect., diphth., amenor., & bronch.—*Doses:* 5–30 grains (0.3–2 Gm.).—Alcoh. extr., 1–5 grains (0.06–0.3 Gm.).—Fld. extr., 10–30 ♏ (0.6–2 Cc.).—Tinct., 30–120 ♏ (2–8 Cc.).

Serpyllum

(Wild Thyme; Creeping Thyme; Horse Thyme).—Herb of Thymus Serpyllum, L. Labiatæ.—

Habit.: Europe; northern Asia; adv. in U. S.—*Etymol.:* Grk. "herpein," to creep, because of the creeping character of the root, & "thymos," strength, because of the invigorating odor.—*Constit.:* Volat. oil; resin; bitter principle; tannin.—Rubefac.—*Uses:* Baths; also for making pillows.

Serum Antidiphtheric.—*U. S. P.*

(Diphtheria Antitoxin).—Fld. separated fr. coagul. blood of a horse immunized through inoculation w. diphtheric toxin.—Yellowish or yellowish-brown, transp. or sl. turbid, liq.; odorl., or w. sl. odor due to antiseptic used as preservative.—Sp. Gr. 1.025–1.040 at 25° C.—*Dose:* For well persons, 500 units as immunizer; average dose, 3,000 units.—*Caut.* Should be kept in sealed glass containers, in a dark place, at 4.5–15° C.

Note.—Antidiphtheric serum gradually loses its power, the loss varying from 10–30 per cent. in 1 year.

Serum Antistreptococcic Menzner-Merck

Fr. blood of horses rendered immune by treatment w. highly virulent streptococcic cultures.—*Uses:* By inj. in erysip., puerperal fev., septicemia, phlegmons, anginas, broncho-pneum., & mixed infections.—*Dose:* First, 5 fl. dr. (20 Cc.); after 24 hours, 150 ♏ (10 Cc.), continuing until reduced temperature remains permanent.

Serum Antivenomous Calmette-Merck

Blood serum of asses or horses immunized against snake venom.—Immunizing power 1:10,000, *i.e.*, a quantity equal to $^1/_{10000}$ the weight of a live rabbit will suffice to neutralize the action of $^1/_{60}$ grain (0.001 Gm.)—the absolute, lethal dose—of the dried venom of the Cobra di Capello, when subsequently ingested. The serum may also successfully be used on the human being & on animals in bites from Bungarus cœruleus, Bothrops lanceolatus, black Naja, Crotalus horridus, horned viper, Cape mountain adder, Echis carinata, Lachesis, Pelias berus, also stings of Trachinus draco & scorpions. In the treatment, a ligature is first placed above the bitten part, then the hands are washed with a 1:60 chloriuated-lime solution, & the serum then injected (150 ♏ [10 Cc.] for children; 300 ♏ [20 Cc.] for adults). Around about the bitten part 120–150 ♏ (8–10 Cc.) of the chlorinated-lime solution are injected into each of 3–4 places, into the connective tissue in order to decompose the still unabsorbed poison in loco. Profuse perspiration is induced by giving hot tea & coffee. Alcohol is to be avoided. If the danger is exceedingly grave, the serum must be injected intravenously.

Serum-casein. } —see **Globulin, Para-**
Serum-globulin. }

Seseli.—see **Siler**

Seven Barks.—see **Hydrangea**

Shellac

(Lacca).—Resin-exudate caused by the puncture by Coccus Lacca, Hemiptera, of the bark of various resiniferous spec. of Schleichera, Butea, Ficus, &c.—*Habit.:* East Indies.—*Etymol.:* Fr. "lacca," the Lat. name for the subst'c.—*Constit.* Laccaic acid, $C_{16}H_{12}O_8$; erythrolaccin, $C_{14}H_8O_5 \cdot H_2O$; wax; resins; bitter subst'c.—*Uses:* Techn., in lacquers, varnishes, polishes, & cements.

Shepherd's Purse.—see **Capsella**

Sideritis

(German Ironwort).—Herb of Sideritis hirsuta, L. Labiatæ.—*Habit.:* Middle & southern Europe.—*Etymol.:* Grk. "sideros," iron, referring to its use as a remedy for wounds caused by iron.—*Constit.:* Volat. oil; tannin; bitter principle.—*Uses:* Domestic Antipyr. & Emmen.; also in aromat. baths.

Sideroxylon

(Downward Plum; Saffron Plum; Ants' Wool).—Bark of Sideroxylon (Achras) obovatum, Gaert. Sapotaceæ.—*Habit.:* Queensland (Australia).—*Etymol.:* Fr. Grk. "sideros," iron, & "xylon," wood, *i.e.*, the wood is very hard.—*Uses:* Tonic & Astring.

Sidonal (75

(Piperazine Quinate).—Wh. powd.—*Sol.* W.—Uric-acid solvent.—*Uses:* Gout.—*Dose* 15–20 grains (1–1.3 Gm.) 5 or 6 t. d.

Sidonal "New" (40

(Quinic-acid Anhydride).—Wh., cryst. powd.—*Sol.* W.—Uric-acid solvent.—*Uses:* Gout, &c.—*Dose* 30–45 grains (2–3 Gm.).

Siegesbeckia

(Herbe de Flacq.; Guérit vite).—Herb of Siegesbeckia orientalis, L. Compositæ. Synantheræ.—*Habit.:* Tropical Asia; South America; Mauritius.—*Etymol.*. Named for J. G. Siegesbeck (lived in Petersburg, 1736).—*Constit.:* Darutyn.—Antiscrof.; Antisyphil.; Antipodagr.—*Uses:* Various cutan. diseases.—Alcoholic tinct. is used.

Sierra Salvia.—see **Artemisia Frigida**

Silberol=Silver Phenolsulphonate.—see **Silver Phenolsulphonate**

Siler

(Seseli; Horse Caraway).—Seeds of Siler trilobum, Scop. Umbelliferæ.—*Habit.:* Southern Europe.—*Etymol.:* "Siler" was originally the Lat. name of a species of willow; derived fr. "sium," fr. the Grk. "sion," a water-parsnip, fr. the Celtic "siw," water. The term "seseli" was used already in Dioscorides' time, & is probably derived fr. some oriental language.—*Constit.:* Volat. oil.—*Uses:* Chiefly in veterinary practice as a carminative.

Silica.—see **(Acid) Silicic Anhydride**

Siliceous Earth.—see **Kieselguhr**

Silicium.—see **Silicon**

Silicon Merck.—Amorph. (100

(Silicium).—*Etymol.:* Fr. Lat. "silex," siliceous sand, pebbles. Discovered in 1823 by Berzelius, who, however, desired to call the element simply "Kiesel," fr. the German "Kieselstein," the equivalent of "silex."—Non-metal. element.—Si.—Gray, amorph. powd.; takes fire if heated in air.—*Sol.*, alkalies.

do. Merck.—Cryst. (200

Hard, black, or grayish-black, lustr. leaflets, resembling graphite; unchangeable on igniting in air.—*Sol.*, alkalies.—*Uses:* Pure silicon has heretofore not found extensive use technically; its alloys have, however, been used (*e.g.*, silicon bronze in telephone & telegraph wires); furthermore silicon carbide (corundum) is technically valuable as an abrasive & polishing agent.

Silicon Bromide Merck (125

(Silicon Tetrabromide).—$SiBr_4$.—Colorl., fum. liq.; disagrc. odor.—Sp. Gr. 2.813 at 0° C.—Decomp. into hydrobromic & silicic acids by W.—*Boil.* 154° C.

Silicon Chloride Merck (20

(Silicon Tetrachloride).—$SiCl_4$.—Clear, colorl., very mobile, fum. liq.; suffocating odor.—Sp. Gr. 1.524 at 0° C.—*Boil.* 58° C.—*Incomp.* W.—*Uses:* Electrotechn.

Silicon-copper Merck (35

(Copper-Silicide).—Alloy of silicon & copper formed electrolytically.—Hard, tough bronze.

Silicon-magnesium Merck (275

(Magnesium Silicide).—Mg_2Si.—Leaflets; metallic luster.

Silicon Tetrabromide.—see **Silicon Bromide**

Silicon Tetrachloride.—see **Silicon Chloride**

Silkweed.—see **Asclepias Syriaca**

Silver Merck.—By Electrolysis (100

Etymol.: "Silver," fr. Old English "selver," or Anglo-Saxon "seolfor." The Lat. "argentum," fr. same root as Grk. "argyros," & referring to the color "argos," white, of the metal.—Metal.—Ag.—Fine, silver-gray powd.

do. Merck.—Precip. (30

do. Merck.—Sheets (70

Uses: Jewelry, silver leaf, wire, castings, alloys, soldering silver objects, & making chemical, pharmaceutical, & photographic salts, &c.

Silver Merck.—Reagent (100

Ag.—Wh., lustr. met.—*Sol.* HNO_3; hot conc. H_2SO_4; insol. HCl, dil. cold H_2SO_4. — *Tests:* (*Foreign Met.*) diss. 2 Gm. in v. sm. quant. HNO_3 (sp. gr. 1.2) – solut. colorl., & no res. (Sb; Sn); dil. w. H_2O – no turb. (Bi); add HCl & boil to ppt. all the Ag; let ppt. settle in dark place; filter; evap. filtrate – no wghble res.—*Uses:* Standardizing volumetric soluts. of NaCl; reducing oxides of nitrogen in ultimate organic analysis.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Silver Acetate Merck.—Pure (60

$AgC_2H_3O_2$. — Wh. cryst. — *Sol.*, boiling W. — *Uses:* 1% solut. to prevent purulent ophthalmia in new-born infants. — *Caut.* All silver salts should be kept fr. light & fr. organic matter.

Silver Arsenite Merck (65

Ag_3AsO_3.—Yellow powd.—Insol. W., A.—Alter.; Antisep.—*Uses:* Skin dis.—*Dose* $^1/_{100}$–$^1/_{60}$ grain (0.0006–0.001 Gm.).—*Caut.* Poison!

Silver Benzoate Merck (40

$AgC_7H_5O_2$.—Wh. powd.—*Sol.*, hot W.; v. sl. A.

Silver Bichromate.—see **Silver Dichromate**

Silver Borate Merck (55

$3Ag_2O.4B_2O_3$ (when freshly made).—Wh. powd.; decomposes on long keeping.—*Sol.*, ammonia, & in solut. potass. cyanide.

Silver Bromate (65

$AgBrO_3$.—Heavy, wh. powd.—*Sol.*, sl. in W.—Decomp. w. heat.—*Caut.* Keep in amber bots.

Silver Bromide Merck (23

AgBr.—Yellowish powd.—*Sol.*, conc. ammonia, & in solut. of potass. cyanide & bromide, & in solut. sod. thiosulphate.—*Uses:* Photo.—*Caut.* Keep fr. light.

Silver Carbonate Merck (50

Ag_2CO_3.—Yellowish, heavy powd.; decomp. by heat. into carbon dioxide & silver oxide.—*Sol.*, in HNO_3 & solut. potass. cyanide; insol. W., A.

Silver Chloride Merck (17

AgCl.—Wh. powd.; blackens on expos. to light.—*Sol.*, amm., potass. thiosulphate, & potass. cyanide.—Antisep.; Nerve Sed.—*Uses:* Chorea, gastralgia, epilepsy, pertussis, diar., & var. neuroses.—*Techn.*, manuf. pure silver, silver-plating by wet & cold process, in analysis, photometry, photography, coloring mother-of-pearl buttons, polishing powd. for German silver, &c.—*Dose* $^1/_3$–$^3/_4$–$1^1/_2$ grains (0.02–0.05–0.1 Gm.) in pills 3–4 t. p. d.—*Caut.* Keep in dark bot.

Silver Chromate Merck (70

Ag_2CrO_4.—Dark-red cryst.—*Sol.*, ammonia.

Silver Cinnamate Merck (70

(Silver Cinnamylate).—$AgC_9H_7O_2$.—Heavy; wh. powd.—*Sol.*, sl. W. & A.—*Caut.* Keep dark.

Silver Citrate Merck (24

$Ag_3C_6H_5O_7$.—Wh. powd. or need.; darkens in light.—*Sol.* 4,000 W.—*Uses:* Surg. antisep. in powd. form. as disinf., in 0.2–0.25% solut.; in acute gonor., 0.25 : 2000, as inject. 4 t. p. d.; as gargle, lotion, & wash, in 0.1–0.5:1000 aqu. solut.—*Caut.* Prepare solutions fresh!

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Silver, Colloidal.—see **Collargol**

Silver Cyanide Merck.—Pure (25

AgCN.—Wh. powd.; odorl., tastel.; turns dark on expos. to light.—*Sol.*, potassium cyanide, ammonia, boiling dil. nitric acid, sodium thiosulphate; insol. W., A.—Antipyr.; Sed.—*Uses:* In making hydrocyanic acid; sometimes employed in epilepsy & chorea.—*Dose* $^1/_{60}$–$^1/_{20}$ grain (0.001–0.003 Gm.) in pills.—*Antid.*, ammonia, chlorine, mixt. of ferric & ferrous sulphates, artif. respir., stomach siphon. — *Caut.* Great care! Poison!

Silver Dichromate Merck (60

$Ag_2Cr_2O_7$.—Violet-red, cryst. powd.—*Sol.*, sl.W.

Silver Eosolate (150

Silver salt of trisulphoacetylguaiacol.—$C_6HO.CH_3.OC_2H_8O.Ag_3(SO_3)_3$.—50% Ag.—Antisep.—*Uses:* Gonor.—*Appl.*, 2% oint., or bougies.—*Inj.*, 1:200 solut.

Silver Fluoride Merck (150

AgF.—Yellow, v. deliq. cryst. conglomerations; darkens in light.—*Sol.* W.—Strong Antisep.

Silver-Ichthyol.—see **Ichthargan**

Silver Iodate Merck (50

$AgIO_3$.—Wh. powd.—*Sol.*, sl. boil. W.—Astring.—*Uses:* Acute & chronic diar.—*Dose* $^1/_{12}$–$^1/_6$ grain (0.005–0.01 Gm.).

Silver Iodide Merck.—Pure (20

AgI.—Light yellow powd.; odorl.; tastel.; affect. by light.—*Sol.*, solut. potass. iodide or cyanide, amm. thiosulphate.—Alterative.—*Uses:* Gastralgia & syph.—*Dose* $^1/_4$–1 grain (0.015–0.06 Gm.) in pills.—*Caut.* Keep fr. light.

Silver Lactate Merck (25

$AgC_3H_5O_3 + H_2O$.—Wh. cryst., or powd.; affected by light.—*Sol.*, abt. 20 cold W.; more sol. in hot W. — Antisep.; Astring. — *Uses:* Sore throat, gonor.; intraparenchymatously in acute & chron. infect. diseases.—*Dose* $^1/_6$ grain (0.01 Gm.).—*Appl.*, as surg. antisep. solut. 1–2:4000; as wash & gargle 1 teaspoonful of 1:50 solut. to 1 glass water.

Silver Nitrate Merck.—Cryst. (11

$AgNO_3$.—Colorl., rhombic plates; odorl.; bitter, caustic, metal. taste; rapidly reduced by org. matter in light.—*Sol.*, abt. 1 W., 26 A., at 15° C.; 0.1 boil. W. & 5 boil. A.; (0.54 W., 24 A. at 25° C., U. S. P.).—*Melt.*, abt. 200° C.—Antisep.; Alter.; Stim.; Eschar.; Irrit. — *Uses: Intern.*, epilepsy, locomotor ataxia, tabes dorsalis, typhoid fever, chronic diar., subacute gastritis, catarrh of gall duct, gastric ulcer, &c.—*Extern.*, in 2% solut. as inj. in gonor. Caustic for warts, wounds, ulcers; in odontalgia following exposure of neck of tooth, in subst'ce or solut.; in ophthalmic practice in 0.2–0.5–1–5% solut.; as enema in 0.1–0.5–1% solut.; as paint for intern. & extern. hemorrhoids, in 2% solut.—*Techn.*, extensively in photo. & as reag. by chemists; in sympathetic & indelible inks; dyeing hair, mother-of-pearl, &c.; silver-plating metals, alloys & glass; manuf. yellow & red glass; etching ivory; manuf. silver salts.—*Dose* $^1/_8$–$^1/_2$ grain (0.008–0.03 Gm.). When given long internally, skin bec. blue-black.—*Antid.*, table salt (not in too large a quantity, however, as it irritates the stomach), ammon. chloride, mucilaginous drinks, emetics, stomach siphon, white of egg, milk, &c.—*Incomp.*, acetates, alcohol, alkalies, antimony salts, arsenites, bromides, carbonates, chlorides, chromates; creosote, cyanides, copper salts, extracts, ferrous sulphate, hypophosphites, iodides, morphine salts, oils, manganous salts, organic substances, phosphates, sulphides, sulphates, tannic acid, tartrates, veget. astring. infusions & decoctions. —*Caut.* Keep in the dark, with care. Poison!

Silver Nitrate Merck.—Diluted.—67% (9

(Mitigated Lunar Caustic, No. 2).—By melting together silver nitrate & potass. nitrate.—White sticks.—*Sol.* W.—Antisep.; Escharotic.—*Uses: Extern.*, where pure lunar caustic is too strong.

do. Merck.—50% (8

(Mitigated Lunar Caustic, No. 3).

do. Merck.—*U. S. P.*—33⅓% (7

(Mitigated Lunar Caustic, No. 4).—$AgNO_3$, fused w. twice its wt. KNO_3.

Silver Nitrate Merck.—Fused.—Pure (12

(Molded Silver Nitrate; Lunar Caustic).—Cryst. silver nitrate fused w. 4% hydrochl. acid.—Wh., hard solid; fibrous fracture; odorl.; bitter, metal., caustic taste. Darkens on expos.—*Sol.* HNO_3 (sol. w. except. of abt. 5% AgCl in 0.54 W., 24 A. at 25° C.; 0.1 boil. W.; 5 boil. A., U. S. P.). —*Melt.* 218° C. — *Uses: Extern.*, gonor., conjunctivitis, cystitis, chronic diar., stricture of urethra, excrescences, warts, fungous growths, chancre, diphth., epididymitis, felon, hydrocele, smallpox pitting, laryngitis, tabes dorsalis, &c.; applied directly or in solut.—*Dose* $^1/_{12}$–$^1/_2$ grain (0.005–0.03 Gm.); eye wash: 1–5% in W.; enemas: 1–5% in W.

do. Merck.—Cones (14

Cont. abt. 5% AgCl.

Silver Nitrate Merck.—Reagent (30

$AgNO_3$.—Colorl., lustr. cryst. or sticks; stellate, cryst. fract.—*Sol.* 0.6 W.; abt. 10 A (80%).—Aqu. solut. neutral to litmus paper.—*Tests:* (*Cl*) 5 Gm. + 5 Cc. H_2O; add to 100 Cc. H_2O – no turb. or opalesc.—(*KNO_3*) 0.5 Gm. + 0.5 Cc. H_2O + 20 Cc. absol. A.; shake few min. – no turb. or ppt.—(*Cu; Bi; Pb*) 1 Gm. + 5 Cc. H_2O + 10 Cc. NH_4OH (sp. gr. 0.96) – solut. clear & colorl.—(*Impur. not pptd. by HCl*) 2 Gm. + 50 Cc. H_2O; boil; add 3 Cc. HCl (sp. gr. 1.124); when ppt. settled, filter; evap. filtrate – no wghble res. — *Uses:* Detect., separ., & determ. halogens & cyanides;

detect. aldehydes, & chromic, arsenous, formic, & uric acids, & cotton-seed oil.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Silver Nitrate Paper

Wh. paper impregnated w. solut. silver nitrate. —*Uses:* For detection of chromic acid, arsenous acid, & phosphorus. Most sensitive reagent for arsenic, especially adapted for toxicological investigations. Also adapted for detecting uric acid in urine (brown color). — Phosphorus = black color; chromates = red color; arsenic = yellow color.

Silver Nitrite Merck.—Pure (30

$AgNO_2$. — A microcryst., alm. colorl. powd. — *Sol.* 300 W.; in boil. W. with partial decomp.

Silver Nitrite Merck.—Reagent (80

$AgNO_2$.—Sm., yellowish, acic. cryst.—*Sol.*, abt. 300 cold W.; more read. in hot W., but w. part. decomp.—*Tests:* (*Impur. not pptd. by HCl*).—2 Gm.+100 Cc. H_2O+2 Cc. HNO_3 (sp. gr. 1.153); boil; add 3 Cc. HCl (sp. gr. 1.124); when ppt. settled, filter; evap. filtrate–no wghble res. — *Uses:* Standardizing permanganate soluts.; estim. nitrites.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Silver Oxalate

$Ag_2C_2O_4$.—Wh., cryst. powd.; detonates w. heat. —*Sol.*, nitric acid.

Silver Oxide Merck (22

Ag_2O.—Heavy, brownish-black powd.; odorl.; disagr., metal. taste.—*Sol.*, v. sl. W.; insol. A.; eas. sol. in HNO_3.—Alter.; Antisep.; Irritant. —*Uses:* Syph., epilepsy, nausea, chorea, pyrosis, cardialgia, dysent., night sw., leucor., uter. inflam., venereal sores, gonor., &c.—*Techn.*, for imparting luster to glass. — *Dose* $^1/_{12}$–$^1/_6$–$^3/_4$ grain (0.005–0.01–0.05 Gm.), best, mixed w. some chalk, & put up in capsules.—*Incomp.*, ammonia water, creosote, tannin, organic matter, phosphorus; salts of bismuth, iron, copper & mercury; acids.—*Caut.* May cause explosion if triturated w. oxidizable matter.

Silver Permanganate Merck (50

$AgMnO_4$. — Dark-violet cryst. — *Sol.*, sl. W. — *Caut.* Dark-colored bot.

Silver Phenolsulphonate Merck (60

Silver Sulphophenylate; Silver Sulphocarbolate). — $C_6H_4.OHSO_3Ag$. —Wh., cryst. powd.—*Sol.* W., A.—Affected by light.—Surg. Antisep. & Astring. — *Uses:* In ophthalmic practice in 2:1000 aqu. solut.; also instead of silver nitrate (only half the strength of latter).

Silver Phosphate Merck (60

(Normal Silver Orthophosphate). — Ag_3PO_4.—Yellow powd.; turns brown w. heat.—*Sol.*, nitric acid; insol. W.—Affected by light.—*Uses:* In photogr. inst. of $AgNO_3$ for collodion emulsions.

Silver-Protalbin.—see **Largin**

Silver Quinaseptolate.—see **Argentol**

Silver Salicylate Merck (100

$C_6H_4OH.COOAg$. — Wh. to reddish-wh. cryst. —*Sol.* W., A.—Affected by light.

Silver Silvinate.—see **Silver Sylvate**

Silver Sulphate Merck (22

Ag_2SO_4.—Sm., lustr., rhombic prisms.—*Sol.*, sl. W.

Silver Sulphide Merck (75

Ag_2S.—Grayish-black, heavy powd.—Insol. W. —*Uses:* Techn., in manuf. niello.

Silver Sulphocarbolate.—see **Silver Phenolsulphonate**

Silver "Sulphoichthyolate."—see **Ichthargan**

Silver Sulphophenylate.— see **Silver Phenolsulphonate**

Silver Sylvate Merck (40

(Silver Silvinate). — $C_{20}H_{29}AgO_2$. — Brownish-gray, cryst. powd.—Insol. W. & A.

Silver Tartrate (60

$Ag_2C_4H_4O_6$.—Fine, wh. powd.

Silver Trinitrophenolate.—see **Picratol**

Silver Vitellin.—see **Argyrol**

Silver & Potassium Cyanide Merck (50

AgCN.KCN, or, $AgK(CN)_2$.—Wh. cryst.; perm't in the light.—*Sol.* 4 W. at 20° C.; 25 A. (85%). — Bactericide; Antisep. — *Uses:* One part in 50,000 destroys anthrax bacilli in blood serum. —*Techn.*, in silvering-solutions.—*Incomp.*, acids. —*Caut.* Very poisonous!

Silver & Sodium Chloride Merck (60

AgCl.NaCl, or, $AgNaCl_2$.—Wh., hard cryst.—Decomp. by W. into AgCl & NaCl.—*Incomp.* W.—*Caut.* Keep fr. light.

Silver & Sodium Thiosulphate Merck (70

$Ag_2S_2O_3.2Na_2S_2O_3+2H_2O$, or, $Ag_2Na_4(S_2O_3)_3+2H_2O$.—Wh. to gray, cryst. powd.; sweet taste. —*Sol.* W.—*Uses:* Techn.—*Caut.* Keep fr. light.

Silver & Thallium Nitrate Merck (65

V. heavy, wh., cryst. powd.—*Sol.*, eas. W.—Affected by light.—*Melt.* 75° C.—Sp. Gr. 4.5 at 15° C.—50% $TlNO_3$.—*Uses:* In mineralogy for separating minerals of sp. gr. below 4.5.

Silybum Marianum.—see **Carduus Marianus**

Simaba

(Cedron Seed; Rattlesnake Beans).—Seeds of Simaba Cedron, Planchon. Simarubaceæ. — *Habit.:* New Granada; Colombia. — *Etymol.:*

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

"Simaba Cedron" is the Guiana name of the tree. — *Constit.:* Cedrin (glucoside). — *Uses:* Remedy for malaria & dyspep., & as antidote to snake bites & dog bites; also used in chol. morbus, facial neural., gout, colic, & hydrophob. —*Dose:* Fld. extr., 1–10 ♏ (0.06–0.6 Cc.).

Simaruba

(Mountain Damson; Bitter Damson; Paradise Tree; Paraiba).—Bark of Simaruba officinalis, De C. Simarubeæ. — *Habit.:* Guiana; Martinique; Jamaica.—*Etymol.:* "Simaruba" is the Guiana name for the plant.—Long pieces, light, flexible, tenacious, fibrous; extern., light brownish-yellow; intern., pale-yellow; odorless; bitter taste.—*Constit.:* Quassin, $C_{10}H_{12}O_3$; volat. oil; resinous matter.—Tonic; Cathart.; Antipyr.—*Uses:* Anorexia, constip., &c., like quassia.—*Doses:* 8–25 grains (0.5–1.6 Gm.) sev. t. p. d. in 1:15 infus.—Alcoh. extr., 5–10 grains (0.3–0.6 Gm.).—Fld. extr., 15–60 ♏ (1–4 Cc.).

Simulo

Fruit (seeds) of Capparis coriacea, Burch. Capparideæ. — *Habit.:* Peru. — *Etymol.:* Fr. Arab. "kabar," or Grk. "kapparis," fr. "kaptein," to bite, to eat, referring to the use of the caper (Capparis spinosa) in cookery. — Antihyst.; Antiepilep. (like bromides). — *Uses:* Hyst., nervousness, & epilepsy.—*Dose:* Tinct., 60–120 ♏ (4–8 Cc.) several t. p. d.; in subacute salpingo-oöphoritis, 30–60 ♏ (2–4 Cc.).

Sinapis Alba.—*U. S. P.*

(White Mustard; Yellow Mustard; Semen Erucæ). — Seed of Sinapis alba, L. (Brassica alba, Boiss.). Cruciferæ.—*Habit.:* Europe; Asia; adv. in U. S.—*Etymol.:* Grk. "sinapi," more vigorously expressive form of "napi," mustard (fr. Celtic "nap," a turnip), referring to the pungency of the seed.—*Constit.:* Sinapine; sinalbin; myrosin; erucin; erucic acid; fixed oil; mucilage; behenic acid; sinapolic acid.—Irritant; Stim.; Rubefac.; Vesicant; Diur.; Carmin.; Dietetic. — *Uses:* Hemorrhoidal affections & in tendency to flatulence.—*Dose* 15–60 grains (1–4 Gm.); as emetic, 120 grains (8 Gm.).

Sinapis Nigra.—*U. S. P.*

(Black Mustard; Red Mustard).—Seed of Brassica nigra (L.), Koch. Cruciferæ.—*Habit.:* Europe; Asia; natur. in U. S.—*Etymol.:* See Sinapis Alba. "Brassica" fr. Celtic "bresic," cabbage, *i.e.*, fr. resemblance of the fruit. — *Constit.:* Sinigrin, $KC_{10}H_{18}NS_2O_{10}$; myrosin; sinapine, $C_{12}H_{25}NO_2$ (Gadamer); sinapine sulphocyanide; fixed oil; erucic (brassic) acid; behenic acid; sinapolic acid; myronic acid (or its potassium salt); mucilage; proteids.—Dietetic; Carmin.; Local irrit.; Rubef.—*Uses: Techn.,* source of volat. oil mustard. — *Dose* 15–60 grains (1–4 Gm.); as emetic, 120 grains (8 Gm.).

Sinistrin.—see **Inulin**

Sinkaline.—see **Choline**

Sisymbrium

(Hedge Mustard; Bank Cress; Hedge Weed). —Whole plant Sisymbrium (Erysimum) officinale, Scopoli. Cruciferæ.—*Habit.:* Middle & southern Europe; northern Asia; natur. in U. S. —*Etymol.:* Fr. Grk. "eryein," to save, referring to the curative properties of the plant. "Sisymbrion" was the Grk. name for an allied plant. — *Constit.:* Erysimin. — *Uses:* In hoarseness, colds, acute laryngeal catarrh, &c.—*Dose* 1 oz. (30 Gm.) daily, in form of decoct.

Skatol Merck.—Synthetic (5000

(Betamethylindole; Scatol).—Constit. of human feces; can be prod. by fus. egg-albumen w. potass. hydroxide.—C_9H_9N, or, $\underline{C_6H_4.C(CH_3)}:CH.\underline{NH}$. —Wh. to brownish, thin scales; v. disagr., fecal odor.—*Sol.,* hot W., A., E., C., & B.—*Melt.* 93–95° C.

Skullcap.—see **Scutellaria**

Slag Wool.—see **Glass-Wool**

Smartweed.—see **Polygonum Hydropiper**

Smilacin Merck.—Amorph.

(Parillin; Salseparin; Parillinic Acid; Sarsaparilla Saponin).—Amorph. saponin (glucoside) fr. root Smilax officinalis, Kunth, & o. sp.—Wh. to yellowish-wh. powd.—*Sol.* W., A.—Alter.; Expector.; Emetic. — *Uses:* Syph., colds, &c. — *Dose* 1–3 grains (0.06–0.2 Gm.) sev. t. p. d.

do. Merck.—Cryst. (2500

Crystallized saponin (glucoside) fr. root Smilax officinalis, Kunth, & o. sp.—$C_{26}H_{44}O_{10}+2^1/_2H_2O$. —Wh. cryst.—*Sol.* A.

Smilax.—see **Sarsaparilla**

Smilax China

(China Root).—Rhizome of Smilax China, L. Smilaceæ.—*Habit.:* China; Cochin China; Japan. —*Etymol.:* Grk. "smile," a scraper, referring to the spiny stem. "China" has reference to the habitat of the drug. — Large, ligneous, knotty pieces 2–6 in. (5–15 Cm.) & more long & 1–2 in. (25–50 Mm.) diam.; extern., grayish-brown; intern., light-flesh or yellowish-white; inodor.; sl. astring. taste.—*Constit.:* Smilacin; resin; starch. — Diur.; Antisyphil.; Antirheumat.; Antipodagr. — *Uses:* As of sarsaparilla, but less active.

Smooth Alder.—see **Alnus Serrulata**

Snake Head.—see **Chelone**

Snakeroot.—see **Serpentaria**

Snakeroot, Black.—see **Cimicifuga**

Snakeroot, Canada.—see **Asarum Canadense**

Snakeroot, European.—see **Asarum Europæum**

Snakeweed.—see **Bistort**

Sneezewort.—see **Ptarmica**

Snowberry.—see **Cahinca**

Snowdrop Tree.—see **Chionanthus**

Soap Bark.—see **Quillaja**

Soap Soft Merck (1
(Green Soap). — Soap made fr. linseed oil & KOH. — Yellowish-green, slippery, soft mass. —*Sol.*, hot W., hot A.—Detergent.; Antisep.; Disinfect. — *Uses: Extern.*, in skin diseases — eczema, itch, &c., & to facilitate resorption of chron. scrofulous & syphilitic lymphatic swellings, & of exudates in serous cavities.—*Appl.*, by inunction 1–2 t. p. d.

Soap Solution. — see **Boutron-Boudet's, & Clark's, Soap Solution**

Soapwort.—see **Saponaria**

Soda; or *Soda, Causlic.*—see **Sodium Hydroxide**

Soda-lime.—see **Sodium Hydroxide with Lime**

Soda Lye.—see **Sodium Hydroxide, Solution**

Sodium Merck (2
Etymol.: Fr. "soda," this fr. "sod-ash," the residue fr. burning masses or "sods" of marine plants. Lat. "natrium," fr. Hebrew "nether," or, fr. Spanish "natron," Arabic "natrun," native sodium carbonate. — First obtained by Davy in 1807, electrolytically.—Metal.—Na.—Light, soft, ductile, mall. metal; silver-wh. luster, where freshly cut; dull gray when oxidized by air.—*Uses:* In manuf. o. metals, dehydrating ether & o. organic compounds, & as reducer in organic chemistry. — *Caut.* Must be kept immersed in a liquid free fr. oxygen, such as naphtha or benzene.

Sodium Merck.—Reagent (4
Na.—Silvery-white when freshly cut, but rapid. bec. dull on expos. to air, & bec. covered w. crusts of NaO, NaOH, & Na_2CO_3.—Wax-like consist. at ord. temp.; brittle at low temp. — *Tests:* (*Foreign Met.*) *a:* clean 1 Gm. w. pieces of filter-paper, cut into sm. pieces, & throw into 20 Cc. cold H_2O–solut. should not be affected by $(NH_4)HS$; *b:* 1 Gm.+20 Cc. H_2O +10 Cc. HCl (sp. gr. 1.124)+aqu. H_2S–no react. — *Uses:* Prepar. volumetric soluts.; reducer; detect. HNO_3, SO_2, As; prepar. H; dehydrating agent; flux.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Sodium Abietinate.—see **Sodium Sylvate**

Sodium Acetate Merck.—Highest Purity, cryst. (1
$NaC_2H_3O_2+3H_2O$. — Colorl., monocl. cryst.; efflor. on expos.—*Sol.* 1 W., 23 A. at 25° C.; 0.5 boil. W. & 2 boil. A.—Diuretic.—*Uses:* Cystitis, dropsy, & o. dis. of urin. org.—*Techn.*, in photography.—*Dose* 15–120 grains (1–8 Gm.).

do. Merck.—Cryst. (1
Uses: Manuf. mordant for red; manuf. acetic acid, acetic ether, Schweinfurth green, &c. Requires for fusion 4 times as much heat as an equal vol. W. can take up, & the heat is v. slowly given up. The salt is hence used for filling foot-warmers (chaufferettes), milk thermophores, &c.

Sodium Acetate Merck.—Pure, fused (2
Gray sticks of radiated cryst.—*Uses:* Photogr.

Sodium Acetate Merck.—Reagent (4
$CH_3.COONa+3H_2O$. — Colorl., transp. cryst.; effloresc. in warm air.—*Sol.* 1 W.; 23 cold, 1 boil., A.—Solut. 1 Gm. in 1 Cc. H_2O is alkal. to litmus paper; it should not be reddened, or only v. sl'y, by solut. phenolphtalein. — *Tests:* (*Cl*) 1 Gm.+20 Cc. H_2O+1 Cc. HNO_3 (sp. gr. 1.153)+solut. $AgNO_3$–no react. — (H_2SO_4) 20 Cc. 1:20 solut.+solut. $BaCl_2$–no turb.—(*Heavy Met.; Ca*) 20 Cc. 1:20 solut.+aqu. H_2S–no react.; add $(NH_4)_2C_2O_4$–no react.—(*Fe*) 1 Gm. +20 Cc. H_2O+1 Cc. HCl+solut. KSCN–no red color. — *Uses:* Detect. alkaloids; separ. opium alkaloids; precip. Fe & Al; determ. H_3PO_4.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Sodium Acetotungstate Merck (4
(Sodium Acetowolframate).—Wh., cryst. powd. —*Sol.* W.

Sodium Acetsulphanilate.—see **Cosaprin**

Sodium Agaricinate
Wh., tastel. powd.—*Sol.*, eas. W.—Antihidrotic. — *Uses:* Night-sweats in phth. — *Dose* $1^1/_2$–3 grains (0.1–0.2 Gm.) at night.

Sodium Alizarinsulphonate Merck (10
(Alizarin Carmine). — Sodium salt of acid formed by acting upon alizarin w. fum. sulphuric acid. — $NaC_{14}H_5O_2.(OH)_2SO_3+H_2O$. — Orange-yellow powd.—*Sol.* W., A.—*Uses:* Dye.

Sodium Alphanaphtholbetasulphonate.—see **Sodium Naphtholsulphonate, Beta-**

Sodium Alphanaphtylaminesulphonate.—see **Sodium Naphtylaminesulphonate, Alpha-**

Sodium Alum.—see **Aluminum & Sodium Sulphate**

Sodium Amalgam Merck.—3%, 4%, 5%, & also 10% (6; 7; 8; & 10
By adding sodium in sm. pieces to mercury heated to 198° C. — Silver-wh., cryst. mass. — Decomp. by W., hydrogen being slowly generated.—*Uses:* Chem.

Sodium Amalgam Merck.—Reagent (10
Gray pieces, the size of a pea; 2% metal. sodium. —*Uses:* Reduction of metal-haloids, detect. SO_2, prepar. H, &c.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Sodium Amidobetanaphtholbetamonosulphonate.—see **Eikonogen**

Sodium Aminosuccinate.—see **Sodium Asparaginate**

Sodium Amylsulphate Merck (5

$2NaC_5H_{11}SO_4+3H_2O$.—Wh. to yellowish powd. —*Sol.* W.

Sodium Amylxanthogenate Merck (4

$(CH_3)_2.CH.CH_2CH_2O.CS_2Na$.—Yellowish, cryst. powd.—*Sol.* W.—*Uses:* Destroy phylloxera.

Sodium Anhydromethylenecitrate.—see **Citarin**

Sodium Anilinesulphonate.—see **Sodium Sulphanilate**

Sodium Anisate Merck (25

$C_6H_4.OCH_3.COONa+{}^1/_2H_2O$. —Colorl. cryst. —*Sol.* W.—Antipyr.; Antirheum.; Analg.—*Uses:* Instead of sod. salicylate in sciatica, rheum., &c.—*Dose* 5–15 grains (0.3–1 Gm.) sev. t. p. d.

Sodium Anthranilate Merck (75

(Sodium Orthoaminobenzoate). — $C_6H_4(NH_2).COONa$.—Grayish-wh. to violet-gray powd.—*Sol.* W., A.

Sodium Anthrarobinate Merck (30

Sodium compound of anthrarobin, $C_{14}H_{10}O_3$. — Dark-brown powd. — *Sol.* W., A. — *Uses:* As anthrarobin in skin diseases (psoriasis, herpes, pityriasis, &c.).

Sodium Antimonate.—see **Sodium Pyroantimonate**

Sodium Arsenate Merck. — **Highest Purity, Medicinal** (1

(Sodium Arseniate). — $Na_2HAsO_4+7H_2O$, or, $AsO(OH).(ONa)_2 + 7H_2O$. — Clear, colorless, monocl. prisms; mild, alkal. taste.—*Sol.* 1.2 W. at 25° C.; v. sol. boil. W.; spar. cold A.; alm. insol. boil. A. (U. S. P.).—Alter.; Tonic; Antisep.; Antiper. — *Uses: Intern.*, for malaria, ague, debility, anemia, chorea, & nervous dis.—Also in baths for rheum. & gout, 30–90 grains (2–6 Gm.) for a bath; in cigarettes for asthma & phth. — *Dose* ${}^1/_{60}$–${}^1/_{20}$–${}^1/_8$ grain (0.001–0.003–0.008 Gm.) 2–3 t. p. d.—*Antid.*, emetics, stomach siphon, fresh ferric hydroxide, dialyzed iron, ferric hydroxide & magnesia, demulcents, stimulants, warmth, &c.—*Caut.* Poison!

do. Merck.—Pure, cryst. (1

$Na_2HAsO_4+12H_2O$.

do. Merck.—Pure, dry (2

(Anhydrous Sodium Arsenate).—Na_2HAsO_4, or, $AsO(OH)(ONa)_2$.—Wh., amorph. powd.; odorl. —*Sol.* 3 W. at 25° C.; v. eas. boil. W.; v. spar. cold A.; alm. insol. boil. A.—*Uses:* As the cryst. salt.—*Techn.*, in dyeing w. Turkey-red oil, & in printing fabrics.

do.—Solution.—*U. S. P.*

1 Gm. anhydrous sod. arsenate in 100 Cc. W.—Clear, colorl. liq. — Alter.; Antiper.; Tonic. — *Uses:* Skin dis., chorea, neural., malaria, &c.— *Dose* 3–10 ♏ (0.2–0.6 Cc.). — *Antid.*, emetics, stom. siphon, freshly pptd. ferric hydroxide, &c.

Sodium Arsenate.— **Solution.**—*N. F.*

1 Gm. cryst. sod. arsenate in 600 Cc. W.—*Dose* 3 ♏ (0.2 Cc.).

Sodium Arsenite Merck (1

$NaAsO_2$.—Grayish-wh. powd.; absorbs carbonic acid.—*Sol.* W.; sl. A.—*Uses:* Antisep. & techn.

do. Merck.—Crude (1

$NaAsO_2$.—Gray lumps.—*Uses:* Techn., manuf. arsenical soap, for use on skins, hides, &c.

Sodium Asparaginate Merck (80

(Sodium Aminosuccinate).—$NaC_4H_6NO_4+H_2O$, or, $COONa.CH_2.CHNH_2.COOH+H_2O$.—Rhombic needles.—*Sol.* W.

Sodium Aurobromide. — see **Gold & Sodium Bromide**

Sodium Aurochloride. — see **Gold & Sodium Chloride**

Sodium Azoalphanaphtholsulphanilate.—see **Tropæoline 000, No. 1**

Sodium Azobetanaphtholsulphanilate.—see **Tropæoline 000, No. 2**

Sodium Benzenesulphonate Merck (12

(Sodium Benzolsulphonate).—$NaC_6H_5SO_3$.—Wh. cryst.—*Sol.* W.

Sodium Benzidindisazobinaphtylaminesulphonate.—see **Congo Red**

Sodium Benzoate Merck.—**Gran. or powd.** (1

$NaC_7H_5O_2+H_2O$. — Wh., amorph., gran., or cryst. powd.; odorl.; sweetish, astring. taste.—*Sol.* 1.6 W., 43 A. at 25° C.; 1.3 boil. W., 12 boil. A., (U. S. P.).—Antirheum.; Antipyr.; Antisep.—*Uses:* Rheum., gout, uremia, cystitis, lithemia, tonsillitis, gravel, phth., puerperal fever, & marasmus. Said to dry up secretions of coryza or bronch. of a cold quickly.—Also as preservative.—*Dose* 10–60 grains (0.6–4 Gm.).—As inhalations in chron. pharyngitis, 5% solut.

Note.—This article is specially adapted for wide & general use; it is carefully prepared so as to be of full strength and high purity.

do. Merck.—Fr. Natural Benzoic Acid (4

Uses, Doses, &c.: As of preceding.

Sodium Benzolsulphonate.—see **Sodium Benzenesulphonate**

Sodium Benzosulphinide

(Sodium Benzoylsulphonate or Orthosulphaminebenzoate; Sodium salt of Saccharin). — $C_6H_4(CO).SO_2.N.Na+2H_2O$. — Colorl. cryst. — *Sol.*, eas. W. — Antisep. — *Uses:* Intest. affect., keratitis, corneal opac., corneal ulcers, iritis, &c. —*Dose:* As intest. antisep., 15 grains (1 Gm.)

1-2 t. p. d. in wafers (to avoid intens. sweet taste).—*Appl.*, in ocular affect. 1-3:6 aqu. solut.

Sodium Benzosulphite Merck (6

Wh., cryst. powd.—*Sol.* W.—Antisep.—*Uses:* Locally as lotion in 0.4-5% solut.

Sodium Benzoylsulphonate.—see **Sodium Saccharinate**

Sodium Betanaphtholalphasulphonate.—see **Sodium Naphtholsulphonate, Alpha-**

Sodium Betanaphtholate.—see **Microcidin**

Sodium Biborate.—see **Sodium Borate**

Sodium Bicarbonate Merck.—Highest Purity, powder & cryst. (1

(Acid Sodium Carbonate; Baking Soda).—$NaHCO_3$.—Wh., opaque powd., or cryst. lumps; cooling, mildly alkal. taste.—*Sol.* 12 W. at 25° C.; insol. A.—Antacid; Antipyr.; Antisep.—*Uses:* Acid stom., pneum., diphth., memb. croup, diab., lithiasis, cystitis, &c.—*Techn.*, in manuf. pure sod. carbonate, mineral waters, effervesc. salts & beverages, baking powd.; treating silk & wool, & in gilding & platinum plating solutions; also chem.—*Dose* 15-60 grains (1-4 Gm.); in iodism, gout, diabetic coma, and vomit. of pregnancy 2 oz. (60 Gm.) and more p. d.—*Caut.* Should not be given as acid antidote, as it evolves large quant. of carbon dioxide.

do. Merck.—Powder (1

Sodium Bicarbonate Merck.—Reagent (2

$NaHCO_3$.—Wh., cryst. crusts, or cryst. powd.—*Sol.* 12 W.; insol. A.—Aqu. solut. sl'y alkal. to litmus paper.—*Tests:* (H_2SO_4) 2 Gm.+30 Cc. H_2O+10 Cc. HCl (sp. gr. 1.124); boil; add solut. $BaCl_2$-no ppt. within 12 hrs.—(*Si*) 5 Gm.+15 Cc. H_2O+25 Cc. HCl (sp. gr. 1.124); diss. in platin. dish; evap. solut. on W.-bath; dry res. $^1/_2$ hr. at 120° C., then diss. in 3 Cc. HCl (sp. gr. 1.124)+25 Cc. H_2O-solut. perf. clear.—(*Cl; Thiosulphate; As*) 1 Gm.+50 Cc. H_2O+5 Cc. dil. $C_2H_4O_2$+solut. $AgNO_3$-at most faint opalesc.—(H_3PO_4) 2 Gm.+20 Cc. H_2O+20 Cc. HNO_3 (sp. gr. 1.153)+10 Cc. solut. ammon. molybd.; heat to 30-40° C.-no yellow ppt. within 2 hrs.—(*Heavy Met.*) *a:* 3 Gm.+40 Cc. H_2O+8 Cc. HCl (sp. gr. 1.124)+aqu. H_2S-no react.; add 5 Cc. NH_4OH (sp. gr. 0.96)+few drops $(NH_4)HS$-no green or brown color, & no ppt.; *b:* 1 Gm.+15 Cc. H_2O+2 Cc. HCl (sp. gr. 1.124)+solut. KSCN-no red color.—(*K*) observe flame color through cobalt glass-no red (or at most transient) color.—(Na_2CO_3) *a:* 1 Gm.+20 Cc. H_2O; diss. at not above 15° C., & avoid excess. shaking; add 3 drops solut. phenolphtalein-no immed. red color, or if any, it should disapp. on add. 0.2 Cc. decinorm. HCl; *b:* dry 1 Gm. over H_2SO_4; ignite-residue not more than 0.638 Gm.—(NH_3) heat 1 Gm. in test-tube-no NH_3 vapors evolved (test w. moist curcuma paper).—(*HSCN*) 1 Gm.+3 Cc. HNO_3 (sp. gr. 1.153)+47 Cc. H_2O+1 drop solut. $FeCl_3$-no red color.—*Uses:* Detect. alkaloids in forensic analysis; starting material for volumetric soluts., etc.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Sodium Bicarbonate Saccharated.—*N. F.*

Sod. bicarb., 3, & powd. sugar, 1.

Sodium Bichromate.—see **Sodium Dichromate**

Sodium Bifluoride Merck (2

NaF.HF.—Wh., cryst. powd.—*Sol.* W.—Powerful Antisep.—*Uses:* Preservative, etching glass, & fixing zoological specimens.

Sodium Bilactate Merck (10

$NaH(C_3H_5O_3)_2$.—Colorl. liq.—*Sol.* W., A.

Sodium Binoxalate Merck (2

(Acid Sodium Oxalate).—$NaHC_2O_4$.—Wh., monocl. cryst.—*Sol.* 60 W. at 15° C.—*Uses:* Techn.—*Caut.* Poison!

Sodium Biphosphate.—see **Sodium Phosphate, Monobasic**

Sodium Bipyrophosphate.—see **Sodium Pyrophosphate, Acid**

Sodium Bisulphate Merck.—Pure, cryst. (1

(Acid Sodium Sulphate).—$NaHSO_4+H_2O$.—Large, colorl. cryst.—*Sol.* W.—*Uses:* As addition to drinking water (3:10,000) to prevent typhoid infection in the field.

do. Merck.—Pure, fused (1

Sol. W.

do.—Pure, dry (1

Grayish-wh. cryst. or masses.—*Uses:* Techn., for liberating CO_2 in carbonic-acid baths, in thermophores, decomposing crude phosphates for analysis, preparing neutral sod. sulphate, &c.

Sodium Bisulphate Merck.—Reagent (2

$NaHSO_4+H_2O$.—Colorl. cryst., or wh., fused pieces.—*Sol.*, eas. W.—Aqu. solut. strongly acid to litmus paper.—*Tests:* (*Heavy Met.*) 1 Gm.+20 Cc. H_2O+aqu. H_2S-no react.; make alkal. w. NH_4OH & add $(NH_4)HS$-no react.—(*Cl*) 20 Cc. 1:20 solut.+solut. $AgNO_3$-no turb.—(*As*) 1 Gm.+3 Cc. solut. $SnCl_2$-no dark color within 1 hr.—(*K*) observe flame color through cobalt glass-at most only transient red color.—*Uses:* Flux, especially suitable for decomposing minerals.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Sodium Bisulphite.—Cryst. (1

(Leucogen).—$NaHSO_3$.—Wh., cryst. powd., or prism. cryst.; faint sulphurous odor; disagre. taste.—*Sol.* 3.5 W., 70 A. at 25° C.; abt. 2 boil. W.; 49 boil. A. (U. S. P.).—Antisep.; Antipyr.

—*Uses: Intern.*, sore mouth, diphth., yeasty vomiting.—*Extern.*, skin. dis.—Also chem. & techn.—*Dose* 10–30 grains (0.6–2 Gm.).—*Incomp.*, acids.

Sodium Bisulphite Merck.—Pure, dry (1

do. Merck.—Commercial, dry (1

$NaHSO_3$.—Antiseptic.—*Uses:* Techn., as disinfectant & bleach, particularly for wool; in dyeing for preparing hot & cold indigo vats; in paper-making in place of antichlor for removing chlorine fr. bleached fibers like straw, wood, paper, rags, & cotton; as preservative for egg-yolk (in manuf. of gloves) & of saccharine liquids; preparing pure aldehydes; & as antiseptic in fermentation industries.

Sodium Bisulphite Merck.—Reagent (3

$NaHSO_3$.—Wh. powd.; odor of SO_2.—*Sol.* 4 W.—Aqu. solut. acid to litmus paper.—*Tests:* (*Heavy Met.; As*) 5 Gm.+5 Cc. conc. H_2SO_4 (sp. gr. 1.84); evap. on sand-bath; diss. res. in 20 Cc. H_2O; *a:* 10 Cc. solut.+aqu. H_2S–no react.; *b:* 10 Cc. solut.+solut. ammon. molybd. in HNO_3; heat to 70–80° C.–no yellow color or yellow ppt.—*Uses:* Reducing agent, especially arsenic to arsenous acid; determ. aldehydes, especially cinnamic aldehyde.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Sodium Bitartrate Merck.—Cryst. & powd. (2

$NaHC_4H_4O_6+H_2O$.—Wh. cryst. or powd.—*Sol.* 9 W.; 1.8 boiling W.—*Uses:* Chiefly reagent.

Sodium Borate Merck.—Highest Purity, Medicinal, cryst. & powder (1

(Borax; Sodium Tetraborate; Sodium Pyroborate; Sodium Biborate).—$Na_2B_4O_7+10H_2O$.—Hard, wh. cryst., or wh. powd.; sweetish, alkal. taste.—*Sol.* 1 G. at 80° C. (17 W. at 25° C.; 0.5 boil. W.; insol. A., U. S. P.).—Antisep.; Emmen.; Antiepil.—*Uses: Intern.*, amenor., dysmenor., epilepsy, uric-acid diathesis, diar., skin dis., diphth., sore mouth, conjunctivitis, urethritis, &c.; also as gargle & paint; as collyr. in conjunctiv. in 1–5:100 solut., lotions, &c. In aphthæ & sprue in infants, give w. honey.—Also techn. as preserv., either alone or mixed w. o. antiseptics.—*Dose* 15–60 grains (1–4 Gm.)p. d.

do. Merck.—Fused (2

(Borax Glass).—$Na_2B_4O_7$.—Wh., glass-like plates; bec. opaque on expos. to the air.—*Sol.* W.—*Uses:* Anal.; & techn., in aqu. solut. for wood-fungus (dry-rot).

do. Merck.—Calcined (1

$Na_2B_4O_7$.—Wh., v. light powd.—*Sol.* W.—*Uses:* As of sodium borate.

do. Merck.—Refined, powd. (1

Wh. powd.—*Uses:* Techn.

Sodium Borate Merck.—Reagent.—Cryst. (2

(Borax).—$Na_2B_4O_7+10H_2O$.—Hard, colorl. cryst., or cryst. pieces.—*Sol.* 17 cold, 0.5 boil., W.; freely in G.; insol. A.—When heated, it swells, the water of cryst. being expelled. At red heat the anhydr. borax fuses to a transp., colorl. mass.—Aqu. solut. alkal. to litmus paper; when acidul. w. HCl, solut. colors curcuma paper brown which, when paper dries, becomes greenish-black when moistened w. NH_4OH.—*Tests:* (H_2CO_3; H_2SO_4) 1 Gm.+20 Cc. H_2O+HCl–no effervesc.; add solut. $BaCl_2$–no react.—(*Cl*) 20 Cc. 1:20 solut.+3 Cc. HNO_3 (sp. gr. 1.153)+solut. $AgNO_3$–at most only sl't turb.—*Uses:* Blowpipe work, metallurgy, volum. anal.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

do. Merck.—Reagent.—Purest, cryst. (2

Tests: (H_2O) ignite 1 Gm.–res. 0.529 Gm.—(H_2CO_3; H_2SO_4) 1 Gm.+20 Cc. H_2O+1 Cc. HCl–no effervesc.; add solut. $BaCl_2$–no react.—(*Cl*) 20 Cc. 1:20 solut.+3 Cc. HNO_3 (sp. gr. 1.153)+solut. $AgNO_3$–no react.—(*Ca*) 1 Gm.+20 Cc. H_2O+solut. $(NH_4)_2C_2O_4$–no turb.—(*Fe; o. Met.*) *a:* 1 Gm.+20 Cc. H_2O+2 Cc. HCl (sp. gr. 1.124)+solut. KSCN–no red color; *b:* 20 Cc. 1:20 solut.+2 Cc. HCl (sp. gr. 1.124)+aqu. H_2S–no react.—*Uses:* As of preceding.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

do. Merck.—Reagent.—Calcined (3

$Na_2B_4O_7$.—Wh., spongy mass, or wh. powd.; at least 75% anhydr. $Na_2B_4O_7$.—*Tests:* As detailed under sod. borate cryst., 0.7 Gm. calcined borax, however, being taken instead of 1 Gm.—*Uses:* As of sod. borate, cryst.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

do. Merck.—Reagent.—Fused (4

(Borax Glass; Anhydrous Borax).—$Na_2B_4O_7$.—Colorl., vitr. pieces; absorb moist. fr. air & bec. turbid.—*Tests:* As detailed under sod. borate, cryst., taking, however, 0.5 Gm. fused borax inst. of 1 Gm.—*Uses:* As of sod. borate, cryst.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Sodium Borate, Meta-.—see **Sodium Metaborate**

Sodium Borate (Neutral) Merck (3

(Sodium Metaborate; improperly "Sodium Tetraborate").—$NaBO_2+H_2O$.—Glass-like masses.—*Sol.* W.—Antiseptic.—*Uses: Extern.*, dis. of nose & ear; a cold, satur. solut. used for bandages.—See also Sodium Metaborate.

Sodium Borobenzoate Merck.—*N. F.* (6
Mixt. 3 parts sodium borate & 4 parts sodium benzoate.—Wh., cryst. powd.—*Sol.* W.—Antisep.; Antilithic; Diur.—*Uses:* Rheum., gravel, & puerperal fever.—*Dose* 30–120 grains (2–8 Gm.).

Sodium Borocitrate Merck (4
Mixt. sodium citrate & borax.—Wh. powd.—*Sol.* W.—Antilithic; Diur.—*Uses:* Lithemia & lithemic gravel.—*Dose* 15–30 grains (1–2 Gm.).

Sodium Borosalicylate Merck (4
(Borsalyl). — React.-prod. sodium salicylate, boric acid & W.—$(C_6H_4)_2COONa.COOH.B(OH)$. —Wh. powd.—*Sol.* W.—Antisep.; Antirheum.; Analg.—*Uses:* Rheum., gout, scarlat., pleurisy, & chorea; also techn. as preservat.—*Dose* 5–30 grains (0.3–2 Gm.).—*Appl.*, w. glycerin, lanum, petrolatum, &c.

Sodium Borotartrate Merck (4
Mixt. sod. tartrate & borax.—Wh. powd.—*Sol.* W. — Antisep.; Diur. — Lithemia & lithemic gravel.—*Dose* 30–120 grains (2–8 Gm.).

Sodium Bromate Merck (10
$NaBrO_3$. — Colorl. cryst.—*Sol.* W.

Sodium Bromate Merck.—Reagent (14
$NaBrO_3$.—Lustr. cryst., or cryst. powd.—*Sol.* 3 cold, 1.5 boil. W.—*Tests:* (*NaBr*) 2 Gm.+ 20 Cc. H_2O+5 Cc. dil. H_2SO_4 – no immed. yellow color.—*Uses:* Substitute for bromine; starting material for volumetric soluts.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Sodium Bromide Merck (1
NaBr.—Wh., cryst. powd.; saline, fbl. bitter taste; absorb moist. fr. air without being deliq. —*Sol.*, abt. 1.7 W., 12.5 A. at 25° C.; 0.8 boil. W., 11 boil. A., (U. S. P.).—Sed.; Alter.; Diur.— —*Uses:* Epilepsy, headache, nymphomania, satyriasis, delir. trem., insom., nervousn., hyst., scrof., &c. Cont. more bromine than potass. bromide, & is less depressing.—*Techn.*, in photogr.—*Dose* 5–60 grains (0.3–4 Gm.); in epilepsy, beginning w. 15–30 grains (1–2 Gm.) & increasing to 150 grains (10 Gm.) p. day.—*Caut.* Keep well stoppered.

Sodium Butylsulphate (Iso-) Merck (10
$NaC_4H_9SO_4$.—Colorl. cryst.—*Sol.* W.

Sodium Butyrate Merck (5
$NaC_4H_7O_2$.—Deliq. cryst.—*Sol.* W.

Sodium Cacodylate Merck (28
(Sodium Dimethylarsenate).—$(CH_3)_2AsO.ONa$ +$3H_2O$. — Amorph., wh. powd. — *Sol.* W. — Alter.; Hematinic.—*Uses:* Instead of arsenates (because far less toxic) in anemia, chlorosis, tuberculosis, malarial cachexy, leukemia, diabetes, Basedow's disease, chorea, psoriasis. —*Doses:* Adults, $^1/_2$–2 grains (0.03–0.12 Gm.) p. d.; in skin diseases, $^3/_4$ grain (0.05 Gm.) 1–5 t. p. d. Children, 10–15 yrs., $^1/_2$–$^2/_3$ grain (0.03–0.04 Gm.) p. d.; 6–10 yrs., $^1/_3$–$^1/_2$ grain (0.02–0.03 Gm.) p. d.; 3–4 yrs., $^1/_6$ grain (0.01 Gm.) p. d.—*Inj.*, $^3/_4$–$1^1/_2$ grains (0.05–0.1 Gm.) in aqu. solut.—Enema, $^1/_{10}$–$^1/_6$ grain (0.006–0.01 Gm.) dissolved in 75 ♏ (5 Cc.) water, 2–3 t. p. d.

Sodium Camphorate Merck (30
$Na_2C_{10}H_{14}O_4$. — Wh., deliq. powd. — *Sol.* W. — Antiseptic; Antihidrotic.

Sodium Cantharidate Merck (1500
$Na_2C_{10}H_{14}O_6$+$2H_2O$.—Wh., cryst. powd.—*Sol.* W.—Antisep.; Antituberc.—*Uses:* As an inj. in laryngeal tuberculosis.—*Dose* 3–6 ♏ (0.2–0.36 Cc.) of 0.6:1000 solut. hypoderm.

Sodium Carbolate.—see **Sodium Phenate**

Sodium Carbonate Merck. — Highest Purity, cryst. (1
(Soda).—Na_2CO_3+$10H_2O$.—Large, colorl., monocl. cryst.; strongly alkaline taste; efflores. on expos.—98.9% pure.—*Sol.* 1.6 cold W., 0.2 boil. W.; 1 G.—Antacid.—*Uses:* Sour stomach, gout, uric-acid diathesis, skin dis., &c.— —Seldom used internally.—*Extern.*, in eys washes (1:1000), mouth washes, injections, nasal douches, & gargles (1% solut.).—*Dose* 5–20 grains (0.3–1.3 Gm.) in water.—*Antid.*, acetic acid, lemon juice, olive oil, &c.

do. Merck.—Highest Purity, anhydrous (1
(Anhydrous Sodium Carbonate).—Na_2CO_3.— Loose, wh. powd.—*Sol.* 2.2 W.—*Uses, &c.:* As of the preceding, only the dose is abt. one-half.—*Incomp.*, acids.—*Caut.* Poison]

do. Merck.—Highest Purity, dried (1
Approx.: Na_2CO_3+H_2O.

do. Merck.—Highest Purity, fused (2

do. Merck.—Twice purified, cryst. & dry (1
Uses: Techn., manuf. glass & soap, detergent, bleaching linen & cotton, washing wool, dyeing & printing fabrics, paper making, manuf. dyes & o. sodium salts, preventing boiler scale, in metallurgy, &c.

do.—Commercial (1
(Sal Soda).

Sodium Carbonate Merck.—Reagent.—Cryst. (2
(Soda). — Na_2CO_3+10 H_2O. — Colorl., transp. cryst.; effloresc. in air; 37% Na_2CO_3.—*Sol.* 1.6 cold, 0.2 boil., W.; insol. A.—Aqu. solut. strongly alkal. to litmus paper.—*Tests:* (*Impur. Insol. W.*) 20 Gm.+80 Cc. H_2O – compl. sol.; colorl. solut.—(*NaOH*) 3 Gm.+50 Cc. H_2O+solut. 6 Gm. cryst. $BaCl_2$ in 30 Cc. H_2O; add H_2O to make 100 Cc.; shake; filter; to 50 Cc. filtrate add solut. phenolphtalein – no red color.—(H_2SO_4) 10 Gm.+50 Cc. H_2O+10 Cc. HCl (sp. gr. 1.124); boil few min.; add solut. $BaCl_2$ – no ppt. within 12 hrs.—(*Cl*) 5 Gm.+50 Cc. H_2O+10 Cc.

