

and supper, should be entirely devoted to it, or to such work as may be necessary outside the ship, so as to ensure about six hours exercise during the day. The indoor workers, commonly termed "idlers," will, if permitted, evade exercise, but it should be enforced on them at periods when they are not required on board." In reference to this paragraph, had you any daily routine during the period the ship was in winter quarters, and if so produce it?—There is the winter routine for the "Alert" (*producing it*). (Appendix No. 4.)

118. (*Dr. Donnet.*) What means did you take to clean your lower deck?—The whole aim was to keep it as dry as possible, and it was more drying and sweeping up the lower deck, which was painted, than the usual service cleaning. Cocoa-nut matting was laid down in the gangways and then rolled back in the mornings, and the deck only wetted when necessary.

119. In your routine you mention that on the first Friday in every month the bedding was spread out and aired on the lower deck. Did you find this bedding wet from the condensation of the breath of the men?—Not as a rule. On two or three occasions men sleeping near a hatchway found their bedding damp, and were allowed to dry it either in the drying-room or before a stove, in addition to the Friday general drying, and, of course, on all occasions removed their sleeping billets to other parts of the ship.

120. (*The Chairman.*) In reference to the personal cleanliness of the men, did you take any special measures?—I will hand in the regulations for the use of the drying-room, which will give the whole of that information (*producing the same*). (Appendix No. 5.)

121. (*Dr. Donnet.*) In what part of the ship was your drying-room, and what means had you for keeping it dry and clean?—The "Alert" was better provided in this respect than any ship that had previously entered the arctic regions. In lieu of the general practice of the drying-room being in the holds, with an opening above communicating with the living deck, the drying-room was bulkheaded off from the lower deck in the fore part of the ship, heated by a special stove of its own. The hatchway above, through which the condensation escaped, communicated with a large snow chamber built under the forecabin. The room was cleaned up every morning previous to divisions.

122. (*The Chairman.*) Each mess having a washing day once a fortnight for ablutionary purposes, was any special measure taken to ensure that the men individually availed themselves of it properly?—If they did not use the washing-room, they would have been on the ice working with the working-party, which would not to them be preferable to washing clothes, or they would have been idling about the lower deck and been detected; but they were not actually mustered into the washing-room by any one. In addition to having the forenoon allowed them once a fortnight for washing clothes, Saturday was also used by most of the ship's company for ablutionary purposes.

123. Had they the means of bathing?—Large tubs, the usual service tubs.

124. Were there any special regulations in regard to change of clothing?—No; merely the daily inspection by the officers at divisions.

Capt. Sir G.
S. Nares,
R.N., K.C.B.,
F.R.S.

10 Jan., 1877.

The witness withdrew.

Adjourned to to-morrow at 11 o'clock.

THURSDAY, 11TH JANUARY, 1877.

PRESENT:

ADMIRAL SIR JAMES HOPE, G.C.B., in the Chair.

ADMIRAL SIR R. COLLINSON, K.C.B.

VICE-ADMIRAL E. A. INGLEFIELD, C.B., F.R.S.

JAMES J. L. DONNET, Esq., M.D., Inspector-General of Hospitals and Fleets, R.N.

THOMAS R. FRASER, Esq., M.D., F.R.S.E.

H. J. VANSITTART NEALE, Esq., Secretary.

CAPTAIN SIR GEORGE STRONG NARES, R.N., K.C.B., F.R.S., *further examined.*

125. (*The Chairman.*) Proceeding to the 6th paragraph: "A periodical monthly examination of the ship's company, after they are settled in winter quarters, should be carried out, as the earliest signs of debility or scurvy will be readily detected thereby, and immediate measures may then be taken to arrest it." Was that recommendation carried out?—Yes.

126. In Captain Stephenson's Report, paragraph 99 (therefore, I presume, towards the end of February), he states, "but all looked pale and blanched." At your monthly inspections did you notice any change of this description in the appearance of your people?—Yes; the paleness is inseparable from arctic service, after passing a winter.

127. That being the case, you do not consider the pallor in question to be any special indication of debility?—None whatever.

128. (*Dr. Donnet.*) Do you think that the absence of the stimulating qualities of light had any effect upon the paleness and the blanched appearance of the crew?—It occasioned it.

129. Did you observe your men at the end of the arctic night, and was there any indication of the lowering of their physical powers from the absence of light?—I considered that they were paler than the crew of the "Resolute," in which ship I passed two winters in about latitude 75 degrees north, near Melville Island;

but I cannot speak with regard to their physical strength, for at that time of the year there are no means of judging of the stamina of the men. The chief tax on the crew in the early spring is occasioned by the walking parties preparatory to the sledge expeditions; and with the exception of one or two weakly men, they used to return after their exercise in what I considered was much the same state as had been experienced in former expeditions.

130. The experiments made by the officers of the expedition upon the growth of the seeds of mustard and cress in darkness showed, that the absence of light had a deteriorating effect upon the growth and appearance of these plants. Do you not think that the men's constitutions were influenced by a similar deteriorating effect as that caused by this absence of light upon the appearance of these plants?—All the mustard and cress that has ever been raised during an arctic winter has an absence of the usual green appearance; it appears of a very light yellow, and has no other colour. As far as the useful properties of the plant are concerned I cannot give exact information, but I believe it has lost some part of its useful properties.

131. On the reappearance of the sun were you able to have light admitted below?—The whole question of lighting the living deck of an arctic ship is a most

Capt. Sir G.
S. Nares,
R.N., K.C.B.,
F.R.S.

11 Jan., 1877.