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CHIEF OF PARTY
Eugene Ellicot

DATE

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Descriptive Report to accompany Sheet No. 1857.

Locality: Purskov, Florida.

1888
U. S. COAST AND GEODETIC SURVEY.

J. M. Thorne, Superintendent.

State: Maine.

DESCRIPTIVE REPORT.

Topographic Sheet No. 1859.

Locality:

Penobscot
Bay and River.

1888.

Chief of Party:

Eugene Elliot.
U. S. Coast and Geodetic Survey,

McLaughlin, Ill.

Dec. 19, 1888

S. W. Thorn, Engr.

U. S. Coast and Geodetic Survey

Washington, D. C.

Sir:

I have the honor to submit the following report of seasons work which closed on the 17th of October.

The location of sheet is best described by saying that it encloses the shore line, and extending contiguously to the

North-Eastern quarter of Lake Erie.

The northern S. Eastern limit of detailed topography is the East Point [proper Island]-Mainland.

Bridge. The western limit—in general terms—

London region topography extended from

section of 1884 by C. H. Fisk.

Field operations were begun on the 14th

of May, and closed Oct. 17th.
The geological formation of this country in question is interesting. I am inclined to believe that the Laurentian deposits are found and elaborately described by Agassiz reached as far south as the Saint Lawrence. It is quite evident that upon a higher geological scale is reached, for there is to be seen evidence of the Devonian deposits, or speak. The physical features of the county are in accordance with the above suggestion that: The hills are generally low and extremely irregular. The greatest altitude on the sheet under discussion is that little in excess of one hundred feet, and this is the highest peak I know of in following the coast from Machias Bay East to Terry’s Head, and thence along the irregular shores of West Broadway Bay, Johnson’s Bay, etc., not and around Lubecook Bay. There are a few peaks on the line of the Mt. Agassiz Range, above of Chamoise Mountain (New Brunswick) which are of greater height.
As indicated the country is for the most part
sparsely occupied. There are not few hills
attaining the height of two thousand feet.

On certain sections of the work where the slope
on hundred foot contours would not be ini-

volved I have experienced as much inconveni-

ence and discomfort in carrying the plane tab-

le in water as I have in California with hills
of twelve or fifteen hundred feet to delineate.

A very marked feature in the rock is the
 abrupt and sparsely jointed South-west folial
 exposure. The weather and time have

destroyed a portion of the prismatic reality, while
at one time we doubt existed - facing as above-

but still it is marked. On the S.E. side of
the hills the slope is conspicuous in contrast.

It is quite responsible to delineate this feature

existing in a general way, on a scale of feet

By referring to the sketch this feature will

show itself very plainly.

A few square miles were covered by Devonian
sandstones in which no fossils were found.

The largest part of area covered by the great
is composed of Tertiary rocks, or formations, similar to that one. In the Tertiary strata, was found a variety of prominent conglomerates, a few ferric ore, but the exposures are not at all frequent. I observed specimens of Murchisonian, Nelson, other or bioclastic, etc. The evidences of glacial action are very marked. The fragments in place being a foot or more across, and many quartz in length. From the very interesting investigations made by Agassiz in vicinity of Baragon, Maine, I am inclined to believe that these are quartz, quite similar, and will fall under the same scientific classification. Maren, which is the popular name, is another name for Maren, does not occur.

The only mineral deposit encountered during recent work in the Western corner of the district, was a deposit in topographical detail. It is a vein of galena, about two (2) inches in thickness, inclined in a manner of gneiss. It has been worked slightly, but the facility of metal discouraged the miners, and operations
were abandoned.

Concerning requirements in paragraph 2: Land water lines is defined plainly because of their being no maintain quantities caused by towns.

6: Springs of water are not frequent and those that were seen are small and insignificant.

7: Salt marshes are scarcely worthy of consideration as they only exist in small, frequent scale, but they.

