

producing species. The favorable conditions and presence of germs in so great a variety would seem to promise the speedy overthrow of all vital function in the tissues of the body, were it not for the fact that nature has made provision for resisting the encroachment and interference of these organisms, which is brought about principally in three ways:

*First*, the fluids of the body are capable of destroying them by their acid character, or prevent their growth by their alkaline reaction.

*Second*, the white corpuscles of the blood and the connective tissue cells have the power to destroy the bacteria by taking them into their interior and digesting them. This can only be accomplished to a definite extent, and when more bacteria are present than the cells can digest, the cells themselves give way and are destroyed by the bacteria, and we have death and the putrefactive process set up.

*In the third place*, the bacteria overcome and destroy each other, or are destroyed by their own products. If a wound is inoculated with several kinds of bacteria, one species will gain the ascendancy at the expense of the others, till it has by destruction so contaminated the media in which it is operating by its own activity, and has produced a condition in which it cannot grow; an excess of acid, or alkali, or alcohol; then its activity ceases and the germ becomes incompetent to produce its species. At this stage another kind of germ that thrives on the conditions present may take up the fight and change conditions to his own hurt or disadvantage, and he in turn is compelled to give way to a more vigorous successor.

This kind of warfare will continue indefinitely, or till by surgical and medical interference or renewed and reinforced vital function, the system is enabled to overcome the parasitic influence and re-establish a normal and vigorous functional condition.

It is at this point that the interference of the surgeon or physician is needed to turn the process in favor of the attacked structures.

That the disinfecting process may be intelligently accomplished, it is not necessary that we recognize the peculiar variety of micro-organisms which may be present, as fortunately the larger number will succumb to comparatively harmless agencies, and all can be reached by drugs contained in our materia medica.