

BUSINESS ANNOUNCEMENT.

THE Business Manager regrets her inability to pay off all the remaining shares of the Journal. She considers a balance at the bank is necessary, of at least a couple of months' press bills, ahead. She will be glad to allow Rs. 100 towards payment of shares this year.

PRIZE COMPETITION PAPER.

CHOLERA.

CHOLERA commences in two ways; 1st suddenly, 2nd after premonitory symptoms; "Malaise" and painless diarrhoea, may extend from one to ten days, or longer. The choleraic seizure often occurs during the night, or in the early morning, when the atmospheric temperature is lowest as is the vitality of the human system, there is frequently from the very first great depression and debility. Spasmodic griping in the bowels is first felt, followed by frequent purging, and vomiting, first of the contents of the stomach, then of watery material, these stools, which are at first coloured, quickly change to an almost odourless white-coloured fluid, resembling rice water, these rice-water stools may amount to fifteen or twenty in the course of a few hours, at first they are discharged with great force, followed by a sense of relief, with a peculiar feeling of exhaustion at the pit of the stomach. Vomiting may be equally frequent, at the same time severe cramp, commencing in the fingers and toes, rapidly extend to the calves, thighs, and muscles over the bowels, the fingers and toes become blue, urine at first is scanty, and highly coloured and ultimately none is passed; urine is not secreted by the kidneys, the bladder is empty, there is also a burning sensation and a feeling of tightness at the pit of the stomach, the tongue is white and tremulous and a bitter taste in the mouth. Little or no saliva is secreted, mouth dry, and a great thirst, with an urgent desire for cool drinks. Pulse feeble, more frequent than natural, rising to 96, the skin is cool, no fever, although the patient complains of heat and oppression, and prefers to lie uncovered. The patient is restless, tossing, about the bed, lastly a rapidly increasing exhaustion is evident, the patient is now on the verge of collapse, should this condition succeed, the pulse becomes quicker, hardly perceptible, the discharges cease, and often the cramps too, the skin is covered with perspiration, has a sickly smell, and a bluish tinge, the nails and lips especially assume this appearance, the voice is husky and faint, the tongue is pointed, and both it and the breath are cold. The countenance assumes the peculiar aspect of the Cholera death, the eyes are sunken and glassy, the pupils remain the natural size; the nose sharpened, the cheeks are hollow, and the jaw falls, the temperature falls, the pulse imperceptible, there is hiccough, stools are passed unconsciously, and the body becomes bluish-grey. Often two or three

hours before death, there is some return of heat in the scalp, forehead, and over the chest; this is an unfavourable sign, being due to relaxation of minute blood-vessels caused by the approach of death.

Favourable Symptoms are; the gradual cessation of vomiting and purging, the skin becoming warmer and the pulse fuller, the voice regaining power, urine being voided, colour appearing in the stools, the burning pain in the stomach ceasing, and the patient falling asleep, even in apparently hopeless cases recovery may take place. So long as the patient has strength to vomit the case is not hopeless. The immediate danger is not over till urine is passed, and the average time of passing urine in favourable cases is 72 hours after seizure. If the kidneys do not resume their office, the waste matters which should be excreted in the urine poison the blood. The face becomes flushed, and the head hot. There is restless delirium and the patient dies of uræmic poisoning with rise of temperature, which may continue after death. The duration of the disease may be from several hours to several days and much longer when secondary results occur.

Causes.—The precise cause of Cholera is not known, but it is generally admitted to be a poison which may be transmitted by human intercourse, by drains, by food, by drink, especially adulterated milk, or even by winds, and which may contaminate wholesome drinking water, or food, a peculiar microbe the "*comma*" bacillus or spirillum has been found in the intestines and discharges of cholera patients; but there is not sufficient evidence to show whether this is the cause of the disease. There is, however, evidence tending to prove that the cholera evacuations poison, and that the great cause of cholera is the contamination of water used for drinking purposes with the dejections of persons suffering from the complaint. There is reason to believe that the contagious principle becomes rapidly multiplied in water, especially if exposed to the heat of the sun. In pure water it dies in about ten days, milk adulterated with contaminated water may become a medium for the dissemination of cholera, or the poison protected in the clothing or in the soil may dry, remaining vital in the same way as germs of various fungi are known to remain vital until brought into activity by favourable circumstances of air, heat, and moisture, as may occur when the dried germs are swallowed or inhaled. Be this however, as it may, and in whatever manner the poison is produced, experience has demonstrated that whatever tends to lower the vital powers will predispose to the disease. Thus three factors are required "the poison germ," "the introduction of the germ into the system," and predisposition of the recipient. Therefore, cholera is not contagious, but it is infectious, that is, conveyed through an intermediate agent as in typhoid fever.

Treatment.—No certain cure has been discovered, careful nursing is judicious and plenty of fresh air. When cholera prevails, the slightest approach to diarrhoea should be at once attended to, all purgatives should be avoided. If there is much nausea or vomiting, a mustard poultice should be applied over the pit of the stomach, the patient should be kept in a recumbent posture, as quiet as possible. The diet, very little is really necessary or desirable.

should consist of tea, arrowroot, sago, mutton or chicken broth, Liebig or raw-meat juice, with a little good Port. If vomiting is very severe, only a teaspoonful should be given, at half-hour intervals. Thirst may be quenched by plain cold or iced water, or soda-water, and ice if available may be kept constantly in the mouth, water with a little vinegar or sulphuric acid is the best drink, as the cholera germ cannot live in acid fluid. So long as tissue is passed, the case is not hopeless, mustard poultices may be applied over the loins, cramp and cold are best relieved by friction with the hand, and application of hot water bottles. This treatment, if commenced early, will often prove successful. A cholera patient should be isolated as much as possible and no one except the attendant should be allowed in the apartments. All excretions should be carefully disinfected and also bedding, clothing, and room. Great care should be exercised with regard to diet during convalescence. Broths and jellies, farinaceous puddings, sago and arrowroot may be given, but no solids whatever, until the stools are of a natural colour, the urine is secreted freely, and all other symptoms have vanished.

Saline given either intravenous or subcutaneous is very beneficial to the patient, as it helps to increase the flow of urine.

NURSE DUBOIS.