

(B) *On the Composition of Blood.*—After cold there is an increase of red and white blood corpuscles and haemoglobin.

After hot air and steam baths a diminution followed by moderate increase in robust people.

(C) *On Respiration.*—The greatest irritation of the respiratory centre is produced by a cold application on chest and abdomen, then follow deeper respirations and an increased oxygen consumption, and a freer carbon dioxide elimination.

It must be noted, however, that after cold applications, respiration is affected by the extent to which reaction ensues; if the latter is good, then respiration becomes much deeper, and more air is inspired into the lungs.

If mechanical influences be added to thermic, as in douches, the effect upon the respiratory centre is much more enhanced.

(D) *On Muscular System.*—The fatigue curve is much increased by cold, that is, the working capacity is much improved.

Warm baths, unaccompanied by mechanical effect, lower the working capacity. Combined with mechanical effect warm baths increase working capacity, but not to the same extent as cold, or alternating hot and cold.

(E) *On Tissue Change.*—The influence of hydropathic procedures on circulation, respiration, composition of the blood, and muscular action has been stated. If these effects are far-reaching in health, how much more marked must they be in disease. The quantity and quality of the blood in various organs and parts of the body are improved and controlled, and since functional activity is the chief agency in producing tissue change, and this activity is dependent upon the blood supply in the organs, we may, by influencing the latter, readily exercise a powerful effect upon the former. That thermic and mechanical irritation applied by means of water upon the cutaneous surface arouses cell activity and effects tissue change is a fact that is based upon substantial experimental data.

Accepting these conclusions as correct, as they are attested to by practical demonstration, we are then in possession of an important agent with which to treat successfully many forms of mental and nervous diseases met with, not only by the specialist, but by the general practitioner.

Our plan of treatment, to be more specific, has been as follows:—

*Neurasthenia.*—In all bath treatment it is a fundamental principle that reaction must follow the application of cold water.