

# MAINE.

## TRIANGULATION STATIONS.

### Brooks and Burnham quadrangles.

#### KENNEBEC, PENOBSBOT, SOMERSET, AND WALDO COUNTIES.

During the season of 1916 Oscar Jones occupied three new stations and located six points by intersections for control of Brooks and Burnham quadrangles. This work is based on stations Beaver, Blanchard, Carmel, Frye, Harris, and Sanborn on North American datum.

For other positions in Maine see United States Geological Survey Bulletins 122, 181, 216, 276, 440, 496, and 644; the Twenty-first Annual Report, pt. 2; United States Coast and Geodetic Survey Special Publication 46; and records of the United States and Canada Boundary Survey.

#### AMES, SOMERSET COUNTY, MAINE. (Not occupied.)

The station is 5 miles north of Burnham Junction.

Signal: Flag in tree used as station mark.

Station mark: A rock-maple tree 18 inches in diameter, in field, on property of Charles Ames, who lives 400 feet southwest. Tree blazed on four sides, a spike in each blaze.

[Latitude 44° 45' 03.57". Longitude 69° 26' 37.79".]

To station—	Azimuth.			Back azimuth.			Distance.	
	°	'	"	°	'	"	<i>Log. meters.</i>	<i>Miles.</i>
Gray.....	269	28	57.51	89	37	33.81	4.20770	10.03
Files.....	309	17	39.28	129	27	20.98	4.37232	14.65
Blanchard.....	338	21	59.80	158	26	15.72	4.33832	13.54

#### BEAVER, WALDO COUNTY, MAINE.

About 7 miles southeast of Albion and 7 miles nearly north of Liberty village, on a bare hill locally known as Beaver Hill, in meadow land, about 600 feet south of a hay barn.

Signal: Lone birch tree on top of hill.

Station mark: Aluminum tablet set in solid ledge.

Reference mark: Signal tree distant 27.5 feet, azimuth 330° 01'.

[Latitude 44° 29' 02.34". Longitude 69° 20' 40.88".]

To station—	Azimuth.			Back azimuth.			Distance.	
	°	'	"	°	'	"	<i>Log. meters.</i>	<i>Miles.</i>
Clinton.....(J)	143	20	46.67	323	13	58.32	4.33215	13.35
Carr.....(H)	40	02	37.06	219	59	26.09	3.9720448	5.826
Foss Tree.....(H)	125	53	37	305	47	13	4.16946	9.180
Foss (2).....(H)	126	09	28.30	306	03	09.49	4.1692678	9.175
Albion Church.....(H)	126	28	13	306	24	18	3.96330	5.710
Sanborn.....(H)	150	37	22.22	330	27	37.15	4.5720296	23.194
Blanchard.....(H)	180	57	50.73	0	57	55.76	3.9735599	5.847
Frye.....(H)	274	47	37.97	94	52	58.02	4.0056487	6.295
Liberty.....(H)	343	28	53.48	163	30	23.29	3.9992827	6.203

(J)=by Oscar Jones in 1916; (H)=by G. T. Hawkins in 1912.

## BLANCHARD, WALDO COUNTY, MAINE.

In field about 300 feet northwest of Mr. Blanchard's house. It is 6 miles nearly east of Albion, 4 miles north of Freedom, and 4 miles southwest of Unity.

Signal: Of sawed lumber covered with white cloth and has flag in top.

Station mark: Aluminum tablet set in granite block 12 by 14 by 20 inches, set 20 inches in ground over a cross in solid ledge.

Reference marks: Cross on ledge in narrow lane N. 30° E., distant 61.5 feet. Apple tree due north 47 feet.

[Latitude 44° 34' 07.13". Longitude 69° 20' 33.69".]

To station—	Azimuth.			Back azimuth.			Distance.	
	°	'	"	°	'	"	Log. meters.	Miles.
Clinton.....(J)	121	05	21.55	300	58	27.85	4.18077	9.42
Ames.....(J)	158	28	15.72	338	21	59.80	4.33832	13.54
Lake.....(J)	171	05	07.51	351	04	19.05	3.99166	6.10
Pittsfield.....(J)	171	31	02.96	351	29	02.30	4.40771	15.89
Gray.....(J)	201	43	00.92	21	47	20.47	4.3414696	13.64
Harris.....(J)	235	04	31.42	55	12	42.37	4.2737359	11.67
Files.....(J)	242	28	52.34	62	34	17.49	4.0612261	7.16
Beaver.....(H)	0	57	55.76	180	57	50.73	3.9735599	5.847
Carr.....(H)	20	28	11.30	200	24	55.16	4.2480728	11.001
Albion Church.....(H)	62	24	17	242	20	17	3.93029	5.292
Foss Tree.....(H)	86	28	41	266	22	15	4.08452	7.549
Foss (2).....(H)	86	42	17.95	266	35	53.82	4.0828019	7.519
Sanborn.....(H)	141	22	51.87	321	13	01.32	4.4711627	18.387

(H)=by G. T. Hawkins in 1912; (J)=by Oscar Jones in 1916.

## CARMEL, PENOBSCOT COUNTY, MAINE.

In the southeast part of the town of Carmel, on the highest point of Hinckley Hill, on land owned by Austin Miller.

Station mark: Bronze tablet cemented in solid rock and marked "U. S. Geological Survey—Maine."

[Latitude 44° 46' 31.24". Longitude 68° 58' 11.78".]

To station—	Azimuth.			Back azimuth.			Distance.	
	°	'	"	°	'	"	Log. meters.	Miles.
Mount Harris.....	49	12	44.67	229	05	12.30	4.2719702	.....
Peaked Mountain.....	262	20	23.35	81	41	44.17	4.6068628	.....
Mount Saunders.....	294	09	01.97	114	24	24.24	4.5036886	.....
Gray.....	83	12	57.89	263	01	32.97	4.3333655	13.40
Ide.....	16	54	38.44	196	52	38.49	4.1109540	8.02

## CLINTON, KENNEBEC COUNTY, MAINE. (Not occupied.)

Signal and station mark: A tall square brick smoke stack in the village of Clinton.

[Latitude 44° 38' 20.36". Longitude 69° 30' 22.84".]

To station—	Azimuth.			Back azimuth.			Distance.	
	°	'	"	°	'	"	Log. meters.	Miles.
Sanborn.....	160	09	12.66	340	06	16.21	4.21070	10.10
Blanchard.....	300	58	27.85	121	05	21.55	4.18077	9.42
Beaver.....	323	13	53.32	143	20	46.67	4.33215	13.35

FILES, WALDO COUNTY, MAINE.

On Files Hill, in the town of Thorndike, 6 miles east of the village of Unity, on property of Charles Wrenn, who lives 500 feet south.

Station mark: Tablet in ledge.

[Latitude 44° 36' 59.21". Longitude 69° 12' 50.56".]

To station—	Azimuth.			Back azimuth.			Distance.	
	°	'	"	°	'	"	Log. meters.	Miles.
Blanchard.....	62	34	17.49	242	28	52.34	4.0612261	7.16
Lake.....	110	31	35.36	290	25	21.48	4.09758	7.78
Sanborn.....	121	54	57.00	301	39	40.44	4.5283385	20.97
Ames.....	129	27	20.98	309	17	39.28	4.37232	14.65
Pittsfield.....	145	05	23.41	324	57	56.89	4.38700	15.15
Gray.....	172	12	05.52	352	10	59.51	4.1823517	9.46

FRYE, WALDO COUNTY, MAINE.

On high bare hill in the town of Montville.

Station mark: A bronze triangulation tablet cemented in solid rock.

Reference mark: Six iron ring bolts at foot of quadripod legs; No. 1, distant 4.2 feet, azimuth 252° 28'; No. 2, distant 8.5 feet, azimuth 266° 10'; No. 3, distant 7.8 feet, azimuth 359° 39'; No. 4, distant 5.8 feet, azimuth 75° 09'; No. 5, distant 4.1 feet, azimuth 155° 56'; No. 6, distant 4.5 feet, azimuth 178° 53'.

[Latitude 44° 28' 34.66". Longitude 69° 13' 04.08".]

To station—	Azimuth.			Back azimuth.			Distance.	
	°	'	"	°	'	"	Log. meters.	Miles.
Liberty.....(M)	39	50	28.03	219	46	38.03	4.0549328	.....
Harris.....(M)	194	39	46.94	14	42	41.97	4.3365735	.....
Patterson.....(M)	311	47	57.89	131	54	47.74	4.2402895	.....
Bald Rock.....(M)	.....	.....	.....	.....	.....	.....	4.43219	.....
Ragged.....(M)	349	44	44.28	169	47	31.16	4.4738346	.....
Beaver.....(H)	94	52	58.02	274	47	37.97	4.0056487	6.295
Gray.....(J)	176	41	59.31	356	41	02.89	4.4871666	19.08
Ide.....(J)	217	16	10.33	37	24	36.90	4.4192896	16.32
Thistle.....(J)	234	07	03.64	54	14	09.42	4.21854	10.28
Oak.....(J)	246	01	43.45	66	06	40.50	4.01052	6.37

(H)=by G. T. Hawkins in 1912; (M)=by E. L. McNair in 1904; (J)=by Oscar Jones in 1916.

GRAY, PENOBSCOT COUNTY, MAINE.

Station is on Gray Hill, a sharp bald hill in the town of Plymouth, on property of Taxter Gray, who lives about 500 yards southwest.

Station mark: Tablet in ledge.

[Latitude 44° 45' 07.64". Longitude 69° 14' 24.43".]

To station—	Azimuth.			Back azimuth.			Distance.	
	°	'	"	°	'	"	Log. meters.	Miles.
Blanchard.....	21	47	20.47	201	43	00.92	4.3414696	13.64
Ames.....	89	37	33.81	269	28	57.51	4.20770	10.03
Sanborn.....	95	55	34.27	275	41	22.74	4.4270144	16.61
Pittsfield.....	112	26	35.38	292	20	14.45	4.10932	8.00
Carmel.....	263	01	32.97	83	12	57.89	4.3333655	13.40
Harris.....	323	01	42.76	143	05	34.73	4.0820304	7.51
Files.....	352	10	59.51	172	12	05.51	4.1823517	9.46
Frye.....	356	41	02.89	176	41	59.31	4.4871666	19.08

## HARRIS, PENOBSBOT COUNTY, MAINE.

A station of the Coast Survey on highest point of largest hill in town of Dixmont, 1.5 miles east of Dixmont village.

Station mark: A masonry column 10 feet high and 7 feet in diameter, with a hole in its center 2 feet in diameter.

Reference marks: Drill hole in rock, N. 2° 38' E., distant 74 feet; drill hole in rock S. 80° 50' E., distant 17.3 feet; drill hole in rock S. 72° 50' W., distant 69.4 feet.

