

THE CANADIAN PHARMACEUTICAL JOURNAL.

of nitrogen either in the living organism in the acts of nutrition, or by the organic matters of the dead plant or animal. The union of atmospheric nitrogon and oxygen under the influence of electrical tension has been shown by Meissner to be preceded by the production of ozone. By a long series of criti-cally conducted observations, Daubeny (Jour. Chemical Soc., 1867,) has made probable that ozone appears in the vicinity of activo foliago exposed to sunlight, and concludes that the oxygen set free from combination in the plant, is partly ozonized, as is true of that which soparates in the decomposition of permanganates and chromates by oil of vitriol. The plant, then, appears to be an agent of nitrification when living as well as when dead, and ozone is the result of a molecular change which accompanies the decomposition as well as the formation of oxygen compounds.

Hoof Ointments.

The following receipts are communicated by W. Hunting, M.R.C.V.S., in a paper on the subject, in the March number of the *Chemist and Druggist*:

Hoof ointments, for convenience, must have a certain consistency, so as not to spill like oil, if accidentally upset, and yet not to be so hard as to require warming for use. They must not be "sticky," as then the brush with which they are applied gets clogged, and straws and dirt stick to the foot; for this reason, wax should not be added to any hoof ointment. They must be of a dark color, and for this purpose tar is a useful ingredient, heades its beneficial action upon any "thrushes" which may exist. Lastly, they must wash off, so as not to interfere with the ready cleaning of the horse, when necessary. This last quality is not absolutely essential to a good protecting hoof ointment, but its advantage must not be overlooked by those who wish to sell an eligible article. Perhaps, in giving formulæ, it would bo better to divide them into two varieties-

Those which are used for bad feet as a protecting agent, and contain no saponifying ingredient : and

Those which are used regularly as preventives, and like hair dyes and pomatum, "beautifying agents."

The following are good of the first class .-

1.—Barbadoes 'Tar Burgundy Pitch Russian Tallow	equal parts.
2.—Stockholm Tar	
Venice Turpentine	<u>1</u> 16.
n mixing these, melt the two ogether first, then add and he tar.	last ingredients thorougly mix

t tl The following preparations are about the

Ŀ

best I know of as samples of the second class : Soft Soan

Fish Oil.	l pint.
2Stockholm Tar.	4lb.
Soft Soap	4lb.
Tallow	2lb.
Fish Oil	l pint.
• • • • • • • •	

I prefer the latter, as being of the better consistence.

I am quito aware that strong alkalis injure horn, but in these forms the excess of fats prevents any marked effects

Glycerine with fats would obviate all objections, but I know as yet of no mixture

with the proper consistence and color that itself is not a good application, as it tends to make the hoof brittle.

Extract of Valerianate of Ammonia.

Some years ago, M. Guyot Dannecy pub-lished a process for the preparation of extract of valerian, which consisted in lixiviating the root in a displacement apparatus with solution of carbonate of ammionia of a certain density, and reducing the liquid by careful evaporation. This preparation represented all the active principles of the root used, and gave very great satisfaction. M. G. Danneey has since recognized the fact that many patients have evinced great repugnance to the medicine in the form of extract, and this has led him to seek a method of reducing its bulk, so as to admit of its being administered in the form of gelatinous capsules. He ultimately adopted the following process :

Valerian root in coarse powder......100 Alcohol (60 per cent) S0 Liquor ammoniae (22 per cent)...... 20

Treat the valerian root in a displacement apparatus, with the mixture of alcohol and ammonia. When this shall have percolated, introduce a quantity of alcohol (60 per cent) sufficient to bring the weight of the a.nmoniacal tincture to the same figure as that of the valerian employed ; evaporate, with continual agitation, at a temperature not exceeding 160° F., to a syrupy consistence. This extract is enclosed in gelatinous capsules, each of which contains about seven or eight grains.

By making the extract with alcohol, in the manner above detailed, a large amount of mert matter is excluded, and thus it is possible to obtain the active principle itselfviz., the valerianate of ammonia in as small a bulk as possible.—Chemist and Druggist.

