

ANNUAL REPORT

UPON

EXPLORATIONS AND SURVEYS IN THE DEPARTMENT OF
THE PLATTE,

BY

W. S. STANTON,

CAPTAIN OF ENGINEERS, U. S. A.;

BEING

APPENDIX QQ

OF THE

ANNUAL REPORT OF THE CHIEF OF ENGINEERS FOR 1875.



WASHINGTON:
GOVERNMENT PRINTING OFFICE.
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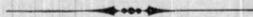
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[EXTRACT FROM THE ANNUAL REPORT OF THE CHIEF OF ENGINEERS TO
THE SECRETARY OF WAR.]

OFFICE OF THE CHIEF OF ENGINEERS,
Washington, D. C., October 18, 1875.

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RECONNAISSANCES AND EXPLORATIONS.

There are at nearly all the headquarters of the four military divisions and the nine military departments, officers of engineers, whose chief duty it is to collect geographical and other information, and these officers do, by means of their own explorations and surveys, and by collecting the notes, sketches, and maps made by the officers and soldiers belonging to the western posts, in their scouts and campaigns, add much, year by year, to the knowledge of the interior of the country, which is not only essential to the generals in command of these departments and divisions, but useful to the country generally.

Capt. W. S. Stanton, on duty with the commanding general of the Department of the Platte, was engaged in the surveys and establishment of the monuments and boundary-lines of the military reservation of Fort Sanders, embracing an area of thirty square miles, pursuant to an act of Congress approved June 9, 1874, the survey of the military reservation of Fort Hartsuff, embracing two townships, and the selection, survey, and examination of the site for a bridge to be built by the United States over the North Platte at Fort Laramie.

During the year every post in the department has been supplied with a set of reconnoitering instruments, embracing odometer, prismatic compass, and set of drawing-instruments. Maps and topographical note-books have been issued with instructions, designed to take advantage of every movement of troops to secure geographical and topographical information sufficiently accurate for use in revising and extending the maps of the department.

In the Office attention has been given to the collection of information from all sources available. Maps have been made of the reservations surveyed, drawings of the sub-structure for the new bridge over the Platte, and various tracings and numerous sketches have been made. Fifty-four note-books and one hundred and fifty skeleton maps, each containing three degrees of longitude, have been issued for use in connection with movements of troops. Two hundred and thirty maps have been mounted, and two hundred maps have been issued for the use of officers. Four hundred copies of the map of Wyoming Territory, which was constructed by Captain Stanton's predecessor, Capt. W. A. Jones, Corps of Engineers, have been lithographed.

(See Appendix QQ.)

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REPORT.

APPENDIX QQ.

ANNUAL REPORT OF CAPTAIN W. S STANTON, CORPS OF ENGINEERS, FOR THE FISCAL YEAR ENDING JUNE 30, 1875.

EXPLORATIONS AND SURVEYS IN THE DEPARTMENT OF THE PLATTE.

HEADQUARTERS DEPARTMENT OF THE PLATTE,
ENGINEER OFFICE,
Omaha, Nebraska, July 13, 1875.

GENERAL: I have the honor to submit the following annual report of surveys and reconnaissances in the Department of the Platte during the fiscal year ending June 30, 1875.

The sum allotted for this purpose was so small work in the field has been necessarily restricted to the survey of military reservations merely. The only field-work done, therefore, is the survey and establishment of the monuments and boundary-lines of the military reservations of Fort Sanders, embracing an area of thirty square miles, pursuant to an act of Congress approved June 9, 1874, the survey of the military reservation of Fort Hartsuff, embracing two townships, and the selection, survey, and examination of the site for a bridge to be built over the North Platte River at Fort Laramie. This bridge is built by the Quartermaster's Department with a special appropriation of \$15,000. It is 400 feet long, 12 feet wide in the clear, contains two spans each 125 feet long, and one span of 150 feet; is of wrought-iron and of the bowstring-girder form of truss. It is built under contract by Z. King & Son, of Cleveland, by whom it is patented.

The Brigadier-General then commanding the Department after accepting the bid of the above firm for the superstructure, assigned the preparation of the plans and specifications and the construction of the substructure to the undersigned. It being difficult to get suitable stone in the vicinity, the piers and abutments are to be of wrought-iron supplied by the manufacturers of the superstructure. The bed of the foundation is a horizontal stratum of sandstone, 5 feet below the low-water line. The bridge will be erected as soon as the stage of the river permits, and will be completed in October.

