very weak solution of an astringent metallic salt. After the first effective injections the pains are considerably diminished, the urine is passed more easily, and the slight fever which is often present disappears. The relief of the pain may also be hastened by tepid sitz-baths. It is an interesting fact that the patient, who at the beginning of the gonorrhea can only pass urine amidst the severest pain, is able to empty the bladder while in the bath with the greatest ease and comfort. With regard to the injections they should at first be as weak as possible, so that they may never act as caustics, but only as astringents. The substance from which Prof. ZEISSL has derived the best results is the permanganate of potash, of which he prescribes two centigrammes in 200 grammes of distilled water, thrown in four times daily by means of a caoutchouc syringe, care being taken to prevent the entrance of air, the presence of even a small quantity of which in the urethra suffices to induce severe dysuria. If this occur, or pains arise in the testes, the injections must be suspended, and the symptoms suitably treated. As already stated, it often happens that after a few injections the pain diminishes, and all traces of the gonorrhœa frequently disappear after only a week's employment of the permanganate. If however, after using this very weak solution for a week, no essential improvement has taken place, it may be strengthened by a centigramme; but Prof. Zeissl never goes beyond fifteen centigrammes in the 200 grammes of water. A rule to be observed is not to continue the same injection for too long a time, as the urethra becomes accustomed to the presence of the medical agent, the further employment of which is then useless, and a weak solution (thirty centigrammes to 200 grammes) of sulphate of zinc should be substituted, gradually increasing the strength to five decigrammes. If this does not succeed. Prof. Zeissl then resorts to the employment of insoluble bodies, such as bismuth, kaolin, or the acetate of lead. Injections containing these suspended bodies must be well shaken, so as to cause a uniform distribution of the precipitate in the urethra. This powder may remain in the urethra for a long period-and at all events until the next discharge of the urine; and when it is forced into the glandular orifices of the prostate it often remains there for a fortnight longer. This circumstance explains the beneficial action of these suspended substances, as they remain in close and prolonged contact with the membranous and prostatic portions of the urethra and with the prostate itself—the parts in which the catarrh exhibits the greatest obstinacy.— Weiner Med. Woch-Lea's Abstract.

## HINTS ON SEA-BATHING.

August is the month for sea-bathing, which, if properly managed, is one of the most healthful and invigorating of exercises, though its good effects are often neutralized through ignorance or

carelessness. The following extracts from Dr. J. H. Packard's Sea-Air and Sea-Bathing (one of the "American Health Primers") furnish a very good summary of rules for the guidance of the unprofessional reader in this matter:—

\*How Long to Bathe.—It is quite absurd to lay down positive rules as to the time people should remain in the water, since they do not carry watches in with them. And any day's experience on the beach in the season will show a great many bathers sporting in the water for half an hour or an hour, and even longer, without any perceptible ill effect. It is quite a common practice among the young to go in, take a bath, come out and lie on the sand, and go in again, perhaps a number of times. The powers of endurance vary greatly; and it is well known that swimmers have sometimes remained in the water for many consecutive hours without harm.

There can, however, be no question that for sanitary purposes, and as a matter of prudence, it is better to take the bath, and then to leave the

water for the day.

What is wanted in ordinary sea bathing is to carry the chilling of the body only so far as to promote the subsequent reaction. The first sense of cold on entering the water is soon followed by the feeling of returning warmth; and this continues for some little time, to be again succeeded by a sense of chilliness. This second cooling is accompanied by a diminution in the activity of the circulation, shown especially by blueness of the lips or finger nails; and this should invariably be regarded as a signal for leaving the water at once. To wait until the teeth chatter, and the skin of the fingers becomes shriveled like those of a washerwoman, is in a very high degree imprudent.

For those who have young children or invalids under their charge, and who are able to observe and regulate the exact time of their stay in the bath, it may be said that this may be according to the condition of the skin, somewhere between two and fifteen minutes. It is always safe to err on the side of prudence, and to cut the bath needlessly short rather than to prolong it at any risk.

Perhaps it need hardly be said that the colder the water is the less time should be spent in it. When the air and the water are both cold, the duration of the bath should be correspondingly diminished. This condition of things increases the danger of shock and of insufficient reaction.

One should enter a sea bath comfortably warm, and exercise actively during the stay in the water. The temporary chilling of the surface will then give place quickly to a glow, which may be kept up

or even increased by thorough rubbing.

How to Bathe.—There is very seldom opportunity for diving into the sea, and only a very small number of bathers are expert enough to do it. The best plan is to walk or run rapidly into the water, wading out at once far enough either to dip the whole person head and all, or to allow a wave to break over the bather. Some like to have a