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

HNO_3 (sp. gr. 1.153)+solut. $AgNO_3$ – no turb. —(*Si*) 20 Gm.+30 Cc. HCl (sp. gr. 1.124); evap. in platin. dish to dryness on W.-bath; dry res. $^1/_2$ hr. at 120° C., then diss. in 3 Cc. HCl+50 Cc. H_2O – solut. perf. clear.—(*HNO_3*) 1 Gm.+10 Cc. dil. H_2SO_4; overlay on 5 Cc. solut. diphenylamine (0.5:100) in conc. H_2SO_4+20 Cc. H_2O – no blue color zone.—(*H_3PO_4*) 20 Gm.+50 Cc. HNO_3 (sp. gr. 1.153)+50 Cc. solut. ammon. molybd. in HNO_3; let stand at abt. 40° C. – no yellow ppt. within 2–3 hrs.—(*K*) observe flame color through cobalt glass – no red color, or if any, only transient.—(*NH_4 Compounds*) 10 Gm.+50 Cc. H_2O+1 Cc. Nessler's solut. – no react.—(*Ca; Mg*) 10 Gm.+10 Cc. H_2O+10 Cc. HCl (sp. gr. 1.124)+5 Cc. NH_4OH (sp. gr. 0.96) + solut. $(NH_4)_2C_2O_4$ – no react.; add solut. $(NH_4)_2HPO_4$ – no react.—(*Heavy Met.*) *a:* 20 Gm.+50 Cc. H_2O+20 Cc. HCl (sp. gr. 1.124)+ aqu. H_2S – no react.; add 5 Cc. NH_4OH (sp. gr. 0.96)+few drops $(NH_4)HS$ – no turb., & no green color; *b:* 10 Gm.+25 Cc. H_2O+10 Cc. HCl (sp. gr. 1.124)+solut. KSCN – no red color. —(*As*) 30 Gm.+100 Cc. dil. H_2SO_4 (1:5); introd. solut. in sm. quant. into Marsh appar. started w. 20 Gm. As-free Zn & dil. (1:5) H_2SO_4 – no deposit in reduction tube within $^1/_2$ hr.—*Uses:* Precipitant & neutralizer.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Sodium Carbonate Merck.—Reagent.—Dried (2

Wh., dry powd.; abt. 80% Na_2CO_3.—*Tests:* As of preceding, using, however, 0.45 Gm. dried sod. carb. instead of 1 Gm. cryst. for test.—*Uses:* As of sod. carbonate, cryst.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

do. Merck.—Reagent.—Anhydrous (2

Na_2CO_3.—Wh. powd.; 99–100%.—*Tests:* As described under sod. carb. cryst., using, however, 0.35 Gm. anhydr. sod. carb. instead of 1 Gm. cryst.—*Uses:* Starting material for prepar. volumetric soluts.; otherwise as of sod. carbonate cryst.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Sodium Carbonate Monohydrated Merck.—*U. S. P.* (1

$Na_2CO_3+H_2O$. — Wh., gran., cryst. powd.; odorl.; str'gly alkal. taste; effloresc. in warm, dry air.—*Sol.* 2.9 W. at 25° C.; 1.8 boil. W.; 8 G.; insol. A., E.—*Uses:* As of sodium carbonate, cryst.; also very largely in photography. —*Dose* 3–8 grains (0.2–0.5 Gm.).

Note.—This monohydrated salt is well adapted for all general purposes; it should always be used when a salt of the U. S. P. quality is called for.

Sodium Carminate Merck (90

$C_{11}H_{10}O_6Na_2$.—Red powd.—*Sol.* W.—*Uses:* Microscopy.

Sodium Chenocholate Merck (750

$NaC_{27}H_{43}O_4$.—Fr. chenocholic acid found in liver of goose.—Yellowish powd.—*Sol.* W.

Sodium Chlorate Merck.—Highest Purity (1

$NaClO_3$.—Colorl. cryst.; odorl.; cooling, saline taste.—*Sol.* 0.5 boil. W.; 5 G.; (abt. 1 W., 100 A. at 25° C.; 40 boil. A., U. S. P.).—Deodorant; Antisep.; Alter.—*Uses: Intern.*, diphth., anginal scarlat., pharyngeal & laryngeal inflam., stomatitis, urethritis, mercurial ptyalism, hemorrhoids, &c.—*Extern.*, as wash (1–5:100), gargle or inj.—Also chem. & techn.—*Dose* 5–10 grains (0.3–0.6 Gm.). — *Incomp.*, organic matters, easily oxidizable subst'ces.—*Caut.* Must not be triturated w. sulphur or phosph., or any combustible substance, or a severe explosion may occur.

do. Merck (1

Sodium Chlorhydrophosphate Merck.—Dry (8

By evap. solut. of sod. phosphate in hydrochl. acid.—Wh., cryst. powd.—*Sol.* W.

Sodium Chloride Merck.—Highest Purity, Medicinal, cryst. (1

(Table, Sea, or Common, Salt).—NaCl.—Colorl., transp. cryst., or wh., cryst. powd.; pure saline taste.—*Sol.* 2.7 W.; 2.5 boiling W.; alm. insol. A.—Antisep.; Stomachic; Tonic; Cath.; Emetic. —*Uses: Intern.*, interm. fever, hemoptysis, &c. —*Extern.*, bruises & sprains; in eye washes, 5% solut.; inhalations, 0.5–1% aqu. solut.; in baths 2–20 lbs. (approx. 1–10 kilos) for a full bath; in sprays for inhalat., 40 grains (2.6 Gm.) each of sod. chloride & sod. bicarbonate to 10 fl. oz. (300 Cc.) water, in chronic catarrh of larynx & pharynx. In chron. coryza, 1–2% solut. for snuffing up nose.—Largely chem. & techn.—*Dose* 10–60–240 grains (0.6–4–15 Gm.).—Physiological Salt Solution for hypoderm. inj. consists of sod. chloride 10 grains (0.6 Gm.), sod. carbonate 15 grains (1 Gm.), & water $3^1/_3$ fl. oz. (100 Cc.). In infantile summer diar., 90–120 ♏ (6–8 Cc.) solut. are inj. at one dose, or $1–1^1/_3$ fl. oz. (30–40 Cc.) p. day. For hypodermoclysis in acute anemia, cholera, & dysentery in children, a solut. is made of 6 grains (0.36 Gm.) sod. chloride, 5 grains (0.3 Gm.) sod. carbonate, & $3^1/_3$ fl. oz. (100 Cc.) water, & a quantity up to 50 fl. oz. (abt. 1,500 Cc.) warmed to 40° C. being injected.

do. Merck.—Highest Purity, dried, & fine powd. (1

do. Merck.—Highest Purity, fused (2

Wh., cryst. plates.

Sodium Chloride Merck.—Reagent (2

NaCl.—Wh., cubic. cryst., or cryst. powd.—*Sol.* 2.7 W.—Aqu. solut. neutral to litmus paper —*Tests:* (H_2SO_4) 3 Gm.+20 Cc. H_2O – solut. perf. clear; add 80 Cc. H_2O & 1 Cc. HCl (sp. gr. 1.124); boil; add solut. $BaCl_2$ – no ppt. within 12 hrs.—(*Alkal. Earths; Heavy Met.*) 3 Gm.+ 50 Cc. H_2O; boil; add: *a:* solut. $(NH_4)_2C_2O_4$; *b:* Na_2CO_3; *c:* $(NH_4)HS$ – no react. in any case — (*Mg*) 3 Gm.+10 Cc. H_2O+5 Cc. NH_4OH (sp. gr. 0.96)+solut. $(NH_4)_2HPO_4$ – no ppt. within 3 hrs.—(*I*) 20 Cc. 1:20 solut.+1 drop solut. $FeCl_3$+starch solut. – no blue color.—(*K*) 1 Gm. +5 Cc.+solut. $PtCl_4$ – no ppt. within 2 hrs.— (*Fe*) 3 Gm.+20 Cc. H_2O+1 Cc. HCl+solut. KSCN – no red color.— (*NH_4 Salts*) 3 Gm.+20 Cc. H_2O+Nessler's solut. – no react. — *Uses:* Chiefly prepar. volumetric soluts.

Note. — For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

do. Merck.—Reagent.—Fused (3

Colorl., transluc. pieces.—*Tests:* As of preceding. —*Uses:* Producing sodium light for polariscopic & o. work; otherwise as of sod. chloride.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Sodium Chloriridate. — see **Iridium & Sodium Chloride**

Sodium Chloroborate Merck (2

Mixt. boric acid, sod. chloride, & sod. sulphate. —Wh., cryst. powd.—*Sol.* W.—Antisep.; Preserv.—*Uses:* Typhoid fever, dysent., &c.; also techn., as preservative.—*Dose* 15 grains (1 Gm.).

Sodium Chloroplatinate.—see **Platinum & Sodium Chloride, Platinic**

Sodium Chloroplatinite.—see **Platinum & Sodium Chloride, Platinous**

Sodium Choleate Merck (5

(Sodium Choleinate).—Dried Purified Ox Gall. —Fr. ox gall, by removing mucus & coloring matters.—Yellowish-wh. powd.; attracts moisture readily.—*Sol.* W., A.—Tonic; Lax.; Cholag. —*Uses:* Deficient biliary secret., chronic constip., &c.—*Dose* 5–10 grains (0.3–0.6 Gm.).

Sodium Chromate, Acid.—see **Sodium Dichromate**

Sodium Chromate Merck.—Pure, neutral (2

$Na_2CrO_4+10H_2O$. — Yellow, transl., efflores. cryst.—*Sol.* 1.6 W.—*Melt.* 24° C.—*Uses:* Chem.

do. Merck (1

Sodium Cinnamate Merck.—Highest Purity, Medicinal (12

(Sodium Cinnamylate).—$NaC_9H_7O_2$, or, C_6H_5-$CH:CH.CO_2Na$. — Wh., cryst. powd. — *Sol.* W. — *Uses:* Intraven. in tuberculosis. — *Dose:* 1/6 grain (0.01 Gm.) grad. increased to 1 grain (0.06 Gm.); by inj. 3–20 ♏ (0.2–1.3 Cc.) of 5% aqu. solut. 3 t. p. week; likewise in surgical tuberculosis.

Note.—This salt is prepared specially so as to be free from all the usually associated impurities; it is therefore particularly well adapted for intravenous use in tuberculosis.

Sodium Citrate Merck.—Acid (2

(Monosodium Citrate). — $NaC_6H_7O_7+H_2O$. — Wh. powd.—*Sol.* W.—Diur.; Antipyr.—*Uses:* Fevers.—*Dose* 5–50 grains (0.3–3.3 Gm.).

Sodium Citrate Merck.—Neutral.—Highest Purity, Medicinal (2

$2Na_3C_6H_5O_7+11H_2O$, or, $2(C_3H_4[OH].[COONa]_3)$ $+11H_2O$.—Wh., cryst., or gran. powd.—*Sol.* 1.1 W. at 25° C.; 0.4 boil. W.; sl. A., (U. S. P.). —Diur.; Antipyr.; Antilithic; Refrig.—*Uses:* Gout, cystitis, rheum., & in fever.—*Dose* 10–60 grains (0.6–4 Gm.) several t. p. d.; in diabetes, 75–150 grains (5–10 Gm.) p. d.

do. Merck (1

Sodium Citrobenzoate Merck (6

Mixt. sod. benzoate & sod. citrate.—Wh., bulky powd.—*Sol.* W.—Diur.; Antisep.; Antilithic.— —*Uses:* Asthma, bronch., cystitis, & dis. of gen.-urin. org.—*Dose* 8–15 grains (0.5–1 Gm.) 2–3 t. p. d.

Sodium Cœrulinsulphale.—see **Indigo Carmine**

Sodium Copaivate Merck (20

$NaC_{20}H_{29}O_2$.—Yellowish powd.; absorbs moisture easily.—*Sol.* W.—Antisep.; Diur.—*Uses:* Gonor., gleet, bronchorrhea, & dis. of muc. memb. —*Dose* 10–30 grains (0.6–2 Gm.). several t. p. d.

Sodium Corallinale.—see **Sodium Rosolate**

Sodium Cresolate, Meta-, Ortho-, or *Para-.*—see **Sodium Meta-, Ortho-, or Para-, Cresotate**

Sodium Crotonoleate Merck.—1% Solut. (12

Solut. of sodium salt of crotonolic acid, the active constit. of croton oil.

Sodium Cyanide Merck (15

NaCN+1 (or 2) aq.—Wh., deliq., cryst. powd. —*Sol.* W.—Sedative.—*Uses:* Spasmodic cough, & nervous irritabil.—*Dose* 1/20–1/4 grain (0.003–0.015 Gm.).—*Antid.*, emetic, stomach siphon, ferric & ferrous sulphates mixed, chlorine & amm. inhalations, &c.—*Caut.* Very poisonous!

Sodium Dianisidindisazobinaphtholsulphonate.— see **Benzoazurine G**

Sodium Dichromate Merck.—Fused (1

(Sodium Bichromate; Acid Sodium Chromate). —$Na_2Cr_2O_7$+aq.—Red, deliq., cryst. fragments. —*Sol.* W.—Antisep.; Corros.; Astring.; Alter.— *Uses: Intern.*, syph.—*Extern.*, sweat. feet, tuberc. elevations, syph. veget., & warts.—*Techn.*, to harden anatomical specimens, as oxidizer, & in

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

tanning; replaces the potassium dichromate v. satisfactorily for most technical purposes.—*Doses:* $^1/_{12}$–$^1/_6$–$^1/_3$ grain (0.005–0.01–0.02 Gm.); 5% solut. for sweat. feet.; 10% solut. caustic.

Sodium Diiodoparaphenolsulphonate.—see **Sozoiodole-Sodium**

Sodium Diiodosalicylate Merck (35

$2NaC_7H_5I_2O_3+5H_2O$.—Wh. leaflets or need.—*Sol.* 50 W.—Analg.; Antipyr.; Antisep.—*Uses: Extern.*, parasitic skin dis.—*Dose:* In rheumat., 3–6 grains (0.2–0.36 Gm.) 1–4 t. p. d.

Sodium Dimethylarsenate.—see **Sodium Cacodylate**

Sodium Dinitrocresolate Merck (40

$NaC_7H_5N_2O_5$, or, $C_6H_2.CH_3.ONa(NO_2)_2$.—Orange-red powd.—*Sol.* W., A.—Antisep.—*Uses:* Techn.—*Caut.* Poison!

Sodium Dinitrodioxyquinonate. — see **Sodium Nitranilate**

Sodium Dioxide.—see **Sodium Peroxide**

Sodium Dithionate.—see **Sodium Hyposulphate**

Sodium Dithiosalicylate.—see **Dithion**

Sodium Divanadate Merck (500

(Sodium Tetravanadate).—$Na_2V_4O_{11}+9H_2O$.—Orange-red cryst. Solut. 1:200,000 W. is yellow.—*Sol.*, v. sl. W.—*Uses:* Techn., in manuf. inks & aniline black.—*Caut.* Keep well stop.

Sodium Ethylate Merck.—Dry (14

C_2H_5ONa.—Wh. or yellowish, hygros. powd.—*Sol.* W., A.—Escharotic.—*Uses:* In 1:3 solut. in absol. alcohol; solut. appl. w. glass rod. Chlorof. arrests action.

do. Merck.—Liquid.—*Ph. B.* (6

Cont. 18% of solid sodium ethylate (NaC_2H_5O).—Colorless, syrupy liquid; turns brown on keeping.—Sp. Gr. 0.867 at 15° C.—Escharotic.—*Uses:* Warts, nevi, &c. The alcohol liberated by its decomp. coagulates the albuminous bodies exposed, & thus mitigates action.—Apply with glass rod, pure.—Chlorof. arrests action.

do. Richardson-Merck (10

(Caustic Alcohol).—Fr. absolute ethyl alc. at 10° C. by sodium.—C_2H_5ONa.—Whitish, cryst., deliq. powd.—*Sol.* W., A.—Caustic, Escharotic.—*Uses: Extern.*, destroy warts & nevi. $33^1/_3$% solut. in absol. alc. carefully applied w. glass rod. When a crust has formed, remove & apply anew. 1 in 4 of olive oil in psoriasis & o. skin dis.—Chlorof. stops the caustic action.—*Caut.* Keep in rubber-stp. bot.

Sodium Ethylsulphate Merck (2

(Sodium Sulphovinate).—$NaC_2H_5SO_4+H_2O$.—Wh., v. hygros. cryst.; cooling, arom. taste.—*Sol.* 0.7 W., A.—Cathartic.—*Uses:* Mild, pleas. remedy for constip.—*Dose* 1–8 dr. (4–30 Gm.).

Sodium Ferricyanide Merck (8

$Na_3Fe(CN)_6+2H_2O$.—Ruby-red, deliq. cryst.—*Sol.* 5.3 cold W.; 1.2 boil. W.—*Uses:* Chem.

Sodium Ferrocyanide Merck.—Pure (2

$Na_4Fe(CN)_6+12H_2O$.—Yellow, transp., monocl. prisms.—*Sol.* W.—*Uses:* Chem.; also w. sod. thiosulphate in photogr. (Farmer's reducer).

do. Merck.—Crude (1

Yellow cryst.—*Uses:* Techn., inst. of $K_4Fe(CN)_6$.

Sodium Fluobenzoate Merck (110

$C_6H_4F.COONa$.—Wh., cryst. powd.—*Sol.* W.—Antisep.—*Uses:* Lupus & o. tuberculous processes, instead of sodium fluoride because free fr. injurious action of latter on stomach.—*Dose* 8 grains (0.5 Gm.) 3 t. p. d.

Sodium Fluoride Merck.—Pure (3

NaF. — Clear, lustr. cryst., or wh. powd.—*Sol.* 23 W.—Antispasm.; Antiper.; Antisep.—*Uses: Intern.*, epilepsy, malaria, ague, tuberculosis, skin dis.—*Extern.*, antisep. dress. for wounds & injuries. Does not attack nickel-plated instruments.—*Dose* $^1/_{12}$–$^1/_6$ grain (0.005–0.01 Gm.) in solut. w. sod. bicarbonate.—*Appl.*, for wounds, 0.5–10:1,000 solut.; mouthwash, & inject. in vaginitis, 0.5–1% solut.

do. Merck.—Purified, arsenic-free (2

Antiferment.; Antisep.—*Uses:* In alcohol distilleries, to prevent formation of injurious quant. of lactic & butyric acids during fermentation of the mash. Largely used in manuf. yeast by Effront's process. Also for purifying vats used in fermentation industries, & for disinfecting apparatus used in distilleries.

Sodium Fluosilicate.—see **Sodium Silicofluoride**

Sodium Formate Merck.—Pure, dry (2

$NaCHO_2+H_2O$. — Wh., deliq., cryst. powd.—*Sol.* W., G.—Antisep.; Diur.; Tonic; Antituberc.—*Uses:* Hypoderm. in surgical tuberculosis.—*Techn.*, as powerful reducer.—*Dose* $^1/_6$–3 grains (0.01–0.2 Gm.) in solut., every 8 to 10 days; in pneumon., $1^1/_3$–4 grains (0.08–0.25 Gm.) every 2 hrs. in aqu. solut. or in infus. Adonis vernalis.

Sodium Glycerinoborate Merck (5

(Borax Glycerite).—Fr. 40 p. borax & 60 p. glycerin w. heat.—Transl., glassy, brittle mass; very hygroscopic.—*Sol.* W., A.—*Melt.* 150° C.—Antiseptic.

Sodium Glycerinophosphate Merck.—75% (5

$Na_2C_3H_7PO_6$+ aq.—Yellowish, viscid liq.—*Sol.* W. in ev. proportion; deposits a cryst. salt in the cold, but clears up on warming.—*Uses:* Deficient nerve nutrition, neurasthenia, Addison's dis.; phosphaturia, convalesc. fr. influenza, lumbago, &c.—*Dose* 4–10 grains (0.25–0.6 Gm.) 3–4 t. p. d.; in goiter, 20 grains (1.3 Gm.) 3 t. p. d.; inj., 3–4 grains (0.2–0.25 Gm.) daily, in physiological solut. sod. chloride.

Note.—This is the article best adapted for

use in all cases, because of its uniform strength & freedom from uncombined glycerin & acid salts.

Sodium Glycerinophosphate Merck.—50% (4

do. Merck.—100%, powd. (12

Sodium Glycocholate Merck (28

Found in bile of man & of herbivora, & obtained fr. latter.—$NaC_{26}H_{42}NO_6$.—Yellowish powd.—*Sol.* W., A.—Cholag.—*Uses:* Cholelithiasis, deficient biliary secret., &c.; capable of increasing flow of bile 100%.—*Dose* 60–75 grains (4–5 Gm.) p. d.—Acts also as a chemical vaccine for poisoning by snake venom.

Sodium Gynocardate Merck (50

$NaC_{14}H_{23}O_2$.—Yellowish powd.—*Sol.* W., A.—Antisep.; Alter.—*Uses:* Leprosy.—*Dose* 5–15 grains (0.3–1 Gm.) twice per day in gelatin capsules.

Sodium Hippurate Merck (35

$NaC_9H_8NO_3$.—Wh. powd.—*Sol.*, boiling W.—*Uses:* As of o. hippurates in dis. due to uric acid diathesis.—*Dose* 10 grains (0.6 Gm.).

Sodium Hydrate.—see **Sodium Hydroxide**

Sodium Hydropyroantimoniate. — see **Sodium Metantimonate**

Sodium Hydrosulphate. } —see **Sodium**
Sodium Hydrosulphide. } **Sulphydrate**

Sodium Hydroxide Merck.—Purified sticks, lumps, drops, powd., & flakes (1

(Sodium Hydrate; Caustic Soda; Soda). — NaOH + aq.—Wh., deliq. flakes, plates or sticks; acrid, caustic taste.—*Sol.* 0.8 boil. W.; (abt. 1 W. at 25° C.; v. sol. A., U. S. P.).—Caustic (as London Paste = eq. parts lime & caustic soda); Antacid.—*Uses:* Pharm. & chem.—*Dose* $^1/_2$–1 grain (0.03–0.06 Gm.) freely diluted.—*Antid.*, W., & then vinegar or lemon juice. — *Caut.* Keep well stoppered.

do. Merck.—Pure (Purified by Alcohol), sticks, lumps, & drops (1

do. Merck.—Highest Purity, fr. Sodium (5

do.—Solution.—*U. S. P.*

(Solution Soda; Soda Lye).—5% of NaOH.—Clear, colorl. liq.; v. acrid, caustic taste; alkal. react.—Sp. Gr. 1.059 at 15° C. (1.056 at 25° C.–U. S. P.).—*Sol.* W., A.—Antacid; Diur.; Antilithic.—*Uses:* Scrof., lepra, psoriasis, & o. skin dis.; lithiasis, cystitis, urethritis, & o. dis. of gen.-urin. org.; also as reagent.—*Dose* 10–30 ♏ (0.6–2 Cc.).—*Antid.*, oils & mild acids.—*Incomp.*, fats, organic matter, amm. salts.

do.—31% Solution

NaOH + aq.—Clear, sl'y yellow-tinged liq.—Sp. Gr. 1.34 = 37° Bé.—Caustic; Antacid; Diur., &c. —*Uses:* Cauterizing, & dil. to proper strength for same purposes as the official.—*Caut.* Keep well stoppered (rubber or paraffin).

Sodium Hydroxide.—15% Solution

Sp. Gr. 1.172 = 21° Bé.—*Sol.* W., A.—*Uses, &c.:* As of U. S. P. solut., but must be reduced in strength.—*Caut.* Keep rubber stoppered.

do.—Crude (1

Gray-white lumps.—Abt. 93–95% NaOH.—*Uses:* Techn., instead of KOH, because cheaper, in manuf. soap & organ. dyes, purifying petroleum, working up distillation products of turf & brown coal, manuf. water glass, mordants for wood, &c.

Sodium Hydroxide Merck. — Reagent. — From Sodium (6

(Caustic Soda).—NaOH.—Wh. pieces; cryst. fract.; 95–98% NaOH.—*Tests:* (H_2SO_4) 3 Gm. + 50 Cc. H_2O + 15 Cc. HCl (sp. gr. 1.124); boil; add solut. $BaCl_2$ – no ppt. within 12 hrs.—(*Cl*) 1 Gm. + 20 Cc. H_2O + 10 Cc. HNO_3 (sp. gr. 1.153) + few drops solut. $AgNO_3$ – at most sl't opalesc. turb.—(*HNO_3*) *a:* 2 Gm. + 10 Cc. H_2O + 20 Cc. dil. H_2SO_4 + 1 drop 1:1000 solut. indigo + a granule NaCl + 10 Cc. conc. H_2SO_4 – blue color should not disapp. within 10 min.; *b:* 25 Gm. + 100 Cc. H_2O + 5 Gm. Zn-dust + 5 Gm. powd. Fe; let stand sev. hrs.; distil. off abt. 25 Cc.; collect distillate in receiver cont. 3–5 Cc. fifthnorm. HCl + 10 Cc. H_2O; titrate dist. w. fifthnorm. KOH (methyl orange indic.) – at most 0.2 Cc. fifthnorm. HCl should be req. to neutralize the NH_3.—(*Si*) 5 Gm. + 25 Cc. H_2O + 25 Cc. HCl (sp. gr. 1.124); evap. in platin. dish to dryness on W.-bath; dry res. $^1/_2$ hr. at abt. 120° C., then diss. in 10 Cc. HCl (sp. gr. 1.124) + 90 Cc. H_2O; filter off any insol. res. & ignite – wt. should not exceed 0.0005 Gm.—(*Al; Ca; Heavy Met.*) 5 Gm. + 10 Cc. H_2O – solut. clear & colorl.; to solut. add 30 Cc. dil. $C_2H_4O_2$ (sp. gr. 1.041) + 10 Cc. NH_4OH (sp. gr. 0.96) + 55 Cc. H_2O; heat on W.-bath till NH_3 disappears; add 2–3 drops NH_4OH & let stand 12 hrs. – no ppt. or only v. sl't flocc. ppt.; if a ppt., collect, wash, & ignite – wt. not more than 0.0005 Gm. Make following tests with filtrate: *a:* to 50 Cc. add few Cc. solut. $(NH_4)_2C_2O_4$ – no ppt. within 2 hrs. (Ca); *b:* to 50 Cc. add few drops $(NH_4)HS$ – no react.—*Uses:* In special analyses requiring great purity; volumetric soluts., synthesis, & ultimate & gas analysis.

Note. — For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

do. Merck.—Reagent.—Purif. by Alcohol (2

Wh., v. hygrosc. sticks or pieces; cryst. fract.; 95–98% NaOH.—*Tests:* (H_2SO_4) 3 Gm. + 50 Cc. H_2O + 15 Cc. HCl (sp. gr. 1.124); boil; add solut. $BaCl_2$ – not more than sl't turb., & liq. still transp. when observed through test-tube 2 Cm. in diam. —(*Cl*) 1 Gm. + 20 Cc. H_2O + 10 Cc. HNO_3 (sp. gr. 1.153) + few drops solut. $AgNO_3$ – sl't opalesc. but no ppt.—(*HNO_3*) as under sod. hydrox. fr. sodium.—(*Si*) 5 Gm. + 25 Cc. H_2O + 25 Cc. HCl (sp. gr. 1.124); evap. in platin. dish to dryness

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

on W.-bath; dry res. on sand-bath $^1/_2$ hr. at abt. 120° C., then diss. in 10 Cc. HCl (sp. gr. 1.124) +90 Cc. H_2O; collect res., wash. & ignite–wt. not more than 0.0025 Gm.—(*Al; Ca; Heavy Met.*) 5 Gm.+20 Cc. H_2O–solut. clear & colorl.; add H_2O to make 100 Cc.; then add 30 Cc. dil. $C_2H_4O_2$ (sp. gr. 1.041)+10 Cc. NH_4OH (sp. gr. 0.96)–at most only sl't turb. within 5 min., but no flocc. ppt. (Al); also no immed. react. on add. solut. $(NH_4)_2C_2O_4$ & $(NH_4)HS$.—*Uses:* Volumetric soluts., gas analysis, &c.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Sodium Hydroxide Merck.—Reagent.—Purified (1

Wh., v. hygrosc. pieces or sticks; cryst. fract.; 90–95% NaOH.—*Tests:* (*HNO_3*) 2 Gm.+10 Cc. H_2O+15 Cc. dil. H_2SO_4 (sp. gr. 1.11)+1 drop 1:1000 solut. indigo+a granule NaCl+10 Cc. conc. H_2SO_4–blue color should not disapp. within 10 min.—(*Al; Ca; Heavy Met.*) 2.5 Gm.+10 Cc. H_2O–solut. clear & colorl.; add H_2O to make 100 Cc.; then add 15 Cc. dil. $C_2H_4O_2$ (sp. gr. 1.041) +5 Cc. NH_4OH (sp. gr. 0.96)–at most only sl't turb. within 5 min., but no flocc. ppt. (Al). Solut. should give no immed. turb. w. solut. $(NH_4)_2C_2O_4$; & w. $(NH_4)HS$ at most only sl't green color.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

do. Merck.—Reagent.—Solution.—Sp. Gr. 1.30 (1

Colorl. liq.; abt. 27% NaOH.—*Tests:* (*HNO_3*) As detailed under sod. hydrox. fr. Na, using, however, 90 Gm.=70 Cc. solut. NaOH sp. gr. 1.30 for the tests.—*Uses:* General precipitant.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

do. Merck.—Reagent.—Solution.—Sp. Gr. 1.30.—Free fr. Nitrogen (1

Tests: As detailed under sod. hydrox. purif. by alcoh., using, however, 3.7 Gm. = 2.9 Cc. solut. inst. of 1 Gm. NaOH.—*Uses:* Determ. N.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

do. Merck.—Reagent.—Solution.—Sp. Gr. 1.168–1.172 (1

Clear, colorl. liq.; abt. 15% NaOH.—*Tests:* As detailed under sod. hydrox. purif. by alcoh., using, however, 6.5 Gm. = 5.6 Cc. solut. instead of 1 Gm. NaOH.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Sodium Hydroxide with Lime Merck (1

(Soda-lime).—Wh. granules (coarse, medium, or fine).—*Uses:* Elementary analysis for quant. determ. of nitrogen.

do. Merck.—Fr. Iceland Spar (25

(Soda-lime).—Gray granules.—*Uses:* Org. anal.

Sodium Hydroxide with Lime Merck.—Reagent (2

Wh., porous mass, finely or coarsely granulated. —*Tests:* (*Excess. Carbonate*) treat w. dil. H_2SO_4 –no strong effervesc.—(*N*) *a:* ignite in test-tube –no NH_3 vapors (test w. moist litmus paper); *b:* 50 Cc. in fine powd.+5 Gm. Zn-dust+5 Gm. powd. Fe+200 Cc. H_2O; let stand 2–3 hrs.; distil. off abt. 25 Cc.; collect distillate in receiver cont. 2–3 Cc. fifthnorm. HCl+H_2O; titrate distil. w. fifthnorm. KOH (methyl orange indic.)–not more than 0.2 Cc. fifthnorm. HCl should have been required to neutralize the NH_3. —*Uses:* Chiefly determ. N.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

do. Merck.—Reagent.—From Iceland Spar (40

Tests: (*Cl*) 5 Gm.+50 Cc. HNO_3 (sp. gr. 1.153); add 100 Cc. H_2O+solut. $AgNO_3$–at most only sl't opalesc. turb.—(*P*) 10 Gm.+100 Cc. HNO_3 (sp. gr. 1.153)+25 Cc. solut. ammon. molybd. in HNO_3–no yellow ppt. within 2–3 hrs. at abt. 40° C.—(*S*) 5 Gm. in fine powd.+2 Gm. $NaNO_3$; ignite in silver cruc.; diss. res. in 50 Cc. H_2O+ 20 Cc. HCl (sp. gr. 1.124); filter; add to filtrate solut. $BaCl_2$–no ppt. within 12 hrs.—*Uses:* Chiefly determ. S, P, & Cl in organic compds.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Sodium Hypophosphite Merck (2

$NaH_2PO_2+H_2O$.—Sm., colorl., pearly plates, or wh., gran. powd.; bitterish-sweet, saline taste. —*Sol.* 1 W., 25 A. at 25° C.; 0.12 boiling W., 1 boiling A.; sl. sol. absol. A.; insol. E.—Tonic; Alter.—*Uses:* Phth., scrof., defects in bony structure, & wasting dis.—*Dose* 10–30 grains (0.6–2 Gm.).—*Caut.* Liable to explode when heated. Keep in well-stp. bot.

do. Merck.—Purified (2

do. Merck.—Highest Purity (8

Sodium Hyposulphate Merck (5

(Sodium Dithionate).—$Na_2S_2O_6+2H_2O$.—Large, transp., rhombic prisms; bitter taste.—*Sol.* W.; insol. A.

Sodium Hyposulphite.—see **Sodium Thiosulphate**

Sodium "Ichthyolsulphonate." — see **Ichthyol Sodium**

Sodium Indigotinsulphonate. — see **Indigo Carmine**

Sodium Iodate Merck (15

$NaIO_3$.—Wh. powd.—*Sol.* 40 W. at 0° C.; 10 hot W.; 2.9 boiling W.—*Uses:* Bronchial asthma, glandular swellings, neural. affect., hemoptysis, muscular rheum.—*Extern.*, trachoma, torpid ulcers, corneal infiltrations, & instead of potass. iodide & iodoform in 5–10% solut.—*Dose* 15 grains (1 Gm.) p. d. in pills; hypoderm. in acute & chron. muscular rheum., $^3/_4$–$1^1/_2$ grains (0.05–0.1 Gm.).—*Appl.*, as pencil in ulcers, trachoma, & corneal infiltrations, or in 1.5–3% solut. or 1.5% oint. For wounds, mixed w. boric acid (1:8).

Sodium Iodide Merck (5

NaI.—Wh., cryst. powd., or cubic cryst.; sl'y bitter taste.—*Sol.*, abt. 0.5 W., 3 A. at 25° C.; 0.33 boiling W., 1.4 boiling A.—Alter.; Antisyphil.; Sialag.—*Uses:* Rheum., pneum., tertiary syph., asthma, chronic bronch., scrof., hepatic cirrhosis, angina pectoris, &c.; does not affect the heart as potass. iodide does.—*Doses:* 5–60 grains (0.3–4 Gm.) several t. p. d.; in angina pectoris, 15–25 grains (1–1.6 Gm.) p. d. for a period of 1–2 years.—*Incomp.*, alkaloidal salts, hydrated chloral, tartaric acid, calomel, silver nitrate, potass. chlorate, metallic salts, & acids generally.

do. Merck.—Highest Purity, Medicinal (5

Sodium Iridichloride. — see **Iridium & Sodium Chloride**

Sodium Kousseinate Merck (225

Sodium salt of Koussein.—Light-brown, amorphous powd.—*Sol.*, cold W., A.—Teniafuge.—*Dose* 15–60 grains (1–4 Gm.) in 4 divided doses given at intervals of $^1/_2$ hr., & followed by a dose castor oil. Children, half the doses named.—Well adapted for use because read. solub.

Sodium Lactate Merck (5

$NaC_3H_5O_3$.—Thick, syrupy liq.—*Misc.* W., A.—Hypnotic.—*Uses:* Insomnia.—*Dose* 2–4 dr. (8–15 Gm.) in 2 fl. oz. (60 Cc.) water.—Action uncertain.

Sodium Lactophosphate Merck (4

Crystalline, sm., round, wh. balls.—*Sol.* W.

Sodium Lygosinate.—see **Lygosine**

Sodium Malate Merck (50

$Na_2C_4H_4O_5+^1/_2H_2O$.—Wh. cryst.—*Sol.* W.

Sodium Meconate Merck (60

Wh. to yellowish-wh., cryst. powd.—*Sol.*, eas. hot W.; diffic. cold W.; v. diffic. in strong A., but more read. in dil. A.

Sodium Metaborate.—see **Sodium Borate, Neutral**

Sodium Metaborate Merck (7

(Normal Sodium Metaborate).—$NaBO_2+2H_2O$.—By fusing borax w. sod. carbon. or caustic soda.—Wh. masses, or transp., monocl. prisms.—*Sol.* W.—See also Sodium Borate, Neutral.

Sodium Metacresotate Merck (7

Wh. cryst.—*Sol.* W.

Sodium Metantimonate Merck (10

(Sodium Hydropyroantimonate).—$Na_2H_2Sb_2O_7$.—Wh., gran. cryst.—*Sol.*, v. sl. in hot W.

Sodium Metaoxycyanocinnamate.—see **Zimphen**

Sodium Metaphosphate Merck (5

$NaPO_3$.—Glassy, clear, colorl., transp. sticks.—Insol. W.

Sodium Metavanadate Merck (30

$NaVO_3$.—Greenish-wh., alm. tastel., cryst. powd.—*Sol.*, hot W.—Alter.; Anticachectic.—*Uses:* As tonic to nervous system in diseases due to impaired metabolism & deficient oxidation processes; succedaneum for arsenic in anemia, chlorosis, chron. rheum., diabetes, neurasth., & tuberculosis. — *Dose* $^1/_{60}$–$^1/_8$ grain (0.001–0.008 Gm.) bef. meals, 2–3 t. p. d. during 2 or 3 days per week.

Sodium Methylarsenate Merck (25

(Disodium Methylarsenate; Monomethyldisodium Arsenate). — $CH_3.AsO_3Na_2+5H_2O$. — Wh. cryst.—*Sol.*, eas. W.; sl. A.: insol. E., benzin, petroleum ether, & oils. — *Melt.* 130–140° C. — Very active arsenical. — *Uses:* Instead of inorganic arsenical salts & cacodylates in tuberculosis, emphysema, chron. bronchitis, asthma, grip, chorea, vomiting of pregnancy, carcinoma, syphilis, skin diseases, & malaria.—*Dose* $^1/_2$–$1^1/_2$ grains (0.03–0.1 Gm.) per day, hypoderm. or per os in aqu. solut.; in malaria, 1–$1^1/_2$ grains (0.06–0.1 Gm.) p. d.

Sodium Methylate Merck (25

Fr. metallic sodium & methyl alcohol.—$CH_3ONa+2CH_3OH$.—Wh. powd.—*Sol.* W., A.

Sodium Methylsulphate Merck.—Cryst. (5

$NaCH_3SO_4+H_2O$.—Colorl., hygros. cryst.—*Sol.* W., A.

Sodium Methyltrihydroxyquinoline Carbonate.—see **Thermifugin**

Sodium Molybdophosphate.—see **Sodium Phosphomolybdate**

Sodium Molybdate Merck (10

$Na_2MoO_4+2H_2O$.—Sm. tablets; mother-of-pearl luster.—*Sol.* W.—*Uses:* Reagent.

Sodium Monosulphide.—see **Sodium Sulphide**

Sodium Naphtionate.—see **Sodium Naphtylaminesulphonate**

Sodium-Naphthol. Betanaphtholate. } —see **Microcidin**

Sodium Naphtholsulphonate (Alpha-) Merck (15

(Basic Sodium Betanaphtholalphasulphonate).—$NaC_{10}H_7SO_4$, or, $C_{10}H_6.OH.SO_3Na$.—Wh. leaflets; silvery luster.—*Sol.* W., A.

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Sodium Naphtholsulphonate (Beta-) Merck (15
(Basic Sodium Alphanaphtholbetasulphonate). —$NaC_{10}H_7SO_4$, or, $C_{10}H_6.OH.SO_3Na$.—Wh., lustrous leaflets.—*Sol.* W.

Sodium Naphtylaminesulphonate (Alpha-) Merck.—Cryst. (2
(Sodium Naphtionate). — $NaC_{10}H_6(NH_2)SO_3+4H_2O$.—Monocl. prisms.—*Sol.* W.—*Uses:* With betanaphthol as exceedingly sensitive reagent for nitrous acid (Riegler's test).

Sodium Nitranilate Merck (175
(Sodium Dinitrodioxyquinonate).—$Na_2C_6N_2O_3$, or, $C_6(NO_2)_2O_2(ONa)_2$.—Reddish-brown powd. —*Sol.* W.

Sodium Nitrate Merck.—Highest Purity, cryst. (1
(Cubic, Chili, or Soda, Niter or Saltpeter). — $NaNO_3$.—Colorl. cryst.; saline, sl'y bitter taste. —*Sol.* 1.1 W., 100 A. at 25° C.; 0.6 boil. W.; 40 boil. A. (U. S. P.).—*Melt.* 312° C.—Refrig.; Antisep.; Diur.; Diaph.—*Uses:* Inflam. condit. of intest., dysent., &c.; less active than KNO_3. —*Extern.*, rheumatism, $33^1/_3\%$ aqu. solut.—*Dose* 10–60 grains (0.6–4 Gm.).

do. Merck.—Highest Purity, powder (1

do. Merck.—Highest Purity, fused, powder (5

do. Merck.—Purified, cryst. (1
Colorl. cryst.

do. Merck.—Fused, sticks (3

do. Merck.—Commercial (1
Uses: Techn., in chemical manuf. industries, manuf. sulphuric & nitric acids, potash saltpeter; also as manure, oxidizer & flux in metallurgy, manuf. glass, &c.

Sodium Nitrate Merck.—Reagent (3
$NaNO_3$. — Colorl., transp., rhombohedr. cryst. —*Sol.* 1.2 W.; 50 A.—Aqu. solut. neutral to litmus paper.—*Tests:* (*H_2SO_4*) 3 Gm.+60 Cc. H_2O+1 Cc. HCl (sp. gr. 1.124)+solut. $BaCl_2$–no ppt. within 12 hrs.—(*Cl*) 1 Gm.+20 Cc. H_2O +few drops HNO_3 (sp. gr. 1.153)+solut. $AgNO_3$ –no turb.—(*$HClO_3$; $HClO_4$*) gently ignite 1 Gm.; diss. res. in 20 Cc. H_2O; add 1 Cc. HNO_3 (sp. gr. 1.153)+solut. $AgNO_3$–no turb. — (*Ca; Heavy Met.*) *a:* 3 Gm.+50 Cc. H_2O+aqu. H_2S–no react.; *b:* 3 Gm.+50 Cc. H_2O+NH_4OH or solut. $(NH_4)_2C_2O_4$–no react. in either case.—(*Fe*) 20 Cc. 1:20 solut.+1 Cc. HCl (sp. gr. 1.124)+solut. KSCN–no red color.—(*HNO_2*) 1 Gm.+20 Cc. H_2O+1 Cc. dil. H_2SO_4+1 Cc. 1:200 solut. metaphenylenediamine hydrochlor.–no yellow or yellowish-brown color.—(*HIO_3; HNO_2*) 5 Cc. 1:20 solut.+3–4 drops dil. H_2SO_4+solut. zinc-iodide-starch–no immed. blue color.—(*K*) *a:* observe flame color through cobalt glass–no red color, or at most only transient; *b:* 3 Gm.+6 Cc. H_2O; heat; filter; to 3 Cc. filtrate add 1–2 drops solut. cobalt & sod. nitrite in $C_2H_4O_2$–no turb.; let stand 2 hrs. at abt. 50° C.–no yellow ppt.— *Uses:* Oxidizer in determ. Cl & S in organic substances; destroying organic matter in forensic analysis; detect. Cr & Mn.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Sodium Nitrite Merck.—Highest Purity, sticks (2
$NaNO_2$.—Wh., opaque sticks, or colorl. cryst. —*Sol.* 1.4 W. at 25° C.; v. sol. boil. W.; sl. A. (U. S. P.).—Diaph.; Antispasm.; Diur.—*Uses:* Angina pectoris, dropsy, suppression of urine, & var. dis. of gen.-urin. org.; also chem. — *Dose* 1–3 grains (0.06–0.2 Gm.) 3–4 t. p. d., given v. cautiously. — Hypoderm., in tabes dorsalis, 15 ♏ (1 Cc.) of a 1–6% solut.—*Antid.*, naphtionic acid, sulphanilic acid. — *Incomp.*, acetanilide, antipyrine, chlorates, chromates, gold chloride, hypophosphites, iodides, mercury salts, permanganates, sulphites, tannic acid, vegetable astringent decoctions, infusions, or tinctures.—*Caut.* Keep well stoppered.

do. Merck.—Commercial, abt. 94% (1
Wh., cryst. powd.—*Uses:* Techn., in manuf. of diazo dyes.

Sodium Nitrite Merck.—Reagent.—Sticks (3
$NaNO_2$.—Wh., or v. slightly yellowish, tough sticks; 98–99% $NaNO_2$. —*Sol.*, eas. W. — Aqu. solut. sl'tly alkal. to litmus paper.—*Tests:* (*Cl*) 1 Gm.+20 Cc. H_2O+5 Cc. HNO_3 (sp. gr. 1.124) +solut. $AgNO_3$–not more than sl't opalesc. turb.—(*H_2SO_4*) 20 Cc. 1:20 solut.+5 Cc. HNO_3+ solut. $Ba(NO_3)_2$–no turb.—(*K*) observe flame color through cobalt glass–no red color, or at most only transient.—(*Heavy Met.*) 20 Cc. 1:20 solut.+few drops solut. $(NH_4)HS$–no react.— *Uses:* Organic synthesis; identifying antipyrine; prepar. nitric oxide.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

do. Merck.—Reagent.—Free from Potassium (5
Test: (*K*) 10 Gm.+20 Cc. H_2O+2 Cc. dil. $C_2H_4O_2$ +solut. 5 Gm. cryst. cobalt acetate in 12 Cc. H_2O+25 Cc. H_2O; let stand 24 hrs. at 40–50° C. –no yellow ppt. Other tests as preceding.— *Uses:* Prepar. sodium cobaltic nitrite; otherwise as of preceding.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Sodium Nitromolybdate Merck.—Pure, cryst. (100
Wh., cryst. powd.—*Sol.* W.

Sodium Nitronaphthalenesulphonate (Alpha-) Merck (25
$NaC_{10}H_6(NO_2)SO_3+^1/_2H_2O$. — Brownish-yellow powd.—*Sol.* W.

Sodium Nitroprussiate.—see **Sodium Nitroprusside**

Sodium Nitroprusside Merck.—Cryst. (10

(Sodium Nitroprussiate).—$Na_2Fe(CN)_5(NO)+2H_2O$. — Ruby-red, transp. cryst. — *Sol.* 2.5 W. at 15° C.—*Uses:* Testing silk for admixed animal hair, & determining intensity of light (Roussin's photometer).

Sodium Nitroprusside Merck.—Reagent (25

$Na_2Fe(CN)_5(NO)+2H_2O$. — Ruby-red, transp. cryst.—*Sol.* 2.5 W.; A.—*Test:* (H_2SO_4) 1 Gm.+ 50 Cc. H_2O+1 Cc. HCl (sp. gr. 1.124)+solut. $BaCl_2$–no turb.—*Uses:* Detect. sulphides, caustic alkalies, alkaline earths, ketones, cystin, creatinine; also preparing copper nitroprusside (Heppe's reagent for oil turpentine in oxygen-containing volat. oils).

Note. — For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Sodium Nucleinate Merck (75

Fr. yeast nuclein.—Whitish powd.—*Sol.*, in W. for the greater part. — Tonic; Antituberc. — *Uses:* As of organo-therapeutic extracts generally, hypoderm., to promote nutrition, & favorably influence the nervous system.—*Dose* 15 ♏ (1 Cc.) of 5% solut. hypoderm. p. d.

Sodium Oenanthate Merck (75

Sodium salt of normal heptylic acid.—$CH_3(CH_2)_5COONa$.—Wh., cryst. powd. or leaflets.—*Sol.* W., A.

Sodium Oleate Merck (3

$NaC_{18}H_{33}O_2$.—Yellow, fatty granules.—*Sol.* W., A.

Sodium Oleate (Acid) Merck (3

Contains $NaC_{18}H_{33}O_2$, w. excess of oleic acid.—Yellow, fatty granules. — *Sol.* A., W. — *Uses:* Biliary lithiasis; also pharm.

Sodium Orthoamidobenzoate.—see **Sodium Anthranilate**

Sodium Orthocresotate Merck (7

Reddish-wh. powd., or gran. mass.—*Sol.* W.

do. Merck.—Highest Purity (12

Sodium Orthodinitrocresylate.—see **Antinonnin**

Sodium Orthosulphaminebenzoate.—see **Sodium Benzoylsulphonate**

Sodium Orthovanadate.—see **Sodium Vanadate**

Sodium Oxalate Merck.—Highest Purity (2

$Na_2C_2O_4$.—Wh. powd.—*Sol.* 33.3 W. at 15° C.

do. Merck.—Pure (1

Wh. powd.

Sodium Oxalate Merck.—Reagent.—According to Sörensen (7

$Na_2C_2O_4$.—Wh., cryst. powd.—*Sol.* 31 cold, 16 boil., W.—100% pure.—*Tests:* (*Hygrosc. Moisture*) dry 10 Gm. in water-drying-oven for 24 hrs. – loss of wt. not more than 0.001 Gm.—(Na_2CO_3; *Sod. Binoxal.*) 250 Cc. H_2O+10 drops solut. phenolphtalein (0.5 Gm.+50 Cc. W.+50 Cc. A.); evap. in Jena flask to 180 Cc. while passing in current of CO_2-free air; cool; add 5 Gm. $Na_2C_2O_4$; shake cautiously while passing in pure air – solut., if red, should not require more than 4 drops decinorm. acid to render it colorl.; if colorl., it must acquire a distinct red color on adding at most 2 drops decinorm. KOH.—(*Cl; H_2SO_4*) decomp. 10 Gm. in platin. cruc. over alcohol flame (illumin. gas contains S); diss. carbonate formed in HNO_3 (sp. gr. 1.153); filter off fr. carbon; *a:* to half the filtrate add solut. $AgNO_3$ – no turb.; *b:* to other half add solut. $Ba(NO_3)_2$ – no turb. — (*Fe; K*) ignite 10 Gm. in platin. cruc. w. blast lamp till all carbon burnt; treat res. w. warm H_2O in platin. dish – compl. solub., or at most scarcely wghble trace of Fe_2O_3; filter; add excess HCl (free fr. Fe); evap. in platin. dish on W.-bath; dry res. 2 hrs. in drying-closet at 120° C. – res. must afford clear solut. w. H_2O. Treat solut. w.: *a:* solut. KSCN – only v. faint react. (Fe); *b:* solut. sod. & cobalt nitrite – no react. (K).—(*Organ. Impur.*) 1 Gm.+10 Cc. conc. H_2SO_4; heat in test-tube, at first gently while gas evolv., then strongly till SO_3 vapors evolv.; cool; compare color with that of 10 Cc. H_2SO_4 similarly treated but without add. of $Na_2C_2O_4$ – only v. faint brownish tinge should be imparted by the $Na_2C_2O_4$ to the H_2SO_4.—*Uses:* Starting material for prepar. volumetric solutions.

Note. — For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Sodium Para-amidobenzenesulphonate.—see **Sodium Sulphanilate**

Sodium Paracresotate Merck (15

$NaC_8H_7O_3$, or, $C_6H_3.CH_3.OH.COONa$. — Fine, microcryst. powd.; bitter taste.—*Sol.*, warm W. — Antipyr.; Antisep.; Analg. — *Uses:* Acute gastric catarrh, acute rheum., pneum., typhoid fever, &c.—*Dose* 1–20 grains (0.06–1.3 Gm.); 6–70 grains (0.36–4.6 Gm.) p. day, accord. to age, in aqu. solut.

Sodium Paradiethylamidoazobenzenesulphonate.—see **Ethyl Orange**

Sodium Parasulphocarbolate.—see **Sodium Phenolsulphonate, Para-**

Sodium Perborate Merck (5

$NaBO_3+4H_2O$.—Wh. cryst.; abt. 10% active O. —*Sol.*, abt. 40 W. at 20° C. The aqu. solut. is sl'tly alkal; dil. acids liberate H_2O_2; conc. H_2SO_4 decomp. it w. formation of ozone; when heated to above 60° C. oxygen is evolved; decomposed also by catalyzers, ferments, animal tissues, &c. — Antisep.; Deodor.; Bactericide. — *Uses:* Wounds, purul. sores, varicose ulcers; also in toilet preparations & techn. in bleaching & disinfecting.—*Appl.*, in powd. or solut.

Sodium Perchlorate Merck (5

$NaClO_4$. — Colorl., deliq. cryst. — *Sol.* A., W. — *Uses:* Techn., in explosives.

Sodium Permanganate Merck.—Pure (8

$NaMnO_4$. — Reddish-black cryst. — *Sol.* W. — *Uses:* As antidote in poisoning by morphine, phosphorus, & curare. Stomach is washed w. a 0.2% aqu. solut., & 1 pint (approx. $^1/_2$ liter) of the solut. drunk.

do. Merck (1

Black, gran. powd. — *Sol.* W. — *Uses:* Techn., as oxidizer, & instead of potass. permanganate; particularly recommended for destroying Oïdium Tuckeri.

Sodium Peroxide (8

(Sodium Dioxide or Superoxide).—Fr. melted sod. w. dry air, followed by ignition in oxygen (Harcourt).—Na_2O_2.—Wh. powd.; yellowish w. heat.—*Sol.* W., w. develop. of great heat, formation of caustic soda, & evolution of H_2O_2.—Exceedingly active oxidizer. — *Uses:* Techn., in 40–45% aqu. solut. for bleaching discolored teeth w. dead pulp; sod. peroxide soap (Unna) used to remove indurated comedones. In chem. anal. for separating iron fr. alumina, decomp. chromium ores, bleach. animal & veget. fibers & tissues (wool, silk, hair, bristles, feathers, bones, ivory, wood, fats, wax, sponges, coral, &c.), & rendering air charged w. CO_2 respirable.—*Caut.* Liable to cause ignition on contact w. alc. or o. inflam. liq. mixed with W.

Sodium Peroxide Merck.—Reagent (8

(Sodium Superoxide). — Na_2O_2. — Light-yellow powd.; at least 95% Na_2O_2.—*Sol.*, eas. W. w. copious evol. of O & great develop. of heat. —On cautiously add. to cooled, dil. min. acid, H_2O_2 results.—*Tests:* (H_2SO_4) add 5 Gm. in small quant. to 25 Cc. HCl (sp. gr. 1.124)+100 Cc. H_2O; add solut. $BaCl_2$ to clear liq. – no ppt. within 12 hrs.—(*Halogens*) add 3 Gm. in sm. quant. to 20 Cc. HNO_3 (sp. gr. 1.153)+100 Cc. H_2O; to clear liq. add solut. $AgNO_3$ – at most only sl't opalesc. turb.—(H_3PO_4) add 2.5 Gm. in sm. quant. to 20 Cc. HNO_3 (sp. gr. 1.153)+100 Cc. H_2O; add 25 Cc. solut. ammon. molybd. in HNO_3; heat to 30–40° C. – no yellow ppt. within 2 hrs.— (*N*) v. cautiously mix 1 Gm.+0.2 Gm. grape sugar in capacious nickel cruc.; deflagrate by gently heat. bottom of cruc.; cool; diss. res. in 5 Cc. H_2O; add 10 Cc. dil. H_2SO_4; overlay few Cc. of solut. on 5 Cc. solut. diphenylamine – no blue color at contact of liquids.—(*Heavy Met.*) cautiously add 5 Gm. to 100 Cc. H_2O – perf. clear & alm. colorl. solut.; *a:* to 40 Cc. of the solut. add 10 Cc. HCl (sp. gr. 1.124)+aqu. H_2S – no react.; *b:* to 40 Cc. solut. add $(NH_4)HS$ – no ppt., & no brown or green color.—*Uses:* Powerful oxidizer, partic. for S, N, P, & their compds.; destroying organic matter; efficient flux in diffic. fusions.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Sodium Persulphate Merck (4

$Na_2S_2O_8$.—Wh., cryst. powd.—*Sol.* W.—Strong bleacher & antisep. like the potassium salt (*q. v.*).—Aperient; Eupeptic.—*Uses:* Tuberculosis, & in convalescence.—*Dose* 3 grains (0.2 Gm.) in water, once daily, 1 hr. bef. meals.—Also used in photography.

Sodium Phenate Merck.—Dry (4

(Sodium Carbolate).—NaC_6H_5O.—Wh., deliq. sticks of radiated cryst.—*Sol.* W.—Antiseptic. —*Uses:* As an intern. antisep. in diar., dysent., typhoid fever, &c.—*Extern.*, like carbolic acid, in bandages, in aqu. solut., or w. linseed oil (1:5–10).—*Dose* 2–10 grains (0.12–0.6 Gm.).—*Caut.* Keep well stoppered.

Sodium Phenolphtaleinate Merck (50

$Na_2C_{20}H_{12}O_4$.—Red, syrupy mass.—*Sol.* W.

Sodium Phenolsulphonate Merck. — Highest Purity, Medicinal (2

(Sodium Paraphenolsulphonate, or Sulphocarbolate). — $C_6H_4OH.SO_2ONa+2H_2O$. — Clear, colorl. cryst.; sl'y bitter taste.—*Sol.*, abt. 6 W., & 150 A., G. at 15° C.; (4.8 W., 130 A. at 25° C.; 0.7 boil. W., 10 boil. A., U. S. P.).—Antiseptic. —*Uses: Intern.*, dyspep., phth., cholera, typhoid fever, flatulence, dysent., &c.—*Extern.*, gonor., as an inj.—*Dose* 8–30 grains (0.5–2 Gm.).

do. Merck (1

Reddish cryst.—*Sol.* W., A.—*Uses:* Disinf.

Sodium Phenonacetate.—see **Guaiacetin**

Sodium Phenylpropiolate.—25% Solution

$C_9H_5O_2Na$+aq., or, $C_6H_5.C{:}C.COONa$ + aq.— Clear, neutral or sl. acid liq.; sl. pungent taste. — Antitubercular.— *Uses:* Laryngeal & pulmonary tuberc.—*Dose:* Abt. 6 fl. oz. (abt. 200 Cc.) of *a* 1, 2, & 3% solut. the first, second, & third week respectively, inhaled twice daily.—*Caut.* Keep fr. light.

Sodium Phosphate Merck. — Dibasic. — Pure, granular (1

(Disodium Orthophosphate).—*Cryst.*, $Na_2HPO_4+12H_2O$; *dried* (exsiccated) Na_2HPO_4.—Colorl., transl., monocl. prisms, or, wh., gran. powd.; cooling, saline taste.—*Sol.* (cryst.), 1.5 boiling W.; abt. 5.5 W. at 25° C.; insol. A. — *Melt.* (cryst.), 40° C. Loses 5 mol. water of cryst. (25.1%) by effloresc.—Cath.; Antilithic.—*Uses:* Stimulant of biliary secretion, as mild lax., in chron. rheum., & in calculi of bladder.—*Doses: Cryst.*, 5–40 grains (0.3–2.6 Gm.); as laxative, $^1/_2$–1 oz. (15–30 Gm.).—*Dried*, abt. half the foregoing.—*Incomp.*, alkaloids, antipyrine, carbolic acid, hydrated chloral, lead acetate, pyrocatechin, pyrogallol, resorcinol, salicylic acid, sod-

ium salicylate.—*Caut.* Keep in well-stoppered bottles; the cryst. lose water of cryst. on expos.

Note. — This unusually desirable product should always be used for medicinal purposes because of its ready solubility & freedom from arsenic.

Sodium Phosphate Merck.—Twice purified, cryst. & dried (exsiccated) (1

Colorl., transl. cryst., or wh. powd.—*Sol.* W.

do. Merck.—Highest Purity, Medicinal, cryst. & dried (1

do.—Effervescent.—*U. S. P.*

Mixt. 200 exsicc. sod. phosphate, 477 sod bicarb., 252 citric acid, & 162 tartaric acid.—Lax.—*Dose* 1–4 dr. (4–15 Gm.).

Sodium Phosphate Merck.—Reagent.—Cryst. (3

$Na_2HPO_4+12H_2O$.—Colorl., transp. cryst.; effloresc. in dry air.—*Sol.* 6 W.—Aqu. solut. alkal. to litmus paper.—*Tests:* (H_2CO_3; H_2SO_4) 20 Cc. 1:20 solut. + 1 Cc. HCl (sp. gr. 1.124) – no effervesc.; add solut. $BaCl_2$ – no turb. within 3 hrs. —(*Cl*) 1 Gm. + 20 Cc. H_2O + 2 Cc. HNO_3 (sp. gr. 1.153) + solut. $AgNO_3$ – at most only v. sl't opalesc. turb.—(HNO_3) 2 Gm. + 10 Cc. H_2O + 1 drop 1:1000 solut. indigo + a granule NaCl + 10 Cc. conc. H_2SO_4 – blue color should not disapp. within 10 min.—(*Heavy Met.*) 2 Gm. + 20 Cc. H_2O + 1 Cc. HCl + aqu. H_2S – no react.; add 5 Cc. NH_4OH (sp. gr. 0.96) + few drops $(NH_4)HS$ – no ppt. or green color.—(*As*) 2 Gm. + 50 Cc. H_2O; introduce in sm. quant. into Marsh appar. started w. 10 Gm. As-free Zn & dil. (1:5) H_2SO_4 – no deposit visible in reduct. tube within 1 hr.—(*K*) observe flame color through cobalt glass – no red, or at most only transient, color.—*Uses:* Standardizing uranium soluts.; detect. alkaline earths & Mg; determ. Mg; recovering molybdic acid.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Sodium Phosphate, Acid. —see **Sodium Phosphate, Monobasic**

Sodium Phosphate Merck.—Monobasic.—Pure (3

(Sodium Biphosphate; Acid Sodium Phosphate; Monosodium Orthophosphate). — $NaH_2PO_4+H_2O$.—Large, transp. cryst.; acid react.—*Sol.* W.

Sodium Phosphate Merck.—Tribasic.—Highest Purity (3

(Normal Sodium, or Trisodic, Orthophosphate). — $Na_3PO_4+12H_2O$. — Six-sided, colorl. cryst. —*Sol.* 5.1 W. at 15.5° C.

do. Merck.—Commercial (1

Clear, colorl. cryst.—*Uses:* Techn.

Sodium Phosphite Merck (8

$Na_2HPO_3+5H_2O$.—Wh., cryst. powd.—*Sol.* W.

Sodium Phosphomolybdate Merck (8

(Sodium Molybdophosphate).—$Na_3PO_4.10MoO_4$. —Yellowish cryst.—*Sol.* W.—*Uses:* Reag. for alkaloids, & in neuromicroscopy.

Sodium Phosphotungstate Merck (8

(Sodium Phosphowolframate). — $2Na_2O.P_2O_5.12WO_3+18H_2O$.—Wh., gran. powd.—*Sol.* W.—*Uses:* Reag. for alkaloids.

Sodium Phosphovanadate Merck (250

$4P_2O_5.6V_2O_5.3Na_2O+21H_2O$. — Yellow, cryst. powd.—*Sol.* W.

Sodium Phosphowolframate.—see **Sodium Phosphotungstate**

Sodium Picrocarminate.—see **Gedölst's Picrocarmine-Sodium**

Sodium Platinichloride.—see **Platinum & Sodium Chloride, Platinic**

Sodium Platinochloride.—see **Platinum & Sodium Chloride, Platinous**

Sodium Platinocyanide.—see **Platinum & Sodium Cyanide**

Sodium Plumbate Merck (2

$Na_2PbO_3+3H_2O$. — Yellow, amorph. masses, decomp. by W. w. separation of lead peroxide. —*Uses:* Techn.

Sodium Propionate Merck.—Pure (15

$NaC_3H_5O_2$.—Wh., gran. powd.—*Sol.* W., A.

Sodium Propylsulphate Merck (35

$NaC_3H_7SO_4$.—Wh. cryst.—*Sol.* W.