Blacking.

Boneblack, by being treated with about 45 per cent. of the strong, and a correspondingly larger weight of the weaker oil of vitriol, separates the animal black in that fine state of division free from grittiness which is an essential point in polishing, and the phosphoric acid mixed with the material undoubtedly likewise aids in accomplishing the "shine." A larger proportion of sulphuric acid, however, could only act injuriously on the leather to which the blacking is applied. Sometimes the phosphates are extracted by muriatic (100 of black to 30 of acid), afterwards using hot water (300); the black residue is then treated with (25) concentrated oil of vitriol. The more thoroughly the black has been decomposed by the acid the more will it take up of the adhesive agents which give the brightness. These are syrups of molasses of various kinds, varying in weight from 1 to 11 times the weight of the original black. Finally, some oil or grease is added, to preserve the leather soft, in variable pro-portions up ω half the weight the black. Gum, glue, and similar substances will in part replace the syrups. The color may sometimes need improving. This can be done by means of lampblack sturred up with spirits or benzine, by means of Prussian blue by a decoction of galls or other tanning material mixed with a solution of copperas, or some extract of logwood with a trace of bich-

romate of potash. The Prussian blue is would wash off pretty easily. Soft soap by made of equal parts of yellow prussiate and copperas, the solution of which in four times their weight of water are mixed, the precipitate after settling stirred up, and after a time washed with water.

A superior blacking is certainly the following, though we think it doubtful whether the fact of rendering the leather impervious to water is to be called an advantage: 3 lbs. of lampblack and $\frac{1}{2}$ lb. of finest boneblack are made into a uniform paste with a gallon of molasses. To this is added a hot mixture of $\frac{1}{2}$ lb. fused gutta percha, $\frac{3}{2}$ lb olive oil, and $\frac{1}{2}$ -5 lb. of stearine, and to this, lastly, a solution of 3 lb, gum senegal in a quart of warm water. A good restorative of patent leather is a solution of stearic acid, 5 parts, in 7 of turpentine, mixed with 3 of fine lampblack, to be applied with a woolen rag, and rubbed dry with a clean white rag.-Ex.

Ozonic Ether.

The substance called ozonic ether, and which is now creating so much interest in tho profession, is peroxide of hydrogen in ether. The mixture thus formed was first made by myself. I was testing the action of the per-oxide of hydrogen on various substances, orga...ic and inorganic, and having one day added a strong solution of the peroxide to some ether, I was surprised, to find that a portion of the peroxide seemed to pass to the other, the ether, when decanted off, having a very strong taste of peroxide, and yielding oxygen freely when treated with oxide of manganese. On being kept, the ether was discovered to undergo further change, the oxygen becoming more stable and fixed. The addition of a little alcohol to the ether facilitates the absorption of the peroxide. The combination of the oxygen with the ether and some water, although it is very slight, is persistent, for the mixture has been sent to Australia without deterioration. The compound is, without doubt, a useful agent. I think I may claim it as an addition to our list of remedies likely to hold its place.

I used it in the first instance for diffusion in the air of the sick room, dispersing it in the form of spray. It is quick in action and effective for purifying the air; it does not charge the air with moisture, and it does not irritate the breathing organs. The disadvantage of it is that it cannot be safely used near a light or fire. It should be sprayed through a glass tube. - Dr. Richardson in Medical Times and Gazette.

Cement for Leather.

The Coachmakers' Journal says, of the many substances lately brought very con-spicuously to notice for fastening pieces of leather together, and in mending harness, joining machinery-belting, and making shoes, one of the best is made by mixing ten parts of sulphide of carbon with one of oil of turpentine, and then adding enough gutta-porcha to make a tough thickly flowing liquid. One essential pre-requisite to a thorough union of the parts consists in freedom of the surfaces to be joined from grease. This may be accomplished by laying a cloth upon them and applying a hot iron for a time. The cement is then applied to both pieces, the surfaces brought in contact, and pressure applied until the joint is dry.