

Minutes of evidence taken before the Committee appointed by the Admiralty to consider the humane slaughtering of animals.

Contributors

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Lee, Arthur H.

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COMMITTEE ON HUMANE SLAUGHTERING OF ANIMALS.

MINUTES OF EVIDENCE

TAKEN BEFORE THE

COMMITTEE

APPOINTED BY THE ADMIRALTY TO CONSIDER THE

HUMANE SLAUGHTERING OF ANIMALS.

Presented to both Houses of Parliament by Command of His Majesty.



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MINUTES OF EVIDENCE

COMMITTEE

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MINUTES OF EVIDENCE.

Monday, 8th February, 1904.

PRESENT :

Mr. ARTHUR LEE (Chairman).

Colonel F. T. CLAYTON, C.B.
Mr. ALEXANDER C. COPE.
Mr. CHARLES GAME.

Mr. GORDON MILLER, C.B.
Mr. SHIRLEY MURPHY.
Sir HENRY YORKE, K.C.B.

Mr. R. G. HAYES (Secretary).

Mr. WILLIAM WILKINSON SMART, called ; and Examined.

1. (Chairman.) I understand that you are the veterinary inspector at Deptford?—Yes.

2. How long have you held that position?—At Deptford for about three years, but at various foreign animal wharves for twenty-seven years.

3. So that you have a very large experience in these matters?—Yes.

4. Are you aware of the nature of the inquiry we are prosecuting?—Yes, it has been explained to me by Mr. Cope.

5. You understand our principal object, and almost our only object, is to ascertain the most humane methods of slaughter of the various animals with due regard, of course, to practicability and expense and so forth?—Yes.

6. I presume in the course of your duties you actually see a large number of animals slaughtered?—Yes, not so many now as I did some few years ago; I used to see a great deal more of it then than now, but still I do see a great many slaughtered.

7. What does your work mainly consist of at Deptford now?—The inspection of animals during life to ascertain their freedom from contagious diseases.

8. I think you are going to bring to us as a witness somebody who actually supervises the slaughter almost daily?—The man I proposed is named Nicholls, now employed as a master drover, but he also slaughters for country butchers; he slaughters a number of sheep, in fact he only slaughters sheep; I do not think he slaughters cattle. I believe he will bring his butcher, the man who actually does the slaughtering. Nicholls, I believe, in his younger days was a butcher.

9. Will you be able to inform us accurately of the various methods employed at Deptford on the different animals?—Yes, in the case of cattle and sheep only; they are the only animals we deal with at Deptford now.

10. There are no pigs slaughtered there?—No.

11. Would you commence by telling us what is the method employed in the slaughter of cattle?—The majority of the cattle landed at Deptford now, are "polled" cattle, that is to say, they have been dishorned and have no horns.

12. Where is that done?—In the United States. That is usually done when they are calves. I mention that because, perhaps, some witnesses will tell you something about the horns of the animals, and practically we do not have to deal with horned cattle at Deptford, as the animals have no horns.

13. Is the dishorning a painful process?—Not very painful if done early in life; there is a certain amount of pain attached to it, but it is a very harmless operation if performed when the calf is a few weeks old.

14. Are the horns of the animals in a painful condition when they arrive at your place?—Oh dear no; the ordinary observer would take them to be natural polled beasts, but their horns have been removed as calves. The mode of slaughter adopted at Deptford is as follows, viz.: First of all they are placed in a fasting pen, a pen outside the slaughter house, and there a chain is put round the bullock's neck, and the end of the chain—or the rope, whichever is used—a chain usually—is brought through

the open slaughter-house door into the slaughter-house and put through a ring fixed in the wall, and the animal's head is drawn down comparatively near the ground. Then it is struck on the top of the poll with a poll-axe.

15. Not on the forehead?—No, I have the bones of a sheep's head with me and on it I can show you where the bullock is struck with the poll-axe.

16. But you are referring to cattle now, I understand?—Yes, but I can show you where they are hit (*exhibiting the skull of a sheep*). They are hit *here* with a poll-axe on the poll, i.e., the top of the head. That brings them to the ground and they fall on their side; then they are struck *there* (pointing) with the poll-axe again; that makes a hole just about there, and then what is called a pithing cane is put through *here* and goes into the spinal cord and smashes up the brain and particularly the *medulla oblongata* and the first portion of the spinal cord. When the animal is first knocked on the poll he falls to the ground stunned and lies perfectly still; as soon as the pithing cane is put in and stirred about the animal struggles, but I take it that is not an evidence of pain, as the animal does not feel it.

17. (Mr. Cope.) It is a reflex action?—That is so.

18. (Mr. Gordon Miller.) Does that last long?—No, the animal gives only a few spasmodic kicks.

19. (Chairman.) Do you give two blows for every animal?—In the case of a quiet bullock, an expert butcher very frequently only gives one, the one *here* (pointing). With English cattle in a country slaughter-house (I am speaking now of village slaughter-houses, etc.) I have never seen them killed with one blow; I have always seen them felled first with a blow on the poll and afterwards struck on the forehead.

20. Do they fell them with the blunt end of the pollaxe?—No, with the pointed end.

21. Both blows?—Yes. The blunt end I take it would be sufficient, but I have never seen the blunt end used. With many pollaxes the blunt end could not be used, as they have a hooked end. The animals are then bled by having the throat cut. That is the method of slaughtering bullocks.

22. And that is universally employed there?—Yes, but another method is adopted by the Jews.

23. Do you consider that is the best method?—I think it is. It is the only one I have any experience of. The Greener system of slaughtering by means of a bullet has been tried at Deptford, although not since I have been there, and I am given to understand that the men will not use it as they say it is dangerous to themselves.

24. (Mr. Gordon Miller.) Is it a mask?—No, it is a pistol barrel held in the hand and discharged by striking the pistol with a hammer.

25. (Chairman.) I presume your slaughterers there are very expert men mostly?—Yes, mostly they are.

26. And therefore the pollaxe is likely to be used with accuracy by them?—Yes.

27. Do you have any cattle that give a great deal of trouble—any very wild cattle from South America for instance?—Yes, we have sometimes, and even cattle from the States and the Canadian North West are very bad to handle.

Mr. Smart.

Mr. Smart
(cont.)

