

A recent experiment made by the well known French physicist, Camille Flammarion, at the Agricultural and Climatological Experiment Station, at Juvisy, indicates plainly the effect of different colored light upon plants, and the result is of special value, practically and theoretically, to plant physiologists and climatologists. It has been clearly shown by the various experiments that ordinary "colorless" light is represented by natural sunlight, because, when exposed only to it, health and natural growth reign. Colored light, according to the particular color used, causes either one sided acceleration or retardation of the development of the plant. In his most interesting experiment, Flammarion adopted the plan of exposing sensitive plants (*Mimosa sensitiva*), which he raised from seed, to different colored light. These plants are specially sensitive to the effect of light and to touch, and were, therefore, well adapted for Flammarion's experiment.

He planted a number of seeds, and the seedlings, after they reached a height of about one inch, were planted in pots, in pairs, and placed in a hothouse, where each pot received the same quantity of light and an even temperature prevailed, so that the plants were subjected to the same conditions. But the experimenter placed over some of the plants bells of green, red or blue glass, while others received the sunlight through the plain glass of the hothouse window. The effect of the colored light was soon perceptible in the development of the plants, and the more they developed the plainer this difference became, until, at the end of two months, the plants under the red glass were sixteen inches high, those under the green glass were only five inches, and those under the blue glass were only one inch high, while the plants that had been left in the "colorless" light were four inches high.

The red light forced the plants most, for those subjected to it blossomed five weeks after the seeds were planted, and the stems were much longer than the stems of the other plants. The difference between them and those exposed to the blue light was most marked. The leaves of the latter were, indeed, dark green, while the leaves of those subjected to the red light were pale, poor in chlorophyll, but the plants themselves seemed unhealthy and stunted, they had gained nothing in height since they were placed under the blue glass. Therefore, it was proved that the blue light was not only an impediment, but an actual injury to vegetation. The effect of the red light was noticeable, not only in the growth of the plants, but also in their sensitiveness, for even the slightest touch, a breath, was sufficient to cause the leaves to close and the little stems to droop. The plants exposed only to white light were not so easily affected, and those raised under blue glass were not at all sensitive. Those raised under white light must be considered normal. They were more stocky and showed a greater tendency to bud, but the buds did not open.

Flammarion extended his experiments to other kinds of plants, such as geraniums, strawberries, etc., but in all cases blue light proved injurious to vegetation, and plants that were exposed to its influence for months showed no development. All the functions of the plant organism seemed to be suspended.

The fruit of strawberry plants devel-

oped under bells of different colors, but varied considerably in size and quality, as in some cases the leaves were developed at the expense of the fruit, and in other cases, as when the plants were exposed to blue light, growth was impeded in every way.

By making these investigations Flammarion has given an impulse to the study of the subject, and now results will be obtained which will be of practical use in gardening and the propagation of plants—Der Stein der Weisen.

TELEGRAPHIC NEWS.

NEW YORK, Jan. 13.—A dispatch to the Herald from Paris says:

The St. Petersburg correspondent of the European edition of the Herald writes that curious complaints against the existing state of affairs in Alaska are brought by the Svet. It alleges that the handful of Russians remaining in the territory suffer under all sorts of vexations and even oppressive acts on the part of American traders who "run" Alaska.

It is claimed that a number of the company's agents entered a Greek orthodox church during service with fire arms in their hands to drive the congregation out to work and that the Russian teacher having refused to give his lessons in English, the Americans threatened to burn down his school.

General condemnation is brought against the government at Washington or leaving the administration of Alaska too much in the hands of a trading company, which, it is claimed, finds its interest in debauching the natives.

NEW YORK, Jan. 13.—A special to the Herald from Washington says:

Absolutely no official information has been received in regard to the outrages perpetrated on Russian residents of the territory of Alaska by the North American Commercial company. The state and treasury departments have heard nothing from their representatives in Alaska and Russia on the subject. The statements that agents of the company invaded a Russian school and chapel may have some basis. State department officials believe that religious troubles exist in Alaska.

There are three classes of schools—the first the territorial school, under the direct supervision of the government; the second, the orthodox Russian schools, governed by Archbishop Nicholas, of the Russian Greek church, who is a close personal friend of Emperor Nicholas, and which the United States is obligated by treaty provisions to protect, and the third to unorthodox native schools. The Russian government last August protested to the state department at the action of unorthodox Russian school authorities in seeking the withdrawal of pupils from the orthodox schools.

The state department turned the matter over to the treasury department with instructions to investigate the matter, and its report, so far as can be learned, has not yet been received. In view of the trouble existing last summer, the state department authorities are inclined to believe that the outbreaks just reported are the result of the religious disturbances existing between the orthodox and unorthodox

Russian churches. They do not see what connection the agents of the company could have in the matter. The company's rights are all confined in the seal islands, and so far as can be learned they have no authority on the main land. The suggestion is also made that the agents may have visited the main land and perpetrated the outrages, but this can only be settled by an investigation, which will be made by the treasury department either through the Russian minister, the representatives of the state department or the agents of the treasury department in Alaska.

SAN FRANCISCO, Cal., Jan. 13.—The big battleship Oregon will weigh her anchor at 2 o'clock this afternoon and move to Sausalito, preparatory to going to sea on Thursday, it is said, on a voyage to Acapulco. There have been rumors that the Oregon would go to sea about the 15th for several days, but as the usual secrecy has been preserved regarding the movements of the vessel, nothing of a definite nature could be learned.

WILMINGTON, Del., Jan. 13.—The committee on judiciary in the constitutional convention has decided to recommend the abolishment of the whipping post as a means of punishment for petty criminals and the convention will take such action in a few days. The whipping post has been in vogue for more than 100 years.

WAPPELO, Iowa, Jan. 13.—A law suit now in progress in Louisa county district court at this place, is exciting more than usual interest from the fact that an application of Professor Roentgen's discovery is being made for the first time in an Iowa court. Patrick Tobin, a farmer is the plaintiff in the suit and the action is brought against D. W. Overhalt as defendant for alleged malpractice in setting and treating Tobin's leg for a fracture. The plaintiff claims defendant failed to set the fracture properly and to prove his case produced a number of photographs or radiographs taken by means of the X-ray last fall by Professor Andrews, of the state university at Iowa City. These plainly show the improper joining of the fracture. The trial is attended by a large number of eminent physicians and specialists.

POTTSVILLE, Pa., Jan. 13.—A terrible accident, by which four persons were killed and one fatally injured, occurred at New Waddeville shaft of the Philadelphia, Reading Coal and Iron company today.

Theodore Frownkenstein, sixteen years old, was so badly crushed that he will die. The four men and the boy belonged to the day shift. This morning they stepped on the rim of a large iron bucket to be lowered into the shaft. When the men got half way down a ore head fell, striking the bucket. The men were hurled to the bottom, 300 feet.

NEW YORK, Jan. 13.—When the resolution calling for the recognition of the independence of Cuba is before the House and its passage is being urged, a delegation of men from New York, headed by Franz Mayer, president of the American Federation of Cuba, will present a monster petition in favor of the resolution. Sixty thousand petitions were sent out, nearly all of which have been returned, with more than