Sodium Pyroantimonate

(Sodium Antimonate). — $2NaSbO_3+7H_2O$. — Wh., gran. cryst.—*Sol.*, sl. W.

Sodium Pyroborate.—see **Sodium Borate**

Sodium Pyrocatechinmonoacetate. — see **Guaiacetin**

Sodium Pyrophosphate Merck.—Pure, cryst. or dried (1

$Na_4P_2O_7+10H_2O$, cryst.; $Na_4P_2O_7$, dried.—Wh., monocl. prisms, or wh. pieces.—*Sol.* (cryst.), abt. 11.5 W. at 25° C.; 1.1 boiling W.; insol. A.—At 100° C. the cryst. lose water of cryst. (40.35%). — Cath.; Hepatic; Stim.; Antilithic. — *Uses:* Lithiasis.—*Techn.*, manuf. iron pyrophosphates. —*Dose: Cryst.*, 5–40 grains (0.3–2.6 Gm.).

do. Merck.—Fused (2

(Anhydrous Sodium Pyrophosphate).—$Na_4P_2O_7$. —Wh. sticks.—*Sol.* W.

Sodium Pyrophosphate Merck.—Reagent.—Cryst. (2

$Na_4P_2O_7+10H_2O$.—Colorl., transp. cryst.—*Sol.* 10–12 cold, abt. 1 boil., W.; insol. A.—Aqu. solut. alkal. to litmus paper.—*Test:* (Na_2HPO_4) 1:20 solut. + solut. $AgNO_3$ – pure wh. ppt. — Other tests as detailed under sod. phosphate.—*Uses:* Electrolytic separ. & determ. metals.

Note.—For *complete* tests see "Chemical

Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Sodium Pyrophosphate (Acid) Merck (4
(Sodium Bipyrophosphate).—$Na_2H_2P_2O_7$.—Wh., fused masses.—*Sol.* W.

Sodium Pyrosulphite Merck.—Dry, 90–100% (3
$Na_2S_2O_5$.—Wh., cryst. powd.—*Sol.*, eas. W.

Sodium Rhodanide.—see **Sodium Sulphocyanate**

Sodium Rosanilinesulphonate.—see **Ruby S**

Sodium Rosolate Merck (7
(Sodium Corallinate).—Sod. salt of trioxydiphenyltolylcarbinol. — $NaC_{20}H_{15}O_3$. — Dark-red masses; greenish luster. — *Sol.* W., A. — *Uses:* Micros. stain.

Sodium Saccharate Merck (35
$C_{12}H_{21}NaO_{11}$.—Wh.powd.—*Sol.*W.—*Uses:* Hypoderm. & intraven. as powerful cardiac tonic, & in acute anemia where death threatens.—*Dose* 8–11 fl. oz. (250–330 Cc.) by inj. of solut. contain. 0.033% sod. saccharate & 0.08% NaCl.

Sodium Salicylate Merck.—Highest Purity, cryst. (1
$NaC_7H_5O_3$, or, $C_6H_4(OH)COONa$.—Lustr., wh. scales, or microcryst. powd.; sweetish, saline taste.—*Sol.* 0.9 W., 6 A., G. at 15° C.; (0.8 W., 5.5 A. at 25° C.; v. eas. boil. W. or A., U. S. P.).—Antirheum.; Antisep.; Antipyr.—*Uses:* Rheum., neural., pleurisy, scarlat., chorea, pericarditis, migraine, &c.—Specific in artic. rheumat.—*Doses:* 2–30 grains (0.12–2 Gm.); in artic. rheumat., 15–30 grains (1–2 Gm.) every hr.—*Max. D.* 60 grains (4 Gm.) single.—Also in suppos., 60–90 grains (4–6 Gm.).—*Incomp.*, ferric salts, lime water, spt. nitrous ether, mineral acids, quinine salts in solut., lead acetate, silver nitrate in solut., sod. phosphate in powd.

do. Merck (1
$NaC_7H_5O_3$.—Wh., mealy powd.—*Sol.* W., A., G.—Antirheum.; Antipyr.—*Uses:* Rheumat., neuralg., pleurisy, migraine, &c.—*Dose* 2–30 grains (0.12–2 Gm.).—*Incomp.:* As of preceding.

do. Merck.—Fr. Natural Oil Wintergreen (7
Fr. natural oil of wintergreen.—$C_6H_4(OH)COO$-Na.—Wh. scales, or powd.; faint, arom. odor. —*Sol.* A., W.—*Uses:* As of preceding.

Sodium Salicylsulphonate.—see **Sodium Sulphosalicylate**

Sodium Santonate Merck (*Not* Santoninate) (15
$NaC_{15}H_{19}O_4$.—Wh., hygros. powd.—*Sol.* A.; v. eas. W.—Anthelmintic.—*Dose* 1½–4–6 grains (0.1–0.25–0.36 Gm.).

Sodium Santoninate Merck (*Not* Santonate) (65
$NaC_{15}H_{19}O_4 + 3\frac{1}{2}H_2O$.—Wh. cryst.; mildly saline & somewhat bitter taste; turn yellow on expos. to light.—*Sol.* 3 W., 12 A.; 0.5 boil. W.; 3.4 boil. A. — Anthelmintic. — *Uses:* Inst. of santonin for worms in intest. Less efficient than santonin as it diss. before reaching the intestines. Is best given in keratinized pills.—*Dose* ¼–1 grain (0.015–0.06 Gm.) for adults.—*Max. D.* 3 grains (0.2 Gm.) single; 10 grains (0.6 Gm.) p. d.—*Caut.* Keep fr. light in dark amber bottles.

Sodium Selenate Merck (70
$Na_2SeO_4 + 10H_2O$.—Wh. cryst.—*Uses:* Reagent.

Sodium Selenite Merck.—Highest Purity (60
Na_2SeO_3.—Wh. cryst.—*Sol.*, eas. W.; insol. A. —*Uses:* In bacteriology, in 2% solut., for demonstrat. reducing properties of bacteria.

do. Merck.—Commercial (25
Uses: Glass-making.

Sodium Silicate Merck.—Pure, cryst. (2
(Soluble Glass).—Na_2SiO_3 + aq.—Wh. to grayish-wh., hard, flat pieces.—*Sol.* W.—*Uses:* A 1:500 solut. in Lippspringe water has been recom. in tuberculosis; chiefly used techn.

do.— Crude, lumps or powder (1
Glassy masses, or whitish-brown powd.—*Sol.* W.

do.— Solution
20% silica & 10% soda.—Na_2SiO_3 + aq.—Yellowish or pale greenish-yellow, viscid liq.; sharp alkal., saline taste. — Sp. Gr. 1.3–1.4 at 15° C. —*Uses: Extern.*, fixed dressings for dis. joints, fractures, &c.—*Intern.*, rarely as antilithic in gout.—Also in artif. mineral waters, & techn.—*Dose* 4–10 ♏ (0.25–0.6 Cc.) well diluted.—*Inj.*, in gonor. in 0.1% solut.—*Incomp.*, with acids. —*Caut.* Keep in rubber-stoppered bottles.

do.— Solution, Crude
Syrupy, yellowish, str'ly alkal. liq. — Sp. Gr. 40–42° Bé.—*Uses:* Techn., fireproofing fabrics, cementing stones, waterproofing walls, in hydraulic mortars, dyeing & bleaching, painting on glass, cements, filling soaps, &c.

Sodium Silicofluoride Merck.—Pure (2
(Sodium Fluosilicate; Salufer).—Na_2SiF_6.—Wh., odorl., tastel., gran. powd. — *Sol.* 200 W. — Antisep.; Germicide; Deodorant; Styp.—*Uses: Extern.*, wounds, carious teeth, cystitis, gonor., &c., in 1:500 solut. or weaker. Superior to corros. sublimate as disinf. for irrigating cavities, & in gynecological practice.—*Appl.* 1:5000 solut.; non-toxic, non-irritant.

Sodium Silvinate.—see **Sodium Sylvate**

Sodium Sozoiodolate.—see **Sozoiodole-Sodium**

Sodium Stannate Merck (2
$Na_2SnO_3 + 3H_2O$.—Wh. powd., or lumps.—*Sol.* 1.6 W. at 20° C.—*Uses:* Mordant in dyeing.

Sodium Stannichloride.—see **Tin & Sodium Chloride**

Sodium Stannite, Solution.—see **Tin Oxide & Soda, Solution**

Sodium Stearate Merck.—Pure (3

$NaC_{18}H_{35}O_2$.—Wh. powd.; soapy touch.—*Sol.* W.—*Uses:* Preparing Unna's alcohol pencils (sod. stearate 6, glycerin 2.5, alcohol to make 100), used in impetiginous dermatoses.

Sodium Subsulphite.—see **Sodium Hyposulphite**

Sodium Succinate Merck.—Pure, cryst. (15

$Na_2C_4H_4O_4+6H_2O$.—Wh., monoclinic prisms.—*Sol.* W.—*Uses:* Catarrhal jaundice.—*Dose* 5 grains (0.3 Gm.) every 3 hrs.

do. Merck.—Pure, anhydrous (25

$Na_2C_4H_4O_4$.—Wh. powd.—*Sol.* W.

Sodium Sulphanilate Merck (8

(Sodium Anilinesulphonate; Sodium Para-amidobenzenesulphonate).—$NaC_6H_4(NH_2)SO_3+2H_2O$.—Wh., lustr. leaflets.—*Sol.* W.—*Uses:* Recom. for dispelling unpleasant symptoms attending acute catarrh & iodism, as it converts the injurious nitrites formed in saliva & nasal mucus into indifferent diazo compounds.—*Dose* 15 grains (1 Gm.) in water, 6 t. p. d.

Sodium Sulphantimonate Merck (3

(Sodium Thioantimonate; Schlippe's Salt).—$Na_3SbS_4+9H_2O$.—Large, colorl. or yellow, tetrahedral cryst.; alkal. react.—*Sol.* W.—*Uses:* Reag. for alkaloids.

Sodium Sulphate Merck.—Highest Purity, cryst. & gran. (1

(Glauber's Salt).—$Na_2SO_4+10H_2O$.—Colorl., efflor., monocl. prisms, or gran. cryst.; bitter, saline taste.—*Sol.* 2.8 W. at 15° C., G., 0.25 W. at 34° C.; 0.47 W. at 100° C.; insol. A., (U. S. P.).—*Melt.* 33° C.—At 100° C. loses all water of cryst. (55.9%).—Cath.; Aper.; Diur.—*Uses:* Constip., dropsy, torpid liver, cystitis, &c., & in artif. mineral waters & salts. Mostly in veter. pract.—*Dose* 1–8 dr. (4–30 Gm.).—*Caut.* Keep in well-stop. bot.

do. Merck.—Highest Purity, Medicinal, dried (1

$Na_2SO_4+H_2O$.—Wh. powd.—*Sol.* W.—*Dose* 60–240 grains (4–15 Gm.).—Also in veter. medicine.

do. Merck.—Pure, dried (1

Uses: Veter. medicine; & techn., in manuf. sod. carbonate, glass, ultramarine, in dyeing, & in frigorific mixtures.

do. Merck.—Commercial (1

Sodium Sulphate Merck.—Reagent.—Cryst. (2

$Na_2SO_4+10H_2O$.—Colorl., effloresc. cryst.—*Sol.* 3 cold, 0.4 boil., W.; insol. A.—Aqu. solut. neutral to litmus paper.—*Tests:* (*Impur. Insol. in W.*) 5 Gm.+50 Cc. H_2O affords clear solut.—(*Cl; Heavy Met.; Ca; Mg*) portions of 20 Cc. of 1:20 solut. should not be affected by: *a:* aqu. H_2S; *b:* $(NH_4)_2C_2O_4$; *c:* solut. $AgNO_3$; *d:* solut. Na_2HPO_4.—(*Fe*) 1 Gm.+20 Cc. H_2O+few drops HCl+solut. KSCN–no red color.—(*As*) 2 Gm. +20 Cc. H_2O; introduce in sm. quant. into Marsh appar. started w. 20 Gm. As-free Zn & dil. (1:5) H_2SO_4–no deposit in reduct. tube within $^1/_2$ hr.—*Uses:* Replacing K_2SO_4; remov. Pb & Bi fr. soluts.; determ. fusel oil.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Sodium Sulphide Merck.—Cryst. (1

(Sodium Monosulphide).—Na_2S+9H_2O.—Colorl. to yellowish, deliq. cryst.—*Sol.* W.

do. Merck.—Cryst., free from sulphite (2

do. Merck.—Pure, fused (1

do. Merck.—Fused (1

Na_2S+Polysulphides.—Brown sticks or pieces.—*Uses:* In tanning for removing hair fr. hides, & manuf. coal-tar dyes & sulphide blacks.

Sodium Sulphide Merck.—Reagent.—Cryst. (2

Na_2S+9H_2O.—Colorl., transp. cryst.; at least 97% Na_2S+9H_2O.—*Sol.*, eas. & clearly in W.—Aqu. solut. alkal. to litmus paper.—*Tests:* (*NH_4 Salts*) 3 Gm.+20 Cc. H_2O+solut. NaOH; heat–no NH_3 vapors evolv. (test w. moist litmus paper).—*Uses:* Separ. some heavy metals, *e.g.*, Cu, Sb, Sn, Bi, Cd; determ. Cu & Zn.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

do. Merck.—Reagent.—Solution.—For Nitrogen determ. accord. to Kjeldahl

5% Na_2S.—*Tests:* (*N*) 100 Cc.+50 Cc. N-free solut. NaOH (sp. gr. 1.3)+1 Gm. Zn-dust; distil off abt. 50 Cc.; collect distillate in U-tube receiver cont. abt. 20 Cc. H_2O+2–3 Cc. decinorm. HCl; titrate w. decinorm. KOH (methyl orange indic.)–KOH solut. used should be at most 0.2 Cc. less than quant. of acid placed in receiver.—*Uses:* Determ. N.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Sodium Sulphite Merck.—Pure, cryst. or dried (1

Cryst., $Na_2SO_3+7H_2O$; dried, Na_2SO_3.—Colorl. cryst. or powd.; saline, sulphurous taste.—*Sol.* (cryst.), in abt. 4 W. at 15° C.; sparingly A. (2 W. at 25° C.; 1.4 boil. W., U. S. P.).—Antisep.; Antizymotic.—*Uses:* Skin dis., sore mouth, diphth., sarcina ventriculi, & chronic merc. affect.; also chem.—*Techn.*, as preservative. The impure grades of the salt are used like the sod. bisulphite (*q. v.*) in general.—*Dose* (cryst.), 10–60 grains (0.6–4 Gm.).—*Caut.* Keep well stoppered & cool.

do. Merck.—Cryst. or dried (1

Sodium Sulphite Merck.—Reagent.—Cryst. (1

$Na_2SO_3 + 7H_2O$.—Colorl., prismatic cryst.; effloresc. in air.—*Sol.*, eas. W.—Aqu. solut. alkal. to litmus paper.—*Tests:* (*Heavy Met.; As*) as detailed under sod. bisulphite.—*Uses:* Reducing agent, especially arsenic to arsenous acid; determ. aldehydes.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

do. Merck.—Reagent.—Dried (2

Na_2SO_3.—Wh. powd.; 85–90% Na_2SO_3.—*Tests:* As under sodium bisulphite.—*Uses:* As of preceding.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Sodium Sulphocarbolate.—see **Sodium Phenolsulphonate**

Sodium Sulphocarbonate Merck (2

Na_2CS_3.—Fr. powd., fused sodium sulphide by carbon disulphide.—Coarse, brown powd.—*Sol.* W.—Antisep.—*Uses:* Destroying insects injurious to plants, & especially vines; chemically, for detect. Co & Ni.

Sodium Sulphocyanate Merck.—Pure, cryst., or dried (4

(Sodium Sulphocyanide, or Rhodanide).—NaSCN.—Colorl., deliq. cryst., or wh. powd.—*Sol.* A., W.—*Uses:* Reagent.

Sodium "Sulphoichthyolate."—see **Ichthyol Sodium**

Sodium Sulphoricinate Berlioz-Heryng-Merck (5

$C_{18}H_{33}O_2NaSO_4$(?). — Clear, yellowish-brown, syrupy liq.; alkaline reaction.—*Sol.* E., A., C.; on shaking w. W., liquid foams strongly & forms an emulsion.—Sp. Gr. 1.035 at 15° C.—Antisep.—*Uses: Extern.*, Skin dis. Also as solv. for phenol, iodine, iodoform, pyrogallol, resorcinol, potass. iodide, naphthalene, &c.—Usually used in form of sod. phenolsulphoricinate.

Sodium Sulphosalicylate Merck.—Cryst. (15

(Sodium Salicylsulphonate).—$NaC_7H_5O_3SO_3$.—Wh., cryst. powd., sour, astring. taste.—*Sol.* W.; alm. insol. A., E.—Antisep.; Antirheum.; Antipyr.—*Uses:* In rheum., neural., chorea, pleurisy, &c., instead of sod. salicylate; less powerful than latter, but free fr. the after-effects.—*Dose* 10–30 grains (0.6–2 Gm.).

Sodium Sulphovinate.—see **Sodium Ethylsulphate**

Sodium Sulphydrate Merck (8

(Sodium Hydrosulphate or Hydrosulphide).—NaHS + aq.—Colorl. cryst., when fresh.—*Sol.*, eas. W.—*Uses:* Chem. analysis.

Sodium Superoxide.—see **Sodium Peroxide**

Sodium Sylvate Merck (20

(Sodium Abietinate, or Silvinate).—$C_{20}H_{29}O_2Na$.—Wh. powd.—*Sol.* W., A.—*Uses:* Blenor.—*Dose* 8–30 grains (0.5–2 Gm.) 3–4 t. p. d.

Sodium Tannate Merck (6

$NaC_{14}H_9O_9$.—Brownish-black lumps or powd.—*Sol.* W.

Sodium Tartrate Merck.—Highest Purity, Medicinal, cryst. (1

(Normal Sodium Tartrate).—$Na_2C_4H_4O_6 + 2H_2O$.—Wh. cryst.—*Sol.* W.—Cath.; Refrigerant; Diur.—*Uses:* Tastel. substit. for Rochelle & Epsom salts.—*Doses:* As lax., 4–8 dr. (15–30 Gm.) once p. d.; diur., 15–45 grains (1–3 Gm.) 2–3 t. p. d.

do. Merck (1

Sodium Taurocholate Merck (250

Fr. bile of carnivora.—$NaC_{26}H_{44}NSO_7$.—Yellowish-gray powd.—*Sol.* W., A.—Powerful cholagogue.—*Uses:* Deficient biliary secretion.—*Dose* 2–6 grains (0.12–0.36 Gm.); 60–75 grains (4–5 Gm.) p. d.

Sodium Tellurate Merck (700

(Normal Sodium Tellurate).—$Na_2TeO_4 + 5H_2O$.—Wh. powd.—*Sol.* W.—Antihidrotic; Antisep.; Antipyr.—*Uses:* Night sw. of phth., gastric ulc., rheum., & typhoid fever.—*Dose* $^1/_4$–$^3/_4$ grain (0.015–0.05 Gm.) in alcoh. mixt. or elixirs.

Sodium Tellurite Merck (700

(Normal Sodium Tellurite).—Na_2TeO_3.—Wh. powd.—*Sol.*, sl. W.—*Uses:* In bacteriology for demonstrating reducing properties of bacteria.

Sodium Tetraborate.—see **Sodium Borate; Sodium Borate, Neutral**

Sodium Tetraiodophenolphtalein.—see **Antinosin**

Sodium Tetrasilicate Merck (30

Wh. powd.—*Sol.*, part. W.

Sodium Tetravanadate.—see **Sodium Divanadate**

Sodium Thioantimonate.—see **Sodium Sulphantimonate**

Sodium Thiophenesulphonate Merck (300

$NaC_4H_3S_2O_3 + H_2O$.—Wh. powd.; 33% sulphur.—*Sol.* W.—Antisep.; Dermic.—*Uses:* Prurigo & o. skin dis. in 5–10% oint.

Sodium Thiosulphate Merck.—Highest Purity, cryst. & gran. (1

(Sodium Hyposulphite; Sodium Subsulphite; Antichlor).—$Na_2S_2O_3 + 5H_2O$.—Wh., transp., monocl. prisms; cooling w. bitter after-taste.—*Sol.* 0.65 W. at 15° C.; (abt. 0.35 W. at 25° C.; sl. oil turpent.; insol. A., U. S. P.).—*Melt.* 50° C. when rapid. heated.—Antisep.; Germic.—*Uses:* Parasitic skin dis., sore mouth, diphth., pyemia, sarcina ventriculi, diar., typhoid fever, flatulent dyspep., &c.—*Extern.*, in 5–10% solut. in chloasma & ringworm.—*Dose* 5–20 grains (0.3–1.3 Gm.) several t. p. d.—In large doses (150 grains

[10 Gm.] p. d.) in chron. fetid bronchitis & pulmonary gangrene.—*Incomp.*, iodine, acids, &c. —*Caut.* Keep well stoppered.

Sodium Thiosulphate Merck.—Cryst. (1

Uses: Techn., as "antichlor" in bleaching & paper-making, as fixer in photogr., in extract. of silver ores in metallurgy, as mordant for wool, manuf. aldehyde green, reducer in chrome dyeing, disinfecting drinking water, &c.

Sodium Thiosulphate Merck.—Reagent (1

(Sodium Hyposulphite). — $Na_2S_2O_3+5H_2O$. — Colorl., odorl. cryst.; perman. in air at ord. temp.—*Sol.*, less than 1 cold W.—*Melt.* 50° C. in its water of cryst.—Aqu. 1:1 solut. sl'tly alkal. to litmus paper.—*Tests:* (H_2CO_3; H_2SO_4; H_2SO_3) 3 Gm.+50 Cc. H_2O+decinorm. I (abt. 120 Cc.) till liq. sl'tly yellow; then add solut. $BaCl_2$–no turb. —(*Free Alkali*) 1 Gm.+10 Cc. H_2O+phenolphtalein–no red color.—(*Sulphide*) 1 Gm.+10 Cc. H_2O+solut. $ZnSO_4$–no react. — (*Ca*) 1 Gm.+20 Cc. H_2O+NH_4OH+solut. $(NH_4)_2C_2O_4$–no turb.—*Uses:* Prepar. volumetric soluts. for use in determ. Cl, Bi, I; in analysis of bleaching powd., chlorates, bromates, iodates, permanganates, & peroxides such as hydrogen, lead, manganese, & magnesium peroxides; iron salts, chromic acid; detect. alkaloids.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Sodium Trichloracetate Merck (35

Fr. hydrated chloral, by sod. permang.—$CCl_3COONa+3H_2O$.—Wh. cryst.—*Sol.* W.

Sodium Trichlorophenate Merck (20

(Sodium Trichlorocarbolate).—$C_6H_2Cl_3.ONa$.—Wh., cryst. powd.—*Sol.*, hot W.—Antiseptic.

Sodium Truxillate Merck (150

$Na_2C_{16}H_{14}O_4+10H_2O$.—Wh. powd.—*Sol.* W., A.

Sodium Tungstate Merck.—Pure (3

(Sodium Wolframate). — $Na_2WO_4+2H_2O$. — Colorl., rhombic prisms; bitter taste.—*Sol.* 4 W.; 2 boil. W.—*Uses:* Chemical.

do. Merck.—Purified (3

Colorl. cryst.

do. Merck.—Crude (2

Wh., cryst. powd.—*Sol.* W.—*Uses:* Fireproofing & waterproofing fabrics.

Sodium Tungstate Merck.—Reagent (7

(Sodium Wolframate). — $Na_2WO_4+2H_2O$. — Colorl. prisms, or rhomb. plates.—*Sol.* 4 W.—Aqu. solut. alkal. to litmus paper. — *Tests:* (H_2O) gently ignite 1 Gm.–res. should weigh 0.88 Gm.—(*Cl*) 1 Gm.+20 Cc. H_2O+5 Cc. HNO_3 (sp. gr. 1.153); filter; add to filtrate few drops solut. $AgNO_3$–at most sl't opalesc. turb. within 10 min.—(H_2SO_4) 1 Gm.+25 Cc. H_2O+5 Cc. HNO_3 (sp. gr. 1.153); boil. 10–15 min.; filter; to 20 Cc. filtrate add solut. $Ba(NO_3)_2$–no immed. turb.—*Uses:* Prepar. sod. phosphotungstate & cadmium borotungstate; in reagents for alkaloids, peptone, bile pigments, acetoacetic acid.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Sodium Tungstate-Citric Acid Paper.—see **Citro-Sodium Tungstate Paper**

Sodium Uranate Merck (7

(Uranium Yellow; Yellow Uranium Oxide).—$Na_2U_2O_7+6H_2O$. — Orange-yellow, rhombic cryst.—*Sol.*, acids.—*Uses:* Techn., in manuf. yellowish-green glass; also in painting on porcelain & in enameling.

Sodium Urate Merck (15

$Na_2C_5H_2N_4O_3+H_2O$.—Wh., gran. powd.; caustic taste.—*Sol.*, in much W. w. part. decomp.

Sodium Valerate Merck. (9

(Sodium Valerianate). — $NaC_5H_9O_2$. — Colorl. cryst.; odor of valerian.—*Sol.* W., A.—Sed.; Nerve Stim.—*Uses:* Nervousn., hyst., mania, &c.—*Dose* 1–5 grains (0.06–0.3 Gm.).

Sodium Vanadate, Meta-.—see **Sodium Metavanadate**

Sodium Vanadate Merck (25

(Sodium Orthovanadate). — Na_3VO_4. — Wh., cryst. powd.—*Sol.* W.—*Uses:* With copper salts as reagent for alkaloids.—*Techn.*, manuf. inks & aniline black.

Sodium Wolframate.—see **Sodium Tungstate**

Sodium Xanthogenate Merck (5

$S:C(OC_2H_5)SNa$.— Yellowish powd.—*Sol.* W., A.—Antisep.; Germic.—*Uses:* Antiphylloxerin, in aqu. solut.

Sodium & Ammonium Oxalate Merck (3

$Na(NH_4)C_2O_4$.—Wh. powd.—*Sol.* W.

Sodium & Ammonium Phosphate Merck.—Highest Purity (2

(Microcosmic Salt; Sodium-ammonium-hydrogen Phosphate).—$Na(NH_4)HPO_4+4H_2O$.—Colorl., efflor. cryst.—*Sol.* W.—*Uses:* Blowpipe flux.

do. Merck (2

Sodium & Ammonium Phosphate Merck.—Reagent (3

(Microcosmic Salt).—$(NH_4)NaHPO_4+4H_2O$.—Colorl., monoclinic cryst. — *Sol.* 5 W. — Aqu. solut. alkal. to litmus paper. — *Tests:* When fused on platin. wire, yields a clear, colorl. bead. Other tests as given under sodium phosphate. —*Uses:* Standardizing uranium soluts.; determ. Mg & Mn; reagent in blowpipe analysis.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Sodium & Ammonium Sulphate Merck (2

$Na_2SO_4.(NH_4)_2.SO_4 + 4H_2O$, or, $Na_2(NH_4)_2(SO_4)_2 + 4H_2O$.—Wh. powd.—*Sol.* W.

Sodium & Antimony Sulphurated Merck (2

(Hepar Antimony). — Antimony oxide & sulphide w. sodium sulphide & sulphate.—Grayish-brown, fused lumps. — *Sol.*, part. W. — *Uses:* Chronic metallic poisoning.—*Dose* 1–5 grains (0.06–0.3 Gm.).—*Extern.*, in mouthwashes & lotions in 1% solut.; mixed w. water to paste as depilatory.

Sodium & Caffeine Sulphonate (35

(Symphorol, N.).—$C_8H_9N_4O_2.SO_3Na$.—*Sol.* 50 W.; 7 boil. W.—Diur.—*Uses:* Kidney dis., fatty heart, & obesity; does not affect blood pressure or depress heart power.—*Dose* 15 grains (1 Gm.) 4–6 t. p. d. in caps.

Sodium & Copper Chloride. — see **Copper & Sodium Chloride**

Sodium & Magnesium Borocitrate Merck (5

Wh. powd. — *Sol.* W. — Antisep.; Antilithic; Diur.; Cath.—*Uses:* Lithiasis & dis. of gen.-urin. org.—*Dose* 5–30 grains (0.3–2 Gm.).

Sodium & Magnesium Lactate Merck (10

Wh. powd.—*Sol.* W.—Stomachic; Tonic.

Sodium & Magnesium Phosphate Merck (8

Wh., cryst. powd.—*Sol.*, part. W.

Sodium & Magnesium Sulphate Merck (2

Wh. cryst.—*Sol.* W.—Lax.

Sodium & Magnesium Tartrate Merck (6

$Na_2Mg(C_4H_4O_6)_2 + 10H_2O$.—Wh. powd.—*Sol.* W. —Cathartic.—*Dose* 120–240 grains (8–15 Gm.).

Sodium & Osmium Chloride. — see **Osmium & Sodium Chloride**

Sodium & Palladium Chloride.—see **Palladium & Sodium Chloride**

Sodium & Potassium Carbonate Merck (2

(Mixt. sod. & potass. carbonates).—Wh., efflores. gran.; fuse more readily than either component. —*Sol.* 0.54 W. at 15° C.—*Uses:* Chem. anal. for decomposing many insoluble or difficultly soluble substances.

Sodium & Potassium Carbonate Merck.—Reagent.—Fused, anhydrous.—For evolution of CO_2 accord. to Kreussler (2

Wh. sticks.

Note. — For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Sodium & Potassium Phosphate Merck (3

$NaKHPO_4 + 7H_2O$.—Wh. powd.—*Sol.* W.

Sodium & Potassium Sulphate Merck (2

$Na_2SO_4.3K_2SO_4$.—Wh. powd.—*Sol.* W.

Solanidine Merck (1500

Decomp. prod. of solanine; occurring also naturally.—$C_{26}H_{41}NO_2$.—Wh., cryst. need.; rapidly turn yellow.—*Sol.* A., E.—*Melt.* 208° C.

Solanine Merck.—Pure (600

Physiologically active substance fr. sprouts of Solanum tuberosum, L. (Potato), & fr. o. sp. of S. (Solanum dulcamara, &c.). — Perf. free fr. solanidine & amorph. bases. Classed both as a glucoside (because of its decomposability into glucose), & as an alkaloid (because of its basic properties). — $C_{42}H_{75}NO_{15}$. — Wh., exceed. fine cryst.; bitter taste.—*Sol.*, dif. hot A.—Analg.; Nerve Sed.—*Uses:* Neural., vomiting of pregnancy, bronch., spasm. asthma, painful gastric affect., epileptoid tremor, locomotor ataxia, sclerosis of cord, &c.—*Dose* $^1/_6$–1 grain (0.01–0.06 Gm.) several t. p. d.—*Max. D.* $1^1/_2$ grains (0.1 Gm.) single; 8 grains (0.5 Gm.) p. d.—*Antid.*, tannin, emetics, cathartics, stimulants, opium.

Solanine Hydrochloride Merck (750

$C_{42}H_{75}NO_{15}.HCl$.—Wh., amorph. powd.—*Sol.* W. —*Uses & Doses:* As of solanine; chiefly hypoderm. up to $^3/_4$ grain (0.05 Gm.) in aqu. solut.

Solanum Carolinense

(Bull Nettle; Radical Weed; Sand-Brier; Horse Nettle). — Fruit of Solanum carolinense, L. Solanaceæ.—*Habit.:* South America; Florida & other sections of U. S.—*Etymol.:* "Solanum," fr. Lat. "solamen," solace, referring to its anodyne properties; & "carolinensis," referring to the place where found (South Carolina).—*Constit.:* Solanine; solanidine.—Antiepileptic; Antitetanic.—*Uses:* Tetanus, convuls., & epilepsy, particul. in convuls. due to albuminuria of pregnancy. Succed. for alkali bromides.—*Dose* 10–60 grains (0.6–1 Gm.) as fld. extr.

Solanum Insidiosum

(Jurubeba de Rio).—Root of Solanum insidiosum, Mart. Solanaceæ.—*Habit.:* Brazil.—*Etymol.:* Lat. "solanum," see preceding; & "insidiosum," insidious, dangerous.—*Constit.:* Jurubebin.—Stoma.; Diur.; Lax.; Antigonor.; Antisyph.

Solanum Paniculatum

(Jurubeba; Jurumbeba).—Root, lvs., & tops of Solanum paniculatum, L. Solanaceæ.—*Habit.:* Brazil.—*Etymol.:* See Solanum Carolinense.—Purgat.; Tonic.; Alter. — *Uses:* Hepatic & spleenic affections, & also in vesical catarrh & chron. dyspep.—The lvs. & tops are also used in gonor., syphilis, &c.—*Doses: Root:* Fld. extr., 15–45 ♏ (1–3 Cc.).—*Lvs. & tops:* Fld. extr., 15–30 ♏ (1–2 Cc.).

Solanum Tomatillo.—see **Natri**

Soldaïni's Reagent.—For glucose

Solut. 15 Gm. precipit. cupric carbonate in solut. 416 Gm. potass. bicarb. & 1400 Cc. W. —Reagent reduced by glucose (also tannin & formic acid), but not by dextrin or cane sugar.

Solferino.—see **Fuchsine**

Solid Blue.—see **Induline, Water-Soluble**

Solid Green.—see **Brilliant Green**

Solid Green O.—see **Malachite Green**

Solid Green O, Paste.—see **Dinitrosoresorcinol**

Solidago Odora

(Sweet-scented Goldenrod).—Lvs. & tops of Solidago odora, Aiton. Compositæ. — *Habit.:* Canada & eastern U. S.—*Etymol.:* Lat. "solidus," solid, & "agere," to act, referring to its curative effect as a vulnerary. "Odora" refers to the odor exhaled by the plant, particularly when bruised. — *Constit.:* Volat. oil. — Antipyr.; Diaphoretic; Carmin.; Styptic.— *Uses:* Fever, to relieve colic, & promote menstruation by sweating.—*Dose:* Fld. extr., 30–60 ♏ (2–4 Cc.).

Solidago Virgaurea

(European Goldenrod; Aaron's-rod; Woundwort).—Herb of Solidago Virgaurea, L. Compositæ.—*Habit.:* Europe; northeastern U. S.—*Etymol.:* "Solidago," see preceding. Lat. "virga," a rod or branch, & "aurea," golden, referring to the color of the plant.—Diur.; Astring.; Antilithic.—*Uses:* In kidney affections, enuresis, & dropsy.—*Doses:* Fld. extr., 30–60 ♏ (2–4 Cc.).—Tinct. (Rademacher's), 30 ♏ (2 Cc.).

Solomon's Seal.—see **Polygonatum**

Solurol

(Thyminic Acid; Nucleotinphosphoric Acid).—$C_{30}H_{46}N_4O_{15}.2P_2O_5$(?).—Yellow, amorph. powd. —*Sol.*, eas. W.—Uric-acid Solvent; Antarthrit. —*Uses:* Gout, rheum., uric-acid diathesis, &c. —*Dose* 4–8 grains (0.25–0.5 Gm.).

Solution Acid Iodotannic.—see **Acid Iodotannic**

Solution Ammonium Selenite.—see **Ferreira da Silva's Reagent**

Solution Arsenous & Mercuric Iodides Merck.—*U. S. P.* (1

(Donovan's Solution).—1 Gm., each, arsenous iodide & red mercuric iodide in 100 Cc.—*Misc.* W.—Alter.; Antiper.—*Uses:* Skin dis., venereal eruptions, chronic rheum., night pains in advanced specific dis., &c.—*Dose* 5–10 ♏ (0.3–0.6 Cc.). — *Antid.:* As of o. arsenicals.—*Incomp.*, alkal. & alkaloids or their salts.

Solution Bismuth & Potassium Iodides. — see **Dragendorff's Reagent**

Solution Cadmium & Potassium Iodides.—see **Marmé's Reagent**

Solution Calcium Chlorhydrophosphate. — see **Calcium Hydrochlorophosphate**

Solution Calcium Hydroxide (Hydrate). — see **Calcium Hydroxide, Solution**

Solution Chlorine Compound.—*U. S. P.*

(Chlorine Water). — Aqu. solut. chlorine fr. potass. chlorate (5 Gm.), HCl (18 Cc.), & water (to make 1,000 Cc.).—Sl'y yellowish-green liq.; disagr. chlorine taste; abt. 0.4% chlorine.—Deodorizer; Antisep.—*Uses: Intern.*, disinf. in infectious dis., like diphth., scarlat., typhus, &c. —*Extern.*, buboes, cancerous sores, abscesses, ulcers, &c.; gargle in smallpox, putrid sore throat, &c.; also as reagent.—*Dose* 15–240 ♏ (1–15 Cc.), dil. with W.—*Appl.*, wash.—*Antid.*, milk & albumen.—*Caut.* Keep in dark-amber or black bot.

Solution Copper Tartrate, Alkaline. — see **Fehling's Solution**

Solution, Donovan's.—see **Solution Arsenous & Mercuric Iodides**

Solution, Fehling's.—see **Fehling's Solution**

Solution Formaldehyde.—see **Formaldehyde**

Solution, Fowler's. — see **Solution Potassium Arsenite**

Solution Gold & Arsenic Bromide.—*N. F.*

Fr. As_2O_3 2.5 Gm., & $AuBr_3$, 3.25 Gm. w. bromine water.—*Dose* 3–5 ♏ (0.2–0.3 Cc.).

Solution Hydrogen Peroxide. — see **Hydrogen Peroxide; Perhydrol**

Solution Hydrogen Peroxide, Ethereal. — see **Hydrogen Peroxide, Ethereal Solution**

Solution Indigocarmine, Alkaline.—see **Mulder's Reagent**

Solution Iodine, Caustic.—*N. F.*

(Churchill's Iodine Caustic).—Aqu. solut. 25% iodine & 50% potass. iodide.

Solution Iodine Compound.—*U. S. P.*

(Lugol's Solution).—Aqu. solut. of 5% iodine & 10% potass. iodide. — Alterative. — *Uses:* Syph. affect., rheum., & scrof.— *Dose* 1–10 ♏ (0.06–0.6 Cc.).

Solution Iron Oxysulphate.—*N. F.*

Fr. ferrous sulph. 165 Gm. & nitric acid 165 Gm. w. W. to make 1000 Cc.

Solution Iron Persulphate or *Subsulphate.*—see **Iron Sulphate, Basic, Solution**

Solution Iron Succinate with Potassium Citrate

Deep reddish-brown liq. — Sp. Gr. 1.110. — *Misc.* W.—Tonic; Astring.

Solution Iron Tersulphate.—see **Iron Sulphate, Ferric, Solution**

Solution Mercury Cyanide, Alkaline. — see **Knapp's Reagent**

Solution Mercury & Barium Iodide. — see **Mercury & Barium Iodide, Solution**

Solution Mercury & Potassium Iodide. — see **Mayer's Reagent; Thoulet's Solution**

Solution Mercury & Potassium Iodide, Alkaline.—see **Nessler's Reagent; Sacchssé's Solution**

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Solution Methylene Blue, Loeffler's.—see **Loeffler's Methylene-Blue Solution**

Solution, Monsel's.—see **Iron Sulphate, Basic, Solution**

Solution Nitroglycerin. — see **Spirit Glyceryl Trinitrate**

Solution Picric & Citric Acids.—see **Esbach's Reagent**

Solution Potassium Arsenite Merck.—*U.S.P.* (1

(Fowler's Solution).—1 Gm. of arsenic trioxide in 100 Cc.—*Sol.* W., A.—Alter.; Antiper.; Tonic.—*Uses:* Chorea, skin dis., anemia, chlorosis, interm. fever, malarial affect., periodic neural., chronic rheum., &c. Never give on an empty stomach.—*Dose* 1–5 ♏ (0.06–0.3 Cc.).—*Incomp.*, alkaloidal salts, hypoposphites, iodides & sulphites, in acid solut.; salts of aluminum, antimony, barium, calcium, chromium, copper lead, mercury, silver, & zinc, in neutral solutions; tannic acid, iron salts.—*Antid.*, emetics, stomach siphon, freshly precipitated ferric hydroxide, or ferric hydroxide with magnesia, saccharated ferric oxide.—*Caut.* Poison!

Solution Soda.—see **Sodium Hydroxide Solution**

Solution Soda Chlorinated.—*U. S. P.*

(Labarraque's Solution).—Aqu. solut. containing sod. hypochlorite, NaOCl, sod. chloride, sod. carbonate; not less than 2.4% available chlorine.—Pale-greenish liq.; chlorine odor; disagr. alkal. taste.—Sp. Gr., abt. 1.050 at 25° C. (U. S. P.).—Antisep.; Disinf.; Stim.; Resolvent.—*Uses:* Malignant scarlat., typhoid fever, dysent., syphilis, scrof., putrid sore throat, glandular enlargements, &c.—*Techn.*, detergent, disinfect., bleaching, &c.—*Dose* 30–60 ♏ (2–4 Cc.).—*Inj.*, in gonor., in 1–2% solut.

Solution Trinitrin.—see **Spirit Glyceryl Trinitrate**

Solution Zinc Iodide-Starch.—see **Zinc Iodide-Starch Solution**

Solutol (1

Dark-brown, alkaline solut. of cresol in an alkali cresotate.—60.4% cresol.—*Sol.* W.—Disinf.; Antiputrefactive.—*Uses:* Disinf. water-closets, sputa, bed-clothes, excreta, &c.

Solveol (2

Neutral conc. solut. of cresol w. sod. cresotate.—100 Cc. cont. 27 Gm. of free cresol.—Dark liq.—*Misc.* W.—Antisep.; Germic.—*Uses: Extern.*, 0.1% solut. for washing wounds, abscess cavities, &c.; & in 0.5% solut. for dress. wounds, abscesses, eczema, & o. skin dis., &c.

Somnos (2

An elix. ea. 4 fl. dr. (15 Cc.) of which cont. 18 grains (1.2 Gm.) of a 73% glycerinic solut. of trichlorethidene propenyl ether $(CCl_3CHO[OH])_3.C_3H_5$, a condens. prod. of chloral & glycerin.—Hypn.—*Dose* 4–8 fl. dr. (15–30 Cc.).

Sonnenschein's Reagent.—For alkaloids

1. Aqu. solut. phosphomolybdic acid.—Ppt's alkaloids & albumen in aqu. solut.—2. Solut. cerosoceric oxide in sulphuric acid. — Gives color reactions w. alkaloids in conc. H_2SO_4.

Sophol (30

Silver comp. of formaldehyde-nucleinic acid. Read. splits off formaldehyde.—Yellowish-wh. powd.—*Sol.*, eas. W.—Antisep.—*Uses:* Gonor. & ophthalmoblennor.—*Appl.*, in soluts. up to 10%.

Sophorine.—see **Cytisine**

Sorbin Merck (2500

(Sorbose; Sorbinose).—Non-fermentable sugar fr. ripe berries of Sorbus Aucuparia, L. (European Mountain-ash), by fermentation.—$C_6H_{12}O_6$.—Hard, rhombic cryst.; sweet taste.

Sorbinose.—see **Sorbin**

Sorbit Merck (1250

Non-fermentable sugar isomeric w. mannit & dulcit, & obt. fr. fruit of Sorbus Aucuparia, L. (European Mountain-ash).— $C_6H_8(OH)_6 + {}^1/_2H_2O$.—Colorl. cryst.—*Sol.*, eas. hot A.; insol. W.—*Melt.* 102° C.—Opt. inactive.

Sorbose.—see **Sorbin**

Sourwood.—see **Oxydendron**

Southernwood.—see **Artemesia Abrotanum**

Sozal (20

(Aluminum Paraphenolsulphonate). — $Al_2(C_6H_4.OH.SO_3)_6$.—Brownish, cryst. gran.; faint, phenol odor; str., astring. taste.—*Sol.* W., A. G.—Antiseptic.—*Uses:* Tuberc. ulc., suppurations, & cystitis.—*Inj.* 1% solut.

Sozoiodole-Aluminum (22

(Aluminum Diiodoparaphenolsulphonate). — $(C_6H_2I_2.OH.SO_3)_3Al + 2H_2O$. — Colorl. needles; contains 2.75% Al.—*Sol.*, v. eas. A. & W.

Sozoiodole-Ammonium (16

(Ammonium Sozoiodolate; Ammonium Diiodoparaphenolsulphonate).—$C_6H_2I_2.OH.SO_3NH_4$.—Large, shining, nacreous, six-sided prisms. — *Sol.* 25 W.; sl. A.

Sozoiodole-Barium (16

(Barium Sozoiodolate).—Colorl. need.—*Sol.*, v. sl. W., & A.

Sozoiodole-Lead (16

(Lead Sozoiodolate). — Colorl., cryst. need.; sensit. to light.—*Sol.*, sl. cold W., but easily on addition of acetic acid.—19.5% Pb.

Sozoiodole-Lithium (22

(Lithium Sozoiodolate).—Cryst. need. or scales.—*Sol.*, v. eas. W.—*Uses:* Artic. rheumat., instead of salicylates.

Sozoiodole-Magnesium (22

(Magnesium Sozoiodolate).—Colorl., cryst. need. w. 8 molec. water of cryst.—*Sol.*, eas. W. & A.

Sozoiodole-Mercury (23

(Mercurous Diiodoparaphenolsulphonate; Mercury Sozoiodolate).—$HgC_6H_2I_2OSO_3$(Fischer).—Orange-yellow, exceedingly fine powd. — 32% Hg; 41% I.—*Sol.*, in solut. sod. chlor. or potass. iodide; insol. W., A.—Antisyph.; Antiseptic; Alterative.—*Uses:* Syph. erupt. & ulcer., enlarged glands, parasitic skin dis., intertrigo, excoriations, rhagades, eczema, & dis. joints. Oint., 3 to 5%. Hypodermically, in 8% solut. w. twice its wt. of potass. iodide, injected in constitutional syphilis in the gluteal region. The injections are painless if a 4–5% cocaine hydrochlor. solution is injected into the part 6 minutes before injecting the sozoiodolate. — *Max. D.*, per os, 1/4 grain (0.05 Gm.) single; 2 1/2 grains (0.15 Gm.) p. day.—*Caut.* Poison!

Sozoiodole-Potassium (15

Potassium Sozoiodolate; Potassium Diiodoparaphenolsulphonate).—$C_6H_2I_2.OH.SO_2K$.—Colorl., odorless, cryst. powder; sl. sour taste. — 52.8% of iodine; 20% of phenol; & 7% of sulphur.—*Sol.* 50 W.—Antisep.; Bactericidal.—*Uses: Extern.*, 10% mixt. w. talcum, or 5–10% oint. suffice for burns, cuts, bruises, abrasions, scalds, ache, exanthema, mycosis, scabies, ecz., herpes tonsurans, impetigo, syph. ulc., diphth.; pure or 50% mixt. in ulc. adenitis, erysipelas, ozena, otitis, & rhinitis; inj. for gonor. The sozoiodole salts quickly destroy the Klebs-Loeffler bacillus of diphth., & solut. of 2.5% is suffic. strong to kill Acarus scabiei in 25 minutes. —*Incomp.*, mineral acids, ferric chloride, silver salts, &c. (Strong sulphuric acid or heat drives off iodine vapor).

Sozoiodole-Sodium (16

(Sodium Diiodoparaphenolsulphonate, Sodium Sozoiodolate). — $NaC_6H_2I_2OHSO_3+2H_2O$. — Colorl., odorl., cryst. need.—*Sol.* 15 W., A., 20 G.—Alter.; Antisep.; Antipyr.—*Uses: Intern.* as intest. antisep., & in diabetes.—*Extern.*, in diphth. (the fine powd. blown into nose & throat), cervical catarrh, lupus, tuberculosis of nose & throat, chron. metritis, periostitis, tuberculous & varicose ulcers, hard & soft chancre; as insuffl. in acute & chron. laryngitis, & in 25% triturat. w. milk sugar in chron. pharyngitis, rhinitis, & rhino-pharyngitis, syph., cystitis, whoop.-cough, &c.—*Dose* 15–45 grains (1–3 Gm.) per day. In whoop.-cough, 3 grains per day, blown into nose.—*Appl.* 10% oint. w. lanum, 2–4% solut. in W. or 2% solut. in paraffin, in gonor. (in altern. w. zinc sulphate), as 6–8% solut. in conjunct. catarrh, blennor. neonator., & as mouthwash; also in stomatitis, & acute & purul. conjunctivitis.

Sozoiodole-Zinc (22

(Zinc Sozoiodolate; Zinc Diiodoparaphenolsulphonate).—$Zn(C_6H_2I_2[OH]SO_3)_2+6H_2O$.—Colorl., odorl. need.—*Sol.* 25 W.; A., G.—Antisep.; Astring. — *Uses:* Gonor., catarrh of nasal & pharyngeal muc. membr., skin dis., &c.—*Appl.*: For vesical irrigations, & wash in leucor., gonor. & urethritis, 1–2% solut.; in stomatitis, endometritis, & vaginismus, 5–7% solut.; in eczema, impetigo, varicose ulcer, & chancre, 5–10% oint.; in purulent otitis, otorrh., & hypertrophic rhinitis, 1–2% triturations w. talcum, milk sugar, or boric acid; in dry & tuberculous laryngitis, chron. & purulent otitis media, otorrh., ozena, chron. pharyngitis, pruritus, atroph. rhinitis, acute coryza, tuberculous ulcer, &c., 7–10–20% mixt.; as gargle, a 1 or 2% solut.

Spanish Hop.—see **Origanum, Cretan**

Spanish Needles.—see **Bidens Bipinnata**

Sparteine Merck.—Pure (200

Alkaloid fr. tops of Spartium scoparium (Sarothamnus scoparius) (Broom). — $C_{15}H_{26}N_2$. — Yellowish, syrupy liq.; peculiar odor; bitter taste.—*Sol.* W., E., C., A.—*Boil.*, at ord. pressure, above 360° C., w. part. decomp.; under 62–63 Mm. pressure, at 232–233° C.—Heart Stim.; Diur.—*Uses:* The salts (chiefly sulphate) only are in actual use. — *Antid.*, emetics & cathartics; tannin, stomach siphon, brandy, coffee, opium, &c. Same treatment for poison. by its salts.—*Caut.* Narcotic poison!

Sparteine Hydriodide Merck.—Cryst. (200

$C_{15}H_{26}N_2.HI$.—Colorl. needles.—*Sol.* W., A.—*Uses, Doses, &c.:* As of the sulphate.

Sparteine Hydrochloride Merck (150

$C_{15}H_{26}N_2.2HCl$. — Colorl. cryst.; faint, bitter after-taste.—*Sol.* W., A.—*Uses, Doses, &c.:* As of the sulphate.

Sparteine Sulphate Merck (15

$C_{15}H_{26}N_2.H_2SO_4+5H_2O$. — Colorl., odorl., sl. hygros. prisms; bitterish taste.—*Sol.*, 1.1 W., 2.4 A. at 25° C.; insol. E., C., (U.S.P.).—*Melt.* 136° C., when anhydr.—Heart Stim.; Diur.—*Uses:* To increase frequency of pulse & respiration, stimulate heart & central nervous syst., relieve weak condit. due to heart dis., irregular & retarded pulse, chloroform syncope, check pulmonary edema & dropsy. Best employed where digitalis fails or is contraindic. Most commonly used salt of sparteine.—*Dose* 1/4–1 grain (0.015–0.06 Gm.).—*Max. D.* 2 grains (0.12 Gm.) p. d.—*Appl.*, extern. in 1:200 solut., to reduce temp. & promote cure in erysip., smallpox, scarlet fever, & measles.

Sparteine Triiodide Merck (200

Fr. ethereal solut. iodine & sparteine.—$C_{15}H_{26}N_2I_2.HI$.—Black powd.—*Sol.* A.—*Uses, Doses, &c.:* As of the sulphate.

Spasmotin (1000

(Sphacelotoxin).—Poisonous prin. from ergot.—$C_{20}H_{21}O_9$.—Yellow, amorph. powd.—*Sol.* A., E., B.—Tonic; Astring.; Emmen.—*Uses:* Amen. & dysmenor.—*Dose* 1/2–1 1/2 grains (0.03–0.1 Gm.).

Spergularia.—see **Arenaria**

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Spermaceti.—*U. S. P.*

(Cetaceum).—Peculiar, concrete, fatty substc. fr. head of Physeter (Catodon) macrocephalus, L. (sperm whale). Cetacea.—*Habit.:* Atlantic, Pacific, & Indian Oceans.—*Etymol.:* "Physeter," fr. Grk. "physeter," a blow-pipe, fr. "physan," to blow (the sperm whale has a blow-hole near edge of snout). "Macrocephalus," fr. Grk. "makros," long or large, & "kephale," head. "Spermaceti," fr. Grk. "sperma," seed, & "ketos," whale. — Pearly-white, semi-transp. unctuous masses; foliated structure; alm. odorl. & tastel., but becomes rancid on exposure.—*Sol.* E., C., CS_2, oils, 50 boil. A.; insol. W. or cold A. —*Melt.* 42–50° C.—Sp. Gr., abt. 0.945 at 15° C. (0.935–0.944 at 25° C., U. S. P.). — *Constit.:* Chiefly cetin (cetyl palmitate, a compd. of cetylic alcoh., $C_{16}H_{33}OH$, with palmitic acid, $HC_{16}H_{31}O_2$); also esters of laurinic, stearic, & myristic acids w. other higher alcohols & w. glycerin.—Demulc.; Emoll.—*Uses:* As a base for oints., cerates, &c., & as emuls. w. egg-yolk or expr. oil almond.—*Techn.,* in manuf. of candles, soaps, &c.

Sphacelotoxin.—see **Spasmotin**

Spice Bush.—see **Lindera**

Spiegel's Reagent.—For nitric acid

Solut. diphenylamine in conc. sulphuric acid. —Reagent affords w. nitric acid & o. oxidizers a fine blue color.

Spigelia.—*U. S. P.*

(Pinkroot; Indian Pink; Carolina Pink; Maryland Pink; Worm-grass). — Dried rhizome & roots of Spigelia marilandica, L. Loganiaceæ. —*Habit.:* North America (N. Jersey to Florida & west to Wisconsin).—*Etymol.:* Named for Adrian van den Spieghel, known as Spigelius, a Flemish botanist & physician (1558–1625). "Marilandica" refers to the habitat of the plant, Maryland.—*Constit.:* Spigeline; resin; tannin; bitter principle; volat. oil.—Nar.; Anthelm.; Mydriat.—*Uses:* To expel ascarides; admin. w. cathartics to prevent narc. effects. —*Doses:* Adults, 30–120 grains (2–8 Gm.); children, 10–20 grains (0.6–1.3 Gm.), us'ly with some cath., *e.g.,* senna.—Fld. extr., 60–120 ♏ (4–8 Cc.).

Spigeline

Highly toxic active principle fr. Spigelia marilandica (Maryland Pink).—Active Anthelm., especially in ascarides.

Spignel.—see **Meum**

Spikenard.—see **Aralia**

Spilanthes

(Para Cress).—Herb of Spilanthes oleracea, L. Compositæ. — *Habit.:* West Indies; South America; cult. in all tropical countries.—*Etymol.:* Grk. "spilos," spot, & "anthos," flower, *i.e.,* the whitish flowers are spotted black. Lat. "oleraceus," serving as domestic vegetable.—*Constit.:* Volat. oil; tannin; spilanthin.—Antiscorbutic; Sialagogue. Used also in toothache.

Spiræa

(Meadow Queen; Meadow Sweet; Bridewort; Sweet-hay).—Fls. & herb of Ulmaria (Spiræa) Ulmaria, Hill. Rosaceæ. Spiraceæ. — *Habit.:* Europe; Western Asia; cultiv. in U. S.—*Etymol.:* Fr. Lat. "ulmus," elm, *i.e.,* the plant is elm-like. "Spiræa" fr. Grk. "speira," spiral, referring to the spiral-shaped capsules of certain spec.—*Constit.:* Volat. oil; salicylic aldehyde; salicylic acid; methyl salicylate; piperonal; vanillin.—Diur.; Vermifuge; Astring.; Tonic; Febrif.

Spirit Ammonia Merck.—*U. S. P.* (1

(Spirit of Hartshorn).—Alcoh. solut. of ammonia cont. 10% NH_3 by wt.—Colorl., inflam. liq.; str., suffoc. odor of ammon.—Sp. Gr. 0.810 at 15° C. (0.808 at 25° C.–U. S. P.).—*Sol.* W., A.—Stim.; Antispasm. — *Uses: Intern.,* hyst., flatulent colic, nervous debility, &c.—*Extern.,* bruises. Also pharm.—*Dose* 10–30 ♏ (0.6–2 Cc.).

Spirit Ammonia Aromatic Merck.—*U. S. P.* (1

Cont. abt. 0.34% of amm. carbonate & 9% of amm. W.—*Sol.* A.—Stim.; Antispasm.; Antacid. —*Uses:* Inebriety, hyst., nerv. debil., sick headache, flat. colic, &c.—*Dose* 30–60 ♏ (2–4 Cc.).

Spirit Ants Merck.—*N. F.* (2

(Spirit Formic Acid).—Fr. 35 Cc. formic acid, 225 Cc. W., & alcoh. to make 1000 Cc.—Rubef. —*Uses:* Counterirritant in painful local affect. To develop redness of skin apply undiluted.

Spirit Ants.—True.

(Formic Spirit from Ants).—Fr. var. sp. of Formica (Ants).—Rubefacient.—*Uses:* Counterirritant in painful local affect.

Spirit Ether Merck.—*U. S. P.* (1

(So-called "Hoffmann's Anodyne").—Mixt. of 32.5% ether & 67.5% alc. by vol.—Colorl., volat. liq.—Anod.; Stim.; Antispasm.—*Uses:* Nerv. affect., dysmenor., renal colic, angina pect., neural., &c.—*Dose* 10–120 ♏ (0.6–8 Cc.).

Spirit Ether Compound Merck.—*U. S. P.* (2

(Hoffmann's Anodyne). — 32.5% ether, 65% alc. & 2.5% ethereal oil, by volume.—Stim.; Antispasm.; Anod.; Hypn.—*Uses:* Nerv. affect., hyst., insomnia, neural., &c.; & nausea fr. opium.—*Dose* 10–120 ♏ (0.6–8 Cc.) in sweet W.

Spirit Formic Acid.—see **Spirit Ants**

Spirit Glonoin.—see **Spirit Glyceryl Trinitrate**

Spirit Glyceryl Trinitrate.—*U. S. P.*

(Spirit Glonoin; Solution of Trinitrin; Spirit or Solution of Nitroglycerin).—1% by weight of nitroglycerin in alc. — Clear, colorl. liq. — Sp. Gr. 0.826 to 0.832 at 15° C.; (0.814–0.820 at 25° C., U. S. P.) — Arterial Stimulant. — *Uses:* Angina pectoris, convulsions, asthma, heart dis., poison. by hydrogen carbide, headache, neural., &c.—*Dose* 1–2 ♏ (0.06–0.12 Cc.).

Spirit Hartshorn.—see **Water Ammonia; Spirit Ammonia**

Spirit Mindererus.—see **Ammonium Acetate, Solution**

Spirit Mustard.—*N. F.*

2% vol. oil mustard in A.

Spirit Niter, Sweet.—see **Spirit Nitrous Ether**

Spirit Nitrous Ether

(Sweet Spirit of Niter).—Alcoh. solut. of not less than 4% ethyl nitrite, $NO.OC_2H_5$.—Pale, straw-colored liq.; fragr., pung. odor; burning taste.—Sp. Gr. 0.823 at 25° C. (U. S. P.).—*Sol.* W., A.—Diaph.; Diur.; Antipyr.; Stim.; Antispasm.—*Uses:* Fevers, dropsy, dis. of gen.-urin. org., flatulent colic, nausea, colds.—*Dose* 30–60 ♏ (2–4 Cc.). — *Incomp.*, antipyrine, tannin, acetanilide, phenacetin, iodides, fl. extr. buchu, tinct. guaiac, morphine salts, carbonates, acacia, & ferrous sulphate.

do.—Conc.

15% solut. of ethyl nitrite in alc. w. traces of aldehyde, acetic acid, &c.—Sl'y yellowish liq. —*Sol.* W., A., E., C.

Spirit Phosphorus.—*N. F.*

1.2 Gm. phosphorus dissolv. in 1000 Cc. absol. A.

Spirit Turpentine.—see **Oil Turpentine**

Spirit Yellow.—see **Amidoazobenzene Hydrochloride**

Spleen Merck.—Dried, powder (25

Fr. spleen of sheep.—1 part=abt. 5 parts fresh organ.—*Uses:* Anemia, chlorosis, malaria, myxedema, syphilis, typhoid, Basedow's disease, rachitis, & in psychic disturbances with atrophied spleen.—*Dose* 4–12 grains (0.25–0.75 Gm.) 3 t. p. d.

Spleenwort.—see **Ruta-Muraria**

Spodium.—see **Charcoal, Animal**

Sponge, Compressed.—*N. F.*—Cones

(Sponge Tents).—Sponge impregnated w. a mixt. of acacia mucilage (1 vol.) & W. (9 vol.) & bound into cylindrical shape.—*Uses:* Enlarge wound canals, fistulous canals, the os uteri, &c. —*Caut.* Keep dry, espec. when unbound.

Spongin Merck (1000

Oxygen-free protein, fr. common sponge by treatment w. dil. hydrochloric acid.

Spoonwort.—see **Cochlearia**

Spotted Arum.—see **Arum**

Sprudel Salt.—see **Salt, Carlsbad**

Spunk.—see **Polyporus**

Squaw Root.—see **Caulophyllum**

Squaw Vine.—see **Mitchella**

Squaw Weed.—see **Senecio Aureus**

Squill.—*U. S. P.*

(Scilla; Sea Onion).—Bulb of Urginea maritima (L.), Baker (Scilla Maritima, L.), Liliaceæ, deprived of its dry membranous outer scales, cut into thin slices & carefully dried, the central portions being rejected.—*Habit.:* Mediterranean basin, near the sea (Spain, France, Italy, Morocco, Algeria, &c.).—*Etymol.:* Fr. Grk. "skilla," an onion, fr. "schizein," to split (into scales); Urginea, fr. Lat. "urgere," to press, *i.e.*, its flattened, compressed seeds; "Maritima." fr. "maritimus," relating to the sea.—Irreg., more or less curved, somewh. transluc., yellowish-wh. or reddish-wh. segments, $1^1/_6$–2 in. (3–5 Cm.) long; sl. odor; mucil., bitter, acrid taste; brittle when dry, tough & flex. when moist.—*Constit.:* Scillin; scillitoxin; scillipicrin; sinistrin, $C_6H_{10}O_5$; sugar; scillain (scillitin).—Emet.; Diur.; Cardiac Tonic; Expector.; Cath.—*Uses:* Coughs, colds, croup, dropsy, &c.; also in domestic economy for poisoning mice, rats, &c.—*Doses:* 1–10 grains (0.06–0.6 Gm.) several t. p. d. in dropsy; 1–3 grains (0.06–0.2 Gm.) as diur. & expector.; 6–12 grains (0.36–0.8 Gm.) emet. Large doses dangerously irritant.—*Max. D.* 3 grains (0.2 Gm.) single; 15 grains (1 Gm.) daily.—Fld. extr., 2–4 ♏ (0.12–0.25 Cc.) expector.; 10–15 ♏ (0.6–1 Cc.) emet., every 15–20 minutes.—Comp. Fld. extr., 2–15 ♏ (0.12–1 Cc.).—Alcoh. extr., $^1/_2$–$1^1/_2$ grains (0.03–0.1 Gm.).—*Antid.*, stomach pump; tannin; demulcents; opiates; stimulants; like digitalis generally.