28. Do you employ the same method with them?—Yes.

29. Do you find that these cattle on being taken into the slaughter-house, where presumably there is blood and the smell of blood about, show signs of fear or reluctance to enter?—Not the slightest; I have heard many people speak of that, and I do not think there is anything in it; it is not an uncommon thing to see animals tied up practically in the slaughter-house; the slaughter-house doors are wide open; they are in the fasting pen, but they can see everything that is going on, and they stand there very placidly chewing the cud. That proves the animal is not terrified, as when a bullock is frightened he at once ceases chewing the cud; but they will stand there chewing the cud waiting their turn for slaughter quite placidly.

30. Do you mean that these animals never show some reluctance to be dragged in to the slaughter-house?—They object to be dragged into the slaughter-house just as they would object to being dragged anywhere else, but it is not the fact of its being a slaughter-house that makes them object, I am convinced of that; it is not, so to speak, the sentimental idea of the thing.

31. You do not think that either the sight or the smell of blood affects cattle?—I do not think it affects them more than anything else to which they are unaccustomed, paint or tar for instance.

32. You have told us the method of slaughtering cattle. Will you now tell us the method of slaughtering sheep?—They are laid on a framework which is called a crutch, i.e., a table made of laths, and their heads are pulled back so (*describing*). This is the first bone of the spine (*indicating*), the man takes the nose and pulls it back so, thereby making this opening *here* as large as he can. That is where the spinal cord goes. The knife is put in *here* and driven straight through from side to side, the blood flowing from the bottom hole in the neck. The animal lies on its side. The knife is put down so, and the blood vessels cut; then as he withdraws the knife he turns it and severs the spinal cord. Some butchers I believe in putting the knife through cut the spinal cord first of all, then turn the knife, and then push it through, but that is not the usual way. The way I have described is the way it should be done, and that is the way the expert butchers do it, and I find that there is practically no struggling afterwards and apparently the animal loses consciousness immediately. In some places—I am not speaking of Deptford but in other places I have been at—the thing is not always done properly, and in that case, if the spinal cord is only imperfectly severed or not severed at all I think there is a good deal of cruelty attached to it.

33. Do the sheep struggle a good deal on being put on these crutches?—Not very much. I may mention that at Birkenhead, at the Foreign Animals' Wharf, there it was the custom for the butchers to fetter the sheep; they tied three feet together, and I noticed many times a good deal of struggling even after they were stuck; but at Deptford, where they do not fetter the sheep, they just lay them on the crutch, and there is really very little struggling after the animal is stuck.

34. How many hold the animal?—One man does it; he lifts the sheep on to the crutch and puts one of his knees on the sheep's side, and it is really done as quickly as this (*indicating an operation lasting a second or two*).

35. I understand they never stun the sheep beforehand?—No.

36. Why do they not do that?—The only man I have found who has been able to give me any information about the stunning of sheep is Nicholls, of whom I spoke, and he says that when he was a lad it was the custom in the slaughter-house he was connected with and employed at, probably when they were dealing with big Lincoln and Leicester sheep—the bigger breeds of sheep—in consequence of the difficulty of lifting them on to the crutch, to stun them with a blow *here* (*indicating*) but that was discontinued because it was found to damage the head, and also because they did not bleed so well, they become "firy," as it is called, and the blood vessels were not properly emptied.

37. It seems to me that they did it in cases where the sheep were large enough to cause a little inconvenience to the operator?—That is so.

38. And with the smaller sheep they did not do it be-

cause the sheep were too small to struggle effectively?—I suppose there may be something in that.

39. Do you yourself consider that there is any serious damage that could be done to the head by a blow sufficient to cause unconsciousness—of course with a mallet?—I do not quite know, perhaps customers would object to buy a sheep's head which was smashed in. There is rather a difference between a sheep's head and a bullock's head to a customer; the bullock's head, I take it, is not cooked whole as a rule, but the flesh is taken off it and cooked; and if a sheep's head was smashed there would be some little *spicules* of bone about it, and on that account customers might object to it.

40. Would not that mean rather a heavier blow than would be necessary; all I was suggesting was that the sheep should be stunned, and to do that it is not necessary to fracture the skull?—No, but the difficulty would be to regulate the blow so as to judge between what would stun and what would smash the head.

41. Surely that would be arrived at with a little practice? In the case of the poll-axe the weight of the blow is calculated very carefully?—Yes, it might possibly be done; my theory is that all animals should be stunned before bleeding, but after seeing the expert way they are killed by pithing I have come to the conclusion that the animal probably suffers less than he would by being stunned.

42. Surely there would be no suffering at all in the case of being stunned?—Not if the sheep was always hit exactly in the right place, which I think probably very often would not be done. I know many years ago I saw a good many pigs slaughtered and they were supposed to be stunned, and that was anything but a satisfactory way of dealing with it.

43. I admit that if not carried out efficiently it would be unsatisfactory, but presumably you are employing skilful men and they would know how to deal the proper blow to stun an animal?—Yes.

44. I understood you to say that it was desirable that all animals should be stunned?—Yes, in theory I think so, but in practice I really find that the sheep is killed practically as quickly with a knife as with a stunning blow.

45. Even the few moments that the process takes as illustrated by you must be exceedingly painful moments for the sheep?—Yes, but to put against that there are the foul blows that may be struck here and there.

46. You are presuming a skilful operator in the one case and an unskilful operator in the other case, which I do not think a fair presumption?—It must be remembered that that will have to come in with the next race of butchers; the present race will not be skilled operators all at once.

47. No, but we are legislating, or attempting to legislate, for the future?

48. (Mr. Cope.) Have you ever seen any cattle pithed?—No, I have seen horses, but not cattle.

49. Of course that would be a very perfect way of killing them?—I do not think pithing would be perfect because I believe when the animal is pithed he is pithed between the first and second vertebrae *there* (*indicating*). Of course before the spinal cord reaches *here* there are some important nerves given off which supply the brain with sensation, and the nearer to the brain the spinal cord is destroyed the less pain there will be to the animal. I think, gentlemen, if you were to see some sheep and bullocks slaughtered at Deptford it would be advantageous.

50. (Chairman.) We propose to do so.

51. (Mr. Cope.) You do not think you could improve on the present system then?—I do not think so practically; the masks that are used in Germany are certainly more perfect than the poll-axe, as the poll-axe misses occasionally and I have seen in the case of wild bullocks an animal struck five or six times before he was brought to the ground, and it was a very distressing sight; but there is a difficulty of affixing the mask to the animals that we have to deal with. I have seen a poll-axe kicked out of a butcher's hand by an American bullock when he has been standing by the side of him; many of them are really very dangerous animals to handle, and these appliances which we see in the German text books, are used on animals that are used to being handled constantly, and which are as quiet as English milch cows.

