

MAINE STATE LEGISLATURE

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RESOLVES

OF THE

SEVENTH LEGISLATURE

OF THE

STATE OF MAINE,

PASSED AT THE SESSION

WHICH COMMENCED ON THE THIRD DAY OF JANUARY, AND ENDED
ON THE TWENTY-SIXTH DAY OF FEBRUARY, ONE THOUSAND
EIGHT HUNDRED AND TWENTY-SEVEN.

Published agreeably to the Resolve of the 20th June, 1820,

FORTLAND.

PRINTED BY THOMAS TODD.....PRINTER TO THE STATE
1827.

STATE OF MAINE.

IN SENATE, January thirtieth, one thousand eight hundred and twenty seven.

The Committee to whom was referred the Petition of Jabez P. Bradbury, on the subject of an uniform system of surveying, have had the same under consideration, and ask leave to REPORT—

That they have examined the manuscript of said Jabez P. Bradbury, purporting to be “a new system of Surveying.” It is divided into two parts. “The first containing a plain and easy mode of surveying by projection, with a new set of instruments.” The second part explaining Trigonometry by a new set of instruments, with rules for measuring Triangles, Heights and Distances, without the help of tables.

By way of introduction, the Author gives the result of his experience in the use of surveying instruments; points out the errors to which those now in use are liable; and calls the attention of the public to his improved instruments, which he thinks will supercede the use of tables. In the first section of the work, the instruments and their uses are described. These are a Plain Scale; Protracting Quadrant; Surveying Quadrant; and Semicircle. The Protracting Quadrant has an index attached, with a dividing scale, by which a degree can be divided into decimal parts, and parallel lines drawn from each side or diameter, cutting the limb in such manner as might answer the purpose of a parallel ruler. The Surveying Quadrant is described somewhat like the Protracting Quadrant, and has two indexes with sight vanes, one moving on the under side, called the main index, and the other moving on the upper side of the instrument, called the magnetic index, each index having a scale which will divide a degree into ten parts. If instruments were accurately constructed on a large scale, embracing the principles here laid down, there is but little room to doubt, that lines may be run and fields plotted with more ease and accuracy than in the usual mode. The Semicircle is an instrument, whose arch contains 180 degrees, and constructed somewhat different from the Quadrant, but keeps in view the same principles.

Section 2d, contains so much of Geometry, as is supposed to be necessary in surveying. Section 3d, is the method of finding areas of Geometrical Problems. Section 4th, takes up Surveying with the improved instruments.

The courses are noted in the field books with degrees and parts, and plotted with Protracting Quadrant in like manner. Section 5th, is on the subject of laying out land. Section 6th, the division of land. Section 7th, the reduction of land.

Section 8th. In this section is taken up the variation of the compass, or account of mines or minerals, and the revolving variation of the magnetic needle, with rules for running new lines and tracing old ones. Section 9th, is a description of the Plain Table and its use. Section 10th, Demonstration of angles. The second part the author calls a new system of Trigonometry, founded on a new set of instruments, and to be performed by the same. The first he calls a Trigonometer or Measuring Sector. The next he calls a Sector or Measuring Triangle. There are two or three other instruments in this part of the work drafted and explained; they are calculated to take the decimal parts of degrees in the northings, southings, eastings and westings of courses. This part of the manuscript contains about fifty pages, and the instruments herein described are rather complicated, and perhaps not so well understood by the plates (which are numerous) as they might be by patterns of the same; but taking into view the multiplicity of their parts and principles, it is a question, whether the projecting and measuring of Geometric Problems, would be facilitated or be so accurate as with more simple instruments.

Taking the work as a whole, your Committee are of opinion that it is deserving of attention and patronage; but the most striking improvement appears to be in the Protracting Quadrant, and Surveying Quadrant, named in the first part. The improvement in these instruments promises more accuracy in the Art of Surveying than any thing of the kind that has heretofore arrested their attention. And in order that the subject may be more fully investigated by scientific men, and such as are well qualified to decide on the merits of the system, your Committee ask leave to submit the following Resolve:—

SAMUEL WESTON, *Per Order.*

CHAPTER XV.

Resolve on the Petition of Jabez P. Bradbury.

Resolved, That the Principal and Professor of Mathematics of the Gardiner Lyceum, be a committee to investigate the subject aforesaid, during the recess of the Legislature, and that they be requested to attend at some convenient time during the recess, and that they notify Mr. Bradbury of the time of meeting, that he may have an opportunity of attending and exhibiting and explaining his manuscript system of surveying, and the several instruments therein described, that the said Committee may be enabled to judge of the merits and

utility of the same, and that said Committee be requested to report the result of their examination to the next Legislature.

[*Approved by the Governor, February 8, 1827.*]

CHAPTER XVI.

Resolve in favor of Nicholas Pierce.

Resolved, That there be paid out of the Treasury of the State to Nicholas Pierce, three dollars per month, as a pension for disability, by reason of a wound received in his right hand, while in the Militia service ; to be computed from the first day of February eighteen hundred and twenty seven, for the term of five years, if he so long live, unless the said Pierce shall sooner be placed upon the pension list of the United States, and on the happening of either contingency, the pension hereby granted shall cease.

[*Approved by the Governor, February 9, 1827.*]

CHAPTER XVII.

Resolve in favor of William Tozier.

Resolved, That there be paid out of the Treasury of the State to William Tozier, three dollars per month, as a pension for disability consequent on a wound received in his left shoulder, while in the Militia service ; to be computed from the eighteenth day of February, eighteen hundred and twenty six, for the term of six years, if he shall so long live, unless the said Tozier shall sooner be placed upon the pension list of the United States ; and on the happening of either contingency, the pension hereby granted is to cease.

[*Approved by the Governor, February 9, 1827.*]

CHAPTER XVIII.

Resolve for opening and clearing a road from the south line of Township number two, Old Indian Purchase, on the east side of Penobscot River, to the Metanawcook Stream.

Resolved, That the Governor, with the advice of Council, be, and he is hereby authorized to appoint an Agent, whose duty it shall be to expend, under the direction of the Govern-