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## ON SOME SANITARY ASPECTS OF HOUSE CONSTRUCTION.

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of Glasgow.

The following very valuable suggestions from this high authority were made at the Congress of the Sanitary Institute, Glasgow, Sept., 1883.

Last winter I read a paper on building-stones to the members of the architectural section of the Philosophical Society, and the subject attracted a good deal of attention among the architects and builders in the city, especially as it had a direct bearing on the selection of a stone suitable for the erection of the magnificent pile of buildings about to begin by the Corporation of Glasgow. An opinion was also expressed that the chemist might give valuable information, and make useful suggestions to the architect and builder if he would devote his attention to the construction of buildings. The encouragement received on that occasion has induced me to bring before the architectural section of the Sanitary Institute a short paper on some of the sanitary aspects of house construction, excluding entirely from consideration the important subjects of drainage and sewerage, which I leave to others who have made them a special study.

Granting, then, that a house is well drained, and that the plumber work is properly trapped and ventilated, what is wanted to make it a healthy residence is

that it should have plenty of light, and that it should contain at all times air pure and dry, or at least as pure and as dry as may be possible. The subject of light may be dismissed in a few words. The importance of having large windows is perfectly understood, and so far as isolated buildings are concerned it is unnecessary to say anything. But as regards street architecture, it is of the utmost importance that houses should be built of a height, bearing a direct relation to the breadth of the street in which they are situated; hence the paramount importance of having enacted by Parliament rigid building regulations for cities and towns, in order to prevent the erection of tenements of such a height in proportion to the breadth of the street that the windows in the lower storeys get little or no sunlight. This is a subject which has been thoroughly discussed in this and other cities, and I hope that in course of time more stringent rules than we at present possess will be enacted. A fair proportion in this latitude is that the house should not exceed in height two-thirds of the breadth of the street; thus giving three storeys in height for a street of 45 to 50 feet wide, and four storeys for one of 60 to 70 feet. I say, advisedly, in this latitude; for while at the equator the sun at mid-day is perpendicular or nearly so, in high latitudes it forms with the earth's surface an angle more or less acute. Hence a street in Cairo of only 15 or 20 feet wide may be better lighted than one of 40 or 50 feet in Stockholm. As regards the direction of a street, I should prefer to live in one placed as near as possible north and south; in this case, and taking the west side of the street as