52. But I suppose it would be possible to require all men who are slaughter men to be experts in stunning

Mr. Smart
(cont.).

before they are allowed to slaughter?—I think they ought to be. I have made inquiries, and I find there is no apprenticeship for the slaughtermen at Deptford; a boy comes into the slaughter-house, and is first employed to catch the blood, then by and by he is put on to do a little rough skinning, cutting off the feet, and so on, and gradually he develops into a slaughterman without any technical training at all.

53. Do you not think it would be rather a good idea if these men were educated sufficiently to know what importance there is to be attached to striking the animals at the right place?—I think they ought to be, and I do not think any man ought to be allowed to slaughter unless he has proved himself to be efficient.

54. How long have you been at Deptford?—I was there twenty-five years ago, for four or five years, but recently I have been there three years. During the interval I have been at the foreign animals wharves at Liverpool and Newcastle-on-Tyne.

55. So that practically you have had more experience than any man we have in the department?—I suppose I have.

56. You must have seen millions of animals during your time?—Yes, certainly I avoid it as much as I possibly can, and I very often turn my head away rather than see animals killed, but I am obliged to see a good deal of it. Seeing an animal slaughtered is not a thing I am particularly fond of.

57. (*Chairman.*) I am afraid that is rather the attitude of the public at large, which has caused this evil to grow; no one likes to see it; and the result is that the whole subject has been avoided; we feel just as strongly as you do on the subject, but we have to face it.

58. (*Mr. Cope.*) You do think it would be very desirable if possible to educate the butcher to carry out the slaughter of animals in a humane way such as has been suggested?—Yes, my experience of the better class of butcher is that he is a very humane man, and it is my experience that most of the cruelty to animals is not during the actual process of slaughtering; the most of the suffering they are put to is in the driving them into the pens and getting them out; and I have frequently heard a slaughterman say to a drover, perhaps a boy, "Be less handy with that stick or you will get into trouble; do not let us have anything of that kind here."—just that kind of warning. Whether my being in the neighbourhood at the moment has caused him to say that I cannot say.

59. (*Chairman.*) That brings one to rather an important point. What arrangements are there for supervision, for seeing that any rules which are made for the conduct of these slaughter houses are observed?—All the regulations at Deptford are under the supervision of the superintendent of the market, Mr. Philcox.

60. I presume he has assistants?—Yes, he has assistants.

61. Is there anybody who is charged with the duty of seeing the slaughtering of the animals?—Not specially, that I am aware of; there is a meat inspector, who is constantly round the slaughter houses, there are myself and my colleague, who are practically in and out all day, and there are policemen on patrol, not actually in each slaughter house but in and about the slaughter houses, so that there is fairly efficient supervision.

62. But is there no one individual in each slaughter house whose duty it is to see if certain regulations are carried out?—No.

63. (*Mr. Cope.*) Mr. Philcox generally has the supervision of it all?—Yes, and it is wonderfully good supervision, too, which he exercises.

64. He is, of course, a very able man?—Yes, wonderfully so.

65. (*Mr. Game.*) I should like to ask you whether you have ever seen any case of a bullock or an ox getting on to his feet again after being properly poll-axed?—Not after being properly poll-axed.

66. He never rises again?—No.

67. And you think he could not?—I have seen them knocked on the ground and get up again scores of times.

68. And then they have to be knocked down again, but after being properly poll-axed he practically could not get on his legs again?—That is so.

69. Would not an inexperienced man in a slaughter-house cause great delay and annoyance to all the others; if a bullock had to be hit four or five times it would cause great delay and serious inconvenience to the others as well?—Yes. The most expert man of the gang usually does the slaughtering; they work in gangs of about six and, as a rule, I do not say invariably, they call on one special man, "Knock another bullock down for us," and he does so.

70. (*Chairman.*) What number are slaughtered at Deptford in a day?—It varies; some hundreds sometimes; I do not know what our biggest slaughtering day has been, but it will run from 600 to 800 or more.

71. They must have a great many men to do that?—Yes.

72. (*Mr. Gordon Miller.*) You were mentioning that the boys enter the yard at Deptford and gradually work up until they become slaughtermen?—Yes.

73. Is there any means there for adults to obtain instruction in the art of slaughtering?—No, no special means.

74. Supposing an adult wished to take up the trade?—There is nothing in the way of a school.

75. Therefore you principally recruit the slaughtermen from the boys who are trained up in the place?—I understand that is the system.

76. About what age do the boys come in?—About fourteen, fifteen, or sixteen.

77. There was one point that arose the other day about the stunning of a sheep, whether or not its brain is smashed in, would that effect the brain so far as its appearance is concerned and the value of the sheep's head for sale?—To a certain extent it would.

78. If the blood were effused or anything of that description?—Yes, and if the skull was broken and a lot of small portions of bones mixed in with the brain.

79. And possibly the butchers might object to that method on that account?—I am told that was one of the reasons that it was discontinued, that customers would not buy the injured heads.

80. (*Chairman.*) I am not at all convinced, however, that it is necessary to injure the head in order to stun them?—I do not think it is absolutely necessary.

81. (*Colonel Clayton.*) Your objection to the slaughtering mask is, that it is very difficult to fix on a wild animal?—Yes.

82. But if you could fix that slaughtering mask would it be preferable to the poll-axe?—Distinctly, because there would be no doubt about the point of the piston going into the correct place and it would save two blows, it would save the blow on the poll.

83. Is there not another objection to it? Do you not think the butchers object to it because of the time it takes to fix?—Yes.

84. And they make the excuse, "I cannot fix that mask" because they do not wish to waste the time?—I can quite imagine that is one of the things they would say; from their point of view it would not be necessary.

85. From your experience I suppose you would say that a butcher would never use the mask unless you forced him to?—I do not think they would use it from choice.

86. (*Mr. Murphy.*) There is an interval of time of course between the operation either of striking the animal on the head or cutting the throat of the sheep and the subsequent dressing?—Yes.

87. How do they determine what the interval shall be?—I do not know that they have any other guide than that the animal has stopped bleeding, or practically stopped bleeding.

88. Are there any recognised signs of death which would guide a butcher?—I do not know that they look for any special sign.

89. Have you ever seen any suggestions that an insufficient time is allowed to elapse?—Yes, there was some complaint about that some years ago at Liverpool, but I have not had any case coming under my immediate notice. At Liverpool at that time we were getting very large numbers of sheep, and I think probably they had put some not very expert butchers to slaughtering the animals simply by cutting their throats instead of pithing them, and

Mr. Smart
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probably there may have been cases at that time which warranted complaint; I know there was a complaint, or more than one, as to the flaying of the animals being commenced before they were really dead, but I think such cases are extremely rare.

