TOBACCO AND ITS EFFECTS ON YOUTH.

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For three hundred years the judgments of men have been divided on the subject of the use of tobacco by adults. We shall here present the testimony as to its use by the young. We shall endeavor to state fairly both sides.

An American plant, tobacco, was taken to Europe soon after the discovery of this continent. It was in use by the Indians in three ways, by pipe, or cigar, and as snuff. Its use now extends over the world.

Tobacco has for its most active principle a substance called nicotine, composed of nicotine proper and a bitter extract. The smoke also contains carbon, ammonia, an empyreumatic substance, carbonic acid and carbonic oxide. The effects of these substances on the body are, briefly, these: Free carbon is an irritant, and discolors the bronchial tubes and teeth; ammonia bites the tongue, produces dryness of mouth and throat, excites the salivary glands, and has a solvent influence on the blood; carbonic acid and oxide are poisonous and produce drowsiness, headache, lassitude; the latter, unsteadiness of heart, tremulous and convulsive movements of the vessels and vomiting. proper produces in man vomiting, purging, sinking at the stomach, vertigo, palpitation of the heart and muscular weakness. It causes death quicker than any other poison except prussic acid. (Stillé.) One thirty-second of a grain causes toxic symptoms in man, and onesixteenth of a grain has produced muscular spasms and other effects lasting three days. The empyreumatic substance causes oppression and bad odor to breath; the bitter extract, bad taste and vomiting. The effect of the smoke on animals, such as cheese mites, flies, bees and wasps, is to cause convulsions and death. One of the first effects of the smoke on the stomach is nausea and vomiting. Next, it affects the nervous system, producing dizziness, muscular tremors and spasms;