



LIBRARIES

UNIVERSITY OF WISCONSIN-MADISON

Lake of the Woods and Kaministiquia River: [specimens] 10116-10172. No. 50 October, 1885

Merriam, W. N.

[s.l.]: [s.n.], October, 1885

<https://digital.library.wisc.edu/1711.dl/IHEWXJO6K2J4J8O>

<http://rightsstatements.org/vocab/InC/1.0/>

For information on re-use see:

<http://digital.library.wisc.edu/1711.dl/Copyright>

The libraries provide public access to a wide range of material, including online exhibits, digitized collections, archival finding aids, our catalog, online articles, and a growing range of materials in many media.

When possible, we provide rights information in catalog records, finding aids, and other metadata that accompanies collections or items. However, it is always the user's obligation to evaluate copyright and rights issues in light of their own use.

U. S. GEOLOGICAL SURVEY
FIELD SECTION BOOK

No. 50.

October, 1885.

Lake of the Woods and
Kaministiquia River
W. A. Merriam.

70116-10172

Survey of the Pre-Cambrian Rocks of the N. W. States.

INSTRUCTIONS.

1. Ordinarily at least two pages of this book will be devoted to one section. On the left hand page place a map of as much of the section as has *actually been seen*. Denote rivers, lakes, marshes, etc., by the usual topographical signs. Denote the ledges of rock, when no structure is made out, by cross-hatching, making the cross-hatching cover as nearly as possible the areas occupied by the exposures. If the rock is a massive one, but still more or less plainly bedded, use the same sign with a dip arrow and figure attached, showing the amount and inclination of the dip. Denote slaty or other very plainly bedded rocks by lines running in the direction of the strike, with figures and a dip arrow attached as before. In all cases where there is the least doubt about the true bedding directions, indicate it by a query. To each exposure on the face of the map attach the number of the specimen representing it. In mapping the section count each of the spaces between the blue line as 100 paces, and twenty of these spaces as one mile, or 2,000 paces. Usually the southeast corner will be placed at the bottom of the page, or at the first black line above the bottom of the page, and at the right hand side. If, however, for any reason, it is desirable to show portions of an adjoining section, the southeast corner may be shifted up, or the map may be turned around and the north placed at the left hand side of the page.

2. On the right hand page place the notes descriptive of the exposures. Begin in each case with the number of the specimen, placing the number on the left hand side of the red line, after which give in order on the right of the same red line the position of the ledges as reckoned in paces from the southeast corner of the section, and the dip and strike when observable, for instance: 4025 | 250 N., 300 W., *Strike*, N. 6° E., *Dip*, 50° E. Then follow with as full a description of the ledge as possible.

3. The ruling of the left hand page is also arranged so that a smaller scale can be used. Each one of the black lines may represent a section line and the red lines quarter sections and "forties." The scale of the maps may thus be reduced, if desirable, to two inches to the mile (the ordinary town plat scale.)

