

districts leads me to the opinion that this necessary provision is more honored in the breach than the observance. But it is vital, and should be unflinchingly enforced. The modern tendency is to abandon the idea of basements, and this should make the correct and effectual dampcourse more easy of attainment, as well as to simplify the gradient of the drainage system.

"As regards the material to be used for dampcourse, it is important to notice the exact wording of the By-law Model Series (20), viz.: 'Sheet lead, asphalt, or slates laid in cement, or of other not less durable material impervious to moisture.' In my judgment this by-law has been most systematically disregarded in all those districts where the common, cheap, and ineffective "tarred felt" (or shall I call it "tarred sand paper") has been allowed—see Model Clause, page 90. The material must not only be impervious, it must be durable. Many good forms of bitumen dampcourse are on the market, and are preferable in my opinion to either slates or tarred felt. Sheet lead I have never seen used on ordinary speculative buildings. Pitch and tar carefully graded, and of proper consistency and applied to the full width of the wall $\frac{3}{8}$ -inch to $\frac{1}{2}$ -inch thick may safely be passed. But when all due care has been taken as to level and quality of dampcourse it is a very common occurrence in houses of from £10 to £100 rental to find that the gardener has paid so much attention to the formation of nicely sloped and really artistic flower beds around the house that the soil has been banked up to cover both damp course and air gratings for ventilating under the floors. Occupiers and gardeners need some education on this point, for they not only grow flowers, but they propagate the bacillus which eventuates in 'dry rot' and consequent risks to health. And in this connection I may observe that even yet in the buildings of an average class the ventilation under the floors is inadequate. We must insist on through ventilation, back to front and side to side, with a minimum of blind ends.

"Concerning damp sites, concreting is not of very much use, unless fine stuff is used on the surface and properly floated or grouted. The idea that ordinary concrete is impervious to moisture is fallacious. Even when this process is carefully done,

I suggest that the surface of the concrete under the floor should be at a higher level than the adjoining ground outside the building. Where the natural level of the ground water is within 2 feet or 3 feet of the surface, the site could with advantage be covered with good Portland cement concrete, put on in two layers with a layer of asphalt between, and the provisions of By-law 59 relating to subsoil drainage should be enforced. Compliance with these provisions, and the floor level raised 18 inches or 2 feet above kerb level, ought to make a fairly dry habitation, providing always that the walls are properly built, and the roof, gutters, and downspouts finished in a workmanlike manner. There can be no excuse for dampness or dry rot except the excuse of unpardonable ignorance, carelessness, stupidity, or a criminal haste to make money regardless of consequences.

"2. Air Space Around Dwellings.—Most sanitary inspectors to-day can, with a fair amount of accuracy, give the death-rate of any locality if the density of population per acre is stated. We now realise that overcrowding on space tends to illhealth, and that ideal conditions are impossible when houses are too closely crowded together. Nearly every town in the United Kingdom has been to a greater or lesser degree too closely packed together, and it is in this relation that more adequate powers should be given to Local Authorities to enable them to secure (1) Wider streets, (2) The compulsory planning on the detached or semi-detached principle. (3) A minimum air space at the rear of 500 square feet per house. (4) A standard number of houses per acre. With reference to the width of new streets, I suggest that the fixed amount of 36 feet or 39 feet, now in vogue should be abolished, and the width should be determined more by the possibilities of the use and amount of traffic which the street may be expected to serve. The following widths are suggested: Business thoroughfares of large towns, 80 feet to 100 feet; ordinary streets in residential districts, 45 feet to 60 feet; minimum for any street, 45 feet.

"This would allow of good footwalks and possibly a boulevard on one side at least of every street. In streets where the traffic is purely of a domestic character, the carriageway might be reduced to 18 feet or 20 feet, and the remainder utilized for