

to open their mouths, to speak, to chew their food, to swallow hot or cold liquids, to expose themselves to a current of air, or to enjoy the least respite, even under the influence of morphia or salicylate of soda. These four patients are enabled now, after two months of treatment, to enjoy that freedom from pain which they had not before known for years, and to live like the other members of the family. The treatment has consisted in the daily use of 75 grains of antipyrine (15 grains every four hours, till the entire quantity was taken). I have also relied very much on the subcutaneous injections of antipyrine—8 grains dissolved in the same weight of water, and the whole injected for one dose—but as these injections have sometimes been painful, I have lately modified my formula, as follows: I now dissolve my 8 grains of antipyrine in 22 grains of water, to which, in order to enhance the effect, I sometimes add  $\frac{1}{2}$  grain of cocaine. These injections act with surprising rapidity and energy. I now rely on these hypodermic injections in all the inveterate cases, and during the painful paroxysms combine the hypodermic treatment with the internal administration of 75 grains a day. The results in this most grave and most intractable of painful disorders have been unprecedentedly gratifying and surprising.”—*Medical Record*.

**COLD WATER ENEMATA IN CATARRHAL JAUNDICE.**—Ten years ago Krull recommended a method of treating catarrhal jaundice which had at any rate the merit of simplicity; it was to give daily large rectal injections of cold water. The water on the first day was to have a temperature of 59° F.; on the following days the temperature was gradually raised to about 72° F. Loewenthal and Eichorst have lately reported very good results from this treatment, and E. Kraus has found it equally successful in children, the quantity used in their case being as much as one litre ( $1\frac{1}{4}$  pint). Dr. A. Chaffard, in a recent number of the *Revue de Médecine*, reports very favorably of the method. He states that the large injections are well borne, and are generally retained for five or ten minutes; they produce only slight colicky pain, and after the stool has been passed the patient feels considerably relieved. Improvement begins almost at once; pruritus and yellow vision disappear with great rapidity; the feces resume their natural color, and the bile pigments disappear from the urine in from two to eight days. The mode or action of this method of treatment is not very clearly made out, but it seems to be proved that one effect is to cause forcible contractions of the gall bladder. The bile is secreted under very low pressure, and as the experiments with toluylendiamine have shown, deep jaundice may be produced if the bile becomes concentrated and thicker than usual. It is quite possible, therefore, that active contraction

of the gall bladder might overcome the slight obstacle at the aperture of the ductus choledochus; such an effect would be doubtless favoured by increased peristalsis of the duodenum.—*Br. Med. Jr.*

**THE ETIOLOGY OF PHTHISIS.**—In an interesting article on the etiology of phthisis (*Philadelphia Med. Times*), Dr. R. W. Philip, of Edinburgh, Scotland, reaches the following conclusions:

1. In view of the work of Koch, it is impossible to avoid admitting that a casual relationship exists between the tubercle bacillus and the phthisical process.
2. The mere predication of this relationship is not sufficient in explanation of the clinical facts and the generally fatal termination of such cases.
3. The usually received explanations of the *modus moriendi* in phthisis are insufficient.
4. It appears probable that the lethal influence of the bacillus is due to the production thereby of certain poisonous products.
5. Clinical and experimental evidence appear to indicate that the morbid secretions from the respiratory surfaces afford a good medium for the growth of the tubercle bacillus and, presumably, for the elaboration of such products.
6. Such a product is separable from the carefully selected and prepared sputum.
7. This product is possessed of well-marked physiological properties, being eminently toxic to frogs, mice and other animals.
8. The toxic properties of the product are, speaking generally, depressant.
9. More particularly they include a marked depressant influence on the heart.
10. This depressant influence seems to be exerted through the medium of cardio-inhibitory mechanism.
11. The toxic action of the product is more or less completely opposed by atropine.
12. The amount of the product which may be separated appears to bear a distinct relation to the abundance of the bacillar elements present.
13. Absorption of the poisonous product most probably occurs by way of the lymphatic circulation.

**WHAT THE MORPHINE HABIT WILL DO.**—The ingenuity of morphine victims to hide their vice has never been better illustrated than in the case of a young girl at a fashionable young ladies' boarding school, near Philadelphia, as told by a contemporary.

The disclosure came about accidentally. When the young student returned to the school this fall she had periods of deep despondency, and often asked the privilege of going to the room in the seminary set apart as a hospital. There she would lie for a day at a time, only rousing herself when any one approached the table, on which stood an ink-bottle and a stylographic pen. The nurse having occasion to send a message to the doctor, attempted to write with this pen, the young girl at that time being asleep. The pen not only refused to write, but the practiced eye of the