

10. *Mr. Fraser.*] You do not think that the alteration which would result from this Bill becoming law would in any way inconvenience the banking community or the public dealing with the banks?—No, I do not think it would at all.

11. *Mr. G. M. Thomson.*] In the event of a general resolution being come to to open business premises an hour earlier, the same result would be achieved? It could be arranged that the Civil servants should commence their work one hour earlier during the summer months, that the schools should open one hour earlier, and that business premises should open one hour earlier; and the same result would be achieved?—Yes. I am not giving any opinion regarding the Bill, as to whether we think it desirable or otherwise, unless you ask me the question.

12. *Mr. Sidey.*] Have you considered generally the difficulties in the way of introducing a scheme of the kind, apart from legislation as proposed in this Bill?—No, I have not.

13. *The Chairman.*] Do you think that trade generally would adjust itself to the new conditions?—I think so.

HAROLD SEWALLIS BLACKBURN, Captain, Nautical Adviser to the Marine Department. (No. 9.)

1. *The Chairman.*] Would you like to make a statement?—No. I am prepared to answer questions.

2. *Mr. Sidey.*] You know what the proposal is that is contained in the Bill before us?—Yes. I understand it is to put the clock on an hour on the last Sunday in September, and to put it back to New Zealand mean time again on the last Sunday in March.

3. What the Committee want more particularly to know from you is what effect this would have upon shipping—whether any inconvenience would be likely to be caused to the shipping, or whether any confusion would be likely to result from that arrangement?—I should say, almost none. In connection with the tides, I think that at first there would, in all probability, be some little inconvenience caused, and occasionally mistakes made; but I do not think there is likely to be much inconvenience. If I were a harbourmaster I think I should keep my clock at New Zealand mean time in order to save confusion. Some one, knowing there is an hour difference, might make the correction plus instead of minus, if you did not do that. It would save all difficulty if harbourmasters at tidal harbours were to be instructed to keep their clocks as they are at present, because we cannot alter tide-tables very well. If the proposal were in vogue, of course we could put a note at the bottom of the tide-table to warn about this.

4. If this principle were adopted, might not the practice arise of showing opposite the time of the tide the local time? Probably both would be shown?—In the tide-tables we must keep it New Zealand mean time. We could make a note, if it were established, at the bottom of the tide-tables that in certain months of the year the local time was an hour ahead of New Zealand mean time.

5. Speaking generally, you think there need not be any fear of any loss or accident occurring through the introduction of this principle?—I do not think it is likely, but I could not guarantee that there might not be some mistake made which might cause, or be brought in as causing, an accident. Ships coming to the colony for the first time would naturally keep the usual time. They would not put their clock on until they got to the Dominion, and they would be all right as far as the tide-tables are concerned. It is ships leaving New Zealand that would be affected, and then the harbourmaster is mostly concerned, and if he were instructed to keep his clock at ordinary New Zealand mean time things would work all right—at least I should say so. Of course there might be mistakes made. There would almost certainly be some mistakes made by some man forgetting the difference in time. I think that in connection with the tides there will be some inconvenience.

6. Do you think that the inconvenience caused to the shipping in the way you have mentioned would be of so serious a character as to be an argument against the making of the change at all?—I should not say so, if material benefit would accrue to the majority of the people. I have not gone into that phase of the matter. Personally I should prefer things to remain as they are. I am thinking of housewives and servants, and the working-people who have to get their breakfast at 7. They will have to get up in the dark a good deal longer in the year than they do now. The proposal, however, is, I suppose, mainly in the interests of those seeking recreation in the open air, and I think they are well in the majority in this country.

7. It is only a comparative few who get up very early to take their recreation before their work?—I suppose so. Of course there are some who go in for gardening in the morning.

8. They could do it in the evening just as well?—That may be. I have not really gone into the question, and do not know how many it would benefit or how many it would not; but as far as shipping is concerned I do not think there is any very strong reason against it. The tides are the principal thing. I do not think it would make any difference as regards the position of a ship—the latitude at noon—because on the coast we very seldom take astronomical observations, and vessels coming in from the sea are constantly altering their time, and they all have chronometers. I am referring now to intercolonial and foreign-going vessels. They keep, as a rule, not mean time, but what we call apparent time—that is, sun time.

9. Are chronometers not all set from Greenwich time?—Oh, yes! There is a book which gives you the error of Greenwich time. No chronometer keeps exact time.

10. *Mr. Fraser.*] The position would be this, then, would it not? that the almanac would show a certain hour for high tide, and the man's watch, if it were set to local time, would not be in conformity with the time so shown?—That is so.

11. Then the probabilities are that it would be more inconvenient for local traders than for those coming from a distance, as the former would probably be keeping their watches by local time, apart entirely from any time which the harbourmaster might keep?—Yes, that is so. There would be bound to be some little inconvenience, and a man might make a mistake; but in a year or two they would all know.