[Latitude 44° 39' 54.87". Longitude 69° 08' 54.67".]

To station—	Azimuth.	Back azimuth.	Distance.	
			Log. meters.	Miles.
Ragged.....(M)	0 16 10.87	180 16 03.41	4.7015453	.....
Frye.....(M)	14 42 41.97	194 39 46.94	4.3365735	.....
Liberty.....(M)	23 17 52.10	203 11 06.80	4.5097166	.....
Patterson.....(M)	347 08 23.11	167 12 18.77	4.5241926	.....
Charleston.....(M)	191 51 30.15	11 57 05.28	4.7034506	.....
Carmel.....(M)	229 05 12.30	49 12 44.67	4.2719702	.....
Greenfield.....(M)	230 15 31.96	50 44 54.33	4.8516641	.....
Bangor.....(M)	241 11 48.28	61 27 13.31	4.5179486	.....
Eddington.....(M)	243 33 32.38	63 53 55.23	4.6297717	.....
Peaked Mountain.....(M)	251 11 30.06	71 40 23.99	4.7570784	.....
Mount Saunders.....(M)	270 50 43.86	91 13 37.14	4.6339557	.....
Blanchard.....(J)	55 12 42.37	235 04 31.42	4.2737359	11.67
Sanborn.....(J)	110 11 49.40	289 53 46.51	4.5569736	22.40
Gray.....(J)	143 05 34.73	323 01 42.76	4.0820304	7.51
Ide.....(J)	270 36 24.19	90 41 56.28	4.0173669	6.47
Thistle.....(J)	325 04 39.89	145 08 51.22	4.13972	8.57
Oak.....(J)	347 06 45.28	167 08 47.74	4.23741	10.73

(M)=by E. L. McNair in 1904; (J)=by Oscar Jones in 1916.

## IDE, WALDO COUNTY, MAINE.

On a bald hill about 3 miles north of North Monroe post office, on property of Hiram Ide, who lives 400 yards north of station.

Station mark: Tablet in ledge.

[Latitude 44° 39' 51.03". Longitude 69° 01' 02.25".]

To station—	Azimuth.	Back azimuth.	Distance.	
			Log. meters.	Miles.
Frye.....	37 24 36.90	217 16 10.33	4.4192896	16.32
Harris.....	90 41 56.28	270 36 24.19	4.0173669	6.47
Carmel.....	196 52 38.49	16 54 38.44	4.1109540	8.02
Thistle.....	12 43 28.11	192 42 07.63	4.05989	7.13
Oak.....	21 29 14.19	201 25 45.00	4.25449	11.16

## LAKE, WALDO COUNTY, MAINE. (Not occupied.)

Station is 3 miles northwest of Unity Village, 0.5 mile southwest of Hutchinson Corner, and 500 feet west of road.

Signal: Flag in tree.

Station mark: Tablet in northwest face of pine tree 36 inches in diameter.

[Latitude 44° 39' 21.09". Longitude 69° 21' 42.69".]

To station—	Azimuth.	Back azimuth.	Distance.	
			Log. meters.	Miles.
Sanborn.....	128 22 36.80	308 13 34.33	4.33493	13.44
Files.....	290 25 21.48	110 31 35.36	4.09758	7.78
Blanchard.....	351 04 19.05	171 05 07.51	3.99166	6.10

**OAK, WALDO COUNTY, MAINE. (Not occupied.)**

Station is on Oak Hill, 1 mile south of Lanes Corners.

Station mark: Tablet in ledge.

[Latitude 44° 30' 49.29". Longitude 69° 06' 00.23".]

To station—	Azimuth.	Back azimuth.	Distance.	
	° ' "	° ' "	<i>Log. meters.</i>	<i>Miles.</i>
Frye.....	66 06 40.50	246 01 43.45	4.01052	6.37
Harris.....	167 08 47.74	347 06 45.28	4.23741	10.73
Ide.....	201 25 45.00	21 29 14.19	4.25449	11.16

**PITTSFIELD, SOMERSET COUNTY, MAINE. (Not occupied.)**

Signal and station mark: Iron water tower, city waterworks at Pittsfield.

[Latitude 44° 47' 46.36". Longitude 69° 23' 25.28".]

To station—	Azimuth.	Back azimuth.	Distance.	
	° ' "	° ' "	<i>Log. meters.</i>	<i>Miles.</i>
Gray.....	292 20 14.45	112 26 35.38	4.10932	8.00
Files.....	324 57 56.89	145 05 23.41	4.38700	15.15
Blanchard.....	351 29 02.30	171 31 02.96	4.40771	15.89

**SANBORN, SOMERSET COUNTY, MAINE.**

In town of Canaan, about 0.8 mile north of Canaan village, on bald hill on Mr. Sanborn's land, 600 feet northwest of Mr. Sanborn's house, and 300 feet west of a road which crosses the hill from Canaan to Lake George. The station is not on the highest hill but was put where it is because no trees interfere with sights. A few trees on the south edge were avoided by selecting a point on the east part of the hill and 6 or 8 feet below the top.

Signal: Tripod of sawed timber over center.

Station mark: Aluminum tablet in solid ledge.

Reference marks: Cross on ledge 2.9 feet east, cross on ledge 10.6 feet northwest, and cross on ledge 5.1 feet southwest.

[Latitude 44° 46' 35.27". Longitude 69° 34' 33.66".]

To station—	Azimuth.	Back azimuth.	Distance.	
	° ' "	° ' "	<i>Log. meters.</i>	<i>Miles.</i>
Gray.....(J)	275 41 22.74	95 55 34.27	4.4270144	16.61
Harris.....(J)	289 53 46.51	110 11 49.40	4.5569736	22.40
Files.....(J)	301 39 40.44	121 54 57.00	4.5283385	20.97
Lake.....(J)	308 13 34.33	128 22 36.80	4.33493	13.44
Clinton.....(J)	340 08 16.21	160 09 12.66	4.21070	10.10
Blanchard.....(H)	321 13 01.32	141 22 51.87	4.4711627	18.387
Beaver.....(H)	330 27 37.15	160 37 22.22	4.5720296	23.194
Carr.....(H)	342 39 13.92	162 45 47.18	4.6186864	25.825
Foss (2).....(H)	344 49 11.76	164 52 37.44	4.3919484	15.321
Foss Tree.....(H)	344 56 58	165 00 22	4.39262	15.345

(J)=by Oscar Jones in 1916; (H)=by G. T. Hawkins in 1912.

**THISTLE, WALDO COUNTY, MAINE. (Not occupied.)**

The station is on a bare hill, 1 mile south of Thistle Pond, and 3 miles south of Monroe post office.

Station mark: Tablet in ledge.

[Latitude 44° 33' 48.29". Longitude 69° 02' 56.82".]

To station—	Azimuth.	Back azimuth.	Distance.	
	° ' "	° ' "	<i>Log. meters.</i>	<i>Miles.</i>
Frye.....	54 14 09.42	234 07 03.64	4.21854	10.28
Harris.....	145 08 51.22	325 04 39.89	4.13972	8.57
Ide.....	192 42 07.63	12 43 28.11	4.05989	7.13

## Mattawamkeag, Millinocket, Patten, Seboeis, and Winn quadrangles.

## PENOBSCOT AND PISCATAQUIS COUNTIES.

During the season of 1916 Oscar Jones controlled the above-named quadrangles by occupying 24 new stations and locating 97 points by intersections, all based on stations Fish, Peasley, Carroll, and Woodville, North American datum.

Nearly all unoccupied secondary points are located from two sights only; positions are therefore doubtful.

## BARN, PENOBSCOT COUNTY, MAINE. (Not occupied.)

Not checked.

Station: A flag on a lone barn on the road from Winn Ferry to North Woodville.

[Latitude 45° 30' 13.4". Longitude 68° 25' 48.61".]

To station—	Azimuth.	Back azimuth.	Distance.	
	° ' "	° ' "	<i>Log. meters.</i>	<i>Miles.</i>
North Woodville.....	169 32 29	349 31 50	3.81636	4.07
Winn.....	319 23 14	139 25 43	3.84466	4.35

## BERRY 1, PENOBSCOT COUNTY, MAINE. (Not occupied.)

Not checked.

Station on Berry Ridge, 1 mile southwest of Seboeis.

Station mark: Flag in maple tree; tree blazed on four sides and has a spike in each blaze.

[Latitude 45° 20' 54.4". Longitude 68° 43' 35.0".]

To station—	Azimuth.	Back azimuth.	Distance.	
	° ' "	° ' "	<i>Log. meters.</i>	<i>Miles.</i>
Fish Hill.....	270 54 05	91 03 23	4.23291	10.62
Gray.....	290 37 24	110 45 02	4.17554	9.31

## BERRY 2, PENOBSCOT COUNTY, MAINE. (Not occupied.)

Not checked.

Station on Berry Ridge, 2 miles southwest of Seboeis.

Station mark: Flag in hemlock tree, blazed on four sides, spike in each blaze.

[Latitude 45° 20' 26.3". Longitude 68° 43' 09.4".]

To station—	Azimuth.	Back azimuth.	Distance.	
	° ' "	° ' "	<i>Log. meters.</i>	<i>Miles.</i>
Fish Hill.....	267 55 53	88 04 53	4.21873	10.28
Gray.....	288 08 13	108 15 32	4.15127	8.80

**BUNKER HILL, PENOBSCOT COUNTY, MAINE.**

Station is on Bunker Hill, 3 miles north of Maxfield.

Station mark: Flag in maple tree south side of road, in a large pile of boulders, 200 feet south of large barn, 300 feet east of James Swift's house.

[Latitude 45° 15' 48.8". Longitude 68° 45' 15.4".]

To station—	Azimuth.	Back azimuth.	Distance.	
			Log. meters.	Miles.
Fish Hill.....	244 33 33	64 44 03	4.32940	13.27
Gray.....	255 35 43	75 44 32	4.22360	10.40

**BOWER, PENOBSCOT COUNTY, MAINE. (Not occupied.)**

Not checked.

Station is 2 miles north of South Lincoln, on road from South Lincoln Ferry to Bower Bank.

Station flag is in spruce tree; tree is blazed on four sides and has a spike in each blaze.

[Latitude 45° 21' 53.1". Longitude 68° 35' 26.7".]

To station—	Azimuth.	Back azimuth.	Distance.	
			Log. meters.	Miles.
Fish Hill.....	287 59 36	108 03 01	3.83258	4.25
Gray.....	334 30 34	154 32 24	3.89573	4.89

**CARPENTER, PENOBSCOT COUNTY, MAINE. (Not occupied.)**

Not checked.

Station is 2.5 miles northwest of South Lincoln.

Station mark: Flag in spruce tree, north end of old field known as Carpenter field; tree blazed on four sides and has a spike in each blaze.