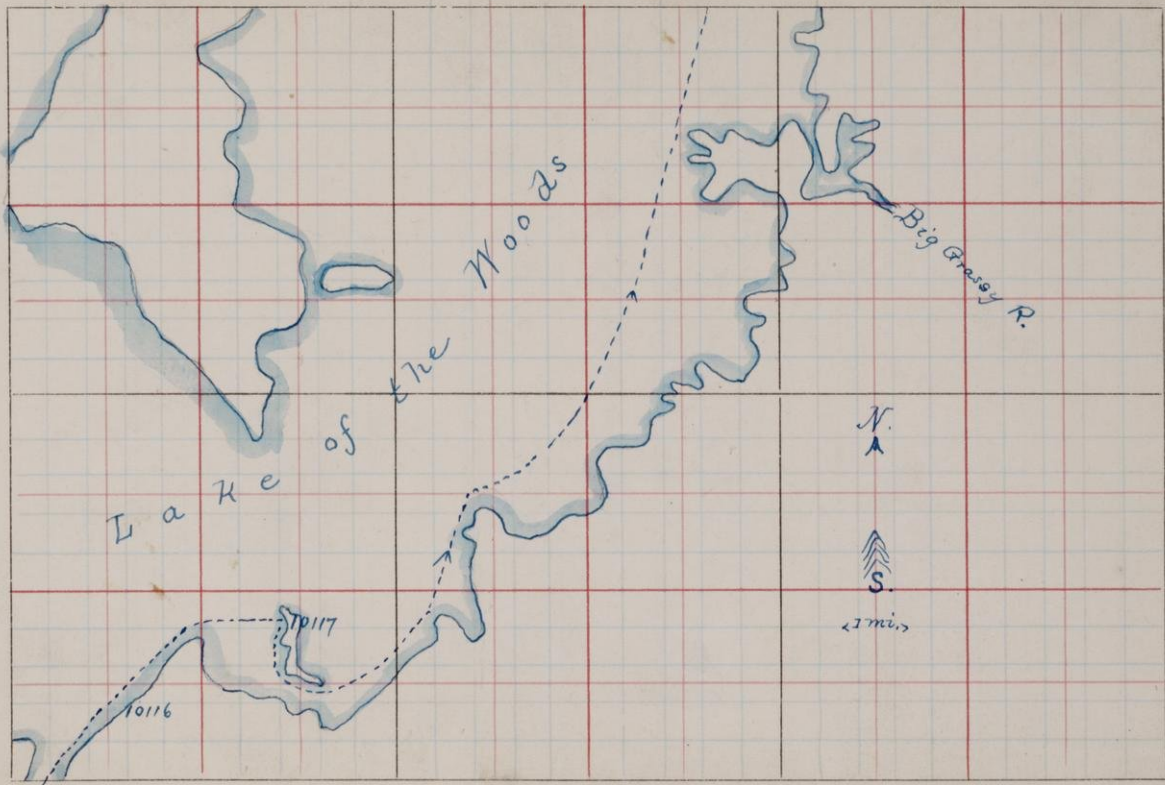
4. Collect a specimen from each separate ledge of rock, or wherever there is a change of rock on any one ledge. In case of trips made on foot or in canoes, for long distances, neighboring ledges, unquestionably of one kind of rock, need not be sampled, the position and extent of the ledge being marked on the map, with a note that it is of a rock identical with specimen so-and-so. Under the same conditions small sized samples, trimmed to a uniform size of $2 \times 2 \frac{1}{2} \times \frac{3}{4}$ inches will be allowed, but in all other cases *large sized specimens*, trimmed to a size of $3 \times 4 \times 1$ inches, must be selected, in accordance with § 3, chapter IV, p. 44, Regulations of the U. S. Geological Survey. In all cases collect chips for slicing. All specimens are to have numbers painted on them, in white on a black background, in the field.

5. On the last twenty-five pages of the book give, as may seem desirable, a general account of the examination of the region mapped in the previous pages, correlation of observations, sketches, cross sections, etc., etc.

6. Forward this note book, as soon as filled, as registered mail matter, to R. D. IRVING, U. S. Geologist, Madison, Wis.

Lake of the Woods
and
Kaministiquia Riv.

10116 - 10172



T.

R.

10116
Hb. gneiss

From the point northeast of Sand Island south end of the Lake of the Woods Hornblende gneiss the bands very marked and regular running N. 70° E.

