

THIRTEENTH DISTRICT.

This district embraces all the aids to navigation on the Pacific coast of the United States north of the southern boundary of Oregon. It extends from the forty-first parallel of latitude to British Columbia, and includes the coast of Oregon and of Washington Territory.

Inspector.—Lieut.-Commander George C. Reiter, United States Navy.

Engineer.—Maj. George L. Gillespie, Corps of Engineers, brevet lieutenant-colonel, United States Army, to July 27, 1881; Capt. Charles F. Powell, Corps of Engineers, United States Army, from July 27, 1881.

There are in this district—

Light-houses and lighted beacons.....	17
Day or unlighted beacons.....	22
Fog-signals operated by steam.....	4
Whistling-buoys, in position.....	2
Other buoys, in position.....	106
Steamer Shubrick, buoy-tender, and for supply and inspection.....	1

LIGHT-HOUSES.

520. *Cape Arago (Gregory), on a small island, at the western extremity of Cape Arago, Oregon.*—About 2 miles of wagon road were made from South Slough, on Coos Bay, leading to the light-house; three-quarters of a mile yet remain for completion of the road. The keeper's dwelling was painted inside and out, and all out-buildings were repainted, and other minor repairs were made.

522. *Tillamook Rock, on Tillamook Rock, 18 miles south of entrance to Columbia River, Oregon.*—The following structures were added, thus finally completing this station: guard railing or fence, exterior iron stairway, coal and engine house, tramway, landing wharf, bridge, and retaining wall on the east side. The landing wharf was placed on the 35-foot level. The clear space inside the guard railing will average 12 feet in width; this area was leveled with concrete filling, finished with cement mortar. The retaining wall is of rubble stone, and on an average 6 feet high. It was built on the east side of the light-house, parallel with it and 12 feet distant, to bring that part of the rock up to the excavated level; the wall has a coping of cut stone, 14 inches wide by 12 inches thick, in which holes are drilled for the posts of the iron guard fence. The space behind the wall was leveled up with broken rock. Forty feet of the wall are on the east side and 10 feet on the south side, embracing the southeast corner.

523. *Point Adams, south of and near the entrance to the Columbia River, Oregon.*—A fence for the protection of the station against drifting sands was built about 100 feet seaward of the light-house, near the edge of the bank and parallel to the direction of the prevailing winds. It is 700 feet long by 9 feet high, made tight by nailing boards closely; the posts are set deep in the sand, and strongly braced in the rear; a hood projects 2 feet on the storm side. The old sand fences, which were in parts and oblique to the wind direction, had proved inadequate and were removed. Material was sent to this station, with which the keeper partly rebuilt 1,200 feet of pasture fence, and the needed minor repairs were made. Eight pounds of mesquite and 8 pounds of blue-grass seed were furnished the keepers, to be sown around and in the immediate vicinity of the light-house, so that its growth would hold the sand in place. The

Thirteenth District.

FOG-SIGNALS OPERATED BY STEAM OR HOT-AIR ENGINES.

522. *Tillamook Rock, Oregon.*—First-order sirens.
528. *Cape Flattery, Washington Territory.*—One 12-inch whistle.
530. *New Dungeness, Washington Territory.*—One 12-inch whistle.
533. *Point Wilson, Washington Territory.*—One 12-inch whistle.
The signals give complete satisfaction to mariners.

BUOYAGE.

The buoyage is in good condition. Additional buoys were placed, wherever demanded by the interests of commerce, and changed as circumstances required.

DEPOT.

Tongue Point, near Astoria, Oregon.—The buildings, wharf, and coalshed are all in good condition.

TENDER.

The steamer Shubrick was in active service, working buoys, delivering supplies, and inspecting stations. She received during the year such repairs as were necessary to keep her in running order, but her age is so great that it is not only very expensive but quite difficult to keep her seaworthy. She should be condemned and sold, and her place should be supplied with a new vessel.