[Latitude 45° 21' 45.8". Longitude 68° 37' 39.2".]

To station—	Azimuth.	Back azimuth.	Distance.	
			Log. meters.	Miles.
McFarlane.....	252 31 35	72 37 45	4.07342	7.36
Gray.....	317 38 20	137 41 45	3.96872	5.73

**CARROLL, PENOBSCOT COUNTY, MAINE.**

On a high ridge in Carroll Township, 1 mile southwest of Carroll post office, on land owned by Fred Oliver, who lives 75 yards east of the station. Timber 30 feet high on the north end of the ridge obstructs the view from the northwest round by the north to the southeast.

Station mark: A copper bolt cemented in upper surface of embedded boulder.

[Latitude 45° 24' 22.50". Longitude 68° 03' 14.84".]

To station—	Azimuth.	Back azimuth.	Distance.	
			Log. meters.	Miles.
Almanac.....(G)	23 59 53.9	203 58 12.1	3.8837120	.....
Pasadamkeag.....(G)	37 47 47.5	217 34 52.7	4.5892082	.....
Peasley.....(G)	58 49 26.7	238 33 41.2	4.5300442	.....
Knob.....(G)	75 43 22.6	255 29 35.0	4.4161767	.....
Woodville.....(G)	103 27 24.3	283 08 40.6	4.5467760	.....
North Woodville.....(G)	119 35 31.8	299 18 47.6	4.5457384	.....
Katahdin.....(G)	129 38 22.4	309 01 23.0	4.9394592	.....
Lawler.....(J)	144 05 45	323 49 34	4.69950	31.11
Dobel.....(J)	144 54 53	324 47 32	4.36745	14.48

(G)=by S. S. Gannett in 1900; (J)=by Oscar Jones in 1916.

**CHESTER 1, PENOBSCOT COUNTY, MAINE. (Not occupied.)**

Not checked.

Station is 4 miles northwest of Lincoln Center, on west side of road to Hall Camp, about 500 feet north of cleared field.

Station mark: Flag in poplar tree; tree blazed on four sides and has a spike in each blaze.

[Latitude 45° 26' 45.8". Longitude 68° 32' 17.0'']

To station—	Azimuth.	Back azimuth.	Distance.	
			<i>Log. meters.</i>	<i>Miles.</i>
	° ' "	° ' "		
McFarlane.....	323 08 05	143 10 25	3.85388	4.44
Fish Hill.....	348 10 12	168 11 28	4.05622	7.07

**CHESTER 2, PENOBSCOT COUNTY, MAINE. (Not occupied.)**

Not checked.

Station is 3 miles northwest of Lincoln Center, 500 feet west of road to Hall Camp, near old fence line, on south end of ridge.

Station mark: Flag in poplar tree; tree is blazed on four sides and has a spike in each blaze.

[Latitude 45° 24' 59.8." Longitude 68° 31' 36.5'']

To station—	Azimuth.	Back azimuth.	Distance.	
			<i>Log. meters.</i>	<i>Miles.</i>
	° ' "	° ' "		
McFarlane.....	305 39 40	125 41 32	3.62240	2.61
Fish Hill.....	349 32 19	169 33 07	3.90322	4.97

**CLAY ROAD FLAG, PENOBSCOT COUNTY, MAINE. (Not occupied.)**

Not checked.

Station mark: Flag in tree at the junction of Clay Road with Hall Camp road; tree is blazed on four sides and has a spike in each blaze.

[Latitude 45° 28' 05.2". Longitude 68° 32' 59.4'']

To station—	Azimuth.	Back azimuth.	Distance.	
			<i>Log. meters.</i>	<i>Miles.</i>
	° ' "	° ' "		
McFarlane.....	327 27 58	147 30 49	3.98611	6.02
Fish Hill.....	346 31 18	166 33 05	4.14539	8.68

**COBB, PENOBSCOT COUNTY, MAINE. (Not occupied.)**

Not checked.

On Cobb Ridge, 2 miles southeast of Seboeis.

Station mark: Flag in hemlock tree, which is blazed on four sides and has a spike in each blaze.

[Latitude 45° 21' 12.0". Longitude 68° 41' 27.3'']

To station—	Azimuth.	Back azimuth.	Distance.	
			<i>Log. meters.</i>	<i>Miles.</i>
	° ' "	° ' "		
Fish Hill.....	273 16 45	93 24 33	4.15646	8.91
Gray.....	297 24 17	117 30 24	4.10238	7.86

**CROOKED PINE, PENOBSCOT COUNTY, MAINE. (Not occupied.)**

Not checked.

On ridge between Penobscot and Seboeis rivers, 2.5 miles north of Howland.

Station mark: A large crooked-top pine tree.

[Latitude 45° 18' 30.8". Longitude 68° 40' 29.0".]

To station—	Azimuth.	Back azimuth.	Distance.	
	° ' "	° ' "	<i>Log. meters.</i>	<i>Miles.</i>
Fish Hill.....	252 19 57	72 27 03	4.13642	8.51
Gray.....	274 52 37	94 58 02	4.00019	6.22

**DAVIS, PENOBSCOT COUNTY, MAINE.**

On the Davis farm, 2 miles northeast of Mattawamkeag.

Station mark: Flag in large elm tree, 50 feet west of old house ruin. Tree is blazed on four sides and has a spike in each blaze.

[Latitude 45° 32' 14.91". Longitude 68° 19' 03.50".]

To station—	Azimuth.	Back azimuth.	Distance.	
	° ' "	° ' "	<i>Log. meters.</i>	<i>Miles.</i>
Winn.....	25 08 07	205 05 47	4.00036	6.20
Carroll.....	305 11 38	125 22 54	4.40217	15.69

**DEAD PINE, PENOBSCOT COUNTY, MAINE. (Not occupied.)**

Not checked.

On ridge between Penobscot and Seboeis rivers, 3 miles north of Howland.

Station mark: A large dead pine tree.

[Latitude 45° 18' 09.7". Longitude 68° 40' 30.5".]

To station—	Azimuth.	Back azimuth.	Distance.	
	° ' "	° ' "	<i>Log. meters.</i>	<i>Miles.</i>
McFarlane.....	235 43 39	55 51 50	4.25949	11.31
Gray.....	271 08 29	91 13 55	4.00011	6.22

**DOBEL, PENOBSCOT COUNTY, MAINE.**

On Dobel Hill, 2 miles northwest of Kingman.

Station mark: The western of three maple trees in field, 30 feet east of road. Barn on south side of road, 300 feet distant.

[Latitude 45° 34' 39.8". Longitude 68° 13' 32.7".]

To station—	Azimuth.	Back azimuth.	Distance.	
	° ' "	° ' "	<i>Log. meters.</i>	<i>Miles.</i>
Lee.....	10 06 33	190 04 07	4.40519	15.80
Carrol.....	324 47 32	144 54 53	4.38745	14.45

**DOUBLE-TOP PINE, PENOBSCOT COUNTY, MAINE. (Not occupied.)**

Not checked.

Station mark: A double-top pine tree on ridge between Penobscot River and Sebocis River.

[Latitude 45° 17' 44.3". Longitude 68° 40' 26.7".]

To station—	Azimuth.	Back azimuth.	Distance.	
	° ' "	° ' "	<i>Log. meters.</i>	<i>Miles.</i>
McFarlane.....	233 35 25	53 43 33	4.26867	11.53
Fish Hill.....	246 43 47	66 50 52	4.15068	8.79

**EAST MILLINOCKET STACK, PENOBSCOT COUNTY, MAINE. (Not occupied.)**

Not checked.

Station mark: The eastern of two brick stacks of the paper mill at East Millinocket.

[Latitude 45° 37' 22.9". Longitude 68° 34' 31.8".]

To station—	Azimuth.	Back azimuth.	Distance.	
	° ' "	° ' "	<i>Log. meters.</i>	<i>Miles.</i>
North Woodville.....	303 50 36	123 56 10	4.08734	7.60
Medway.....	332 53 37	152 54 02	3.22655	1.05

**ENFIELD ROAD, PENOBSCOT COUNTY, MAINE. (Not occupied.)**

Not checked.

On a high timbered ridge, 6 miles south of Lincoln, 0.5 mile west of road from Lincoln to Enfield.

Station mark: Flag in spruce tree; tree is blazed on four sides and has a spike in each blaze.

[Latitude 45° 17' 20.1". Longitude 68° 33' 50.0".]

To station—	Azimuth.	Back azimuth.	Distance.	
	° ' "	° ' "	<i>Log. meters.</i>	<i>Miles.</i>
Fish Hill.....	214 34 14	34 36 36	3.88540	4.78
Peasley.....	292 27 46	112 33 46	4.07670	7.42

**ENFIELD CHURCH, PENOBSCOT COUNTY, MAINE. (Not occupied.)**

Not checked.

Station mark: Center of spire on church at Enfield.

[Latitude 45° 14' 57.7". Longitude 68° 33' 57.8".]

To station—	Azimuth.	Back azimuth.	Distance.	
	° ' "	° ' "	<i>Log. meters.</i>	<i>Miles.</i>
Bunker Hill.....	96 09 24	276 01 23	4.17193	9.23
Fish Hill.....	202 54 25	22 56 53	4.06587	7.23

**FERRY HOUSE, PENOBSCOT COUNTY, MAINE. (Not occupied.)**

Not checked.

Station mark: Ferry House and residence, 0.5 mile northwest of South Lincoln, west side of Penobscot River.

[Latitude 45° 20' 24.8". Longitude 68° 35' 22.6".]

To station—	Azimuth.			Back azimuth.			Distance.	
	°	'	"	°	'	"	Log. meters.	Miles.
Fish Hill.....	264	25	21	84	28	49	3.80658	3.98
Gray.....	323	03	19	143	05	06	3.73878	3.41

**FISH HILL, PENOBSCOT COUNTY, MAINE.**

On a cleared hill, 1 mile south of Lincoln village, in the town of Lincoln, overlooking the surrounding country, though the view is limited southward to about 5 miles and eastward to about 6 miles.

Station mark: A granite post 30 by 7 by 7 inches, set 28 inches in the ground, in the center of the top of which is cemented a bronze triangulation tablet.

[Latitude 45° 20' 44.90". Longitude 68° 30' 29.78".]

