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? WHY THE WEATHER ?

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SUNNY WINTER

If there is any time in the year when one needs dark glasses it is in winter. Not only is this because of the bright reflection from any snow covering that may be present, but also because of the great intensity of the sun's direct rays, shining into our eyes from a low angle. Other things being equal, the sun would be seven per cent. brighter in January than in July, because in January the sun is closer to the earth than in July. Other things are not equal, however. Though the atmosphere is more transparent in winter, the rays of the sun entering obliquely must pass through a greater thickness of air than in summer. This factor is just sufficient to offset approximately the closer proximity of the sun and the greater transparency of the atmosphere.

In view of winter sunlight being as intense as summer sunlight it is not surprising that tuberculous children at sanitarium can be trained to withstand the coldness of the air while bathing in the bright sunshine in winter. With equal air temperature and wind days with snow on the ground are far warmer in the sun than days without, for a new snow surface may reflect as much as 70 per cent. of the sunlight, and thus give a child nearly twice the intensity of sunlight available in summer.

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