- 56. Mr. Foster.] But the fact remains that the carbonic-acid gas or sulphur-fumes merely prevent the fire breaking into flame?—It absolutely extinguishes any fire, even a smouldering
- 57. But supposing at the time of taking fire, it will only keep it from becoming incandescent?—I understand it would be better to allow it to get into fire and then put it out, and you then destroy the cause at once.

58. Would that be so?—Well-

59. If you let it get into fire and put it out, you have still the temperature to deal with in what you leave. These I know are rather abstruse questions, and although they do not, perhaps, bear on the case, they are interesting?—Until there is absolutely fire the temperature does not rise much. If it should be only smouldering, you might be working alongside it and never know it was there. Supposing the air could not get at it, then there would not be any smoke. The heat itself would not indicate to you any fire—the heat would not be much round about it.

60. The Chairman. If the heat had radiated that would be the best reason why it should

- 61. Mr. Foster. It was suggested that a fire-alarm in a ship's hold would be a good thing?-I have never seen any of these patents of much value in a case of fires in a ship's hold. You wi remember that there have been four or five fires—the "Perthshire," "Waimate," "Rimutaka," "Gothic," and I fancy another—one of the Tyser line—I think it was the "Indraghiri."
- these fires have been in the one season.

  62. Captain Blackburne.] When was the "Perthshire" 1—That was on the 26th June that I left Home—she had gone into St. Vincent when the fire broke out. On the way Home the "Gothic" caught fire, the "Rimutaka" in dock on arrival at Home, the "Waimate" on her way Home, and the "Indraghiri"—I think she was on her way Home. The fact that so many ships have taken fire all on the homeward voyage from here points to some common cause.

63. The Chairman. Can you suggest that common cause?—That is what we are trying to find

- 64. We want your opinion: you want safe ships?—Yes, and the feeling at Home is so keen about this that we have to pay nine to ten guineas premium on the "Delphic," although she was not overdue.
- 65. That is what we want to get at. We do not want an embargo placed upon the shipping starting from New Zealand, nor do we wish our wool industry—which, I suppose, is the largest export of the colony—crippled. It is from the captains of the ships—the actual men who have to deal with this—that we want any suggestions as to what they consider a danger to their ships; not only a danger to the ships and cargo, and the loss thereby incurred, which must eventually fall upon the colony, but also the great loss of life that may take place upon these ships. In addition to that, the crew of a wool-ship, who are forced by virtue of their calling to be there, even from the captain to the galley-boy, and their lives are just as valuable and as dear to them as any one-else's. Therefore we want to get from the men who are actually engaged in the business some idea as to what they consider—for us to say whether rightly or wrongly—to be the elements of danger that enter into this business. I do not think you need have any hesitation in speaking.

captain?—I have no hesitation whatever in speaking: not the least.

66. The shipping people are with us in this?—I do not think it would be any more——. We

are trying to find out just what you are trying to find out.

67. We are mere landsmen here?—It is just as much a question for a landsman as for a sailor.

It is more a question for the scientists.

68. Oh, God help you if you get the scientists to work: they will give you plenty of science and very little practice?—It is one of three causes, either the damp in the wool, excessive grease in the wool, or the chemicals that may be used in treating the wool.

69. You give us three views of the case?—It is due to one of those three causes

- 70. Can you say if any one of those three would be sufficient to cause the fires?—Yes; damp in wool on board ship will be liable to cause spontaneous combustion. I do not put this down to
- the cause of the fires, but generally speaking.

  71. Mr. Foster.] In using the term "greasy wool," do you mean any particular sort of greasy wool?—Of course, I do not know the difference between them, except greasy and scoured. As to the degree of grease in any particular wool I do not think I can tell you if it would make the wool more dangerous.

72. We have had it in evidence from a wool expert that fleece wool-body wool-that has not

much natural oil in it will not heat when damp?—That is what I think.

73. That goes a step further in regard to greasy fleece wool: if greasy fleece wool is not liable to heat, scoured is less liable?—If greasy wool is not liable to spontaneous combustion, then I think, myself, for the scoured to take fire must be very unlikely. I think the locks and pieces are more likely to take fire than anything else. They used to send the locks and pieces in the unclean state, with much vegetable matter adhering.

74. Do you think the presence of vegetable matter—dung—if thoroughly dried, would be an additional danger?—I think so, even if thoroughly dry; but really I know very little about that.

75. I do not think there would be any danger if the vegetable matter were thoroughly dry,

but you know that many times the belly-pieces and pizzle-pieces are naturally more damp from the urine, and these pieces would be thrown into the bales with the rest?-I think from what I know of wool on sheep-stations that there will be a considerable quantity of damp wool-I do not know what you call it, but cut off—well, the after part of the sheep, a little for'ard of the tiller—put into the bales in that wet state. There would be a good deal of chemical action going on just the same as with manure. Practically it is manure.

76. Do you consider that grease-not natural wool-grease-that might get on the wool would lead to conflagration ?—I suppose it would be exactly the same thing. I do not see any difference.