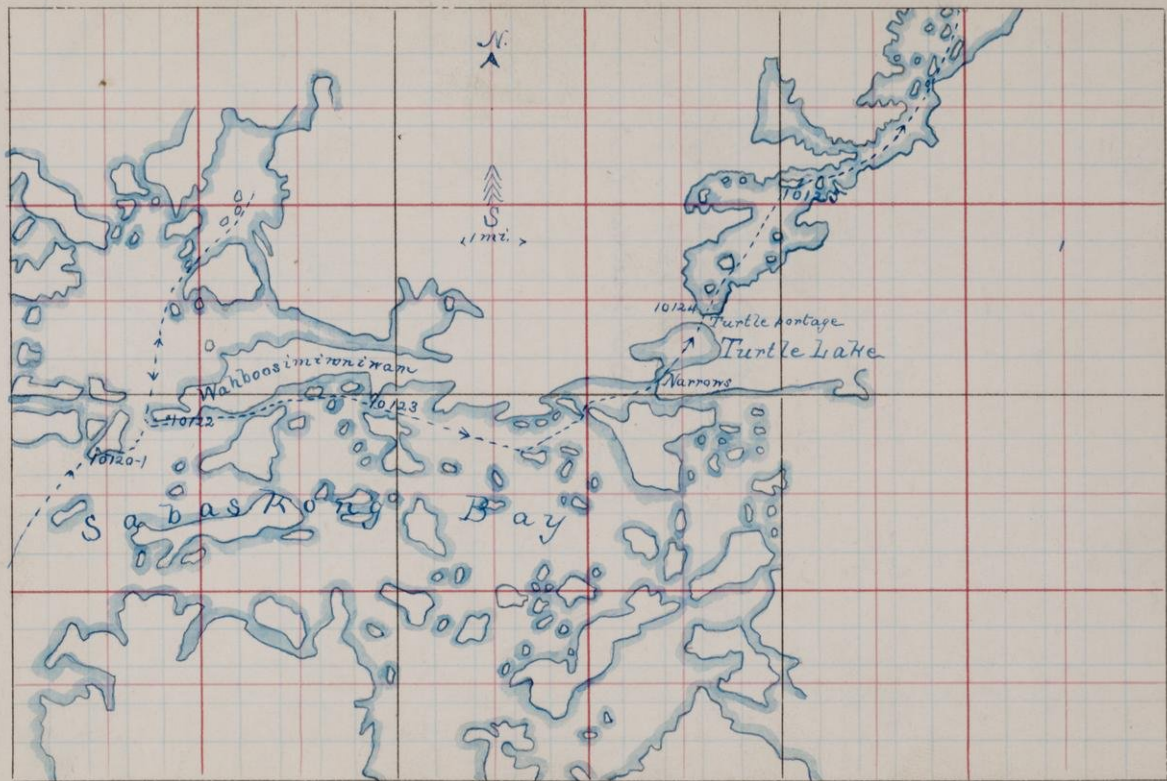
Veins of granitic material intersect these bandings

Dip 80° to 90° to the north

The same rock occurs again about $\frac{1}{4}$ of a mile to the east

10117 From an island about 2 or 3 miles east of the last a gneiss from Bell's Laurentian Area

10118 In order from 10117 to the mouth
10119 of Big Grassy River
Bell's Laurentian Area



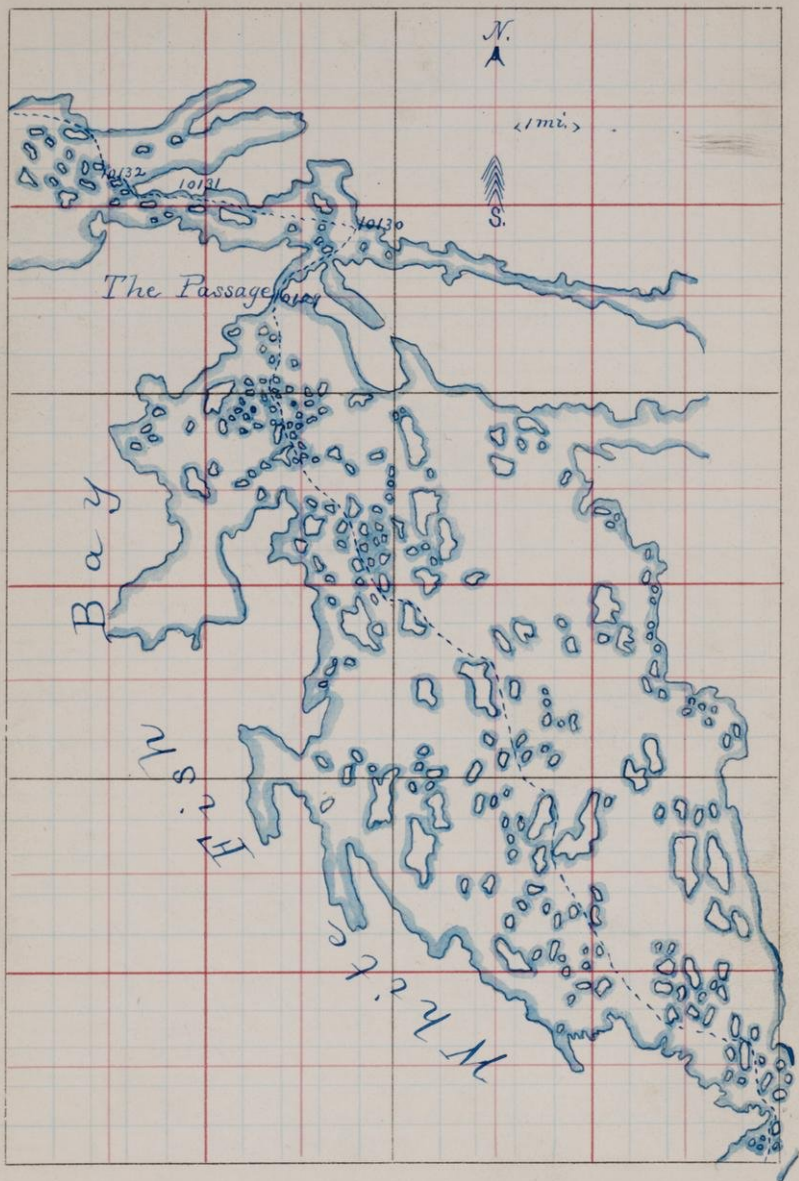
T.

