

cwts. an approximation at all events to the strain on the rope.

A second derrick, nearly equally strong, was rigged over the stern, and we dredged sometimes from one and sometimes from the other. The stern derrick was, however, principally used for sounding; the letting-go board, &c., being fitted up in connection with it. We had an excellent arrangement for stowing the dredge-rope in the 'Porcupine;' an arrangement which made its manipulation singularly easy, notwithstanding its great weight—about 5,500 lbs. A row of about twenty great iron pins, about two and a half feet in length, projected over one side of the quarter-deck, rising obliquely from the top of the bulwark. Each of these held a coil of from two to three hundred fathoms, and the rope was coiled continuously along the whole row (Fig. 46). When the dredge was going down, the rope was taken rapidly by the men from these pins—'Aunt Sallies' we called them, from their ending over the deck in smooth white balls—in succession, beginning with the one nearest the dredging derrick; and in hauling up, a relay of men carried the rope along from the surging drum of the donkey-engine and laid it in coils on the pins in inverse order. Thus, in letting go, the rope passed to the block of the derrick directly from the 'Aunt Sallies;' in hauling up, it passed from the block to the surging drum of the donkey-engine, from which it was taken by the men and coiled on the 'Aunt Sallies.'

The length of the dredge-rope was 3,000 fathoms, nearly three and a half statute miles. Of this, 2,000 fathoms were 'hawser-laid,' of the best Russian