90. The slaughterers, I believe, are employed by the butchers themselves, are they not, and not by the market authorities?—They are employed by the purchasers of the animals.

91. Are they licensed by the corporation? Do they have to get sanction before they begin slaughtering?—Oh dear no.

92. It is entirely within the discretion of the butchers themselves?—I take it that it is; I am not aware that they have to have any licence.

93. The slaughtering is mostly done in separate rooms, or whatever you would call them?—Yes, in separate rooms.

94. Do you think that a good plan, or do you think it would tend to maintain things being done under good conditions if it was done, as in Germany, in halls where everything is seen by a number of people?—I really do not know that there would be very much in that.

95. At any rate, from what you have seen, you would not feel that the animals being killed in the presence of each other would be detrimental to the use of a public slaughtering hall?—No, I do not think so.

96. (Chairman.) Do I understand that each animal is slaughtered in a separate room?—No, each owner or master butcher has a separate room.

97. (Mr. Cope.) There is a shed and a yard outside?—Yes, they can work two gangs in each slaughter-house.

98. (Chairman.) Are the animals cut up, then, in the same room in which they are poll-axed?—They are poll-axed and skinned and dressed there, and then they are passed on to the cooling room.

99. (Mr. Murphy.) Do you think it would be a good plan if a system of licensing did exist?—Yes, it would be, to a certain extent, a guarantee that only skilful men were employed.

100. And you would not limit that, probably, to the public slaughter-houses of Deptford and Islington; you would apply it generally to the killing of animals in private slaughter-houses?—Yes, but, of course, the difficulty would arise in small villages where there are only one bullock and three or four sheep a week killed, and I am inclined to think that there is a good deal more cruelty goes on in slaughter-houses of that class than in the larger slaughter-houses.

101. (Chairman.) But I see no difficulty about licensing them, do you?—No.

102. The licence need not be expensive?—No.

103. (Mr. Murphy.) Does this subject matter touch the number of persons who are employed in killing animals? Ought there to be a limited number employed, say, in killing a sheep on account of its struggles?—I do not think so.

104. A single man, by himself, would have a difficulty in killing a sheep?—Oh, dear, no; one butcher is quite sufficient to kill a sheep, and indeed in country places one man has to kill and dress a bullock; I have seen it done scores of times.

105. Do you think it tends to prolong the sufferings occasionally, if only one man is employed?—I do not think so at all.

106. When the knife is put through the throat, is the neck of the animal broken or is the spinal cord divided only?—The spinal cord is divided. You mean the articulation?—

107. Yes?—No, it is not destroyed.

108. The ligaments are not torn?—No, the head is pulled back, and there is a fairly large space for the insertion of the point of the knife.

109. Does it require much skill to do that, or can an unskilled person do it?—I think it requires some skill; it requires a certain amount of practice to hit the exact point, and I take it that in the majority of cases where I have seen sheep struggling after they have been stuck, it is where the spinal cord has not been divided.

110. (Chairman.) I understand there is a method by which the sheep's neck is broken; technically, I suppose, the ligaments are torn, and the spinal cord broken?—The spinal cord is severed by being torn?

111. Yes; would that cause death instantaneously?—It would if it could be done, but I do not think the spinal column can be severed in the way you suggest.

112. (Mr. Gordon Miller.) Does the Corporation exercise any control over the persons employed in slaughtering?—No special control as far as I am aware; you mean in the way of licensing?

113. Yes?—No.

114. (Chairman.) Are there any bye-laws or regulations in force at Deptford to regulate the methods of slaughtering?—I am not aware of any.

115. I presume there are certain regulations as regards sanitary observances and so forth?—Yes, that is all under the management of the superintendent. I do not know what the bye-laws are.

116. Who is the superintendent?—Mr. Philcox. He is a most able man.

117. Is there anything else you wish to say?—No, I think that pretty well covers the ground. My own idea is that instead of devising fresh methods of slaughter, the present methods if efficiently carried out are satisfactory. There is one thing I certainly do think—that before a lad, or a man either, is allowed to commence slaughtering he ought either to pass some kind of an examination to prove his efficiency, or there ought to be some system which makes no doubt of his having proper knowledge of the work. That is particularly so in the sticking of a sheep. Although I have had considerable experience in handling a knife myself I do not think I could stick a sheep and pith him at the first attempt.

Staff-Sergeant Major FIELDER, called; and Examined.

Staff-Serg.
Major
Fielder.
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118. (Chairman.) I understand you are the master butcher at Aldershot?—Yes.

119. How long have you held that position?—Thirteen months.

120. Where were you before that?—In South Africa for three years and previous to that I was at Shorncliffe as master butcher.

121. How many years' experience as master butcher have you?—From 1886 as master butcher.

122. You have eighteen years' experience?—On and off, not at all times employed.

123. At any rate you have had a very large experience?—Yes.

124. You have had experience of slaughtering animals on service as well as at home in time of peace?—Yes.

125. You have charge of the slaughtering of all animals at Aldershot now?—Yes.

126. Do you actually see the slaughtering yourself as a rule?—Yes, I do as a rule, if not, my assistant is there, but I am there nearly always.

127. How many animals do you have to slaughter a day as a rule?—Now, on the average, about twenty-five.

128. Cattle?—Yes.

129. Do you slaughter sheep as well?—No, only for the hospital use, about three or four, but no number; we have supplies of mutton from the colonies twice a week.

130. Your work is chiefly in slaughtering cattle, and your chief experience is in that line?—Yes.

131. What is your method of slaughtering cattle?—We use the mask; we used the poll-axe up to about two months ago, but we use the slaughtering mask now.

132. Do you use it entirely?—Not entirely, because we have two mallets only, but we have applied for more;

[Staff-Serg.
Major
Fiddler
(cont.).
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being in store so long they got out of condition and we applied for more, but we use them right through as often as we can.

133. Which do you prefer to use—the mask or the poll-axe?—Most butchers prefer the poll-axe, but that is only on account of the trouble of putting the mask on. I think in regard to humanity the mask is best.

134. And you do use the mask very largely at Aldershot now?—Yes.

135. Do you find any great difficulty in putting it on?—Sometimes on a very wild beast, but no very great difficulty.

136. What is the trouble—does the blindfolding frighten the animal?—It draws back its head to use its horns and so it might injure a man.

