DWELLING HOUSES: THEIR SANITARY CONSTRUCTION AND ARRANGEMENTS

Published @ 2017 Trieste Publishing Pty Ltd

ISBN 9780649542802

Dwelling Houses: Their Sanitary Construction and Arrangements by W. H. Corfield

Edited by Trieste Publishing Pty Ltd.
Cover @ 2017

www.triestepublishing.com

W. H. CORFIELD

DWELLING HOUSES: THEIR SANITARY CONSTRUCTION AND ARRANGEMENTS

Trieste

DWELLING HOUSES:

THEIR SANITARY CONSTRUCTION AND ARRANGEMENTS.

BY

PROF. W. H. CORFIELD, M. A., M. D.

(OXON.)

REPRINTED FROM VAN NOSTRAND'S MAGAZINE

NEW YORK:
D. VAN NOSTRAND, PUBLISHER,
23 MURRAY AND 27 WARREN STREET,
1880.

PREFACE.

The absorbing interest manifested in this subject of late was deemed a sufficient reason for republishing these lectures in a more convenient form than was presented in the Magazine.

The eminence of the Author, moreover, seemed a guaranty that the work would be regarded as a standard authority on a subject of great public interest.

EDITOR OF MAGAZINE.

DWELLING HOUSES:

Their Sanitary Construction and Arrangement.

SITUATION AND CONSTRUCTION OF HOUSES.

It is only necessary for me to make a few introductory remarks about climate. Although few persons can choose what part of the world they will live in, a considerable number are able to decide in what part of the country they will reside. Other things being equal, the nearer a place is to the sea, the more equable is the climate, and the further inland the place is, the more is the climate one of extremes; so that those who wish for a moist, equable climate, with warm winters and warm nights, will choose a place by the seaside; while those who wish for a more bracing atmosphere will go further inland. In England, too, there is considerable difference, as is

well-known, between the climate at various parts of the seaboard. Thus, the western coast, being exposed to the winds which pass over the Atlantic, and to the action of the moist, warm air which passes over the course of the Gulf Stream, has a warm, moist atmosphere, and a heavy rainfall; while the eastern coast, which is swept by winds that have passed across Siberia and Russia, and have only the narrow strip of German Ocean to pass over before they reach our coast, has a dry, bleak, and comparatively cold climate.

For the same reason, too, the exposition of a house, or the way in which it faces, is a matter of great importance in this climate, as is well-known; a southern exposition, for example, being warm and genial, whilst an eastern one is just the reverse.

In the neighborhood of forests, the air is damp during a great part of the year, from the enormous amount of evaporation that takes place from the leaves of the trees, and Humbolt tells us that the

large forests on the banks of the Amazon are perpetually covered with mist. Other things being equal, a bare, open country is drier and hotter than a well-wooded one.

I will divide the soils, for sanitary purposes, into two kinds—pervious and impervious; those that allow water to pass freely through them, and those that do not. Pervious soils are such as gravel, sand, and the less compact and softer limestone, which allow water to pass through their interstices, and chalk, in which the water, for the most part, travels through the fissures; and the typical impervious ones, such as the various clays, mostly named from the localities where they are best known, as the London clay, Oxford clay, Kimmeridge, clay. Most of the metamorphic rocks and the hard limestones are non-porous, but have a multitude of crevices, through which the water finds its way. In the former case, the water which falls on the surface passes readily through the soil, until it comes to some

impervious stratum below, over which surface it passes, until it either finds outlet at the surface of the ground where the impervious stratum crops out, or until it reaches the nearest water-course, so that above the impervious layer, which has arrested its progress through the rocks, there is a stratum of water of a depth which will vary with a variety of circumstances—a stratum which can be reached from the surface of the ground by digging wells down to it. This water we call the "subsoil" water, or the ground water (*grund-wasser*). In some instances, the impervious stratum just spoken of is placed in such a manner as to prevent the escape of the subsoil water at all, in which case the soil is said to be water-logged. The water which falls on the impervious soils, on the other hand, does not sink into the ground, but remains on the surface, or runs off if there be a suitable incline, and so such soils are necessarily damp. The diseases that are prevalent upon the pervious soils are enteric