To station—	Azimuth.			Back azimuth.			Distance.	
	°	'	"	°	'	"	Log. meters.	Miles.
Charleston.....(G)	56	54	19.7	236	32	40.6	4.6789897	.....
Mattamiscontis.....(G)	125	55	04.5	305	46	04.2	4.3087467	.....
Katahdin.....(G)	152	51	44.8	332	34	12.4	4.8425063	.....
Woodville.....(G)	184	50	58.8	4	51	40.0	4.1724197	.....
Knob.....(G)	268	38	13.3	88	43	51.8	4.0140397	.....
Peasley.....(G)	328	32	36.2	148	36	13.3	4.1059741	.....
Passadumkeag.....(G)	333	34	27.2	153	40	59.7	4.4282994	.....
Gray.....(J)	31	41	43.3	211	40	02.5	3.76904	3.66
Gravel Pit.....(J)	39	51	31	219	47	56	4.01196	6.39
Bunk Hill.....(J)	64	44	03	244	33	33	4.32940	13.27
North Woodville.....(J)	191	33	35.2	11	36	16.4	4.38901	15.22
McFarlane.....(J)	199	48	25.0	19	49	28.9	3.76089	3.58
Mohunk Corner.....(J)	206	18	13	26	26	29	4.53202	21.17
Macwahoc.....(J)	214	02	35	34	13	45	4.56091	22.61

(G)=by S. S. Gannett in 1900; (J)=by Oscar Jones in 1916.

**FLAG A 7, PENOBSCOT COUNTY, MAINE.**

One mile east of Millinocket, on a low rocky knob covered with low brush.

Station mark: Flag in trimmed tree 6 inches in diameter.

[Latitude 45° 39' 25.5". Longitude 68° 41' 45.4".]

To station—	Azimuth.			Back azimuth.			Distance.	
	°	'	"	°	'	"	Log. meters.	Miles.
Shack Hill.....	18	17	50	198	17	25	3.38709	1.52
Ragged 2.....	62	24	51	242	16	24	4.23887	10.77

**FLAG V, PENOBSCOT COUNTY, MAINE. (Not occupied.)**

Not checked.

Station mark: Flag in tree, on south end of Mattamiscontis Mountain; tree is blazed on four sides and has a spike in each blaze.

[Latitude 45° 26' 30.2". Longitude 68° 42' 44.3".]

To station—	Azimuth.			Back azimuth.			Distance.	
	°	'	"	°	'	"	Log. meters.	Miles.
Woodville.....	256	20	15	76	29	40	4.24828	11.01
Fish Hill.....	303	38	16	123	46	59	4.28347	11.93

**FLAG HOUSE, PENOBSCOT COUNTY, MAINE. (Not occupied.)**

Not checked.

The house is in the north part of Maxfield Township, at the end of a road north from the river.

Station mark: Flag on east chimney.

[Latitude 45° 18' 41.4". Longitude 68° 44' 24.2".]

To station—	Azimuth.	Back azimuth.	Distance.	
	° ' "	° ' "	<i>Log. meters.</i>	<i>Miles.</i>
Fish Hill.....	258 04 00	78 13 53	4.26875	11.54
Gray.....	274 25 39	94 33 52	4.18009	9.41

**FULLER MONUMENT, PENOBSCOT COUNTY, MAINE.**

Station mark: The Fuller monument in the graveyard 1 mile southwest of Lincoln, Me.

[Latitude 45° 21' 44.9". Longitude 68° 31' 06.8".]

To station—	Azimuth.	Back azimuth.	Distance.	
	° ' "	° ' "	<i>Log. meters.</i>	<i>Miles.</i>
McFarlane.....	217 41 09	37 42 39	3.65452	2.81
Fish Hill.....	336 29 39	156 30 05	3.30559	1.26

**GRAVEL PIT, PENOBSCOT COUNTY, MAINE.**

On north brink of gravel pit of the Maine Central R. R., 1 mile north of Enfield station.

Station mark: Flag in birch tree; tree is blazed on four sides and has a spike in each blaze.

[Latitude 45° 16' 29.2". Longitude 68° 35' 32.0".]

To station—	Azimuth.	Back azimuth.	Distance.	
	° ' "	° ' "	<i>Log. meters.</i>	<i>Miles.</i>
Bunker Hill.....	84 27 06	264 20 12	4.10647	7.94
Fish Hill.....	219 47 56	39 51 31	4.01196	6.39

**GRAY 2, PENOBSCOT COUNTY, MAINE.**

On Gray's hill, a cleared hill 4 miles south of Lincoln.

Station mark: Tablet in large pile of boulders on higher part of hill.

[Latitude 45° 18' 03.0". Longitude 68° 32' 51.5".]

To station—	Azimuth.	Back azimuth.	Distance.	
	° ' "	° ' "	<i>Log. meters.</i>	<i>Miles.</i>
Fish Hill.....	211 40 02.5	31 41 43.3	3.76904	3.66
Peasley.....	301 06 32.0	121 11 49.7	4.05646	7.08

**HALL 1, PENOBSCOT COUNTY, MAINE. (Not occupied.)**

Not checked.

One mile south of Hall Camp, 100 feet west of road.

Station mark: Flag in double pine tree; tree is blazed on four sides and has a spike in each blaze.

[Latitude 45° 31' 31.1". Longitude 68° 33' 49.9".]

To station—	Azimuth.	Back azimuth.	Distance.	
	° ' "	° ' "	<i>Log. meters.</i>	<i>Miles.</i>
McFarlane.....	336 31 38	156 35 04	4.19950	9.84
Fish Hill.....	347 40 57	167 43 20	4.31000	12.70

**HALL 2, PENOBSCOT COUNTY, MAINE. (Not occupied.)**

Not checked.

Two miles south of Hall Camp, 150 feet east of road, 500 feet south of dam and bridge over Medunkemunk stream.

Station mark: Flag in large, partly dead pine; tree is blazed on four sides and has a spike in each blaze.

[Latitude 45° 30' 01.8". Longitude 68° 33' 14.8".]

To station—	Azimuth.	Back azimuth.	Distance.	
	° ' "	° ' "	<i>Log. meters.</i>	<i>Miles.</i>
McFarlane.....	334 46 08	154 49 09	4.11416	8.08
Fish Hill.....	348 11 37	168 13 35	4.24461	10.91

**HILL NO. 1, PENOBSCOT COUNTY, MAINE. (Not occupied.)**

Not checked.

Four miles south of Bundista, 400 feet west of road, in fence line of field, known as Hill Number One.

Station mark: Flag in pine; tree is blazed on four sides and has a spike in each blaze.

[Latitude 45° 43' 09.7". Longitude 68° 21' 58.0".]

To station—	Azimuth.	Back azimuth.	Distance.	
	° ' "	° ' "	<i>Log. meters.</i>	<i>Miles.</i>
Lawler.....	138 09 55	318 07 06	3.88245	4.74
Silver Ridge.....	194 37 55	14 39 32	4.06151	7.16

**HOUSE, PENOBSCOT COUNTY, MAINE. (Not occupied.)**

Not checked.

Station mark: House 1.5 miles west of Lincoln; center.

[Latitude 44° 22' 59.5". Longitude 68° 32' 09.6".]

To station—	Azimuth.	Back azimuth.	Distance.	
	° ' "	° ' "	<i>Log. meters.</i>	<i>Miles.</i>
Fish Hill.....	332 22 32	152 33 43	3.67107	3.59
Gray.....	5 41 06	185 40 36	3.96378	5.72

**HOWLAND 1, PENOBSCOT COUNTY, MAINE. (Not occupied.)**

Not checked.

North side of cleared field, 3 miles north of Howland.

Station mark: Flag in double spruce tree 24 inches in diameter, 300 feet north of barn; tree is blazed on four sides and has a spike in each blaze.

[Latitude 45° 16' 56.5". Longitude 68° 38' 42.0".]

To station—	Azimuth.	Back azimuth.	Distance.	
	° ' "	° ' "	<i>Log. meters.</i>	<i>Miles.</i>
McFarlane.....	225 23 31	45 30 25	4.25000	11.05
Gray.....	254 56 08	75 00 17	3.89814	4.92

**HOWLAND 2, PENOBSBOT COUNTY, MAINE. (Not occupied.)**

Not checked.

On a timbered ridge, 5 miles north of Howland, 1 mile west of the road.

Station mark: Flag in hemlock tree 18 inches in diameter; tree is blazed on four sides and has a spike in each blaze.

[Latitude 45° 18' 30.9". Longitude 68° 38' 51.1".]

To station—	Azimuth.	Back azimuth.	Distance.	
			<i>Log. meters.</i>	<i>Miles.</i>
McFarlane.....	233 19 44	53 26 45	4.20497	9.96
Gray.....	276 15 01	96 19 17	3.89668	4.90

**HOWLAND WATER TOWER, PENOBSBOT COUNTY, MAINE. (Not occupied.)**

Not checked.

Station mark: Center of water tower of the paper mill at Howland.

[Latitude 45° 14' 17.2". Longitude 68° 39' 30.7".]

To station—	Azimuth.	Back azimuth.	Distance.	
			<i>Log. meters.</i>	<i>Miles.</i>
Bunker Hill.....	110 38 18	290 34 13	3.90471	4.99
Fish Hill.....	224 30 39	44 37 03	4.22526	10.44

**KATAHDIN, PISCATAQUIS COUNTY, MAINE. (Not occupied.)**

Not checked.

The highest and best-known mountain in Maine.

Station mark: Sharp rocky summit of mountain.

[Latitude 45° 54' 07.95". Longitude 68° 55' 02.03".]

To station—	Azimuth.	Back azimuth.	Distance.	
			<i>Log. meters.</i>	<i>Miles.</i>
Lawler.....	291 01 57	111 22 51	4.60720	25.15
Ragged 2.....	356 54 21	176 55 24	4.54830	21.96

**LAWLER, PENOBSBOT COUNTY, MAINE.**

Station is on Lawler Hill, 0.5 mile west of the house of Thomas Lawler.

Station mark: Tablet in rock ledge.

[Latitude 45° 46' 13.71". Longitude 68° 25' 53.51".]

To station—	Azimuth.	Back azimuth.	Distance.	
			<i>Log. meters.</i>	<i>Miles.</i>
Mattamiscontis.....	32 33 30	212 21 10	4.62134	25.98
Ragged 2.....	60 17 01	239 57 14	4.61751	25.75

**LEE, PENOBSCOT COUNTY, MAINE.**

On a hill known as Mount Jefferson, 0.75 mile south of Lee.  
Station mark: Tablet in rock ledge.

[Latitude 45° 21' 09.1". Longitude 68° 16' 57.7".]

To station—	Azimuth.	Back azimuth.	Distance.	
			<i>Log. meters.</i>	<i>Miles.</i>
	° ' "	° ' "		
North Woodville.....	151 21 16	331 14 18	4.42330	16.47
Carrol.....	251 28 17	71 38 03	4.27582	11.73

**LINCOLN PAPER MILL STACK, PENOBSCOT COUNTY, MAINE. (Not occupied.)**

Not checked.  
Station mark: Tall brick stack of the paper mill at Lincoln, Maine.

[Latitude 45° 22' 07.1". Longitude 68° 30' 36.1".]