137. Have you ever had any accidents from putting on the mask?—No, it takes a little while longer but that is all. You pull the bullock right down first.

138. You pull him down to a ring in the same way as you would have to do if you were to poll-axe him, before you put on the mask?—Yes.

139. You do not put it on outside the slaughter-house?—No; that is the best way, I consider, because the bullock cannot harm anybody so much; although it might dash about its head it cannot get at the men.

140. You do not think it would be a good thing to put it on outside?—No.

141. Have you seen any cases of the mask failing to act effectively?—I have seen sometimes now and then that a man would have to strike twice.

142. You mean because he made a bad shot?—Yes, perhaps not enough force behind it; it must be fair and square.

143. Do you see less mistakes made with the mask than with the poll-axe?—Oh, yes.

144. After the animal has been struck effectively with the mask you find he is felled and is motionless?—Yes.

145. Then you remove the mask at once?—Yes.

146. And then stick him?—Then you put a cane through the perforation. You can do that without removing the mask most times; you simply pull the bolt out and insert the cane.

147. Through the same hole?—Yes.

148. Do you ever find the bolt sticks in the animal's head so that you cannot withdraw it?—No, it is quite loose, and there is no difficulty at all.

149. Do you poll-axe or slaughter the animal in the same room that you cut him up in?—We dress him and split him down in two halves, what are called sides of beef, and then these are run over a railway into the cooling room.

150. But you split him, and so forth, in the same room that you slaughter him in?—Yes.

151. Do you notice that cattle when brought into the slaughter house show any signs of fear at the smell of blood?—Oh yes.

152. Do you think it is the sight of the blood or the smell?—The smell, I think.

153. How do they show their fear?—They sniff about and perhaps run or are obstinate.

154. They try to avoid being dragged in?—Yes.

155. When they are brought in they naturally see blood about and smell it?—Yes. We close the doors and we rope them in a little pen close to the door in the slaughtering place. We rope them first, and there are five men and we knock down five at a time. Each man gets hold of the rope and they drive them up or push them up; if a bullock is very obstinate we get all hands to push it up but not to knock it about.

156. And you think there is no doubt that the animal is frightened at the smell of blood?—There is no doubt about that.

157. You or your assistant exercise proper supervision over the slaughterers?—Yes.

158. Who actually do the slaughtering?—We have what we call, foremen—first-class butchers.

159. Belonging to the Army Service Corps?—Yes.

160. How is a man like that trained?—Perhaps when

he enlists he is a third hand, then going upwards there are second hands, first hands, foremen and masters, all those grades.

161. But how does a man learn to perform the act of slaughtering in the first place—to use the poll-axe?—Supposing he is a second hand he is not looked upon as competent to knock a bullock down; when he wants to rise to the grade of first hand you put a poll-axe in his hand and he has to have practice before he is put up by the officer.

162. The result is that, probably, when he first begins, he is not very skilful, and he does not kill the animal straight off?—No, that is where the mask comes in to make it all the better; if he had a poll-axe the bullock seeing a stranger would flinch and perhaps move his head a little, causing the poll-axe to go too much to the right or perhaps lower down on the nose so that it would not penetrate the brain, necessitating two or three blows.

163. But you have no method of training butchers to slaughter animals except on the animal himself?—That is all.

164. (Colonel Clayton.) With regard to the use of the mask, you say that it is difficult to fix on an animal that is wild?—Yes, it moves its head sometimes.

165. Where does the difficulty come in if the head is tied down? The first thing you do is to rope the animal?—Yes.

166. And then you bring it in and tie it down to a ring?—Yes.

167. Its head is fixed tight to the ring?—Yes.

168. Then where is the difficulty of putting on the mask?—It takes a little while longer.

169. That is it; is not that really the main objection to the use of a mask, because of the delay; the butcher does not like it because it takes a little longer?—That is my opinion.

170. And he says he cannot fix it on because the animal is wild, but if the head is fixed down tight to a ring the head cannot move?—No.

171. And there ought to be no difficulty whatever in putting on the mask?—No, if the head is pulled down close to the ring there should be no difficulty.

172. When you are training these men when they first come in, do you train them, first of all, to knock a bullock down with the mask on before you let them use the poll-axe?—I have not had the mask in Aldershot except for the last two or three months; we have always had the poll-axe before that.

173. Do you let him practise on a live animal?—Yes; if he is rising from second to first grade and I find he is qualified, afterwards we must let him practice.

174. You put a poll-axe in his hand, and let him start straight away?—Yes.

175. Without any preliminary instruction at all?—He has instruction in the way of being shown where to strike the animal; that instruction is given to him, and he is told to be steady, and has the foreman standing at his side in case of an accident.

176. (Chairman.) Is this the pattern of the mask you use? (showing a mask to the Witness.)—Yes.

177. (Colonel Clayton.) Before you let a man attempt to knock a bullock down how long would he be in the slaughter-house?—A long time; he would be quite three months right off before I would recommend him, and before he would come before the officer to pass out so that he would have confidence in himself.

178. Do you find these men get nervous at all when they first start?—Yes, in some cases, but very rarely—perhaps one out of five.

179. Would you tell us what is your method of slaughtering sheep?—I stick them at the back of the neck.

180. Can you tell us exactly how it is done? Just describe it. What does the man do?—He ties the three legs first, and then puts the animal on its side; then he puts the head up against his knee, and penetrates the sheep's neck with a knife just at the back of the windpipe at the joint. Then he breaks its neck afterwards to pith it; he gives it a jerk and breaks the neck.

181. After he has stuck it he breaks the neck?—Yes.

182. Do you find them struggle much after that?—They

Staff-Serg.
Major
Fielder
(cont.).

do not struggle much after that; if its neck was not broken it would, and it would not die for a long time.

183. Do you know what the breaking of the neck does?—Yes, they give the sheep's neck a sharp push to break the neck, and they put their finger in what they call the cup bone. We dislocate the neck in fact.

184. And you find after that the sheep does not struggle?—No, it dies very quickly after that.

185. Does it require a good deal of skill to do that?—No.

186. Can a man learn that quicker than he can learn to knock down a bullock?—Yes.

187. When you are training your men do you train them first to kill a sheep before you let them touch a bullock?—Yes.

188. Always?—Yes. I have their names on a notebook long before I recommend them to the officer, and before they come before the officer after I recommend them there is generally a month's interval.

189. And they do not get their qualifications until they are actually passed as experts?—That is so; the chief inspector passes them out in my presence.

