## CLIMATE AND COLOUR.

Most people, if asked to give a reason for the colour of a negro's skin, would think the ques-tion quite beside the mark. That it happens in temperate climates people are white, and in tropical black, is the only reason they know. But those who have studied the methods of Nature know that she never works aimlessly, that there is an underlying cause for all her actions, that her secrets may be wrested from her by patient observation, and that the harmony of the "reign of law," when understood, is a beautiful and fascinating study. Those, therefore, who have grasped the fundamental principle of purpose in natural laws will be prepared to learn that experiments by Professor Finsen go to prove that the black skin of the negro acts as a protection from the chemical rays (not the heat rays) of the sun. In illustration of this, a broad line in Indian ink, when painted on a bare arm subsequently exposed to strong sunshine, protected the part so covered from sun-erythema, which the unprotected portion of the arm developed, leaving the sunburnt skin with a broad white line upon it. An interesting conclusion to the experiment was that upon a second exposure of the same arm some days later the inflammation set in only in the white line, the brown pigment caused by the sun at the first exposure (sunburn) protecting the rest of the skin against the chemical rays of the sun.

Red acts in the same way as a protection against the chemical rays, and this is the principle underlying the red-room treatment of small-pox. It has been found in patients suffering from this disease that subsequent pit marks occur almost exclusively on parts ex-posed to the light, thus proving its irritating effect. But when the chemical rays are excluded, which they are when the red-room treatment is applied, before the fourth or fifth day, it is found that the bad effect of light is neutralised. The vesicles in the skin do not fully develop, the secondary fever caused by their rupture is avoided, pit marks do not occur, and the course of the disease, as a rule, is in consequence both milder and shorter. Nurses, more than any other class, have opportunities for constant observation of the sick. If they carefully cultivated this faculty, and recorded the results of its application—as, for instance, in the effect of light upon patients in various diseases, their intolerance

or tolerance of it in its natural condition, or when modified by coloured blinds-they might be able to render valuable aid to medical science.

THE Y-SHAPED WARD. Those who make a study of hospital construction will be interested in the proposal of Messrs. Henman and Cooper, of Birmingham, for the rebuilding of the Royal Infirmary, Manchester. Having regard to the possibilities of the site, they proposed that the wards should be Y-shaped. Ordinary parallelogram wards would exceed the limits available; circular wards, while overcoming some of the difficulties, are open to objection on others, one of these being the great diameter of the enclosed space, which can neither be so well sunned nor efficiently ventilated by cross currents as the ordinary narrow ward with windows on both sides.

The Y-shaped ward has apparently all the advantages of the circular ward without its acknowledged defects. A good view of all the beds can be obtained, and cross-ventilation secured. The two upper arms of the Y form the chief wards, the lower limb being used for accessory rooms. The kitchen, bath-room, and conveniences are placed at the entrance end of the ward, and can thus be approached from the small wards without the necessity of passing through the main wards. The plan appears to have many points to commend it.

## THE JAPANESE RED CROSS SOCIETY.

The Japanese Red Cross Society has done good service to the Russian wounded who fell into the enemy's hands after the Chemulpo fight. The Russian sailors speak in the highest terms of the treatment they received. The Japanese have, indeed, throughout the war worked most sympathetically and efficiently in regard to the care of the sick and wounded on both sides. A striking indication of the mood of the Japanese nation is furnished by the solicitude shown for the wives and families of soldiers sent to the front. Omitting minor associations of limited capacity and operation, no fewer than fourteen large societies have been formed to collect funds for aiding those rendered destitute or embarrassed by the death, maining, or absence of the bread-winner. The Tokio Government has recently declared its willingness to concede to the steamer Mongolia, of the Eastern Chinese Railway Company, the rights enjoyed by military hospital ships in view of the provisions of the Hague Convention. • •



