SPIRITUS DISTILLATI.

DISTILLED SPIRITS.

ALKOHOL.

TAKE of rectified ſpirit of wine one gallon,
kali hot one pound and an half,
pure kali, w. one ounce.

Mix the ſpirit of wine with the pure kali, and add of the hot kali one pound; ſhake them together, and digeſt them for twenty-four hours. Pour off the ſpirit, add to it the reſt of the kali, and diſtill it in a water-bath. Keep it in a veſſel well ſtopped.

The ſpecific gravity of alkohol is to that of diſtilled water as 815 to 1,000.*

SPIRITUS

* I ſuppoſe the pure kali is employed to take out the eſſential oil from the ſpirit. The London Rectifiers employ it to take off the flavour of malt ſpirits.

If

SPIRITUS ÆTHERIS VITRIOLICI.

SPIRIT OF VITRIOLIC ÆTHER.

Take rectified ſpirit of wine,
vitriolic acid, of each one pound.

Pour the acid by a little at a time into the ſpirit, and ſhake them till they are mixed; then diſtill the ſpirit of vitriolic æther with a moderate fire, from a retort into a tubulated receiver, the tube of which enters into another receiver, to which it is fitted, until ſulphureous vapours begin to ariſe.

ÆTHER

If it be wiſhed to have pure alkohol, the end of the worm ſhould be fitted into a receiver, by tying a bladder which has been rendered ſoft by moiſtening it, but dried as well as poſſible with a cloth, round the end of the worm in the neck of the receiver. Small holes ſhould be made with a pin through the bladder. Alkohol attracts water ſo ſtrongly from the air, that if it runs in a ſtream through it into the receiver, it will be conſiderably diluted.

The kali ſhould be heated nearly red hot, eſpecially that which is put in the ſtill; and in my opinion it would be better to diſtill the ſpirit after it is poured off from the firſt kali, and then digeſt it with the ſecond portion of kali, afterwards to pour it off and diſtill it by itſelf.

ÆTHER VITRIOLICUS.

VITRIOLIC ÆTHER.

Take of ſpirit of vitriolic æther two pounds,
water of pure kali, M. one ounce.

Skake them together, and diſtill over with a gentle heat, M. fourteen ounces.*

* The proceſs for forming æther from alkohol and vitriolic acid has been variouſly given and reaſoned upon by different authors. What ſeems to me the beſt idea is, that alkohol conſiſts of phlogiſton, acetous acid, and water. When vitriolic acid is applied to alkohol, it unites with part of the phlogiſton, and ſets looſe part of the water, leaving the acetous acid combined with a leſs proportion of phlogiſton and water forming æther. If the exact proportion of vitriolic acid is not employed, if there be too little, or if there be water combined with the alkohol, or vitriolic acid, the alkohol is not all decompoſed; the proportion of æther is therefore leſs, and the remaining alkohol is combined with the æther, and renders part or the whole of it ſoluble in water. By the re-diſtillation as ordered in this proceſs, the æther is ſeparated from the part of the alkohol which comes over along with it, but this does not avoid the loſs of the alkohol which remains un-decompoſed.

SPIRITUS ÆTHERIS NITROSI.

SPIRIT OF NITROUS ÆTHER.

Take of rectified ſpirit of wine two pints,
nitrous acid half a pound.

Mix

un-decompoſed. In order therefore to procure the æther in its full quantity, the pure alkohol, inſtead of rectified ſpirit, ſhould be employed. Conſidering, however, that the College might have ſome reaſon for preferring a proceſs in which there is an evident loſs, I bought a ſmall quantity at Apothecary's Hall, and compared it with ſome I made with the ſame proportions of pure alkohol and acid, and found them differ only in that mine ſmelt a little more of volatile vitriolic acid, but it agreed in all other properties.

If the diſtillation be continued, oil of wine is procured in very ſmall quantity, not nearly ſufficient for the preſent conſumption, Hoffman's anodyne liquor having been more uſed lately, being recommended by the phyſician of the greateſt buſineſs in this country.

If vitriolic acid be applied in a larger proportion, it decompoſes part of the æther, uniting with the phlogiſton, and alſo detaching a part of the water, leaving the acetous acid combined with leſs phlogiſton and water, ſo forming oil of wine and very little æther; as in the proceſs given by the College for oil of wine.

In

Mix them by pouring the acid into the ſpirit, and diſtill over with a gentle heat, w. one pound ten ounces.*

SPIRITUS AMMONIÆ.

SPIRIT OF AMMONIA.

Take weak ſpirit of wine three pints,
ſal ammoniac, w. four ounces,
pearl-aſh, w. ſix ounces.

In the proceſs preſcribed by the College for making æther, if what comes over firſt in the firſt diſtillation of vitriolic æther be taken away by changing the receiver, more æther will be procured in the ſecond diſtillation.

