

## SCIENCE:

A WEEKLY NEWSPAPER OF ALL THE ARTS AND SCIENCES.

PUBLISHED BY

N. D. C. HODGES,

47 LAFAYETTE PLACE, NEW YORK.

SUBSCRIPTIONS.—United States and Canada.....\$3.50 a year.

Great Britain and Europe..... 4.50 a year.

Science Club-rates for the United States and Canada (in one remittance):

|   |                          |         |
|---|--------------------------|---------|
| 1 | subscription 1 year..... | \$ 3.50 |
| 2 | “ 1 year.....            | 6.00    |
| 3 | “ 1 year.....            | 8.00    |
| 4 | “ 1 year.....            | 10.00   |

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VOL. XIV.

NEW YORK, JULY 12, 1889.

No. 336.

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A MOVEMENT IS ON FOOT to celebrate the four-hundredth anniversary of the discovery of America by a world's exhibition to be held in this city. The time before 1892 is considered short for the satisfactory organization of such a vast undertaking; but, as the suggestion meets with general approval, it is likely to be carried forward to success. As to the location to be chosen, considerable discussion has begun, many opposing a proposal that the buildings should be erected in Central Park. This opposition argues, and as it appears justly, that the use of the park for such a purpose would interfere with its legitimate use as a pleasure-ground for at least a year, and that the injuries inflicted on the grounds could not be effaced in ten years. Some spot farther up on the island is more likely to be chosen, — a spot which, with the means of rapid transit which already exist, and which could be added to without much outlay, would be of easy access. We look forward to a rapid and satisfactory development of the plans for the exhibition; although, of course, as Americans do not seek any but a home market for their goods, the main stimulus of such a fair is not so strong as with Europeans.

ON JULY 9 the President appointed Professor T. C. Mendenhall superintendent of the Coast and Geodetic Survey. Professor Mendenhall was born in Ohio in 1841. From 1873 to 1878 he was professor of physics at the Ohio State University at Columbus. In

1878 he went to Japan, where he organized a physical department in the University at Tokio, as well as a weather bureau for the country. On his return to this country, in 1881, he again assumed the chair at Columbus, and in 1882 started the Ohio Weather Bureau. In 1884, Professor Mendenhall was called to Washington to take charge of an electrical branch of the Signal Office, and during his stay in the government employ also busied himself in developing a system of earthquake observations in the United States. Since 1886 he has been president of the Rose Polytechnic School at Terre Haute, Ind. In the new work Professor Mendenhall has undertaken, his many friends will wish him all success.

The last Congress legislated Mr. F. M. Thorn, the late superintendent of the Coast Survey, out of office at the close of the fiscal year. It provided, in an appropriation bill, that he should be appointed by the President, "by and with the advice and consent of the Senate." The proposed change of the law was submitted to Mr. Thorn by the Senate sub-committee on appropriations, and his opinion was requested as to the advisability of its enactment. He replied that he regarded as entirely unobjectionable the requirement that the superintendent should be appointed "by and with the advice and consent of the Senate," and that he had no personal interest in it whatever. His resignation was written on March 6, but was withheld at the suggestion of Senator Allison until April, when it was sent to the President. On June 22 Mr. Thorn directed the attention of the President and Secretary Windom to the law requiring the appointment of a superintendent to be made at the beginning of the fiscal year. He has not since discharged any of the duties of the office. Although Mr. Thorn was not a scientific man, like all of his predecessors, yet it is believed, that, as a result of his excellent executive ability, the forces of the office have been so employed during the past four years as to greatly increase their efficiency.

## MASTER AND WORKMEN.

THE greatest interest attaching to the Petit-Bourg Works, for the manufacture of light railway material, twenty miles from Paris, is to be found in the relations that exist between the master and workmen. As described in *Engineering*, a system of almost military discipline prevails everywhere. With the exception of a small number of hands, all work is paid for by the piece, and every thing that fails to pass a rigid inspection is condemned at the expense of the men. The hours of the work are long, — fourteen hours a day, — and Sunday is only observed as a holiday after two o'clock. Yet the men are contented and prosperous, and are the first to stifle and exclude the spirit of discord which too often prevails in the factories of adjoining communes. Workmen are always eager to obtain service at Petit-Bourg, and, once there, are loth to quit it. The secret lies in the fact that the men like to be governed, and that their material welfare is always carefully studied. Comfortably fitted up dwellings are provided for the unmarried men, in which they can rent a well-furnished bedroom for 1½ pence a day, or for 2½ pence if two live together. Then a clean and attractive restaurant is close at hand, where well-cooked meals are furnished at prices just sufficient to pay expenses. Married men are not allowed to use this restaurant, but they can purchase and take home with them their meals at a somewhat lower price, so that all the expense and trouble of cooking is saved them. In this restaurant a separate room is provided for the use of the foremen, the scale of charges being the same; and a general shop is attached, where every thing can be purchased at the lowest possible rate. For those men who wish to save the expense and trouble of going to the restaurant at meal-times, a range of ovens is provided within the works, and placed under the charge of a superannuated employee, whose duty it is to receive the food brought by the men, and have it comfortably prepared when the breakfast or dinner hour comes. The men are paid monthly, and are allowed to open credits to fixed amounts with the restaurant and shop, the balance due to them being paid at each settlement. Pay-day is celebrated

# Science

ns-14 (336)

*Science* ns-14 (336), 19-34.

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