To station—	Azimuth.	Back azimuth.	Distance.	
			<i>Log. meters.</i>	<i>Miles.</i>
	° ' "	° ' "		
McFarlane.....	215 56 08	35 57 16	3.55210	2.22
Fish Hill.....	356 52 42	176 52 47	3.40529	1.58

**McFARLANE, PENOBSCOT COUNTY, MAINE.**

On a cleared hill 1 mile northeast of Lincoln Center.  
Station mark: Tablet in boulder.

[Latitude 45° 23' 40.6". Longitude 68° 28' 59.9".]

To station—	Azimuth.	Back azimuth.	Distance.	
			<i>Log. meters.</i>	<i>Miles.</i>
	° ' "	° ' "		
Fish Hill.....	19 49 28.9	199 48 25.0	3.76089	3.58
Peasley.....	343 55 22.7	163 57 56.0	4.22990	10.55

**MACWAHOC, PENOBSCOT COUNTY, MAINE.**

Two miles east of Macwahoc, on land of C. A. Shannon, who lives 200 yards south of the station.

Station mark: A double maple tree at southeast corner of grove; tree is blazed on four sides and has a spike in each blaze.

[Latitude 45° 37' 00.4". Longitude 68° 14' 49.7".]

To station—	Azimuth.	Back azimuth.	Distance.	
			<i>Log. meters.</i>	<i>Miles.</i>
	° ' "	° ' "		
Fish Hill.....	34 13 45	214 02 35	4.56091	22.61
North Woodville.....	68 28 58	248 20 28	4.22115	10.34

**MATTAMISCONTIS, PENOBSCOT COUNTY, MAINE. (Not occupied.)**

Not checked.

A well-known prominent mountain 10 miles (air line) northwest of Lincoln.

Station mark: A tall spruce tree blazed on four sides and having a spike in each blaze; tree is used as a lookout by fire warden.

[Latitude 45° 27' 10.83". Longitude 68° 43' 09.13".]

To station—	Azimuth.	Back azimuth.	Distance.	
	° ' "	° ' "	<i>Log. meters.</i>	<i>Miles.</i>
Ragged 2.....	137 14 20	317 06 54	4.30000	12.40
North Woodville.....	240 27 30	60 39 13	4.39042	15.26

**MEDWAY, PENOBSCOT COUNTY, MAINE.**

On a cleared hill 2 miles southwest of Medway, 100 yards west of house of Freman Powers.

Station mark: One-inch hole drilled in granite boulder at end of lane.

[Latitude 45° 36' 34.3". Longitude 68° 33' 56.3".]

To station—	Azimuth.	Back azimuth.	Distance.	
	° ' "	° ' "	<i>Log. meters.</i>	<i>Miles.</i>
North Woodville.....	299 30 02	119 35 10	4.03285	6.70
Medway Pine.....	317 47 40	137 49 39	3.73363	3.36

**MEDWAY CHURCH, PENOBSCOT COUNTY, MAINE. (Not occupied.)**

Not checked.

Station mark: Center of spire of church at Medway.

[Latitude 45° 36' 20.9". Longitude 68° 31' 41.1".]

To station—	Azimuth.	Back azimuth.	Distance.	
	° ' "	° ' "	<i>Log. meters.</i>	<i>Miles.</i>
Medway.....	98 03 59	278 02 22	3.47119	1.84
North Woodville.....	307 12 17	127 15 17	3.90871	5.04

**MEDWAY PINE, PENOBSCOT COUNTY, MAINE.**

Three miles south of Medway, south end of a cleared field, at end of road known as the Medway turnpike.

Station mark: Flag in tree; tree is blazed on four sides and has a spike in each blaze.

[Latitude 45° 34' 24.4". Longitude 68° 31' 08.6".]

To station—	Azimuth.	Back azimuth.	Distance.	
	° ' "	° ' "	<i>Log. meters.</i>	<i>Miles.</i>
North Woodville.....	282 46 19	102 49 28	3.77044	3.66
Fish Hill.....	358 05 20	178 05 48	4.40333	15.73

**MILLINOCKET STACK, PENOBSCOT COUNTY, MAINE. (Not occupied.)**

Not checked.

Station mark: Brick stack of paper mill at Millinocket.

[Latitude 45° 38' 52.5". Longitude 68° 42' 20.7".]

To station—	Azimuth.	Back azimuth.	Distance.	
	° ' "	° ' "	<i>Log. meters.</i>	<i>Miles.</i>
Ragged 2.....	64 20 37	244 12 36	4.20935	10.08
Shock Hill.....	359 56 58	179 56 58	3.11328	8.07

**MILLINOCKET TREE, PENOBSCOT COUNTY, MAINE.**

Station mark: A small lone spruce tree on a cleared hillside about 1,500 feet south-east of the paper mill at Millinocket.

[Latitude 45° 38' 35.3". Longitude 68° 42' 24.0".]

To station—	Azimuth.	Back azimuth.	Distance.	
	° ' "	° ' "	<i>Log. meters.</i>	<i>Miles.</i>
A 7.....	208 38 02	28 38 30	3.24170	1.08
Shock Hill.....	354 50 12	174 50 15	2.89604	.49

**MOLUNKUS CORNER, PENOBSCOT COUNTY, MAINE. (Not occupied.)**

Not checked.

In a spruce tree about 700 yards southwest of Molunkus Corners.

Station mark: Flag in tree; tree is blazed on four sides and has a spike in each blaze.

[Latitude 45° 37' 12.8". Longitude 68° 18' 53.5".]

To station—	Azimuth.	Back azimuth.	Distance.	
	° ' "	° ' "	<i>Log. meters.</i>	<i>Miles.</i>
Fish Hill.....	26 26 29	206 18 13	4.53202	21.17
North Woodville.....	57 28 52	237 23 16	4.08238	7.51

**MOUNT CHASE, PENOBSCOT COUNTY, MAINE. (Not occupied.)**

Not checked.

A well-known mountain in the northern part of Penobscot County.

Station mark: Fire-lookout tower on the summit of mountain.

[Latitude 46° 06' 32.00". Longitude 68° 28' 42.28".]

To station—	Azimuth.	Back azimuth.	Distance.	
	° ' "	° ' "	<i>Log. meters.</i>	<i>Miles.</i>
Fish Hill.....	1 34 52	181 33 35	4.92862	52.72
Ragged 2.....	28 04 05	208 46 15	4.82324	41.35

**NEW BARN, PENOBSCOT COUNTY, MAINE. (Not occupied.)**

Not checked.

New barn on the north side of the road from Lincoln Center to Chester.

[Latitude 45° 24' 34.6". Longitude 68° 30' 54.9".]

To station—	Azimuth.	Back azimuth.	Distance.	
	° ' "	° ' "	<i>Log. meters.</i>	<i>Miles.</i>
McFarlane.....	303 39 25	123 40 47	3.47775	1.87
Fish Hill.....	355 35 11	175 35 29	3.85195	4.42

## NORTH WOODVILLE, PENOBSCOT COUNTY, MAINE.

On a cultivated ridge in the northern part of Woodville Plantation.

Station mark: A tablet in the center of a large pile of granite boulders.

[Latitude 45° 33' 42.06". Longitude 68° 26' 43.48".]

To station—	Azimuth.	Back azimuth.	Distance.	
			Log. meters.	Miles.
Fish Hill.....	11 36 16.4	191 33 35.2	4.38901	15.22
Woodville.....	21 44 33.4	201 42 33.2	3.99447	6.14
Mattamiscontis.....	60 39 13.0	240 27 30.0	4.39042	15.27
Ragged (2).....	94 20 45.4	274 01 35.3	4.54426	22.26
Macwahoc.....	248 20 28.0	68 28 58.0	4.22115	10.34
Carroll.....	299 18 46.0	119 35 31.0	4.54571	21.83
Lee.....	331 14 18.0	151 21 16.0	4.42330	16.47
Winn.....	333 57 02.0	154 00 11.0	4.11657	8.13

## PEASLEY, PENOBSCOT COUNTY, MAINE.

On the highest point of bare, grass-covered hill in the town of Burlington, east of Esculassis Pond.

Station mark: A bronze triangulation tablet cemented in solid granite, level with the surface of the ground.

[Latitude 45° 14' 52.10". Longitude 68° 25' 24.35".]

To station—	Azimuth.	Back azimuth.	Distance.	
			Log. meters.	Miles.
Greenfield.....(G)	7 09 42.6	187 08 23.0	4.2943006	.....
Lowell.....(G)	130 08 37.8	310 06 15.9	3.7554309	.....
Fish Hill.....(G)	148 36 13.3	328 32 36.2	4.1059741	.....
Woodville.....(G)	168 11 27.1	348 08 31.0	4.4194598	.....
North Woodville.....(G)	177 11 03.0	357 10 06.6	4.5431412	.....
Knob.....(G)	198 16 53.6	18 18 53.7	4.0689899	.....
Carroll.....(G)	238 33 41.2	58 49 26.7	4.5300442	.....
Almanac.....(G)	247 33 17.5	67 47 20.8	4.4463959	.....
Passadumkeag.....(G)	338 10 24.8	158 13 15.5	4.1502341	.....
Gray.....(J)	121 11 49.7	301 06 32.0	4.05646	7.08
McFarlane.....(Grif)	163 57 56.0	343 55 22.7	4.22990	10.55

(G)= Work by S. S. Gannett in 1900; (J)= Work by Oscar Jones in 1916.

## POND, PENOBSCOT COUNTY, MAINE. (Not occupied.)

Not checked.

On a high ridge known as the Pinnacle, in Cold Stream Pond.

Station mark: Pine tree blazed on four sides; spike in each blaze. Flag in tree.

[Latitude 45° 16' 53.6". Longitude 68° 32' 24.7".]

To station—	Azimuth.	Back azimuth.	Distance.	
			Log. meters.	Miles.
Gray.....	164 43 52	344 43 52	3.34608	1.38
Fish Hill.....	199 18 01	19 19 22	3.87885	4.70

## PORCUPINE, PENOBSCOT COUNTY, MAINE.

In north portion of Chester plantation, north end of last field on the Hall Camp road.

Station mark: Large pile of boulders 200 yards north of abandoned house, east side of road.

[Latitude 45° 26' 28.5". Longitude 68° 31' 55.3".]

To station—	Azimuth.	Back azimuth.	Distance.	
			Log. meters.	Miles.
Woodville.....	216 28 52	36 30 34	3.71931	3.26
McFarlane.....	323 38 35	143 40 40	3.80855	4.00

**RAGGED 2, PENOBSCOT COUNTY, MAINE.**

On Ragged Mountain, 5 miles northwest of West Seboeis, 4 miles west of Engle siding on the Bangor & Aroostook Railroad. The mountain is a fire-control lookout, and cabin of lookout is 100 yards south of the station. A good trail from Engle siding to mountain. Follow telephone line.

