THE AROWTH OF PLANTS ANOTHER VOICE ON THE PRAIRIE

ELECTRIC LIGHT AS A SUB-STITUTE FOR SUNSHINE.

Fruits Ripen and Flowers Blossom More Speedily Under It.

der It. A most interesting project is being considered by the scientific section of the Royal Horticultural Society. As soon as the necessary funds can be raised it is proposed to establish at the new gardens at Wisley, near Wey-bridge, England, a scientific station or botanical laboratory, and one of the special studies to be undertaken will be the growth of plants by elec-tric light as a substitute for sur-shine. To be independent of our gloomy climate, and to produce the-most beautiful flowers, and even rip-en\_strawberries and other delicious fruits in winter, is one of the gar-dener's most cherished dreams. The tact that artificial light will enable **FIGURE STRAWGETTIES and other delicious** fruits in winter, is one of the gar-dener's most cherished dreams. The fact that artificial light will enable plants to grow and fruits to ripen has long been known to scientists. More than 40 years ago M. Herve Mangon found that the electric rays would enable plants to form the green chlorophyl or coloring matter work would enable plants to form the green chlorophyl or coloring matter of their leaves, and that flowers turned toward the electric lamp just as they turn towards the sun. In 1879 and 1880 the late Sir William Signers made compared to the supervised of the Kidney Disease is of

In 1879 and 1880 the late Sir William Siemens made some remark-able experiments at Tunbridge Wells, the results of which he showed to the Royal Society. By supplement-ing the sunlight of day with electric lamps at night, both in the open air and in green-houses, he caused roses and arums to bloom long her ing the sunlight of day with the open air and in green-houses, he caused roses and aruns to bloom long be-fore their usual time, melons and cu-cumbers, vines and strawberries also responding most' gratefully to the stimulus of the added light. The sunlight of millions of years ago, stored up in plants which afterwards and made to do its work over again in ripening fruits and causing flow-ers to bloom. Although electricity then cost three times as much as now, Dr. Siemens, as he then was, was enthusiastically convinced of the garden. As usual, there were many objec-tors to the new proposal. A sort

garden. As usual, there were many objec-tors to the new proposal. A sort of humanitarian outery was started on behalf of the poor plants them-selves. To make them grow night and day would give them no rest. They would be old and exhausted be-fore their time, and would perish miserably as the result of their arti-ficial mode of life. Experience since then has shown, however, that the of sumanitarian outcry was started on behalf of the poor plants them selves. To make them grow night and day would give them no rest. They would be old and exhausted be fore their time, and would perish priserably as the result of their arti-ficial mode of life. Experience since then has shown, however, that the plant does not need rest, like an animal. In Norway, Sweden and Finland, during the short two inonths of summer, while the sum never goes down, vecestation flourish-es with astounding luxiance and rap-idity. Flowers take on the most gorgeous colors and have exquaite perfumes, vegetables grow like magic, and then comes the long winter, and they, have a correspondingly long fire. A steeple of flame, which has burned for generations in the Pitts for living in a blaze of light . All around and fust outside the circle of its scorching heat is a ring of tropica ty egetation, which the warmth and light have projuced, the plants were really exhausted by artificial light, we grow them no tor their aver really exhausted by artificial light, we grow them no tor their aver really exhausted by artificial light, we grow them no tor their aver really exhausted by artificial light, we grow them no tor their aver really exhausted by artificial light, we grow them no tor their aver they and day alike. Even if plant, were really exhausted by artificial light, we grow them no tor their aver really exhausted by artificial light, we grow them no tor their aver to of no the same footing as a pro-test against using up, plant life but considerers that there a problems to be settled as the uccosiderers that there a problems to be settled as the uccosiderers that there a problems to be settled as the uccosiderers that there a problems to be settled as the uccosiderers that there a problems to be settled as the uccosiderers that there a problems to be settled as the uccosiderers that there a problems to be settled as the plant settle and the real plants from the light, and the prevention of it seeding and early mature

TELLS OF DIABETES CURED F DODD'S KIDNEY PILLS.

MOST OF THIS PAGE IS MISSING

....

VEGETABLE IDIOSYNCRASIES. Dr. Siemens found that all plants rould not be treated alike. Particu-larly they varied in the amount of stimulation they could undergo. The delicate lily of the valley, grown by the aid of heat alone, and with a de-ficiency of sunlight, was sickly and anaemic, flimsy in texture, and with its petals thin and colorless. The electric light gave the flowers their natural rich, white, creany color, and made the leaves strong, firm and green. Generally the natural colors of flowers were enriched by and made the leaves strong, firm and green. Generally the natural colors of flowers were enriched by the light, and plants which would wither in a high temperature without the light, with its aid flourished ex-ccedingly. The electric light, Dr. Siemens pointed out, would almost save its cost in stove fuel by the heat it supplied and the quicker ma-turing of plants, and it might be nsed in the orchard to counteract used in the orchard to counteract many special features. the effects of night frosts.

the effects of night frosts. But banana leaves too near the expense. Tickets will be go lamp were scorched by its rays. Melons, cucumbers, strawberries, anustard, carrots, beans, tulips, pe-largoniums, all matured under the electric lamp long before the same electric lamp long before the same plants under daylight alone. Sub-

plants under davlight alone. Sub-sequent investigations have shown that a great deal of caution must be used in the application of artificial light. Every plant has its own way of responding to the stimulus. For instance, Professor Bailey, at Cornell University, and the authori-ties of the West Virginian Agricultur al Station, have found that cauli-flowers will grow very tall, but have smaller heads, and radishes develop extraordinary profusion of "top" un-der the influence of the lamp. But as we do not prize the cauliflower for its stature, or the radish as a fol-

"So she has broken her ment to you?" "Yes." "I as we do not prize the calliflower for better here is stature, or the radish as a fol-its stature, or the radish as a fol-inge plant, these advantages were regret the love you wasted o not worth the cost of producing "No. It's the postage st them. Nearly all flowers are found wasted on her that trouble m

It's