Squirrel Corn.—see **Corydalis**

Staff Tree.—see **Celastrus**

Staggerwort.—see **Senecio Jacobæa**

Stannic & Stannous Salts.—see under **Tin**

Staphisagria.—*U. S. P.*

(Stavesacre; Larkspur).—Ripe seed of Delphinium Staphisagria, L. Ranunculaceæ.—*Habit.:* Mediterranean Basin; cult. France & Italy.—*Etymol.:* Grk. "staphis," dried grape, or raisin, & "agria," wild, *i.e.*, the fruit clusters resemble those of the wild grapes. "Staves-acre" is a corruption of "staphisagria." "Delphinium," fr. Grk. "delphin(ion)," a dolphin, *i.e.*, the form of the seed resembles the imaginary figures of the dolphin.—*Constit.:* Delphinine, $C_{22}H_{35}NO_6$; staphisagrine (staphisaine), $C_{22}H_{33}NO_5$; delphinoidine, $C_{42}H_{68}N_2O_7$; delphisine, $C_{27}H_{46}N_2O_4$; staphisagroine, $C_{20}H_{24}NO_4$; malic acid; fixed oil; proteids.—Antineuralgic; Diur.; Cathart.; Emet.; Rubefac.; Insecticide.—*Uses:* Chiefly externally in itch, rheumat., & as insecticide.—*Dose* 1–2 grains (0.06–0.12 Gm.).—*Antid.*, stomach siphon, ammonia, digitalis, brandy, tannin, &c.

Star Anise.—see **Illicium**

Star Grass.—see **Aletris**

Starch.—*U. S. P.*

(Corn Starch; Amylum).—Starch grains fr. fruit of Zea Mays, L. Gramineæ.—*Habit.:*

Tropical & subtropical America (chiefly the U. S.). — *Etymol.:* Fr. Grk. "a," negative, & "myle," a mill, *i.e.*, so fine as to not require a millstone (grinding). "Zea," fr. Grk. "zao," to live, referring to its life-sustaining properties. "Mays," fr. Spanish "maiz," fr. "mahiz," the native Haytian name. "Starch," fr. Germ. "stark," stiff or strong, referring to its stiffening properties.—Wh., tastel. powd., or angular, irreg. micro-granular masses.—Empirical formula $(C_6H_{10}O_5)_n$.—*Constit.:* Granulose; cellulose.—*Sol.*, hot W. (jelly when cold).—*Uses:* Demulc.; diet for invalids & convalesc.; dusting powd.; enemata (in aqu. solut.); antid. for iodine.—*Techn.*, paste; starching fabrics, &c.—*Chem.*, as indicator (starch test-solut.); reagent for iodine.

Starch.—Arrow-root

(Maranta; Arrow-root).—Fecula fr. rhizome of Maranta arundinaceæ, L. Marantaceæ.—*Habit.:* West Indies; also cultiv. in S. Carolina & Georgia, U. S., East Indies, Ceylon, & Southern Africa.—*Etymol.:* More properly "aru-root," fr. "aru-aru," a Brazilian name for flour.—Wh., floury lumps; odorl. & tastel.—*Sol.*, hot W.—Empirical formula $(C_6H_{10}O_5)_x$.—*Constit.:* Granulose; cellulose.—Demulc.; Nutr., & Dietet. for invalids & children.

do.—Rice

(Rice Flour).—Fecula fr. seeds of Oryza sativa. Gramineæ.—*Habit.:* India, & all tropical & subtropical countries.—*Etymol.:* Fr. Grk. "oryza," rice.—Uniform, minute, polyhedric granules.—*Constit.:* Granulose; cellulose.—*Uses:* Nutrient; size for fabrics; paste; prep'g alcoh. beverages (arrak, saké, &c.).

do.—Wheat

Fecula fr. seeds of Triticum vulgare, Gramineæ.—*Habit.:* All countries.—*Etymol.:* Lat. "tritus" (fr. "tero"), to thresh, rub, or grind (*i.e.*, seeds must be ground for eating).—Usually a fine powd. consisting of nearly spherical or ellipsoidal grains; white, odorl., & tastel. Empirical formula $(C_6H_{10}O_5)_n$.—*Constit.:* Granulose; cellulose.—*Sol.*, hot W.—*Uses:* As of corn starch (Starch, U. S. P.).

Starch, Alani.—see **Inulin, White**

Starch, Cassava.—see **Tapioca**

Starch Iodide.—see **Starch Iodized**

Starch Iodized Merck (6

(Starch Iodide).—2% iodine.—Bluish-black powd.—Insol. W.—Disinf.; Antisep.—*Uses: Intern.*, diar., typhoid fever, dysent., &c.—*Extern.*, with lanolin, as substit. for tincture of iodine.—*Dose* 3–10 grains (0.2–0.6 Gm.) several t. p. d.—*Appl.*, in oint. w. lanum instead of tinct. iodine.—*Caut.* Keep well stoppered.

Starch Soluble Merck (2

(Amylodextrin).—By heating starch w. glycerin & adding str. alc. during the cooling.—Wh. powd.—*Sol.* W.—*Uses:* Emulsifying agent; also techn., in textile industry, & in volum. analys. as indicator.

Starch Sugar.—see **Dextrose**

Starwort.—see **Helonias**

Statice Brasiliensis.—see **Baycuru**

Statice Limonium

(Sea Lavender; Marsh Rosemary; Canker Root; Meadow Root).—Root of Statice Limonium, L., var. Caroliniana, Gray. Plumbaginaceæ.—*Habit.:* Atlantic & Gulf coasts.—*Etymol.:* Grk. "statikos," standing.—*Constit.:* 12–18% tannin (greenish-black color w. ferric salts); trace volat. oil; caoutchouc-like matter; gum; inorgan. salts (Na & Mg).—Astring.; Tonic.—*Uses:* Diar. & dysent.—*Appl.*, to bleeding or ulcerated surfaces, sore throat, &c.—*Dose:* Fld. extr., 10–30 ♏ (0.6–2 Cc.).

Stavesacre.—see **Staphisagria**

Stearin.—see **Tristearin**

Sterculia Acuminata.—see **Cola**

Steresol

Brown or flesh-colored, adhesive, varnish-like antisep.; adheres closely to mucosa & skin.—Compos., benzoin, tinct. tolu, carbolic acid, ethereal oil chamomiles, shellac, & saccharin, dissolved in alcohol.—*Uses:* Painting on false membranes in diphtheritic angina.

Stibic Anhydride.—see **Antimony Oxide, Antimonic**

Stibious Acid, Anhydrous.—see **Antimony Oxide, Antimonous**

Stibium.—see **Antimony**

Sticta

(Lungwort Lichen; Lungmoss; Tree Lungwort; Oak Lungwort).—The lichen, Sticta pulmonacea, Ach. Parmeliaceæ.—*Habit.:* Europe; U. S.—*Etymol.:* Lat. "sticta," fr. Grk. "stiktos," spotted, punctated. "Pulmonacea" fr. Lat. "pulmo," lung, *i.e.*, the plant is used in pulmonary diseases.—*Constit.:* Bitter principle (stictic acid).—*Uses:* Astring. (particularly in pulmonary diseases).

Stigmata Maydis.—see **Zea**

Stilbene Merck.—Cryst. (600

(Symmetrical Diphenylethylene; Toluylene).—Fr. toluene, by passing it over heat. lead oxide.—$C_{14}H_{12}$, or, $C_6H_5.CH:CH.C_6H_5$.—Colorl. to yellowish cryst.—*Sol.*, hot A., E., B.—*Melt.* 125° C.—*Boil.* 306–307° C.—*Uses:* In form of derivatives as starting point in manuf. artificial dyes.

Stillingia.—*U. S. P.*

(Queen's Root; Yaw Root; Silver Leaf).—Root of Stillingia sylvatica, L. Euphorbiaceæ.—*Habit.:* Southeastern U. S.—*Etymol.:* Named for

Benjamin Stillingfleet, an English botanist of the 18th century. "Sylvatica," fr. Lat. "silva," a wood, forest, *i.e.*, it grows in the pine-barrens of the South.—*Constit.:* Stillingine (alkaloid; existence doubted); volat. oil; resin; glucoside; sylvacrol; tannin; gum.—Emet.; Alter. (in hepatic & cutaneous diseases); Antisyph.; Antiscrofular; Expector.; Diur.; Diaph.; Sialag.; Cholag. —*Doses:* 15–30 grains (1–2 Gm.).—Extr., 3–10 grains (0.2–0.6 Gm.).—Fld. extr., 15–60 ♏ (1–4 Cc.).—Comp. fld. extr., 30–90 ♏ (2–6 Cc.).

Stoechados.—see **Helichrysum**

Stoehr-Renaut's Eosine

Mixt. of conc. aqu. solut. potass.-eosine, satur. solut. of hematoxylin in alc., & satur. solut. of potass. alum in glycerin.—*Uses:* Stain. sections for histological study.

Stone Root.—see **Collinsonia**

Stone Seed.—see **Lithospermum**

Storax.—see **Styrax**

Stork's Bill.—see **Erodium; Geranium**

Stovaïne (80

(Dimethylaminobenzoylpentanol, or Ethyldimethylaminopentanolbenzoyl, Hydrochloride). —$C_{14}H_{21}NO_2.HCl$, or, $C_6H_5OCO.(CH_3)C(C_2H_5).CH_2.N(CH_3)_2.HCl$.—Small, lustr. scales.—*Sol.*, eas. W., A., acetic ether; less eas. in acetone.—*Melt.* 175° C.—Local Anesthetic.—*Uses:* In ophthalmology.

Stramonium.—*U. S. P.*

(Thorn Apple; Jamestown Weed; Jimpson or Jimson Weed; Stinkweed; Devil's Apple; Apple of Peru).—Dried lvs. (also seed, though not official) of Datura Stramonium, L. Solanaceæ. —*Habit.:* Europe; Asia; America.—*Etymol.:* "Datura," fr. "tatorah," Arabic, or "dhatura," Hindoo, name of plant. "Stramonium," fr. Grk. "strychnon," synonym for "solanum"; & "manikon," raving, *i.e.*, solanaceæ, which causes raving madness when taken.—*Constit.: Lvs.:* Atropine; hyoscyamine; albumen; mucilage.—*Seed:* Hyoscyamine; atropine; fixed oil; malic acid; resin; proteids.—Hypn.; Nervine; Mydriatic; Nar.; Antispasm.; Diur.—*Uses:* Insanity, mania, & epilepsy.—*Lvs.:* Smoked in asthma.—*Extern.*, in oint., f. ulcers, hemorrhoids, fissures, skin diseases., poison-oak erupt., rheumat., sprains, &c.; also to keep flies from horses, in form of 1:3 aqueous decoction as extern. appl.—*Doses: Lvs.:* 1–5 grains (0.06–0.3 Gm.).—Alcoh. extr., $^1/_4$–1 grain (0.015–0.06 Gm.); *Max. D.* $1^1/_2$ grains (0.1 Gm.) single, 6 grains (0.36 Gm.) daily.—Fld. extr., 1–3 ♏ (0.06–0.2 Cc.); *Max. D.* 5 ♏ (0.3 Cc.) single, 15 ♏ (1 Cc.) daily.—Tinct., 5–10 ♏ (0.3–0.6 Cc.). —For smoking, 15 grains (1 Gm.).—*Seed:* 1–3 grains (0.06–0.2 Gm.) in powd., tinct., extr., or fld. extr.; *Max. D.* 3 grains (0.2 Gm.) single, & 10 grains (0.6 Gm.) daily.—*Antid.*, same as for belladonna.

Strassburger's Corallin (Rosolic Acid)

1 Gm. corallin, 25 Gm. sod. carbonate, & 100 Cc. W.—*Uses:* Staining plant tissue.

Strasser's Fat Mixture

Solut. spermaceti & tallow in castor oil.—*Uses:* As imbedding material in microscopy.

Strawberry, Wood.—see **Fragaria**

Strontia.—see **Strontium Oxide**

Strontium Merck.—Fr. Amalgam (3000

Etymol.: Fr. "Strontian," the place in Scotland where the mineral strontianite, from which the element was first isolated, is found.—Metal.—Sr.—Pale-yellow pieces; one of the group of alkaline earths; oxidizes quickly on expos.—Sp. Gr. 2.5 at 15° C.—*Caut.* Keep under naphtha, as o. alkali metals.

do. Merck.—By Electrolysis (10000

Strontium Acetate Merck (2

$Sr(C_2H_3O_2)_2+^1/_2H_2O$.—Wh., cryst. powd.—*Sol.* W.—Anthelm.; Tonic.—*Uses:* To expel worms. —*Dose* 10–40 grains (0.6–2.6 Gm.) twice daily, for 5 days, as anthelm.

Strontium Arsenite Merck (8

$Sr(AsO_2)_2+4H_2O$(?).—Wh. powd.—*Sol.* W.—Alter.; Tonic.—*Uses:* Skin dis. & malarial affect. —*Dose* $^1/_{30}$–$^1/_{15}$ grain (0.002–0.004 Gm.) several t. p. d.

Strontium Bromate Merck (15

$Sr(BrO_3)_2+H_2O$.—Colorl. to yellowish, hygros. cryst.—*Sol.* 3 W.

Strontium Bromide Merck.—Anhydrous, powd. (2

$SrBr_2$.—Wh., hygrosc. powd.—*Sol.* W.; sl. in A. —Sed.; Tonic.—*Uses:* Epilepsy, convulsions, headaches, stomach affect., nervousn., hyst., &c. —7 pts. of anhydrous salt are equal to 10 pts. of the cryst.—*Dose* 3–10 grains (0.2–0.6 Gm.).

do. Merck.—Cryst. (1

$SrBr_2+6H_2O$. — Colorl. cryst.; bitter, saline taste.—*Sol.*, abt. 1 W. at 25° C.; 0.4 boil. W. (U. S. P.).—Gastric Tonic; Nerve Sed.; Antiepileptic; Antinephritic.—*Uses:* Hyperacidity of stomach, rheum., gout, epilepsy, nervousness, hyster., headache, & convulsions.—*Dose* 5–15–20 grains (0.3–1–1.3 Gm.). In epilepsy as much as 150 grains (10 Gm.) may be given daily.—In Basedow's disease in children, in comb. w. strontium iodide (1:2).—*Incomp.*, acids, alkaloids, & salts of antimony, bismuth, copper, lead, mercury, & silver.—*Caut.* Keep in glass-stop. vials.

Strontium Carbonate Merck.—Pure (1

$SrCO_3$.—Wh., impalp. powd.—*Sol.*, acids, & in carbonated W.

do. Merck.—Precipitated (1

Uses: Pyrotechn., & in manuf. iridescent glass.

Strontium Chlorate Merck (5

$Sr(ClO_3)_2+5H_2O$. — Wh., cryst. powd. — *Sol.*

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

0.6 W., A.—*Uses:* Pyrotechn. (red fire).—*Caut.* Use same precautions as with potass. chlorate.

Strontium Chloride Merck. — Highest Purity, cryst. (2

$SrCl_2+6H_2O$.—Wh. need.; sharp, bitter taste. —*Sol.* 2 W.

do. Merck.—Pure, cryst. or dried (1

Colorl. cryst., $SrCl_2+6H_2O$ (cont. some lime), or white, dry, anhydr. powd. ($SrCl_2$). — *Sol.*, (cryst.), v. eas. W.; insol. A. — *Uses:* Manuf. stront. carbonate; also to some extent for red flames (in alcoholic solut.).

Strontium Chromate Merck (4

$SrCrO_4$.—Yellow powd.—*Sol.* W.

Strontium Citrate Merck (5

$SrC_6H_6O_7$+aq.—Wh., cryst. powd.—*Sol.*, sl. W.

Strontium Dioxide Merck.—Hydrated (7

(Hydrated Strontium Peroxide).—SrO_2+8H_2O. —Wh. powd.—*Sol.*, eas. acids; sl. W.—*Uses:* Bleaching.

Strontium Diuranate.—see **Uranium & Strontium Oxide**

Strontium Fluoride Merck.—Pure (3

SrF_2.—Wh., cryst. powd.—*Sol.*, in HF, HCl; insol. W.—Antisep.

do. Merck.—Commercial, free fr. arsenic (2

Strontium Formate Merck (10

$Sr(HCO_2)_2+2H_2O$. — Colorl., rhombic cryst. — *Sol.* W.

Strontium Glycerinophosphate Merck (10

$SrO_2 : PO . OC_2H_5(OH)_2 + 2H_2O$. — Wh., cryst. powd.—*Sol.* W.; insol. A.

Strontium Hydroxide Merck (1

(Strontium Hydrate).—$Sr(OH)_2+8H_2O$. — Colorl., deliq., quadratic cryst. — *Sol.*, sl. W. — *Uses:* Techn., in sugar industry for separating crystallizable sugar fr. molasses; manuf. caust. alkalies fr. corresponding carbonates.

Strontium Hyposulphate Merck (10

$SrS_2O_6+4H_2O$.—Colorl. cryst.; bitter taste.— *Sol.*, hot W.

Strontium Hyposulphite.—see **Strontium Thiosulphate**

Strontium Iodide Merck (5

SrI_2+6H_2O.—Colorl. to yellowish, deliq., gran. powd.; bitterish, saline taste.—*Sol.* A.; sl. E.; 0.6 W. at 15° C.; (abt. 0.5 W. at 25° C., U. S. P.); 0.27 boiling W.—Alter.; Sialag.— *Uses:* Instead of potass. iodide in heart dis., asthma, rheum., scrof., &c.; combined w. stront. bromide (2 : 1) in Basedow's disease in children.—*Dose* 5–10 grains (0.3–0.6 Gm.) single; 15–45 grains (1–3 Gm.) p. d.—*Caut.* Keep in dark amber bottles.

Strontium Lactate Merck.—Highest Purity, Medicinal (2

$Sr(C_3H_5O_3)_2+3H_2O$.—Wh., gran. powd.; sl'y bitter taste.—*Sol.* A., 4 W.; 0.5 boiling W.— Anthelm.; Antinephritic; Diur.; Tonic.—*Uses:* Albumin. of nephritis; in worms, rheum., gout, & chorea.—Decreases albumin in urine without diuresis.—*Doses:* Nephr., 5–10 grains (0.3–0.6 Gm.); for worms, 30 grains (2 Gm.) twice p. d. for 5 d.—*Max. D.* 120–150 grains (8–10 Gm.) p. day.

Strontium Monosulphide.—see **Strontium Sulphide**

Strontium Monoxide.—see **Strontium Oxide**

Strontium Nitrate Merck.—Pure, dry (1

$Sr(NO_3)_2$.—Wh. powd.—*Sol.* 1.4 W. at 20° C.; sl. A.—*Uses:* Pyrotechn. (red fire).

do. Merck.—Dry (1

do. Merck.—Impalp. powd. (1

Strontium Nitrite Merck (20

$Sr(NO_2)_2$.—Wh. to yellowish powd.—*Sol.* W.

Strontium Oxalate Merck (1

SrC_2O_4.—Wh., cryst. powd.—*Sol.*, sl. in W.— *Uses:* Pyrotechn.

Strontium Oxide Merck.—Pure, anhydrous (4

(Strontia; Strontium Monoxide).—SrO.—Grayish-wh., porous, infusible, caustic mass.—*Sol.* W. w. evolution of much heat, & formation of hydroxide.

Strontium Peroxide, Hydrated.—see **Strontium Dioxide, Hydrated**

Strontium Phosphate Merck (2

$Sr_3(PO_4)_2$.—Wh., tastel. powd.—*Sol.*, acids.— Nutritive; Tonic.—*Uses:* Phth., & o. wasting dis. as a tissue builder. Superior to calc. phosphate (Laborde).—*Dose* 10–30 grains (0.6–2 Gm.).

Strontium Platinocyanide — see **Platinum & Strontium Cyanide**

Strontium Salicylate Merck (1

$Sr(C_7H_5O_3)_2+2H_2O$.—Colorl. cryst.—*Sol.*, abt. 20 W. & abt. 75 A. at 15° C.; (18 W., 66 A. at 25° C.; 3.5 boil. W., 10.5 boil. A., U. S. P.).—Antirheum.; Tonic.—*Uses:* Rheum., gout, chorea, muscular pains, & pleurisy.—*Dose* 10–40 grains (0.6–2.6 Gm.) 2–3 t. p. d.

Strontium Succinate Merck (30

$SrC_4H_4O_4$.—Wh. powd.—*Sol.* W.

Strontium Sulphate Merck.—Precip., free fr. Sodium (5

$SrSO_4$. — Wh. precip. — *Sol.*, in solut. alkali chlorides; v. sl. W.—*Uses:* Pyrotechn.

do. Merck.—Precip., commercial (1

Strontium Sulphide Merck (2

(Strontium Monosulphide).—SrS.—Light-gray powd.—*Sol.*, acids.—*Uses:* In luminous paints, because of its phosphorescent properties.

Strontium Tartrate Merck (6

$SrC_4H_4O_6 + 4H_2O$.—Wh., cryst powd.—*Sol.*, sl. in W.

Strontium Thiosulphate Merck (7

(Strontium Hyposulphite). — Fr. strontium acetate w. sodium thiosulphate.—$SrS_2O_3 + 5H_2O$. —Fine need.—*Sol.* W.

Strontium & Caffeine Sulphonate

(Symphorol, S.).—$(C_8H_9N_4O_2.SO_3)_2Sr$.—*Sol.* W. Diur.—*Uses:* Kidney dis., fatty heart, & obesity. —*Dose* 15 grains (1 Gm.) 4–6 t. p. d. in caps.

Strontium & Potassium Chlorate Merck (5

$Sr(ClO_3)_2.2KClO_3$.—Wh., cryst. powd.—*Sol.* W. —*Uses:* Pyrotechn.

Strophanthin Merck (500

Glucoside, fr. seeds Strophanthus Kombé, Oliv. —$C_{40}H_{66}O_{19}$ (Fraser; Feist).—Wh. to yellowish, amorph., or cryst. powd.; v. bitter taste.—*Sol.* W., A.; alm. insol. E., C., B.—Vaso-constrictor; Heart Tonic. Not Diur. — *Uses:* Heart dis.; superior to digitalin in some cases.—*Dose* $^1/_{300}$–$^1/_{200}$–$^1/_{60}$ grain (0.0002–0.0003–0.001 Gm.). — *Antid.*, emetics, stomach siphon, aconite, veratrum viride, staphisagrine, muscarine, atropine ($^1/_{120}$–$^1/_{60}$ grain [0.0005–0.001 Gm.] hypoderm.), camphor, picrotoxin, mustard plaster, brandy.

Strophanthin Tannate Merck (600

Yellowish-wh., amorph. powd.; 58% strophanthin.—*Sol.* A.—*Uses, &c.:* As of strophanthin, but more easily taken.—*Dose* $^1/_{120}$–$^1/_{60}$ grain (0.0005–0.001 Gm.) several t. p. d.

Strophanthin Thoms-Merck.—Cryst. (750

(G.-Strophanthin; Gratus Strophanthin). — Glucoside fr. Strophanthus gratus; said to be ident. w. ouabain (*q.v.*). — $C_{30}H_{46}O_{12}.9H_2O$. — Colorl., bitter, quadrangular plates.—*Sol.*, abt. 100 W., & abt. 30 absol. A. & amylic A.; sl. E., C., & acetic acid.—*Melt.* 187–188° C.—Cardiac Tonic; Diur. — *Uses:* As of digitalis in weak heart, aortal insufficiency, disturb. of compensation, dyspnea, edema, etc. — *Doses:* $^1/_{20}$–$^2/_5$ grain (0.003–0.025 Gm.); average $^1/_{12}$ grain (0.005 Gm.) single; $^1/_2$ grain (0.03 Gm.) p. d., & begin. w. small initial doses.

Strophanthus.—*U. S. P.*

Ripe seed of Strophanthus Kombé, Oliver. Apocynaceæ, deprived of its long awn.—*Habit.*. Central Africa; Asia; Philippines. — *Etymol.:* Grk. "strephein," to turn, to twist, & "anthos," flower, *i.e.*, referring to the twisted & tailed lobes of the corolla. Lat. "hispidus," hairy, bristly, *i.e.*, covered with long, coarse hairs.— *Constit.:* Strophanthin, $C_{40}H_{66}C_{19}$; kombic acid; choline; trigonelline; fixed oil.—Cardiac Stim.; Diur.; Substitute for digitalis.—*Uses:* Heart diseases, asthma, dyspnea, dropsy, renal colic due to calculi, palpit. of heart, nephrit., &c. —*Dose:* $^1/_4$–1 grain (0.015–0.06 Gm.).—Alcohol. extr., $^1/_{60}$–$^1/_{15}$ grain (0.001–0.004 Gm.).—Fld. extr., $^1/_8$–$^1/_2$ ♏ (0.008–0.03 Cc.).—Tinct. (1:10), 5–15 ♏ (0.3–1 Cc.).—*Antid.*, emetics, stomach siphon, cathartics, tannin, opium, coffee, brandy, &c.

Strychnine Merck.—Cryst. & powder (25

Alkaloid fr. seed of Nux Vomica & o. Loganiaceæ.—$C_{21}H_{22}N_2O_2$, or, $N{:}C_{20}H_{22}O{:}N.CO$.—Sm., hard cryst., or wh., cryst. powd.; v. bitter taste. —*Sol.* 7 C., 110 A., 6,700 W. at 15° C.; 12 boil. A., 2,500 boil. W. (6,400 W., 110 A., 5,500 E., 6 C., 150 B., & 180 amyl alcoh. at 25° C.; 3,000 W. at 80° C.; 28 A. at 60° C., U. S. P.).—*Melt.* 268° C.—Bitter Tonic; Excito-motor Stim.; Stomachic. — *Uses: Intern.*, palsy, tabes dorsalis, chronic alcoholism, vomiting, dyspepsia, anemia, insom. fr. mental over-work, &c.; antidote to chlorof. & chloral poisoning. Poison for rats, mice, foxes, & wolves.—*Extern.*, linim. in palsy, amaurosis, & myopia. — *Doses:* $^1/_{60}$–$^1/_{15}$ grain (0.001–0.004 Gm.) 2–3 t. p. d.—*Max. D.* $^1/_6$ grain (0.01 Gm.) single; $^1/_3$ grain (0.02 Gm.) p. d.; in dipsomania, $^1/_{120}$–$^1/_{30}$ grain (0.0005–0.002 Gm.) hypoderm.—*Appl.* 0.5–3% oint.— *Antid.*, stomach tube, tannin, emetics, camphor, charcoal, paraldehyde, urethane, potass. bromide, chlorof., hydrated chloral, morphine hypoderm. ($^1/_3$ grain [0.02 Gm.]), curare hypoderm., 0.1–0.5% solut. potass. permangan. intern., artif. respir., &c.—*Incomp.* (of *all* strychnine salts), alkalies, alkali carbonates & bicarbonates, ammonium chloride, benzoates, dichromates, bromides, borax, cyanides, gold chloride, ichthyol, iodides, mercuric chloride, oxalic acid, picric acid, piperazine, potassio-mercuric iodide (not if acacia present), oxidizers, tannic acid, salicylates.—*Caut.* Very poisonous!

Strychnine Acetate Merck (34

$C_{21}H_{22}N_2O_2.C_2H_4O_2$.—Sm., wh. cryst.—*Sol.*, sl. W.—*Uses, Doses, &c.:* As of the alkaloid.

do.—Solution.—*N. F.*

Aqu. solut. cont. 0.21 Gm. strych. acetate, 3.5 Cc. dil. acetic acid, 25 Cc. alcoh., & 1 Cc. comp. tr. cardamom in 100 Cc.

Strychnine Arsenate Merck (34

$C_{21}H_{22}N_2O_2.H_3AsO_4 + {}^1/_2H_2O$.—Wh., cryst. powd.; v. bitter taste.—*Sol.* 14 W., more eas. hot W.— Tonic; Alter.; Antituberc.—*Uses:* Tuberculosis, skin dis., malarial affect., &c.; us'y hypoderm. 0.5% in liq. paraffin; of this 4–15 ♏ (0.25–1 Cc.) may be injected per day.—*Dose* $^1/_{60}$–$^1/_{15}$ grain (0.001–0.004 Gm.) several t. p. d.—*Antid. & Incomp.:* As of strychnine alkaloid.

Strychnine Arsenite Merck (34

$(C_{21}H_{22}N_2O_2)_2.HAsO_2$.—Wh., cryst. powd.—*Sol.*, sl. W.—Tonic; Alter.; Antiper.—*Uses:* Remit. & interm. fever, dyspep., tuberculosis, skin dis.,

&c. — *Dose* $^1/_{60}$–$^1/_{15}$ grain (0.001–0.004 Gm.) several t. p. d.

Strychnine Bisulphate Merck (30

$C_{21}H_{22}N_2O_2.H_2SO_4+2H_2O$.—Wh. need.—*Sol.* W.

Strychnine Cacodylate

Wh., cryst. powd.—*Sol.* 750 W. at 15° C.; 15 A. at 60° C.—*Dose* $^1/_{30}$–$^1/_3$ grain (0.002–0.02 Gm.).

Strychnine Camphorate Merck (150

$C_{21}H_{22}N_2O_2.C_{10}H_{16}O_4$.—Colorl. cryst.—*Sol.* W.—Tonic.—*Uses, Doses, &c.:* As of the alkaloid.

Strychnine Citrate Merck (150

$C_{21}H_{22}N_2O_2.C_6H_8O_7$. — Wh. cryst. — *Sol.* W.—*Uses, Doses, &c.:* As of the alkaloid.

Strychnine Glycerinophosphate Merck (50

Wh., cryst. powd.—*Sol.* W.—*Uses, &c.:* As of the alkaloid.

Strychnine Hydrobromide Merck (50

$C_{21}H_{22}N_2O_2.HBr$. — Wh. need. — *Sol.* 55 W. — Tonic; Sed.—*Uses:* Nerv. affect., chronic alcoholism & insom. from over-work.—*Dose* $^1/_{30}$–$^1/_{12}$ grain (0.002–0.005 Gm.) 2–3 t. p. d.

Strychnine Hydrochloride Merck (35

$C_{21}H_{22}N_2O_2.HCl+1^1/_2H_2O$.—Wh., efflores. need. —*Sol.* 40–50 W.—*Uses, Doses, &c.:* As of the alkaloid.

Strychnine Hypophosphite Merck (40

Wh., cryst. powd. — *Sol.* W. — Tonic; Tissue Builder.—*Uses:* Tuberc. affect., in scrof., & in wasting dis. gen'ly.—*Dose* $^1/_{30}$–$^1/_{12}$ grain (0.002–0.005 Gm.).

Strychnine Iodate Merck (400

$C_{21}H_{22}N_2O_2.HIO_3$. — Colorl. need. — *Sol.* W.—Tonic.—*Uses:* Paralysis, anesthesia, &c.; chiefly hypoderm.—*Dose* $^1/_{10}$ grain (0.006 Gm.) hypoderm. (this dose should not be exceeded).

Strychnine Lactate Merck (100

$C_{21}H_{22}N_2O_2.C_3H_6O_3$.—Wh., cryst. powd.—*Sol.* W. —*Uses, Doses, &c.:* As of the alkaloid.

Strychninemethylammonium Hydroxide. — see **Methylstrychnine**

Strychninemethylammonium Iodide.—see **Methylstrychnine Iodide**

Strychnine Nitrate Merck.—Cryst. & powd. (35

$C_{21}H_{22}O_2N_2.HNO_3$.—Groups of silky need., or powd.—*Sol.* 90 W. at 15° C.; 3 boil. W.; 5 boil. A. (42 W., 120 A., 156 C., 60 G. at 25° C.; 8 W. at 80° C.; 60 A. at 60° C.; insol. E., U. S. P.).—*Uses, Doses, &c.:* As of the alkaloid. The salt most frequently used in Europe.

do. Merck.—Highest Purity, free fr. brucine (50

Strychnine Oleate.—2%

Strychnine in oleic acid.—*Sol.* E., & oleic acid. —Tonic.—*Uses: Extern.*, admin'g strychnine.

Strychnine Orthosulphaminebenzoate. — see **Strychnine Saccharinate**

Strychnine Phenolsulphonate Merck (200

(Strychnine Sulphophenate, or Sulphocarbolate). —$C_{21}H_{22}N_2O_2.C_6H_5OHSO_3$.—Wh., cryst. powd. —*Sol.* W., A.

Strychnine Phosphate Merck (35

$(C_{21}H_{22}N_2O_2)_2.H_3PO_4+9H_2O$.—Wh., cryst. powd. —*Sol.*, sl. W.—*Uses, Doses, &c.:* As of the alkaloid.

Strychnine Saccharinate

(Strychnine Orthosulphaminebenzoate).—A true salt of saccharin & strychnine.—$C_{21}H_{22}N_2O_2.C_6H_4(SO_2)(CO)NH$.—Wh. powd.—*Uses:* This comp. of strychnine is sweet inst. of bitter; used in all cases as the alkaloid, & in doses abt. one-third larger.

Strychnine Salicylate Merck.—Cryst. (40

$C_{21}H_{22}N_2O_2.C_7H_6O_3$.—Wh., cryst. powd.—*Sol.* W., A.—*Uses, Doses, &c.:* As of the alkaloid; espec. advantageous in rheum. & chorea.

Strychnine Sulphate Merck.—Cryst. & powd. (25

$(C_{21}H_{22}N_2O_2)_2.H_2SO_4$ + $6H_2O$. — Wh., odorl. prisms, or wh. powd.; v. bitter taste; cryst. effloresc. in dry air.—*Sol.* 50 W., 26 G. at 15° C.; 109 A.; 2 boil. W., 8.5 boil. A.; (31 W., 65 A., 325 C. at 25° C.; 6 W. at 80° C.; 20 A. at 60° C.; insol. E., U. S. P.).—*Melt.* 200° C. when anhydrous.—*Uses:* The salt most frequently prescribed in the U. S. Its action & uses differ but sl'y fr. those of the alkaloid.—*Dose* $^1/_{30}$–$^1/_{12}$ grain (0.002–0.005 Gm.).—*Caut.* Keep in well-stop. vials.

Strychnine Sulphocarbolate. } — see **Strychnine**
Strychnine Sulphophenate. } **Phenolsulphonate**

Strychnine & Zinc Hydriodide

$C_{21}H_{22}N_2O_2.HI.ZnI_2$.—Sm., wh. cryst.; yellow on expos.—*Sol.* W.—*Caut.* Keep in the dark.

Strychnos Ignatia.—see **Ignatia**

Stypticin (130

(Cotarnine Hydrochloride Merck). — Hydrochloride of oxidation product of narcotine.—$C_{12}H_{15}NO_4.HCl$, or, $(CH_3.O)(CH_2:O_2):C_6H(CH_2.CH_2).CH(OH.N.CH_3.HCl$.—Yellow cryst.—*Sol.*, eas. W., A.—Styptic; Hemostat.; Analg.; Sed. —*Uses:* Hemorrhages of any source, but especially functional dysmenor. & menor. of puberty, & climacteric period, uterine subinvolution after delivery & abortion, also vesical hemor. as well as all profuse, uterine hemor. Also effective in nose bleed, & in bleeding following tooth extraction.—*Dose* $^1/_2$–$1^1/_2$ grains (0.03–0.1 Gm.) 5–6 t. p. d. in capsules or pearls; in dysmenor. & menor., $^3/_4$ grain (0.05 Gm.) 4–5 t. p. d.—*Inj.* (urgent cases): $1^1/_2$–4 grains (0.1–0.25 Gm.) in 10% solut.—*Extern.*, as styptic, pure or in strong solut., or in 30% gauze or cotton.

Stypticin Tablets.—Sugar-coated
Each contains $^3/_4$ grain (0.05 Gm.) stypticin. —*Uscs, &c.*, As of stypticin.

do.—Hypodermic

Styptol Knoll (130
(Cotarnine Phtalate). — $C_6H_4(COOH)_2.(C_{12}H_{15}NO_4)_2$.—Yellow, microcryst. powd.—*Sol.*, eas. W. — Stypt. — *Uses:* Hemorrhages. — *Dose* $^3/_4$ grain (0.05 Gm.) 3–5 t. p. d. in tabl.

Styracin Merck.—Cryst., white
(Cinnamyl, or Cinnyl, Cinnamate).—Constit. of storax.—$C_{18}H_{16}O_2$, or, $C_6H_5.C_3H_4.C_9H_7O_2$.—Wh., or faint yellowish need.—*Sol.* 3 E., 20 A., benzin. —*Melt.* 44° C.—Antisep. & Stim.

Styracol (24
(Guaiacol Cinnamate Knoll; Cinnamyl-guaiacol). —Fr. guaiacol, by cinnamyl chloride w. heat.—$C_{16}H_{14}O_3$, or, $C_6H_4OCH_3.C_6H_5(CH)_2CO_2$.—Colorl. need.—*Sol.* A., C., acetone; alm. insol. W.—*Melt.* 130° C.—Antisep.; Germic.—*Uses: Intern.*, tuberculosis, chronic vesical catarrh, diar., dysent., gonor., &c.—*Extern.*, wounds & ulcers.

Styrax.—*U. S. P.*
(Storax; Oriental Sweet Gum). — Balsam obtained fr. wood & inner bark of Liquidambar orientalis, Miller. Hamamelidaceæ. — *Habit.*: Asia Minor.—*Etymol.:* Arabic "asstirak," styria drops, *i.e.*, a plant yielding a resinous exudation. Lat. "liquidus," liquid, & Arabic "ambar," amber, *i.e.*, the fresh styrax resembles liquid amber in color.—*Sol.*, warm A.; insol. W. —*Constit.:* Styrol (styrene; styrolene), C_8H_8; cinnamic acid; styracin (cinnamyl cinnamate), $C_9H_7(C_9H_9)O_2$; α- & β-storesin, $C_{36}H_{68}O_3$; phenylpropyl cinnamate, $C_9H_7(C_9H_{17})O_2$; ethyl cinnamate; ethyl vanillin. — Stim.; Expector.; Diur.; Antisep.; Disinf.—*Uses:* Particularly in scabies.—*Techn.*, in microscopy for imbedding (diatoms); in fumigating pastilles & powders; in perfumery.—*Dose* 10–30 grains (0.6–2 Gm.), usually as tinct.

Styrene Merck (120
(Styrol; Styrolene; Cinnamene [or, -ol]; Phenylethylene; Vinylbenzene [or, -ol]).—Constit. of liquid storax.—C_8H_8, or, $C_6H_5.CH:CH_2$.—H'ly refractive, yellowish, oily liq.; arom. odor.—Sp. Gr. 0.925 at 0° C.—*Misc.* A., E.—*Boil.* 140–145° C.—Opt. inactive.

Styrene (Meta-) Merck (200
(Metastyrol).—Polymer of styrene, by heat.—$(C_8H_8)_n$.—Colorl., glassy, transp. solid; odorl.; tastel.—*Sol.*, sl. boil. E.; insol. A.

Styrol. } —see **Styrene**
Styrolene. }

Styrone Merck.—Cryst. (60
(Cinnamic, Cinnamylic, Styrylic, or Phenylallylic, Alcohol).—Fr. styracin w. aqu. solut. KOH, by distil.—$C_9H_{10}O$, or, $C_6H_5.CH:CH.CH_2.OH$.—Wh. need., or cryst. mass; hyacinth odor.—*Sol.* A., E., benzin, G.—*Melt.* 30–35° C. —*Boil.* 250° C. — Deodor. & Antisep. — *Uses:* 12.5% glycerin solut. for deodor. purposes.—*Caut.* Turns dark-colored on expos. to light.

Styrone Merck.—Liquid (30
Fr. styracin, by conc. solut. of KOH.—Yellow, oily, h'ly refractive liq.; odor of hyacinth.—*Misc.* A., E., benzin, &c.—*Boil.*, abt. 250° C. —*Uses:* Perfumery.

Subcutin
(Paraphenolsulphonic-acid Ethyl Ester of Paraaminobenzoic Acid).—$C_2H_5COO.C_6H_4.NH_2.SO_3H.C_6H_4OH$.—Wh., cryst. powd.—*Sol.* 100 cold, & 40 hot, W.—Loc. Anesthetic.—*Uses:* As of anaesthesin.—*Appl.* 12.5% solut. in physiol. salt solut.

Suberin Merck (20
Substance, not yet definitely known chemically, incrusting cork cells. — Fr. bark of Quercus suber (Cork Oak).—Sm. pieces resembling cork. —Insol. in usual solvents.

Sublamine (10
(Mercury Ethylenediaminesulphate; Ethylenediamine Mercuric Sulphate).—$HgSO_4.2(CH_2.NH_2)_2.2H_2O$.—Abt. 44% Hg. — Wh. cryst. — *Sol.*, eas. W., G.; sl. A.—Surg. Disinf. & Antisep. —*Uses:* Instead of corros. sublimate in syphilis, skin diseases, gynecology, ophthalmology, otology, &c. — *Appl.*, vaginal douche, 1:500–1000 solut.; collyria, 1:3000–5000 solut.

Succinamide Merck (75
Diamide of succinic acid.—$C_4H_8N_2O_2$, or, $C_2H_4(CO.NH_2)_2$. — Colorl. need. — *Sol.*, sl. W.; eas. boiling W.—*Melt.* 243° C.

Succinic Anhydride.—see **(Acid) Succinic Anhydride**

Succinimide Merck.—Cryst. (50
Fr. succinic anhydride, by dry NH_3 gas. — $C_4H_5NO_2$, or, $(COCH_2)_2NH$. — Colorl. need. — *Sol.* W., A., E.—*Melt.* 125–126° C.—*Boil.* 287–288° C. — Antisep.—Used in form of mercury compound (*q. v.*).

Succinonitrile.—see **Ethylene Cyanide**

Succinyl Chloride Merck (50
(Succinyl Dichloride). — $C_4H_4O_2Cl_2$, or, $COCl.CH_2.CH_2.COCl$. — Fum., h'ly refractive liq. — Sp. Gr. 1.412 at 15° C.—*Boil.* 190° C.

Succinyl Oxide.—see **(Acid) Succinic Anhydride**

Succinyl Peroxide.—see **Alphozone**

Succisa
(Devil's Bit; Devil's Root; Radix Morsus Diaboli).—Root of Succisa pratensis (Scabiosa succisa, L.). Moquin-Tandon. Dipsaceæ. — *Habit.:* Europe.—Astring.—*Uses: Extern.*, in metritis, & for gargles in throat diseases.

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Sucrol

(Dulcin; Valzin; Paraphenetolcarbamide; Para-ethoxyphenylurea). — Fr. paraphenetidin by potass. cyanate, & in o. ways.—$C_9H_{12}N_2O_2$, or, $NH_2.CO.NH.C_6H_4.OC_2H_5$.—Shin. need.; v. sweet taste; 200 times as sweet as cane sugar.—*Sol.* E., 25 A., 800 W., 150 boiling W.—*Melt.* 173–174° C.—*Uses:* Sweetening for bitter rem., &c.

Sucrose.—see **Saccharose**

Sucupira.—see **Bowdichia**

Sucuuba Bark.—see **Plumiera**

Sudan Brown.—Fat dye

(Pigment Brown). — Diazo-comp. from alpha-naphtylamine, w. alphanaphthol.—Brown powd. —*Sol.* A., E., fats, oils, &c.

Sudan Red.—see **Magdala Red**

Sudan Red III.—Fat dye

(Aminoazobenzeneazobetanaphthol). — Diazo-comp. from aminoazobenzene, w. betanaphthol. —$C_{22}H_{16}N_4O$, or, $C_6H_5.N_2.C_6H_4.N_2.C_{10}H_6.OH$.—Brown powd.—*Sol.* A., E., B., petroleum ether, oils, fats, &c.—*Uses:* Coloring fats, &c.; also in micro-techn. as stain for zoological, pathologico-anatomical, & vegetable objects, like wax, cutin, suberin, resin, contents of lactiferous ducts, &c., which are colored red, while cellulose membrane remains uncolored.

Sudan Yellow Merck (12

(Anilineazobetanaphthol).— Brick-red powd.—*Sol.* A., w. orange-yellow color; insol. W.—*Uses:* Coloring spirit lacquers & oils.

Sudan Yellow G.—Fat dye

(Metadioxyazobenzene; Anilineazoresorcinol).—$C_{12}H_{10}N_2O_2$, or, $C_6H_5N_2.C_6H_3(OH)_2$. — Brown powd.—*Sol.* A., fats, oils, &c.

Suet

(Mutton Suet).—Purified internal fat of abdomen of Ovis Aries (Sheep), L.—Wh., solid fat; sl. odor; taste, bland if fresh, but rancid if long expos.—*Sol.* 2 B., 44 boil. A., 60 E.; insol. W., cold A.—*Melt.* 45–50° C.—*Uses:* Pharmaceutical. —*Caut.* Keep well closed.

Sugar, Cane.—see **Saccharose**

Sugar, Meat.—see **Inosite**

Sugar of Lead.—see **Lead Acetate**

Sugar of Milk.—see **Milk Sugar**

Sulfonal (27

(Sulphonmethane [U. S. P.]; Diethylsulphone-dimethylmethane).—Fr. anhydrous acetone, by anhydrous ethylmercaptan w. a stream of dry hydrochl. acid gas. — $(C_2H_5SO_2)_2:C:(CH_3)_2$.—Colorl., cryst. powd.—*Sol.* 65 A., 110 dil. A., 135 E., 500 W. at 15° C.; (360 W., 47 A., 45 E., 16 C. at 25° C.; 15 boil. W., 2 boil. A.; sol. B., U. S. P.). — *Melt.* 125–126° C. — *Boil.* 300° C. — Hypn.; Sed.; Antihidrotic. — *Uses:* Insom., epilepsy, night sw., hiccough, whoop.-cough, heart diseases where hypnotic required, chordee, &c. No action on heart in therapeutic doses. Do not give if kidneys are not acting normally.—*Dose* 15–45 grains (1–3 Gm.) $^3/_4$ hour before retiring, in beer, wine, or simple elixir.—*Max. D.* 60 grains (4 Gm.) p. d.—*Antid.*, stimulants, stomach siphon; sod. bicarbonate, 75–120 grains (5–8 Gm.) daily.

Sulfopyrine

(Antipyrine Para-aminobenzenesulphonate). — Wh., non-hygrosc. powd.—*Sol.*, eas. W.—*Uses:* Coryza, iodism, &c.—*Dose* 15 grains (1 Gm.).

Sulphaldehyde Merck (100

(Thioaldehyde; Thioacetaldehyde).—Colorl. liq., penetrating, nauseous smell.—*Sol.* A., E., C.; alm. insol. W.—Hypnotic.—*N.B.:* Three times as active as paraldehyde (Luisini).

Sulphaminol Merck (20

(Thioxydiphenylamine).—$C_{12}H_9NS_2O$, or, $NH(C_5H_3OH)C_6H_4:S_2$. — Greenish-yellow powd.; odorl.; tastel.—*Sol.* A.; acetic acid; alkalies; insol. W. — *Melt.* 155° C. — Antiseptic. — *Uses: Intern.*, in cystitis.—*Extern.*, instead of iodoform. By insufflation in laryngeal phth., as dust. powd. on wounds, syph. sores, &c.—*Techn.*, in foul brood in bee culture.—*Dose* 3–4 grains (0.2–0.25 Gm.) single; 15 grains (1 Gm.) p. d.

Sulphanilic Acid-Naphtylamine Sulphate Paper. —see **Griess's Paper, Red**

Sulphine.—see **Primuline Yellow**

Sulphobenzeneazodimethylaniline.—see **Dimethylamidoazobenzenesulphonate**

Sulphobenzide Merck (50

(Diphenylsulphone). — Fr. benzene, by fum. sulphuric acid.—$C_{12}H_{10}SO_2$, or, $(C_6H_5)_2SO_2$.—Monocl. prisms or plates.—*Sol.* E.; v. sl. W.—*Melt.* 128–129° C.—*Boil.* 376° C.

Sulphocarbanilide Merck (20

(Thiocarbanilide).—By boil. aniline w. alc. & CS_2.—$C_{13}H_{12}N_2S$, or, $CS(NH.C_6H_5)_2$.—Cryst. leaflets.—*Sol.* A., E.—*Melt.* 153° C.

Sulphonethylmethane Merck.—*U. S. P.* (13

(Trional; Methylsulfonal; Diethylsulphonemethylethylmethane).—By passing dry hydrochl. acid into a mixt. of anhydrous mercaptan & methylethyl ketone & oxid'g the prod.—$C_8H_{18}S_2O_4$, or, $CH_3(C_2H_5):C:(SO_2.C_2H_5)_2$. — Colorl., lustr., cryst. powd.; odorl.; character. taste.—*Sol.* 195 W. at 25° C.; more read. boil. W.—*Melt.* 76° C.—Hypnotic; Sed.—*Uses:* For producing sleep, espec. where there is no pain. Free from cumulative action of sulfonal, because completely decomp. in the syst. Espec. valuable in agrypnia due to morphine, cocaine or hydrated chloral.—Contraindic. in cardiac diseases, & in disturbances of compensation.—*Dose* 15–30 grains (1–2 Gm.).—*Max. D.* 45 grains (3 Gm.) single; 120 grains (8 Gm.) p. day.

Sulphonmethane Merck.—*U. S. P.* (11
(Sulfonal; Diethylsulphonedimethylmethane). —Fr. anhydrous acetone, by anhydrous ethylmercaptan w. a stream of dry hydrochl. acid gas.— $(C_2H_5SO_2)_2:C:(CH_3)_2$.—Colorless, cryst. powd.—*Sol.* 360 W., 47 A., 45 E., 16 C. at 25° C.; 15 boil. W., 2 boil. A.; sol. B.—*Melt.* 125–126° C.—*Boil.* 300° C.—Hypn.; Sed.; Antihidrotic.—*Uses:* Insom., epilepsy, night sw., hiccough, whoop.-cough, heart diseases where hypnotic required, chordee, &c.—No action on heart in therapeutic doses. Do not give if kidneys do not act normally.—*Dose* 15–45 grains (1–3 Gm.) $^3/_4$ hour before retiring, in beer, wine, or simple elixir.—*Max. D.* 60 grains (4 Gm.) p. d.—*Antid.*, stimulants, stomach siphon; sod. bicarbonate, 75–120 grains (5–8 Gm.) daily.

Sulphourea.—see **Thiocarbamide**

Sulphur Merck.—Cryst. (3
Etymol.: Fr. Lat. "sulphur." — S. — Yellow, transp. cryst.—*Sol.*, carbon disulphide.—*Melt.*, abt. 115° C.—Antiseptic.

do.—Crude (1
(Brimstone). — Yellow, solid, cylindrical rolls. —*Uses:* Techn.

do. Merck.—Precipitated, pure.—*U.S.P.* (1
(Lac Sulphuris; Milk of Sulphur).—Fr. slaked lime & sulphur boiled together, & pptd. by hydrochl. acid. — Fine, amorph., pale-yellow powd.—Superior to other forms in certain applications. — Lax.; Alter.; Antisep.; Diaph. — *Uses: Intern. & Extern.*, as washed sulphur.—*Dose* 30–120 grains (2–8 Gm.).—Best preparation for use in cosmetics.

do. Merck.—Sublimed.—*U. S. P.* (1
(Flowers of Sulphur).—Fine, yellow powd.; faint odor.—*Uses:* Pharm., pyrotechny, & techn. in matches, gunpowder, sulphuric & sulphurous acids, sulphurizing wine & beer vats, fire-extinguishers, destroying Oïdium Tuckeri, making casts & molds, cements, coal-tar dyes, sulphur blacks, niello, sulphurized tar, &c.

do.—Washed—*U. S. P.* (1
Fr. sublimed sulphur by treatm. w. NH_4OH, followed by washing w. W.—S.—Fine, yellow, dry powd.; odorl.; tastel.—*Sol.*, benzin, oil turpentine; E., C., B.; boil. alkal. solut., carbon disulphide.—*Melt.*, abt. 115° C.—Lax.; Alter.; Antisep.; Diaph.—*Uses: Intern.*, rheum., catarrh, asthma, hemorrhoids, sciatica, & skin dis.—*Extern.*, 1:2–6 oint. in scabies & other skin affect., rheum., &c.—*Dose* 60–180 grains (4–12 Gm.) as lax.; as diaphor., & in catarrh, 8–15 grains (0.5–1 Gm.) several t. p. d.—*Incomp.*, never triturate w. any chlorate.

Sulphur Bromide Merck (10
(Sulphur Mono- or Subbromide). — S_2Br_2. — Yellow liq.; turns red in air.—*Sol.*, carbon disulphide.—Sp. Gr. 2.628 at 4° C.

Sulphur Chloride Merck (1
(Sulphur Subchloride; Sulphur Monochloride). —S_2Cl_2.—Amber to yellowish-red, fum., oily liq.; penetrating odor, which causes tears & affects the breathing.—Sp. Gr. 1.68 at 0° C.—*Sol.*, carbon disulphide, B., A., E.; in W. w. decomp.—*Boil.* 139° C.—Readily dissolves sulphur, hence used in vulcanizing rubber, working gutta-percha, manuf. vulcanized oils intended for printing inks & varnishes, working sugar-cane juices, combined w. carbon disulphide or olive oil in cements, manuf. factice, &c.—*Caut.* Keep well stoppered.

do. Merck.—Camphorated (60
Mixt. sulphur chloride & camphor. — *Uses:* Techn., in vulcanizing rubber.

Sulphur Dioxide.—see **Acid Sulphurous**

Sulphur Iodide Merck (6
(Sulphur Subiodide).—By fusing together 80 parts iodine w. 20 parts sulphur. The preparation is not sulphur monoiodide, S_2I_2, & it is a question whether it contains the latter or is purely a mechanical mixt. — Grayish-black masses; metallic luster; odor of iodine.—*Sol.*, abt. 60 G.; CS_2; alm. insol. W.; A., E., & solut. KI dissolve the iodine, & leave the sulphur (U. S. P.).—Antisep.; Alter.—*Uses: Intern.*, glanders, scrof., & chronic skin dis.—*Extern.*, in oint. of 5–10% w. lard or petrolatum for ecz., psoria., prurigo, &c.—*Dose* 1–2 grains (0.06–0.12 Gm.).—*Caut.* Keep glass stoppered & cool.

Sulphur Monobromide.—see **Sulphur Bromide**

Sulphur Monochloride.—see **Sulphur Chloride**

Sulphur Subbromide.—see **Sulphur Bromide**

Sulphur Subchloride.—see **Sulphur Chloride**

Sulphur Subiodide.—see **Sulphur Iodide**

Sulphur Trioxide.—see **(Acid) Sulphuric Anhydride**

Sulphur Yellow S.—see **Naphthol Yellow S**

Sumach.—see **Rhus Glabra**

Sumbul.—*U. S. P.*
(Musk Root).—Dried rhizome & root of undeterm. plant, probab. of the family Umbelliferæ (prob'y fr. Euryangium Sumbul [Ferula S., Hooker], Kaufm.).—*Habit.:* Central Asia; East Indies.—*Etymol.*: "Sumbul" is the Persian name of the drug, & signifies a spike, referring to the appearance of the flowering stem.—Transverse segments of variable length, & rarely more than 4 in. (10 Cm.) diam.; extern., dark-brown, wrinkled, & annulate; smaller pieces w. smooth silver-gray periderm; short-fibrous fract.; light & spongy; numerous brownish-yellow resin reservoirs; odor strong & musk-like; bitter taste.—*Constit.:* Angelic acid (sumbulic acid); volat. oil; resin; valeric acid; methylcrotonic acid; bitter extractive.—Tonic; Stim.;

Carmin.; Nervine; Antispasm.—*Uses:* Hysteria, hypochond., neurasth., neural., chlorosis, &c. —*Techn.*, in perfumery, & in manuf. of liquors. —*Doses:* 10–60 grains (0.6–4 Gm.), usually as tinct.—Alcoh. extr., 2–5 grains (0.12–0.3 Gm.). —Fld. extr., 10–30 ♏ (0.6–2 Cc.). — Tinct., 15–60 ♏ (1–4 Cc.).

Summer Savory.—see **Satureja**

Sundew.—see **Drosera**

Sunflower.—see **Helianthus**

Suprarenal Capsule, Extract.—see **Extract Suprarenal Capsule**

Suprarenal Gland Merck.—Dried, powder (200

Fr. the suprarenal gland of cattle & sheep.—1 part dried gland = abt. 5 parts fresh organ.—*Uses:* Addison's disease, diabetes insipidus, in all diseases due to loss of vasomotor tone, *e.g.*, menopause, neurasthenia; & also cyclic albuminuria, cardiac affections, & hay fever.—*Dose* 3–5 grains (0.2–0.3 Gm.) 2–3 t. p. d., 1 hr. aft. meals; in diab., 8 grains (0.5 Gm.) 3 t. p. d.

Suprarenin

Active principle fr. suprarenals.—$C_9H_{13}NO_3$.—Grayish-wh., cryst. powd.—*Sol.*, v. diffic. W., A., E.—*Melt.* 210–212° C.—Vasoconstrictor; Hemostat.—*Uses:* Comb. w. local anesthetics in conjunct., iritis, glaucoma, & operations on eye; operations on nose; hay-fever; operations on larynx; in Schleich's infiltration anesthesia; hemor. fr. bladder or urethra; strictures; uterine, gastric, & intest. hemorrh., &c.—*Doses:* Ear & nose: solut. 1:1,000–5,000; eye: solut. 1:5,000–10,000; vesical hemor.: solut. 1:10,000.—*Inj.: Hypoderm.*, $^1/_{120}$ grain (0.0005 Gm.) (as hydrochloride or borate) = 15 ♏ (1 Cc.) 1:2,000 solut. —*Caut.* Keep fr. light.

Suprarenin Borate

Wh. cryst.—1.3 Gm.=1 Gm. pure suprarenin. —*Sol.*, eas. W.—Vasoconstrictor.—*Uses:* Hemorrhages; in conjunction w. loc. anesthetics in operations on eye.—Also marketed in sterile solution corresponding to a 1:1000 solut. suprarenin.

Swallow-wort.—see **Vincetoxicum**

Sweet Clover.—see **Melilotus**

Sweet Flag.—see **Calamus**

Sweet Sumach.—see **Rhus Aromatica**

Sword Grass or *-Lily.*—see **Gladiolus**

Sykose.—see **Benzosulphinide; Saccharin**

Symphorol L.—see **Lithium & Caffeine Sulphonate**

Symphorol N.—see **Sodium & Caffeine Sulphonate**

Symphorol S.—see **Strontium & Caffeine Sulphonate**

Symphytum

(Comfrey; Radix Consolidæ; Blackwort; Bruisewort). — Root of Symphytum officinale, L. Boraginaceæ. Asperifoliaceæ.—*Habit.:* Europe; Asia; natur. in U.S.—*Etymol.:* Grk. "symphytos," united, grown together, referring to the corolla, which is tubular-campanulate.—Root is spindle-shaped, branched, often more than 1 in. (25 Mm.) thick & 12 in. (30 Cm.) long; smooth & blackish extern.; wh., fleshy & juicy intern.; when dry, firm & horny, & dark within.—*Constit.:* Asparagin; tannin; pectin; sugar.—Astring.; Demulc.; Expector.—*Uses:* Coughs, colds, & pulmon. affect.—*Dose:* Fld. extr., 30–60 ♏ (2–4 Cc.).

Symantherin.—see **Inulin**

Syntonin Merck (250

(Parapeptone; Muscle Fibrin). — Conversion product of albumose by dil. HCl.—Yellowish powd.—*Sol.*, dil. HCl; alkali carbonates.

Syringin Merck (1500

(Lilacin; Ligustrin; Oxymethylconiferin). — Glucoside fr. bark Syringa vulgaris, L. (Lilac), & Ligustrum vulgare, L. (Privet).—$C_{17}H_{24}O_9 + H_2O$.—Sm., wh., bulky, tastel. need.—*Sol.* A.; sl. W.—Antipyr.; Antiper.—*Uses:* Intermit. & remit. fevers, & malarial affect.

Syrup Iron Iodide.—see **Iron Iodide, Syrup**

Syrup Iron Iodide, Tasteless.—see **Iron Citro-iodide, Syrup**

Syrup Mulberry Merck (1

Mulberry juice, sugar, & suffic. alc. to prevent ferment.—Sl. Astringent.

Syrup Raspberry Merck (1

Fr. juice of fresh, ripe raspberries.—Aromatic. —*Uses:* Flavor.

Syrup Violets Merck (2

Fr. fresh fls. Viola odorata, L.—Demulc.; Diur.; Tonic.—*Uses:* Coughs, colds, bronchial affect., pneum., & nephritis.—*Dose* 60–240 ♏ (4–15 Cc.) or more.

Syzygium Jambolanum.—see **Jambul**

T

Tabacum

(Tobacco).—Lvs. of Nicotiana Tabacum, L. Solanaceæ.—*Habit.:* Central & South America; extensively cultiv. in warm temperate & tropical countries.—*Etymol.:* Named for Jean Nicot, a French statesman who introduced tobacco into France in 1560. "Tobacco," fr. "Tabayo," one of the West Indies; or fr. the Mexican province Tabasco, where Europeans first learned to use tobacco.—*Constit.:* Nicotine, $C_{10}H_{14}N_2$; nicotianin; albumin; gum; resin; tannin; sugar; wax; nicotelline; nornicotine.—Diur.; Sed.; Emet.; Nar.; Expector.; Antispasm.; Errhine; Antisep.; Sialagogue; Anodyne; Antiparasitic.

—*Uses: Intern.*, in whoop.-cough, & chron. asthma.—*Extern.*, in hemorrhoids, neural., tinea capitis, toothache, &c.; also by enema in hernia. —*Doses:* $^1/_2$–5 grains (0.03–0.3 Gm.).—Alcoh. extr., $^1/_{10}$–1 grain (0.006–0.06 Gm.).—Fld. extr., $^1/_2$–5 ♏ (0.03–0.3 Cc.).—*Antid.*, tannin, emetics, strychnine (physiol. antid.); alcohol, ammonia, digitalis, belladonna, brandy, &c.

Tacamahac

Resinous substance obtained fr. var. species of Amyris & Icica (Protium). Burseraceæ.—*Habit.:* West Indies; South America.—*Etymol.:* "Tacamahaca" is the East Indian name of the drug. —*Constit.:* Volat. oil; resin.—*Uses: Extern.*, in ointments & plasters; also as ingredient in fumigating mixtures.

Tachia

(Caferana; Radix Quassiæ paraënsis).—Root of Tachia guaianensis, Aublet. Gentianeæ.—*Habit.:* South Africa, Brazil, Guiana.—*Etymol.:* "Tachi" is the name given to the plant by the Galibis (of Guiana), & it signifies an ant, as the insect is often found on the stem of the plant.—*Constit.:* Caferanin; tachinin.—Tonic; Antipyr.; Prophyl. in malaria.—*Dose* 15 grains (1 Gm.) in powd., 1:4 tinct., or 1:60 infus.

Tachiol = Silver Fluoride.—see **Silver Fluoride**

Tag Alder.—see **Alnus Serrulata**

Tagulaway

(Cebur or Cebú).—Bark of Parameria vulneraria, Radlkofer. Apocynaceæ.—*Habit.:* Philippine Islands.—*Etymol.:* Fr. Grk. "para," beside, & "meros," thigh, referring to the two adjacent, thigh-shaped fruits. "Cebú," fr. the island Cebú, where it is found.—*Constit.:* Caoutchouc; arom. resin.—*Uses:* For preparing the cebur or cebú balsam, also known as tagulaway balsam, used as a vulnerary.

