

no fuel, and a long way from food, but it would do your heart good to be in our tent, to hear our songs, and our cheery conversation."

"Be not," said the Rector, "merely courageous, but lighthearted, also gay. . . . Yet lightheartedness is not for ever and a day. But courage comes all the way.

"'Fight on, my men,' says Sir Andrew Barton,
'I am hurt, but I am not slaine;
I'll lie me down, and bleed a-while,
And then I'll rise and fight again.'"

"In bidding you goodbye," Sir James Barrie concluded, "my last words must be of the lovely virtue. Courage, my children, and 'greet the unseen with a cheer.'"

OUR PRIZE COMPETITION.

WHAT ARE THE PRINCIPAL GLANDS OF THE BODY, AND WHAT ARE THEIR FUNCTIONS?

We have pleasure in awarding the prize this week to Miss Sarah Ann Cross, Woolwich Home for Ailing Babies, Eglinton Road, Plumstead, S.E.18.

PRIZE PAPER.

Glands are small bodies or organs occurring in different parts of the body; there are two kinds, "secreting glands" and "excreting glands," or both combined.

The structure of a gland is a mass of tissue formed of collections of cells which are surrounded by blood and lymph vessels, and which manufacture, from the nourishment supplied to them by the blood, certain substances which form the secretion of the gland, which did not pre-exist in the blood; this substance is set apart for some future use in the body. In most cases the secretion is poured out by the gland-cells into tiny vessels or tubes, which join together to form a duct, which leads to the exterior or into a cavity. Some glands pour their secretion into the blood or lymph stream, and it has some special influence over the general nutrition of the body; these glands are known as ductless glands.

The principal glands of the body are the liver, kidneys, salivary, pancreas, lymphatic, spleen, mammary, lachrymal, sudoriparous, sebaceous, ceruminous, meibomian and the intestinal glands.

The liver is the largest gland in the body; its function is secreting bile and glycogen and manufacturing an internal secretion which is poured into the blood. The bile is required to aid digestion, chiefly of the fatty matters, by neutralising the acid of the gastric juice.

The kidneys are the chief excretory organs, and excrete an injurious substance from the blood called urea.

The salivary or digestive glands, parotid, sub-maxillary and sub-lingual, secrete saliva. Their function is to prepare a substance which converts starch into sugar, and to bring the materials of the food into such a condition that they may be taken up by the blood and lymphatic vessels, so as to be rendered available for the wants of the system.

The pancreas secretes pancreatic juice; this neutralises the gastric juice and prevents the further action of its ferments.

Lymphatic glands act as filters for the lymphatic system, and detain any septic material, thus preventing it entering the general circulation.

The lymph glands also play an active part in the elaboration of the blood.

The mesenteric glands are the lymphatic glands of the lacteals; they assist in elaborating the chyle.

The spleen is one of the ductless glands; its functions are connected with the work of sanguification, and the metamorphoses of the blood corpuscles.

The mammary glands of the breasts consist of numerous masses of cells which, during lactation in nursing mothers, discharge a secretion of milk for nourishing their babies.

The lachrymal glands secrete fluid which moistens and lubricates the front of the eyeball.

Sudoriparous glands excrete the perspiration, which consists, when condensed, of a colourless transparent, slightly acid liquid, having a characteristic odour.

Sebaceous glands secrete fatty matter to keep the skin soft and flexible.

Ceruminous glands secrete the waxy secretion of the ear.

Meibomian glands, sebaceous glands of the eyelids.

The mucous glands, found in the mucous membrane from the mouth to the rectum. The glands separate from the blood a watery fluid called mucus, which serves to keep the mucous membrane moist.

HONOURABLE MENTION.

The following competitors receive honourable mention:—Miss James, Miss P. Thomson, Miss A. Anderson, Miss Jennings, Miss T. Butler.

QUESTION FOR NEXT WEEK.

Describe the part played by insects in spreading disease.

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