R.

- 10120 Hornblende schist from an island near the mouth of Sabaskong Bay, Lake of the Woods
- 10121 From light-colored band in 10120
- 10122 From the end of Nahboosiminniwami Pt., about 1 mile N.E. of 10121
Hornblende schist: The bandings of dark green and light material are coarse and very regular. Two sets of granitic veins and occasionally large masses of granite occur.
- 10123 Hornblende schist about 4 miles east of 10122. Granitic veins were noted.
- 10124 From an exposure at the north end of Turtle portage. A compact dark green crystalline rock; occurs in the gneiss and granite.
- 10125 Hornblende granite from an island about 3 miles north of Turtle portage (Whitely Fish Bay).

T.

R.



- 3
- 10126 Hornblende granite from Whiti-
Fish Bay, Lake of the Woods,
(Bell's Laurentian Area)
- 10127 Granite from Whiti Fish Bay
North of 10126 (Bell's Laurentian Area)
- 10128 Granite showing a portion of a vein?
of a different colored granite
Whiti Fish Bay north of 10127
(Bell's Laurentian area)
- 10129 Green schist At the entrance to the
Passage north end of Whiti Fish Bay
(Bell's 21/)
- 10130 Green schist from a mile or so north
of the Passage (Bell's 21(?)
- 10131 Greenish schist from east side of
Lake of the Woods, about half way
between the Passage and Yellow
Girl Point (Bell's 20/)
- 10132 Schist from Bell's 20 a short distance
N.W. of 10131 More schistose than
10131

T.

R.