Station mark: A tablet in rock ledge.

Signal: Spruce tree, distant 43.5 feet, azimuth 00° 00'.

[Latitude 45° 35' 04.86". Longitude 68° 53' 34.03".]

To station—	Azimuth.	Back azimuth.	Distance.	
			Log. meters.	Miles.
Katahdin.....	111 22 51	291 01 57	4. 60720	25. 15
Lawler.....	239 57 14	60 17 01	4. 61751	25. 75
Shock Hill.....	248 29 24	68 37 25	4. 19519	9. 74
North Woodville.....	274 01 35. 3	94 20 45. 4	4. 54426	21. 80
Fish Hill.....	311 18 06. 4	131 34 53. 2	4. 60330	24. 93

**SCHOOL, PENOBSCOT COUNTY, MAINE.**

Station is a schoolhouse on the north side of the river, on the north side of the road from Mattawamkeag to Medway.

[Latitude 45° 34' 46.8". Longitude 68° 25' 12.7".]

To station—	Azimuth.	Back azimuth.	Distance.	
			Log. meters.	Miles.
North Woodville.....	44 36 03	224 34 58	3. 44794	1. 74
Medway Pine.....	84 54 43	264 50 29	3. 88914	4. 93

**SEBOEIS, PENOBSCOT COUNTY, MAINE. (Not occupied.)**

Not checked.

One-half mile east of South Branch Pond, 2 miles northeast of Seboeis.

Station mark: Flag in pine tree; tree is blazed on four sides and has a spike in each blaze.

[Latitude 45° 24' 03.4". Longitude 68° 39' 55.5".]

To station—	Azimuth.	Back azimuth.	Distance.	
			Log. meters.	Miles.
McFarlane.....	272 45 43	92 53 30	4. 15462	8. 87
Gray.....	320 16 56	140 21 58	4. 16014	8. 99

**SCHOOL, PENOBSCOT COUNTY, MAINE. (Not occupied.)**

Not checked.

Station mark: Schoolhouse, Chester Township.

[Latitude 45° 25' 24.6". Longitude 68° 31' 31.5".]

To station—	Azimuth.	Back azimuth.	Distance.	
			Log. meters.	Miles.
McFarlane.....	314 13 11	134 14 59	3. 66280	2. 86
Fish Hill.....	351 09 01	171 09 45	3. 94141	5. 43

**SCHOOLHOUSE, PENOBSCOT COUNTY, MAINE. (Not occupied.)**

Not checked.

Six miles southwest of Lincoln, on road from South Lincoln to Enfield.

[Latitude 45° 18' 18.1". Longitude 68° 35' 17.6".]

To station—	Azimuth.	Back azimuth.	Distance.	
			<i>Log. meters.</i>	<i>Miles.</i>
McFarlane.....	219 30 21	39 34 50	4.11101	8.02
Gray.....	278 20 01	98 21 45	3.50755	2.00

**SHOCK HILL, PENOBSCOT COUNTY, MAINE.**

On Shock Hill, 1 mile south of Millinocket, 0.5 mile east of road.

Station mark: Tablet in granite boulder.

[Latitude 45° 38' 10.45". Longitude 68° 42' 20.72".]

To station—	Azimuth.	Back azimuth.	Distance.	
			<i>Log. meters.</i>	<i>Miles.</i>
Mattamiscontis.....	2 57 24	182 56 50	4.30945	12.67
Ragged 2.....	68 37 25	248 29 24	4.19519	9.74

**SILVER RIDGE, PENOBSCOT COUNTY, MAINE.**

Station is 4 miles south of Sherman Mill, on Silver Ridge, 300 yards west of road, 100 feet northwest of apple orchard.

Station mark: Tablet in stone post 12 by 8 by 36 inches.

[Latitude 45° 49' 10.7". Longitude 68° 19' 43.2".]

To station—	Azimuth.	Back azimuth.	Distance.	
			<i>Log. meters.</i>	<i>Miles.</i>
Lawler.....	55 41 22	235 36 56	3.98618	6.02
Katahdin.....	101 33 47	281 08 27	4.66856	28.94

**SOUTH LINCOLN FLAG, PENOBSCOT COUNTY, MAINE. (Not occupied.)**

Not checked.

Station mark: Flag in pine tree, 1 mile east of South Lincoln, 500 feet west of road. Hill cleared; tree blazed on four sides and has a spike in each blaze.

[Latitude 45° 20' 15.8". Longitude 68° 34' 08.8".]

To station—	Azimuth.	Back azimuth.	Distance.	
			<i>Log. meters.</i>	<i>Miles.</i>
Fish Hill.....	259 18 43	79 21 19	3.68604	3.02
Gray.....	337 39 17	157 40 12	3.64684	2.76

**SOUTH LINCOLN WATER TANK, PENOBSCOT COUNTY, MAINE. (Not occupied.)**

Not checked.

Station mark: Center of high wooden water tank of the spool mill at South Lincoln.

[Latitude 45° 19' 50.8". Longitude 68° 35' 40.0".]

To station—	Azimuth.	Back azimuth.	Distance.	
			<i>Log. meters.</i>	<i>Miles.</i>
McFarlane.....	230 46 45	50 51 30	4.05044	6.98
Gray.....	312 11 05	132 13 05	3.69506	3.08

**STONE, PENOBSCOT COUNTY, MAINE.**

On the north end of a cleared ridge, 3 miles northeast of Lincoln Center, 500 yards north of Mr. Stone's residence.

Station mark: Flag in spruce tree 3 feet north of fence line and 150 feet west of fence corner; tree is blazed on four sides and has a spike in each blaze.

[Latitude 45° 25' 39.0". Longitude 68° 26' 41.4".]

To station—	Azimuth.	Back azimuth.	Distance.	
			<i>Log. meters.</i>	<i>Miles.</i>
Fish Hill.....	28 42 27	208 39 45	4.01489	6.43
North Woodville.....	179 49 45	359 49 46	4.17358	9.27

**WEBB, PENOBSCOT COUNTY, MAINE.**

On Webb Hill, 0.5 mile north of Mattawamkeag.

Station mark: Flag in pine tree on west side of road: tree is blazed on four sides and has a spike in each blaze.

[Latitude 45° 31' 44.2". Longitude 68° 20' 53.0".]

To station—	Azimuth.	Back azimuth.	Distance.	
			<i>Log. meters.</i>	<i>Miles.</i>
Fish Hill.....	31 41 22	211 34 31	4.37849	14.85
North Woodville.....	115 36 33	295 32 23	3.92583	5.24

**WHITNEY 1, PENOBSCOT COUNTY, MAINE.**

On the south end of Whitney Ridge, 0.5 mile north of Seboeis.

Station mark: Cross cut in east face of cliff; timber 50 feet northeast.

[Latitude 45° 22' 35.00". Longitude 68° 42' 42.5".]

To station—	Azimuth.	Back azimuth.	Distance.	
			<i>Log. meters.</i>	<i>Miles.</i>
McFarlane.....	263 27 27	83 37 12	4.25548	11.19
Gray.....	303 04 15	123 11 15	4.18658	9.55

**WHITNEY 2, PENOBSCOT COUNTY, MAINE.**

On the north end of Whitney Ridge, 1 mile north of Seboeis, 300 feet west of end of road. Hill cleared.

Station mark: A pine tree 6 inches in diameter, blazed on four sides, and having a spike in each blaze.

[Latitude 45° 22' 50.5". Longitude 68° 43' 03.0".]

To station—	Azimuth.	Back azimuth.	Distance.	
			<i>Log. meters.</i>	<i>Miles.</i>
Flag B.....	146 11 37	326 10 43	3.47418	1.85
McFarlane.....	265 05 20	85 15 20	4.26493	11.43
Gray.....	303 37 40	123 44 55	4.20415	9.95
Bunker Hill.....	12 29 07	192 27 23	4.12491	8.29

## WIDOW, PENOBSCOT COUNTY, MAINE. (Not occupied.)

Not checked.

On the farm of the Widow Reed, 8 miles north of Lincoln Center.

Station mark: Flag in spruce tree, north end of field, 200 feet northwest of house; tree is blazed on four sides and has a spike in each blaze.

[Latitude 45° 28' 46.5". Longitude 68° 30' 29.3".]

To station—	Azimuth.		Back azimuth.		Distance.			
	°	'	''	°	'	''	<i>Log. meters.</i>	<i>Miles.</i>
McFarlane.....	347	06	55	167	08	06	3.98614	6.02
Fish Hill.....	359	12	20	179	12	27	4.17228	9.23

## WINN, PENOBSCOT COUNTY, MAINE.

On the north end of a cleared ridge, 2 miles southeast of Winn.

Station mark: Flag in tree; tree is blazed on four sides and has a spike in each blaze.

[Latitude 45° 27' 21.38". Longitude 68° 22' 19.15".]

To station—	Azimuth.		Back azimuth.		Distance.			
	°	'	''	°	'	''	<i>Log. meters.</i>	<i>Miles.</i>
North Woodville.....	154	00	11	333	57	02	4.11657	8.13
Carroll.....	282	24	10	102	37	45	4.40619	15.83

## WOODVILLE, PENOBSCOT COUNTY, MAINE.

On a cleared ridge in the southeast corner of Woodville Plantation, on land owned by Jerry Glidden, who lives on the southeast side of ridge; station is on east side of a big pile of rocks on bare ledge. View is obstructed by timber on the northeast end of ridge.

Station mark: A granite post, 18 by 11 by 11 inches, set 12 inches in the ground, on solid ledge; in the center of top of post is cemented a bronze triangulation tablet.

[Latitude 45° 28' 44.96". Longitude 68° 29' 31.88".]

To station—	Azimuth.		Back azimuth.		Distance.			
	°	'	''	°	'	''	<i>Log. meters.</i>	<i>Miles.</i>
Fish Hill.....(G)	4	51	40.0	184	50	58.8	4.1724197	.....
Charleston.....(G)	45	16	07.4	224	53	45.6	4.7641319	.....
Mattamiscontis.....(G)	80	48	44.4	260	39	00.8	4.2547967	.....
Katahdin.....(G)	144	59	59.6	324	41	48.5	4.7597900	.....
North Woodville.....(G)	201	42	33.2	21	44	32.7	3.9944700	.....
Carroll.....(G)	283	08	40.6	103	27	24.3	4.5467760	.....
Almanac.....(G)	295	41	01.6	115	58	03.0	4.5396474	.....
Knob.....(G)	328	07	26.0	148	12	22.3	4.2346552	.....
Passadumkeag.....(G)	344	38	29.2	164	44	17.8	4.6049016	.....
Peasley.....(G)	348	08	31.0	168	11	27.1	4.4194598	.....
Lowell.....(G)	357	17	34.3	177	18	08.3	4.3437360	.....
Porcupine.....(J)	36	30	34	216	28	52	3.71931	3.26

(G)=by S. S. Gannett in 1900; (J)=by Oscar Jones in 1916.

