MENTION SOME OF THE USES OF THE SKIN, ITS CONDITION IN HEALTH, AND SOME PROMINENT FEATURES CHARACTERISTIC OF DISEASE,

We have pleasure in awarding the prize this week to Miss Gladys Tatham, Davos Platz.

PRIZE PAPER.

The chief uses of the skin are excretory, protective, and ornamental. The skin is an important organ of excretion, and a valuable aid to the other excretory organs in getting rid of waste matter thrown off by the body. Through the skin waste matter escapes by way of the sweat and sebaceous glands in the form of vapour, watery substances containing sundry impurities, and called collectively "sweat," and a fatty or oily fluid which lubricates the skin.

The skin acts as a protective envelope to the body, chiefly by keeping the body-temperature equable by helping to regulate the radiation and escape of heat from the surface of the body. During cold weather, or when for any reason the body loses too much heat, the pores of the skin contract, and help to retain the normal temperature. In hot weather, or when the body is overheated, the pores expand and give off moisture, helping to cool the body by evaporation. The skin also acts protectively by preserving the superficial nerves and blood-vessels from scratches or other forms of injury.

A healthy skin also serves ornamental purposes.

The outer layer of the skin is called the *cuticle*, and consists of dry epithelium, which can be removed without causing pain or bleeding.

The deeper layer of skin is known as the *cutis*; it contains small blood-vessels, and nerve fibres which end in minute projections called papillæ. As stated above, sweat and sebaceous glands are also part of the skin.

Sweat glands are minute tubes opening on to the surface of the skin, but having their roots in the deeper layers.

Sebaceous glands supply the oily matter which lubricates the skin.

Nails and hair are modifications of the cuticle. Nails are scales compactly laid one on top of the other. Hair arises from a root embedded in the true skin; it is hollow, like a tube, with a central pith. It also contains pigment, and a certain amount of oil.

In health the skin should be clear, free from oiliness, but not too dry; the sebaceous glands and sweat glands should be capable of acting freely. The nails should be hard, not brittle and dry, smooth and of a good colour, not ridged, bent, or misshaped in any way. The hair should be clean, free from dandruff (or scurf), not "lanky" with oil, but glossy with its natural lubricant, free from any strong odour.

Disease of the skin may be (a) Functional or (b) Organic.

(a) Functional affections of the skin include the following :---

Pruritus, or itching, generally with absence of any eruption.

Atrophy of the skin, as, e.g., the wavy, white lines across the abdomen in ascites, or following pregnancy.

Albinism, or congenital absence of pigmentary colouring matter.

Lentigo, or freckling.

Chloasma, a yellow or brownish discolouration on the forehead or neck of women, especially in pregnancy.

Affections of the hair, e.g., alopecia or baldness, brittleness, and premature greyness of the hair.

Affections of the Sebaceous Glands, including "blackheads," various small forms of pimples. Seborrhœa, an excessive secretion of fatty matter giving rise to an oily appearance, and in certain forms also to a scaly eruption with offensive odour.

Affections of the Sudoriparous or sweat glands, including absence of all perspiration; excess of perspiration (usually a symptom of various diseases); bromidrosis, or offensive odour of the sweat; and very rarely chromidrosis and hæmatidrosis—*i.e.*, coloured and bloody sweats.

(b) Organic affections of the skin include the various forms of—

Erythema.

Eczema, either chronic or acute, or seborrhœic in type.

Impetigo, a disease chiefly seen among children of the poorer classes. It is due to unhygienic conditions in the first place, but is highly infectious and contagious.

Urticaria, or nettlerash, an intensely irritating eruption. Certain articles of food causing digestive disturbances, internal parasites such as threadworms, and contact with jellyfish are some of the conditions likely to bring on an attack.

Herpes Zoster, or Shingles, is a painful eruption which may appear almost anywhere, but more frequently is seen below the ribs or across the lumbar region. There is usually intense neuralgic pain in the region corresponding to the nerve root involved, with slight feverish symptoms. The skin involved becomes



