



THE

EXECUTIVE DOCUMENTS

OF THE

HOUSE OF REPRESENTATIVES

FOR THE

SECOND SESSION OF THE FORTY-NINTH CONGRESS.

1886-'87.

VOLUME 22.—No. 40.

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1887.

P 357

THIS PAGE LEFT BLANK INTENTIONALLY

Branch, and along that road to the Tennallytown and Rockville turnpike, and northeastwardly from that point to Woodley lane, along that road to the Klinge Ford road, down that road to Klinge's line, and thence in an irregular line to Rock Creek Ford road and the Daniel road, and from thence to the crossing of the District line by the Seventh street road.

During the summer and fall months of 1885 the operations of Mr. Donn's party were principally confined to the open country adjacent to the Tennallytown and Pierce's Mill roads, Woodley lane and the Grant Military road, and the Loughborough and Tunlaw roads. There were many small areas of woods that could not be entered until the trees became bare of leaves, but these were completed early in the winter. Klinge Ford road was opened in September, and to make the original sheets upon which it fell perfect, its line was run and its grades connected with contours formerly run, as soon as it was possible to work to advantage through that heavily-wooded region.

During the period of the most intense cold, while the snow covered the ground, work was entered upon in the valley of Soapstone Creek, an area very difficult to pass through with an instrumental survey, being thickly covered with woods and entirely shut in from facilities for the determination of positions by means of triangulation points. The only resource was the running of numerous traverse lines intersecting and checking each other. Excepting the area lying within the angle of the Grant Military and the Broad-Branch roads the work was satisfactorily completed by the time the opening leaves again compelled a return to open grounds.

In May, 1886, the survey was resumed on the western side of Foundry Branch and pushed across the Ridge road and over the country bounded by that road and the Conduit and Chain Bridge roads.

Mr. Donn's report is accompanied by a map showing the area over which the survey had been completed at the beginning of the fiscal year and the additional area surveyed up to June 30, 1886. After a full consideration of the amount of work accomplished, he comes to the conclusion that the work will be completed in the time originally estimated, namely, ten years from the beginning in February, 1881.

The office-work, which involves the preparation of original sheets for the archives of the Survey and the preparation of tracings, drawings, and level records for the immediate use of the Engineer Commissioner of the District, keeps Mr. Donn and his party closely occupied upon all occasions when active field-work is impossible.

Gravity research.—Pendulum oscillations at Washington.—Reference has already been made under the heading of Section II to the occupation of a series of gravity stations by Assistant Charles S. Peirce with the invariable reversible pendulums, Peirce No. 2 (a meter in length) and No. 3 (a yard in length).

For comparison with the results at these stations, the same pendulums were oscillated in April, 1886, at the permanent gravity station which had been established in the Smithsonian Institution. For this work time signals were furnished by the Superintendent of the Naval Observatory.

Approximate results have been obtained and the final reductions are in progress.

Hydrographic examinations for the Coast Pilot in Chesapeake Bay and its tributaries.—In pursuance of instructions dated April 6, 1886, Lieut. G. H. Peters, U. S. N., Assistant Coast and Geodetic Survey, took command of the steamer Arago, and, having organized his party on board of her, took up such hydrographic examinations in Chesapeake Bay and its tributaries as were needed to complete for publication the manuscripts of Subdivisions 17 and 18 of the Atlantic Local Coast Pilot.

These examinations included the Potomac River and the streams tributary to it, Tangier and Pocomoke Sounds and their tributaries and the more southerly waters on the eastern shore of the bay, the waters of the lower bay and the rivers of its western shore, including the Patuxent and the Patapsco, and extended thence to the northward for work in the upper bay and its tributaries.

Lieutenant Peters reports that much delay and serious inconvenience was caused by frequent rains and fogs.

With regard to the charts of the Survey which he had occasion to consult and study in connection with the Coast Pilot work, he observes that while the field-work for some of them was done many years ago, yet in these cases the changes that have taken place do not materially affect their value for such waters as a stranger would be apt to attempt to navigate by a chart.