## WOODARD, PENOBSCOT COUNTY, MAINE. (Not occupied.)

Not checked.

About 400 feet south of Woodard, a station of the Canadian Pacific Railway.

Station mark: Flag in a large double pine tree; tree is blazed on four sides and has a spike in each blaze.

[Latitude 45° 24' 25.9". Longitude 68° 34' 52.6".]

To station—	Azimuth.		Back azimuth.		Distance.			
	°	'	''	°	'	''	<i>Log. meters.</i>	<i>Miles.</i>
Fish Hill.....	320	00	31	140	03	38	3.94945	5.53
Gray.....	347	25	07	167	26	33	4.08325	7.53

## NEW HAMPSHIRE.

### TRIANGULATION STATIONS.

Alton, Mount Pawtuckaway, Gilmanton, and Suncook quadrangles.

BELKNAP, MERRIMACK, ROCKINGHAM, AND STRAFFORD COUNTIES.

In the spring of 1917 George T. Hawkins extended triangulation over the above-named quadrangles from stations Rattlesnake, Pawtuckaway, and Catamount of the United States Coast and Geodetic Survey.

Ten new stations were occupied and 3 points were located by intersections, all on North American datum.

#### BALD, ROCKINGHAM COUNTY, N. H.

In the town of New Market, on low bald hill, 2.5 miles southwest from New Market and 4 miles northeast of Epping.

Station mark: A chiseled cross, with letters "U. S." cut in top of large boulder in place in old fence.

Reference mark and signal: A 4-foot red-oak tree 7.5 feet north of mark; true azimuth, 212° 24' 30".

[Latitude 43° 03' 20.68." Longitude 71° 00' 27.92".]

To station—	Azimuth.	Back azimuth.	Distance.	
	° ' "	° ' "	<i>Log. meters.</i>	<i>Miles.</i>
Rattle.....	78 54 29.85	258 45 56.70	4.2392230	10.779
Lookout.....	110 01 21.42	289 54 14.15	4.1777198	9.356
Pawtuckaway.....	115 00 42.23	294 52 55.39	4.2316737	10.593
Green.....	189 02 26.25	9 03 56.17	4.2761511	11.735

#### BLUE JOB, STRAFFORD COUNTY, N. H.

A State fire watch tower on highest part of hill used as signal and station mark. Instrument under center of tower and 11.1 feet from the center of each of 4 concrete piers which support the tower.

NOTE.—United States Coast and Geodetic Survey station bolt and triangle (not found) is given as latitude 43° 19' 53.733"; longitude 71° 06' 59.802".

[Latitude 43° 19' 53.53". Longitude 71° 06' 59.81".]

To station—	Azimuth.	Back azimuth.	Distance.	
	° ' "	° ' "	<i>Log. meters.</i>	<i>Miles.</i>
Pawtuckaway.....	15 41 59.06	195 38 39.41	4.3865691	15.133
Catamount.....	66 53 19.73	246 45 56.73	4.1996366	9.840
Pine tree.....	105 20 01.68	285 12 11.05	4.2042714	9.945
Gunstock.....	135 22 37.77	315 12 11.17	4.4645724	18.110
Prospect.....	143 08 51.17	323 05 49.82	3.9960174	6.157
Breezy.....	203 41 57.36	23 44 42.75	4.1293997	8.371
Green.....	315 23 54.95	135 29 53.74	4.2258825	10.453

## BREEZY, STRAFFORD COUNTY, N. H.

In the town of Milton, about 5 miles northeast of Farmington, on a low hill 250 feet east of north and south road and 250 feet south of old house. Mountain has some brush and a few trees on top.

Station mark: A tablet in solid granite.

Signal: A small pine tree with white target distant 25 feet; true azimuth  $318^{\circ} 45'$ .

[Latitude  $43^{\circ} 26' 33.15''$ . Longitude  $71^{\circ} 02' 59.03''$ .]

To station—	Azimuth.		Back azimuth.		Distance.	
	°	'	°	'	Log. meters.	Miles.
Blue Job.....	23	44	203	41	4.1293997	8.371
Prospect.....	68	50	248	44	4.0857204	7.570
Gunstock.....	108	02	287	49	4.4348716	16.913

## CATAMOUNT, MERRIMACK COUNTY, N. H.

A station of the United States Coast and Geodetic Survey in Pittsfield. Go from Pittsfield village to home of William T. Batchelder, on the southeast side of Catamount Mountain, thence the way is direct and plain to the top, which is a somewhat long, bare ridge. The station is on the highest part and is marked by a bolt and triangle. No angles were taken, as trees would have had to be cut down.

Recovered in 1885 and 1917.

Signal: A tripod of poles with white target and small spruce tree in top, distant 11.4 feet; true azimuth,  $312^{\circ} 32'$ .

[Latitude  $43^{\circ} 16' 31.60''$ . Longitude  $71^{\circ} 17' 45.71''$ .]

To station—	Azimuth.		Back azimuth.		Distance.	
	°	'	°	'	Log. meters.	Miles.
Fort.....	10	53	190	52	4.0123292	6.392
Hookset.....	35	40	215	33	4.3880496	15.184
Garvin.....	60	53	240	47	4.0873154	7.597
Rattlesnake.....	77	00	256	48	4.2624685	14.316
Gunstock.....	167	30	347	27	4.4409050	17.150
Prospect.....	211	14	31	18	4.2191971	10.293
Blue Job.....	246	45	66	53	4.1996366	9.840
Green.....	282	11	102	25	4.4313442	16.776
Pawtuckaway.....	335	02	155	06	4.2784249	11.797

## FORT, MERRIMACK COUNTY, N. H.

In the town of Epsom, about 3 miles nearly southeast from Short Falls, a station on the Boston & Maine R. R., on a high, bald hill that has timber on its south side. It is the middle and highest one of a group of hills.

Station mark: An iron bolt in solid granite with triangle cut around bolt.

Signal: A spruce tree braced with poles and having a flag in top; distant 13 feet; true azimuth,  $135^{\circ} 55'$ .

[Latitude  $43^{\circ} 11' 04.22''$ . Longitude  $71^{\circ} 19' 11.74''$ .]

To station—	Azimuth.		Back azimuth.		Distance.	
	°	'	°	'	Log. meters.	Miles.
Hall.....	15	42	195	41	4.0273369	6.617
Hookset.....	51	36	231	30	4.1959371	9.756
Rattlesnake.....	103	28	283	18	4.3240408	13.104
Garvin.....	115	24	295	19	3.9857047	6.012
Catamount.....	190	52	10	53	4.0123292	6.393
Pawtuckaway.....	305	31	125	36	4.0875151	7.601
Rattle.....	334	30	154	34	4.2914416	12.156

**GARVIN, MERRIMACK COUNTY, N. H.**

In the town of Chichester, about 4 miles north of Short Falls, a station on the Boston & Maine R. R., and 8 miles east of Concord. On a cleared hill.

Station and signal: Flagpole over center of lookout tower on hotel.

[Latitude 43° 13' 18.55". Longitude 71° 25' 39.01".]

To station—	Azimuth.			Back azimuth.			Distance.	
	°	'	"	°	'	"	<i>Log. meters.</i>	<i>Miles.</i>
Hookset.....	14	18	33.53	194	16	46.23	4.1569435	8.919
Gunstock.....	188	04	04.26	8	06	26.86	4.5215643	20.650
Pine Tree.....	210	44	52.88	30	49	50.23	4.2809247	11.865
Prospect.....	223	41	24.31	43	51	10.89	4.4449216	17.309
Catamount.....	240	47	42.54	60	53	06.83	4.0873154	7.597
Fort.....	295	19	53.53	115	24	18.65	3.9857047	6.012
Hall.....	337	47	55.88	157	50	53.53	4.1916793	9.661

**GREEN, STRAFFORD COUNTY, N. H.**

In the town of Barrington, about 6 miles northwest from Dover, on the highest part of a bald hill known locally as Green Hill, and about 0.25 mile north of Mr. Houston's house.

Station mark: A tablet in large boulder in place.

Signal: A tripod of poles with white target over center.

Latitude 43° 13' 25.07". Longitude 70° 58' 16.42".]

To station—	Azimuth.			Back azimuth.			Distance.	
	°	'	"	°	'	"	<i>Log. meters.</i>	<i>Miles.</i>
Bald.....	9	03	56.17	189	02	26.25	4.2761511	11.735
Pawtuckaway.....	58	10	09.19	238	00	51.65	4.3361173	13.473
Catamount.....	102	25	18.36	282	11	57.20	4.4313442	16.776
Blue Job.....	135	29	53.74	315	23	54.95	4.2258825	10.453

**GUNSTOCK, BELKNAP COUNTY, N. H. (Not occupied.)**

A well-known mountain immediately south of Lake Winnepesaukee and 5 miles east of Laconia.

Station mark: Center of fire tower.

(Not identical with United States Coast and Geodetic Survey station.)

NOTE.—Gunstock United States Coast and Geodetic Survey copper bolt (not found) is given as latitude 43° 31' 04.319"; longitude 71° 22' 11.378".

[Latitude 43° 31' 04.70". Longitude 71° 22' 11.35".]

To station—	Azimuth.			Back azimuth.			Distance.	
	°	'	"	°	'	"	<i>Log. meters.</i>	<i>Miles.</i>
Garvin.....	8	06	26.86	188	04	04.26	4.5215643	20.650
Rattlesnake.....	27	06	27.97	206	58	07.23	4.5576361	22.438
Breezy.....	287	49	18.25	108	02	31.17	4.4348716	16.913
Prospect.....	311	14	16.75	131	21	42.10	4.2872237	12.039
Blue Job.....	315	12	11.17	135	22	37.77	4.4645724	18.110
Catamount.....	347	27	55.45	167	30	57.96	4.4409050	17.150

## HALL, MERRIMACK COUNTY, N. H.

In the town of Hookset, about 10 miles northeast of Manchester, on well-known hill named Hall Mountain. The highest part has been cleared of timber and has second growth of birch and poplar on top. Some of this small timber was cut so that other points could be seen. Large trees that come in line toward Hookset and Rattlesnake were not cut, and lines to these stations can be sighted only in the reverse direction.

Station mark: A tablet in solid granite.

Signal: A tall dead snag 75 feet east of center; true azimuth,  $278^{\circ} 02'$ .

[Latitude  $43^{\circ} 05' 31.99''$ . Longitude  $71^{\circ} 21' 19.25''$ .]