8: The regulation is a matter of small range. The trees are of forest growth, and generally, indeed, entirely of second growth. The principal forest was of noble proportions and of great commercial value. Before the opening up of the Michigan and other white pine districts, the Atlantic states depended on Maine for the valuable timber, and the activity in cutting and marketing continued from even after the Rebellion, until a few years after the Rebellion. During those many years preceding guarantees were stripted, and the country practically stripped of its first timber.
At present the shipment of lumber are
considerably smaller, and the great loss on our
only sale in the market of trade as usual class.
Michigan face to being exceeded the first
year. (The remark on this subject, which
I very much appreciate will be regarded
as insignificant. Should apply to the Eastern
port of Maine. To confine myself, the poor
little space covered by an antiquarian sheet,
or Books of Tynne would be to reduce the dilu-
vation to an illegible limits.)
The average height of the Spruce - its dominant
Tree - is almost forty feet. The white fir is priced
destroyed by fire or fire are generally
coming up in force. The hardwoods are
a small factor, through there is much of
the Trees used as material for cotton spools.
Probably all the spools used by manufa-
ufacturing of seizing actions, etc., etc., are made of
Prarie Fir. Nuthlets sized up the lumber
and in fourth age of the forest made of it is
being cut for lower grades of lumber
The manufaicts of cases for packing
Last year consumers quite a lot of small stuff, but larger in most cases than the cord wood wood for fuel in Baltimore and Washington. The most valuable hard wood for fuel is the Black maple.

I saw it stated in a paper recently—

as to reliability of report, I know nothing.

That an Agent of Agricultural Dept. had made an of land suitable examination of the woods lands of Maine, and reported that the cutting of timber was not equal to the growth.

In other words, the timber is growing more rapidly than the mill men can cut it.

I am inclined to join my faith to the report, for the growth is remarkable.

If fruit trees there are 10 or 20 no fruit flourish. The apple is liked by all the farmers. But the orchard does not strike me as

accommodate with anything. There is a gorgeous array of blossoms toward the latter part of June, just before the fall, and useful work of an apple tree's life begins this cold nights of September.
Upon their disappearance, and safe return, went
this to stay for eight months, and prepare
for production of more blossoms.

The proportion of arable land to the
wooded, is not more than an one to fifteen,
and directly North of that an almost
impenetrable wood. Land is uncommon.
The only town embraced, or included in the
survey under discussion is Pembroke.

One, that is N. Pembroke, which exists by
grace of the Post Office Department.

There is no bar of discrimination between the two
settlements (two as officially considered).

The S. Office an about three quarters of
a mile apart.

I was unable to learn the derivation of
the name Pembroke, though I made frequent
inquiry. The first settlement was made in
1774 by a party of colonists from Hampshire,
Massachusetts, headed by a bold spirit
named Hersey. The only one I could get
the origin of name was that Hersey had
not been long in Massachusetts, and that
became James England. The chances are that his name is the place after the English
Parliaments because of early association.
It was the custom of the Colonial Governor
at the grants of one hundred acres to settle.
In some instances an entire township was
granted an individual upon condition that
he would induce a certain number of families
to locate there—this number varied, as
well as I can learn from thirty to sixty.
This was an encouragement to much grant on
the Commonwealth, and impulsion on the
settlers. I have seen some of the so-called
deeds or titles to these lands—they are in themselves
will not succeed. Title was finally
acquired by prescription, in many cases
at least. In almost under the squatter of
the West to-day, has his prototype in the
year 1774. The discussion may be irrelevant
to the subject in hand, but in a more enlightened
spirit would not be without interest.
To comply with requirements, the original
settlement was made, as directed by the
Family goods quality of the land, safety of

I am informed by Mr. Franklin, that the
beginning of present century, and subsequently.

The town as a corporate body was set off from
Derryville in 1832.

In 1838 the Coffin Iron Mills were started.