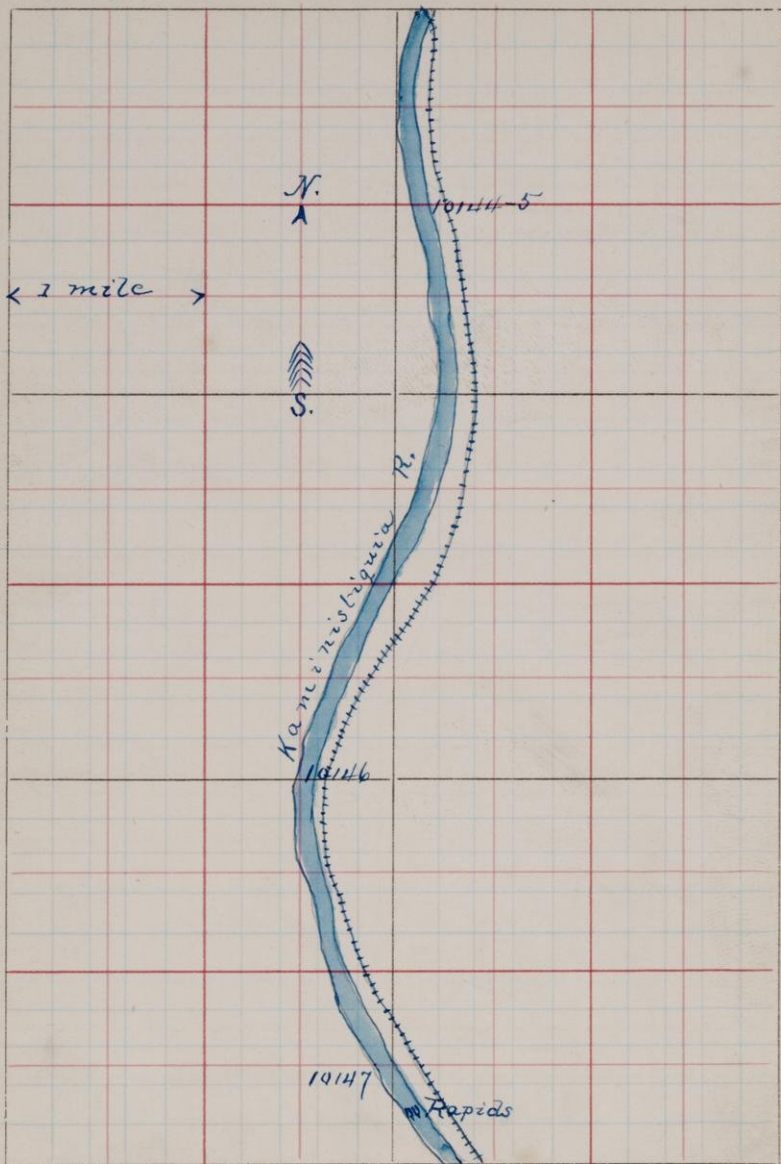


- 10133 Hornblende granite - from the end
of Yellow Girl Pt., Lake of the Woods
- 10134 From an island north of Yellow
Girl Pt. Immediately north of
the granite; a dark grey schist;
schistose structure well developed
- 10135 A porphyry from an island
about one mile north of 10134
- 10136 Green schist from an island
a short distance north of 10135
- 10137 From the point south of Pipestone
point or on Pipestone point
A rather coarse, greenish, very
hard conglomerate - Pebbles are
flinty material and porphyry
the latter greatly predominating
- 10138 A light colored rusty shale from
a point just north of Pipestone
point or from Pipestone point
as named by the Indians

- 10139 A light-colored schist breaking
in ligniform masses. From
the south side of Hay Id.
- 10140 Green schist from a small island
a short distance N.W. of Hay Id.
- 10141 A very light green shale from a
small island about a mile or
two north of 10140
- 10142 A very firm green schist a short
distance north of 10141
- 10143 From the narrows a mile or so
south of Rat Portage

T.

R.



10144 From the Kamministiquia River
one mile below the Ry. crossing
Banded jasper, very much
contorted The bands are much
broken in places, giving it a
bracciated appearance
Jasper is interbanded with a
greenish material (shown in
10145) in bands from a fraction
of an inch to two or three inches
in width. Bears a striking
resemblance to some of the Vermil-
lion Lake jaspers

