OUR PRIZE COMPETITION.

STATE HOW TO MAKE, AND THE USES OF, PASTES AND PLASTERS.

We have pleasure in awarding the prize this week to Miss Amy Phipps, St. George's Infirmary, Raine Street, London, E.

PRIZE PAPER

Pastes and plasters are most commonly prescribed for outward application; the latter always so, the former occasionally for internal use, such as when used in the form of confection of guaiacum.

A paste is formed by the blending of a solid with a liquid, in prescribed proportions, care being taken to keep the mixture from becoming too liquid.

The most common form of a paste is that made by the combination of drugs and a fatty base, the result being known as ointment (Latin, *unguentum*).

Every drug thus prepared needs individual preparation to get the best results. If properly made, pastes should be free from grittiness; watery extracts should be rubbed down smoothly in water before combining with the fatty base; soluble salts which are likely to crystallise should be rubbed smooth with a little oil, and again drugs of a deliquescent nature are best rubbed down with a little water first. Liquids which have to be incorporated should be added gradually to the fatty base and stirred slowly. A water bath, or heat in some other form, is usually necessary to bring about thorough incorporation.

The base of an ointment may be lard, paraffin, wool fat, almond oil, and many others. Cleanliness throughout the preparation of pastes is essential.

Ointment is sometimes used to rub into the skin, but its more general use is in the healing of wounds and abrasions, when it is usually spread on lint or linen. A special preparation known as Unna's paste is made hot for use, and is applied with a brush over a gauze bandage, and when cold affords a rest to the affected part. Plaster of paris is also used in the form of a paste for the same reason, though on a more elaborate principle.

Plasters are prepared by spreading some sticky substance containing the drug required on holland, leather, muslin, swansdown, &c., the two former being the most common.

In spreading a plaster, stretch the material carefully, as this will prevent it stretching when the plaster iron passes over it.

The plaster preparation is sometimes melted in a water bath; the plaster iron warmed, but

not made too hot, and cleaned before use. If the iron is too hot, the plaster may be decomposed, especially when it contains a volatile ingredient. For very small plasters, a spatula may take the place of the iron. When spreading, a margin of about half an inch should be left uncovered, to facilitate the removal of the plaster and to prevent soiling the clothing.

Emplastrum Cantharides is not spread by heat; and opium and soap plasters require very little heat. Blisters are usually spread upon adhesive plaster, with a small margin left bare. These latter are applied as a powerful counterirritant; their application results in a blister, which is snipped, drained and dressed. Plasters are generally useful on account of their power of gripping and exerting a steady pressure over the affected part.

The skin is first washed, and the plaster snipped round the edges, heated, and applied, the skin being held on the stretch as much as possible. A large plaster should be perforated for the evaporation of moisture.

They are often used when a part is weak after injury, or to relieve pain, also for enlarged glands, syphilitic swellings, &c. Mustard plasters or mustard leaves are sometimes applied as counter-irritants. When ordinary adhesive plaster is used for strapping a limb to secure rest, the limb is usually shaved, otherwise much discomfort is caused in removal. The strapping is cut into strips and applied from below upwards, each strip overlapping two-thirds.

In all these applications evenness, neatness, and cleanliness must be carefully observed.

Dr. A. S. Blumgarten, writing in The American Journal of Nursing, says that pastes and plasters are usually applied (1) to relieve pain; (2) to dilate the blood vessels of the skin, and in this way to withdraw blood from the deeper tissues or organs, thus relieving congestion and inflammation of these organs; (3) to produce blisters. The rapidity and character of the effect produced depend on the strength of the drug contained in the paste or plaster.

HONOURABLE MENTION.

The following competitors receive honourable mention :---Miss M. James, Miss J. Maclean, Miss E. O'Brian, Miss F. Simpson, Miss N. Johnson, Miss Bennett.

QUESTION FOR NEXT WEEK.

For what conditions is tracheotomy done, and what instruments are required for the operation? Describe the after-care of the patient.



