

hours before it was out of sight from the land. Off shore the pack moves to the northward more slowly.

The current setting along the Siberian shore changes to the northward and sets up toward Herald island at the rate of about 1 knot an hour, carrying the ice up in that direction, so that late in the fall it has formed a gap in the pack, extending about 30 miles north of Herald island, known as "the Hole." The result of this northerly current and the northeast current along the Alaska shore, combined with the prevailing summer southwest and southeast winds, is that the center of the pack in this Arctic basin moves slower than the sides, and, with the addition of drifting floes, a point of ice is formed, extending well to the southward. This point is found in from longitude 160° W. to 170° W., and is known as "Post-Office point," as it makes a natural meeting place for vessels cruising to the eastward and westward to communicate and exchange news. On very open seasons, with prevailing southwesterly winds, Post-Office point has been found as far to the eastward as longitude 157° W.

I have been unable to collect much data to determine the spring movements of the pack in the vicinity of Herald island. In 1881, which was an exceptionally open season to the westward, vessels were within sight of Herald island July 20, and on July 30 the *Corwin* landed men there, having passed considerable ice midway between there and cape Sabine. On August 12 of the same year she succeeded in forcing her way through very heavy floe ice and landed men on Wrangel island. In 1885, the *Corwin* met solid packed ice as far as the eye could reach, in latitude $69^{\circ} 32'$ N., longitude $174^{\circ} 15'$ W.

Following the coast north of Icy cape, vessels always have to take more or less risk. If the pack is not far off shore it is liable to shut in for several days at a time on the different capes, when vessels may anchor in the bights or moor to ground ice until the pack sets off shore again.

The dates of the probable arrival of vessels at different points vary greatly with different seasons. In 1879, about August 20, the fleet was stopped by the pack at Blossom shoals; a few vessels worked around, and about 15 miles into the bight to the eastward, but returned within a week.

On August 9, 1885, there was heavy drift ice on Icy cape, but vessels worked through it, and, on August 10, anchored at point Marsh. On August 14 of the same year the ice was packed in solid on point Franklin, but vessels then between cape Smyth and that point lay safely under the lee of ground ice, and succeeded in getting south by August 19, when