190. They are not graded, then, as first or second hands or foremen until they are actually passed out?—No.

191. (Chairman.) Will you tell us how you slaughtered the animals in South Africa?—We used a poll-axe where I was. I was at Norval's Pont.

192. (Colonel Clayton.) Were you not on the march at all?—No.

193. (Chairman.) You always used a poll-axe?—Yes.

194. Did you ever shoot the animals?—We have shot them.

195. When you had not got a poll-axe?—Yes, or even when there was a poll-axe they have been shot occasionally.

196. When the troops were on the march what did they use?—They used to shoot them, but unfortunately I did not happen to be on the march and I had no experience of it.

197. Do you have any very wild animals to deal with at Aldershot?—No; now and again you find one, but it is a very small percentage.

198. They are mostly English cattle?—All English cattle.

199. (Sir Henry Yorke.) When you use the poll-axe where do you hit the animal?—On the forehead; it is marked by a star.

200. Not behind?—No, I have seen it done that way but that is not our way.

201. (Chairman.) You only strike the one blow?—Yes, on the forehead where you see a sort of a star.

202. (Mr. Game.) In using the mask and after the blow is hit, have you ever known that that has failed to kill the bullock?—No.

203. It always has killed it?—Yes.

204. You have never seen it miss?—No.

205. I understood that sometimes there was a difficulty in placing the mask straight on the head and that when the bolt was shot the head might go sideways and so death might not be caused at once; did I not understand you to say that?—I said that; the superintendent, like myself, would be there and would put on the mask the proper way. I have seen it done years ago like that, but I have not seen it in my experience this last time.

206. In a case like that you would have to remove the mask and use the poll-axe; you could not re-adjust the mask?—You can re-adjust the mask; you can put it down lower or higher. The proper thing is to put the mask on not too tight, because if it is too high it will escape the brains of the bullock, and it should be placed lower down than the star which is hit by the poll-axe.

207. Supposing it is not properly placed on and the blow comes and it does not kill the bullock, what would you have to do then? You would have to replace it?—Yes.

208. You have seen circumstances like that?—Yes.

209. It is not always so vexatious, but cases arise in which you have to re-adjust the mask before the animal is effectively wounded?—Yes.

210. The next thing I have to ask you is this: in working in the slaughter-house with gangs you have the men of different grades?—Yes.

211. Is it not the man who comes in last, as a rule, that has to chop the horns off the bullock, if it is a horned bullock?—Yes.

212. Does he not also have to break the scrags of the bullock before he goes on to the other work?—No.

213. That is generally done by the poll-axe?—Yes.

214. And therefore as he is using the poll-axe, after the bullock is dead, to knock his horns off, could he not become an accomplished man to be able to knock down a bullock afterwards?—Yes.

215. That is the practice he gets; he does not practise on live beasts only but his work has been work with the poll-axe that insures the precision of his aim if he has to kill one?—Yes.

216. (Chairman.) Do you consider that the kind of blow is sufficiently the same for knocking the horns off and killing an animal which is possibly moving about? I understood you to say previously that when a man first began to slaughter animals he often missed and was nervous and so forth, in spite of the fact that he had had the poll-axe in his hands for another purpose?—He has this practice of chopping the horns off and using the chopper to get his hand in already; he has so much practice to hit twice in the same place and he has done it so often that he is confident he can knock a bullock down. You might find one man a bit nervous, but there is always somebody standing by his side, an experienced man, in case of an accident.

217. I understood you to say that the cases of the mask failing through being wrongly adjusted are very rare indeed?—Very rare.

218. How many cases have you seen during the last two months?—About three which had to be readjusted.

219. That was carelessness on the part of the adjustment?—Yes, being put up too tight or something like that.

220. (Mr. Murphy.) Are all the masks the same size?—Yes, there is not much difference.

221. So that you do not have to have different masks for different animals?—No, they are all about the same size.

222. (Mr. Cope.) You do not have two blows; you do not hit them at the back of the head to stun them and then on the forehead to kill them?—No, we hit them on the forehead straight off.

223. (Colonel Clayton.) Many of your foremen could make certain of knocking them down with the poll-axe every time?—Yes.

224. You would have no hesitation in picking out as many men as you wanted at Aldershot who could knock a bullock down every time?—With the mask or with the poll-axe?

225. I am only talking of the poll-axe now; you never stun a bullock before you absolutely poll-axe it?—No.

226. It never has been done?—Never.

227. To go back to that question about the wild cattle again, there could not be any difficulty in fixing a mask on the wildest animal if his head was tied down?—Not if his head was pulled right down.

228. There could be no difficulty whatever, however wild he was, because if his head was pulled down he could not move?—That is so. I know butchers do not care for the mask.

229. When you get your young recruits to join, do you find that the majority have had experience as butchers before they come into the army?—Some, and the majority of those who are coming up now have; they are second hands right off. Lately, this last fortnight, there have been four second hands and two third hands.

230. About what age do they come in, about eighteen or nineteen?—Nineteen to twenty and a little more than that.

231. (Dr. Murphy.) You never use the Greener's cartridge?—Not at home; I have shot them abroad.

232. But I mean the Greener cartridge—a patent method of killing bullocks?—No, I have never seen it used; only the mask and the poll-axe.

Mr. WILLIAM EDWIN PALMER, called; and Examined.

233. (Chairman.) You are the master butcher at the victualling yard at Gosport?—I am.

234. How long have you held that position?—About eight years.

235. Before that were you in the Admiralty Service?—No.

236. What was your experience before then?—A butcher.

237. And therefore you have had experience of slaughtering animals all your life practically?—Yes.

238. At Gosport your duty is mainly, I understand, to see that the meat after it is killed is in proper condition and fit for issue?—Yes.

239. You have no direct supervision over the actual slaughtering, have you?—Yes, I have.

240. But have you authority over the contractor?—Yes, under the superintendent of the yard.

241. What I am trying to get at is that the whole of the slaughtering is done by contract, is it not?—Yes.

242. And your chief work is to see that the meat after it is killed is fit for issue?—And before.

243. Before and after, but the slaughtering is really left almost entirely to the contractor, is it not?—Oh no; I have authority over the men, and if I saw anything wrong I should stop it immediately.

244. You would have authority, if you chose, to order a different method of slaughtering?—No. Contract does not provide for this.

245. What animals are slaughtered there—only cattle or cattle and sheep?—Oxen and sheep.

246. Not pigs?—No.

247. What is the method employed in slaughtering oxen?—The poll-axe.

248. Entirely?—Entirely.

249. I remember seeing the slaughter-house at Gosport, and the oxen are kept in a yard behind the slaughter-house?—Yes, separate from the slaughter-house.

