

has been gentle, so much the more is the flavour of the cheese sweet and agreeable. It is at this precise moment, when the reaction between the elements has produced combinations agreeable to the taste, that it is necessary to perfect the cheese—sooner than this, it is not finished; later it is in a state of decomposition more or less advanced.

The insects which attack cheese are:—

1. The fleshworm or cheesemite (*acarus sira*), which devours the cheese when partially dried. These animals are so much the more dangerous because they hatch beneath the crust, whence they spread throughout the interior, causing great injury. Brushing the cheeses frequently, wiping them with a cloth, and washing the shelves on which they lie with boiling water, constitutes some sort of protection; but the most certain method is, after having rubbed the cheeses with a brine, to let them dry, and smear them over with sweet oil. It is in this way that Gruyère cheese is treated when attacked by this destructive insect.

2. The larvæ of the gilded green fly (*musca cesar*), of the common fly (*musca domestica*), and, above all, of the fly of putrefaction (*musca putris*). These larvæ introduce themselves into the cheese and commit ravages. All these animals may be destroyed by vinegar, by the vapour of burning sulphur, or by washes of chloride of lime. When these insects are numerous, take up the cheeses and scrape and wash the shelves with water holding in solution chloride of lime; then scrub the floor and whitewash the walls. When the cheese-room is dry replace the cheeses. If the cheeses have arrived at an advanced stage of decomposition, they should be put into powdered charcoal, mixed with a small quantity of chloride of soda, which destroys the offensive odour. Haste must also be made to finish their manufacture before they become entirely putrid. Mildew can be prevented by scraping the cheese, by brushing it, and by rubbing it with oil.

Practical Memoranda.

ALLOYS, OR MISCELLANEOUS METALS.*

Chaudet's Medal Metal.

Copper 100 parts; tin 4.17. Cast in moulds formed of cupel bone ash.

Lead in Grains.

Lead, melt it, and pour it in a small stream from a height of three or four feet into cold water.

Bell Metals.

1. Copper 25 parts; tin 5. Mix.
2. Copper 79 parts; tin 26. Mix.
3. Copper 78 parts; tin 22. Mix.

Common Bell Metal.

Copper 100 par tin 50. Mix.

Parisian Bell Metal.

Copper 72 parts; tin 26½; iron 1½. This alloy is used for the bells of small ornamental clocks.

Bath Metal.

Brass 32 parts; spelter 9. Mix.

*Haellit's Hand Book.

Another.

Brass 35 parts; zinc 9. Mix.

Brass.

Copper 3 parts. Melt, then add zinc 1 part.

Button Makers' Fine Brass.

Brass 8 parts; zinc 5. Mix.

Button Makers' Common Brass.

Button brass 6 parts; tin 1; lead 1. Mix.

Bright Brass Color.

Brass reduced to fine powder.

Red Brass Color.

Copper filings 3 parts; bole 2. Mix.

Fine Brass.

Copper 2 parts; zinc 1. Mix.

Brass for Wire.

Copper 34 parts; calamine 56. Mix.

To give Plates of Copper a Brass Color.

Expose the plates, after being sufficiently heated, to the fumes of zinc.

To Brass Copper Vessels.

Argol 1 part; amalgam of zinc 1; muriatic acid 2; water to fill the vessel. Mix.

Brass or Hard Solder.

Brass 2 parts; zinc 1. A little tin is occasionally added.

Jewellers' Metal.

Copper 30 parts; brass 10; tin 7. Mix.

Fusible Alloys.

1. Bismuth 8 parts; lead 5; tin 3. This is fusible at boiling water heat.

2. Zinc, lead, and bismuth equal parts. This may be fused in a bit of writing paper, and will melt even in hot water.

3. Lead 3 parts; tin 2; bismuth 5. Mix. This alloy melts at 197° Fah. In using this composition to make casts of seals, gems, &c., it should be employed at the lowest possible temperature at which it will keep fluid; for this purpose it is as well to let it become pasty, and then forcibly impress the substances together.

4. Bismuth 2 parts; tin 3 parts; lead 5. Melt. This alloy fuses in boiling water.

German Silver.

1. Nickel 1 part; zinc 1; copper 2.

When intended for rolling into plates, use the following:

2. Nickel 25 parts; zinc 20; copper 60; to which may be added 3 of lead.

3. Pure copper 55 parts; nickel 23; zinc 17; iron 3; tin 2.

Fine White German Silver.

Iron 1 part; nickel 10; zinc 10; copper 20. Mix.

German Silver for Castings, &c.

Lead 3 parts; nickel 20; zinc 20; copper 60. Mix.

Genuine German Silver.

Copper 40½ parts; nickel 31½; zinc 25½; iron 2½. Mix