Taka-Diastase.—see **Diastase, Taka-**

Tamarac (or *-ak*).—see **Larix**

Tamarind.—*U. S. P.*

(Tamarind Pulp).—Preserved pulp of the fruit of Tamarindus indica, L., Leguminosæ. Cæsalpiniaceæ.—*Habit.:* East Indies; Africa; natur. in West Indies.—*Etymol.:* Fr. Arabic "tamer," date palm, & "Hindi," India, *i.e.*, Indian date. Hebrew "tamar," palm tree, & "Hindi," India. —*Constit.:* Tartaric, citric, & malic acids; potassium bitartrate; sugar; pectin.—Lax.; Refrig.—*Dose* 30–300 grains (2–20 Gm.).

Tanacetum

(Tansy; Tanzy).—Lvs. & tops of Tanacetum vulgare, L. Compositæ.—*Habit.:* Asia; Europe; naturalized in N. America (especially eastern U. S. & Canada).—*Etymol.:* Fr. Grk. "tanaos," long, large, & "akeomai," to heal.—*Constit.:* Volat. oil; tanacetin, $C_{11}H_{16}O_4$; resin; tannin; mucilage; fat; sugar; malic acid (tanacetic acid?); tartaric, citric, & oxalic acids.—Flowers contain volat. oil & tanacetin.—Stim.; Tonic; Anthelmin.; Diur.; Emmen.; Diaphor.; Abortifac.—*Uses:* Locally for bruises, sprains, rheum., &c.—Flowers are febrifuge.—*Dose* 15–60 grains (1–4 Gm.) in powd., infus., or fld. extr.

Tanacetum Balsamita

(Costmary).—Lvs. & tops of Tanacetum balsamita, L. Compositæ.—*Habit.:* Southern Europe.—*Etymol.:* See preceding. "Balsamita," fr. Grk. "balsamon," balsam, referring to the arom. odor of the plant.—*Constit.:* Volat. oil. —*Uses:* Vermifuge.

Tang-Kui.—see **Eumenol**

Tangle.—see **Laminaria**

Tannal.—see **Aluminum Tannate**

Tannal, Soluble.—see **Aluminum Tannotartrate**

Tannalbin (17

(Tannin Albuminate Exsiccated Knoll).—Light-brown, odorl., tastel. powd.; 50% tannin. —Insol. in water.—Intest. Astring.; Antidiar. Reported not acted upon in stomach, but slowly & equably decomposed in the intestines; causes no gastric disturbance, while gently yet firmly astringent on entire intestinal mucosa; without by- or after-effects.—*Uses:* Acute dysent., chron. intestinal catarrh, diar., in phth., &c.—*Doses:* 15–60 grains (1–4 Gm.) hourly until effect is noticeable, then 3–5 t. daily, in tabl. or powd., with water, continued in diminished dose a few days after diarrhea ceases. *Nurslings* receive 5–8 grains (0.3–0.5 Gm.), $^1/_2$ hourly at first, then 4 t. daily, in gruel or other mucilaginous vehicle; *children*, up to 15 grains (1 Gm.) per dose.

do.—Veterinary (13

Uses: Diar. in domestic animals.—*Doses:* Foals 2–4 dr. (8–15 Gm.) p. d.; calves, 45–75 grains (3–5 Gm.) several t. p. d.; horses & cattle, 5–8 dr. (20–30 Gm.) in divided doses of 90–150 grains (6–10 Gm.).

Tannigen.—see **Diacetyltannin**

Tannin.—see **Acid Tannic**

Tannin Albuminate.—see **Tannalbin**

Tannin-formaldehyde.—see **Tannoform**

Tannoform (4

(Tannin-formaldehyde Merck).—Condensation prod. of formaldehyde & tannin.—$C_{29}H_{20}O_{18}$.—Loose, reddish powd.—*Sol.*, in alc. or alkaline liquids; insol. in W.—*Melt.* 230° C.—Siccat. Antisep.; Deod.—*Uses:* Hyperidrosis, bromidrosis, balanitis, pruritus vaginæ, chron. ulcer of leg, decubitus, burns, soft chancre, weeping eczema, ozena, &c.—Applied pure or in 25–50% triturations w. talcum in hyperidrosis; in intertrigo as 10% oint. or soap; in hemorrhoids as 5% supposit.—*Intern.* (seldom used; tannalbin is best adapted), as intest. astring. in chron. diar. & gastroenteritis.—*Dose* 4–15

grains (0.25–1 Gm.) 3–4 t. p. d.—*Veter. Med.*, chron., especially infectious, diar., in domest. animals.—*Doses:* Cattle, 5–10 dr. (20–40 Gm.) p. d.; calves, 60 grains (4 Gm.) several t. p. d.; also extern. as antisep.; astring., &c., for recent wounds.—In dentistry in cement.

Tannopine (15

(Hexamethylenamine-tannin). — Light-brown, odorl., tastel. powd.—*Sol.*, in dil. alkalies; insol. A., W., E., or dil. acids.—87% tannic acid & 13% hexamethylenamine.—Intest. Astring. & Disinfect.—*Dose* 15 grains (1 Gm.) several t. daily; children, 3–8 grains (0.2–0.5 Gm.).

Tanocol (10

Tannin-gelatin comp. — Grayish-wh., odorl., tastel. powd.—*Sol.*, alkalies; insol. W., acids.—Intest. Astring.—*Dose* 10–15 grains (0.6–1 Gm.).

Tanosal

(Creosal; Tannosal; Creosote Tannate). — By heating beechwood creosote w. tannic acid & phosphorus oxychloride.—Dark-brown, v. hygros. powd.; creosote odor & taste.—*Sol.* W., A., G., acetone; insol. E. — Astring.; Antisep. —*Uses:* In inflam. of muc. membr. of larynx & bronch. tubes.—*Dose* 45 grains (3 Gm.) p. d.

Tanret's Reagent.—For albumen

Solut. 3.32 Gm. potass. iodide, 1.35 Gm. mercuric chloride, & 20 Cc. acetic acid in W. to 60 Cc. — Gives a white ppt. w. albumen. — Also ppt's peptone & alkaloids.

Tansy Ragwort.—see **Senecio Jacobæa**

Tantalic Anhydride.—see **Acid Tantalic**

Tantalum Merck (7000

Etymol.: Named for Tantalus of mythology, because of the belief held at the beginning of this century that tantalum was incapable of being saturated by acids, even in excess.—Metal.—Ta.—Black powd.; probably cont. also tantalum oxide.—*Uses:* In electric lamps.

Tantalum Chloride Merck.—Sublimed (5000

$TaCl_5$.—Light yellow, cryst. powd.; decomp. in moist air.—*Sol.*, absol. A.; warm solut. KOH. Decomp. by W.—*Caut.* Keep well stoppered.

Tantalum Pentoxide.—see **Acid Tantalic**

Tantalum & Potassium Fluoride Merck (600

TaK_2F_7.—Wh., silky need.—*Sol.*, diffic. W.

Tanzy.—see **Tanacetum**

Tapioca

(Brazilian Arrow-Root; Mandioc; Cassava Starch).—Fecula of the root of Manihot utilissima, Pohl. Euphorbiaceæ. — *Habit.:* Brazil; Antilles.—*Etymol.:* Portuguese "tapioca," fr. the West Indian name of the plant, "typyoka." —*Constit.:* Starch.—*Uses:* Nutrient.

Tar.—*U. S. P.*

(Pix Liquida).—Empyreumatic product obt. by destructive distil. of wood of Pinus palustris, Miller, & other spec. of Pinus. Coniferæ. — *Habit.:* U. S.—Thick, dark, viscous mass; peculiar, terebinth. odor; heavier than W.; empyreum., sharp taste.—*Sol.* A., E., C., fixed & volat. oils, & solutions of caustic alkalies; sl. W. —*Constit.:* Resin; turpentine; empyreumatic oils.—*Uses: Intern.*, bronch. affect.; colds; fevers; diar., & diseases of gen.-urin. organs.—*Extern.*, skin diseases.—*Dose* 30–60 ♏ or grains (2–4 Cc. or Gm.), usually as glycerole or syrup.

Tar Camphor.—see **Naphthalene**

Taraxacum.—*U. S. P.*

(Dandelion; Lion's Tooth). — Dried root of Taraxacum officinale, Weber (T. Taraxacum, Karst.), Compositæ, collected in autumn.—*Habit.:* Europe; natur. in North America.—*Etymol.:* Grk. "tarasso, tarasscin," to move, to disturb, referring to its disturbing action on the bowels. — *Constit.:* Taraxacin; taraxacerin, $C_8H_{16}O$; resin; levulin; inulin; pectin. Flowers contain resin & a bitter subst'ce.—Aper.; Tonic; Diur.; Stomachic; Deobstruent.—*Uses:* Liver diseases w. dyspep. & chronic splenic congestion. —Fresh lvs. somet. used as salad.—*Doses:* 30–120 grains (2–8 Gm.).—Aqu. extr., 15–60 grains (1–4 Gm.).—Fld. extr., 1–2 fl. dr. (4–8 Cc.).

Taraxacum Juice Merck (2

(Dandelion Juice).—Fr. fresh root Taraxacum officinale, Weber; preserv. w. alc.—Bitter Tonic; Lax.; Alter.—*Uses:* Atonic dyspep.; liver dis.; "blood purifier," &c.—*Dose* 1–4 fl. dr. (4–15 Cc.).

Tarragon

(Biting Dragon). — Whole plant Artemisia Dracunculus, L. Compositæ.—*Habit.:* Southern Europe; Asia; also widely cultiv. — *Etymol.:* "Tarragon," a corrupt form of "dragon." "Dracunculus" is the Lat. diminutive form of "draco," dragon, referring to the serpentine form of the root. "Artemisia," fr. Grk. "Artemis," the Roman Diana, in whose honor Artemisia Absinthium was named. — *Constit.*. Volat. oil; tannin; bitter principle. — *Uses:* Antiscorbutic; Anthydropic. Also used as a spicy addition to mustard & vinegar.

Tartar, Borated. — see **Potassium & Sodium Borotartrate**

Tartar Emetic.—see **Antimony & Potassium Tartrate**

Tartar, Soluble.—see **Potassium Tartrate**

Tartarlithine=Lithium Bitartrate.—see **Lithium Bitartrate**

Tartrated Antimony.—see **Antimony & Potassium Tartrate**

Tartarated Iron. } —see **Iron & Potassium Tartrate, Ferric**
Tartarized Iron. }

Tasi.—see **Chlorostigma; Morrhenia**

Taurin Merck (1500

(Aminoethansulphonic Acid; Aminoisethionic Acid). — Decomp. prod. taurocholic acid. — $C_2H_7NSO_3$, or, $CH_2(NH_2).CH_2.SO_3H$. — Colorl. cryst.; glass-like luster.—*Sol.* W.; insol. A., E.

Taxine Merck.—Pure (2000

Alkaloid fr. lvs. Taxus baccata, L.—$C_{37}H_{51}NO_{10}$. —Wh. scales.—*Sol.* A., E., carbon disulphide; sl. W.—*Melt.* 110° C.—*Caut.* Poison!

Taxus

(Yew; Chinwood).—Herb of Taxus baccata, L. Taxaceæ.—*Habit.:* Europe; northern Africa.—*Etymol.:* Grk. "tassein," to order, referring to the arrangement of the lvs. Or, fr. Grk. "toxon," a bow, as this weapon was frequently made fr. the wood. Lat. "baccata," bearing berries, *i.e.*, the fruit resembles a berry in appearance. — *Constit.:* Taxine; milouin; volat. oil. — *Uses:* Abortifacient; Antiepilep. — *Dose* 1–5 grains (0.06–0.3 Gm.).

Tayuya

Root of Trianosperma ficifolia, Mart. Cucurbitaceæ.—*Habit.:* Brazil; Paraguay.—*Etymol.:* "Tayuya" is the Brazilian name of the drug.—*Constit.:* Resin; trianospermine & trianospermatine (alkaloids); tayuyin (bitter principle). — Antisyphil.; Antihidrotic; Antiepileptic; Febrif.; Antiscrofular; Purgat.; Emetic; Lymphatic Stim.; Alter.—*Uses:* Tert. syph.; dropsy. —*Dose* 5–15 ♏ (0.3–1 Cc.) of 1:5 tinct.

Tea.—see **Thea**

Teamsters' Tea.—see **Ephedra**

Tecoma Ipé.—see **Ipé-tabaco**

Tellicherry.—see **Holarrhena**

Telluric Hydroxide, Dihydrated. } —see **Acid Telluric**
Telluric Oxide, Trihydrated. }

Tellurium Merck.—Powder & sticks (300

Etymol.: Named by Klaproth in 1798 in honor of "the old mother," Tellus.—Non-metallic element.—Te.—Dark-gray powd., burning in the air with a blue flame when heated; or bluish-wh., brittle sticks w. metallic luster.—*Sol.*, nitric acid. —*Melt.* 455° C.—No techn. uses.

Tellurium Bichloride Merck (750

(Tellurium Dichloride).—$TeCl_2$.—Black, amorphous mass.—*Melt.* 175° C.—Decomp. by W.

Tellurium Sulphide Merck (1200

TeS_2. — Black, amorph. powd. — Insol. W. & acids.

Tellurous Hydroxide or *Tellurous Oxide, Hydrated.*—see **Acid Tellurous**

Terebene Merck.—Optically inactive (1

Mixt. of several terpenes, chiefly dipentene & terpinene, w. some cymol & camphene, obtained by the action of sulphuric acid on oil of turpentine & subsequent rectification. — $C_{10}H_{16}$. — Colorl. or sl'y yellowish liq.; thyme-like odor; resinifies when exposed to air & light.—Sp. Gr. 0.862–0.866 at 15° C.; (0.860–0.865 at 25° C., U. S. P.).—*Sol.*, sl. W.; 3 A., E., glacial acetic acid, carbon disulphide.—*Boil.* 156–180° C. (160–170° C., U. S. P.).—Expector.; Antisep.; Astring.; Antifermentative.—*Uses: Intern.*, in chronic bronch., flatulent dyspep., gen.-urin. dis., emphysema, phth., bronch. dyspnea, &c. —*Extern.*, in 1% solut. in uterine cancer, gangr. wounds, skin dis., &c. In phth. affect. it is given by inhalation (13 fl. dr. [50 Cc.] per week). —*Dose* 4–6–20 ♏ (0.25–0.36–1.3 Cc.) w. syrup or on sugar.—*Caut.* Keep well stoppered & cool.

Terebentene.—see **Pinene, Levogyrate**

Terminalia Chebula.—see **Myrobalan**

Terpene Dihydrochloride Merck.—Cryst. (25

(Dipentene Dihydrochloride; Turpentine Dihydrochloride).—Fr. solut. of limonene in glacial acetic acid, or fr. terpin hydrate, by gaseous HCl.—$C_{10}H_{18}Cl_2$, or, $C_{10}H_{16}.2HCl$.—Wh., cryst. mass.—*Sol.* A., E., C., B.—*Melt.* 50° C.

Terpene Hydriodide Merck (50

(Terpin or Terpene Iodide; Dipentene Hydroiodide).—$C_{10}H_{16}.HI$.—Red-brown liq.—*Sol.* A., E., C.

Terpene Hydrochloride Merck (20

(Artificial Camphor; Pinene Hydrochloride; Turpentine Monohydrochloride; Turpentine Camphor). — $C_{10}H_{16}.HCl$. — Wh., cryst. mass, resembl. camphor; turpentine & camphor odor. —*Sol.* A.; insol. W.—*Melt.*, abt. 125° C.—*Boil.*, abt. 208° C.—Antiseptic.—*Uses: Intern.*, phth.; & check secret. of saliva & perspiration.—*Extern.*, w. carbolic acid: local anesth., abort. boils, prevent suppurat., & skin dis.—*Dose* 15–30 grains (1–2 Gm.).

Terpene Iodide.—see **Terpene Hydriodide**

Terpilene

(Terpinylene).—Fr. heating terpene dihydrochloride with W. & subsequently treating w. dil. sulphuric acid. — $C_{10}H_{16}$. — Clear liq. — Sp. Gr. 0.852 at 15° C.—*Boil.* 176–178° C.

Terpilene Dihydrochloride.—see **Eucalypteol**

Terpilenol.—see **Terpineol**

Terpin Hydrate Merck.—Highest Purity, Medicinal, cryst. & powd. (1

(Dipenteneglycol). — Hydrate of the diatomic alcohol terpin. Fr. oil of turpentine w. alc. by dil. nitric acid.—$C_6H_8(OH)_2(CH_3)(C_3H_7)+H_2O$. — Colorl., lustr., rhombic prisms; sl'y bitter taste.—*Sol.* B., 10 A., 100 E., 200 C., 200 W. at 25° C.; 1 boil. glacial acetic acid; 2 boil. A.; 32 boil. W.; CS_2. — *Melt.* 116–117° C. — *Boil.* 258° C.—Expector.; Antisep.; Diur.; Diaph.—*Uses:* Bronch. affect., whoop.-cough, throat affect., hemostat. in hemoptysis in incipient

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

tuberculosis, neural., chron. nephritis, gen.-urin. dis., &c.—*Doses:* Expector., 3–6 grains (0.2–0.36 Gm.); diur., 10–15 grains (0.6–1 Gm.) several t. p. d.—*Max. D.* 15 grains (1 Gm.) single; 45 grains (3 Gm.) p. day.—Children, in whoop.-cough, 8–15 grains (0.5–1 Gm.) single; 45 grains (3 Gm.) p. d.

Note.—The exceedingly high purity & perfect solubility of this preparation render it peculiarly suitable for use in all cases where proper results are desired.

Terpin Iodide.—see **Terpene Hydriodide**

Terpineol Merck (5

(Terpilenol; "Lilacine").—By heating terpin hydrate w. phosphoric acid of Sp. Gr. 1.120.—$C_{10}H_{17}.OH$.—Colorl. liq.; odor of lilacs.—Sp. Gr. 0.936–0.938 at 15° C.—*Sol.* A., E.—*Boil.* 218° C.—Aromatic.—*Uses:* Perfume, & to mask odor of iodoform.

Terpinol Merck (8

Mixt. of principles having the compos. $C_{10}H_{16}$ & $C_{10}H_{18}O$, produced by act. dil. mineral acids on terpin hydrate; the fraction boiling at 168° C.—Oily liq.; odor of hyacinths.—Sp. Gr. 0.852 at 15° C.—*Sol.* A., E.—Bronchial Stim.; Antisep.; Diur.—*Uses:* Diminish expectoration & lessen odor in phth., in hemopt. in tuberculosis, coughs, colds & bronch. affect.—*Techn.*, perfumery, & soap manuf.—*Dose* 2–5 ♏ (0.12–0.3 Cc.).

Terpinylene.—see **Terpilene**

Terra Alba.—see **Kaolin**

Testa Preparata.—see **Oyster Shell, Prepared**

Testaden (26

Lactose trituration of dried extr. of testes of bull. 1 part = 2 parts fresh organ.—*Uses:* Impotence, neurasthenia, & spinal & nervous dis.—*Dose* 15–30 grains (1–2 Gm.).

Testes Merck.—Dried, powder (25

Fr. testes of steer, by freeing fr. fat & drying.—1 part = 6 parts fresh testes.—Tonic.—*Uses:* Hysteria, hystero-epilepsy, neurasthenia, affections of brain & spinal cord, diabetes, prostatic hypertrophy, & as aphrodisiac.—*Dose* 10–30 grains (0.6–2 Gm.) p. d.

Tetra Paper.—see **Tetramethylparaphenylenediamine Paper**

Tetrabromophenolphtalein Merck (100

Fr. alcoh. solut. of phenolphtalein, by bromine in acetic acid.—$C_{20}H_{10}Br_4O_4$, or, $C.C_6H_4.OCO.(C_6H_2Br_2OH)_2$.—Colorl., cryst. powd.—*Sol.*, in alkalies w. violet color; E.; v. sl. A.—*Melt.* 220–230° C. w. decomp.—*Uses:* Indicator in alkalimetry (acids = colorless; alkalies = violet).

Tetrabromophenolphtalin Merck (3000

By brominating phenolphtalin.—$C_{20}H_{12}Br_4O_4$, or, $C_6H_4.CO_2HCH(C_6H_2Br_2OH)_2$.—Wh., cryst. powd.—*Sol.* A., E., B., CS_2.—*Melt.* 205° C.

Tetrachlorethene. } —see **Carbon Dichloride**
Tetrachlorethylene. }

Tetrachlorethylenedichloride.—see **Carbon Trichloride**

Tetrachloromethane.—see **Carbon Tetrachloride**

Tetrachloroquinone.—see **Chloranil**

Tetraethylammonium Iodide Merck (100

(Tetraethylammonium Monoiodide).—Fr. ethyl iodide, by triethylamine.—$C_8H_{20}NI$, or, $(C_2H_5)_4NI$.—Wh. to yellowish cryst.—*Sol.* W., A.

Tetraethylammonium Hydroxide Merck.—10% Solution (40

$C_8H_{21}NO$, or, $N(C_2H_5)_4OH$ + aq.—Str'ly alkal., colorl. solut.; saponifies fats, & imparts soapy feel. to skin; bitter, burn. taste.—Antirheumatic.—*Uses:* Uric-acid solvent, & in artic. rheumat.—*Dose* 5–20 ♏ (0.3–1.3 Cc.) well diluted.

Tetrahydrobetanaphtylamine Hydrochloride.—see **Thermin**

Tetrahydroparamethyloxyquinoline or *Tetrahydroparaquinanisol* Salts.—see under **Thalline**

Tetrahydroquinoline Merck (75

Fr. quinoline, by reduct.—$C_9H_{11}N$, or, $C_6H_4.(CH_2.CH_2).(NH.CH_2)$.—Brownish liq.—*Sol.* A., E.; sl. W.—*Boil.* 244° C.

Tetrahydroquinoline (Iso-) Merck (1000

(Tetrahydroisoquinoline).—Fr. reduct. of isoquinoline.—$C_9H_{11}N$, or, $C_6H_4(CH_2.CH_2).(NH.CH_2)$.—Colorl. to yellow liq.—*Sol.* W., A., E.—*Boil.* 232–233° C.

Tetrahydroquinoline (Iso-) Hydrochloride Merck.—Cryst. (1500

$C_9H_{11}N.HCl$.—Cryst. laminæ.—*Melt.* 195–197° C.

Tetraiodofluoresceïn.—see **Iodeosine**

Tetraiodophenolphtalein.—see **Nosophen**

Tetraiodophenolphtalein-Sodium.—see **Antinosin**

Tetraiodopyrrol.—see **Iodol**

Tetramethylammonium Bromide Merck (50

$N(CH_3)_4.Br$.—Colorl., deliq. mass.—*Sol.* W.

Tetramethylammonium Chloride Merck (75

$N(CH_3)_4.Cl$.—Deliq., colorl. cryst.—*Sol.* W.

Tetramethylammonium Hydroxide Merck (350

$N(CH_3)_4.OH$.—Deliq. cryst.—*Sol.* W., A.

do. Merck.—10% Solution (50

1 part $N(CH_3)_4.OH$ dissolved in 9 parts W.—Strongly alkal. liq.; read. absorbs CO_2 fr. air.—Caustic.

Tetramethylammonium Iodide Merck (50

React.-prod. ammonia in methyl alcoh. w. methyl iodide & heat.—$N(CH_3)_4.I$.—Prismat., yellow cryst.—*Sol.* W.

Tetramethylbenzene (or, *-zol*).—see **Durene**

Tetramethyldiaminobenzophenone Merck (30

(Michler's Ketone). — Fr. dimethylaniline, by carbonyl chloride.—$C_{17}H_{20}N_2O$, or, $CO(C_6H_4.N[CH_3]_2)_2$.—Wh. to greenish leaflets.—*Sol.* A., E., warm B.—*Boil.*, above 360° C., with decomp.

Tetramethylethyleneglycol.—see **Pinacone**

Tetramethylparaphenylenediamine (2500

By heating dimethylparaphenylenediamine w. hydrochl. acid & methyl alc. — $C_{10}H_{16}N_2$, or, $N(CH_3)_2.C_6H_4.N(CH_3)_2$. — Cryst. leaflets. — *Sol.* A., E. — *Melt.* 51° C. — *Boil.* 260° C. — *Uses:* Reag. for ozone, hydrogen peroxide & ozonizers (Wurster's reagent).

Tetramethylparaphenylenediamine Hydrochloride Merck (2500

$C_{10}H_{16}N_2.2HCl$.—Sm. cryst.—*Sol.* W., A.

Tetramethylparaphenylenediamine Paper

(Wurster's Ozone Paper [Blue]).—Wh. paper, charged w. tetramethylparaphenylenediamine; w. color scale & directions. — *Uses:* Detecting hydrogen peroxide & ozone, which, in neutral or acetic acid soluts., develop an intense bluish-violet color; & ozonizers, as turpentine, pine-wood, &c.

Tetramethylthionine Hydrochloride.—see **Methylene Blue**

Tetranitroanthraquinone.—see **Acid Aloetic**

Tetranitrochrysazin. } —see **Acid**
Tetranitrodioxyanthraquinone. } **Chrysaminic**

Tetranitrol.—see **Erythrol Tetranitrate**

Tetraoxydiphenyl.—see **Diresorcinol**

Tetraoxyphtalophenonanhydride.— see **Fluorescein**

Tetronal (60

(Diethylsulphonediethylmethane).—By passing dry hydrochl. acid into a water-free mixt. of ethyl sulphydrate & diethylketone.—$C_9H_{20}S_2O_4$, or, $(C_2H_5)_2:C:(SO_2C_2H_5)_2$.—Colorl., lustr. laminæ; camphoraceous, bitter taste.—*Sol.*, eas. A., E., 450 W.—*Melt.* 85° C.—Hypn.; Sed.—*Uses:* Insomnia.—*Dose* 15–30 grains (1–2 Gm.).—*Max. D.* 60 grains (4 Gm.) p. day.

Tetryl Formate.—see **Butyl, Iso-, Formate**

Teucrin Mosetig-Merck

Purified aqu. extr. of Teucrium Scordium, L., sterilized in sm. sealed glass tubes each containing abt. 45 ♏ (3 Cc.).—Antisep.; Irritant.—*Uses: Extern.*, abscesses, fungous adenitis, actinomycosis, & lupus. Injected hypoderm. produces local active hyperemia & organic reaction that arrests development of these dis. Apply near seat of dis.—*Dose* 45 ♏ (3 Cc.).

Teucrium

(Germander; Cat Thyme; Herb Mastich; Syrian Herb Mastich; Herba Mari veri).—Whole plant Teucrium Marum, L. Labiatæ.—*Habit.:* Mediterranean region. — *Etymol.:* "Teucrium" is the Grk. name of the plant. "Marum," fr. Hebrew "mar," bitter.—*Constit.:* Volat. oil; resin; bitter principle; camphor-like substance.—Tonic; Digestive; Diur.; Diaph.; Emmen.—*Uses: Intern.*, in atonic dyspep.—*Extern.*, as sternut.—*Dose* 20–40 grains (1.3–2.6 Gm.) in powd. or infus.

Thallic & Thallous Salts.—see under **Thallium**

Thalline Periodide Merck (110

(Periodothalline Sulphate; Thalline Periodosulphate).—Iodine addition prod. of thalline sulphate.—Black cryst.—*Sol.* A.—*Uses:* Carcinoma.—*Dose* 3–4 grains (0.2–0.25 Gm.) in pill, every 2–3 hrs. Where much dryness & lack of functional activity of skin exists, $^1/_{60}$ grain (0.001 Gm.) pilocarpine hydrochlor. is added to each dose.

Thalline Periodosulphate.—see **Thalline Periodide**

Thalline Salicylate Merck (100

(Tetrahydroparaquinanisol Salicylate). — Fr. salicylic acid, by tetrahydroparamethyloxyquinoline.—$C_{10}H_{13}NO.C_7H_6O_3$.—Reddish, cryst. powd. — *Sol.* A. — Antipyr.; Antisep.; Antirheum.—*Uses:* Typhoid fever, gonor., rheum., gout, &c.—*Dose* 3–8 grains (0.2–0.5 Gm.).

Thalline Sulphate Merck (60

(Tetrahydroparaquinanisol or Tetrahydroparamethyloxyquinoline Sulphate). — Fr. tetrahydroparaquinanisol, by dil. sulphuric acid.—$(C_{10}H_{13}NO)_2.H_2SO_4 + 2H_2O$.—Wh. need., or cryst. powd.; cumarin-like odor; acid, saline, bitterish, arom. taste; turns brown on expos.—*Sol.* C., E., 7 W., 100 A., 0.5 boiling W.—*Melt.*, above 100° C.—Antisep.; Antipyr.; Hemost.—*Uses: Intern.*, typhoid fever, malarial fever, typhus, &c.—*Extern.*, inj. in 1–2% solut. for gonorrhea. In chronic gonorrhea a 5% solut. in oil is best.—*Dose:* 3–8 grains (0.2–0.5 Gm.). In *typhoid* the initial dose in progressive thallinization is $1^1/_3$ grains (0.08 Gm.) every hr., increasing the dose daily by $^1/_6$ grain (0.01 Gm.).—*Max. D.* 8 grains (0.5 Gm.) single; 25 grains (1.6 Gm.) p. day. In progress. thallinization, *Max. D.* is $2^1/_2$ grains (0.15 Gm.) per hr., & 55 grains (3.6 Gm.) p. d.—*Caut.* Keep fr. light.

Thalline Tannate Merck (60

Yellowish-brown powd.—*Sol.* A.—*Uses, Doses, &c.:* As of the sulphate.

Thalline Tartrate Merck (80

$C_{10}H_{13}NO.C_4H_6O_6$. — Wh., flat cryst., or cryst. powd.—*Sol.* 10 W., 300 A.—*Uses, Doses, &c.:* As of the sulphate, but somewh. weaker.—*Max. D.* 8 grains (5 Gm.) single; 25 grains (1.6 Gm.) p. d. In progressive thallinization, *Max. D.* is 3 grains (0.2 Gm.) single, up to 72 grains (4.8 Gm.) per day.

Thallium Merck (60

Etymol.: Fr. Grk. "thallos," a green branch.

So named by Crookes (who discovered the element in 1861) because of the green flame reaction & the green line in the spectrum afforded by the element.—Metal.—Tl.—Heavy, soft, easily fusible; bluish-wh. tint; lead-like, metallic luster.—Sp. Gr. 11.8.—*Melt.* 283° C.—Thallium & its salts are cumulative poisons, causing extravasation of blood, &c.

Thallium Acetate Merck (60

(Thallous Acetate). — $TlC_2H_3O_2$. — Wh., deliq. cryst.—*Sol.* W., A.—*Uses:* Formerly in syphilis & in night-sweats in phthisis.—*Dose* $1^1/_2$–3 grains (0.1–0.2 Gm.) p. d. — The remedy causes the falling out of the hair.

Thallium Bromide Merck (150

(Thallous Bromide).—TlBr.—Wh., or yellowish-wh., cryst. powd.—*Sol.*, v. diffic. in W.

Thallium Carbonate Merck (150

(Thallous Carbonate). — Tl_2CO_3. — Alm. colorl. cryst.—*Sol.* 19 W. at 18° C.; 44 boiling W.

Thallium Chloride Merck (150

(Thallous Chloride).—TlCl.—Wh., cryst. powd. —*Sol.*, sl. W.—*Uses:* Ac. rheum.—*Dose* $1/_5$ grain (0.012 Gm.) single; $1^1/_2$ grains (0.1 Gm.) p. d.

Thallium Iodide Merck (150

(Thallous Iodide).—TlI.—Citron-yellow, cryst. powd.—Alm. insol. W.

Thallium Nitrate Merck (150

(Thallous Nitrate). — $TlNO_3$. — Colorl. cryst. — *Sol.* W.—*Uses:* Quantitative determination of iodine in pres. of chlorine & bromine; microchem. detect. halogens & certain o. metals (Au, Pt, U, Th, &c.); prepar. thallium test paper; as indicator in titrating zinc. — Fused thallium nitrate has the Sp. Gr. 5, melts at 75° C., & is used in the separation of minerals; also w. potass. chlorate, calomel, & resin for green fire for signalling at sea.

Thallium Oxide Merck.—Thallic (150

(Thallium Peroxide; Thallium Trioxide).—Tl_2O_3. — Brownish-black powd. — *Sol.*, acids. — *Uses:* Mixed w. sulphur in manuf. matches.

Thallium Oxide Merck.—Thallous (150

Tl_2O. — Black powd. — *Sol.* W., absolute A. — Oxidizes on expos. to air, & becomes insoluble. —The satur. alcoh. solut. of thallium alcoholate ($TlOC_2H_5$) has the Sp. Gr. 3.55, & is the heaviest liquid known except mercury.—*Uses:* In manuf. of glass having a high coefficient of refraction for optical purposes, & for artif. gems.

Thallium Ozone Paper

Wh. paper charged w. thallous hydroxide.—*Uses:* Test for ozone (brown color); also as indicator.

Thallium Peroxide.—see **Thallium Oxide, Thallic**

Thallium Sesquichloride Merck (150

$TlCl_3.H_2O$.—Yellowish, v. deliq. cryst.

Thallium Sulphate Merck (150

(Thallous Sulphate). — Tl_2SO_4. — Colorl. prisms. —*Sol.* W.—*Uses:* Acute artic. rheumat.—Also as thallium paper in ozonometry.—*Dose* $1/_5$ grain (0.012 Gm.) single; $1^1/_2$ grains (0.1 Gm.) p. d.

Thallium Sulphide Merck (150

(Thallous Sulphide). — Tl_2S. — Micros., bluish-black, lustr. cryst., or powd.—*Sol.*, min. acids.

Thallium Trioxide.—see **Thallium Oxide, Thallic**

Thanatol.—see **Guaethol**

Thapsia

(Deadly Carrot).—Root of Thapsia garganica, L. Umbelliferæ.—*Habit.:* Mediterranean region. —*Etymol.:* Fr. "Thapsos," the island where first discovered (Dioscorides). In the time of Theophrastus it was also found abundantly on the promontory Gargano, hence the name of the species "garganica."—*Constit.:* Resin; thapsic acid, $C_{16}H_{30}N_4$. — Irritant; Alter.; Purgat. — *Uses: Intern.*, in leanness, chron. lung diseases, sterility, &c.—*Extern.*, rheumat., gout, neural., bruises, erupt., &c.—*Dose:* Fld. extr., 2–10 ♏ (0.12–0.6 Cc.).

Thea

(Tea).—Lvs. of Thea Chinensis, L. (Camellia Thea, Link; C. theifera, Griffith), & other spec. of Thea; Ternstrœmiaceæ. — *Habit.:* China; Japan; cult. in India & other tropical countries. —*Etymol.:* Fr. "tscha," the Chinese name for tea.—*Constit.:* Volat. oil; caffeine (theine); theophylline, tannin; gallic acid; quercetin; boheic acid; adenine.—*Uses:* Stim.; Popular beverage. —*Techn.*, as source of caffeine.

Thebaine Merck.—Pure, cryst. (100

(Paramorphine).—Alkaloid fr. opium.—$C_{19}H_{21}NO_3$, or, $(CH_3O)_2:C_{14}H_8.N(CH_3).(CH_2)_2.O$.—Wh., lustr., cryst. scales; sharp, styptic taste.—*Sol.* 10 A., 18 C., 20 B., 60 amyl. A., 140 E.—*Melt.* 193°C.—Spinal Convulsant.—*Caut.* Very poison.!

Thebaine Hydrochloride Merck.—Cryst. (100

$C_{19}H_{21}NO_3.HCl$. — Colorl. cryst. — *Sol.* 15.4 W. at 10° C.—*Uses:* Neural. & neurasthenia.—*Dose* $^3/_4$ grain (0.05 Gm.) grad. increased to 3 grains (0.2 Gm.) single; hypoderm., $^1/_6$ grain (0.01 Gm.).

Thebaine Tartrate (Acid) Merck.—Cryst. (100

(Thebaine Bitartrate).—$C_{19}H_{21}NO_3.C_4H_6O_6$ + aq. —Wh., cryst. powd.—*Sol.* W., hot A.

Theine.—see **Caffeine**

Theobrominat.—see **Oil Coriander**

Theobromine Merck (18

(Dimethylxanthine).—Alkaloid fr. seeds Theobroma Cacao, L.—$C_7H_8N_4O_2$, or, $CH_3N.CO.HN.CO.C(N.CH_3):C.N:CH$.—Microcryst., wh. powd.; bitter taste.—*Sol.* E.; sl. W., or A.; more readily in boil. C.—Diur.; Nerve Stim.—Its double salts are preferably used because of their greater

solubility.—*Uscs:* Cardiac dropsy. Theobromine salts are purely diuretic, & have no action on the heart.—*Dose* 5 grains (0.3 Gm.) 4 t. p. d., the dose being increased by 15 grains (1 Gm.) daily for 4 days, and then reduced to 4–6 doses of 8 grains (0.5 Gm.) each per day.

Theobromine Acetosalicylate Merck (100
(Theobromine Acetylsalicylate). — $C_7H_8N_4O_2.C_9H_8O_4$.—Wh., cryst. powd.—*Sol.* A.—*Uses & Doses:* As of theobromine.

Theobromine-barium & Sodium Salicylate.—see **Barutin**

Theobromine Hydrochloride Merck.—Cryst. (100
$C_7H_8N_4O_2.HCl$.—Wh. cryst.—*Sol.* W. w. decomp.—Diur.; Nerve Stim.—*Uses:* About the same as of the double salts of theobromine.

Theobromine Salicylate Merck.—True, cryst. (30
$C_7H_8N_4O_2.C_7H_8O_3$. — Fine, wh., acid, bitter, perman. need.—*Sol.*, sl. W.—*Uses, &c.:* As of the double salts of theobromine; salt best adapted for use.—*Dose* 15 grains (1 Gm.) in wafers or in powd. w. saccharin.

Theobromine-sodium Citrate.—see **Urocitral**

Theobromine-sodium Iodide.—see **Iodotheobromine**

Theobromine-sodium & Sodium Acetate. — see **Agurin**

Theobromine-sodium & Sodium Salicylate.—see **Theobromine & Sodium Salicylate**

Theobromine & Lithium Benzoate. — see **Uropherin B**

Theobromine & Lithium Salicylate. — see **Uropherin S**

Theobromine & Sodium Acetate.—see **Agurin**

Theobromine & Sodium Benzoate Merck (40
(Theobromine-sodium & Sodium Benzoate). — 47% of theobromine.—$NaC_7H_7N_4O_2.H_2O(?) + NaC_6H_5CO_2$.—Wh., fine powd.; easily decomp. by expos.—*Sol.*, eas. W.—Diur.—*Uses:* Dropsy, nephritis, cardiac diseases.—*Dose* 8–15 grains (0.5–1 Gm.) 3–4 t. p. d.—*Max. D.* 15 grains (1 Gm.) single; 90 grains (6 Gm.) p. day.—*Caut.* Keep fr. contact w. air.

Theobromine & Sodium Iodosalicylate Rummo-Merck (40
(Iodotheobromine).—40% theobromine, 21.6% sod. iodide & 38.4% sod. salicylate.—Wh. powd. —*Sol.*, hot W.—Heart Stim.; Diur.; Alter.—*Uses:* Chiefly in aortic insufficiency.—*Dose* 4–8 grains (0.25–0.5 Gm.) 2–6 t. p. d. in caps. or wafers.

Theobromine & Sodium Salicylate Merck (12
(Theobromine-sodium & Sodium Salicylate). —$C_{14}H_{12}N_4O_5Na_2 + H_2O(?)$, or, $NaC_7H_7N_4O_2 + H_2O(?).C_6H_4(OH).CO_2Na$.—Wh. powd., cont'g abt. 47% theobromine, & abt. 36% salicylic acid.—Diuret.—Decomp. on expos.—*Sol.* 2 W.; insol. C., E.—*Uscs:* Heart dis., nephr., espcc. of scar. fever, in dyspnea, & coughs.—*Dose* 8–15 grains (0.5–1 Gm.) several t. p. d. in powd. or pill, or diss. in peppermint W.—*Max. D.* 15 grains (1 Gm.) single; 90 grains (6 Gm.) p. d. —*Caut.* Keep fr. air.

Theobromine & Sodium Sulphate Merck (40
(Theobromine-sodium & Sodium Sulphate).—Wh. powd.—*Sol.* W.—Abt. 50% theobromine. —*Uses, &c.:* As of other theobromine comp'ds.

Theobromose
Theobromine-lithium comp. — $LiC_7H_7N_4O_2$. — Fine, silky need.—*Sol.*, eas. W.—Diur.—*Caut.* Solut. deposits lithium carbonate & theobromine on expos. to air.

Theocin (54
(Synthetic Theophylline).—Fine, colorl. cryst. —*Sol.*, eas. warm W.; diff. in cold W. & A.; insol. E.—*Melt.* 268° C.—Diuret.—*Dose* 3–6 grains (0.2–0.4 Gm.).

Theophylline (28
(Dimethylxanthine). — Alkaloid found with caffeine in tea. — $C_7H_8N_4O_2.H_2O$, or, $CH_3.N.CO.CH_2N.C(N:CH):C(NH).CO. + H_2O$.—Wh., cryst. powd. — *Sol.* 180 W. at ord. temp.; 85 W. at 37° C.—*Melt.* 268° C.—Diur.—*Uses:* Cardiac affect., nephr., dropsy, &c.—*Dose* 3–8 grains (0.2–0.5 Gm.).—N. B.: A synthetic theophylline is marketed under the name Theocin.

Theophylline Sodium (30
Soluble theophylline salt.—*Uses, Doses, &c.:* As of theophylline.

Theophylline & Sodium Acetate (50
$C_7H_7N_4O_2Na.CH_3COONa + H_2O$.—Wh. powd.—*Sol.* 25 W.—Diur.—*Dose* 5–8 grains (0.3–0.5 Gm.).

Theophylline & Sodium Formate.—see **Thephorin**

Theophylline & Sodium Salicylate (22
$C_7H_7N_4O_2Na.C_6H_4.OH.COONa$. — Wh., cryst. powd.—*Sol.* 14 W.—Diur.—*Uses:* Cardiac dis., ascites, dropsy, nephritis; renal sclerosis, tumor, & atrophy; angiosclerosis.—*Dose* 25 grains (1.6 Gm.) in div. doses.

Thephorin
(Theophylline & Sodium Formate).—$C_7H_7N_4O_2Na.HCOONa + H_2O$. — Wh. powd.—*Sol.* W.—Diur.—*Dose* 8–15 grains (0.5–1 Gm.) 3 t. p. d.

Thermifugin
(Sodium-Methyltrihydroxyquinoline Carbonate). — $C_9H_8(CH_3).NCOONa$. — Sl'y yellowish-wh. powd.—*Sol.* W.—Antipyr.—*Dose* 4 grains (0.26 Gm.).

Thermin Merck (200
(Tetrahydrobetanaphtylamine Hydrochloride). —$C_{10}H_{11}NH_2.HCl$.—Colorl., to reddish-wh., cryst. powd.—*Sol.* W., A.; amylic A.—*Melt.* 237° C.

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

—Mydriatic.—*Uses:* Increases body-temperature (abt. 4.5° C.).

Thermodin (50

(Acetylparaethoxyphenylurethane Merck).—$C_{13}H_{17}NO_4$, or, $C_6H_4(C_2H_5O).NCO_2.C_2H_5.CO.CH_3$. — Colorl., odorl. cryst. — *Sol.*, sl. W. — *Melt.* 86–88° C.—Antipyr.; Antisep.; Analg.—*Uses:* Typhoid fever, pneum., pleurisy, influenza, tuberculosis, erysip., angina pectoris, &c. Temp. reduct. begins in one hour after taking, & reaches its lowest in 4 hrs. In neural. large doses are required.—*Doses:* Antipyr., 8–12 grains (0.5–0.75 Gm.); antineural., 20–25 grains (1.3–1.6 Gm.).

Thial

(Hexamethylenamine Oxymethylsulphonate).—Wh., odorl. powd.—*Sol.*, eas. W.—Antisep.—*Uses:* Vulnerary in 0.5–1% solut.; wash & irrigat. in 2.5–5:1000 solut.; in hyperidrosis 1–2% solut.; also for disinf. spittoons, &c.

Thialdin Merck (40

$C_6H_{13}NS_2$, or, $NH(CH.CH_3.S)_2CH.CH_3$.—Monocl. prisms; character. odor.—*Sol.* W., A., E.—*Melt.* 43° C.—Heart Stimulant.

Thiersch's Carmine Oxalate

5 Gm. carmine, 5 Gm. ammonia, 5 Cc. W., mixed w. solut. 4 Gm. oxalic acid in 80 Cc. W., & 120 Cc. A. added.—*Uses:* As stain.

Thioacetaldehyde. } —see **Sulphaldehyde**
Thioaldehyde. }

Thioallylic Ether.—see **Allyl Sulphide**

Thiocarbamide Merck (30

(Sulphourea or Thiourea).—CH_4N_2S, or, $CS(NH_2)_2$.—Wh., lustr. cryst.; bitter taste.—*Sol.* 11 W.—*Melt.*, constant at 149° C. after fusing & solidifying.—Sp. Gr. 1.406 at 15° C.—*Uses:* Photo. fixing agent, & to remove stains from negatives.

Thiocarbanil.—see **Oil Phenylmustard**

Thiocarbanilide.—see **Sulphocarbanilide**

Thiochromogen.—see **Primuline Yellow**

Thiocol (38

(Potassium Guaiacolsulphonate).—$C_6H_3.(OCH_3)$-$OH.SO_3K$. —White, odorless powd.; faint bitter, then sweet, taste.—*Sol.* W. or syrup; sl. A.; insol. E.—Antituber.; Anticatarrhal.—*Uses:* Phth., chron. coughs & catarrhs, scrof., typhoid, &c.—*Dose* 5–20 grains (0.3–1.3 Gm.) 3 t. p. d., in solut. with orange syrup, or as tablets.

Thioform (15

(Basic Bismuth Dithiosalicylate).—$2(S.C_6H_3$-$[OH]COOBiO) + (Bi_2O_3 + 2H_2O)$(?). — Yellowish-brown powd.; 72% bismuth oxide.—Antisep. —*Uses: Extern.*, instead of iodoform in veter. med., as dusting powd. in wounds, erysipelas, eczema, otitis, conjunctivitis, keratitis, &c.

Thiol.—Liquid (8

Mixt. of sulphurized hydrocarbons fr. commercial gas-oils, sulphonized & neutralized w. ammonia.—Dark-brown liq.—*Sol.* W.—Sp. Gr. 1.08 at 15° C.—*Uses:* Erysipelas & o. skin dis. in 5–20% oint. or aqu. solut.

do.—Powder (20

Dark-brown powd.; faint bituminous odor.—*Sol.* W.—*Uses:* As dusting powd. in skin dis.

Thionine Ehrlich-Merck.—Reagent (75

(Lauth's Violet).—Oxidation prod. of imidamidothiodiphenylimide, $C_{12}H_{10}N_3SCl$. — Greenish-black powd.; metallic luster.—*Sol.* W. w. violet color.—*Uses:* Micros., for stain. nuclei, & in metachromatic investigations (mast cells, mucus).

Thiophene Merck.—Synthetic (120

Constit. of coal tar.—C_4H_4S, or, $S(CH.CH)_2$.—Colorl., oily liq.—Sp. Gr. 1.072 at 15° C.—*Boil.* 84° C.—Antiseptic.

Thiophene Biniodide Merck (130

75.5% of iodine, & 9.5% of sulphur.—$C_4H_2I_2S$. —Yellow cryst.—*Sol.* A., E., C.—*Melt.* 40.5° C. —Antiseptic.—*Uses:* Mastitis, wounds, erysip., bursitis, carcinoma, &c.; applied as a dusting powd., & as 10% gauze.—*Caut.* Keep well stop'd.

Thiophene Tetrabromide Merck (150

By complete bromination of thiophene.—C_4Br_4S. —Yellow, cryst. powd.—*Sol.* A.—*Melt.* 112° C. —*Boil.* 326° C.—Antiseptic.

Thiophosphoric Anhydride.—see **Phosphorus Pentasulphide**

Thiophosphorus Anhydride.—see **Phosphorus Trisulphide**

Thiosinamine Merck (12

(Allyl Sulphocarbamide; Allyl Sulphourea; Allyl Thiourea; Rhodalline).—Fr. allyl sulphocyanate (mustard oil), by amm. & alc.—$C_4H_8N_2S$, or, $CS(NH_2).NHC_3H_5$.—Colorl. cryst.; faint garlic odor; bitter taste.—*Sol.*, sl. W.; eas. A., & E.—*Melt.* 74° C.—Eschar.; Resolvent; Antisep.—*Uses: Extern.*, lupus, chronic glandular tumors, & for removing scar tissue. Possesses the power of softening cicatricial tissue & tumors of the uterine appendages.—*Intern.*, stricture, corneal opacities, chron. deafness.—*Techn.*, photo. developer.—Also used in analysis of feces.—*Doses:* $^1/_2$ grain (0.03 Gm.) grad. incr. to $1^1/_2$ grains (0.1 Gm.) 2–3 t. p. d., in caps. or tablet triturates. —*Inj.*, parenchym. or hypoderm., 1–2 grains (0.06–0.12 Gm.) in 10% glycerino-aqueous (4:1) solut. every 3 days.

Thiosinamine & Sodium Salicylate.—see **Fibrolysin**

Thiourea.—see **Thiocarbamide**

Thioxydiphenylamine.—see **Sulphaminol**

Thomas Balsam.—see **Balsam Tolu**

Thorium Merck (12000

Etymol.: Named for "Thor," the mythol. Scandinavian god of thunder; element discovered & named by Berzelius in 1828.—Metal.—Th.—Gray, heavy, infus. powd.—*Sol.*, in nitrohydrochloric acid.—Burns in air to thorium dioxide w. brilliant light. Thorium salts constitute 99% of salts used in manuf. incandescent mantles.

Thorium Anhydride.—see **Thorium Dioxide**

Thorium Chloride Merck (50

$ThCl_4.8H_2O$.—Wh., v. hygrosc. cryst. mass.—*Sol.*, eas. W.; A.—*Uses:* Incandescent lighting.

Thorium Dioxide Merck (75

(Thorium Anhydride). — ThO_2. — Wh., heavy powd.—Insol. W. & dil. acids; decomp. by sulphuric acid.—*Uses:* Incandescent lighting.

Thorium Nitrate Merck (20

$Th(NO_3)_4+4H_2O$.—50–52% ThO_2.—Wh., cryst. masses.—*Sol.*, eas. W.—Most important substance used in incandescent lighting.—Thorium nitrate w. 1% cerium nitrate constitutes the usual impregnating fluid for incandesc. mantles.

Thorium Sulphate Merck (40

$Th(SO_4)_2+4H_2O$.—Wooly, felted, wh. cryst.—*Sol.*, diffic. W. at medium temperature; in cold water passes into the enneahydrate, & thus becomes more soluble.

Thoroughwort.—see **Eupatorium**

Thoulet's Solution.—For separating minerals

Conc., aqu. solut. potass. iodide & mercuric iodide. — Sp. Gr. 3.17 at 15° C. — *Uses:* For separating minerals of different specific gravity.

Thresh's Reagent.—For alkaloids

Solut. 2.4 Gm. bismuth citrate, 20 Cc. W., & suff. ammonia & W. to make 30 Cc.; mix w. a solut. 2 Gm. potass. iodide in 45 Cc. HCl.—Reagent gives a ppt. w. albumen, & w. alkaloids in acidul. solut.

Thridace.—see **Lactucarium, French**

Thuja

(Arbor Vitæ; Yellow Cedar; False White Cedar; Tree of Life).—Herb of Thuja occidentalis, L. Coniferæ.—*Habit.:* North America; cultiv. in Europe. — *Etymol.:* Grk. "thyein," to exhale, referriug to the odor given off by the burning wood. Lat. "Occidentalis," occidental, *i.e.*, western, refers to its habitat.—*Constit.:* Volat. oil (thujon, $C_{10}H_{16}O$, & fenchon); thujin, $C_{20}H_{22}O_{12}$; thujetic acid, $C_{28}H_{22}O_{13}$; tannin; pinipicrin. — Diaph.; Diur.; Emoll.; Antisyph.; Antirheum.; Anthelm.; Astring.; Styptic (extern.); Emmen.; Antiper.; Alter.; Vermif.—*Uses:* Intermit. fever, scurvy, cough, rheum., amenor., & worms.—*Doses:* 15–60 grains (1–4 Gm.).—Fld. extr. 30–60 ♏ (2–4 Cc.).

Thymacetin

Deriv. of thymol & closely allied to phenacetin. —$C_{14}H_{21}NO_2$, or, $C_6H_2.CH_3.C_3H_7(OC_2H_6).NHC_2H_3O$).—Wh., cryst. powd.—*Sol.* A., E.; sl. in W. — *Melt.* 136° C. — Analg.; Hypn.; Antisep. — *Uses:* Headache, neural., paralysis, insom., delir., &c.—*Dose* 5–15 grains (0.3–1 Gm.).

Thyme

Herb of Thymus vulgaris, L. Labiatæ.—*Habit.:* Southern Europe; cult. in gardens.—*Etymol.:* Grk. "thymos," strength, referring to its invigorating odor. Lat. "vulgaris," common, ordinary.—*Constit.:* Volat. oil; tannin; gum.—Antisep.; Antispasm.; Carmin.; Antipyr.—*Uses: Intern.*, Diar., whoop.-cough, &c., & as condiment.—*Extern.*, in arom. herbal baths, cataplasms, & fomentations in contusions, skin dis., &c.—*Dose:* Fld. extr., 5–30 ♏ (0.3–2 Cc.).

Thyme, Wild.—see **Serpyllum**

Thymene Merck (5

Hydrocarbon fr. oil of thyme; probably ident. w. pinene. — $C_{10}H_{16}$. — Colorl., volat. oil. — *Sol.* A., E.—Sp. Gr. 0.868 at 20° C.—*Boil.* 165° C.—Antiseptic.

Thymiode.
Thymiodol.
Thymodin.
} —see **Thymol Iodide**

Thymoform

Condensation prod. of thymol & formaldehyde.—$CH_2:(C_6H_3[CH_3][C_3H_7]O)_2$. — Yellowish, tastel. powd.; faint odor of thymol.—*Sol.*, eas. A., E., C., oils; insol. W., G.—Antisep.—*Uses:* Instead of iodoform.

Thymoïl.—see **Thymoquinone**

Thymol Merck. — **Highest Purity, cryst. & powder** (5

(Thyme Camphor; Thymic Acid; Parapropylmetacresol; Methylnormalpropylphenol). — A phenol found in volat. oil of Thymus vulgaris, T. Serpyllum, Ptychotis Ajowan, & Monarda punctata. — $C_{10}H_{14}O$, or, $C_6H_3(CH_3)OH(C_3H_7)$.-[1:3:4].—Colorl., transl. cryst.; thyme-like odor; pung., somewhat caustic taste.—*Sol.* A., E., C., carbon disulphide, glacial acetic acid, oils; 1,100 W.—*Melt.* 50–51° C.—Sp. Gr. 1.030 at 25° C.—*Boil.* 228–230° C.—Antisep.; Antipyr.; Anthelm. — *Uses: Intern.*, rheum., gout, typhus fever, whoop.-cough, influenza, gastric fermentation, &c.—*Extern.*, inhaled in bronch., coughs, coryza, &c.; for toothache & mouthwash; & for wounds, ulc., & skin dis. In dentistry & surgery 1% solutions are used.—*Techn.*, destroying mold & herbarium parasites, preserv. anatom. specimens & urine, embalming corpses, &c.—*Doses:* 1–5 grains (0.06–0.3 Gm.) several t. p. d.; as antipyret., 8–15 grains (0.5–1 Gm.); as anthelmint., 120 grains (8 Gm.) in 12 divided doses given at intervals of 15 minutes.—*Incomp.*, acetanilide, antipyrine, butyl-chloral hydrate, camphor, monobromated camphor, carbolic acid, hydrated chloral, euphorin, menthol, quinine sulphate, salol, or urethane, in trituration; gold salts, spt. nitrous ether.

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Thymol Merck.—Reagent (10

$C_6H_3.(CH_3)[1]OH[3].(C_3H_7)[4]$.—Colorl., hexag. cryst.—*Sol.*, eas. A., E., C.; diffic. W. (1:1100). —*Melt.* 50–51° C. —*Boil.* 228–230° C. —*Tests:* (*Inorgan. Impur.*) ignite 1 Gm. – no wghble res. —(*Free Acids*) blue litmus paper not reddened by aqu. or alcoh. solut.—(*Phenol*) Aqu. 1:1100 solut. + bromine water – only milky turb., but no cryst. ppt. Add solut. $FeCl_3$ – no violet color.—*Uses:* In Molisch's sugar test replacing alpha-naphthol; detect. coniferin.

Note. — For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Thymol Carbonate.—see **Thymotal**

Thymol Iodide Merck.—*U. S. P.* (10

(Aristol; Diiododithymol; Annidalin; Dithymol diiodide; Thymotol; Iodistol; Iodohydromol; Iodothymol; Iodosol; Iosol; Iothymol; Thymiode; Thymiodol; Thymodin).—Fr. thymol, by alkal. w. iodine in solut. KI.—$C_{20}H_{24}O_2I_2$, or, $(C_6H_2CH_3.OIC_3H_7)_2$.—Red-brown powd.—45% of iodine.—*Sol.* E., C., oils; sl. A.; insol. W. or O. — Succedaneum for iodoform. — Dermic & Antisep.—*Uses: Extern.*, rhus poisoning, psori., syph. ulc., syph. neopl.; carcinoma; burns; cicatr. wounds, as dust. powd., solut. or oint.; in supposit. in chr. dysent.—*Appl.* 10% solut. in oils, collodion, or ether, or as oint. In prep'g solut. avoid heat.—*Incomp.*, acids, alcohol, ammonia, corros. sublimate, metal. oxides, alkalies, starch, & alkali carbonates.—*Caut.* Sensitive to light, hence keep in dark bot.

Thymol Salicylate

(Salithymol).—React.-prod. sod. salicylate w. sod. thymolate & phosphorus trichloride. — $C_{10}H_{13}O.C_7H_5O_3$.—Wh., cryst. powd.; sweetish taste.—*Sol.* A., E.; sl. in W.—Antiseptic.

Thymoquinone Merck (200

(Thymoïl). — $C_6H_2O_2.CH_3.C_3H_7$. — Brownish-yellow cryst.—*Sol.* A., E., C.—*Melt.* 74° C.

Thymotal (30

(Tyratol; Thymol Carbonate).—Obt. by passing phosgene gas, $COCl_2$ into a solut. sod. thymolate.—Colorl., cryst.; faint odor thymol.—*Sol.* A., E., C.; insol. W.—Teniacide. — *Uses:* Tape worm, pin worms, &c.—*Doses:* Adults, 30 grains (2 Gm.) 3 t. p. d.; children, 8–15 grains (0.5–1 Gm.).

Thymotol.—see **Thymol Iodide**

Thymus Gland Merck.—Dried, powder (50

Fr. the fresh thymus glands of calves & sheep. —1 part=6 parts of the fresh gland.—Contains iodine.—*Uses:* Struma, Basedow's disease, & pseudohypertrophic myopathy. — *Dose* 40–75 grains (2.5–5 Gm.) per day.

Thymus Serpyllum.—see **Serpyllum**

Thymyl Acetate.—see **Acetyl-thymol**

Thymyl Trichloracetate

Fr. thymol & trichloracetic acid in molec. proport. — Cryst. mass. — *Sol.* A., E.; insol. W. — *Melt.* 44° C.—Caust. Antisep. for wounds, &c.

Thyraden (26

(Standardized Dried Extract Thyroid Gland. Knoll).—Lactose trituration of the dried extract of thyroid gland.—15 grains (1 Gm.) contains $^1/_{85}$ grain (0.0007 Gm.) iodine.—1 part=2 parts fresh gland. Light-brownish, sweet powd., free fr. ptomaines. — Alter.; Antifat. — *Uses:* Myxedema, cretinism, psoriasis, obesity, &c.—*Dose* 2–4 grains (0.12–0.25 Gm.) 3 t. p. d., gradually increased to 8 grains (0.5 Gm.) if necessary, best taken in tablets; children $^1/_4$–$^1/_2$ as much.

Thyreoidin Notkin-Merck.—Purified (800

Albuminoid fr. thyroid gland. — Develops the thyroid action in most pronounced manner.—Transp. scales or yellow powd.—*Sol.* W.—*Uses:* In all cases where thyroid preparations indicated, & particularly for hypodermic medication (see Thyroidin). — *Dose:* $^1/_6$ grain (0.01 Gm.) once or twice daily; hypoderm., 15 ♏ (1 Cc.) of a solut. 0.05:10, to which a drop of chloroform is added to preserve it.

Thyroid Gland, Powdered.—see **Thyroidin**

Thyroidin Merck (26

Dried & powdered thyroid glands of sheep.—7 grains (0.4 Gm.) of the powd. represents the active constituents of a fresh thyroid gland of medium size, *i.e.*, 1 part=6 parts fresh gland. —Contains iodine organically combined.—*Uses:* Myxedema, cretinism, psoriasis, lepra, obesity, cerebral anemia, prurigo, iodide-idiosyncrasy, dwarfed growth, spasmodic torticollis, retarded bony growth in fractures, agalactia, neurasthenia, diabetes, &c.—*Dose* $^1/_2$–1 grain (0.03–0.06 Gm.) gradually increased up to 8 grains (0.5 Gm.) 2–3 t. p. d. in powd. or tablets.—*Antid.*, arsenic (Fowler's solution) in ordinary doses.

Thyroiodine.—see **Iodothyrine**

Tiglium

(Croton; Purging Croton; Molucca Grains; Grana Tilli).—Seeds of Croton Tiglium, L. Euphorbiaceæ. — *Habit.:* East Indies; Philippines.—*Etymol.:* Grk. "kroton," dog-tick, *i.e.*, fr. the resemblance of the seeds. "Tiglium," fr. Grk "tilos," diarrhea, referring to its action. —Ovoid, abt. size of a pea, reddish-brown when fresh, grayish-brown when old; thin, brittle, ligneous shell; delicate, white, membranous integument; oleaginous kernel.—*Constit.:* Fixed oil (croton oil), containing tiglic acid ($C_5H_8O_2$), crotonol ($C_{18}H_{28}O_4$), croton resin, &c. — *Uses:* Drastic Purgative.

Tilia

(Basswood; White Wood; Linn Tree; Linden). —Flowers of Tilia ulmifolia, Scopoli, & var. spec. of T. Tiliaceæ.—*Habit.:* Europe; Asia; cultiv. in U. S.—*Etymol.:* Fr. Grk. "ptilon," feather, fr. the feathered or winged peduncles.—*Constit.:*

Volat. oil; pectin; tannin; sugar; fat; wax; coloring matter.—Antispasm.; Diaph.; Stim.; Tonic. —*Uses:* Local & general baths & steam baths, & in mouthwashes, gargles, inhalations, &c.—*Dose* 30–40 grains (2–2.6 Gm.) in infus. or tinct.

Timbó

Bark of Paullinia pinnata, L. Sapindaceæ.—*Habit.:* Brazil.—*Etymol.:* Named for the Danish botanist Simon Paulus, died 1680; "Timbó" is the aboriginal name of the plant.—*Constit.:* Acrid resin; timbonine.—*Uses:* Rubefacient in hepatic affections; used by natives as fish poison.