250. Then are they brought out more than one at a time to be slaughtered?—Yes.

251. How many do you slaughter at a time?—Two to four and six.

252. How many do you slaughter in a day?—Forty, some days—from twenty to forty.

253. Are you always present when slaughtering is going on?—Always.

254. Will you describe to me the method of slaughtering from the time the animal is taken out of the lair?—They are driven across.

255. Loose?—They have a rope round the neck when they are tied up in the pound. The foreman of the slaughtermen takes the rope and catches one as it is driven in; they are all driven in; and directly the bullock is in position he holds it by the horns, and a man hits it with a poll-axe.

256. The bullock is driven loose from the lair to the slaughter-house without any rope?—Simply the guide rope that is on it.

257. A man is holding it?—Not until it is in the slaughter-house; they are all driven into position as it were, and a man catches hold of the guide rope and obstructs the sight the side the man hits and he holds the horns of the bullock while another man stands alongside it and hits it at the back of the head.

258. That must be a very tame animal that permits all that?—No, we have thousands of animals done like that.

259. If you had a wild South American steer would it let you hold its horns?—No, but if I saw one at all vicious I would not allow it to be untied and I would have it slaughtered tied up.

260. In the lair?—Yes.

261. That is a new point of view altogether, you mean you would go and poll-axe it in the lair?—Yes, I would not allow any risk to human life.

262. All I want to arrive at is the method; if you had a restive animal you would poll-axe him in the lair?—Yes.

263. And how would you get him into the slaughter-house?—We have a trolley, and it would be rolled over immediately to the slaughter-house.

264. I am rather glad to hear that, because there is no blood letting in the lair?—No.

265. You merely stun him so to speak in the lair and then run him into the slaughter-house?—Yes, there is never any blood in the lair.

266. Do you frequently poll-axe animals in the lair?—No, probably once a twelve month; it is only when we have a restive animal.

267. What cattle have you—mostly English?—All English and Irish.

268. They are not the kind they get at Deptford, for example?—No, there are no foreign animals allowed.

269. I understand you take the animal into the slaughter house and one man holds his horns; does he stand in front of him?—Yes.

270. He holds him by one horn with each hand?—Yes.

271. And then a second man strikes him on the back of the neck?—Yes.

272. Then the animal drops?—Yes.

273. Then do you poll-axe him in the forehead afterwards?—Yes.

274. And then pith him?—Yes.

275. Have you never had any accident from the man holding the animal's horns?—No. I may say we do not allow any man to do that.

276. But you have always the two blows, the stunning first and the other afterwards?—Yes.

277. Do you find the animals show any signs of fear either from the sight or smell of blood on going into the slaughter-house?—Yes. They can smell blood undoubtedly.

278. How do you know they smell it? How do they betray it? Do they sniff?—Yes, they sniff and snort, so to speak.

279. Then do they try to go back?—Yes. They are more afraid of the water on the asphalt outside, and it is more difficult to get them out of the pound on to the wet asphalt than to get them into the slaughter-house.

280. I suppose although they object to the wet on the asphalt they can probably smell the blood all the same?—Yes. There is about 15 or 20 feet between them and the slaughter-house.

281. It is the smell really that affects them?—Yes. We find that horses are very much averse to it.

282. Do you slaughter any horses there?—No, but the horses draw the fodder in and we find they do not like the smell of the blood and they shy at the asphalt as well.

283. There is no blood outside?—No.

284. But it is all open; there is a yard leading right into the slaughter house?—Yes.

285. How do you kill sheep?—We stick them with a knife.

286. Do you put them on a crutch first?—No, a man holds them on the ground, they have a deep gully or open drain and the blood all runs down into a pit on the outside of the slaughter-house.

287. That is after you stick them, but what is your method of sticking them?—We stick them behind the ear to sever the jugular vein and the neck is broken at once.

288. Do you break the neck after you have stuck them?—Yes.

289. By jerking it back?—Yes, with the left hand underneath the jaw and right hand on top of its head, between the ears causing a sort of leverage.

290. What does that do—dislocate the neck?—Yes. It can be done with a knife, and some men do it without withdrawing the knife and it is dislocated at once.

Mr. Palmer

Mr. Palmer
(cont.)

291. When they do it with a knife they merely sever the spinal cord?—Yes.

292. But I presume you dislocate the bone, do you not?—No, not at all times; if the spinal cord is severed there is no feeling whatever.

293. But I want to know how you do it. You do it by jerking the head back and you say other people do it with a knife?—Some slaughtermen do it with a knife and some with their first finger, and it is done just as quickly the one way as the other.

294. (Sir Henry Yorke.) Would you describe the system of training the marines?—The marines are first allowed to go into the offal house; they have the handling of the knife and a view of all that is going on to get their nerves strengthened for slaughtering work, and after they have been in there say a month or six weeks—some men show more aptitude than others—they are allowed to go on with flaying the animal within six weeks; from six weeks to three or four months after they have been there, when they have got well accustomed to the axes and the cleavers and chopping off the horns, after the bullock is knocked down they use the poll-axe to do the second blow when the animal is dead and they are pithing it, and after he has been there about four months or so, if he feels himself competent and has confidence enough, he is allowed to knock a bullock down.

295. Is it a fact that no marine is allowed to strike the first blow at the back of the neck of an ox until he has been in the habit of seeing the whole thing going on, cutting off the horns and striking the second blow on the forehead?—That is so, after he has been in the slaughter house, say, four months.

296. And that is not until he has cut off the horns and bled the animal and struck the second blow on the forehead after the animal is knocked down?—Quite so.

297. Is it part of your business to see that no unnecessary cruelty takes place in the yard?—Yes, that is my duty.

298. I suppose you have seen such things since you have been there?—I have seen it.

299. What steps do you take?—I approach the man at once and stop him from any further cruelty, and if it was a marine and I saw it again he would be sent back to barracks under the superintendent's directions.

300. You would report it to the superintendent and he would be sent back to the barracks?—Yes.

301. If it was a contractor's man would you speak to the contractor's foreman?—The agent, the local representative for the contractor, would be spoken to at once.

302. Would you first speak to the contractor's foreman, the man in the slaughter house?—Yes.

303. And if that did not produce a result you would speak to the agent?—Yes.

304. And you would then bring it under the notice of the superintendent?—If it occurred again the man would be discharged under the superintendent's directions.