During the year every post in the Department has been supplied with a set of reconnoitering instruments, embracing an odometer, prismatic compass, and set of drawing-instruments; and maps and topographical note-books have been issued with instructions designed to take the greatest possible advantage of every movement of troops to secure geographical and topographical information sufficiently accurate for use in revising and extending the maps of the Department.

In the office attention has been given to the collection of information from this and other sources; maps have been made of the reservations surveyed, drawings of the substructure for the bridge, and various and numerous sketches and tracings.

Fifty-four topographical note-books and one hundred and eighty skeleton-maps, each containing three degrees of longitude, have been issued for use in connection with the movements of troops. Two hundred and thirty maps have been mounted and two hundred issued for the use of officers.

By special authority of the Chief of Engineers, 400 copies of the map of Wyoming Territory, prepared by my predecessor, Capt. W. A. Jones, Corps of Engineers, have been lithographed in Chicago.

As the money allotted for the fiscal year ending June 30, 1876, is only sufficient to pay the salary of one draughtsman, the work contemplated is in character and extent like that of the year just closed. Experience demonstrates the impracticability of securing journals and plats of marches sufficiently accurate to be useful in making a map without the services of a small detachment of Engineer troops specially instructed and drilled in this service, a member of which should be attached to every column of troops on the march. With such a detachment, improved by frequent practice, material would be steadily collected with which revision and extension of the maps of the Department would be always in progress, and information of its geography and topography recorded in this office. Such information is now in many respects very meager and inaccurate, and often much needed in connection with the supply and movement of troops; it is often unsuccessfully sought at this office; without such a detachment of specially-instructed men it cannot be secured, good opportunities for getting it are lost, and the provisions of the circular of June 6, 1873, from the headquarters of the Army, cannot be thoroughly carried out. There is not an engineer soldier serving in this department, embracing a force of six regiments, and a territory west of the Missouri River of over two hundred and fifty thousand square miles, much of which, although of rare interest from its physical and mineral character and conformation, is comparatively little known. A recent application for even one engineer soldier was unsuccessful, because the entire strength of the battalion of engineers is required for the torpedo service. The urgent importance of increasing the battalion so as to permit a detachment to be made from it for this very important and legitimate service is earnestly and respectfully presented.

The state and territorial boundary surveys, and the land surveys made within the department under the General Land-Office, constitute a mass of information which, in perfecting the maps of the Department, would be of great value to add to that gained from surveys and reconnaissances in connection with the troops.

The field-notes and maps of the boundary surveys are now being procured for the records of this office. To procure the land-survey township-plats is a matter of greater magnitude, and requiring a considerable sum of money, moderate, however, in consideration of the utility and value of the information to be secured with it for compiling maps, when it is considered that these surveys with compass and chain extend in northwest Nebraska beyond the settlements, and into a region which is almost a blank on the map. With the boundary surveys for the perimeters of Nebraska and the two territories, with the township surveys to the frontier, and the journals and careful plots of marches of troops beyond, an elaborate and important revision and extension of the map of the Department could be made. Then the maps of Nebraska and these Territories issued by the Engineer Department would be, as they should be, the best and standard ones, not only for military purposes, but for public use. These township-plats are not compiled by the Government into a map on a sufficiently large scale and sufficiently in detail

to be of value for local use. To disregard them while devoting labor, pains, and expense to the compilation of a comparatively incomplete map, does not seem consistent with the efficient and proper discharge, by me, of the duties pertaining to this office.

The number of townships thus far surveyed in Nebraska is 1,667, and the number now annually surveyed is 125. The aggregate number surveyed in Wyoming is 300, and the number surveyed annually is 60. My application for this information respecting Utah was unsuccessful.

So prepared as to embrace only the information of use in the compilation of maps, the plats of these townships can be procured at the offices of the surveyors-general at \$1.50 each. Unless they can be procured cheaper through the General Land-Office, it is respectfully recommended that the allotment of funds for this Department for the fiscal year ending June 30, 1877, include the sum of \$3,500, to be applied to this purpose.

Respectfully submitted.

W. S. STANTON,
Capt. of Engineers.

Brig. Gen. A. A. HUMPHREYS,
Chief of Engineers, U. S. A.

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