Tin Merck.—Pure, gran., sticks & filings (2

Etymol.: "Tin," "stean," or "stan," a stone, was the Anglo-Saxon name for tin stone. The Lat. "stannum," fr. "stan." Among the ancients the name "stannum" was not applied to tin, but to a mixt. of silver & lead, & it was in the 4th century A.D. that the name appeared to have been first used for tin.—Metal.—Sn. —Wh., lustr., gran. bars, sticks or filings.—Sp. Gr. 7.29.—*Melt.* 235° C.—*Sol.*, hydrochloric acid, & in nitrohydrochloric acid.—*Uses:* Techn., tin & its alloys are used in manuf. utensils for domestic & industrial purposes; plating sheet iron & copper; tin foil; mirrors; enclosure for foods to prevent drying out; soldering; tin "diamonds," tin luster, &c.; prepar. tin salts, &c.

do. Merck.—Pure, powder (2

Fine gray powd.—*Sol.*, acids.—Teniafuge.—*Dose* 8 grains (0.5 Gm.) 4 t. p. d.—*Extern.*, as dusting powd. in corneal opacities.

do. Merck.—Sticks & sheets (2

Tin Merck.—Reagent (3

Sn.—Alm. silver-wh., soft met.—*Sol.* HCl ($SnCl_2$-formed); hot conc. HNO_3 converts it into insol. metastannic acid.—*Melt.* 231° C.—*Tests:* (*Pb; Cu; Fe; Zn*) digest 5 Gm.+40 Cc. HNO_3 on W.-bath till compl. convert. into wh. powd.; evap. compl.; stir res. w. 10 Cc. dil. HNO_3 (sp. gr. 1.153)+50 Cc. H_2O; filter; to filtrate add 1 Cc. dil. H_2SO_4 & evap. on W.-bath; treat res. w. 10 Cc. H_2O – no wghble res. (Pb); filter; to filtrate add NH_4OH to alkal. react. – no blue color (Cu); add $(NH_4)HS$ & let stand 4–5 hrs. at abt. 50° C.; if any ppt. forms, ignite & weigh – wt. should not exceed 0.002 Gm. (Fe; Zn).—*Uses:* Electrolytic; prepar. stannous chloride.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Tin Acetate Merck (15

(Stannous Acetate).—$Sn(C_2H_3O_2)_2$.—Yellowish powd.—Insol. W.—*Uses:* Techn., mordant.

Tin Amalgam Merck (8

Uses: Dental cements, &c.

Tin Anhydride.—see **Tin Oxide, Stannic, White**

Tin Ash.—see **Tin Oxide, Stannic, Gray**

Tin Bichloride.—see **Tin Chloride, Stannic, Fuming; Tin & Sodium Chloride**

Tin Bisulphide. } —see **Tin Disulphide**
Tin Bronze. }

Tin Chloride Merck.—Stannic.—Fuming (8

(Tin "Bichloride" [improperly] or Tetrachloride). — $SnCl_4$. — Colorl., fum., caustic liq. — Sp. Gr. 2.234 at 15° C.—*Boil.* 115° C.—*Uses:* Techn., as mordant, reviving colors, manuf. fuchsine, dyeing w. iodine green, tinning vessels, &c.—*Caut.* Keep well stoppered.

Tin Chloride Merck.—Stannous.—Pure (2

(Tin Protochloride or Dichloride; Tin Salt).—$SnCl_2+2H_2O$.—Wh., cryst. mass; absorbs oxygen fr. air & forms insol. oxychloride.—*Sol.* 0.37 W., A.—*Uses: Intern.*, Teniafuge, & antidote in poison. by corrosive sublim.—*Extern.*, in 1–2:1000 aqu. solut. in eczema.—*Techn.*, reducer for indigo & iron & manganese oxides in dyeing, as mordant in dyeing w. cochineal, manuf. gold-purple & lakes, tinning by galvanic methods, determ. of tannin, removing ink stains, improv. appearance of sugar, manuf. of metalline which, mixed w. albumen, is printed on hangings & o. fabrics, &c.—*Dose* $^1/_{12}$–$^1/_2$ grain (0.005–0.03 Gm.) several t. p. d.—*Antid.* (*for all tin salts*): Emetics, sod. bicarbonate, tannin (5 grains [0.3 Gm.] every 15 min.), milk, egg albumen.—*Caut.* Keep well stoppered.

do. Merck.—Pure, fused (2

do. Merck.—Cryst. (1

Tin Chloride Merck.—Reagent.—Stannous (4

(Stannous Chloride). — $SnCl_2+2H_2O$. — Colorl. cryst.—*Sol.*, eas. & clearly in A., & W. acidul. w. HCl; decomp. by much W. w. separ. basic stannous chloride.—*Tests:* (H_2SO_4) 1 Gm.+5 Cc. HCl (sp. gr. 1.19)+50 Cc. H_2O+solut. $BaCl_2$ – no turb.—(NH_4 *Compounds*) heat 1 Gm.+10 Cc. solut. NaOH (sp. gr. 1.3) – no NH_3 vapors evolv. (test w. moist litmus paper).—(*Earths; Alkalies; Fe*) 2 Gm.+10 Cc. HCl (sp. gr. 1.19)+100 Cc. H_2O; pass in H_2S gas till all Sn pptd.; filter; evap. filtrate; ignite res. – wt. no more than 0.001 Gm. Heat res. w. 1 Cc. HCl (sp. gr. 1.124); add 20 Cc. H_2O+solut. KSCN – at most only faint red color.—(*As*) boil 2 Gm.+10 Cc. HCl (sp. gr. 1.19) sev. min. – solut. should remain clear & colorl. for 1 hr.—*Uses:* Detect. As, Hg; determ. Cu, Fe; indicator in determ. sugar.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

do. Merck.—Reagent.—Solution

Obt. by stirring 5 parts stannous chloride w. 1 part HCl (sp. gr. 1.124) & then satur. mixture w. dry HCl gas.—Sl'tly yellow, v. refract. liq. — Sp. Gr. not below 1.90. — *Tests:* (*Impur. Pptd. by A.*) 1 vol.+10 vol. 85% A. – no turb.

within 1 hr.—(H_2SO_4) 5 Cc. + 50 Cc. H_2O + solut. $BaCl_2$ – no turb.—*Uses:* Detect. As, Bi, Se, Hg, sesame oil.

Note.— For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Tin Chromate Merck.—Stannic (8

$Sn(CrO_4)_2$. — Brownish-yellow, cryst. powd. — *Sol.* W.—*Uses:* Decorating porcelain.

Tin Chromate Merck.—Stannous (5

$SnCrO_4$.—Brown powd.; alm. insol. W.—*Uses:* Decorating porcelain (affords red & lilac colors).

Tin Citrate Merck (8

(Stannous Citrate). — $C_6H_6O_7Sn$. — Wh., heavy powd.—*Sol.*, sl. W.

Tin Dichloride.—see **Tin Chloride, Stannous**

Tin Dioxide.—see **Tin Oxide, Stannic**

Tin Disulphide Merck (4

(Stannic Sulphide; Tin Bisulphide; Mosaic Gold; Tin Bronze).—SnS_2.—Golden, transl. scales, or six-sided laminæ.—*Uses:* Techn., for gilding & bronzing metal, gypsum, wood, & paper, usually suspended in lacquer or varnish. Formerly used medicinally as tape-worm remedy.

Tin Hydroxide Merck.—White (2

(Stannic Hydrate).—$Sn(OH)_4$.—Pure wh., amorphous powd.—*Sol.*, in fused alkalies.

Tin Iodide Merck (15

(Stannic Iodide; Tin Tetraiodide).—SnI_4.—Red cryst.—*Sol.* CS_2, A., E., C., & B.—*Incomp.* W.

Tin Monosulphide.—see **Tin Sulphide**

Tin Monoxide.—see **Tin Oxide, Stannous**

Tin Oxalate Merck (4

(Stannous Oxalate). — SnC_2O_4. — Heavy, wh., cryst. powd. — *Sol.* acids. — *Uses:* Techn., in dyeing & printing.

Tin Oxide Merck.—Stannic.—White, pure (2

(Tin Peroxide, or Dioxide; Flowers of Tin; Stannic Anhydride). — SnO_2. — Wh., amorph. powd.—*Sol.* in fused alkalies; insol. W., & acids. —*Uses:* Medicinally obsolete. — Techn., & as polish for finger nails.

do. Merck.—White (1

do. Merck.—Gray (2

(Polishing Powder; Tin Stone; Tin Ash).—SnO_2. —Grayish-wh., amorph. powd.—*Uses:* Techn., for polishing steel & glass, manuf. milk-colored glass, alabaster glass, enamel, & opaque glaze.

Tin Oxide Merck.—Stannous.—Pure (4

(Tin Monoxide, or Protoxide).—SnO.—Brownish-black, insol. powd.; burns on heating in air. —*Uses:* Powerful reducing agent.

Tin Oxide & Soda Merck.—Solution (2

(Solution Sodium Stannite).—Colorl. liq.—Sp. Gr. 1.150 at 15° C.—*Uses:* Techn., in dyeing & printing fabrics.

Tin Peroxide.—see **Tin Oxide, Stannic**

Tin Phosphide Merck (10

Sn_2P_2.—Silver-wh., hard mass.—*Uses:* Techn., in manuf. phosphor bronze, which is v. resistant to oxid'g act. of atm. air & acid vapors.

Tin Protochloride.—see **Tin Chloride, Stannous**

Tin Protosulphide.—see **Tin Sulphide**

Tin Protoxide.—see **Tin Oxide, Stannous**

Tin Stone.—see **Tin Oxide, Stannic, Gray**

Tin Sulphate Merck.—Pure (3

(Stannous Sulphate).—$SnSO_4$.—Heavy, wh. to yellowish cryst. powd.—*Sol.* W. & acids.—*Uses:* Dyeing.

Tin Sulphide Merck.—Cryst. (4

(Stannous Sulphide; Tin Monosulphide, or Protosulphide).—SnS.—Gray, glist., cryst. scales. —*Sol.*, hydrochloric acid.

Tin Tannate Merck (10

(Stannous Tannate). — $Sn_2C_7H_2O_5 + H_2O$. — Brownish-black, insol. cryst. powd.

Tin Tartrate Merck (10

(Stannous Tartrate).—$SnC_4H_4O_6$.—Heavy, wh., cryst. powd.—*Sol.* W.—*Uses:* Dyeing & printing fabrics.

Tin Tetrachloride.—see **Tin Chloride, Stannic, Fuming**

Tin Tetraiodide.—see **Tin Iodide**

Tin & Sodium Chloride Merck.—Cryst. (2

(Sodium Stannichloride; Tin Bichloride; Tin & Sodium Tetrachloride).—$Na_2SnCl_6.H_2O$.—Wh., cryst. mass, or hard, brittle pieces.—*Sol.* W.— *Uses:* Techn., as mordant in dyeing.

Tincture Adonis Æstivalis Merck (2

Fr. A. æstivalis, L.—100 Gm. per liter.—Dinret. —*Uses:* Cardiac dis. (insufficiency of cardiac valves, &c.). Also obesity.—*Dose:* As anti-fat, 10–30 ♏ (0.6–2 Cc.), after meals, in lithia W.

Tincture Simulo Merck (7

Fr. seeds Capparis coriacea, Burch. — Nerv.; Antiepil.— *Uses:* Hyst., nervousn., & epilepsy. —*Dose* 30–60 ♏ (2–4 Cc.).

Tincture Strophanthus Merck.—*U.S.P.*—1:10 (2

Fr. seed Strophanthus Kombé, Oliv., deprived of the awn.—100 Gm. per liter.—Pale-yellow liq.; peculiar odor; bitter taste.—Cardiac Tonic; Diur. — *Uses:* Heart dis., asthma, dyspnea, dropsy, renal colic fr. calculi, palpitation of heart, nephritis, &c.—*Dose* 5–15 ♏ (0.3–1 Cc.).— *Antid.*, emetics, stom. siphon, cathartics, tannin, opium, coffee, brandy, &c.—*Caut.* Poison!

Titanic Anhydride.—see **(Acid) Titanic Anhydride**

Titanic Hydroxide. } —see **Acid Titanic**
Titanic Oxide. }

Titanium Merck (140

Etymol.: Discovered in 1795 by Klaproth, & named by him in honor of the Titans, the primeval sons of the earth. — Metal. — Ti. — Dark-gray, amorph. powd.; very hard; scratches agate & steel. — Sp. Gr. 3.589 at 0° C.—*Sol.*, warm hydrochl. acid.—*Uses:* As alloy (copper & iron) in titanium bronze, & as titanium green. The metal itself is not used.

Titanium Chloride Merck.—Titanic (75

(Titanium Tetrachloride).—$TiCl_4$.—Colorl. liq.; absorbs moisture fr. air & evolves dense wh. fumes. — *Boil.* 136° C. — *Uses:* With potass. bitartrate as mordant in textile industry.

Titanium Chloride.—Titanous

(Titanium Dichloride).—$TiCl_2$.—Hygros., black powd.; burns like tinder when heated in air; decomp. W.—*Caut.* Keep protected fr. air.

Titanium Dichloride.—see **Titanium Chloride, Titanous**

Titanium Dioxide.—see **(Acid) Titanic Anhydride**

Titanium Dioxide, Hydrated.—see **Acid Titanic**

Titanium Nitrate Merck (100

Approx. $TiO(NO_3)_2.xH_2O$. — Wh., cryst. mass, or wh., lustr. cryst.—*Sol.*, cold W.; decomp. by warm W.

Titanium Oxide.—see **(Acid) Titanic Anhydride**

Titanium Sulphate Merck.—Pure (110

$TiOSO_4.2H_2O$. — Wh., cryst. needl. — *Sol.*, in W. acidul. w. H_2SO_4; decomp. by boil. w. pure W.—*Uses:* Dyeing.

Titanium Tetrachloride.—see **Titanium Chloride, Titanic**

Titanium Trichloride Merck.—Solution (5

Reddish-violet liq. cont. abt. 15% $TiCl_3$.—*Uses:* Chem. anal.—*Caut.* Keep in well-stop'd bots.

Titanium & Ammonium Oxalate Merck (7

$TiO:(COO.COONH_4)_2.H_2O$. — Sm., wh., lustr. cryst.—*Sol.*, cas. W.—*Uses:* As mord. in dyeing.

Titanium & Potassium Fluoride Merck (12

TiK_2F_6 + aq.—Wh. cryst.—*Sol.*, diffic. in cold W.; more readily in hot W.—*Uses:* In manuf. pure titanic acid & titanium.

Titanium & Potassium Oxalate Merck.—Techn. (3

$TiO:(COO.COOK)_2.2H_2O$. — Wh., or greenish-wh., lustr., triclinic cryst.—*Sol.*, cas. W.—*Uses:* As mordant in dyeing.

Tobacco.—see **Tabacum**

Tobacco, Indian.—see **Lobelia**

Tolidine Merck.—Pure (30

(Orthotolidin; Orthodiamidoditolyl).—Fr. ortho-nitrotoluene by reduct w. sod. amalgam in pres. of $C_2H_4O_2$.—$C_{14}H_{16}N_2$, or, $(C_6H_3)_2(CH_3)_2(NH_2)_2$.—Wh. to reddish cryst.—*Sol.* A., E.—*Melt.* 129° C.

do. Merck.—Commercial (6

Grayish-yellow powd.—*Uses:* Manuf. dyes.

Tolidine Sulphate Merck (6

(Orthotolidine Sulphate).—$(C_6H_3)_2(CH_3)_2(NH_2)_2.H_2SO_4$.—Wh. to reddish cryst. powd.—*Sol.*, sl. in W. & A.

Toluazotoluidine.—see **Amidoazotoluene, Ortho-**

Toluene Merck.—Pure (1

(Toluol; Methylbenzene [or, -zol]; Phenylmethane).—Fr. coal tar.— C_7H_8, or, $C_6H_5.CH_3$.—Colorl., refractive liq.; benzene-like odor.—Sp. Gr. 0.870 (= 31° Bé.) at 15° C.—*Sol.* A., E.; glacial acetic acid, acetone, C.; sl. W.—*Boil.* 110–112° C. — *Uses:* Techn., in manuf. coal-tar dyes & artif. musk; also as solvent.

Toluene Bromo- (Ortho-) Merck (75

(Orthomonobromotoluene [or, -ol]).—By brominating toluene in the cold & separating the para-compound. — C_7H_7Br, or, $C_6H_4Br.CH_3$[2:1].—Colorl. to yellowish liq.—*Sol.* A., E., B.—Sp. Gr. 1.411 at 22° C. (Kekulé).—*Boil.* 182–183° C.

Toluene Bromo- (Para-) Merck (60

(Paramonobromotoluene [or, -ol]).—By brominating toluene in the cold & separating fr. the ortho-comp. — C_7H_7Br, or, $C_6H_4Br.CH_3$[4:1].—Reddish cryst.—*Sol.* A., B.—*Boil.* 185° C.(?)

Toluene Chloro- Merck (20

(Paramonochlorotoluene [or, -ol]). — By chlorinating toluene in the pres. of iodine.—C_7H_7Cl, or, $C_6H_4Cl.CH_3$[4:1].—Colorl. liq.—*Sol.* A., B.—Sp. Gr. 1.073 at 27° C.—*Boil.* 161° C.

Toluene Trichloride.—see **Benzotrichloride**

Toluic Nitrile (Ortho-) Merck (75

(Orthotoluic Nitrile; Nitrile of Orthotoluic Acid).—Fr. potass. cyanide by heat. w. potass. toluenorthosulphonate. — $C_6H_4.CH_3.CN$.[1:2].—Brown liq.—*Sol.* A., E., B.—*Boil.* 203–204° C.

Toluic Nitrile (Para-) Merck (75

(Paratoluic Nitrile; Nitrile of Paratoluic Acid).—Fr. potass. cyanide, by distil. it w. potass. toluneparasulphonate.—$C_6H_4.CH_3.CN$[1:4].—Yellow, cryst. mass.—*Sol.* A., E., B.—*Melt.* 28° C.—*Boil.* 218° C.

Toluidine Blue Merck (10

Zinc-chloride double salt of dimethyltoluthionine.—$C_{15}H_{16}N_3SCl.ZnCl$.—Dark-green powd.—*Sol.* A. w. blue color.—*Uses:* In ophthalmology like methylene blue in purulent, infectious conjunctivitis; also like fluoresceïn to detect corneal defects. — *Techn.*, for dyeing cotton. — *Appl.* 1:1000 solut.

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Toluidine (Meta-) Merck (30

(Meta-aminotoluene [or, -ol]).—Fr. reduct. of metanitrotoluene.—$C_6H_4CH_3.NH_2[1:3]$.—Reddish-brown liq.—*Sol.* A., E.—Sp. Gr. 0.998 at 25° C.—*Boil.* 197° C.

Toluidine (Ortho-) Merck.—Highest Purity (3

(Orthoaminotoluene [or, -ol]). — By reduct. of orthonitrotoluene. Free from paratoluidine.—$C_6H_4.CH_3.NO_2[1:2]$.— Light-yellow liq. closely resembling aniline; reddish-brown on expos. to air & light.—*Sol.* A., E.—Sp. Gr. 1.000 at 16° C.—*Boil.* 197° C.

do. Merck.—Commercial (2

Reddish-brown liq.—*Sol.* A., E.—*Boil.* 197° C. —Sp. Gr. 1.003 at 20° C.

Toluidine (Ortho-) Nitrate Merck (12

$C_7H_9N.HNO_3$.—Reddish cryst.—*Sol.* W., A.

Toluidine (Para-) Merck.—Highest Purity (6

(Para-aminotoluene [or, -ol]).—By reduct. of paranitrotoluene.—$C_6H_4.CH_3.NH_2[1:4]$.— Wh., lustr. plates or leaflets; pecul. odor.—*Sol.* A., E.—*Melt.* 45° C.—*Boil.* 198° C.

do. Merck.—Commercial (3

Wh. to brown leaflets, or brown, cryst. mass.—*Uses:* Manuf. coal-tar dyes.

Toluidine (Para-) Hydrochloride Merck (8

$C_7H_9N.HCl$.—Reddish, cryst. crusts.—*Sol.* W., A.

Toluidine (Para-) Sulphate Merck (8

$C_7H_9N.H_2SO_4$.—Wh. to yellowish cryst.—*Sol.* W., A.

Toluol.—see **Toluene**

Toluylene.—see **Stilbene**

Toluylene Red.—see **Neutral Red, Grübler**

Toluylenediamine Merck (100

(Metatoluylenediamine; Alphadiaminotoluene [or, -ol]).—By reduction of dinitrotoluene.—$C_6H_3.CH_3(NH_2)_2[1:2:4]$.—Brown need.—*Sol.* W., A., E.—*Melt.* 99° C.—*Boil.*, abt. 280° C.—*Caut.* Keep dry & fr. air. Poison! Has destructive influence on red blood-corpuscles. Used in physiological researches.

Toluylenediamine Hydrochloride Merck (150

(Orthotoluylenediamine, or Betadiaminotoluene [or, -ol], Hydrochloride). — $C_7H_{10}N_2.2HCl$. — Brown powd.—*Sol.* W.

Tolylantipyrine.—see **Tolypyrine**

Tolylhydrazine (Ortho-) Hydrochloride Merck (50

$C_7H_{10}N_2.HCl + H_2O$. — Wh. to reddish cryst. — *Sol.* W., A.

Tolylhydrazine (Para-) Hydrochloride Merck (40

$C_7H_{10}N_2.HCl$.—Brownish powd.—*Sol.* W., A.

Tolylpentadecylkelone.—see **Pentadecyltolylketone**

Tolypyrine (30

(Paratolyldimethylpyrazole; Tolylantipyrine). —Fr. paratolylhydrazine w. acetoacetic ester, & methylation of the resulting prod.—$C_{12}H_{14}N_2O$, or, $C_6H_4.CH_3N.CH_3N.CH_3C:CH.CO$.— Colorl. cryst.; bitter taste.—*Sol.* A., 10 W.—*Melt.* 136–137° C.—Antipyr.; Antineural.; Anod. —*Uses:* Febrile condit., rheum., gout, neural., migraine, &c.—*Doses:* Antipyr., 5–15 grains(0.3–1 Gm.); analg., 30–60 grains (2–4 Gm.) p. d.

Tolypyrine Salicylate.—see **Tolysal**

Tolysal (25

(Paratolyldimethylpyrazole Salicylate; Tolypyrine Salicylate).—Fr. tolypyrine w. salicylic acid.—$C_{12}H_{14}N_2O.C_7H_6O_3$.—Sm., alm. colorl., or faintly reddish, cryst.; astring., bitter taste.—*Sol.* A., acetic ether; sl. W., E.—*Melt.* 101–102° C.—Antineural.; Antirheum.—*Uses:* Acute & chronic rheum., rheumatic neural., &c. Free fr. unpleas. secondary effects.—*Doses:* Antipyr., 15 grains (1 Gm.) every half to 1 hour; antineural., 15–45 grains (1–3 Gm.) ev. hr. or two; for rheum., 8–15 grains (0.5–1 Gm.) ev. 2 hrs.

Tonga

Mixed lvs., bark & wood of Rhaphidophora vitiensis, or Epipremnum mirabile, Schott. Araceæ.—*Habit.:* Fiji Islands(?); Java; Sumatra; Paraguay; Australia. — *Etymol.:* "Tonga" is the native name.—*Constit.:* Tongine (alkaloid); volat. oil.—*Uses:* Analg. in neural.—*Dose:* Fld. extr., 10–30 ♏ (0.6–2 Cc.).

Tong-Pang.—see **Rhinacanthus**

Tonka

(Tonka Bean; Coumarouna Bean; Snuff Bean; English Tonka Bean).—Bean of Dipteryx oppositifolia, Aubl., D. odorata, Aubl., & o. sp. of D. Cæsalpiniaceæ.— *Habit.:* Tropical America, Guiana, Angostura.—*Etymol.:* "Tonka" is the South American name of the tree. "Dipteryx" fr. Grk. "dis," two, & "pteryx," wing.—Blackish-brown seeds w. wrinkled surface & brittle, shining or fatty skin; aromat., bitterish taste; balsamic, vanilla-like odor; efflorescence of cumarin often observed on surface.—*Constit.:* Cumarin.—Cardiac Stim.; Nar.; Antispasm.—*Uses:* Whoop.-cough. — *Techn.,* in perfum. & manuf. cumarin.—*Dose:* Fld. extr., 5–30 ♏ (0.3–2 Cc.).

Toothache Tree.—see **Xanthoxylum**

Tormentilla

(Tormentil; Septfoil).—Rhizome of Potentilla Tormentilla, Necker. Rosaceæ.—*Habit.:* Europe; northern Asia.—*Etymol.:* Lat. "potens," powerful, referring to its medicinal action. "Tormentilla," fr. Lat. "tormentum," torment, pain, referring to the use of the drug in dysentery.—*Constit.:* Tannin; tormentilla red; quinovic acid; volat. oil. — Astring.; Tonic. — *Uses:* Diar. &

dysent.—*Extern.*, in gargles & mouthwashes; also as astring. injection, & local appl. to ulcers. —*Doses:* 30–60 grains (2–4 Gm.).—Aqu. extr., 5–15 grains (0.3–1 Gm.).—Fld. extr., 30–60 ♏ (2–4 Cc.).

Tous-les-mois.—see **Canna**

Toxin, Antistreptococcic. — see **Serum Antistreptococcic**

Toxins Erysipelas & Prodigiosus Pasteur.—For Cancer & Malignant Growths

Liq.—*Inj.*, daily, 24 ♏ (1.5 Cc.), mixed w. eq. quant. steril. water.

Tragacanth.—*U. S. P.*

(Gum Tragacanth; Goat's Thorn; Hog Gum).—Gummy exudation fr. Astragalus gummifer. Labillardière, & other species of Astragalus. Leguminosæ. — *Habit:* Asia Minor; Syria; Persia.—*Etymol.:* Grk. "tragos," goat, & "akantha," thorn, or horn, *i.e.*, the exuded gum acquires a horny consistency & appearance; or the plant is thorny, & hedges of it resist the attacks of goats. — Whitish, ribbon-shaped bands; horny consistency; transluc.; short fracture.—With 50 W. it swells up & forms a cloudy, gelat. mass.—*Constit.:* Bassorin; pectin; starch. —*Uses:* Adhesive; size for fabrics; in pharmacy as excipient for pills, pastilles, &c., as emulsifier, & for suspending heavy powders.

Trailing Arbutus.—see **Epigæa**

Trapa

(Water Nut).—Fruit (nut) of Trapa natans, L. Onagraceæ. — *Habit.:* Europe. — *Etymol.:* Fr. "calcitrappa," an implement having 4 prongs & used in Roman warfare for impeding cavalry, *i.e.*, the water nut has four spines.—*Constit.:* Fixed oil & considerable iron.—Nutrient; Ferrug. Vegetable.—*Uses:* In diar. & lithiasis.

Traumaticin Merck (4

Abt. 5% solut. of gutta-percha in chloroform.—Thick, viscid, alm. colorl. liq.—*Uses: Extern.*, in dentistry & surg. as a protective covering for bleeding surf., cuts, &c. Also, as a vehicle for appl. of chrysarobin or o. antisep., in skin dis.

Tree of Heaven.—see **Ailanthus**

Triacid Mixture.—see **Ehrlich-Biondi's Triacid Mixture**

Triacid Solution.—see **Ehrlich's Triacid Solution**

Triaminodiphenyltolylcarbinol.—see **Rosaniline**

Trianosperma.—see **Tayuya**

Tribenzylidenediamine.—see **Hydrobenzamide**

Tribromacetaldehyde.—see **Bromal, Anhydrous**

Tribromaniline Merck (75

(Symmetrical, or Ordinary, Tribromaniline; Aniline Tribromide).—By act. of bromine on aniline or one of its salts.—$C_6H_4Br_3N$, or, C_6H_2-NH_2Br_3[1:2:4:6].—Colorl. need.—*Melt.* 119° C. —*Boil.* 300° C.—*Uses:* As hydrobromide ("bromamide") in neuralgia, in doses of 10 grains (0.6 Gm.).

Tribromaniline Hydrobromide.—see **Bromamide**

Tribromhydrin.—see **Allyl Tribromide**

Tribromobenzene, Symmetrical.—see **Benzene, Tribromo-**

Tribromomethane.—see **Bromoform**

Tribromphenol Merck (12

(Bromol). — Fr. aqu. solut. carbolic acid, by bromine W. — $C_6H_2Br_3.OH$. — Wh. to reddish cryst.; disagr., bromine odor; sweet, astring. taste.—*Sol.* A., E., C., G., oils; insol. W.—*Melt.* 95° C. — Extern. & Intern. Antisep. — *Uses: Intern.*, cholera inf., typhoid fever, &c.—*Extern.*, purul. wounds, diphth., &c.—*Doses* $1^1/_2$–8 grains (0.1–0.5 Gm.) per day; children, $^1/_{12}$–$^1/_4$ grain (0.005–0.015 Gm.). — *Appl.*, wounds, &c., in 1:30 oily solut. or 1:8 oint.; diphth., 4% solut. in G., or 1:10–30 dust. powd. (talcum).

Tribromphenolbismuth.—see **Xeroform**

Tribrompropane. }
Tribrompropylene. } —see **Allyl Tribromide**

Tribromsalol

(Cordol).—$C_6H_5.C_7H_2Br_3O_3$. — Cryst. powd.—*Sol.*, diffic. A., E.; insol. W.—*Melt.* 195° C.—Intestinal antiseptic, easily decomp. into tribromphenol & salicylic acid; can be used inst. of both.—*Dose* 5–25 grains (0.3–1.6 Gm.); up to 90 grains (6 Gm.) p. d.

Tributyrin.—see **Butyrin**

Tricalcium Orthoarsenate.—see **Calcium Arsenate**

Tricalcium Orthophosphate.—see **Calcium Phosphate**

Tricarbimide.—see **Acid Cyanuric**

Trichloracetic Aldehyde.—see **Chloral, Anhydrous**

Trichloraldehyde Hydrate.—see **Chloral Hydrated**

Trichloraldehyde-oxyphenyldimethylpyrazol. —see **Hypnal**

Trichlorbutylalcohol, Tertiary.—see **Chloretone**

Trichlorethylideneimide.—see **Chloralimide**

Trichlorisopropylalcohol.—see **Isopral**

Trichlorobenzene (or, *-zol*).—see **Benzene, Trichloro-**

Trichlorobutyric Aldehyde.—see **Butyl-chloral**

Trichlorolactonitrile.—see **Chloral Hydrocyanate**

Trichloromethane.—see **Chloroform**

Trichloromethyl Sulphite Merck (100

(Trichloromethylsulphurous Acid).—$CCl_3H.SO_3$. —Colorl. cryst.; odor of chloric acid.—*Sol.* A.; sl. W.—Antiseptic.

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Trichloronitromethane.—see **Chloropicrine**

Trichlorophenol Merck (8

Fr. phenol, by chlorine.—$C_6H_2OHCl_3$[1:2:4:6]. —Wh. cryst.—*Sol.* A., E.—*Melt.* 65° C.—*Boil.* 243° C. — Antisep.; Germic. — *Uses: Intern.*, diphth., ulc., erysip., chancre, &c. — *Extern.*, as 5–10% oint. or solut.

Trichlorophloroglucinol Merck (300

By passing chlorine into a solut. of phloroglucin in acetic acid.—$C_6Cl_3(OH)_3+3H_2O$.—Yellowish, cryst. powd.—*Sol.* A., hot W.—*Melt.* 129° C.

Trichloroquinone Merck (175

Fr. sulphuric acid solut. of phenol by potass. chlorate w. hydrochl. acid.—$C_6HCl_3O_2$.—Yellow leaflets.—*Sol.* E., hot A.—*Melt.* 165–166° C.

Trichlortertiarybutylalcohol.—see **Chloretone**

Tricresol (3

Mixt. of ortho-, meta-, & para-cresols fr. coal tar.—Colorl., oily liq.—Sp. Gr. 1.045 at 15° C. —*Sol.*, abt. 40 W.—Antisep.; Germic.—*Uses: Extern.*, 1% solut. or oint. in skin dis., surg. dress., &c. Neither attacks instruments nor benumbs the bands.

Tricresolamine

Solut. containing 2% each ethylenediamine & tricresol.—Clear, colorl., alkaline liq.; phenolic odor; turns yellow on expos. — *Sol.* 2 W. — Antisep., like tricresol, but stronger & less irritating.—*Appl.* 1–10:1000 solut.

Trielaïdin.—see **Elaïdin**

Triethyl Phosphine Merck (1200

React.-prod. zinc ethyl w. phosph. trichloride. — $(C_2H_5)_3P$. — Colorl., mobile liq.; pecul., not unpleas., odor.—Sp. Gr. 0.812 at 15° C.—*Misc.* A., E.—*Boil.* 128° C.—*Uses:* Determine carbon disulphide in illuminating gas.

Triethylamine Merck (300

Fr. ethyl iodide or nitrate, by amm.—$(C_2H_5)_3N$. —Colorl., str'ly alkal. liq.; odor of amm.—Sp. Gr. 0.733 at 15° C.—*Sol.*, sl. in W.—*Boil.* 90° C.

Triethylamine Hydrochloride Merck (250

$(C_2H_5)_3N.HCl$.—Wh. cryst.; subl. without decomp.—*Sol.* W.—*Melt.* 248–250° C.

Triethylrosaniline Hydrochloride. — see **Hofmann's Violet**

Triferrin (20

(Iron Paranucleinate).—Tastel., reddish powd.; 2.5% P., 22% Fe.—*Sol.*, eas. dil. solut. sod. carbonate; insol. W., dil. HCl.—Hematinic.—*Uses:* Chlorosis, anemia, debility.—*Dose* 5 grains (0.3 Gm.) 3 t. p. d.

Trifolium Arvense

(Rabbit-foot Clover; Hare's Foot; Calf Clover; Field Clover).—Herb of Trifolium arvense, L. Papilionaceæ.—*Habit.:* Europe; Asia; natur. in U. S.—*Etymol.:* Lat. "tres," three, & "folium," leaf. Lat. "arvensis," field.—*Uses:* Domestic remedy in gout.

Trifolium Pratense

(Meadow Clover; Purple Clover; Cow Clover; Red Clover).—Flowers of Trifolium pratense, L. Papilionaceæ.—*Habit.:* Europe; Asia; Northern Africa; natur. in U. S.— *Etymol.*. "Trifolium," see preceding. "Pratensis," fr. Lat. "pratum," meadow, *i.e.*, where the plant grows. —*Constit.:* Tannin; two resins; fat; chlorophyll. —Alter.; Sed.— *Uses:* Domestic cough remedy.

Trifolium Repens

(Dutch Clover; Honeysuckle Clover; White Trefoil; White Clover).—Flowers of Trifolium repens, L. Papilionaceæ.—*Habit.:* Europe; Asia; Sub-Arctic N. America; natur. in U. S.—*Etymol.:* "Trifolium," see Trifolium Arvense "Repens" fr. Lat. "repo," to crawl, creep.— *Constit.:* Tannin.—Antarthritic.

Triformol = Paraformaldehyde. — see **Trioxymethylene**

Trigemin (30

(Dimethylaminoantipyrine-butylchloralhydrate). — $C_{17}H_{24}N_3O_3Cl_3$. — Fr. pyramidon & butylchloralhydrate.—Wh., sl. hygrosc. powd.—*Sol.*, in abt. 65 W.; 2 A., B., 10 E.; diffic. ligroin.—*Melt.* 83–85° C.—Analgesic; Sedative.— *Uses:* Migraine, neuralgia, headache, caries, influenza, & angina.—*Dose* 5–20 grains (0.3–1.3 Gm.).

Triimide.—see **Paramide**

Triiodocresol.
Triiodometacresol. } —see **Losophan**

Triiodomethane.—see **Iodoform**

Trillin (Eclectic) (20

Alcoh. extr. of Trillium erectum, L. (Wake Robin; Birthroot). — Dark-brown powd. — Astring.; Tonic; Expector.—*Uses:* Hasten parturition, check hemorrhage, &c. — *Dose* 2–4 grains (0.12–0.25 Gm.).

Trillium

(Bethroot; Birthroot; Indian Balm; Ground Lily).—Rhizome of Trillium erectum, L., & o. spec. of T. Convallariaceæ.—*Habit.:* Canada, south to Tennessee & Missouri; also Japan.— *Etymol.:* Lat. "tri," fr. Grk. "tris," three, referring to the 3-parted flowers & the three lvs. —*Constit.:* Trilliine; fixed oil; tannin; starch. —Alter.; Expect.; Astring.—*Uses: Intern.*, in asthma. — *Extern.*, indol. ulcers & injuries. — *Dose:* Fld. extr., 1–2 fl. dr. (4–8 Cc.).

Trimethylamine Merck.—Anhydrous (1500

(Its aqueous solut. is often miscalled "Propylamine"). — Fr. methyl iodide, by ammonia. — C_3H_9N, or, $(CH_3)_3N$.—Colorl., liquef. gas; fishy, ammoniacal odor.—*Sol.* W., A.—Sp. Gr. 0.673 at 0° C.—*Boil.* 9–10° C.

"Trimethylamine" Merck.—10% Solution (11
(More properly "Propylamine").—Solut. propylamine in W. — $CH_3(CH_2)_2.NH_2$ + aq.—Colorl. liq.; str. fishy & amm. odor.—*Sol.* W.—Caustic; Antisep.; Antirheum.—*Uses:* Rheum., chorea.—*Doses:* 10–45 ♏ (0.6–3 Cc.) several t. p. d. in rheum.; in chorea & in pneum., 5–12 fl. dr. (20–50 Cc.) p. d. in sweetened & flavored water.

do. Merck.—True.—33% Solution (100
Colorl. liq.—*Misc.* W., A.

Trimethylamine Hydrochloride (300
$C_3H_{10}NCl$, or, $(CH_3)_3N.HCl$.—Deliq., colorl. cryst.—*Sol.* W.—Decomp. at 285° C.—*Melt.* 274–275° C.—*Uses:* Odorous addition to bait.

Trimethylamine Sulphate
$C_6H_{20}N_2SO_4$, or $[(CH_3)_3N]_2.H_2SO_4$.—*Sol.* W.

Trimethylammoniumvinyl Hydroxide.—see **Neurine**

Trimethylanthraquinone Merck (600
Fr. pseudo-cuminoylbenzoic acid, by concentrated sulphuric acid w. heat.—$C_{17}H_{14}O_2$, or, $(CH_3)_2.C_6H_2.C_2O_2.C_6H_3.CH_3$.[1:2:4]. — Yellowish needles.—*Sol.* A., C.—*Melt.* 161° C.

Trimethylbenzene (or, *-zol*).—see **Cumene; Mesitylene**

Trimethyl Carbinol.—see **Alcohol Butylic, Tertiary**

Trimethylene Bromide Merck (70
(Normal Propylene Bromide; Propylene Dibromide; Dibromopropane). — By adding hydrobromic acid to allyl bromide at −16° C.—$C_3H_6Br_2$, or, $CH_2Br.CH_2.CH_2Br$.—Colorl. liq.—*Sol.* A., E., C.—Sp. Gr. 1.974 at 15° C.—*Boil.* 165° C.

Trimethylene Chlorobromide Merck (65
(Chlorobromopropane). — Reaction-product of trimethylene bromide w. mercuric chloride.—$CH_2Br.CH_2.CH_2Cl$.—Colorl. liq.—Sp. Gr. 1.63 at 8° C.—*Boil.* 142° C. at 746 Mm.

Trimethylethylene.—see **Amylene; Pental**

Trimethylethylene Bromide.—see **Bromamylene**

Trimethylethylenehydrate-ammoniumhydroxide.—see **Choline**

Trimethylglycine Hydrochloride.—see **Betaine Hydrochloride**

Trimethylpyrogallol Merck (85
(Trimethylester of Pyrogallol). — React.-prod. methyl iodide, KOH, & pyrogallol dissolved in methyl alc.—$C_9H_{12}O_3$, or, $C_6H_3(OCH_3)_3$.—Wh. need.—*Sol.* A., E.—*Melt.* 47° C.—*Boil.* 235° C.

Trimethylxanthine.—see **Caffeine**

Trinitrin Solution.—see **Spirit Glyceryl Trinitrate**

Trinitrobulyltolylazoimid.—see **Musk, Artificial**

Trinitrocresol Merck (15
(Trinitrometacresol).—By nitration of coal-tar cresol, or its sulphonic acid.—$C_7H_5N_3O_7$, or, $C_6H.CH_3.OH.(NO_2)_3$[1:2:3:4:5].—Yellow powd.—*Sol.*, sl. W.—*Melt.* 102° C.—Antiseptic.

Trinitronaphthalene Merck.—Commercial (3
By successive nitrations of naphthalene.—$C_{10}H_5(NO_2)_3$.—Yellowish cryst.—*Sol.* A.; sl. E., C.

Trinitrophenol.—see **Acid Picric**

Triolein Merck (100
(Olein).—$C_3H_5(OC_{18}H_{33}O)_3$.—Chief constit. fatty oils; also in solid fats.—Colorl. to yellowish, oily liq.—*Sol.*, sl. A.; v. sol. E., C.—Solidif. at −6° C.

Trional (30
(Sulphonethylmethane [U. S. P.]; Methylsulfonal; Diethylsulphonemethylethylmethane).—By passing dry hydrochl. acid gas into a mixt. anhydrous mercaptan & methylethyl ketone & oxid'g the prod.—$C_8H_{18}S_2O_4$, or, $CH_3(C_2H_5)$:C:$(SO_2.C_2H_5)_2$. — Colorl., lustr., cryst. powd.; odorl.; character. taste.—*Sol.* A., E., 320 W. at 15° C.; (195 W. at 25° C.; more read. boil. W., U. S. P.).—*Melt.* 76° C.—Hypnotic; Sed.—*Uses:* For producing sleep, espec. where there is no pain. Free from cumulative action of sulfonal, because completely decomp. in the system. Espec. valuable in agrypnia due to morphine, cocaine or hydrated chloral. — Contraindic. in cardiac diseases, & in disturbances of compensation.—*Dose* 15–30 grains (1–2 Gm.).—*Max. D.* 45 grains (3 Gm.) single; 120 grains (8 Gm.) p. day.

Trioxyanthraquinone.—see **Anthragallol; Purpurine Red**

Trioxybenzene (or, *-zol*).—see **Phloroglucinol**

Trioxybenzophenone.—see **Salicylresorcinolketone**

Trioxymethylanthraquinone.—see **Emodin**

Trioxymethylene Merck (3
(Paraform; Paraformaldehyde; Polymerized Formic Aldehyde). — Fr. formic aldehyde w. heat.—$(CH_2O)_3$.—Wh., cryst. powd.—*Sol.*, v. sl. W., A., or E. — *Melt.* 171° C.; gives off formaldehyde vapors even at ord. temperat., the evolut. being increased by heat.—Antisep.; Astring.—*Uses: Intern.*, cholera nostras, diar., &c. Also pharm.; antisep. bandages & surg. dress.—*Dose* 5–15 grains (0.3–1 Gm.) several t. p. d.—*Appl.*, in 10% supsension in collodion (for warts) 3 t. p. d.—Vapors used in inhal. in phthisis, coryza, & tracheobronchitis, also for disinf. sick-rooms, clothing, linen & sick-room utensils. For the last-named purpose, the utensils are enclosed in a wooden or tin box in which a small quantity of trioxymethylene is warmed. The trioxymethylene may also be mixed w. calcium chloride & spread on cloths, formaldehyde being evolved.—*Antid.*, solut. ammon. acetate, stomach siphon, warm baths.

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

—Marketed also in compr. tabl., ea. 8 grains (0.5 Gm.) & 4 grains (0.25 Gm.).

Tripalmitin Merck (200

(Palmitin). — $C_3H_5(OC_{16}H_{31}O)_3$. — Constit. of most fats.—Wh., cryst. powd.—*Sol.* E., C.; hot A.—*Melt.*, abt. 60° C.

Triphenin (10

(Propionylphenetidin Merck). — $C_6H_4.OC_2H_5.NH.CO.C_2H_5$. — Colorl., cryst. powd. — *Sol.* A., E.; insol. W.—*Melt.* 120–122° C.—Antipyr. & Antineural.; reported prompt, without by- or after-effects.—*Uses:* Typhoid, pneum., pleurisy, influenza, erysipelas, tuberculosis, migraine, sciatica, tabetic pains, &c.—*Doses:* Antipyr., 4–10 grains (0.25–0.6 Gm.); antineural., 15–20 grains (1–1.3 Gm.) 3–4 t. p. d.

Triphenyldihydroglyoxalin.—see **Amarine**

Triphenylguanidine Merck (70

(Alphatriphenylguanidine). — By adding lead oxide to boil. alcoh. solut. of aniline & thiocarbanilide.—$C_{19}H_{17}N_3$, or, $NC_6H_5:C(NH.C_6H_5)_2$.—Wh. powd. or cryst.—*Sol.* A., E., C.; v. sl. W.—*Melt.* 143° C.—Antiseptic.

Triphenylguanidine Hydrochloride Merck (100

$C_{19}H_{17}N_3.HCl+H_2O$.—Wh., cryst. powd.—*Sol.* A., W.—*Melt.* 241–242° C.

Triphenylmethane Merck (100

$C_{19}H_{16}$, or, $HC(C_6H_5)_3$.—Colorl. cryst.—*Sol.* A., E., C., B.—*Melt.* 92° C.—*Boil.* 358–359° C.

Tristearin Merck (15

(Stearic Ester of Glyceryl; Stearin).—Fr. the more solid natural fats.—$C_{57}H_{110}O_6$, or, $C_3H_5(C_{18}H_{35}O_2)_3$. — Wh. powd.; odorl.; tastel. — Sp. Gr. 0.987 at 10° C.—*Sol.* E., boil. A.—*Melt.*, at 55° C.; on further heat solidifies, & melts again at 72° C.—*Uses:* Technical.

Triticum.—*U. S. P.*

(Couch Grass; Dog Grass; Graminis; Quick Grass).—Dried rhizome of Agropyron repens (L.), Beauvois, Gramineæ, gathered in spring. — *Habit.:* Europe; Northern Asia; natur. in U. S. — *Etymol.:* Fr. Lat. "tero, terere," from "tritus," to rub or grind, *i.e.*, the seeds must be ground for eating. "Agropyron" fr. Grk. "agros," a field, & "pyros," wheat. "Repens" fr. Lat. "repo," to creep or crawl, *i.e.*, the stem inclines to crawl on the ground. — *Constit.:* Triticin; sugar (levulose); acid malates; inosite. —Aper.; Diur. Lessens irritation in diseases of urinary organs.—*Uses:* Cystitis and o. diseases of genito-urin. organs. — *Doses:* 30–180 grains (2–12 Gm.).—Aqu. extr., 8–30 grains (0.5–2 Gm.).—Fld. extr., 1–3 fl. dr. (4–12 Cc.).

Tritopine Merck (2500

Alkaloid fr. opium.—$C_{42}H_{54}N_2O_7$.—Wh. powd.—*Sol.* A., C., caustic soda solut., E.—*Melt.* 182° C.—Tetanic poison, like strychnine.

Tropacocaine Hydrochloride Merck (550

(Benzoylpseudotropeine Hydrochloride). — Fr. narrow-lvd. var. of Erythroxylon Coca, Lam., grown in Java; also synthet.— $C_{15}H_{19}NO_2.HCl$, or, $CH_2.CH(N.CH_3).(CH_2)_2.CH.CH_2.CHO.CO.C_6H_5.HCl$. — Colorl. cryst. — *Sol.* W. — Local Anesth.—*Uses:* Inst. of cocaine hydrochloride. Solut. claimed more stable, easily sterilizable, & to have less depressing effect on heart. — *Appl.*, 3% solut., in 0.6% sod. chloride solut. in ophthalm., dentistry, in general surgery by the Schleich infiltration method, in regional anesthesia accord. to Oberst, & in lumbar anesthesia accord. to Bier's method.

Tropæoline D.—see **Methyl Orange**

Tropæoline D Paper.—see **Methyl Orange Paper**

Tropæoline O.—see **Yellow T**

Tropæoline O O.—see **Diphenylamine Orange**

Tropæoline O O O No. 1 Merck (8

(Alphanaphthol Orange; Orange I; Sodium Azoalphanaphtholsulphanilate). — $C_{16}H_{11}N_2O_4SNa$. —Reddish-brown powd.—*Sol.* W.—*Uses:* As indicator in volumetric analysis (acids = yellow; alkalies = red).

Tropæoline O O O No. 2 Merck (7

(Betanaphthol Orange; Orange II; Mandarin; Orange Extra; Chrysaureine; Sodium Azobetanaphtholsulphanilate).—$C_{16}H_{11}N_2O_4SNa$. — Yellowish-red powd.—*Sol.* W.—*Uses:* Dye, & coloring; not well adapted for use as indicator, as color change too slight.

Tropæoline Paper

Wh. paper impregnated w. a satur. alcoh. solut. tropæoline O O.—*Uses:* For detecting free HCl in gastric juice (lilac color).

Tropæoline R.—see **Yellow T**

Tropine Merck.—Pure (600

(Methyloxyethylpyridinetetrahydride).— Artif. alkaloid obt. by heat. atropine or hyoscyamine w. baryta water.—$C_8H_{15}NO$.—Hygros., wh. cryst.—*Sol.* W., E., C.—*Melt.* 61° C.—*Boil.* 229° C.

Tropine Sulphate Merck (600

$(C_8H_{15}NO_2)_2.H_2SO_4$.—Wh. cryst.—*Sol.* W., A.

Tropon

Albuminoid contain. 90% albumen digestible by pepsin.—Brownish powd.—Insol. W.—*Uses:* Nutrient for invalids & in convalescence.

Trumpet Weed.—see **Eupatorium Purpureum**

Trypsin Merck (300

Enzyme fr. pancreatic juice, or the pancreas, of animals.—Converts albuminates, at body temperature & in alkaline solut., successively into globulin-like substances, peptone, & finally tripeptone.—Yellow to grayish-yellow powd.—

Sol. W.—Proteolytic.—*Uses:* Artif'y peptonize milk; & somet. w. o. ferments in duodenal dyspep. in diabetes. Acts in an alkal. medium.—*Dose* 8–25 grains (0.5–1.6 Gm.) at meals, or after, in keratin-coated pills.—*Appl.*, as solvent of false diphtherit. membrane in 10% solut. prepared by digesting trypsin 4 hours in 1:1000 solut. salicylic acid, & then making alkaline.

Tuberculin Koch-Merck.—For cattle & pigs

(Koch's Lymph).—Glycerin extr. fr. pure cultures of the tubercle bacillus.—Transp., dark-brown liq.—*Sol.* W., G.—Effects on animals having the tuberculous diathesis are very marked, & therefore it enables the physician to discover these dis. at a very early stage.—*Uses:* Diagnostic for tuberculosis in domestic animals; on hypoderm. inj. of remedy, a rise of temperature (1.5° C.) occurs if the animal is tuberculous.

Tuberculol Merck

Tuberculous toxin free fr. secondary products. Contains in conc. form the toxins of both the culture fluid & the bacteria cells, hence eminently adapted for immunizing against tuberculosis, & also for therapeutic employment in tuberculous affections. — Brown powd. — *Sol.* W.—The toxic unit is represented by the quantity (15 ♏ [1 Cc.]) required to kill a healthy guinea-pig weighing abt. 8 oz. (250 Gm.) within 4 days.—Used hypodermically.

Tubocurare.—see **Curare**

Tubocurarine.—see **Curarine**

Tulip-tree.—see **Liriodendron**

Tumenol.—Crude (11

Mixt. of sulphones & sulphonic acids fr. bituminous minerals.—Dark-brown, or blackish-brown liq. — *Sol.* E., B. — Antisep.; Germic. — *Uses: Extern.*, in 5–10% solut. in E., G., or A., for ecz., prurigo, & o. skin dis. Also as 5% oint.

do.—Oil (13

(Tumenolsulphone).—Ether. extr. fr. tumenol previously diss. in caustic soda.—Dark-yellow, thick liq. — *Sol.* E., B. — Antiseptic. — *Uses: Extern.*, skin dis., in 5 to 10% solut. or oint.

do.—Powder (22

(Tumenolsulphonic, or Sulphotumenolic, Acid). —Active ingredient of tumenol.—Dark-yellow powd.; bitter taste.—*Sol.*, eas. W.—Dermic; Antisep.—*Uses: Extern.*, dust. powd.; also in skin dis. as 5% oint. or 10% ether-alcoh., or glycerin-aqu., solut.

Tumenolsulphone.—see **Tumenol Oil**

Tungsten Merck.—Pure (15

(Wolfram; Scheelium).—*Etymol.:* "Tungsten" signifies "heavy-stone"; "Wolfram" is an old, miner's name for the metal, fr. "wolf-rahm," wolf's cream (hence also designated by Agricola "spuma lupi"), or fr. "wolfrig," wolfish, biting, because on fusing tin ores w. wolfram the tin content is reduced.—Metal.—W.—Light, gray powd.; metallic luster.—Sp. Gr. 19.129 at 15° C. —Converted by nitric & nitrohydrochloric acids into WO_3.

Tungsten Merck.—Commercial (6

Hard, brittle, gray powd.—Imparts great resistance, ductility, & hardness to steel.—*Uses:* Techn., manuf. alloys, tungsten steel, tungsten German silver, gun metal (tungsten manganese copper), tungsten white metal, &c.

Tungsten Bronze Merck.—Orange (50

(Tungsten-sodium Bronze; Saffron Bronze; Tungsten-sodium Tungstate).—By diss. tungsten trioxide in melted sodium tungstate.— $Na_2WO_4 + W_2O_5$.—Gold-like leaflets.—Insol. in usual solvents.—*Uses:* Pigment.

Tungsten Bronze Merck.—Violet (50

(Potassium Tritungstate).—$K_2W_3O_9$ + blue tungsten oxide, W_2O_5.—*Uses:* Bronze pigment.

Tungsten Oxide Merck (15

W_2O_5.—Blue powd.—Insol. in aqua regia.

Tungsten Oxychloride Merck (100

$WOCl_4$. — Dark-red cryst. — *Boil.* 227.5° C. — *Melt.* 208–210° C.—Decomp. by W.—*Caut.* Keep in sealed glass containers as it is decomposed by moisture in air.

Tungsten-sodium Bronze. } —see **Tungsten**
Tungsten-sodium Tungstate. } **Bronze, Orange**

Tungsten Trioxide.—see **(Acid) Tungstic Anhydride**

Tupelo

(Large Tupelo; Swamp Tupelo; Cotton Gum-tree; Black Gum; Sour Gum).—Wood of Nyssa aquatica, L. Santalaceæ. Cornaceæ.—*Habit.:* Southern U. S.—*Etymol.:* "Tupelo" is the American aboriginal name for the wood. "Nyssa" fr. Grk. "nysa," the name of a water nymph, the nurse of Bacchus.—*Uses:* Making sponge-tents.

Turkey Corn.—see **Corydalis**

Turlington's Balsam.—see **Balsam Traumatic**

Turmeric.—see **Curcuma**

Turmeric Paper.—see **Curcuma Paper**

Turmeric Yellow.—see **Curcumin**

Turnera.—see **Damiana**

Turnsole.—see **Litmus**

Turpentine Camphor.—see **Terpene Hydrochloride**

Turpentine Chian Merck (12

(Chios Turpentine; Scio Turpentine; Cyprian Turpentine).—Oleo-resin fr. Pistacia Terebinthus, L. Anacardiaceæ.—*Habit.:* Island of Chios or Scio; Western Asia; Mediterranean basin.— *Etymol.:* "Terebinthus" fr. Grk. "terein," to

incise, *i.e.*, the oleo-resin is obtained by incising the bark.—Yellowish, greenish, or bluish-green, transl., viscid liquid; pecul. aromat. odor; less acrid taste than other turpentines; gradually hardens by age.—*Constit.:* Volat. oil; resin; bitter substc.—*Uses:* Cancerous growths.—*Dose* 3–7 grains (0.2–0.4 Gm.) several t. daily; in oint. with petrolatum (5:30).

Turpentine Dihydrochloride.—see **Terpene Dihydrochloride**

Turpentine, French

(Bordeaux Turpentine; Galipot).—Oleo-resin fr. Pinus Pinaster, Solander. Coniferæ.—*Habit.:* Southern France.—*Etymol.:* See Turpentine, Chian.—*Constit.:* Volat. oil; resin.—*Uses:* In ointments & plasters as rubefacient.

Turpentine Monohydrochloride.—see **Terpene Hydrochloride**

Turpentine Spirits.—see **Oil Turpentine**

Turpentine, Venice

Oleo-resin fr. Larix europæa, De C., or Pinus Larix, L. Coniferæ.—*Habit.:* Middle & southern Europe.—*Etymol.:* See Turpentine, Chian.—Yellow, sometimes greenish, limpid, tenacious, thick liquid; pleasant, arom. odor; hot, pungent, somewh. bitter taste; becomes hard & brittle on prolonged expos. to air.—*Sol.*, glac. acetic acid; amylic alcohol; acetone; caustic alkalies; slowly but freely in A.—*Constit.:* Volat. oil; resin.—*Uses: Intern.*, in chronic vesical & bronchial catarrhs.—*Extern.*, rubefac. in form of plasters & ointments.

Turpeth Mineral.—see **Mercury Subsulphate**

Turpeth Root.—see **Ipomœa Turpethum**

Turtle Head.—see **Chelone**

Tussilago

(Coughwort; Coltsfoot).—Flowers & lvs. of Tussilago Farfara, L. Compositæ.—*Habit.:* Northern Europe & Asia; natur. in Northeastern U. S.—*Etymol.:* Fr. Lat. "tussis," cough; "farfara," fr. Lat. "far," flour, & "ferre," to bear, referring to the appearance of the lower surface of the leaf.—*Constit.: Flowers:* Bitter extractive & pectin.—*Lvs.:* Pectin; bitter extractive; tannin; volat. oil; resin; saponin; wax; caoutchouc.—Emoll.; Demulc.; Tonic; Errhine.—*Uses: Flowers & Lvs.:* In bronchial catarrhs, coughs, colds, &c., in form of tea.—*Extern.*, in poultice.—*Dose: Flowers:* Teacupful of 1:16 decoct.—*Lvs.:* Fld. extr., 30–60 ♏ (2–4 Cc.).

Tussol (33

(Antipyrine Amygdalate; Antipyrine Mandelate; Phenylglycolantipyrine).—$C_6H_5CH.OH.COOH.C_{11}H_{12}N_2O$.—Wh. powd.—*Sol.*, eas. W.—Specific in whoop.-cough.—*Dose* 1–4–8 grains (0.06–0.25–0.5 Gm.) 4–6 t. p. d., according to age of child.

Twinleaf.—see **Jeffersonia**

Typhoid Diagnostic Ficker-Merck

A specially treated & sterilized typhoid culture, which serves for carrying out the Gruber-Widal typhoid test, & which obviates the use of living bacilli & the microscope.—In carrying out the test, some blood serum fr. the patient is mixed w. a sterilized solut. sodium chloride, & a part of this mixed in turn w. the diagnostic fluid. The reaction is positive when the bacteria present in the diagnostic liquid conglutinate & sink to the bottom, while the liquid portion becomes clear.

Typhoid Ox-bile Diagnostic Kayser-Conradi-Merck

Sterilized ox-bile marketed in: (1) sealed tubes; & (2) tubes closed w. a rubber stopper & parchment-paper cap. Each tube cont. 75 ♏ (5 Cc.) of the sterilized ox-bile, sufficient for diagnostic purposes. Abt. 40 ♏ (2.5 Cc.) of blood drawn fr. the ear lobe or finger tip of the patient suspected of having typhoid are added to the contents of a tube; the latter is then properly closed w. the accompanying cap, & heated in an incubator at 37° C. for 14–20 hrs. Even if only 2–4 typhoid germs were present, the incubated material enables pure typhoid cultures to be obtained with certainty.

Tyratol.—see **Thymotal**

Tyrosine Merck (2000

(Paraoxyphenylalphaaminopropionic Acid).—Deriv. of proteids. Formed by heating albuminoids w. potassa.—$C_9H_{11}NO_3$, or, $C_6H_4(OH).C_2H_3(NH_2).CO_2H$.—Fine, wh. need.—*Sol.*, sl. in W., but eas. suspended.—Decomp. on heating.

U

Ulexine.—see **Cytisine**

Ulmaria.—see **Spiræa**

Ulmus.—*U. S. P.*

(Elm; Slippery Elm).—Dried bark of Ulmus fulva, Michaux. Ulmaceæ, deprived of its periderm.—*Habit.:* Eastern & central N. America.—*Etymol.:* Fr. Celtic "elm" or "ulm," trunk.—Lat. "fulvus," deep-yellow, tawny, referring to color of liber bark.—Flat pieces of varying length & width, $^1/_8$–$^1/_6$ in. (3–4 Mm.) thick; extern. light-brown w. occas. dark-brown patches; intern. yellowish-brown; fibrous fract.; mucil. taste.—*Constit.:* Much gum; little tannin.—Demulc.; Nutrient.—*Uses: Intern.*, as mucil. in diar., dysent., inflam. of urinary passages.—*Extern.*, as poultice for abscesses, felons, &c.—*Dose*, of mucilage, 4–16 dr. (15–60 Cc.).

Ulmus Campestris

(English Elm; European Elm).—Dried inner bark of Ulmus campestris, L. Ulmaceæ.—*Habit.:* Europe.—*Etymol.:* See preceding. Lat. "campestris" fr. "campester," a field, *i.e.*, where the tree grows.—Yellowish to reddish-

brown pieces, somewh. thinner than that of U. fulva; alm. odorless; bitterish, astring., mucil. taste.—*Constit.:* Mucilage; tannin.—Teniacide; Astring.; Demulc.—*Uses:* Chronic skin diseases; cataplasm.—*Dose:* Given in 10–15:200 decoct.

Umbrella-Leaf.—see **Petasites**

Uncomocomo.—see **Pannum**

Uragoga.—see **Ipecac**

Ural.
Uraline.
Uralium.
—see **Urethane, Chloral-**

Uramil Merck (150

(Murexane; Dialuramide; Aminobarbituric Acid; Aminomalonylurea).—By boiling alloxantin with ammonium chloride. — $C_4H_5N_3O_3$, or, $CO(NH.CO)_2CH.NH_2$. — Wh. to reddish cryst. — *Sol.*, cold sulphuric acid or alkali; insol. W.

Uranine Merck (10

(Uranine Yellow).—$C_{20}H_{10}O_5Na_2$.—Sod. salt of fluoresceïn.—Yellowish-brown powd.—*Sol.* A., W.—*Uses:* Test for death. If abt. 15 grains (1 Gm.) be injected into human body, the whites of the eyes will acquire a greenish color within 1 hour if life still exists, otherwise no coloration is observed.—*Techn.*, dyeing silk & wool yellow.

do. Merck.—II (8

Uses: Examining subterranean waters. No toxic action on fish. Serves to ascertain source of springs, connection between streams & sea, determ. approxim. vol. of water delivered by a spring, detect. contamination of polluted water of streams in drinking water, infiltration of soil with waste waters of factories, &c. Proportion of 1:10,000,000 W. employed; still efficient in solut. of 1:2,000,000,000.