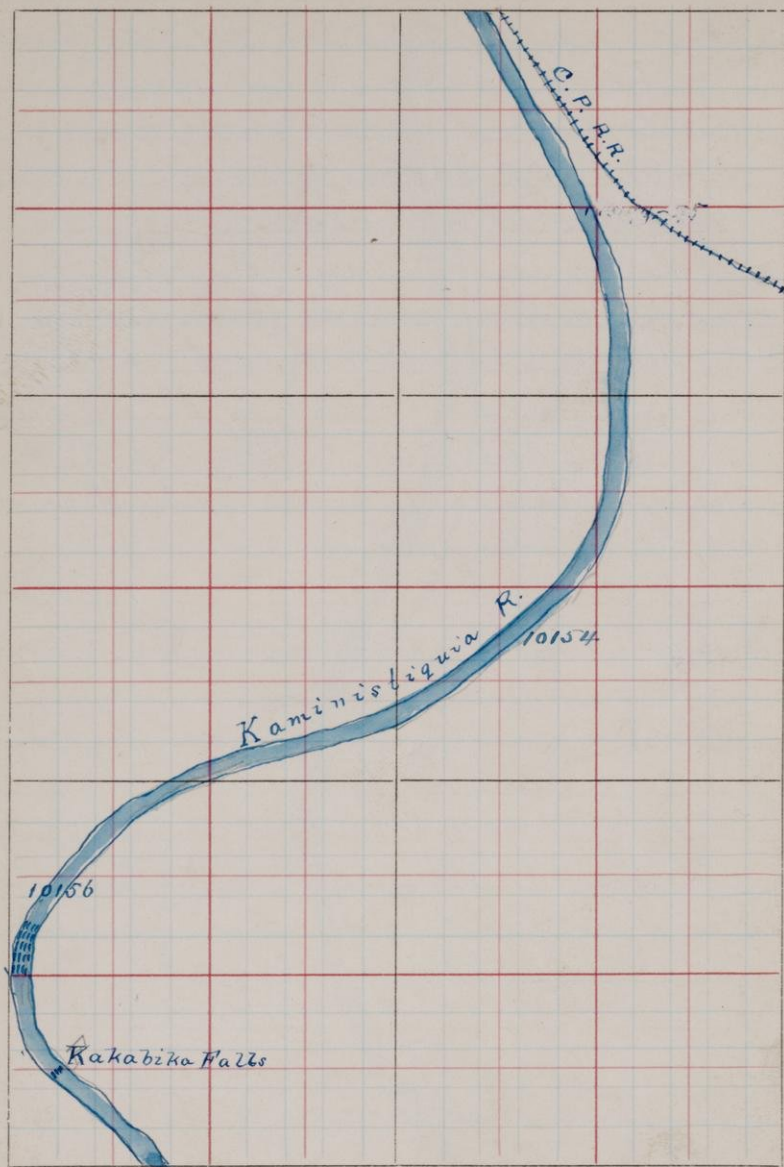
10145 Band in the jasper

✓ 10146 From a small exposure on the east
side of river
Chl. and
cherty con.
(Highly acc.) A light green conglomerate, very
firm. The pebbles are a flint-
and a dark green fine grained
material, the latter predominating

✓ 10147 A very fine grained quartzite (?)
Cherty ag.
(Highly acc.) Massive and breaks with a conchoi-
dal fracture. The same rock
occurs in the rapids about $\frac{1}{4}$ of a mile

T.

R.



south of 10147

8

- 10148 } Green quartzite (?) from the
10149 } Kamunistiquia river taken
✓ 10150 } at about equal distances between
Hb. Sch. the rapids below 10147 and
a point about $1\frac{1}{2}$ miles below

10151 A schist containing small
masses of quartz and semi-opal (?)

✓ 10152 A schistose quartzite banded
Hb. Sch. with fine and coarse bands

✓ 10153 Banded quartzite; the strike
Hb. Sch. is N. 55° E. Dip 70° to the N.

The last six specimens are taken
in order from near the rapids
below 10147 for the next 3 miles
when a hornblende granite
shows

✓ 10154 Hornblende granite from
Hb. Granite the Kamunistiquia river
Below this comes in a Hb. sch.
which with the hornblende granite

continues to within about $\frac{1}{4}$
of a mile above Kakabika Falls

10155 Hornblende schist a short dis-
tance below 10154

10156 Hornblende schist (banded) from
near the head of the rapids
just above Kakabika falls
*Hb. Sc. n.
plot like
10150-2-3)*

101567 A gneiss from below these
rapids

10157 Iron slates from the head of
10158 Kakabika Falls. Flat lying

10159 Banded iron rocks from the
portage at Kakabika

10160 Near the south end of portage
10161 at Kakabika Below 10157-8-9
although these slates are seen
interbanded with the cherty
layers

10162 } Taken in order below the
 10163 } south end of the podagē at-
 10164 } Kakabika for about 1 mile

10165 From the Dawson Road in
Port Arthur

10165 Slati from Ry. cut in Port-
Arthur

10166 Greenstone dike in 10165-

10167 From the 1st. exposure on
 10168 the Dawson Road In Port
 10169 Arthur

10170 From the 2d. exposure on the
 10171 Dawson Road In Port
 10172 Arthur about 200 yds.
 west of 10168-9

