

Linné, is not the true cochineal, and that the latter insect belongs to the genus *Pseudococcus*, Westwood. I have lately had some correspondence with Professor and Mrs. Fernald of the Massachusetts Agricultural College, on the synonymy of this insect, and it seems that the only way to avoid confusion is to propose a new name for the *Coccus cacti* of Signoret, *Essai sur les Cochenilles*, p. 381; Newstead, *Ent. Mo. Mag.*, April, 1897, p. 76. It is therefore proposed to name the latter species *Pseudococcus signoreti*.

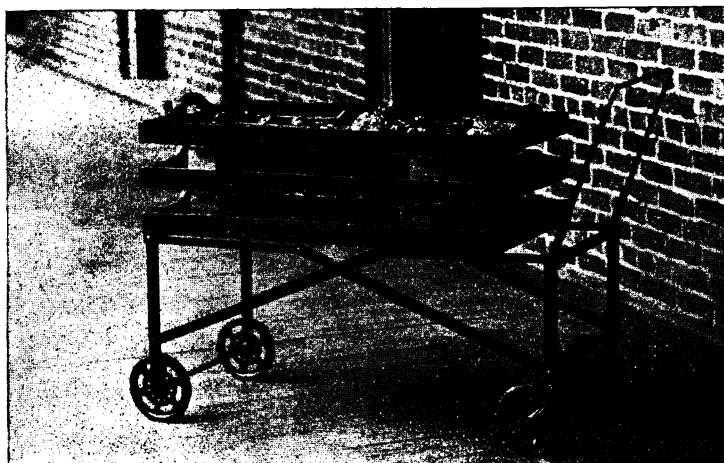
T. D. A. COCKERELL.

MESILLA PARK, N. M., May 28, 1900.

#### A TRUCK FOR MINERALS.

TO THE EDITOR OF SCIENCE: For the benefit of those teachers who have to move heavy specimens for purposes of illustration from

and set upon the opened truck. If more than one tray full be needed, others may be added by using wooden bridges, made by nailing to each end of a thin strip a little longer than the width of the tray, a square block notched below to fit the side of the tray. This contrivance makes a temporary frame on which the second tray rests securely, high enough above the first to be out of the way of the specimens. With another pair of bridges another tray can be added, and so on till the load is complete. One load of these on the truck trays is shown in the figure. The steel trucks are very strong and are guaranteed to sustain a weight of 500 pounds. They are provided with rubber-tired, ball-bearing wheels—those at one end being swiveled, and with full load they are very easily pushed or pulled and guided around



museum to lecture room, I send you an account of a plan which for two years I have used here with great comfort to myself. For a truck I have a folding steel church truck, such as is used by funeral directors. This, when not in use, can be folded up and put aside, occupying very little space. For convenience I have attached a handle to one end, made by bending a piece of half inch iron rod twice at right angles, and bolting the two ends to the frame, with a locking device which holds it rigid when pushed against. The minerals or other specimens are placed in shallow wooden trays 18 x 36 inches, with the usual hand holes at the ends,

the ends of cases. With an arrangement for holding books, trucks of this kind would certainly be a great convenience to librarians also.

EUGENE A. SMITH.

UNIVERSITY, ALA., May 26, 1900.

#### THE ECLIPSE OF MAY 28TH.

THE party from Vassar College selected Wadesboro, N. C., as the station of observation for the solar eclipse of May 28th, because of its favorable weather prognostication, and because other parties having a large and varied equipment were stationed there. The instruments used by us were a three-inch Clark telescope,

and a pair of field glasses of two inches aperture, with a direct-vision spectroscope attached to one eye-piece. The three-inch telescope was to be used in comparing the color of the prominences. With this purpose in view, a low power was employed, so that the entire rim of the hidden sun could be seen at once. Cross wires at focus served for locating the prominences in position angle. Tachini and a few others have seen what appeared to be white prominences. Whether this was a real phenomenon or a psychological effect has been questioned, and among the twelve observations proposed by the eclipse committee of the Astronomical and Astrophysical Society, one upon prominence color was included, in order that a general effort to note color might lead to more definite conclusions. Purkinje's investigations have shown that the brightest prominences should look the reddest. Therefore, slight variations in redness would not necessarily indicate difference in constitution. Miss Furness is familiar with the appearance of a prominence as seen in the hydrogen line of the spectrum. She noted no marked difference in color in the several prominences seen around the sun's limb during eclipse. A variation toward the pink was clearly observable in one small prominence in the S. E. quadrant. A very large and beautiful prominence in the form of the banyan tree was observed in the S. W. quadrant. This was of the usual red color.

The direct vision spectroscope attached to the field-glass was a McClean star spectroscope, with the cylindrical lens removed. The object in view was to examine the distribution of coronium. It has been claimed that the green line of coronium is as plainly discernible in the rifts of the corona as in the streamers. With the simple apparatus above described (first suggested by Mr. Maunder) if it is properly adjusted, and if the continuous spectrum of the inner corona is not too bright, the question of distribution might be well tested. If the coronium is confined to the regions determined by the visible outline of the corona, the green image in the one glass would correspond in form to the composite image in the other. If, on the contrary, the coronium is equally distributed in streamers and rifts, the green image would in-

dicate this by its uniformity of outline. Our apparatus was tested by examining an opening of the form of the corona, cut in cardboard, and held before a Bunsen flame, emitting sodium and lithium light. The red and yellow images were sharply defined.

The observation during totality was, however, without decided result. The continuous spectrum of the inner corona was so bright that the green image could not be separated from it. Clear separation being found impossible, attention was turned to the regions above and below the continuous spectrum limits, to note, if possible, any green extensions. These could not be seen, though the brightness of the field might have rendered this doubtful in any case. Probably the dispersion of the prisms was insufficient. The inner corona was much more brilliant than I had expected.

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#### NOTES ON INORGANIC CHEMISTRY.

At the recent meeting of the Iron and Steel Institute of Great Britain a number of very interesting papers were read, which are abstracted in *Nature* and from which we make note of the following:

A paper by Mr. B. Talbot on the open-hearth continuous steel process as introduced in the Pencoyd Steel Works in Pennsylvania. Here a basic tilting furnace of seventy-five tons capacity is used, and is charged at once with fluid metal, at a great saving of fuel and time. The general advantages of the furnace were stated to be increased output, increased yield, saving in repair, and saving in labor. A long discussion followed the paper and the opinion was general that this process represented an important advance in open-hearth steel practice.

A description was given by Mr. A. Greiner of the first blowing-engine worked by blast-furnace gas. This is a 600 H. P. engine at the Cockerill works, Belgium, and has been running since last November with unpurified gases from the Seraing blast furnace.

Mr. C. von Schwarz discussed the manufacture of cement from blast-furnace slag. Various attempts at the utilization of the slag