

arises as to whether any opening exists whereby the appeasing force of hereditary influence can be mitigated. It must always be borne in mind that the upward trend of evolution is in favor of the effacement of morbid and wrong tendencies; that all things being equal the good surmounts the evil, and that it is health which strives to have the last word. Hence the existence of an alcoholic

tendency in a family is not to be regarded as implicating all its members, but merely means that being forewarned they should be able to counteract any special dangers which may have been inherited, by assiduously cultivating habits of right living and by the careful avoidance of the use of alcohol in any form—this being a danger which they are forbidden to brave.

## SCIENCE AND ALCOHOL

The cause and nature of the phenomena of inebriety are described with unusual clearness and force in a recently published book, entitled "How to Impress the Evils of Alcohol, Cases and Comments from a Doctor's Practice." The author is Dr. W. A. Chapple, M.P., Ch. B., M.R.C.S., D.P.H., who is widely known as a writer upon physiological and psychological topics. The author sets out in condensed form something of the structure and functions of the brain and nerve system, and goes on to explain the effects upon these organs of alcoholic indulgence. His statements have received high commendation from medical authorities and others competent to pass judgment upon their accuracy. About one-third of the one hundred and fifty pages of the volume is devoted to a statement in general terms of what strong drink does, the remainder is a record of eleven specific cases of the disastrous effects resulting from the facts and processes previously described. The whole treatise is well worthy of careful perusal and study, having the great advantage of setting out scientific truths in easily comprehended language. The following extracts from the first part will give an idea of the writer's record of the facts and conclusions; his own words are closely followed, no change being made except where it is necessary to connect passages, because of omissions which limited space has compelled.

The truth, the whole truth and nothing but the truth, about alcohol is contained in a nutshell. Here is the kernel which the nutshell surrounds.

Alcohol is a poison having a specific affinity for the nerve-centres of the brain and paralysing those centres in the inverse order of their development, the last developed suffering first and most and the first developed suffering last and least.

Let not the reader be deterred by this first formidable and comprehen-

sive statement of a scientific fact. It will grow luminous as we proceed, and shed a light upon many of the mysterious manifestations of alcoholism. We must first understand our terms. They are all capable of simple description—nerve cells, brain centres, paralysis, development. Let us understand what these mean.

### The Brain

The brain is composed of nerve cells, little star-like bodies of microscopic size. So numerous are they that they can be counted by the million by the aid of the microscope, all