Uranine Yellow.—see **Uranine**

Uranium Merck.—Fused (600

Etymol.: So named by its discoverer, Klaproth, in 1789, because its discovery occurred at the time the planet Uranium was discovered.—Metal. —U.—Black, gran. mass.—Sp. Gr. 18.4.—Burns in air at 200° C. & becomes converted into uranouranic oxide. On vigorous shaking, the metallic particles exhibit decided phosphorescence.—*Uses:* Techn., only in form of alloy in manuf. gun barrels.

"Uranium Acetate" Merck (8

(Uranium & Sodium Acetate).—$UO_2.(C_2H_3O_2)_2.NaC_2H_3O_2$.—Yellow, tetrahedr. cryst.—*Sol.* W. —*Uses:* Chem. anal., in determ. phosphates.

Uranium Acetate Merck.—Free fr. Sodium (11

(Uranyl Acetate). — $UO_2.(C_2H_3O_2)_2+2H_2O$. — Sm., yellow cryst.—*Sol.* A.; sl. W.—Antiseptic. —*Uses:* Acute coryza; also chemically.—*Appl.* 0.5–1% aqu. solut. 2–3 t. p. d. snuffed up the nose.—*Caut.* Violent Poison! Keep in the dark.

Uranium Acetate Merck.—Reagent.—Free fr. Sodium (35

$UO_2(CH_3.COO)_2+2H_2O$.—Yellow, cryst. powd. —*Sol.*, eas. W.—As the prep. alm. always cont. some basic salt, a clear solut. is obt. only on add. a little $C_2H_4O_2$.—*Tests:* (H_2SO_4) 1 Gm.+20 Cc. H_2O+2–3 Cc. dil. $C_2H_4O_2$+solut. $BaCl_2$–no turb.—(*Na*) 5 Gm.+10 Cc. dil. $C_2H_4O_2$+200 Cc. H_2O; boil; add while boil. excess NH_4OH; filter; evap. filtrate to dryness; ignite res.; diss. res. in H_2O, & titrate w. norm. HCl (methyl orange indic.)–not more than 0.1 Cc. norm. HCl should be required up to point where red color develops. —(*Earths*) 1 Gm.+20 Cc. H_2O+2–3 Cc. dil. $C_2H_4O_2$+NH_4OH+solut. ammon. carbon.–solut. should remain clear.—(*Uranous Salt*) 1 Gm.+20 Cc. H_2O+1 Cc. dil. H_2SO_4+0.1–0.2 Cc. decinorm. $KMnO_4$–solut. should acquire a red color. —(*Foreign Met.*) *a:* 5 Gm.+500 Cc. H_2O+5 Cc. HCl (sp. gr. 1.124); boil.; pass in H_2S gas–no react.; *b:* to liq. obt. from test for earths add 2–3 drops $(NH_4)HS$–no dark-brown color, & no ppt. — *Uses:* Prepar. volumetric soluts.; detect. Na, & determ. H_3PO_4.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Uranium Benzoate Merck (18

$UO_2.(C_7H_5O_2)_2$.—Yellow powd.—*Sol.*, sl.W., & A.

Uranium Borate Merck (30

Light-yellow powd.—*Sol.*, acids; insol. W.

Uranium Bromide (25

(Uranium & Ammonium Bromide; Uranyl Ammonium Bromide).—$UO_2(NH_4)_2Br_4.2H_2O$.—Deliq., brownish-yellow cryst.—*Sol.* W.—Keep well stoppered.

Uranium Chloride Merck.—Highest Purity, free fr. alkali (25

(Hydrated Uranyl Chloride).—$UO_2.Cl_2+H_2O$.—Yellow, deliq. cryst.—*Sol.* W., A., E.—*Caut.* Poison! Keep fr. air.

do. Merck (8

(Uranium Ammonium Chloride; Uranyl Ammonium Chloride). — $UO_2(NH_4)_2Cl_4.2H_2O$. — Greenish-yellow, deliq. cryst.—*Sol.* W.

Uranium Ferricyanide Merck (35

$(UO_2)_3.(Fe[CN]_6)_2$.— Reddish-brown powd.— Insol. W.

Uranium Iodide Merck (11

(Uranyl Ammonium Iodide; Uranium Ammonium Iodide). — $UO_2(NH_4)_2I_4.2HO_2$. — Black, cryst. mass.—*Sol.* W.

Uranium Nitrate Merck.—Highest Purity.—Free fr. sodium (7

(Uranyl Nitrate).—$UO_2.(NO_3)_2+6H_2O$.—Lemon-yellow, fluoresc., rhombic prisms.—*Sol.* W., A., E.—Antidiabetic.—*Uses: Intern.*, diab.—

Also photo., chem., & techn.—*Dose* 3–15 grains (0.2–1 Gm.) 2–3 t. p. d. after meals.—*Caut.* Poison!

Uranium Nitrate Merck (6

Uses: Photogr., & techn. in manuf. uranium glaze.

Uranium Nitrate Merck.—Reagent (20

(Uranyl Nitrate).—$UO_2(NO_3)_2+6H_2O$.—Yellow cryst.; greenish luster by reflect. light; effloresce superfic. in dry air.—*Sol.*, eas. W., A., E.—Aqu. solut. acid to litmus paper.—*Tests:* (H_2SO_4) 1:20 aqu. solut.+solut. $BaCl_2$–no turb. within 15 min.—(*Alkali Salts*) ignite 1 Gm.; treat res. w. 20 Cc. H_2O; filter; evap. filtrate to dryness–no wghble res.—(*Earths*) 1 Gm.+20 Cc. H_2O+NH_4OH+solut. ammon. carbon. in excess–solut. should remain clear.—(*Uranous Salt*) 1 Gm.+20 Cc. H_2O+1 Cc. dil. H_2SO_4+0.1–0.2 Cc. decinorm. $KMnO_4$–solut. should acquire red color.—(*Foreign Met.*) *a:* to liq. obt. fr. test for earths add 2–3 drops $(NH_4)HS$–no dark-brown color, & no ppt.; *b:* 5 Gm.+100 Cc. H_2O+5 Cc. HCl (sp. gr. 1.124); boil; pass in H_2S gas–no react.—*Uses:* Indicator; prepar. volumetric soluts.; detect. morphine, & determ. arsenic & phosphoric acids.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Uranium Oxalate Merck (20

(Uranyl Oxalate).—$UO_2.C_2O_4+3H_2O$.—Yellow powd.—*Sol.*, acids; insol. W.—*Caut.* Poison!

Uranium Oxide Black Merck.—Pure (30

(Uranous Oxide).—UO_2.—Grayish-black powd.; formerly supposed to be the metal.—*Sol.*, acids.

Uranium Oxide, Hydrated.—see **Ammonium Uranate**

Uranium Oxide Red Merck.—Pure (35

(Uranium Trioxide; Uranic Oxide, or Anhydride; Uranic Acid).—UO_3.—Orange-red powd.—*Sol.*, mineral acids, & alkalies.—*Uses:* Techn., paint. porcelain, & as mordant in calico printing.

Uranium Oxide, Yellow.—see **Sodium Uranate**

Uranium Oxychloride.—see **Uranium Chloride**

Uranium Oxyiodide.—see **Uranium Iodide**

Uranium Phosphate Merck (25

(Uranic Phosphate; Monouranylorthophosphate).—$UO_2.HPO_4$.—Yellow powd.—*Sol.*, acids; insol. W.

Uranium Sulphate Merck.—Highest Purity, free fr. sodium (8

(Uranyl Sulphate).—$UO_2.SO_4+3H_2O$.—Lemon-yellow cryst.—*Sol.* W.

do. Merck (7

(Uranium Sodium Sulphate; Uranyl Sodium Sulphate).—$UO_2SO_4.Na_2SO_4+2H_2O$.—Yellowish-green cryst.—*Sol.* W.

Uranium Tetrabromide.—see **Uranium Bromide**

Uranium Trioxide.—see **Uranium Oxide, Red**

Uranium Yellow.—see **Ammonium** (or **Sodium**) **Uranate**

Uranium & Ammonium Carbonate Merck.—Cryst. (35

(Uranylammonium Carbonate).—$UO_2CO_3.2(NH_4)_2CO_3$.—Sm., yellow, transp. cryst.; decomp. by air.—*Sol.* W.—*Uses:* Techn., in uranium-yellow glazes.—*Caut.* Keep well stoppered. Poison!

Uranium & Ammonium Fluoride Merck (35

$UO_2F_2.3NH_4F$+aq.—Green, fluoresc. cryst.—*Sol.*, eas. W.; sl. in hydrofluoric acid; insol. A.—Fluoresces on expos. to Röntgen rays.

Uranium & Barium Oxide Merck.—Orange (25

(Barium Diuranate).—BaU_2O_7.—Orange powd.—*Sol.*, acids.—*Caut.* Poison!

do. Merck.—Yellow (25

BaU_2O_7.—Yellow powd.—*Sol.*, acids.—*Caut.* Poison!

Uranium & Calcium Phosphate Merck (60

(Uranylcalcium Phosphate).—$(UO_2)_2Ca(PO_4)_2+8H_2O$.—Greenish-yellow cryst.—*Sol.* W.

Uranium & Potassium Nitrate Merck (50

(Uranylpotassium Nitrate).—$2(KNO_3).UO_2(NO_3)_2$.—Greenish-yellow, cryst. powd.—*Sol.*, eas. W.

Uranium & Potassium Sulphate Merck (25

$K_2SO_4.U(SO_4)_2+H_2O$.—Greenish-yellow, cryst. powd.—*Sol.*, eas. W.

Uranium & Sodium Acetate.—see **"Uranium Acetate"**

Uranium & Strontium Oxide Merck (35

(Strontium Diuranate).—SrU_2O_7.—Yellow powd.—*Sol.*, acids.

Urari.—see **Curare**

Urea Merck.—Highest Purity, Medicinal (5

(Carbamide).—Constit. of urine. Formed artif. by heating solut. of amm. cyanate.—CH_4N_2O, or, $CO(NH_2)_2$.—Wh cryst.—*Sol.* W., 20 A.—*Melt.* 132° C.—Diur.; Antituberc.—*Uses:* Hepatic cirrhosis, simple serous pleurisy (to obviate puncture), renal calculus, & tuberculosis.—*Techn.*, rendering explosives stable.—*Doses:* 10–20 grains (0.6–1.3 Gm.) in water, 3–4 t. p. d.; in renal calculus, 150–300 grains (10–20 Gm.) p. d., for a period of 2 to 3 weeks.—*Incomp.*, hydrated chloral, lead acetate.

Urea Acetate Merck.—Fused (12

Wh., cryst. crusts; var. compos.—*Sol.* W., A.

Urea Citrate Merck (10

(Acid Urea Citrate).—$CO(NH_2)_2.C_6H_8O_7$.—Wh., cryst. powd.—*Sol.* W., A.

Urea Hydrochloride Merck (15

$CO(NH_2)_2.HCl$.—Wh. to faintly yellowish cryst., or deliq. leaflets; decomp. by W.—*Caut.* Keep dry & fr. air.

Urea Nitrate Merck (15

$CO(NH_2)_2.HNO_3$.—Wh. leaflets.—*Sol.*, sl. W.; A.

Urea Oxalate Merck (6

$CO(NH_2)_2.C_2H_2O_4$.—Wh. cryst.—*Sol.* 23W., 60A.

Urechites

(Savannah Flower; Yellow-flowered Nightshade).—Lvs. of Urechites suberecta, Jacq. Apocynaceæ.—*Habit.:* Jamaica.—*Etymol.:* Fr. Lat. "uro," I burn, & Grk. "echis," nettle, because the plant climbs & winds about other plants, & causes a burning sensation in mucous surfaces brought into contact with it.—*Constit.:* Urechitic acid; urechitoxin, $C_{13}H_{20}O_5$; urechitin, $C_{28}H_{42}O_8$; urechotonin.—Antiper.; Tonic; Heart Depressant.—*Uses:* Intermit. & sthenic fevers. —*Dose:* Fld. extr., 2–10 ♏ (0.12–0.6 Cc.).—*Antid.*, emetics, stomach siphon, alcohol, ammonia, strong coffee, electricity, &c.

Urethane Merck (10

(Ethyl Carbamate; Ethylurethane).—Fr. carbonic ether, by amm.; or fr. urea by ethyl alc., w. heat.—$C_3H_7NO_2$, or, $CO(NH_2).OC_2H_5$.—Colorl. cryst.; faint, pecul. odor; saltpeter-like taste.—*Sol.* 0.6 A., 1 W., 1 E., 1.5 C., 3 G., 20 olive oil (Vulpius).—*Melt.* 48–50° C.—*Boil.*, abt. 180° C. —Hypn.; Antispasm.; Sed.—*Uses:* Insom., eclampsia, nerv. excit., tetanus, & as antid. in strychnine, resorcinol, & picrotoxin poison. Does not interfere w. circulation, or secretion; no unpleas. after-effects; in large doses increases respiration without affecting pulse or temp., & produces a mild, natural sleep. In eclampsia it should be given per enema.—*Doses:* Sedative, children, 4–8–15 grains (0.25–0.5–1 Gm.) 1–4 t. p. d.; hypn., 30–45 grains (2–3 Gm.) in 3 portions at $^1/_2$–1 hr. intervals, in 10% solut.—*Max. D.* 75 grains (5 Gm.) single; 150 grains (10 Gm.) daily.—*Incomp.*, alkalies, acids, butyl-chloral hydrate, antipyrine, camphor, carbolic acid, euphorin, menthol, naphthol, resorcinol, salol, or thymol, in trituration.

Urethane, Chloral-, Merck (15

(Chloralurethane; Uralium; Ural; Uraline).—By heating chloral w. urethane, then successively adding conc. hydrochl. & sulphuric acids.—$CCl_3.CH(OH)(NH)COOC_2H_5$.—Colorl. cryst.—*Sol.* A., E.—*Melt.* 103° C.—Hypn.—*Uses:* Produce sleep in epileptic dementia, hypochondria, & mitral insufficiency.—*Dose* 10–45 grains (0.6–3 Gm.).

Urethane, Ethylidene-, Merck (40

(Ethylideneurethane).—Fr. solut. of urethane in aldehyde, by dil. hydrochl. acid.—$C_8H_{16}N_2O_4$, or, $CH_3CH(CO[NH]OC_2H_5)_2$.—Colorl. cryst.—*Sol.* A., E., hot W.—*Melt.* 125–126° C.—Hypnotic(?).—*Caut.* Keep well stoppered & dry.

Urethylane Merck (40

(Methylurethane).—$C_3H_5NO_2$, or, $CO(NH_2)OCH_3$. —Colorl. cryst.—*Sol.* W., A.—*Melt.* 52° C.—*Boil.* 177° C.

Urginea Scilla.—see **Scilla**

Uric Oxide.—see **Acid Uric**

Uricedin (4

Mixt. of sod. sulphate, chloride, & citrate, & lithium citrate.—Wh. powd.—*Sol.*, eas. W.—Antilithic.—*Uses:* Uric-acid diathesis.—*Dose* 15–30 grains (1–2 Gm.) in hot W., 3 t. p. d.; or, better, in the morning.

Urner's Liquid Chloracetic Acid.—see **Acid Dichloracetic**

Urobilin Hoppe-Seyler-Merck (40000

(Hydrobilirubin).—Biliary pigment; found in dark-colored urine in fever.—$C_{32}H_{40}N_4O_7$.—Brownish-red, resinous masses.—*Sol.* A., E., C., & alkalies.—*Uses:* Reagent for zinc.

Urocitral

(Theobromine-Sodium Citrate).—Wh. powd.; 45% theobromine.—*Sol.*, eas. warm W.—*Uses:* Anginal & cardiac asthmatic affect., dropsy, pleurisy, &c.—*Dose* 8–15 grains (0.5–1 Gm.) sev. t. p. d.—*Caut.* Avoid simultaneous taking of acids, fruit juices, &c.

Uromelanin Thudichum-Merck (50000

Color. prin. fr. urine.—$C_{36}H_{43}N_7O_{10}$.—Amorph., black powd.—*Sol.* A., & caustic alkalies.

Uropherin B (30

(Theobromine & Lithium Benzoate Merck).—47% theobromine.—$LiC_7H_7N_4O_2.H_2O(?) + LiC_6H_5CO_2$.—Fine, wh. powd.; decomp. on expos.—*Sol.* 5 W.—Diur.; Nerve Stim.—*Uses:* Dropsy, nephritis, & dis. of heart & gen.-urin. org.—$1^1/_2$ times as powerful as theobromine. Works well together with digitalin.—Patients who cannot tolerate salicylic acid generally do well w. this salt.—*Dose* 5–15 grains (0.3–1 Gm.).—*Max. D.* 60 grains (4 Gm.) p. day.—*Caut.* Keep fr. air.

Uropherin S (30

(Theobromine & Lithium Salicylate Merck).—$LiC_7H_7N_4O_2.H_2O(?) + LiC_7H_5O_3$.—Wh. powd.—*Sol.* 5 W.—*Uses, Doses, &c.:* As of Uropherin B. —*Caut.* Keep solut. fr. contact w. air!

Urosine (20

(Lithium Quinate).—Mixt. quinic acid & lithium citrate, marketed in form of tablets, ea. cont. 8 grains (0.5 Gm.) quinic acid, & $1^1/_2$ grains (0.1 Gm.) lithium citrate with some sugar.—Antiarthritic; Diur.; Uric-acid Solvent.—*Uses:* Gout, gravel, &c.—*Dose* 6–10 tablets p. d.

Urostigma Cystopodum.—see **Mururé**

Urotropin.—see **Heximethylenamine**

Uroxin.—see **Alloxantin**

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Urson Merck (150

Cryst. prin. found besides arbutin in lvs. Arctostaphylos Uva-ursi, L.—$C_{30}H_{48}O_3+2H_2O$.—Wh., cryst. powd.—*Sol.* A., E.; insol. W.—*Melt.* 266–268° C.

Urtica

(Stinging Nettle; Common European Nettle; Greater Nettle). — Herb of Urtica dioica, L. Urticaceæ.—*Habit.:* Europe; Asia; natur. in U. S. —*Etymol.:* Lat. "urere," to burn, referring to the burning sensation caused on contact with the glandular hairs. "Dioica" refers to the diœcious flowers. — *Constit.:* Tannin; formic acid; glucoside.—Hemostat.; Irritant; Diur.—*Uses:* Domestic remedy in gout, diar., & uterine hemorrhages.—*Doses:* 15–30 grains (1–2 Gm.). —Fld. extr., 15–30 ♏ (1–2 Cc.).

Urystamine

(Hexamethylenamine - Lithium Benzoate). — *Sol.*, eas. W. — *Uses:* Gout, rheumat., vesical & urethral catarrh, & to promote elim. of uric acid.—*Dose* 15 grains (1 Gm.).

Ustilago

(Corn Smut; Corn Ergot; Corn Brand).—A parasitic fungus, Ustilago segetum Bull (Ustilago Maydis, Leveillé), developed upon the fruit of Zea Mays, L. Ustilagineæ.—*Habit.:* North America; Europe.—*Etymol.:* Lat. "urere," to burn or scorch, *i.e.*, the parasite causes other plants to appear scorched or burned.—*Constit.:* Ustilagine; fixed oil; maisenic (sclerotic) acid; secaline. —*Uses:* Echolic like ergot.—Contractile power intermittent, not continuous as with ergot.—*Doses:* 15–60 grains (1–4 Gm.).—Fld. extr., 30–120 grains (2–8 Cc.).

Uva Ursi.—*U. S. P.*

(Bearberry). — Dried lvs. of Arctostaphylos Uva-ursi (L.), Sprengel. Ericaceæ. — *Habit.:* Northern Europe; North America, south to N. J., Colorado, & Calif.; Asia.—*Etymol.:* "Uva ursi" fr. Lat. "uva," grape, & "ursus," bear. "Arctostaphylos," fr. Grk. "arktos," bear, & "staphyle," bunch of grapes, *i.e.*, the fruit is rough, & the berries grow in bunches like grapes. —*Constit.:* Volat. oil; arbutin, $C_{12}H_{16}O_7$; ericolin, $C_{24}H_{56}O_{22}$; urson, $C_{10}H_{16}O$; ericinol; resin; tannin; malic acid; fat; wax; gum; coloring matter. — Tonic; Astring.; Diur.; Nephritic; in large doses Emet.; Purgat.; Emmen.—*Uses:* Chiefly in urinary diseases, as cystitis, gravel, incontin. urine, gleet, gonor., leucor., menor.; nephrit., &c.—*Doses:* 15–60 grains (1–4 Gm.). —Hydro-alcoh. extr., 5–15 grains (0.3–1 Gm.). —Fld. extr., 30–60 ♏ (2–4 Cc.).

Uvedalia.—see **Polymnia**

V

Vaccinium

(Whortleberry; Bilberry; European Huckleberry).—Dried fruit (berries) & herb of Vaccinium Myrtillus, L. Ericaceæ.—*Habit.:* Europe. —*Etymol.:* "Vaccinium" is the Lat. name for the huckleberry. Lat. "myrtus," *i.e.*, the berries resemble those of the myrtle.—*Constit.: Fruit:* Ericolin; tannin; coloring matter.—*Lvs.:* Quinic acid; arbutin.—*Uses: Fruit:* As decoct. in diar. —*Extern.*, in eczema, scalds, & burns.—*Techn.*, as a dye.—*Lvs.:* Used as specific in diabetes(?), & as surrogate for uva ursi.—Also used in chron. cystitis, diar., dysent., & dropsy.—*Doses: Fruit:* Extr., as enema (4 dr. [15 Gm.] to 8 fl. oz. [250 Cc.] water), & supposit. (extr. 15 grains [1 Gm.], potass. carb. $1^1/_2$ grains [0.1 Gm.], cacao butter 30 grains [2 Gm.]), in inflam. affect. of lower intestines.—*Lvs.*, 30–75 grains (2–5 Gm.).

Valeraldehyde.—see **Aldehyde Valeric, Iso-**

Valeral-Sodium Bisulphite Merck (30

(Valerylaldehyde-Sodium Bisulphite). — $2(C_5H_{10}O.NaHSO_3)+H_2O$.—Colorl. cryst.—*Sol.* W.

Valeramide Merck (100

(Isovaleramide). — $(CH_3)_2CH_2.CH_2.CO.NH_2$. — Wh. cryst.—*Sol.* A., W.—*Melt.* 126–128° C.—*Boil.* 230–232° C.

Valerian.—*U. S. P.*

Dried rhizome & roots of Valeriana officinalis, L. Valerianaceæ. — *Habit.:* Europe; northern Asia; natur. in eastern U. S. — *Etymol.:* Lat. "valere," to be strong, healthy, referring to the medicinal virtues of the plant. Or, fr. "Valerianus" or "Valerius," who is said to have first used it in medicine.—*Constit.:* Volat. oil; valerin; chatinine; valeric, formic, malic, & acetic acids; tannin; resin; mucilage.—Anod.; Antispasm.; Stim.; Nervine.—*Uses:* Hysteria, epilepsy, hypochond., headache, fevers, &c. — *Doses:* 15–60 grains (1–4 Gm.).—Alcoh. extr., 5–15 grains (0.3–1 Gm.).—Fld. extr., 30–60 ♏ (2–4 Cc.).—Tinct., 60–120 ♏ (4–8 Cc.).

Valeric-acid Diethylamide.—see **Valyl**

Valerydin

(Valerylparaminophenetol; Sedatin; Isovalerylparaphenetidin; Valerylphenetidin).—Fr. paramidophenetol by valeric acid.—$C_2H_5O.C_6H_4.NH.C_5H_9O$.—Colorl., lustr., odorl., tastel. need. —*Sol.* A., C., acetone; diffic. E.; insol. W.—Sed.; Nervine.—*Uses:* Instead of valerian preparations as sedative in nervous affections.—*Dose* 8–15 grains (0.5–1 Gm.) several t. p. d.

Valeryl Chloride Merck (35

(Isovaleryl Chloride).—C_5H_9OCl, or, $(CH_3)_2.CH.CH_2COCl$.—Liq.; decomp. w. W.—Sp. Gr. 0.989 at 20° C.—*Boil.* 114° C.

Valerylaldehyde-Sodium Bisulphite.—see **Valeral-Sodium Bisulphite**

Valerylene Hydriodide.—see **Iodamylene**

Valerylparaminophenetol., *Valerylphenetidin.* } —see **Valerydin**

Validol (28

(Menthol Valerate).—Comp. of menthol (30%) & valeric acid (70%).—Colorl. liq.; mild, pleasant odor; cooling, faintly bitter taste; dissolves considerable quantities of menthol. — Nerve Sedative; Carmin.; Stomachic.—*Uses:* Hysteria, neurasthenia, flatulence, migraine, vomiting of pregnancy, irritated bladder, anorexia, epilepsy, gastralgia, seasickness, &c.—*Dose* 10–20 drops on sugar, several t. p. d.

Validol Camphorated (28

Validol w. 10% camphor.—Colorl., thick liq.; cool, faintly bitter taste.—*Sol.*, eas. A., oils; insol. W.—Local Analg. — *Uses:* Toothache, & in all cases where prompt stimulant restorative is indicated.—*Dose* 10–15 ♏ (0.6–1 Cc.) 3 t. p. d., on sugar or in wine.

Vallet's Mass.—see **Mass Ferrous Carbonate**

Valser's Reagent.—For alkaloids

Satur. solut. mercuric iodide in 10% solut. potass. iodide.—Affords white ppt's w. alkaloids.

Valyl (18

(Valeric-acid Diethylamide). — $CH_3.CH_2.CH_2.CH_2.CO.N(C_2H_5)_2$.—Colorl. liq.; peppermint-like odor.—*Sol.*, eas. A., E.; abt. 25 W.—Sed.; Antispasm. — *Uses:* Hysteria, neural., hemicrania, neurasthenia, &c.—*Dose* 1–3 caps. (each containing 2 ♏ [0.12 Gm.] valyl) 3 t. p. d.

Valzin.—see **Sucrol**

Vanadic Anhydride.—see **(Acid) Vanadic Anhydride**

Vanadium Merck (2000

Etymol.: Named by Seftström in 1830 in honor of the Northern Goddess "Vanadis" (the German "Freya").—Metal.—V.—Light-gray, lustr. powd.—Sp. Gr. 5.5 at 15° C.—The metal is of no importance technically.

Vanadium Chloride Merck (50

(Hypovanadic Hydrochloride; Divanadyl Tetrachloride). — $2VO_2.4HCl + 3H_2O$. — Dark-green, syrupy masses.—*Sol.* W., A.—*Uses:* Techn., as mordant in printing fabrics.

Vanadium Pentasulphide.—see **Vanadium Sulphide**

Vanadium Pentoxide.—see **(Acid) Vanadic Anhydride**

Vanadium Sesquioxide.—see **Vanadium Trioxide**

Vanadium Sulphate Merck (50

$V_2O_2.(SO_4)_2 + 4H_2O$, or, $VO_2.SO_3 + 2H_2O$.—Blue, cryst. powd.—*Sol.* W.

Vanadium Sulphide Merck (200

(Vanadium Pentasulphide). — V_2S_5. — Green powd.—Insol. W.

Vanadium Trioxide Merck (200

(Vanadium Sesquioxide).—V_2O_3.—Black powd.; sl. luster; in air gradually converted into indigo-blue cryst. of vanadous acid (V_2O_4). — *Uses:* mordant in dyeing, & in manuf. steel, in making easily malleable & ductile alloys.

Vanadyl Salts.—see under **Vanadium**

Vanilla.—*U. S. P.*

Cured, full-grown, but immature fruit of Vanilla planifolia, Andrews. Orchideæ.—*Habit.:* Mexico; West Indies; Réunion; Ile de France; Seychelles. —*Etymol.:* Fr. Spanish "vainilla," diminutive of "vaina," sheath, pod, *i.e.*, a little pod resembling a sheath. "Planifolia" fr. Lat. "planus," flat, & "folium," leaf, *i.e.*, the lvs. are flat, without prominent veins. — *Constit.:* Vanillin; balsam; vanillic acid. — Emmen.; Aphrodisiac; Antihysteric; Antirheumat.; Aromat. — *Uses:* Techn., in manuf. of chocolate & confectionery; perfumery; flavor for syrups, tinctures, &c.—*Dose* 8–20 grains (0.5–1.2 Gm.).

Vanillic Aldehyde.—see **Vanillin**

Vanillin Merck.—Refined (13

(Methylprotocatechuic Aldehyde; Vanillic Aldehyde).—Principle fr. pods of Vanilla planifolia, Andrews; also potato parings & Siam benzoin; artif. fr. eugenol & coniferin, &c.— $C_8H_8O_3$, or, $C_6H_3.OH.OCH_3.CHO[4:3:1]$. — Colorl. prisms; pleas., arom. odor; vanilla taste.—*Sol.* A., E., G., C., CS_2; sl. W., at 15° C.; (100 W. at 25° C.; 15 W. at 80° C., U. S. P.).—*Melt.* 80–81° C.—*Boil.* 285° C.—Stim.; Tonic; Aphrodisiac.—*Uses:* Dyspep.—Chiefly for perfumery & confectionery, *e.g.*, in artif. cognac, chocolate, &c. 1 part vanillin equals 400 parts vanilla pods. In the manuf. liqueurs, 2.5–3 parts vanillin replace 500 parts tinct. vanilla. — *Dose* $^1/_6$–$^1/_8$ grain (0.01–0.02 Gm.).

Vanillinethylcarbonate-paraphenetidin.—see **Eupyrin**

Vasaca.—see **Adhatoda**

Vaselin.—see **Petrolatum**

Vaselon

Mixt. of margaron & stearon diss. in mineral oil. —Wh., neutral, fatty mass; odorl.; tastel.; resembles petrolatum.—*Uses:* Ointment base.

Vasicine

Alkaloid fr. the Indian plant Adhatoda Vasica, Nees.—*Uses:* Bronch. affect. & as an insecticide.

Vasicine Tartrate Merck (2500

Tartrate of alkaloid fr. lvs. Adhatoda Vasica, Nees, an East-Indian Acanthaceæ.—Wh., cryst. powd.—*Sol.*, sl. W., A.—Has toxic action on lower animals, but is without such effect on higher animals, hence may be used as an insecticide. To what extent the alkaloid & salt exhibit the expector. & antispasm. properties of the lvs. of the plant, is still to be investigated.

Vasogen

(Oxygenated Vaselin). — Readily emulsifies w. W. & renders many active remedies like creolin-

Pearson, menthol, iodine, ichthyol, pyoktanin, &c., readily absorbable.—Yellowish-brown, viscid mass; slight alkaline reaction.—*Uses:* Chiefly as vehicle for remedies in skin diseases.

Vegetable Albumin.—see **Albumin, from Plants**

Vegetable Mercury.—see **Manaca**

Vegetable Wax.—see **Wax, Japan**

Venice Turpentine.—see **Turpentine, Venice**

Veratrine Merck.—*U. S. P.* (44

Mixt. of alkaloids, chiefly amorph. veratrine & cryst. cevadine ($C_{32}H_{49}NO_9$), w. small quant. crystalline alkaloids sabadinine & sabadine, fr. seeds Asagræa officinalis, Lindley. — Yellowish-wh. powd.; causes violent sneezing when inhaled; exceedingly irritating to muc. membr.—*Sol.* 2 C., 3 A., 6 E.; sl. W., at 15° C.; (1,750 W., 2.2 A., 3 E.,1 C. at 25° C.; 1,300 W. at 80° C.; v. sol. B., amyl. A.; insol. petrol. benzin, U. S. P.). —*Melt.*, abt. 145–155° C.—Irritant; Sed.; Alter.; Counterirritant; Antipyr.; Analg. — *Uses: Intern.*, gout, rheum., neural., scrof., epilepsy, photophobia. — *Extern.*, injuries, stiff joints, sprains, & chron. swellings, in oint.—*Dose* $^1/_{60}$–$^1/_{12}$ grain (0.001–0.005 Gm.).—*Appl.* 1–4% in oint.—*Max. D.* $^1/_{10}$ grain (0.006 Gm.) single; $^1/_4$ grain (0.015 Gm.) p. day.—*Antid.*, tannic acid (5 grains [0.3 Gm.] every 15 min.), potass. iodide, camphor, wine, emetics, powdered charcoal, stomach tube, stimulants; morphine & atropine hypoderm.; heat, recumbent position. —*Caut.* Poison! Great care!

do. Merck.—Pure, cryst. (175

(Cevadine).—Cryst. alkaloid fr. seeds Asagræa officinalis, Lindley.—Discovered by G. Merck in 1855. — $C_{32}H_{49}NO_9$. — Colorl. cryst. — *Sol.* W., A., & E.—*Melt.* 205° C.—On heating with KOH decomposes into cevine ($C_{27}H_{45}NO_8$) & tiglic acid ($C_5H_8O_2$).—Better adapted for internal use than the preceding (which is better for external use).— *Uses:* Gout, rheum., erysipelas, neural., croupous pneum., & heart diseases.—*Dose* $^1/_{60}$–$^1/_{12}$ grain (0.001–0.005 Gm.) sev. t. p. d. in pill or alcoh. solut. — *Max. D.* $^1/_{12}$ grain (0.005 Gm.) single; $^1/_4$ grain (0.015 Gm.) p. d.

Veratrine Acetate Merck (100

$C_{32}H_{49}NO_9.C_2H_4O_2$. — Wh. powd. — *Sol.* W., A. —*Uses, Doses, Antid., &c.:* As of the official alkaloid.—*Caut.* Poison!

Veratrine Hydrochloride Merck (100

$C_{32}H_{49}NO_9.HCl$. — Wh., amorph. powd. — *Sol.* W., A.—*Uses, Doses, Antid., &c.:* As of the official alkaloid.

Veratrine Nitrate Merck (100

$C_{32}H_{49}NO_9.HNO_3$.—Wh. powd.—*Sol.* W., A.—*Uses, Doses, Antid., &c.:* As of the alkaloid.

Veratrine Oleate

2% of veratrine in oleic acid.—*Sol.* E., & oleic acid. — Rubefacient; Anod. — *Uses: Extern.*, scrofulous joints, rheum., & sprains; or inunction, as in pneumonia.

Veratrine Sulphate Merck (50

$(C_{32}H_{49}NO_9)_2.H_2SO_4$.—Wh. to yellowish powd. —*Sol.* W., A.—*Uses, Doses, Antid., &c.*. As of the official alkaloid.

Veratrine Valerate Merck (100

Wh. powd.—*Sol.* W., A.—*Uses, Doses, Antid., &c.*: As of the official alkaloid.

Veratrole Merck.—Cryst. (35

(Pyrocatechindimethyl Ester). — From veratric acid, by baryta w. heat.—$C_8H_{10}O_2$, or, C_6H_4-$(OCH_3)_2$[1:2].—Perfectly pure, colorl. cryst.—*Sol.* A., E., fatty oils.—*Melt.* 23° C.—*Boil.* 205° C.—Antisep.—Only one-third as toxic as guaiacol, but far more caustic.—*Uses: Extern.*, as paint in intercostal neural. (eq. parts veratrole & tinct. iodine), & comb. w. potass. iodide (5:45) in orchitis. — *Intern.*, in tuberculosis. — *Dose* 2 grains (0.12 Gm.). 3 t. p. d.

Veratrone

Alcoh.-free, sterile prep. of Veratrum viride, rendered stable by add. of 0.75% chloretone. —Clear liq.; pleas. odor; sl'tly bitter taste.— *Uses:* As of fl. extr. Veratrum viride.—4 parts =active constit. 1 part drug.

Veratroylaconine.—see **Aconitine from Aconitum Ferox**

Veratrum.—*U. S. P.*

(American Hellebore; Green Hellebore; American Veratrum; Indian Poke).—Dried rhizome & roots of Veratrum viride, Aiton (or of V. album, L.), Liliaceæ.—*Habit.:* North America.— —*Etymol.:* Lat. "vere," truly, & "ater," black, dark, *i.e.*, the roots of some of the spec. are dark. Lat. "viridis," green, *i.e.*, the flowers are greenish.—*Constit.:* Jervine, $C_{20}H_{37}NO_2$; pseudojervine, $C_{29}H_{43}NO_7$; veratrine (cevadine), $C_{32}H_{49}NO_9$; rubijervine, $C_{26}H_{43}NO_2$; veratralbine, $C_{28}H_{43}NO_5$; veratroidine, $C_{32}H_{53}NO_9$; resin; starch.—Sed.; Emet.; Diaphor.; Irritant; Sternutat.; Errhine; Diuret. Retards heart's action without weaken.; checks puerper. convuls.; aborts croup, limits pneum. in the lungs.—*Uses:* Laryng., mening., vertigo, diar., dropsy, gout, &c. — *Techn.*, as insecticide.—*Doses:* 1–4 grains (0.06–0.25 Gm.). —Alcoh. extr., $^1/_4$–1 grain (0.015–0.06 Gm.). —Fld. extr., 1–4 ♏ (0.06–0.25 Cc.); *Max. D.* 8 ♏ (0.5 Cc.) single, 30 ♏ (2 Cc.) daily.—Tinct., 1–5 ♏ (0.06–0.3 Cc.).—*Antid.*, emetics, stomach siphon, tannin, stimulants (whisky, ether, alcohol, ammonia), atropine, strychnine, digitalis, heat, mustard applications, friction, &c.

Veratrum Album

(White Hellebore; White Veratrum; Lingwort; Sneezewort).—Rhizome of Veratrum album, L. Liliaceæ. Melanthaceæ.—*Habit.:* Europe; northern Asia.—*Etymol.:* See preceding. "Veratrum album" is the Lat. name for the "Helleborus leu-

kos" of the Greeks. —Powd. of the plant causes sneezing, an omen verifying the truth of any assertion.—*Constit.:* Jervine, $C_{26}H_{37}NO_3$; veratrine (cevadine), $C_{32}H_{49}NO_9$; pseudojervine, $C_{29}H_{43}NO_7$; rubijervine, $C_{26}H_{43}NO_2$; veratralbine, $C_{28}H_{43}NO_5$; protoveratrine, $C_{32}H_{51}NO_{11}$; protoveratridine, $C_{26}H_{45}NO_8$; jervic acid. —Antipyr.; Emet.; Diaph.; Errhine; Sternut.—*Uses: Extern.*, as insecticide.—*Techn.*, for killing insects on plants, & also rats, mice, &c. —*Dose* 1–5 grains (0.06–0.3 Gm.), beginning with a small dose & cautiously increasing.—*Antid.* As of preceding.

Verbascum

(Mullein; Mullen).—Flowers & herb of Verbascum Thapsus (L.), V. Thapsiforme, Schrad., & V. phlomoides, L. Scrophulariaceæ.—*Habit.:* Europe & Central Asia.—*Etymol.*. Fr. Lat. "barbascus," through "barba," beard, *i.e.*, the plant is deusely tomentose. "Thapsos" is the Grk. name for the island, Thapsus, where the plant grew.—*Constit.: Flowers:* Fixed & volat. oils; coloring matter; sugar; wax; tannin; two resins.—*Lvs.:* Volat. oil; wax; taunin; resin.—Diaph.; Demulc.; Diur.; Anod.; Antispasm.; Antiper.—*Uses: Herb:* is emoll. in bronchial affections, & resolv. in form of fomentations. —*Dose:* Fld. extr., 30–60 ♏ (2–4 Cc.).—The fld. extr. of the root is similarly used & in like dose.

Verbena

(Vervain; Wild Hyssop).—Herb of Verbena officinalis, L. Verbenaceæ.—*Habit.:* Europe; Asia; natur. in U. S.—*Etymol.:* Lat. "verbum," word, *i.e.*, oaths were taken on this plant. Or, fr. Celtic "ferfaen," removes gravel.—*Constit.:* Tannin; bitter principle.—Demulc.; Bitter Tonic. —*Uses:* Popular panacea, partic. for gravel, but now obsolete.—*Dose* 10–30 grains (0.6–2 Gm.).

Verdigris, Blue.—see **Copper Acetate, Basic, Blue**

Verdigris, Crystallized.—see **Copper Acetate, Normal**

Verdigris, Green.—see **Copper Acetate, Basic, Refined**

Verditer Blue.—see **Copper Carbonate, Blue**

Verditer Green.—see **Copper Carbonate, Green**

Vermilion.—see **Mercury Sulphide, Red**

Veronal (32

(Diethylmalonylurea Merck; Diethylbarbituric Acid).—$(C_2H_5)_2:C:(CONH)_2:CO$. — Wh., cryst. powd.; faintly bitter taste.—*Sol.*, abt. 150 cold & 12 boil. W.—*Melt.* 191° C.—Safe, reliable Hypnotic.—*Uses:* Simple agrypnia, & in insomnia accompanying hysteria, neurasthenia, cure of morphinism, & mental disturbances.—*Dose* 5–15 grains (0.3–1 Gm.), best taken dissolved in hot tea or water.—Also marketed in tablets of 5 grains (0.3 Gm.) each.

Note.—Practitioners generally concede Veronal to be the safest as well as most efficient hypnotic for general use.

Veronica

(Speedwell).—Herb of Veronica officinalis, L. Scrophularineæ.—*Habit.:* Europe; Asia; natur. in U. S.—*Etymol.:* Lat. "verus," true, & "unicus," only, single, referring to the far-fetched ideas formerly held regarding the medicinal value of the plant.—*Constit.:* Volat. oil; bitter subst'ce; tannin.—Expector.; Alter.; Tonic; Diur.—*Uses:* Tuberculosis, rheum., & gout, under the name "European Tea."

Veronica Beccabunga.—see **Beccabunga**

Veronica Virginica.—see **Leptandra**

Vernonin

Glucoside, fr. root Vernonia nigritiana, Oliv. & Hier.—$C_{10}H_{24}O_7$.—Wh., deliq., amorph. powd. —*Sol.* A.; sl. E. & C.—Heart Tonic.—*Uses:* Inst. of digitalis; said to possess abt. $^1/_{24}$ the power of digitalin.—*Caut.* Cardiac poison!—*Tests:* Sulphuric acid produces a brown color, turning to purple.

Vervain.—see **Verbena**

Vesipyrine

(Acetylsalol).—$CO.CH_3O.C_6H_4.COOC_6H_5$.—Colorl., odorl., alm. tastel. cryst.—*Sol.* A.; insol. W.—*Melt.* 97° C.—*Uses:* Artic. rheum., rheumatoid pains, neuralg., influenza, &c.—*Doses:* Adults, 30–75 grains (2–5 Gm.) p. d.; children, 8 grains (0.5 Gm.) twice p. d.

Vesuvine.—see **Bismarck Brown**

Vesuvine B Merck (5

(Bismarck Brown B; Metatoluylenediamine-disazobimetatoluylenediamine Hydrochloride).—Dark-brown powd.—*Sol.* A. & W.—*Uses:* As of Bismarck Brown.

Viburnum Opulus.—*U. S. P.*

(Cramp Bark; High Cranberry; Cranberry Tree; Water Elder; Squaw Bush; Snowball Bush).—Dried bark of Viburnum Opulus, L. Caprifoliaceæ.—*Habit.:* Europe; Asia; northern North America, south to Pennsylvania. — *Etymol.*. "Viburnum," fr. Lat. "vieo," to plait, to weave, because of the pliability of its branches. "Opulus," the old name for the maple, & the lvs. of which resemble those of V. opulus.—Flattish or curved bands, or quills; extern. ash-gray; beneath the cork a pale-brownish or somewhat reddish-brown color, inner surface dingy-white or brownish; inodor.; somewhat astring. & bitter taste.—*Constit.:* Viburnin; valer. acid; brown, bitter resin; tannin; sugar; oxalates, citrates, & malates. — Nervine; Antispasm.; Diur.; Tonic; Astring.—*Uses:* Specially useful in hysteria & pregnancy.—*Dose* 30–120 grains (2–8 Gm.), in powd. or fld. extr.

Viburnum Prunifolium.—*U. S. P.*

(Black Haw; Sweet Viburnum; Sheep Berry; Stag

Bush; Sloe-leaved Viburnum).—Dried bark of root of Viburnum prunifolium, L. Caprifoliaceæ. —*Habit.:* U. S.—*Etymol.:* "Viburnum," see preceding. "Prunum," plum, & "folium," leaf, *i.e.*, the lvs. resemble those of the plum-tree.—Thin pieces or quills; glossy, purplish-brown (fr. old wood grayish-brown); inner surface whitish, smooth; fract. short; inodor.; somewh. astring. & bitter.—*Constit.:* Viburnin; valeric acid; resin (brown, bitter); tannin; oxalates, malates, & citrates.—*Uses:* Uterine tonic & Sed.; particularly useful in threatened abortion; ovar. irrit.; dysmenor., menor., &c.—*Doses:* 15–60 grains (1–4 Gm.).—Alcoh. extr., 5–15 grains (0.3–1 Gm.).—Fld. extr., 30–60 ♏ (2–4 Cc.).

Victoria Blue B Merck (8

(Phenyltetramethyltriamido - alphanaphtyldiphenylcarbinol Hydrochloride).—$C_{33}H_{31}N_3.HCl$. —Crystalline grains of a shining bronze color. —*Sol.*, hot W.; sl. cold W.; eas. in A., with pure blue color.—*Uses:* Dyeing wool, cotton, & silk.

Victoria Blue 4 R Merck (12

(Phenylpentamethyltriamido - alphanaphtyldiphenylcarbinol Hydrochloride). — Bronze-colored powd.—*Sol.*, hot W. w. blue-violet color. —*Uses:* Dyeing wool, cotton, & silk.

Victoria Green.—see **Malachite Green**

Victoria Orange

(Aniline Orange; English Yellow; Saffron Substitute).—Potass. or amm. salts dinitro-orthocresol & dinitroparacresol.—$C_7H_5N_2O_5K$, or, $C_5H_2.(OK)(CH_3)(NO_2)_2$.—Reddish-yellow powd. —*Sol.* W.—*Uses:* Dyeing wool & silk orange. Improperly for coloring butter, liqueurs, &c.

Vienna Caustic or *Paste.*—see **Potassium Hydroxide with Lime**

Viferral

Fr. chloral & pyridine.—Wh. powd.—*Sol.*, slowly in cold, rapid. in hot, W.; insol. in W. acidul. w. HCl.—*Melt.* 153–155° C. (sinters at 150° C.).—Hypnotic.—*Dose* 12–15 grains (0.75–1 Gm.) in powd. or tabl.

Vinca

(Small Periwinkle; Periwinkle).—Herb of Vinca minor, L. Apocynaceæ.—*Habit.:* Europe; natur. in U. S.—*Etymol.:* Lat. "vincere," to conquer, *i.e.*, the plant resists the cold of winter. "Minor," comparative of "parvus," small.—*Constit.:* Vincin; tannin.—Tonic; Alter.; Diur.; Bitter Astring.—*Uses:* Popular remedy formerly, but now obsolete.

Vincetoxicum

(Swallow-wort; White Swallow-wort).—Root of Vincetoxicum officinale, Moench. (Cynanchum Vincetoxicum, Pers.). Asclepiadaceæ.—*Habit.:* Mountainous Europe.—*Etymol.:* Lat. "vincere," to conquer, & Grk. "toxikon," poison, referring to its supposed action.—*Constit.:* Asclepiadin; volat. oil; resin; mucilage.—Diur.; Antiscrof.—Used chiefly in veterinary practice.

Vinegar, Pyroligneous or *Wood.*—see **Acid Pyroligneous**

Vinyl Trichloride.—see **Ethylene Chloride, Monochloro-**

Vinylbenzene (or, *-zol*).—see **Styrene**

Vinyltrimethylammonium Hydroxide.—see **Neurine**

Vioform (28

(Iodochloroxyquinoline). — $C_9H_3NOHICl$. — Greenish-yellow, alm. odorl., bulky insol. powd. —Antisep.; Cicatrizant; Hemostat.—*Uses:* As of iodoform.

Viola Odorata

(English Violet; Marsh or Sweet Violet).—Flowers & herb of Viola odorata, L. Violaceæ. —*Habit.:* Europe & northern Asia; cultiv. in U. S.—*Etymol.:* "Viola," corrupted fr. Grk. "ion," violet.—*Constit.: Flowers:* Volat. oil; blue coloring matter.—*Uses: Flowers:* Lax.; Corrigent (as syrup).—*Techn.*, as dye.—*Lvs.* Diaph.; popular remedy for cancer.—*Dose: Flowers:* 3–4 dr. (12–16 Gm.) as lax.

Viola Tricolor

(Heartsease; Pansy).—Flowers & herb of Viola tricolor, L. Violaceæ.—*Habit.:* Europe; northern Asia; cultiv. in U. S.—*Etymol.:* "Viola," see preceding; "tricolor," fr. Lat. "tres," & "color," *i.e.*, the corolla has three colors, blue, yellow, & purple.—*Constit.:* Violin; salicylic acid; violaquercitrin ($C_{42}H_{42}O_{24}$).—*Uses: Flowers:* Alter. in skin dis.—*Lvs.:* Lax.; Demulc.; Pectoral; Expector.—*Extern.*, as fomentation.—*Dose:* Fld. extr., 30–60 ♏ (2–4 Cc.).

Violet.—see **Viola Odorata**

Violette-Fehling's Solution.—For glucose

Solut. copper sulphate, Rochelle salt, & sod. hydroxide in W.—Used like Fehling's solut.

Viper's Grass.—see **Scorzonera**

Virginia Creeper.—see **Ampelopsis**

Virginia Snakeroot.—see **Serpentaria**

Viscum

(Mistletoe).—Lvs. & branches of Viscum (Phoradendron) flavescens, Pursh. Loranthaceæ, a yellowish-green, succulent parasite found growing on oaks, apple-trees, elms, &c.—*Habit.:* America.—*Etymol.:* Celtic "gui" or "gwid," shrub; Grk. "iskos," "ischein," "echein," to adhere; Lat. "viscidus," "viscosus," adhesive, referring to the adhesive contents of the berries. —*Constit.:* Viscin; fat; tannin; gum; bassorin; extractive.—Nar.; Antispasm.; Diaph.; Tonic; Oxytocic; Styptic in uterine or intern. hemorrhages.—*Doses:* 30–60 grains (2–4 Gm.) increased to 3–4 dr. (12–16 Gm.).—Fld. extr., 30–60 ♏ (2–4 Cc.).

Viscum Quercinum

A mistletoe particularly found on the oak.—*Habit.:* Eastern & southern Europe.—*Etymol.:* See Viscum.—*Constit.:* Viscin; fat; tannin; gum.—*Uses:* Popular remedy, particularly in epilepsy. The inspissated ethereal extract (viscin) is employed externally as a protective, & as vehicle for other dermatotherapeutic agents.

Vitellin Merck.—From Eggs (150

(Ovovitellin).—Nuclein, containing some lecithin, fr. yolk of eggs (after Hoppe-Seyler).—Wh., gran. powd.—*Sol.,* dil. acids, alkal., 10% solut. sod. chloride; insol. W.

do. Merck.—From Plants (400

Globulin separated fr. beans, peas, &c., by a solut. sod. chloride.—Wh. powd.

Vitreous Antimony.—see **Antimony Sulphide, Vitreous**

Vitriol, Green.—see **Iron Sulphate, Ferrous**

Volhard's Solution.—see **Potassium Sulphocyanate, Solution**

W

Wad.—see **Graphite**

Wahoo.—see **Euonymus**

Wall Pellitory.—see **Parietaria**

Wall Rue.—see **Ruta-Muraria**

Wallwort.—see **Parietaria**

Walnut, Leaves, Shells, &c.—see **Juglans**

Water Ammonia Merck.—16° Bé. (1

(Aqua Ammoniæ; Liquor Ammoniæ; "Spirit of Hartshorn").—NH_3+aq.—Sp. Gr. 0.960 at 15° C.; (0.958 at 25° C., U. S. P.).—10% by wt. of NH_3.—Stim.; Antacid; Rubefac.; Antiprur.—*Uses: Intern.,* in syncope, heartburn, sick headache, poisoning, &c.; hypoderm., for snake bites, collapse in typhoid, &c.—*Extern.,* insect bites & in poison. by chlorine gas; chiefly as rubefac. in rheumat. & neuralg., in liniment (1–5:10 lanum, oil, or other fat).—*Techn.,* as detergent, removing spots & stains, bleaching, calico printing, manuf. lakes & dyes, extracting plant colors (cochineal, archil, &c.), manuf. snuff tobacco, saponif. fats & oils, &c.—*Dose* 10–30 ♏ (0.6–2 Cc.); intraven., 30–60 ♏ (2–4 Cc.).

do. Merck.—20° Bé. (1

Sp. Gr. 0.935 at 15° C.—17% NH_3.

do. Merck.—Stronger (1

(Aqua, or Liquor, Ammoniæ Fortior; Stronger or Concentrated Ammonia).—Aqu. solut. ammonia gas.—NH_3+aq.—Colorl. liq.; intense, pung., suffoc. odor; acrid taste; str. alkaline react.—Sp. Gr. 0.900 at 15° C.; (0.897 at 25° C., U. S. P.).—28% by wt. of NH_3.—*Misc.,* all prop., W., A.—*Uses:* Pharm., chem., & techn.—*Antid.,* acetic, tartaric, or dil. hydrochloric, acids after vomiting, & siphoning out stomach.—*Incomp.:* Great danger in mixing ammonia w. sulphuric acid or o. str. mineral acids, as they inst'ly become boiling hot. Avoid iodine, chlorine water, alkaloids, acids, &c. — *Caut.* Keep cool, in strong, gl.-stp. bot., not completely filled.

Water Ammonia Merck.—Reagent.—Sp. Gr. 0.96 (2

Abt. 10% NH_3. — *Tests:* See under Water Ammonia, Reagent, Sp. Gr. 0.925.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

do. Merck.—Reagent.—Sp. Gr. 0.925 (2

NH_3 gas+H_2O.—Clear, colorl. liq.—Sp. Gr. decreases as NH_3 content increases.—Sp. Gr. abt. 0.925 & cont'g abt. 20% NH_3.—*Tests:* (*Res.*) evap. 10 Cc. sp. gr. 0.96 or 5 Cc. sp. gr. 0.925 on W.-bath–none wghble; a trace is, however, almost always left.—(*Cl; Pyridine*) 10 Cc. sp. gr. 0.96 or 5 Cc. sp. gr. 0.925+30 Cc. H_2O+20 Cc. HNO_3 (sp. gr. 1.153)–solut. should remain colorl.; add solut. $AgNO_3$–no turb.—(*H_3PO_4*) 20 Cc. sp. gr. 0.96 or 10 Cc. sp. gr. 0.925+40 Cc. HNO_3 (sp. gr. 1.153)+25 Cc. ammon. molybd. solut.; let stand at abt. 40° C.–no yellow ppt. within 2 hrs.—(*H_2SO_4*) 10 Cc. sp. gr. 0.96 or 5 Cc. sp. gr. 0.925+solut. $BaCl_2$; heat to boil.–no ppt. within 12 hrs.—(*H_2S*) 10 Cc. sp. gr. 0.96 or 5 Cc. sp. gr. 0.925 + sev. drops ammoniacal solut. $Pb(C_2H_3O_2)_2$–no yellow or brown color, or dark ppt.—(*Tar Bases [Aniline; Pyridine; Pyrrol, &c.]*) 10 Cc. sp. gr. 0.96 or 5 Cc. sp. gr. 0.925+20 Cc. HNO_3 (sp. gr. 1.153); evap. on W.-bath–res. must have a pure wh. color.—(*Ca*) 10 Cc. sp. gr. 0.96 or 5 Cc. sp. gr. 0.925 +20 Cc. H_2O+solut. $(NH_4)_2C_2O_4$–no turb.—(*Mg*) 20 Cc. sp. gr. 0.96 or 10 Cc. sp. gr. 0.925 +solut. $(NH_4)_2HPO_4$–no ppt. within 2 hrs.—(*H_2CO_3*) 20 Cc. sp. gr. 0.96 or 10 Cc. sp. gr. 0.925+20 Cc. lime-water; boil–not more than sl't turb.—(*Heavy Met.*) 5 Cc. sp. gr. 0.96 or 2.5 Cc. sp. gr. 0.925+20 Cc. H_2O+few drops $(NH_4)HS$–no react.

Note. — For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

do. Merck.—Reagent.—Stronger.—Sp. Gr. 0.90 (2

NH_3 gas+H_2O. — Clear, colorl. liq. — Sp. Gr. abt. 0.90.—Abt. 28% NH_3.—*Tests:* (*CO_2*) 3.5 Cc.+15 Cc. solut. $Ca(OH)_2$–not more than slight opalesc.—(*Heavy Met.*) 1.75 Cc.+20 Cc. H_2O+few drops solut. $(NH_4)HS$–no change.—(*Res.*) evap. 3.5 Cc. on W.-bath–none wghble (a trace is, however, almost always left).—(*Cl; Pyridine*) 3.5 Cc.+30 Cc. H_2O+20 Cc. HNO_3 (sp. gr. 1.153)–no color change, & solut. not affected on

add. solut. $AgNO_3$. — (H_2SO_4) 3.5 Cc.+acetic acid to acidity+solut. $BaCl_2$; heat to boil.–no ppt. ($BaSO_4$) within 12 hrs.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Water Bitter Almond Merck.—Distilled (2 0.1% of hydrocyanic acid, together w. essential oil almonds, & A.—Anod.; Sed.; Antispasm.—*Uses:* Chiefly as vehicle; also in asthma, whoop.-cough, & dyspnea.—*Dose* 10–20 ♏ (0.6–1.3 Cc.).—*Max. D.* 30 ♏ (2 Cc.) single; 90 ♏ (6 Cc.) p. d.

Water Blue.—see **Pure Blue**

Water Blue 2 BN (& R; 2 R; & 5 BS) Merck (10 Sodium, Ammonium, or Calcium salts of Triphenylrosaniline- & Triphenylpararosanilinetrisulphonic Acids, with more or less Disulphonates.—Blue, lustr. powd. or lumps.—*Sol.* W. w. blue color.—*Uses:* Dye. cotton & silk.

Water Cherry-Laurel Merck (1 Water distilled w. fresh lvs. cherry laurel.—0.1% hydrocyanic acid.—Turbid liq.; odor of HCN.—Anod.; Sed.; Antispasm.—*Uses:* Chiefly as vehicle; also in whoop.-cough, asthm. affect., dyspnea, &c. — *Dose* 10–20 ♏ (0.6–1.3 Cc.).—*Max. D.* 40 ♏ (2.6 Cc.) single; 90 ♏ (6 Cc.) p. d.

Water, Chlorine.—see **Solution Chlorine Compound**

Water Distilled Merck.—Reagent

H_2O.—*Tests:* (*NH_3; NH_4 Compounds*) 50 Cc.+10–15 drops Nessler's solut.–no react.—(*Cl*) 100 Cc.+few drops HNO_3+solut. $AgNO_3$–no turb.—(*H_2SO_4*) 100 Cc.+1 Cc. HCl (sp. gr. 1.124)+solut. $BaCl_2$–no ppt. ($BaSO_4$) within 12 hrs.—(*HNO_3*) overlay 10 Cc. on 5 Cc. solut. diphenylamine–no blue color zone.—(*Res.*) evap. 100 Cc. on W.-bath–none wghble.—(*Heavy Met.; Ca*) 100 Cc.+: *a:* aqu. H_2S; or *b:* NH_4OH; or *c:* $(NH_4)HS$+$(NH_4)_2C_2O_4$–no react. in any case.—(*Oxidiz. Substcs* [*Organ. Matter, Nitrites, &c.*]) 100 Cc.+1 Cc. dil. H_2SO_4; boil; add 1 drop solut. $KMnO_4$ (1:1000); boil 3 min.–liq. not decolorized.

Note. — For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Water Elder-Flower Merck (1 Water distilled w. flowers of Sambucus canadensis.

Water Fennel—see **Phellandrium**

Water Hemlock.—see **Cicuta**

Water, Lead.—see **Lead Subacetate Solution, Dilute**

Water-Nut.—see **Trapa**

Water Orange Flower, Stronger

(Triple Orange Flower Water).—By-prod. in distil. orange fls. for the essential oil.—*Caut.* Keep loosely stoppered w. pledget of purified cotton, in a dark place.

Water Pennywart.—see **Hydrocotyle**

Water Pepper.—see **Polygonum Punctatum**

Water Rose, Stronger

(Triple Rose Water).—Water satur. w. volat. oil of rose petals; by-prod. in distil. oil of roses.—*Caut.* Keep in bottles loosely stoppered w. pledget of purified cotton, & in a cool place.

Water Smartweed.—see **Polygonum Punctatum**

Water Cress.—see **Nasturtium**

Water-glass.—see **Potassium Silicate**

Watermelon.—see **Citrullus**

Watermint

Lvs. of Mentha aquatica. Labiatæ.—*Habit.:* Germany.—*Etymol.:* Fr. Grk. "Mintha," daughter of Cocytus; she was supposed to have been changed into this plant by Proserpine, in a fit of jealousy. "Aquatica," fr. Lat. "aqua," water, *i.e.*, it grows in wet places.—*Constit.:* Volat. oil; tannin.—Stim.; Antispasm.; Carmin.—*Uses:* Colic, flatulence, cholera, & diar.

Wax.—White.—*U. S. P.*

(Bleached Beeswax). — Bleached yellow wax, prepared fr. honeycomb of the hee, Apis mellifera, L. Hymenoptera.—Found everywhere in tropical & temperate countries.—*Etymol.*. Fr. Lat. "apis," the bee, fr. Grk. "empis," a giant—the classical name. "Wax," fr. Anglo-Saxon "wax." — Brittle, yellowish-wh. solid; faint, charact. odor; insipid taste.—*Sol.* E., C.; boil. A.; oils; benzene, CS_2.—*Melt.* 64–65° C.—Sp. Gr. 0.965–0.975 at 15° C.; (0.950–0.960 at 25° C., U. S. P.).—*Constit.:* Cerin (cerotic acid), $C_{27}H_{54}O_2$; melissic acid, $C_{30}H_{60}O_2$; ceryl alcohol, $C_{27}H_{55}OH$; myricin, $C_{16}H_{31}(C_{30}H_{61}O_2)$.—*Uses:* Oint., cerates, plasters, &c.—*Techn.*, wax paper, candles, &c.

do.—Yellow.—*U. S. P.*

(Beeswax).—Solid substance prepared fr. honey comb of the bee, Apis mellifera, L. Hymenoptera.—*Habit. & Etymol.*, see preceding.—Yellowish to brownish-yellow solid, soft or brittle snbstc.; agre. honey-like odor; faint, balsamic taste.—*Melt.* 62–64° C.—Sp. Gr. 0.955–0.967; (0.951–0.960 at 25° C., U. S. P.).—*Sol.* E., C., oils; part. in cold B. or CS_2; complet. sol. in B. or CS_2 at 25–30° C.; spar. in cold A.; part. in boil. A.; insol. W. — *Constit. & Uses:* As of white wax.

Wax, Carnauba.—see **Carnauba Wax**

Wax, Japan

(Vegetable Wax; Sumach Wax). — A fat expressed fr. the fruit of Rhus succedanea, L. Anacardiaceæ.—*Habit.:* Japan & China.—Pale-yellow, flat cakes, disks, or squares, w. a greasy

feel; somewh. tallow-like, rancid odor & taste. —*Melt.* 53.5–55° C.—Sp. Gr. 0.97–0.98 at 15° C.—*Sol.* B., CS_2, petroleum ether, E., hot A., & alkal. solut.; insol. cold A., W.—*Constit.:* Palmitin (chiefly); 9–13% palmitic acid; stearin; arachin.—*Uses:* Techn., as a substit. for beeswax; wax varnishes; candles; & as ingred. in plasters, ointments, &c.

