

as far as possible to place the wards and pavilions away from the noise and the wind-borne dust of the highways, which is often foecal and poisonous.

It need hardly be said that a General Hospital does not provide accommodation for consumptive or small-pox patients; such diseases are treated in special sanatoria or hospitals; and small-pox hospitals should be detached in a separate zone of not less than $\frac{1}{4}$ of a mile from anywhere. Isolated blocks, however, for other infectious diseases, mixed or otherwise, form a part of a general hospital and in the lay-out should be completely cut off, each disease from the other, the whole block commonly called the "Fever Hospital" being placed in its separate zone of not less than 40 ft. from any other. No Fever Hospital should be placed on any site until the complete lay-out has been definitely decided upon; until then, the best possible angle or axis or shape or plant for it cannot be determined without risk of seriously "crippling" the site for the whole scheme. Casual observation cannot settle such an important point.

On rural sites where ground is not so restricted as in the towns, no ward pavilions should exceed two stories high. The risk from fire and the obstruction of sunlight greatly increase in ratio as upper stories are added. The upper stages of high buildings receive the exhalations and odours from the lower, and they require lifts, staircases, and other appertenances.

The one-storey ward is the medical ideal: but, except in small hospitals, it cannot generally be attained completely in actual practice because of the cost of extra buildings, extra ground required and the added length of distance for serving the wards, etc.; but some special blocks should be kept to one storey such as infectious wards (unless restricted for space), operating theatres, installation blocks, and some minor buildings; and, finally, such auxiliary wards or adjuncts designed for the "open air treatment" which, being of light and inexpensive construction can economically be built ground floor high only.

Aspect.—The decisions as to this are all important in their effect. In the lay-out, however tempting to do otherwise (reluctant not to miss a fine view) "*prospect*" must always give way to "*aspect*"—that aspect which secures sunshine in the wards, and which, indeed, is absolutely necessary for the cure of the patient. All wards must face the sun for some part of the day; and the "two-row" wards for the whole day on one side or another.

A very happy condition exists if "*prospect*" coincides with the essentials required of "*aspect*"; for fine views, trees, (which should be treasured and preserved within reason) flowers, and other amenities within the visual range of the patient must surely add to his pleasure and assist towards his recovery.

III.—DIVISION, GROUPING AND SUB-DIVISION

The first consideration should be given to the site, the blocks being planned in adaptation to it and not the reverse, as often happens. The scheme and its division depend upon the scope and exact character of the institution "*in toto*"; which, again, are influenced by the town or district served by it

—whether manufacturing or residential, poor or well-to-do, and a centre of learning, science and art—"ars medici"! Land which has not been previously built upon is preferable; and any old buildings if of wood, should be ruthlessly cleared away as soon as they can be dispensed with, and not be brought permanently into the scheme.

The larger hospitals which serve great populations are frequently centres for clinical education: smaller hospitals are not usually equipped as medical schools, but nevertheless should have the accommodation and perfect equipment for surgical and medical work and research of all kinds.

A General Hospital should be divided into blocks as follows:—The Administration block; Kitchen block; Boiler house, Disinfecting installation, or Lighting and Laundry block; Fever or Infectious Diseases hospital (detached); Medical Ward pavilions; Surgical Ward pavilions; Private Patients wards; Children's ward; Maternity and Gynaecological wards; Out-patients block; Receiving wards; Operating room; Mortuary; and Chapel; and various smaller adjuncts.

It should provide for the following classes of cases separated into departments, all of separate design and equipment; viz:—medical, surgical, infectious, children's gynaecological and maternity, (the last sometimes omitted on the plea of expense in separately establishing, equipping and maintaining them). A small hospital has no room for a separate pathological or anatomical block.

The question of corridors connecting the groups is all-important. There should be none whatever between the infectious diseases pavilion and the main buildings. The remaining blocks except the installation block and mortuary, and chapel perhaps to save expense should be connected with the administration block corridor merely by covered open ways at ground floor level only, which are a fair compromise between having them absolutely disconnected—the previous German fashion and connected by enclosed corridors, which were sometimes 2 or 3 stories high; both of which systems have been in use and have been condemned.

The aggregate length of corridors and distances to be travelled, have in some of the larger institutions become enormous; by reason of mistaken ideas as to the minimum distance apart of the pavilions; which space, need by no means be excessive, especially when laying down open-air or only partially enclosed wards. Such long corridors are the result of past tendencies to "draw-out" the scheme in the planning; and the distances to be traversed would harass the medical men, matron, nurses, and all those who perform the service. The distance apart of the blocks is dependent upon their sectional height, situation, aspect, and the lie of their axial lines; and it need be no greater than has been found by experience to be actually necessary. There should be no steps or breaks in the floor levels of corridors.

By placing the ward pavilions "en echelon," they can often be brought appreciably closer to the administration and service blocks; and the maximum use can also be made of "sunny aspect" facilities by that arrangement. ("Butterfly-shaped" blocks,