The enterprise, which was for a period very
successful and remunerative, is in the
fact that their was not an element for

The ore came from abroad, or Cenangle
Vine or coal from Pennsylvania, and
the flax from land of Bay of Fundy —
and Nova Scotia. Every family of note,
from the poor to huge and noble plate was
made.
So reply to the question, What maintains (to settlers) their want in industry? At first, in former years, beside the farm works, many vessels of large size were built. I am informed that at one time their were several hulls under course of construction. Some of the people are "squeezed" out vessels from which some income was derived. But the bulk of the people have nothing but their little farms, or lot, but in fact of going to work in factories in Massachusetts for part of year to manage to subsist. Money, however, the men trade for one another. The carpenter works out his bill at the store and the shoemaker. The farmer takes goods for their mercant products. The shopkeeper buys the wholesale in eggs and other small stuff. The people who board are able to work and in almost a part of their board, or if they are independant, the board is paid in goods. So the life in the village of Cambridge goes. One of the most intelligent and best off men in the place told me that the destruction of all their interests had not created any
perjury or treachery. Of course many farmers have moved away during part of the year,
but those who remain have comfortable homes, and by the operation of an economy which
favors every little shot of genius, they pull
through decently and are for today.

There are no built roads. The communication
with the metropolis, Eastport, is by a very few
wagons for heavy goods, freight, etc., by water.
In a previous report I had occasion to say
that the roads were generally good, and in
Scituate, extraordinarily so. In the case of
Penskela there is different. West of the town
toward Danysville they are poor. To the
W. in Paul equal as to. From Penskela
to the East part they, a distance of 7 miles
the road is vile beyond description. There
are in the town of Danysville deposits of
gravel everywhere - along the main road.
The result is a layer very thick and
fossil. In Penskela there is no gravel within easy
reach of the road, excepting those leading to
Barred Head and Lighters' Pt, where beach
ground is used. The apparent low piece of
and between Campbrook and Eastport Bridge
would be better, perhaps, but that is not through
the town of Perry, and the settlements are flat
and far between Perry village and the producing
factors are all on the Eastport-Caids road.

The Perry people say that they go on and the
Barber's road, and the Campbrook people are
too selfish and narrow-minded to spend a
penny outside of their town limits. Hence, one
of the most important and truly useful
roads in the country is the proposed.

I cannot resist the temptation to call your
attention to the town system of this section. A
good system is the abstract, thoroughly American
and productive of splendid results in rich
sections, but ill suited to a poor sterile
county like this. There are about ten towns
in this county, to where three should be one.

The grades are not generally bad there
and have a stiff pitch in most cases. The
country is on a low grade—but few labor
of any magnitude—hence not many good
grades.
The Reservoir (sometimes called with a slight "k" in the first syllable) being the only stream with which I have to do. This stream, in its normal volume, is not of much importance, but by the control in which it is held it is particularly valuable. Contingent is the mill rights, or falls, and sufficient truck two miles there is a valuable right (belonging to the present owner of the old iron works) of sluicing. Beside the right the natural facility is good. The sluicing works, or can be made to even about five acres of area. So perfect is the control over the water it can be raised from a high water sluice dammed for 30 feet. By a dam made with a depth of 6 feet makes it itself a thousand square yards of water power. Frigid water is caught, or as much of it as needed, and held for mill. Such water is a small part, as in functional part of the water storage facility this stream, and its source affords a terrace above the bend of the above mentioned reservoir in the S. end of Reservoir.
Lake, in which another Branch Pool.

I estimate the area of these two bodies at 30

acres. They lie, probably forty feet above
the lake area, and can be kept in

perfect control. Indeed I do not doubt but

that (assuming private rights) their water could

be inexpensively made to raise their surface

6 to 10 feet above ordinary level, and

the water, then stored, let off just as needed.

While having no special knowledge of

such propositions, I am inclined to regard

this as one of the most valuable water

resources in Exchange Town. It is all good

drinking.

The bridges are all good; they are

generally very small streams, and the

keeping in repair involves but little expense.

The ferry is generally used, but not

disagreeably, because of the gentle load.