Wax, Mineral.—see **Ceresin**

Wax Myrtle.—see **Myrica**

Wayne's Solution.—For glucose

Solut. 10 Gm. copper sulphate, 50 Gm. glycerin, & 325 Cc. solut. potass. hydroxide (Sp. Gr. 1.14) in W. to 1,000 Cc.—Used like Fehling's solut. —Reduced by glucose on warming.

Weigert's Acid Fuchsine.— For staining bacteria

2% solut. acid fuchsine (Rubin S) in 15% alcoh.

Weigert's Hematoxylin.—Nos. 1 & 2

No. 1.—1 Gm. hematoxylin & 10 Cc. A., mixed w. solut. 0.012 Gm. lith. carbonate in 90 Cc. W. No. 2.—(*a*) solut. 0.08 lithium carbonate in 100 Cc. W.; (*b*) solut. 1 Gm. hematoxylin in 10 Cc. A.—For use 1 vol. *b* is mixed w. 9 vol. *a*.—*Uses:* Staining marrow-containing nerve fibers.

Weigert's Picrocarmine

Solut. picric acid mixed w. solut. carmine in ammonia; after 24 hrs. acetic acid is added to incipient cloudiness, & 24 hrs. later some ammonia is added.—*Uses:* Same as of Ranvier's picrocarmine.

Weingärtner's Reagent.—For coal-tar dyes

Solut. 10 Gm. tannin & 10 Gm. sod. acetate in 100 Cc. W.—*Uses:* For differentiating acid & basic coal-tar dyes; affords a ppt. w. basic dyes.

Welmann's Reagent.—For vegetable oils

5% aqu. solut. sodium phosphomolybdate acidulated w. nitric acid.—Reagent gives w. vegetable oils a green color changed by ammonia to blue.

White Arsenic.—see **Arsenic Trioxide**

White Ash.—see **Fraxinus Americana**

White Bole.—see **Kaolin**

White Fraxinella.—see **Dictamnus Albus**

White Gentian.—see **Laserpitium**

White Hellebore.—see **Veratrum Album**

White Lead.—see **Lead Carbonate**

White-Lead Paper.—see **Lead Carbonate Paper**

White Oak.—see **Quercus**

White Precipitate.—see **Mercury Ammoniated**

White Precipitate, Fusible.—see **Mercury & Ammonium Bichloride**

White Saunders.—see **Santalum Album**

White Vitriol.—see **Zinc Sulphate**

Whortleberry.—see **Vaccinium**

Wickersheimer's Solution

12 Gm. potass. nitrate, 25 Gm. sod. chloride, 60 Gm. potass. carbonate, 100 Gm. potass. alum., 20 Gm. arsenic trioxide, & 3,000 Cc. W.—*Uses:* Preserv'g anat. & histological specimens.

Wiesner's Reagent.—For lignin

0.5% alcoh. solut. phloroglucin acidulated w. HCl.—*Uses:* For detecting wood fiber in paper; on moistening latter w. reagent, a fuchsine-red color develops if lignin present.

Wigger's Anesthetic Ether.—see **Ethyl Chloride Polychlorated**

Wild Cherry.—see **Prunus Virginiana**

Wild Cotton.—see **Asclepias Syriaca**

Wild Elder.—see **Aralia Hispida**

Wild Ginger.—see **Asarum Canadense**

Wild Indigo.—see **Baptisia**

Wild Licorice.—see **Abrus**

Wild Yam.—see **Dioscorea**

Willow, Black.—see **Salix Nigra**

Willow, Crack.—see **Salix Fragilis**

Wilson's Calcium Chloride Solution

0.215 Gm. cryst. calc. carbonate diss. in dil. hydrochl. acid, & made w. distil. W. to 1 liter. —*Uses:* Standardizing soap solut. for water anal.

Winckler's Reagent.—For alkaloids

Identical w. Mayer's reagent (*q. v.*).

Wind Flower.—see **Pulsatilla**

Winter Asparagus.—see **Scorzonera**

Wintera

(Winter's Bark; Magellan Canella; Winter's Cinnamon).—Bark of Drimys Winteri, Forst. Magnoliaceæ.—*Habit.:* Central & South America. —*Etymol.:* Named for Capt. Winter, who accompanied Sir Fr. Drake through the straits of Magellan (1578).—Quills or channelled pieces, twisted or bent; extern. whitish or silvery, or rusty-brown; intern. dark rusty-brown; intolerable pungent, burning taste; odor terebinthinous.—*Constit.:* Volat. oil; tannin; resin. —Stim.; Aromat.; Stomachic; Tonic; Antiper. Specific in scurvy.—*Dose* 30 grains (2 Gm.).

Winterberry

(Prinos; Feverbush; Black Alder). — Bark & berries of Ilex verticillata, Gray (Prinos verticillatus, L.). Ilicaceæ. — *Habit.:* Canada & eastern U. S.—*Constit.:* Bitter principle; resin; tannin. — Astring.; Tonic; Antisep. — *Uses: Intern.*, in diar., dysent., & dyspep.—*Extern.*,

in flabby or ill-conditioned ulcers.—*Dose:* Fld. extr., 30–60 ♏ (2–4 Cc.).

Wintergreen.—see **Gaultheria**

Wintergreen, Roundleaved.—see **Pyrola**

Witchhazel.—see **Hamamelis**

Wolfram.—see **Tungsten**

Wolfram White.—see **Barium Tungstate**

Wolfsbane.—see **Aconite**

Wood Alcohol, -Naphtha, or *-Spirit.*—see **Alcohol, Methylic**

Wood Fern.—see **Aspidium Spinulosum**

Wood Strawberry.—see **Fragaria**

Wood Vinegar.—see **Acid Pyroligneous**

Woodbine.—see **Ampelopsis**

Wool Fat.—see **Lanum**

Woorali. } —see **Curare**
Woorari. }

Worm-Müller's Solution.—For glucose Modified Fehling's solution, & used like latter.

Wormseed.—see **Santonica**

Wormwood.—see **Absinthium**

Wormwood Sage.—see **Artemisia Frigida**

Wourali.—see **Curare**

Wrightine.—see **Conessine**

Wurster's Ozone Paper, Blue.—see **Tetramethyl-paraphenylenediamine Paper**

Wurster's Ozone Paper, Red.—see **Dimethyl-paraphenylenediamine Paper**

X

Xanthine Merck (10000

(Ureous Acid).—Diureid obtained fr. guanine, by nitrous acid; occurs naturally in the animal body.—$C_5H_4N_4O_2$.—Yellowish-wh. powd.—*Sol.*, sl. in hot W.; readily in acids & in alkal. solut. —Decomp. when heated above 150° C.

Xanthium

(Spiny Clotbur; Thorny Clotbur; Cocklebur).—Herb of Xanthium spinosum, L. Compositæ.—*Habit.:* Southern Europe; Levant; widely natur. in U. S.—*Etymol.:* Grk. "xanthos," yellow, *i.e.*, the aqueous decoct. was supposed to color the hair yellow (Discorides). "Spinosus," spiny, thorny.—*Constit.:* Resin; volat. oil.—Astring.; Styptic. — *Uses:* Diar., dysent. & intern. & extern. hemor.; also used as a remedy in hydrophobia.—*Dose:* Fld. extr., 60–120 ♏ (4–8 Cc.).

Xanthoxylin (Eclectic) (30

Purified alcoh. extr. of prickly-ash bark (Xanthoxylum, var. species).—Brown powd.—*Sol.* A. — Stim.; Diaph. — *Uses:* Chronic rheum. — *Dose* 1–2 grains (0.06–0.12 Gm.).

Xanthoxylum.—*U. S. P.*

(Prickly Ash; Toothache Tree; Yellow Wood; Angelica Tree).—Dried bark (& berries, though not official) of Xanthoxylum americanum Miller (Northern Prickly Ash), & of Fagara Clava-Herculis, L. (Southern Prickly Ash). Rutaceæ. —*Habit.:* Canada, south to Virginia & Missouri. —*Etymot.:* Grk. "xanthos," yellow, & "xylon," wood, *i.e.*, the roots of the tree have a yellow color. "Americanum," belonging to America. "Clava," club, & Hercules, *i.e.*, resemblance of cone-like warts to Hercules' club. — *Constit.:* Resins; xanthoxyline (probably an alkaloid); acrid volat. oil; tannin; sugar.—Diaph.; Alter.; Stim.; Counter-irrit.— *Uses:* Syph., neural., muscul. pains, & pelvic diseases.—*Doses: Bark:* Extr., 5–10 grains (0.3–0.6 Gm.).—Fld. extr., 30–60 ♏ (2–4 Cc.).—*Berries:* Fld. extr., 20–40 ♏ (1.3–2.6 Cc.).

Xeroform (10

(Bismuth Tribromocarbolate; Tribromphenol-bismuth; Bismuth Tribromophenate).—Approx.: $Bi_2O_3(C_6H_2Br_3OH)$.—Yellow, neut., insol. powd.; odorl.; tastel.—57–61% of Bi_2O_3.—Intest. Antisep. — *Uses:* Cholerine, Asia. cholera, lymph. fever, & inflam. condit. of muc. membr. of intest. —*Dose* 8–15 grains (0.5–1 Gm.) several t. p. d.—*Max. D.* 90 grains (6 Gm.) p. d.—*Appl.*, as dust. powd. instead of iodof., & in 10–20% oint.

Xylene Merck (1

(Xylol; Dimethylbenzene [or, -zol]).—Mixt. of ortho-, meta-, & para-xylene extr. fr. coal tar. — C_8H_{10}, or, $C_6H_4(CH_3)_2$.— Colorl. liq. — *Boil.* 137–140° C. — Sp. Gr. abt. 0.85.— Antiseptic. — *Uses:* Smallpox, troubles of respiration, & dyspep.; also techn. as solvent, & in manuf. azo-dyes.—*Dose* 5–15 ♏ (0.3–1 Cc.) in caps.—*Max. D.* 45 ♏ (3 Cc.) p. d.

Xylene (Meta-) Merck (10

(Metadimethylbenz[ol]ene; Isoxyl[ol]ene). — $C_6H_4(CH_3)_2$[1:3].—Colorl. liq.—Sp. Gr. 0.878 at 0° C.—*Sol.*, v. sl. A.—*Boil.* 139° C.—*Uses, Doses, &c.:* As of preceding.

Xylene (Meta-) Chloro- Merck (50

(Chlorometaxylol).—By chlorination of meta-xylene in presence of iodine. — C_8H_9Cl, or, $C_6H_3(CH_3)_2Cl$[1:3:4].—Liq.; does not solidify at -20° C.—Sp. Gr. 1.060 at 20° C.—*Boil.* 186.5° C.

Xylene (Ortho-) Merck (3

(Orthodimethylbenzene [or, -zol]).—C_8H_{10}, or, $C_6H_4(CH_3)_2$[1:2].—Colorl. liq.—Sp. Gr. 0.893 at 0° C.—*Boil.* 142–143° C.—*Uses, Doses, &c.:* As of xylene.

Xylene (Para-) Merck (25

(Paradimethylbenzene [or, -zol]).—$C_6H_4(CH_3)_2$-[1:4].—Colorl. liq.; fluid above 15° C.—Sp. Gr. 0.862 at 19.5° C.—*Boil.* 138° C.—*Uses, Doses, &c.:* As of xylene.

Xylenol (Meta-) Merck (60

By fusing metaxylenesulphonic acid w. KOH. —$C_6H_3(CH_3)_2OH$-α-[1:3:4].—Colorl. to reddish-brown liq.—*Misc.* A., E.—*Boil.* 211.5° C.

Xylenol (Meta-) Salicylate

(Metaxylenolsalol).—Internal Antisep. — *Uses:* Rheum., diarrh., dysent., &c.—*Dose* 2-6 grains (0.12-0.36 Gm.).

Xylenol (Ortho-) Merck (200

By fusing orthoxylenesulphonic acid w. KOH. —$C_8H_{10}O$, or, $C_6H_3(CH_3)_2.OH$-α-[1:2:4].—Colorl. to reddish need.—*Sol.* W., A.—*Melt.* 62.5° C.—*Boil.* 225° C.

Xylenol (Ortho-) Salicylate

(Orthoxylenolsalol).—$C_{15}H_{14}O_3$, or, $C_8H_9.C_7H_5O_3$. —Neutral, wh. powd.; odorl.; tastel.—Internal Antiseptic.—*Uses:* Rheum., diar., dysent., &c. —*Dose* 2-6 grains (0.12-0.36 Gm.).

Xylenol (Para-) Merck (150

By fusing paraxylenesulphonic acid w. KOH. —$C_6H_3(CH_3)_2OH$-β-[1:4:2].—Wh., cryst. mass. —*Sol.* A., E.; sl. W.—*Melt.* 74° C.—*Boil.* 211° C.

Xylenol (Para-) Salicylate

(Paraxylenolsalol).—Internal Antisep.—*Uses:* Rheum., diarrh., dysent., &c.—*Dose* 2-6 grains (0.12-0.36 Gm.).

Xylidine Merck (3

(Aminodimethylbenzene [or, -zol]; Aminoxylene [or, -ol]). — $C_8H_{11}N$, or, $C_6H_3(NH_2)(CH_3)_2$. — Yellow liq.; prone to darken. — *Boil.* abt. 215° C.—*Uses:* Techn., in manuf. azo-dyes.

Xylidine Merck.—Reagent (5

$C_6H_3(CH_3)_2(NH_2)$.—Yellow to yellowish-brown liq.—Sp. Gr. 0.981-0.984.—*Boil.* 212-215° C.—*Test:* (*Impur. Insol. in HCl*) 10 Cc.+10 Cc. HCl (sp. gr. 1.124)+10 Cc.-perf. clear solut.—*Uses:* In Schiff's reagent for furfural.

Note.— For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Xylidine (Meta-) Merck.—Asymmetric (15

(Ordinary Metaxylidine).—By reduct. of alpha-nitrometaxylene. — $C_6H_3(CH_3)_2NH_2$[1:3:4]. — Brown liq.—*Sol.* A., E.; v. sl. W.—Sp. Gr. 0.918 at 15° C.—*Boil.* 212° C.

Xyloidin.—see **Pyroxylin**

Xylol.—see **Xylene**

Y

Yam, Wild.—see **Dioscorea**

Yara-Yara.—see **Methyl Betanaphtholate**

Yarrow.—see **Achillea**

Yeast

Ferment obt. in brewing beer.—Viscid liq., or soft mass; consists of the cells & spores of Saccharomyces cerevisiæ.—Stim.; Ton.; Antisep.—*Uses:* Typhoid, scurvy, purpura, furunculosis, dysentery, infantile diarrh. Action believed to be due to presence of enzymes or ferments, chiefly zymase, & invertase.—*Dose* 1 oz. to 1 pint (30-500 Cc.) liq.; 1-3 dr. (4-12 Gm.) solid.

Yellow; Chrome-, Lemon-, Paris-, or *Leipzig-.*— see **Lead Chromate, Precipitated**

Yellow Dock.—see **Rumex**

Yellow Jasmin.—see **Gelsemium**

Yellow Parilla.—see **Menispermum**

Yellow Precipitate.—see **Mercury Oxide, Yellow**

Yellow Puccoon.—see **Hydrastis**

Yellow Saunders.—see **Santalum Album**

Yellow T Merck (10

(Resorcinol Yellow; Tropæoline O; Tropæoline R; Chrysoine; Chryseoline; Gold Yellow; Acme Yellow).—Sod. salt of azoresorcinolsulphanilic acid.—$C_{12}H_9N_2O_5SNa$.—Brown powd.—*Sol.* A., W. w. reddish-yellow color.—*Uses:* Dyes wool & silk reddish-yellow in acid bath.

Yellow Wolfsbane.— see **Aconitum Lycoctonum**

Yellow Wood.—see **Xanthoxylum**

Yerba Buena.—see **Micromeria**

Yerba del Pollo.—see **Commelina**

Yerba Maté.—see **Maté**

Yerba Reuma.—see **Frankenia**

Yerba Santa.—see **Eriodictyon**

Yew.—see **Taxus**

Yohimbéhé

(Yohimbé).—Bark of Corynanthe Yohimbé, K. Schumann. Rubiaceæ.—*Habit.:* Cameroon district near Kribi.—*Etymol.:* "Yohimbé" is the African name of the plant.—Pieces $^1/_8$-$^2/_5$ in. (3-10 Mm.) thick w. extern. gray-brown corky layer covered w. isolated lichens; numerous longit. & transv. fissures; fracture is yellowish-brown, & short & fibrous, like rough velvet.—*Constit.:* Yohimbine, $C_{23}H_{32}N_2O_4$; or $C_{21}H_{23}N_2O_3$-$+^1/_2H_2O$(?); yohimbenine.—*Uses:* Aphrodisiac.

Yohimbine Hydrochloride

$C_{23}H_{32}N_2O_4.HCl$.— Wh. cryst. —*Sol.*, hot W.—Aphrodisiac.—*Uses:* Impotence, partic. in the neurasthenic form.—*Dose* $^1/_{10}$ grain (0.006 Gm.).

Youthwort.—see **Drosera**

Yttria.—see **Yttrium Oxide**

Yttrium Merck (7500

Etymol.: Fr. "Ytterby," the place in Sweden where gadolinite, the mineral in which Eckeberg in 1797 discovered ytterbia, was found, &

from which the element was isolated.—Yttrium also occurs in xenotim, samarskite, & o. rare minerals. — Metal. — Y. — Dark-gray powd.; contains a little erbium, but free from earths of cerium group.—*Uses:* Tecbn., in manuf. incandescent mantles, (like o. salts of rare earths —thorium, lanthanum, cerium, &c.).

Yttrium Acetate Merck (200

$Y(C_2H_3O_2)_3+8H_2O$.—Colorl. cryst.

Yttrium Carbonate Merck (200

$Y_2(CO_3)_3+3H_2O$.—Reddish-wh. to wh. powd.—*Sol.*, dil. mineral acids; insol. W.—Contains sm. amt. erbium; free fr. earths of cerium group.

Yttrium Chloride Merck (200

YCl_3+6H_2O. — Reddish-white, transp., deliq. prisms.—*Sol.*, v. eas. W.; more diffic. A.—Contains sm. amt. erbium; free fr. earths of cerium group.—*Caut.* Keep well closed.

Yttrium Nitrate Merck (100

$Y(NO_3)_3+6H_2O$.— Reddish-wh. cryst.—*Sol.*, v. eas. W., A.—Contains sm. amt. erbium; free fr. earths of cerium group.

Yttrium Oxide Merck.—Anhydrous (250

(Yttria).—By ignition of yttrium hydroxide.—Y_2O_3.—Yellowish-wh. powd.—*Sol.*, eas. in dil. mineral acids; insol. W.—Contains sm. amt. erbium; free fr. earths of cerium group.

Yttrium Sulphate Merck (100

$Y_2(SO_4)_3+8H_2O$.—Sm., reddish-wh., monosymmetr. cryst.—*Sol.*, diffic. in W.—Contains sm. amt. erbium; free fr. earths of cerium group.

Z

Zea.—*U. S. P.*

(Corn-Silk; Stigmata Maydis). — Fresh styles & stigmas of Zea Mays, L. Gramineæ.—*Habit.:* Found everywhere.—*Etymol.:* Grk. "zao," to live, *i.e.*, used by man & beast to sustain life. "Mays," fr. Lat. "maydis," fr. Spanish "maiz," fr. "mahiz," its native Haytian name.—*Constit.*. Maizenic acid; fixed oil; resin; mucilage.—Diur.; Demulc.; Lithontriptic; Alter.—*Uses:* Diseases of the genito-urinary organs & bladder (cystitis, gravel, dropsy, gonor., incontin. urine, &c.).—*Dose* 30–120 grains (2–4 Gm.) us'y as fld. extr.

Zedoary

Rhizome of Curcuma Zedoaria, Roscoe. Scitamineæ.—*Habit.:* East Indies.—*Etymol.:* Fr. the Arabic "d'jeduar," Persian "dschadwar." — Usually found as circular disks abt. $^1/_2$–$1^1/_2$ in. (12–37 Mm.) in diam. & $^1/_4$–$^3/_4$ in. (6–18 Mm.) thick; orange-brown extern.; reddish-grayish-brown intern.; odor & taste like ginger. —*Constit.:* Resin; volat. oil; starch; mucilage. —*Uses:* Stomachic (like ginger) in dyspepsia & flatulence.—*Dose* 10–30 grains (0.6–2 Gm.).

Zellner's Paper.—see **Fluorescein Paper**

Ziehl-Neelson's Carbol-Fuchsine

1 Gm. fuchsine & 5 Gm. phenol in 100 Gm. 10% alcohol.—*Uses:* Staining tubercle bacilli, spores.

Zimphen

(Sodium Metaoxycyanocinnamate). — Na[1]-COO.C(CN):CH.C_6H_4.OH[3]. — Yellowish-wh. cryst. or minute tablets; sl't odor; bitter taste. —*Sol.* W.; dil. A.—Tonic; Digest. Stim.—*Uses:* Gastro-intest. atony, dyspep., &c. — *Dose* 8 grains (0.5 Gm.).—Not adapted f. intraven. inj.

Zinc Merck.—Highest Purity.—Gran., sticks, powder, filings & sheets (2

Etymol.. Zinc was first mentioned by Basilius Valentinus & Paracelsus in the 15th century, but neither mentions from what source the metal was obtained. Their successors, such as Agricola & Mathesius, used the designation "zinc" for zinc ores generally.—Metal.—Zn.—Sticks & gran. metal are bluish-wh. w. cryst. fracture.—Sp. Gr. 6.9.—*Sol.*, acids.—*Melt.* 419° C.—Becomes brittle at 200° C., & distils at 1,000° C.—*Uses:* Prepar. pure zinc salts, & in chem. anal.

do. Merck.— Free fr. Arsenic. — Sticks, granul. & coarse powder, filings, & sheets (1

Uses: In Marsh's apparatus for detect. arsenic.

do. Merck.—Powder (1

(Zinc Dust).—Mixt. powd. zinc w. 8–10% zinc oxide, & usually w. o. metals. First prod. of zinc distillation.—*Uses:* As reducer (in indigo vats); also w. calcium hydroxide for making hydrogen to be used for balloons; also in paints.

Zinc Merck.—Reagent.—Highest Purity.—Granulated, Thin Sticks & Thick Sticks (3

Zn.—Shining, wh. met.; bluish-gray luster.—*Tests:* (*As*) place 20 Gm. in Marsh appar. w. As-free dil. H_2SO_4 (1:5); allow react. to proceed till met. nearly all dissolved – no deposit visible within reduction tube.—(*Impur. Oxidizable by $KMnO_4$*) 10 Gm.+60 Cc. H_2O+15 Cc. conc. H_2SO_4 (sp. gr. 1.84); place in flask provided w. rubber valve – no black flocks should remain; when Zn dissolved, add by drops decinorm. $KMnO_4$ – not more than 0.1 Cc. decinorm. $KMnO_4$ should be required up to point when distinct red color supervenes. If more required, titrate the dil. H_2SO_4 (15 Cc. conc. acid+60 Cc. H_2O) for purpose of control, but without Zn, w. decinorm. $KMnO_4$—(*S; P; &c.*) 1 Gm.+5–10 Cc. dil. As-free H_2SO_4; place in narrow test-tube in upper part of which insert a plug of cotton to hold back H_2O carried off by evol. of H; over mouth of tube place sm. piece filter paper moistened w. 1:1 solut. $AgNO_3$ & dried; allow react. to proceed in dark place perf. free fr. H_2S – $AgNO_3$-paper should show no yellow or black color within 2 hrs. — *Uses:* Forensic analysis, especially for quick & easy

determ. arsenic; reducer in determ. Fe, Cu, Pb, & Mo.

Note. — For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Zinc Merck. — Reagent. — Pure. — Granulated, Thick or Thin Sticks, Sheets, Powder, & Filings (2

Tests: (*As*) place 20 Gm. in Marsh appar. w. As-free dil. H_2SO_4 (1:5); allow react. to proceed till metal all dissolved – no deposit visible in reduct. tube.—(*Impur. Oxidiz. by $KMnO_4$*) 10 Gm.+60 Cc. H_2O+15 Cc. conc. H_2SO_4; place in flask provided w. rubber valve – no undiss. black flocks, or only v. sl. quant.; add to solut. by drops decinorm. $KMnO_4$ – not more than 0.1 Cc. decinorm. $KMnO_4$ required to point when distinct red color supervenes.—In addition test Zn powd. for (*Cl*): 5 Gm. powd.+50 Cc. HNO_3+100 Cc. H_2O+solut. $AgNO_3$ – not more than slight opalesc. turb. — *Uses:* Reducer in determ. AgCl; testing for iodic acid, and as of preceding.

Note. — For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

do. Merck. — Reagent. — Arsenic-free. — Granulated, Thick & Thin Sticks, Coarse Powder, & Filings (2

Test: (*As*) place 20 Gm. in Marsh appar. w. As-free dil. (1:5) H_2SO_4; allow react. to proceed till met. alm. compl. dissolved – no deposit visible in reduct. tube.—*Uses:* Particularly for the Marsh test for As.

Note. — For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

do. Merck.—Reagent.—Powder (1

(Zinc Dust).—Gray, fine powd.; abt. 90% Zn. —*Tests:* (*N fr. Niter & NH_3*) 20 Gm.+20 Cc. conc. H_2SO_4 (sp. gr. 1.84)+200 Cc. H_2O; add 100 Cc. solut. NaOH (sp. gr. 1.3); distil off abt. 50 Cc.; collect distil. in receiver cont. abt. 20 Cc. H_2O+2–3 Cc. decinorm. HCl; titrate w. decinorm. KOH (methyl orange indic.) – decinorm. KOH used up should be within 0.2 Cc. of the acid placed in receiver.—*Uses:* Determ. nitrates & nitrogenous substances; reducer.

Note. — For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Zinc Acetate Merck.—Pure (1

$Zn(C_2H_3O_2)_2+3H_2O$. — Wh., monocl. plates; pearly luster.—*Sol.* 2.5 W., 36 A. at 25° C.; 1.5 boil. W., 0.6 boil. A.—Astring.; Emetic; Antisep.; Nerv.—*Uses: Intern.*, instead of the sulphate as an emetic.—*Extern.*, collyrium in ophthalmia; inj. in urethritis, gonor., & otorrhea; & gargle in sore mouth or sore throat.—*Techn.*, for preserv. wood, as mordant in dyeing, & manuf. glazes in painting on porcelain.—*Doses:* $^3/_4$–4 grains (0.05–0.25 Gm.) 3–4 t. p. d.; emetic, 8–15 grains (0.5–1 Gm.).—*Appl.*, eyewash, 1–2:1,000 W.; gargle, 5–10:1,000 W.—*Inj.*, 2–5:1,000 W.—*Antid.*, alkali carbonates, tannic acid.—*Incomp.* (zinc salts in general), acacia, alkalies, arsenates, carbonates, cyanides, lime-water, oxalates, phosphates, sulphates, sulphides, veget. astring. decoct's & infusions.

Zinc Acetate Merck.—Fused (3

$Zn(C_2H_3O_2)_2$.—Wh., fused crusts.—*Sol.* W., with turbid.

Zinc Albuminate Merck (10

Yellowish scales.—*Sol.*, sl. & incompletely in W.

Zinc Alum.—see **Aluminum & Zinc Sulphate**

Zinc Amalgam Merck (8

Uses: Chem., reducing agent.—*Techn.*, electric batteries.

Zinc Arsenate Merck (4

$ZnHAsO_4$. — Wh. powd. — *Sol.*, acids. — *Antid.*, emetics, stomach siphon, fresh hydrated iron sesquioxide, dialyzed iron, demulcents, &c.—*Caut.* Poison!

Zinc Arsenite Merck (3

$Zn(AsO_2)_2$.—Wh. powd.— *Sol.*, acids.—*Antid.*, As of preceding.—*Caut.* Poison!

Zinc Benzoate Merck (4

$Zn(C_7H_5O_2)_2$.—Wh. powd.—*Sol.* W.

do. Merck.—Fr. natural Benzoic Acid (6

$Zn(C_7H_5O_2)_2$.—Wh. powd.—*Sol.* W.

Zinc Biborate.—see **Zinc Tetraborate**

Zinc Bichromate.—see **Zinc Dichromate**

Zinc Borate Merck (4

Amorph. wh. powd. — *Sol.*, acids. — *Uses:* As dust. powd. for wounds, in 1:10 oint., & like zinc oxide in eczema.

Zinc Bromate Merck (30

$Zn(BrO_3)_2$. — Wh., deliq. powd. — *Sol.* W. —. Antisep.

Zinc Bromide Merck (2

$ZnBr_2$. — Wh., hygros., cryst. powd.; sharp, metal. taste.—*Sol.* W., A., E., amm.—*Melt.* 394° C.—Antiepileptic.—*Uses: Intern.*, in epilepsy, in v. dil. solut.—*Dose* 1–2 grains (0.06–0.12 Gm.).—*Max. D.* 10 grains (0.6 Gm.) p. day. —*Incomp.*, acids, alkaloids; salts of antimony, bismuth, copper, lead, mercury, & silver.—*Caut.* Keep in small, glass-stop. vials.

Zinc, Butter of.—see **Zinc Chloride**

Zinc Carbolate.—see **Zinc Phenate**

Zinc Carbonate Merck.—Precipitated (1

(Zinc Subcarbonate).— $2ZnCO_3+3Zn(OH)_2$. —

Comparative Values (*see Preface, page* v): 1=Cheap Articles; 2=Salol; 3=Guaiacol; 4=Potassium Iodide; 5=Iodoform; 11=Silver Nitrate; 25=Strychnine; 44=Veratrine; 55=Morphine Sulphate; 225=Aconitine; 570=Gold Tribromide; 1111=Eserine Sulphate; 1710=Hyoscyamine; 2565=Homatropine Hydrobromide; 3000 & over=Very Expensive Articles.

Impalp., wh. powd.—*Sol.*, dil. acids, ammonia water, & solut. ammon. carb.; insol. W., A.—Antisep.; mildly Sed.—*Uses: Extern.*, wounds, ulc., skin dis., &c.; also face powd.

Zinc Carbonate Merck.—Pure.—*U. S. P.* (2

Zinc Chlorate Merck (10

$Zn(ClO_3)_2+6H_2O$. — Colorl., v. deliq. cryst. — *Sol.* 0.6 W., A.—*Melt.* 60° C.

Zinc Chloride Merck.—Pure, gran. (1

(Butter of Zinc).—$ZnCl_2$.—Wh., gran., deliq. powd.—*Sol.*, abt. 0.5 W., 1 A., E. at 15° C.; (abt. 0.4 W. at 25° C., U. S. P.).—*Melt.* 115° C. —Alter.; Antispasm.; Eschar.; Disinf.; Preserv. —*Uses: Intern.*, epilepsy, chorea, scrof., syph., &c.—*Extern.*, caustic in nevi, cancerous affect., superabundant granul., gangr., aneurisms, &c.; collyrium in thickened & vascular conjunctiva; & inj. in gonor.—*Techn.*, in dental cement (w. zinc oxide), preserv. wood, flux for soldering, etching metals, manuf. paper & parchment paper, preserving anatom. specimens, oil refining, disinfecting, cement for metals, & in microscopy for differentiating fibers of silk, wool, & plants.—*Dose* $^1/_{10}$–$^1/_3$ grain (0.006–0.02 Gm.); *inj.* in urethra, 1:1,000 W.; for bandaging solut., 1:100–500 W.; for eye-wash, 1:2,000 W.; inj. in tuberculous joints, 6–20 drops of solut. 1:10 W. hypoderm. near the affected parts; for cancer, 50% paste w. rye flour.—*Antid.*, alkali carbonates, preceding water or milk; albumen, anodynes, stimulants, tea, &c. —*Caut.* Poison! Keep well stoppered.

do. Merck.—Fused, sticks, drops, plates (1

do.—Solution.—*U. S. P.*

50% by weight of zinc chloride in W.—$ZnCl_2$+ aq.—Colorl., astring., sweetish liq.; acid react. —Sp. Gr. 1.535 at 15° C.; (1.548 at 25° C., U. S. P.).—*Sol.* W.—Disinf.; Antisep.; Astring.—*Uses: Extern.*, dress. for ulc., cancer, & gangr. sores; & as inj., diluted in urethritis & vaginitis.

do.—Crude, dried (1

Antisep.; Preservative.—*Uses:* Deodorant, disinf. & embalming material, alone or w. phenol & o. antiseptics.

Zinc Chloride Merck.—Reagent.—Dry (2

$ZnCl_2$.—Wh. powd.; deliquesc. in air.—*Sol.*, eas. W., A.—Aqu. solut. acid to litmus paper.—*Tests:* (*Solubility* [*Basic Zinc Chloride*]) 1 Gm. +1 Cc. H_2O–solut. clear, or at most only sl'tly turb., & turb. caused by add 3 Cc. alcoh. should disapp. on add. 1 drop HCl (sp. gr. 1.124).—(H_2SO_4) 10 Cc. 1:10 solut.+few drops HCl+ solut. $BaCl_2$–no turb.—(*Foreign Met.; Alkalies*) *a:* 1 Gm.+10 Cc. H_2O+1 Cc. HCl+aqu. H_2S–no react.; *b:* 1 Gm.+10 Cc. H_2O+10 Cc. NH_4OH (sp. gr. 0.96)–clear solut.; add aqu. H_2S–pure wh. ppt.; filter; evap. filtr. to dryness & ignite–no wghble res.—*Uses:* Reagent for alkaloids; dehydrating agent; solvent for cellulose; detect. silk.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Zinc Chloride (fused) with Potassium Nitrate Merck (4

Mixt. 1 part potass. nitrate & 10 parts zinc chloride, dry.—Wh., v. hygros. sticks.—*Sol.* W. —*Uses:* Caustic in endometritis.

Zinc Chloroiodide Merck (15

Mixt. of zinc chloride & zinc iodide.—Wh. powd. —*Sol.* W.—Antiseptic.—*Uses:* Disinfectant.

do.—Solution

(Naegeli's Solution).—Fr. hydrochl. acid w. zinc followed by saturation w. potass. iodide & iodine.—*Uses:* Micro-chemical test for cellulose (blue color), & for tannin (reddish or violet color).

Zinc Chloroiodide Mixture.—see **Behrens' Zinc Chloroiodide**

Zinc Chromate Merck (3

(Zinc Yellow; Buttercup Yellow).—$ZnCrO_4$+ $7H_2O$.—Yellow powd.—*Sol.* W.—*Uses:* Pigment.

Zinc Chrysophanate Merck (30

Brownish-red powd.—*Sol.*, alkal. solut.—Antiseptic.—*Uses: Extern.*, dress. (as 1:10–20 oint.) for wounds, the alkal. secretions of which readily dissolve it.

Zinc Citrate Merck (8

$Zn_3(C_6H_5O_7)_2+2H_2O$. — Wh., amorph. powd.—*Sol.*, sl. W.—Antiepileptic.—*Uses:* As of o. zinc salts in epilepsy.—*Dose* 3–12 grains (0.2–0.8 Gm.) several t. p. d.

Zinc Cyanide Merck.—Pure (4

$Zn(CN)_2$. — Wh. powd. — *Sol.*, solut. potass. cyanide; insol. W. & A. — Alter.; Antisep.; Anthelm.—*Uses:* Chorea, rheum., gastric cancer, whoop.-cough, neural., dysmenor., colic, gastralgia, & palpitation & pain in the cardiac region. Small doses at first, & gradually increased.—*Dose* $^1/_{10}$–$^1/_4$–1 grain (0.006–0.015–0.06 Gm.).—*Antid.*, stomach siphon, ammonia, a mixture of persulphate & protosulphate of iron, chlorine inhalation, cold douche, &c.—*Caut.* Poison!

do. Merck (3

Wh. powd.—*Uses:* Techn.

Zinc Dichromate Merck (8

(Zinc Bichromate).—$ZnCr_2O_7$.—Orange-yellow powd.—*Sol.*, hot W.

Zinc Diiodoparaphenolsulphonate.—see **Sozoiodole-Zinc**

Zinc Dust.—see **Zinc, Powder**

Zinc-ethyl Merck (150

React.-prod. zinc & zinc-sodium w. ethyl iodide. —$Zn(C_2H_5)_2$.—Colorl. liq.; takes fire on contact w. air.—Sp. Gr. 1.18 at 15° C.—Violently decomp. by W.—*Boil.* 118° C.—*Uses:* Synthetic organic chem.—*Caut.* Very dangerous! Handle & keep w. extreme care. Liable to cause fire.

Zinc Ethylsulphate Merck (15

$Zn(C_2H_5SO_4)_2+2H_2O$. —Clear, colorl., hygros. leaflets.—*Sol.* W., A.—*Caut.* Keep well stop'd.

Zinc Ferrocyanide Merck (4

$Zn_2Fe(CN)_6+3H_2O$.—Wh. powd.—Insol. W.—Alter.; Antiseptic.—*Uses:* Dysmenor., rheum., chorea, gastralgia, &c.—*Dose* $^1/_2$–2 grains 0.03–0.12 Gm.) several t. p. d.

Zinc Fluoride Merck (10

ZnF_2.—Wh. powd.—*Sol.*, sl. in W.

Zinc, Flowers of.—see **Zinc Oxide**

Zinc Formate Merck (10

$Zn(CHO_2)_2+2H_2O$.—Wh. cryst.—*Sol.* W.; insol. A.—Astring.; Antisep.—*Uses:* Gonor., &c.

Zinc Gallate.—see **Zinc Subgallate**

Zinc Glycerinophosphate Merck (40

$C_3H_5(OH)_2OPO_3Zn$. — Wh., amorph. powd. — *Sol.* W.; insol. A., E.

Zinc Gynocardate Merck (40

Yellow, gran. powd.—*Sol.* A., E., C.; & in acids w. separation of gynocardic acid.—Antiseptic. —*Uses:* As of gynocardic acid in psoria., lichen, pruritus, & o. skin affect.

Zinc-hemol.—see **Hemol, Zinc-**

Zinc Hypophosphite Merck (5

$Zn(H_2PO_2)_2+H_2O$. — Colorl., hygros. cryst. — *Sol.* W.—Antisep.; Astring.; Antispasm.—*Uses:* Gastric & intest. catarrhs, chorea, whoop.-cough, epilepsy, skin dis., & gonor.—*Dose* $^1/_2$–$1^1/_2$ grains (0.03–0.1 Gm.) several t. p. d.

Zinc "Ichthyolsulphonate."—see **Ichthyol Zinc**

Zinc Iodate Merck (25

$Zn(IO_3)_2$.—Wh., cryst. powd.—*Sol.*, sl. W.

Zinc Iodide Merck (6

ZnI_2.—Hygros., wh., cryst. powd.; sharp, saline taste.—*Sol.* W., A., & E.—*Melt.*, abt. 446° C. — Alter.; Antisep.; Caustic. — *Uses: Intern.*, scrof., chorea, syph., &c.—*Extern.*, ulc. tonsils, gonor., &c.—As caustic, 1:2 solut.; as resolvent in scrofulous enlargements, 2–6:100 solut.; inj. in gonor., 0.5–1:300 solut.; in scrofulous ophthalmia, as collyr., 1.5:1,000 solut.—Used also in making zinc iodide-starch solut. & paper.—*Dose* 1–2 grains (0.06–0.12 Gm.).—*Caut.* Keep in sm., glass-stop. bottle.

Zinc Iodide-Starch Paper

Wh. paper impregnated w. a zinc-iodide & starch solut.—*Uses:* For detecting traces of free iodine (development of blue color); also ozone.

Zinc Iodide-Starch Solution Merck.—Reagent

Colorl., clear, or only sl'tly opalesc. liq.—*Tests: a:* 1 Cc.+20 Cc. H_2O+1 drop decinorm. I – intense blue color; *b:* 1 vol.+50 vol. H_2O+dil. HCl – no blue color.—*Uses:* Detect. nitrites; indicator.

Note. — For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Zinc Lactate Merck.—Pure (4

$Zn(C_3H_5O_3)_2+3H_2O$.—Wh. cryst.—*Sol.* 52.5 W. at 15° C.; 6 boil. W.—Antiepileptic.—*Uses:* Instead of zinc oxide in epilepsy.—*Dose* $^1/_2$–1 grain (0.03–0.06 Gm.), gradually increased.—*Max. D.* 10 grains (0.6 Gm.) p. day.

Zinc Lactophosphate Merck (12

(Zinc Phospholactate).—Wh. powd.—*Sol.*, dil. acids. — Antisep.; Astring.; Tonic. — *Uses:* As of zinc lactate, in nerv. diseases.

Zinc Malate Merck (70

$ZnC_4H_4O_5+3H_2O$.—Wh., cryst. powd.—*Sol.* W.

Zinc Monochloracetate Merck (200

$Zn(C_2H_2ClO_2)_2$.—Wh. powd.—*Sol.*, sl. W.—Antiseptic.

Zinc Nitrate Merck.—Pure (2

$Zn(NO_3)_2$.—Colorl. pieces, w. varying quantities of water. — *Sol.* 0.9 W., A. — *Melt.* 36.4° C. — Escharotic.—*Uses: Extern.*, as 50% paste with W. & flour in cancerous affect., nevi, &c.

do. Merck.—Commercial (1

Reddish pieces.—*Sol.* W.—*Uses:* As a mordant in dyeing.

Zinc Oleate Merck.—*N. F.* (8

React.-prod., zinc acetate & sodium oleate.—$Zn(C_{18}H_{32}O_2)_2$.—Dry, wh., greasy, gran. powd.; 13% of zinc oxide. — *Sol.* A., E., carbon disulphide & petroleum benzin.—Antisep.; Stim.; Astring.—*Uses: Extern.*, sweaty feet, indol. ulc. & excoriated surf., & in eczema instead of zinc oint. Also insufflation vehicle for o. remed.

do.—5%

5% zinc oxide in oleic acid.—Wh., semi-solid mass. — *Sol.*, oleic acid. — Antiseptic. — *Uses:* Oint. w. soft paraffin or petrolatum for skin dis.

Zinc Oleo-Stearate.—*N. F.*

By pptng. zinc acetate, & stearic & oleic acids w. KOH.

Zinc Orthophosphate, Tribasic.—see **Zinc Phosphate**

Zinc Oxalate Merck (3

$ZnC_2O_4+2H_2O$.—Wh. powd.—*Sol.*, acids & in ammonia water; sl. W.

Zinc Oxide Merck.—By wet process.—Pure (1

By igniting basic precip. zinc carbonate.—ZnO. —Amorph., wh. powd.; absorbs carbon dioxide fr. air.—*Sol.*, dil. acids, amm., amm. carbonate; insol. W.—Antispasm.; Antisep.; mildly Sed.; Siccative.—*Uses: Intern.*, chorea, nervousness, epilepsy, convulsions, cholera inf., whoop.-cough, dysent., &c.—*Extern.*, as powd. or oint. for drying wounds & in skin dis. — *Dosc* 1–5 grains (0.06–0.3 Gm.).—*Caut.* Keep in air-tight vessels.

do. Merck.—Highest Purity (1

do. Merck.—By dry process (1

(Flowers of Zinc).—By combustion of zinc in air or oxygen. — Wh., amorph. powd. — *Sol.*, acids; insol. W. — *Uses:* In cosmetics, oint., dusting powd., pigment (instead of lead carbonate), manuf. artif. meerschaum, printing fabrics, manuf. glass (inst. of lead oxide), zinc green, &c.

Zinc Oxide Merck.—Reagent (2

ZnO. — Wh., amorph. powd.; faint yellowish tinge.—*Sol.*, dil. $C_2H_4O_2$, min. acids; insol. W.—*Tests:* (*As*) 1 Gm.+3 Cc. solut. $SnCl_2$–no darker color within 1 hr.—(*H_2SO_4; Cl*) 2 Gm.+20 Cc. H_2O; shake; filter; to filtr. add solut. $Ba(NO_3)_2$ –no react.; add solut. $AgNO_3$–at most only sl't opalesc. turb.—(*H_2CO_3; Ca; Mg; Foreign Heavy Met.*) 1 Gm.+10 Cc. dil. $C_2H_4O_2$–compl. sol. without effervesc.; add 20 Cc. NH_4OH–solut. clear & colorl.; add solut. $(NH_4)_2C_2O_4$ & Na_2HPO_4 –no change; add aqu. H_2S–pure wh. ppt.—(*Impur. Reducing $KMnO_4$ in dil. H_2SO_4 Solut.*) triturate 3 Gm. w. solut. 0.2 Gm. ferric alum (free fr. ferrous salt) in 20 Cc. H_2O; add 25 Cc. dil. H_2SO_4; heat gently to dissolve; dil. w. 100 Cc. well-boiled & cooled H_2O, & add a drop decinorm. $KMnO_4$–1 drop should suffice to impart a distinct pink color to solut.—*Uses:* Neutralizing agent, &c.

Note. — For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Zinc Perborate Merck (10

Approx. $Zn(BO_3).xH_2O$.—Wh., amorph. powd. —Insol. W.—On long treatm. w. W., yields boric acid.—Antisep.—*Uses:* Dust.-powd. for wounds, &c., as it liberates H_2O_2.

Zinc-Perhydrol Merck (20

(Zinc Peroxide).—Mixt. equal parts zinc peroxide, ZnO_2, & zinc oxide, ZnO.—Wh. powd. —Insol. W. — Liberates hydrogen dioxide on contact w. acids.—Disinf.; Bactericide; Antisep. —*Uses:* Surgery & gynecology, skin diseases, wounds, ulcers, burns, &c.—*Appl.*, in 10% oint. (w. paraffin oint.), & as dusting powd. either pure or w. a little tartaric acid, which causes more rapid evol. of H_2O_2.

Zinc Permanganate Merck (7

$Zn(MnO_4)_2+2H_2O$. — Violet-brown, or almost black, hygros., cryst. gran.; similar in appearance to potass. permang.—*Sol.*, eas. W.—Antisep.; non-irritating Antigonor.—*Uses: Extern.*, solut. of 1:4,000 of W. as injection in gonor.; & 1–2:1,000 of W. as eye-wash in conjunctivitis.—*Incomp.*, all easily oxidizable or combust. substances (sugar, glycerin, alcohol, &c.).

Zinc Permanganate Merck.—Solution 25% (6

Zinc Peroxide.—see **Zinc-Perhydrol**

Zinc Phenate Merck (4

(Zinc Carbolate or Phenolate).—Wh. powd.—*Sol.*, sl. in W. & A.—Antiseptic.—*Uses:* Dust. powd. in surg. & skin dis.

Zinc Phenolsulphonate Merck.—Cryst. or powd. (1

(Zinc Sulphophenate, or Sulphocarbolate). — $Zn(C_6H_5SO_4)_2+8H_2O$, or, $(C_6H_4[OH]SO_3)_2Zn$-[1:4]+$8H_2O$. — Clear, colorl., column-shaped cryst., or fine, wh. powd.—*Sol.* 1.7 W., 1.7 A. at 25° C.; 0.3 boil. W., 0.56 boil. A. (U. S. P.). —Antisep.; Astring.; Tonic.—*Uses: Extern.*, astring., stim. to foul ulc. & muc. membr. w. sub-acute inflam.—*Inj.*, in gonor., 1–2:200 solut. —*Dose* 1–4 grains (0.06–0.25 Gm.).—*Techn.*, for destroying Oïdium on vines.

Note.—This pure salt exclusively should be used medicinally, as it is the para compound, & is perfectly free from the undesirable ortho compound.

Zinc Phosphate Merck (1

(Tribasic Zinc Orthophosphate).—$Zn_3(PO_4)_2+4H_2O$.—Wh. powd.—*Sol.*, mineral acids, ammonia water, & solut. ammon. salts; alm. insol. W.—Antiepil.; Antisep.; Astring.; Tonic.—*Uses:* Specific for nerv. dis., epilepsy, insanity, &c.—*Techn.*, in dental cements.—*Dose* $1^1/_2$–3–5 grains (0.1–0.2–0.3 Gm.) 3 to 4 t. p. d.—*Max. D.*, in acid solut. 15 grains (1 Gm.) p. d.

Zinc Phosphide Merck.—Powder (3

Zn_3P_2. — Dark-gray, gritty powd.; faint odor of phosphorus. — *Sol.*, hydrochl. & sulphuric acids w. evolution of hydrogen phosphide; insol. W. & A.—Stimulant to nervous system. —*Uses:* Instead of phosphorus in sexual exhaustion, cerebral affect., mania, melancholia, epilepsy, rachitis, caries, osteomalacia, paralysis, & chronic skin dis.—*Dose* $^1/_{60}$–$^1/_{20}$–$^3/_4$ grain (0.001–0.003–0.05 Gm.) in pill, several t. p. d. —*Caut.* Keep in sm., gl.-stop. vials.

Zinc Phosphite Merck.—Pure (8

$ZnHPO_3+2^1/_2H_2O$.—Gran., cryst. powd.—*Sol.*, cold W., alm. insol. hot W.—Antisep.; Astring.; Tonic.—*Uses:* Nerv. dis.

Zinc Phospholactate.—see **Zinc Lactophosphate**

Zinc Picrate

(Zinc Picronitrate).—$Zn(C_6H_2[NO_2]_3O)_2+8H_2O$. —Yellow, cryst. powd.—*Sol.* W.—Antiseptic.

Zinc Picronitrate.—see **Zinc Picrate**

Zinc Pyroborate.—see **Zinc Tetraborate**

Zinc Pyrophosphate Merck (4
$Zn_2P_2O_7$.—Wh. powd.—*Sol.*, acids.

Zinc Rhodanide.—see **Zinc Sulphocyanate**

Zinc Salicylate Merck (3
$Zn(C_6H_4.OH.COO)_2+3H_2O$.— Wh. nced.— *Sol.* W., A. — *Uses: Extern.*, dust. powd. in skin affect.—*Intern.*, as zinc oxide.—Also techn.—*Dose* $^1/_2$–1 grain (0.03–0.06 Gm.).—*Max. D.* $1^1/_2$ grains (0.1 Gm.) single; 5 grains (0.3 Gm.) p. d.

Zinc Silicate Merck (3
Wh. powd.—Insol. W.

Zinc Silicofluoride Merck (10
$ZnF_2.SiF_4+6H_2O$.—Wh. cryst.—*Sol.* W.

Zinc Silvate.—see **Zinc Sylvate**

Zinc Sozoiodolate.—see **Sozoiodole-Zinc**

Zinc Stearate Merck (8
$Zn(C_{18}H_{35}O_2)_2$. — React.-prod. zinc sulphate w. potass. or sod. stearate.—Wh., agglutinating powd.; turns darker on expos.—Insol. in usual solvents.—Antisep.; Astring., without irritant action on mucosa. — *Uses:* Gonor., atrophic rhinitis, &c.—*Appl.*, in substance, or attenuated with europhen (30%) or w. menthol (2%) in urethritis & gonor., & as insuffl. in rhinology; also as dust. powd. for burns (5 zinc stearate & 1 powd. acetanilide).

Zinc Subcarbonate.—see **Zinc Carbonate**

Zinc Subgallate Merck (12
(Zinc Gallate).—44% zinc oxide, 56% gallic acid. — Greenish-gray, neutral powd.; odorl. — Insol. in ordinary solvents.—Antisep.; Astring. —*Uses: Intern.*, fermentative dis. of intest., & in night sw.—*Extern.*, eczema, wounds, gonor., piles.—*Dose* $^1/_2$–4 grains (0.03–0.25 Gm.) in W. & mucilage.—*Appl.*, pure, or in powd. or oint.

Zinc Succinate Merck (50
$ZnC_4H_4O_4$.—Wh. powd.—Insol. W.

Zinc Sulphate Merck.—Highest Purity, Medicinal.—Cryst. or gran. (1
(White Vitriol; Zinc Vitriol).—$ZnSO_4+7H_2O$.—Colorl. cryst., astring., metal. taste; effloresce in dry air.—*Sol.* 0.6 W., at 15° C., 3 G., 0.2 boil. W.; insol. A.; (0.53 W. at 25° C., U. S. P.).—Emetic; Astring.; Antisep.; Escharotic.—*Uses:* Gastric catarrh, nerv. affect., night sw., gonor., ophthalmia, skin dis., &c. For wash, gargle, or inj., 0.5–2% solut. As vaginal wash, 1% solut. For painting on eyelids, 1% solut. As eye-wash, 1:1,000; & as oint., 1:10–20.—*Doses:* $^1/_4$–$^1/_2$ grain (0.015–0.03 Gm.) sev. t. p. d.; emetic, 10–30 grains (0.6–2 Gm.).—*Max. D.* 15 grains (1 Gm.) single; 30 grains (2 Gm.) p. d.—*Antid.*, alkali carbonates, tannin, albumen, demulcents.

do. Merck.— Highest Purity, Medicinal, dried (1

Zinc Sulphate Merck.—Highest Purity, fused sticks (3
$ZnSO_4+2H_2O$.—Wh., light powd.—*Sol.* W.

do. Merck.—Commercial.—Cryst. (1
Uses: Disinfectant. — *Techn.*, as mordant in calico printing, manuf. zinc paints, preserv. wood & skins; w. barium hypochlorite for bleaching paper; siccative for varnishes & oils, & in fireproof paints.

Zinc Sulphate Merck.—Reagent (2
$ZnSO_4+7H_2O$.—Colorl. cryst.; slowly effloresc. in dry air.—*Sol.* 0.6 W.; insol. A.—Aqu. solut. acid to litmus paper.—*Tests:* (*Cl*) 1:20 solut. + solut. $AgNO_3$ – no turb.—(*Foreign Met.*) 0.5 Gm. + 10 Cc. H_2O + 5 Cc. NH_4OH (sp. gr. 0.96) – clear solut.; add aqu. H_2S – pure wh. ppt.—(*Fe*) 1 Gm. + 20 Cc. H_2O + few drops HCl + solut. KSCN – no red color.—(*HNO_3*) 5 Cc. 1:10 solut. + 1 drop indigo solut. + 5 Cc. conc. H_2SO_4 – blue color should not disapp.—(*NH_4 Compounds*) 1 Gm. + solut. NaOH; heat – no NH_3 vapors evolv. (test w. moist litmus paper).—(*Free H_2SO_4*) 2 Gm. + 10 Cc. 85% A.; filter after 10 min.; dil. w. 10 Cc. H_2O – should not redden blue litmus paper.—(*As*) 2 Gm. + 20 Cc. H_2O; introduce into Marsh appar. started w. 20 Gm. As-free Zn & dil. (1:5) H_2SO_4 – no deposit visible in reduction tube within $^1/_2$ hr.—*Uses:* Determ. zinc, &c.

Note.—For *complete* tests see "Chemical Reagents: Their Purity & Tests," published by D. Van Nostrand Co., New York. This reagent conforms to the standard therein given.

Zinc Sulphide Merck.—Pure (2
$ZnS+H_2O$.—Yellowish-wh. to light grayish-wh. powd.—*Sol.*, acids.

do. Merck.—Commercial (1
Wh. to yellowish powd. — *Uses:* Pigment in paints, or mixed w. zinc oxide as mineral white.

Zinc Sulphite Merck (2
$ZnSO_3+2H_2O$.—Wh., cryst. powd.; readily absorbs oxygen fr. air.—*Sol.*, v. sl. W.—Antisep. —*Uses:* Skin dis., usually in form of gauze.—In aqueous solution for preserving anatomical specimens.

Zinc Sulphocarbolate.—see **Zinc Phenolsulphonate**

Zinc Sulphocyanate Merck (8
(Zinc Sulphocyanide, or Rhodanide). — $Zn(CNS)_2$.—Wh. powd.—*Sol.* A., amm.

Zinc Sulphocyanide.—see **Zinc Sulphocyanate**

Zinc "Sulphoichthyolate."—see **Ichthyol-Zinc**

Zinc Sulphophenate.—see **Zinc Phenolsulphonate**

Zinc Sulphydrate Merck (10
$Zn(SH)_2$.—Wh. powd.; decomp. when kept dry, hence kept under water.—Antiseptic.—*Uses. Intern.*, intestinal troubles due to bacterial in-

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fection.—*Extern.*, chronic ecz., psoriasis, & all parasitic skin dis. — Also chem. — *Dose* $^1/_2$–2 grains (0.03–0.12 Gm.) in pill form, 3–12 t. p. d. —*Appl.* 10% oint. w. lanum or lard.

Zinc Sylvate Merck (100

(Zinc Silvate or Sylvinate).—$Zn(C_{20}H_{29}O_2)_2$.—Wh. powd.—Insol. W.

Zinc Tannate Merck (4

Variable compos., but prob'y $Zn_3(C_{27}H_{19}O_{17})_2$. —Gray powd.—*Sol.*, dil. acids; insol. W., A.—Astring.; Antisep.—*Uses: Intern.*, diar. affect.—*Extern.*, specific in gonor. as inject. (0.1–0.5:150 W. w. a little mucil. acacia). — *Dose* $1^1/_2$–3 grains (0.1–0.2 Gm.).

Zinc Tartrate Merck (4

$ZnC_4H_4O_6+2H_2O$.—Wh. powd.—*Sol.*, sl. W.

Zinc Tetraborate Merck (4

(Zinc Biborate, or Pyroborate).—ZnB_4O_7.—Wh. powd.—*Sol.*, acids.—Antiseptic.

Zinc Trichlorocarbolate.—see **Zinc Trichlorophenate**

Zinc Trichlorophenate Merck (20

(Zinc Trichlorocarbolate). — $Zn(C_6H_4Cl_3O)_2$. — Wh. powd.—*Sol.*, acids.—Antisep., like trichlorophenol.—*Uses:* Skin diseases.

Zinc Valerate Merck.—Light, cryst., & powd. (3

$Zn(C_5H_9O_2)_2+2H_2O$. — Wh., glist. laminæ, or powd.; valeric acid odor; sweetish taste; decomp. on expos.—*Sol.* 40 A., 100 W., at 15° C.; (abt. 50 W., 35 A. at 25° C.; more sol. absol. A., U. S. P.).—Antispasm.; Astring.; Tonic.—*Uses:* Diabetes insipidus, nerv. affect., neural., &c.—*Dose* $^1/_2$–3 grains (0.03–0.2 Gm.).—*Max. D.* 5 grains (0.3 Gm.) p. d.—*Caut.* Keep well stop'd.

Zinc Vitriol.—see **Zinc Sulphate**

Zinc Yellow.—see **Zinc Chromate**

Zinc & Ammonium Chloride Merck (3

$ZnCl_2.5NH_3+H_2O$, when freshly prepared.—Wh. cryst.; comp. variable; loses amm. on expos.—*Sol.*, acids, ammonia water; in W. w. decomp. —*Uses:* Welding, & as flux in soldering.—*Caut.* Keep well stoppered & cool.

Zinc & Ammonium Sulphate Merck (3

$ZnSO_4.(NH_4)_2SO_4+6H_2O$. — Wh. cryst. — *Sol.*, eas. W.

Zinc & Calcium Cyanide Merck (15

$Zn(CN)_2.Ca(CN)_2$.—Sm., wh. cryst.—*Sol.* W.

Zinc & Manganese Chloride Merck (4

$2ZnCl_2.MnCl_2+3H_2O$. — Rose-red cryst. — *Sol.* W., A.

Zinc & Potassium Cyanide Merck (4

$Zn(CN)_2.2KCN$, or, $K_2Zn(CN)_4$. —Wh. cryst.—*Sol.* W.—Possesses all the medicinal properties of HCN, but is stable, hence used instead of the acid.—*Dose* $^1/_{10}$–1 grain (0.006–0.06 Gm.) several t. p. d. in solut.

Zinc & Potassium Iodide. — see **Potassium & Zinc Iodide**

Zinc & Potassium Sulphate Merck (3

$K_2Zn(SO_4)_2+4H_2O$.—Wh., deliq. cryst.

Zinc & Sodium Alloy Merck (8

Fr. reduct. of sod. salts in pres. of zinc.—Whitish, gran. solid.

Zinc & Tin Amalgam Merck (6

25% zinc, 25% tin, 50% mercury.—*Uses:* Electrical machines, & in dental cements.

Zingiber.—see **Ginger**

Zirconia.—see **Zirconium Oxide**

Zirconium Merck.—Cryst., scales (1200

Etymol.: Fr. the mineral zircon, in which the element was first found. "Zircon" is derived fr. the East Indian (Ceylonese) "cercars," or "cercan," stone (gargum); hence also the designation "jargon de Ceylan," used by French jewelers for zirconium.—Metal; cont. sm. quant. aluminum.—Zr.—Hard, lustr., grayish, monosymmetrical scales.—Insol. hydrochloric or sulphuric acid.

do. Merck.—Fine cryst. (250

Zirconium Carbonate Merck (50

(Basic Zirconium Carbonate).—Compos. variable, but approx. $3ZrO_2.CO_2+6H_2O$.—Wh., amorphous powd.—*Sol.*, eas. in dil. mineral acids when freshly precipitated.

Zirconium Chloride Merck (1500

(Zirconium Tetrachloride).—$ZrCl_4$.—Wh., lustr. cryst.—*Sol.* W. with decomp.

Zirconium Chloride, Basic. — see **Zirconium Oxychloride**

Zirconium Dioxide.—see **Zirconium Oxide**

Zirconium Hydroxide Merck (25

Approx. $ZrO(OH)_2$.—Wh., bulky, amorph. powd. —*Sol.*, dil. mineral acids when freshly made.—*Uses:* As of zirconium oxide.

Zirconium Nitrate Merck (25

(Basic Zirconium Nitrate).—Compos. variable, but approx. $3ZrO_2.2N_2O_5$.—Wh., cryst. powd. —*Sol.*, eas. W., A.

Zirconium Orthophosphate. — see **Zirconium Phosphate**

Zirconium Oxide Merck.—Anhydrous (35

(Zirconium Dioxide; Zirconia; Zirconic Anhydride).—ZrO_2.—Heavy, wh., amorph. powd.; odorl.; tastel. Acts as a basic oxide.—Insol. in

HCl, & cold H_2SO_4.—Decomposed by hot H_2SO_4 & HF.—*Uses:* Inst. lime in the oxyhydrogen light; also in the manufacture of Welsbach mantles.

Zirconium Oxychloride Merck (30
(Basic Zirconium Chloride; Zirconyl Chloride). —$ZrOCl_2+8H_2O$.—Wh., silky, long, prismatic (acicular), tetragon. cryst.; astring. taste.—*Sol.*, v. eas. W. & A.

Zirconium Phosphate Merck (50
(Basic Zirconium Phosphate; Zirconium Orthophosphate).—Approx.: $5ZrO_2(P_2O_5)_4+8H_2O$.—Wh., dense, amorph. powd.—Insol. W.

Zirconium Sulphate Merck (30
Approx.: $Zr(SO_4)_2+4H_2O$.—Wh., cryst. powd. —*Sol.*, eas. W.

Zirconium Tetrachloride.—see **Zirconium Chloride**

Zirconium & Ammonium Fluoride Merck (30
(Ammonium Zirconifluoride). — $Zr(NH_4)_2F_6$. — Wh. cryst.—*Sol.* W.

Zirconium & Potassium Fluoride Merck (30
(Potassium Zirconifluoride). — ZrK_2F_6. — Wh. cryst.—*Sol.*, hot W.; sl. cold W.—*Uses:* Manuf. metallic zirconium.

Zirconium & Potassium Sulphate Merck (30
Approx.: $ZrK_2(SO_4)_3$.—Wh., cryst. powd.—*Sol.*, diffic. W.

Zirconyl Chloride.—see **Zirconium Oxychloride**

Zizyphus.—see **Jujube-Berries**

Zuckerin.—see **Benzosulphinide; Saccharin**

Zylonite.—see **Celluloid**

Zymase.—see **Invertin**

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