

**Water Tanks.**

In a paper recently read before the Engineers' Society of Western Pennsylvania, on "Iron and Steel Water Tanks," Mr. W. C. Coffin stated that the most economical proportions for such were obtained when the height was equal to from two-thirds to the whole diameter. The height of settling tanks should be about a quarter the diameter. Stand pipes should have a diameter not less than one-tenth their height. The thinnest plates used in constructing such tanks or stand pipes should not be less than three-sixteenths inch thick, and the bottom plates should not be less than one-fourth inch to five-sixteenths inch thick. Dipping the plates in a hot bath of asphaltum before shipping protects the material better than any other method of painting. In painting the tanks care should be taken to see that the paint is of such a consistency that it will not scale off. This can be ascertained by dipping a piece of painted iron in cold and in hot water, and also testing it by a hammer.

**NOVEL SCENE IN INDIA.**

The illustration represents a scene which, it may well be believed, is not a very common one, even in India, where the greater portion of the population have had sufficient proofs of the danger to life from

infection. While the disease is usually communicated by personal contact, there were found plenty of instances of infection through articles of clothing, furniture, or carpets, sometimes years after the original cases. Quarantine should certainly be continued for two weeks after apparently complete recovery.

Information regarding typhoid fever is somewhat unsatisfactory. Its usual incubation period is twelve to fourteen days, and the limits may be placed at nine and twenty-three days. It is infectious throughout its whole course and for at least a fortnight after convalescence. This last statement of the committee should not be taken for more than it is worth, for there is good evidence that the stools of convalescents from typhoid may contain the infectious principle much later than two weeks after convalescence has been established.

Although epidemic influenza is included in the report, it is much less interesting than the other diseases mentioned, because its infectiousness is not universally admitted and information regarding it is scanty. Its incubation period appears to vary from one day to five, and usually to be two or three days.

In fixing the incubation period of measles, the appearance of the rash was taken as a starting point, because of the difficulty of determining the time of be-

delayed as long as eight days. Infection begins with the earliest symptoms and is very active in the later stages of the disease during desquamation. Quarantine should be at least eight weeks, and in all cases as long as any desquamation continues. This is the disease which is of all most readily communicated by a third person, probably through the medium of the clothing. The mild cases, without eruption and but slight sore throat, are common distributors of the disease.

The labors of the committee served to confirm the old rule that twelve days is the usual incubation period of smallpox, although this time is sometimes reduced to ten or increased to fifteen days. The disease is communicable from the start until the last scab has disappeared; but the danger of infection is not great until the disease has become well developed.

Chicken-pox resembles smallpox closely in the features of the periods of incubation and infectiousness, except that fourteen days is the usual time of incubation rather than twelve. The danger of communicating this disease lasts until all scabs have come away.

The text-books give so much latitude to the incubation periods of contagious diseases, particularly the exanthemata, that the information obtained from them is of but little use, and it is an excellent thing to have



**A CAPTIVE TIGER IN INDIA.**

tigers to give them a wholesome dread of that animal. Our sketch, which is from the *London Graphic*, was made by a party traveling with the troops near Bombay. The captive tiger was in charge of a native, who was going around the country exhibiting him for such small sums as spectators might contribute.

**The Periods of Incubation and Duration of Infectiousness of Zymotic Diseases.**

A very valuable contribution to medical knowledge has been made by the report of a committee appointed by the Clinical Society of London, to investigate the periods of incubation and contagiousness of certain diseases. This inquiry, as the *Pacific Record* states, partakes somewhat of the nature of a collective investigation, and the quality of the committee was such as to warrant perfect reliance upon the accuracy of the work done. The report gives a complete list of all the cases in abstract form; but it is the general conclusions that will be of most interest to the medical profession at large.

The investigation of diphtheria showed that the usual incubation period does not exceed four days, and that it is oftener two days than any other period, while seven days may be set as the outside limit. The disease is undoubtedly communicable during its whole course and the duration of the infection period is very variable, although, as a rule, some unhealthy condition of the throat will be found to account for late cases of

beginning of the period of invasion. This would probably lengthen the actual time of incubation by about four days, but as given it is found to be fourteen days very exactly, more than three-quarters of the cases reported following exposure in thirteen, fourteen, or fifteen days. Exceptionally the interval may be as short as seven or as long as eighteen days. Measles is communicable throughout its course, and, as is well known, the contagion is active when the catarrhal symptoms first appear. Quarantine with disinfection may safely terminate three weeks after the appearance of the rash.

Mumps has a very long incubation period, and the majority of observations makes it very exactly three weeks, with a limit of fourteen days on one side and twenty-five days on the other. It is most infectious at the start, beginning four days before the parotiditis appears, and the danger of communicating the disease becomes gradually less for two weeks, when it may be considered to be over.

German measles or rotheln appears in from two to three weeks after exposure, its incubation period being very irregular. It is infectious two or three days before the rash appears, and in most cases quarantine need not be continued more than two weeks.

Scarlet fever has an incubation period that is measured by hours rather than by days. A large majority of the cases appear in from twenty-four to seventy-two hours after exposure; but a respectable number develop during the first twenty-four hours, and some are

some reliable and accurate rules for guidance in the important matter of quarantining not only those who actually suffer from contagious disease, but also those who have been exposed to it.

**Treatment for Children.**

In a recent number of the *Medical Record*, Dr. J. W. Huddleston, of this city, describes a very successful method of treating young children for diarrhea, without diet or medicine, namely, by means of injections of water. He simply washes out the little one in a very thorough manner. The infant, bared of shoes, stockings and diaper, is placed across the mother's lap face down, with the legs hanging by her side. Beneath the child's abdomen is a sheet of rubber cloth which is held snugly around its waist by the mother; the lower end of the cloth rests in a small tub placed beside the mother's chair. A two quart fountain syringe filled with a salt solution of nearly normal strength (six per cent) is hung about four feet above the baby. The water is at the temperature it flows from the faucet—i. e., from 68° F. to 75° F. In the middle of the tube leading from the bag is a glass pipe which serves to show when the current is flowing freely. To the nozzle is attached a large soft rubber catheter (size No. 12). This is anointed with vaseline, passed up the baby's rectum and colon as far as it will go, and the entire contents of the bag allowed to flow through it.