The vitriolic acid which remains in the retort will decompoſe about half the firſt proportion of alkohol.

* This operation ſhould be performed in a tubulated retort, and tubulated receiver, the tube going down into another receiver. The ſpirit ſhould be put into the retort, the acid poured in at once, and the tube of the retort immediately be ſhut. If the acid be put into the retort firſt, an ebullition often takes place, and occaſions the deſtruction of the whole apparatus.

Nitrous æther differs from vitriolic in the ſmell principally. It has however been conſidered as a very different medicine.

Mix them, and diſtill over with a moderate fire one pint and an half.

SPIRITUS AMMONIÆ FOETIDUS.

FŒTID SPIRIT OF AMMONIA.

Take weak ſpirit of wine ſix pints,
ſal ammoniac one pound,
aſa fœtida, w. four ounces,
pearl-aſh one pound and an half.

Mix them, and diſtill over with a moderate heat five pints.*

SPIRITUS ANISI COMPOSITUS.

COMPOUND SPIRIT OF ANISE.

Take aniſeed bruiſed,
angelica ſeed bruiſed, of each half a pound,
weak ſpirit of wine one gallon,
a ſufficient

* There being a little cauſtic alkali in the pearl-aſh, theſe two preparations will be ſomewhat more pungent than if prepared kali had been uſed.

a ſufficient quantity of water to prevent burning.

Diſtill over one gallon.*

SPIRITUS CARUI.

SPIRIT OF CARAWAY.

Take caraway ſeeds bruiſed half a pound,
weak ſpirit of wine one gallon,
water a ſufficient quantity to prevent burning.

Diſtill over one gallon.

SPIRITUS CINNAMOMI.

SPIRIT OF CINNAMON.

Take bark of cinnamon bruiſed one pound,
weak ſpirit of wine one gallon,

 a ſufficient

* In this and the following preſcriptions, the eſſential oils of the plants are diſſolved in the ſpirit. They were formerly called, improperly, compound or ſpirituous waters.

a ſufficient quantity of water to prevent burning.

Diſtill over one gallon.

SPIRITUS JUNIPERI COMPOSITUS.
COMPOUND SPIRIT OF JUNIPER.

Take of juniper berries bruiſed one pound,
caraway ſeeds bruiſed,
fennel ſeeds, of each, w. one ounce and an half,
weak ſpirit of wine one gallon,
a ſufficient quantity of water to prevent burning.

Diſtill over one gallon.

SPIRITUS LAVENDULÆ.
SPIRIT OF LAVENDER.

Take of freſh lavender flowers one pound and an half,

weak ſpirit of wine one gallon,

Diſtill over in a water bath five pints.

SPIRITUS MENTHÆ PIPERITIDIS.

SPIRIT OF PEPPERMINT.

Take the dried herb of peppermint one pound and an half,

weak ſpirit of wine one gallon,

a ſufficient quantity of water to prevent burning.

Diſtill over one gallon.

SPIRITUS MENTHÆ SATIVÆ.

SPIRIT OF GARDEN MINT.

Take the dried herb of garden mint one pound and an half,

weak ſpirit of wine one gallon,

a ſufficient quantity of water to prevent burning.

Diſtill over one gallon.

SPIRITUS NUCIS MOSCHATÆ.

SPIRIT OF NUTMEG.

Take of nutmegs bruiſed, w. two ounces,
weak ſpirit of wine one gallon,
a ſufficient quantity of water to prevent burning.

Diſtill over one gallon.

SPIRITUS PIMENTO.

SPIRIT OF PIMENTO.

Take the bruiſed berries of pimento, w. two ounces,
weak ſpirit of wine one gallon,
a ſufficient quantity of water to prevent burning.

Diſtill over one gallon.

SPIRITUS PULEGII.

SPIRIT OF PENNYROYAL.

Take of the dry herb of Pennyroyal one pound and an half,
weak ſpirit of wine one gallon,
a ſufficient

a ſufficient quantity of water to prevent burning.

Diſtill over one gallon.

SPIRITUS RAPHANI COMPOSITUS.

COMPOUND SPIRIT OF HORSE-RADISH.

Take the freſh root of horſe-radiſh,
the exterior rind of Seville oranges dried, of each two pounds,
of the freſh herb of garden ſcurvy-graſs four pounds,
bruiſed nutmegs, w. one ounce,
weak ſpirit of wine two gallons,
a ſufficient quantity of water to prevent burning.

Diſtill over two gallons.

SPIRITUS RORISMARINI.

SPIRIT OF ROSEMARY.

Take of the freſh tops of roſemary one pound and an half,
weak ſpirit of wine one gallon.

Diſtill over five pints in a water bath.

DECOCTA