To station—	Azimuth.			Back azimuth.			Distance.	
	°	'	''	°	'	''	Log. meters.	Miles.
Hookset.....	93	00	45.19	272	56	00.58	3.9747452	5.863
Garvin.....	157	50	53.53	337	47	55.88	4.1916793	9.661
Fort.....	195	41	15.80	15	42	42.99	4.0273369	6.617
Pawtuckaway.....	256	12	46.64	76	19	14.74	4.1212260	8.214
Lookout.....	265	32	34.16	85	39	37.79	4.1520893	8.819
Rattle.....	303	12	09.10	123	17	50.12	4.1308339	8.398

## HOOKSET, MERRIMACK COUNTY, N. H.

In the town of Hookset, about 0.5 mile west of Hookset station, about 10 miles north of Manchester, on sharp rocky peak known as the Pinnacle.

Station mark and signal: Center of observation tower.

Reference marks: South anchor ring bolt for guy cable to tower, 70 feet distant, and west anchor bolt, 71.3 feet distant.

[Latitude  $43^{\circ} 05' 47.85''$ . Longitude  $71^{\circ} 28' 15.87''$ .]

To station—	Azimuth.			Back azimuth.			Distance.	
	°	'	''	°	'	''	Log. meters.	Miles.
Rattlesnake.....	150	40	54.91	330	36	45.49	4.2254153	10.442
Garvin.....	194	16	46.23	14	18	33.53	4.1569435	8.919
Catamount.....	215	33	17.43	35	40	28.69	4.3880496	15.184
Fort.....	231	30	03.57	51	36	15.64	4.1959371	9.756
Hall.....	272	56	00.58	93	00	45.19	3.9747452	5.863

## LOOKOUT, ROCKINGHAM COUNTY, N. H. (Not occupied.)

About 3 miles south of Deerfield. Center of an observation tower for fire control.

[Latitude  $43^{\circ} 06' 07.26''$ . Longitude  $71^{\circ} 10' 53.50''$ .]

To station—	Azimuth.			Back azimuth.			Distance.	
	°	'	''	°	'	''	Log. meters.	Miles.
Rattle.....	18	35	38.52	198	34	12.30	3.9526144	5.571
Hall.....	85	39	37.79	265	32	34.16	4.1520893	8.819
Bald.....	289	54	14.15	110	01	21.42	4.1777198	9.356

## PAWTUCKAWAY, ROCKINGHAM COUNTY, N. H.

A station of the United States Coast and Geodetic Survey on Pawtuckaway Mountain. The mountain is in the towns of Deerfield and Nottingham. It rises about 800 feet above the level of the sea and commands a fine view of the surrounding country. The ocean is also seen from the summit. It is covered with small oak and pine timber and the summit is owned by William Chase, who resides on the south side and near the base of it. Station is on the highest point of the mountain and is

marked by a copper bolt driven firmly into the ledge. There are two routes by which this mountain is easily reached from Boston. One is by taking Portland train on "upper" railroad to Newmarket, distance from Boston 54 miles, thence by private conveyance, approaching the mountain from the east; distance from Newmarket to mountain, 16 miles. Second route from Boston, take train for Concord and stop at Manchester, distance from Boston 56 miles, thence by private conveyance to Pawtuckaway, approaching it from the southwest; distance from Manchester to station, 21 miles. The mountain is quite steep and difficult of ascent. Best route for ascending it is on the southwest side, and a road is there laid out.

Recovered 1886, 1908. O. B. French: Found iron bolt in a drill hole and various other holes in same ledge. Mountain is covered with small timber and brush. Some cutting was necessary to open lines. Ridge is about northeast and southwest; hence any lines in these directions would require much cutting. This iron bolt probably is at point where old station was located. Probably placed by a State geological survey party many years ago. Pole then used was held erect by guy wires attached to iron bolts in the rock. The following measurements were made to various drill holes and bolts: Stratham Junction,  $00^{\circ} 00' 00''$ .

(1) One-half inch drill hole,  $119^{\circ} 00'$ , 0.51 meter.

(2) One-half inch drill hole  $240^{\circ} 00'$ , 0.445 meter.

(3) One-half inch drill hole  $355^{\circ} 00'$ , 0.60 meter.

(4) One-half inch drill hole  $00^{\circ} 00'$ , 0.605 meter.

(5) Iron bolt bent for guy  $102^{\circ} 40'$ , 1.81 meters.

(6) Iron bolt bent for guy  $230^{\circ} 20'$ , 1.93 meters.

(7) Iron bolt bent for guy  $335^{\circ} 40'$ , 3.015 meters.

Signal (Hawkins, 1917): Spruce tree 31 feet distant; true azimuth,  $54^{\circ} 58'$ .

[Latitude  $43^{\circ} 07' 13.689''$ . Longitude  $71^{\circ} 11' 51.318''$ .]

To station—	Azimuth.	Back azimuth.	Distance.	
			Log. meters.	Miles.
Gunstock.....(CGS)	162 29 53.31	342 22 47.91	4.6656557	.....
Agamenticus.....(CGS)	254 15 15.37	74 35 59.52	4.6298055	.....
Rattle.....(H)	8 21 28.52	188 20 41.77	4.0278356	6.625
Hall.....(H)	70 19 14.74	256 12 46.64	4.1212260	8.214
Rattlesnake.....(CGS) <sup>a</sup>	111 37 06.02	291 21 42.94	4.5152114	20.350
Fort.....(H)	125 36 08.88	305 31 07.66	4.0875151	7.601
Catamount.....(H)	155 06 26.82	335 02 24.23	4.2784249	11.797
Blue Job.....(H)	195 38 39.41	15 41 59.06	4.3865691	15.133
Green.....(H)	238 00 51.65	58 10 09.19	4.3361173	13.473
Bald.....(H)	294 52 55.39	115 00 42.23	4.2316737	10.593

<sup>a</sup> Not observed.

(CGS)=work done by U. S. Coast and Geodetic Survey in 1872. (H)=work done by George T. Hawkins in 1917.

#### PINE TREE IN GROVE, BELKNAP COUNTY, N. H. (Not occupied.)

About 3 miles northwest of Center Barnstead. A pine tree in a grove.

[Latitude  $43^{\circ} 22' 10.11''$ . Longitude  $71^{\circ} 18' 25.40''$ .]

To station—	Azimuth.	Back azimuth.	Distance.	
			Log. meters.	Miles.
Prospect.....	248 35 42.29	68 40 31.82	4.0080547	6.330
Blue Job.....	285 12 11.05	105 20 01.68	4.2042714	9.945
Garvin.....	30 49 50.23	210 44 52.88	4.2809247	11.865

## PROSPECT, BELKNAP COUNTY, N. H.

In the town of Alton, on sharp bald hill which has timber on north side, about 2 miles northeast of Half Moon Pond and 3 miles southwest of New Durham station.

Station mark: An iron bolt in granite ledge.

Signal: Spruce tree braced with poles and having flags above top, 7 feet distant; true azimuth,  $92^{\circ} 08'$ .

[Latitude  $43^{\circ} 24' 10.36''$ . Longitude  $71^{\circ} 11' 23.90''$ .]

To station—	Azimuth.			Back azimuth.			Distance.	
	°	'	''	°	'	''	Log. meters.	Miles.
Catamount.....	31	18	52.38	211	14	30.34	4.2191971	10.293
Garvin.....	43	51	10.89	223	41	24.31	4.4449216	17.309
Rattlesnake.....	58	08	25.63	237	52	41.27	4.5631873	22.727
Pine tree.....	68	40	31.82	248	35	42.29	4.0080547	6.330
Gunstock.....	131	21	42.10	311	14	16.75	4.2872237	12.039
Breezy.....	248	44	43.17	68	50	30.21	4.0857204	7.570
Blue Job.....	323	05	49.82	143	08	51.17	3.9960174	6.157

## RATTLE, ROCKINGHAM COUNTY, N. H.

In the town of Raymond, about 2 miles southwest of the village of Raymond, on low bald hill known as Rattlesnake Hill. All timber is cleared off. The station is not on the highest part, because Hall Mountain could not be seen from that point.

Station mark: A tablet in large granite boulder in place and about 4 feet lower than highest part of hill.

Signals: A spruce tree braced with poles near a pile of rocks on the highest point, distant 17.5 feet; true azimuth,  $260^{\circ} 56'$ , and another 150 feet southwest of highest point, built on small bushes with white cloth stretched, distant 150.3 feet; true azimuth,  $242^{\circ} 46'$ .

[Latitude  $43^{\circ} 01' 31.85''$ . Longitude  $71^{\circ} 12' 59.77''$ .]

To station—	Azimuth.			Back azimuth.			Distance.	
	°	'	''	°	'	''	Log. meters.	Miles.
Hall.....	123	17	50.12	303	12	09.10	4.1308339	8.398
Port.....	154	34	17.27	334	30	03.08	4.2914416	12.156
Pawtuckaway.....	188	20	41.77	8	21	28.52	4.0278356	6.625
Lookout.....	198	34	12.30	18	35	38.52	3.9526144	5.571
Bald.....	258	45	56.70	78	54	29.85	4.2392230	10.779

## RATTLESNAKE, MERRIMACK COUNTY, N. H.

A Coast and Geodetic Survey station, first set in 1871 on the northern part of the hill, which is not the highest part, the top at that time being covered with wood. Before 1872 the wood had been cut off, and the station was moved to the highest point. To reach the new station take the long pond road from Concord Street and turn to the right just before reaching Mr. Farnham's. This road was used by the quarry company, which owns the land leading to the top of the hill. The station is on a very large boulder at the highest point of the hill and is marked by the usual bolt and triangle.

Signal (1917): Spruce tree in top of small oak tree with white targets, distant 13 feet; true azimuth,  $180^{\circ} 37'$ .

[Latitude  $43^{\circ} 13' 42.47''$ . Longitude  $71^{\circ} 34' 20.49''$ .]

To station—	Azimuth.			Back azimuth.			Distance.	
	°	'	''	°	'	''	Log. meters.	Miles.
Gunstock.....(H)	206	58	07.23	27	06	27.97	4.5566361	22.438
Prospect.....(H)	237	52	41.27	58	08	25.63	4.5631873	22.727
Catamount.....(H)	256	48	42.00	77	00	03.63	4.3624685	14.316
Fort.....(H)	283	18	14.48	103	28	36.64	4.3240408	13.104
Pawtuckaway.....(H)	291	21	42.94	111	37	06.07	4.5152114	20.350
Hookset.....(H)	330	36	45.49	150	40	54.91	4.2254153	10.442
Unkonooc.....(CGS)	2	48	17.21	182	47	36.97	4.4356724	.....
Stewart.....(CGS)	96	12	33.33	276	00	24.43	4.3828029	.....

(CGS)=work done by U. S. Coast and Geodetic Survey in 1871-2. (H)=work done by G. T. Hawkins in 1917.