

merce; the South African, presumably from *Aloe ferax*, as also *A. africana*, and the West Indian from *A. vulgaris*. On the European continent the Cape aloes is most frequently employed, and in the German "Arzneibuch" the drug is also described as the inspissated juice of the leaves principally of *Aloe Ferax* and *A. Africana*. Besides this, the ordinary *Aloe capensis lucida*, there is now an aloe in Natal which is quite dissimilar, being of grey color, non-translucent, and containing a crystalline constituent. According to experiments recently carried out at Kew, this is certainly derived from *A. ferax*. The perfectly amorphous and lustrous Cape aloes can, therefore, be no longer be referred to this species.

Asafetida.—At the present time the market is quite bare of good qualities, and the London stock stated on July 1st as 785 cases, included only inferior residues from earlier auctions, scarcely fit to be used. If further imports do not soon arrive there will be little suitable material for powdering for the approaching winter demand, and the present sensible deficiency will become further apparent.

Balsamum Copaive.—Some time ago a large lot of copaiba balsam from West Africa was put upon the market, but did not find any buyer, partly because it was of so dirty a quality and partly because the origin was not stated. When investigated later it was found to be a genuine balsam but not purified. Hitherto it has been always assumed that South America is alone the native land of the copaiba tree.—*Br. and Col. Druggist.*

Bleaching Beeswax.

THE following is A. and P. Buisine's theory as to the bleaching of beeswax, &c., by the exposure to air, as portrayed in the *Compt. Rend.*, 112:

When beeswax is exposed in thin layers to the air, and to direct sunlight, it is quickly rendered colourless, but in the dark, in presence of a free supply of air, oxygen or ozone, no decolorisation whatever is effected, even after a long time. In presence of sunlight, oxygen, and especially ozone, destroy the colour very rapidly, but the presence of oxygen is not absolutely necessary, for when the wax is exposed to sunlight in vacuo, or in an atmosphere of carbonic anhydride it is bleached, but much more slowly than in the presence of air.

The composition of the unbleached wax differs considerably from that of wax which has been bleached by exposure to air and sunlight. The latter contains a slightly larger percentage of free acids, but a larger proportion of the unsaturated hydrocarbons in the crude wax have disappeared; this fact shows that in the bleaching process not only does the coloring matter suffer total combustion, but the unsaturated acids and the unsaturated hydrocarbons are converted in saturated compounds by the fixation of oxygen. This is also the case with other fatty substances, such as suet, and the reason why

the addition of 1 to 5 per cent. of suet to beeswax causes decolorisation to proceed more quickly, is because the suet in its oxidation or combustion aids the destruction of the coloring matters. The addition of a small quantity of other oxidisable substances, such as essence of terebenthene, also hastens the action, so that it would seem that the destruction of the coloring matter is due to the formation of ozone by the oxidation of the added substance.—*B. & C. Druggist.*

How the Druggist Should Cleanse his Hands.

ON this subject, a writer in the *Pharmaceutische Centralhalle* advises as follows: When the hands have been stained by strong alkaline solutions, they should be washed in some dilute acid nitric, oxalic, or acetic (1 to 100 of water). If soap without water is then immediately applied, fatty acids are deposited in the skin, which thus becomes less liable to crack. The effects of the lime solutions, and also of strong ammonia may be prevented in the same way. After using mineral acids, the hands should be washed with water and rubbed while wet with a piece of soap. If the acid was strong, or has affected a large surface, they should be bathed, after washing, in a weak solution of soda (1 to 100). Strong sulphuric acid is first to be washed-off as far as possible with plenty of water, after which soap should be employed as above directed. If water is used abundantly there is no danger of too much heat being evolved. When the acid has caused severe burns, the affected parts may be covered with a paste composed of magnesia, carbonate of magnesium, or bicarbonate of sodium, with a little water. Nitric acid is removed by the same process. Burns by this acid, especially when treated with alkaline agents, are apt to leave behind a yellowness of the affected integument. Nitric acid destroys the epidermis so quickly that it can scarcely ever be restored to a normal condition, and the same is the case with the fumes; also with those of nitromuriatic acid, bromine and chlorine. Iodine stains should be treated with a solution of sodium thio-sulphate (1 to 10 of water). When the hands have been exposed for a long time to the action of carbolic acid, wash them first with alcohol, which may be used several times over for this purpose, and then with soap, after which without being dried, they may be rubbed with lanolin. After working with sublimate solutions, it is best to bathe the hands for some time in a solution of common salt (1 to 50 of water), followed by soap and lanolin.

Milk a Microbe Killer.

THE results of Dr. Freudenreich's experiments, as now published in the *Annales de micrographie*, are of the greatest importance. He finds that the cholera bacillus, if put into milk drawn fresh from the cow, dies in an hour, and in five

hours if put into fresh goat's milk. The bacillus of typhoid fever takes 24 hours to die in cow's milk, and 5 hours in goat's milk. Other microbes suffer a like fate in varying periods. By this showing, fresh milk is a bactericide or killer of disease-causing micro-organisms. But Dr. Freudenreich's researches go yet further than the foregoing. He finds that milk, maintained for an hour at a temperature of 55 degrees (131 degrees F.), loses its power to kill microbes—a statement which is of interest in face of the common teaching which makes the purification of milk depend upon its being boiled. Again, the microbe-killing properties of milk become weaker the older it gets. Cow's milk after four days, and goat's milk after five days, cease to have any effect upon micro-organisms. The conclusions, at any rate, are altogether in favor of the consumption of fresh milk.

Cash as an Available Asset.

PROMISES to pay are sometimes good. Cash in hand is always reliable. Book accounts, no matter how good they may be, will not pay a bill or take up a note when it falls due. Having too many accounts "good as wheat" has ruined many a man, for the simple reason that he could not realize on them at the time when he needed money the most. It would seem impossible to do business without credit; but all business need not necessarily be done on a credit basis. Keep a supply of ready money always on hand, no matter what the temptation may be otherwise. This is an absolutely safe rule for all business men. Occasions may arise, and often do arise, when cash, and cash only, will do the talking. During a stringency in the money market, and in times of panic, it is the man who has the cash who is master of the situation. Instances are known where millionaires, many times over, could not raise money on the giltiest of gilt edge securities. The great firm of Baring Bros., one of the oldest and wealthiest banking firms in the world, got into trouble because they had too many "securities" and not enough cash. And so it is likely to happen with every business man, if he neglects this all-important matter of ready money. Any man may be a shrewd investor and money maker, and yet a spendthrift, not in the sense that he throws his money away, but for the reason that he has it all "invested" when his cash drawer should be full of coin. It is a bad, and oftentimes, a ruinous system of doing business, to have one's entire capital tied up in stocks and bonds, or merchandise and book accounts. Never fail to keep a good cash balance in one or more banks, when misfortune is much less likely to overtake you.—*Ex.*

Chrome Blue is a new chromic pigment, supplementing those previously known, viz., yellow, green and red.

A harness that looks luminous in the dark has been invented. It is intended to prevent collisions at night.