

BUILDING GROUND IN ITS RELATIONS TO HEALTH.

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The condition of the ground has very much to do with all questions of health. The character of the soil, the degree to which it can dispose of all that comes in contact with it—whether in the form of gases, of animal or vegetable decay, of pure and impure liquids,—all have intrinsic and vital bearings upon human health. The making of the earth, a place fit for the healthful habitation of man, is a part of the problem which creative skill has considered. We need to become aware of the constant activities and adjustments taking place to this end. These are not accidental or incidental, but involved, as if the chief things intended to be conserved. Where natural transformations are in nowise interfered with by art, it is wonderful to see how processes involving productions inimical to health are so conducted as to be entirely consistent with vigorous existence. While decomposition is the rule, evil therefrom under natural conditions is the exception. While, for instance, enough carbonic acid is produced each day to kill all the inhabitants of the earth, yet it is so well managed as not to interfere with the health of man or animal.

But the very moment a spot comes to be builded upon, it is by necessity placed in abnormal conditions. The building clears the ground of that herbage which had no unimportant sanitary office in appropriating the products of decay. It covers it from sunlight and sun-heat, and necessarily makes its condition as to moisture quite different. It interferes with the range of winds, and modifies the immediate thermometric and hygrometric conditions of the atmosphere. It throws the rainfall into streams upon the ground around its sides, instead of allowing it to diffuse itself into drops. In winter it causes accumulations of snow and ice. It alters the course of water, making, it may be, the cellar, the well, the cistern, the cesspool, the privy vault and the sewer parts of its underground drainage. In a word it alters the whole relation of the ground occupied and of its immediate surroundings. Besides all this, the necessities of habitation create filth, garbage and dust, and refuse of various kinds, which are conveniently added to the soil just where it cannot use them.

Pettenkofer says of the city of Munich, that about ninety per cent. of its excretions go into the ground. It is thus easy