

deformed. Young girls should not carry heavy weights, such as message baskets, or their heavy brother or sister of ten months old. Contorted attitudes while sitting at school-desks or standing at play should be noticed and corrected by suitable exercises under medical advice and trained supervision.

Rachitic children are always delicate, liable to chills, chest complaints, and tubercular disease. Unfailing attention to the laws of health and building up the weakened constitution with wholesome food, with corrective exercises when prescribed, are the chief essentials for their welfare.

#### HONOURABLE MENTION.

Many of the papers this week were admirable, especially that of Miss Sarah Ann Cross, who receives honourable mention, as do also Miss Lucy Walker, Miss M. Dods, Miss L. M. Park, Miss A. D. Fairbank, Miss S. Simpson, Miss M. Eaves, and Miss O'Brien.

Miss Cross writes:—The principal requisites in the care of rachitic children are:—

1. Good, nourishing food.
2. Pure fresh air, and sunshine.
3. Plenty of soap and water.

The bones of a young infant consists largely of cartilage, which only gradually becomes converted into bony tissue. In rickets the gelatinous substances in the cartilage, owing principally to an insufficiency of lime, continue to predominate. The process of hardening is delayed, and the bones become bent and deformed, or greenstick fracture may be produced in bad cases. The ends of the long bones are especially liable to bend out under weight of body. The elbows, wrists, and ankles get enlarged, and there may be marked curving of the spine. Chest narrow, with prominent sternum—pigeon-breasted. In a bad case the bones of the head are also affected, flattening it out at the top, and giving a square appearance. The fontanelle will be open very late, and the teeth will be much behind their time in appearing, and will be cut with great irregularity.

In some cases the child is fat and flabby, in others he is extremely emaciated and pale. There are usually digestive disorders, and the abdomen will be big and prominent. Perspiration, especially about the head and face, will be extremely marked during sleep, and the child is restless.

The errors in diet which cause rickets are the exclusive use for long together of sterilised milk, or of patent artificially preserved foods, or of starchy foods at too early an age.

Miss A. D. Fairbank emphasises the need for a carefully regulated diet, fresh air, and sunlight, with good hygiene. Surgical treatment will be required for the deformities of bones. . . . The early stage of the disease usually reveals its onset by the restlessness of the child at night, and a profuse perspiration about the head; other symptoms are soreness and tenderness of body and pallor; there may be diarrhoea, or there may be constipation.

#### QUESTION FOR NEXT WEEK:

What precautions would you take in nursing a case of venereal disease in regard to the patient, the household, and yourself?

### THE GERM THEORY IN PRACTICE.

On Wednesday, January 15th, Mr. Stephen Paget, F.R.C.S., delivered a lecture, under the auspices of the Nurses' Social Union, in the Lecture Hall of the Institute of Hygiene, Devonshire Street, W., which was illustrated by lantern slides.

The lecturer was introduced by Miss A. C. Gibson, the Hon. Organizer of the London Division, and in the fascinating way peculiarly his own, Mr. Paget dealt with his subject.

Nurses, he said, were somewhat apt to think that the germ theory meant a knowledge of the application of aseptic and antiseptic methods and was of quite modern origin, but it was something much more than that. That was a very narrow view.

Treatment by antiseptics was of very ancient origin, an instance was the application by the Good Samaritan of oil and wine to the wounds of the man who fell among thieves, the spirit in the wine being, no doubt, an antiseptic.

Hippocrates, 500 years before, directed the use of antiseptics after an operation for empyema, and before that Homer, and probably the Egyptians, sprinkled wounds with drugs. Medical men of a century or so ago appeared to think antiseptic treatment more or less unnecessary. Thus Potts, a surgeon to St. Bartholomew's Hospital, referring to the application of an antiseptic fomentation for a poisoned wound, said: "Better amputate the limb and be done with it."

Aseptic methods were also indicated by the smoking of meat and the boiling of milk for their preservation from the earliest ages. It was highly probable that Noah boiled the milk in the Ark. But the first beginning of the modern series of discoveries was inaugurated by the first man who saw germs through the microscope, some 200 years ago. This was Leuwenhoek, a Dutchman.

The first to really study and understand the nature of yeast, to see the millions of cells under the microscope and to study its action in brewing and baking was Cagniard-Latour, a Frenchman. From this began the study of fermentation in 1836, and arising from that the researches of Pasteur, whose

[previous page](#)

[next page](#)