There are no pleasant resorts on the lake,

though the many lovely spots on the Cartha

Bay part of the Lake, can not, I think

give many years my favour.
During the winter, or at least definite from
1st of June (or something) until March 15,
the river did not go above Cuyamaca Wharf.
There were little cannon, which marked the
river of the river and the coast
below their place. Eventually, the Bay is far away
from this point up to the village.

Our tribe is described as one game
because of its schools. They are connected
and including a high school. This process
of education is good for the country at
least. The West and East, but also
true but little service. None of the grant
who obtain any sort of standing as soon
complete their course of study before they
leave the village, for the most part
outside of the country. And still remain
on educating its grants to labor in other
villages. The stupid - the afflicted. The
improving stay at home. The age are
not be supported by the refuse, as remains
I was afraid that there will be no circular
issued forbidding the discussion of
afterwards subjected, but as presently
indicated a report confirmed to the four sides of
a plan that what would be very little found.
My chief consolation is that, in solitude, no
body will ever read a line of their words
production, so I will acute some for
epitomies which twice perhaps. Still it will fill the whole
The summer climate of certain of
Camley lying E. of Cadet,
factory or which lists as fifteen people,

Generally, 3 to 4 men were unemployed at one time for

three months and indefinite periods.

Also, a cheese factory, whichquire employment

to one man for half the year. If this letter

circumstance is not foreign to subject I would

like to mention it. The man who is so inexperienced

in the practical of the cheese factory above

referred to is an expert cheese maker, from

Clay County, N. T. and informed me that

the milk produced in vicinity of Cumberland

was the finest and creamiest milk in any mile

he ever tested in Cumberland Co, and that he had

for years examined several thousand gallons

early in my desperation, regret of

work of season 1857, and possibly, looked

on in respects of former seasons I had arising

to refer to the laws grade civilization which

obtains in the settlements contiguous to canals

After a season as Cumberland and neighboring

towns I am more than satisfied with the

affluence and convenience of my conclusions.

The town will removed from fishing grounds,
Though not ventured by Teller and others, water, water power, wood, or any other constituent of a people's needs, are unnecessarily bitter off and unpractically higher in the present state of Missouri. Ground ideas, lands, boats, and DeSargerville seem to have no visible means of support, notwithstanding which they are fairly, flourishing, in a manner as very hardy, comfortable and perfect, and there is a very small farmer class. It would be difficult to convey in a paper of this character an adequate idea of the tremendous difference which exists between the Smoak towns and their surround from the fishing influence. To make a comparison between any Cotton and Lambskin, in this case of first named viliage there is adjacent a town known a rolling rich in soil perfecting many little patches of ground, all of which would quickly grow tobacco in the first fruit is of the country, but as later is hopelessly demonstrated by the declining and neglected villages, (tobacco plant) and by work incidental to the fishing, wrought in demand by many bodies for the smack master of the year.
When the first are not among 

I am fully satisfied that the coast of Canada 

would be a more prosperous and useful sector 

df the country if were another farming was taught. 

There is no summer playing between Cape Breton 

and the outside world. There is no railroad 

of almost 300 miles running between Cape Breton - 

Eastport and Portland. 

Statistical. 

Census sheet: 

Arice  27.5 miles 29.4  27.5 

Portland  37.0  7.5 

Bar Harbor  5.0  1.0 

Beck  37.0  40.0 

400 

Sheet No. 979. Sandanby, 3rd Darnia, 1868 

detail laying by fisher, 1858. 

Roads  3 miles 

Arice  1/2  1.5 

For purposes of wording coast - 5000 miles  40.5
Statistical con.

EarlyDepress May 14 to Oct 17 $1900.71
Salary May 14 --Dec 20 904.95
Total total cost $2803.66

$2803.66 = $67.56 per square mile

To ascertain actual cost then should
be added, say 1 month's pay - a liberal
estimate for cost of completing mile
work 129.20
Transportation estimated June
Machinist, Mr. O. Washington 32.00
    161.20

2803.66
2964.86

Cost per square mile, including above, $71.45

Weather: during the season the weather
was in the whole unfavorable. While pleasant
and conduce to good results in June and
July it became disagreeable in Aug. and
Sept. From Sept 15 to close of work, Oct 17
The conditions became insupportable bad.
I had hoped to finish sheet 780, three lots of which was expected by 1863, in addition to 799, which was done in bad weather.

It may strike you as curious to have carried this topography so far inland, but as it was done at no extra cost I beg that what was reached beyond the usual one mile limit will be accepted as so much done gain. It was necessary to occupy certain stations and sites outside of the flexible one mile limit in order to carry the plane table traverse work along, and at such places it involves no extra expense to delimitate country within reach, and since I found that I could walk a mile or two inland when the fog was hanging over, and quite close along the shore.

I will repeat, in this report, a statement I made to you in a personal interview, that I made a survey of the road from Calais to Manchester, and all the other road lying between that line and
The works are of some value, and considerable.
The distance from East Machias to Calais
is about 26 miles. Fifteen miles of road-i.e.,
from near East Machias to Herring hill-
which is done, from Mill bridge, and the
much further part I do not know. To the
boundary. In case of war with England,
which is among the remote possibilities,
the network of roads necessary to the
same would all be of great importance.
Especially where it is remembered that
this is but one mile to the boundary, and
that passing through some miles of Canadian
territory before reaching Calais.
In military preparedness to a great
accompaniment of say, run the roads with local
and field maps, interpreting the greater, water,
beaches, obstructions of bolder contiguous to road,
slight settlements, hill tops, etc. I think these
miles of works could be done daily, with
wagon and light camping outfit.
One hundred miles would be a liberal estimate of some distance involved. Two months should suffice to accomplish the surveying. I think that where the survey has ceased to work a mile or more inland greatly miscalculates the entire length of the Atlantic coast. Had there been more than justification in walking back at this place to (water) referred to above.

I am quite sure that military and diplomatic authorities would highly sanction such a survey.

Under head 5: Schedule Statistical subjects.

Thus were all the triangulation points needed. Some difficulty was experienced in creating harmony here and there, but I am quite sure that neither the quality of the high-precision work, nor the method of projection are at fault. The very villanous though not slenderly so weather was probably the cause. Of plane table points there was an infinite number, indeed all trees and barns were used after once being located along the shores I marked, with poles and jigs of wood a large number of p.b. points.
and subsequently traced them together with these lines, for use of hydrographical survey.

Concerning character and degree of any obtained, I would say: the roads were made, an area of plans taken with surveyor's call, and trench marks placed. This method gave me a reference point on all the work adjacent to roads. The above line was carefully and successfully done.

Along this N. E. side of sheet the country is extremely uneven, and absolutely不适的.

It was necessary to generalize to a great degree in the contour work. But for the prominence of the range of hills which happen to fall along this side of sheet I would not have carried the work so far back. A vast deal of difficulty and personal discomfort was experienced in doing so.

I have not attempted to describe the location of these tracts, as it is manifest that reference to the report is almost impossible. Any疏忽 would be subsequent to an examination of the chart.
The population of the town of New Tivoli in 1880 was 2324. Since then the village has lost probably twenty per cent of its inhabitants. In the past century and at present the village supports for troops during the year of four population.

I desire to repeat a recommendation contained in my last report. I will:\n
Not that it be compiled from various reports or letters yet that time and facilities be afforded some one of the Society to make a report of the Court and circumstances attending from the county (Washington) line, which lies West of Millbridge, to the head of navigation, St. Croix River.

The present system of practically confining report to limits of streets, which are arbitrary, and perforce, unsuited beyond the mechanical perfection of the pen, on lot of paper over another, as is

presuming a wall, but not that the art of the stenographer is in the letter of regularity.

The prevalent method simply carres
a vast deal of repetition. The subjects of the problems, who worked East and West of me during past season probably embody the industrial ideas I have only been too honor of presenting.

Very respectfully,

Your obedient servant,

Eugene Elliott

Act I of B