305. Have you had any cases where you have had to report the contractor's men for cruelty?—Never.

306. But you have had cases where you have had to report the marines?—Yes.

307. (Chairman.) Do you think in those cases it was deliberate cruelty or merely carelessness or lack of knowledge?—I have seen deliberate cruelty with marines—unnecessarily belabouring an animal with heavy sticks and that sort of thing.

308. To drive him into the slaughter house?—Yes.

309. (Sir Henry Yorke.) How long have you been butchering, including your eight years at the Royal Clarence Yard?—All my life.

310. How many years would that be?—I have had nearly forty years' experience.

311. Have you ever personally seen any other plan of killing animals except the use of the poll-axe?—No, I have not.

312. You have heard about it?—I have read.

313. I suppose you have been unable to form any conclusions as to whether the poll-axe is the best plan because you have had no personal experience of the others?—That is so.

314. Say you had to kill six bullocks to-morrow morning, what would happen to those six bullocks? They would be driven from the lair into the slaughter house?—Yes.

315. That is to say they would be all together in the slaughter house?—Yes.

316. And then what would happen?—Two regular men would be told off to poll-axe these animals, one to each animal.

317. (Chairman.) What are the other five doing?—There are two taken at a time.

318. (Sir Henry Yorke.) I understand the two men would commence killing the two bullocks?—Yes.

319. There would be two killed and before anything more was done the next two would be killed, that is to say before any flaying was done?—Yes, all six would be killed within two minutes.

320. The next two would be killed and then the next two?—Yes.

321. How long would it take, roughly, to kill these six animals?—Two minutes.

322. If you take a single bullock into the slaughter house do you find he objects more or less than if you take three along with him?—It would take much longer with a single animal, he would object much more, and there would be much more cruelty in getting that animal into the slaughter house than with a number together.

323. Why do you say there would be more cruelty?—Because he would object to going by himself.

324. (Chairman.) Are the other four loose while you are killing the two?—Yes.

325. (Sir Henry Yorke.) These six animals are there, and somebody proceeds at once to knock two down; what effect, so far as you can see, has that on the other four?—None whatever; they do not take the slightest notice of it.

326. That is your experience?—That is my experience.

327. (Colonel Clayton.) Are they walking about loose all the time?—Yes.

328. Some of the Irish cattle are rather wild, are they not?—Not more than others. We are killing a lot of Irish cattle just now; we have Irish contractors at the present time.

329. (Sir Henry Yorke.) The animals are not tied down; they have only a short rope round their necks?—Only a short guide rope.

330. (Chairman.) You never pull their heads down to a ring?—No.

331. Of course if these animals are as tame as that and you are able to stand in front of them and hold their heads it would be equally easy to put on this mask if required?—Yes, it might be easy but it would take longer.

332. With an animal as quiet as that it would be easy enough to put it on?—Yes.

333. (Sir Henry Yorke.) At present as I understand from you these six bullocks which come in here apparently do not mind?—No, you see no perspiring as you would see in a frightened horse, or anything like that.

334. Supposing you proceeded to tie those bullocks' heads down to a ring and then proceeded to tie on a mask, have you any idea as to what the effect would be upon them? Have you anything to tell you whether that would make them more restive?—Yes, I should think it would.

335. I do not mean only at the Royal Clarence Yard but when you were butcher?—Anywhere; I should think it would. At the Royal Clarence Yard Slaughterhouse the ox not being tied down there is no resisting power; they have no time to struggle or resist; the animal is driven on to the position and the man immediately takes hold of it and holds its head, and they are knocked down in such a short time that they have no time to think. There is no struggling or beating about in any sense of the word.

336. (Chairman.) You have never seen the mask used?—No.

337. (Sir Henry Yorke.) As far as your experience goes I gather that you do not think that the smell of blood

or the sight of great fellows being killed there affects the animals?—No.

338. (*Chairman.*) I understood you to say at the beginning that they did show fear on smelling the blood?—Yes. The animals can smell the blood.

339. (*Sir Henry Yorke.*) What is your experience with sheep as compared with oxen about the smell of blood and seeing each other killed? Is it much the same, or do you think sheep mind it more or less?—I think the sheep mind it less, because they will run about where a lot of dead sheep are and take no notice.

340. (*Mr. Game.*) In answer to one of the questions you said that the blow that is given to the bullock at the back of the head practically kills it?—Yes.

341. And that there is not so much inconvenience caused by missing in attempting to hit it on the forehead after it is on the ground?—No.

342. Why do you hit it on the forehead when it is practically killed? Is it to put the cane down to pith the bullock?—That is so.

343. Why not hit it on the forehead at first and put the cane down directly without the first blow?—I do not think there is any feeling in the animal after the first blow.

344. Why give it at all if the one in the forehead and putting the cane down will kill the bullock entirely? Practically is it easier?—It is easier.

345. (*Colonel Clayton.*) In your experience as a butcher is it the custom not to tie the animal down before you slaughter him?—Yes, we never tie him down.

346. In all your experience you have killed him loose?—In the Royal Clarence Yard.

347. I am not talking about that?—In private slaughter-houses we do tie them down.

348. (*Chairman.*) What is the cause of the difference?—Because we have not the room; you could not do it in a small place, as the bullock would have too much power over you.

349. (*Mr. Murphy.*) Have you any experience of killing calves?—Yes; not in the Royal Clarence Yard, but previously.

350. Do you kill any pigs?—No.

351. (*Chairman.*) Do you ever stun sheep before sticking them?—No.

352. Have you ever seen that done?—No.

353. (*Mr. Gordon Miller.*) Where does the contractor

get his slaughtermen from?—We have had men there thirty years.

354. Passing on from one contractor to another?—Yes, the foreman has been there thirty years.

355. Are they paid by day work or piece work?—By day work; they are weekly wage men.

356. How many men does the contractor employ?—Seven.

357. (*Chairman.*) At what times of the day do you slaughter?—All the slaughtering is done usually before twelve o'clock.

358. (*Mr. Gordon Miller.*) Have you known cases where the blow at the back of the neck has been ineffectual?—I have seen it.

359. Not many times?—No, very seldom.

360. Would you look upon the men who are employed by the contractor as first-class slaughtermen?—Yes.

361. Men of great experience?—Yes, men of great experience.

362. Do you know at all what their wages would be?—I think the wages of the foremen come to nearly £4 a week.

363. And the men?—In proportion to their length of service and their ability.

364. (*Sir Henry Yorke.*) I wanted to ask you who passes out the Marines? They go there for six months and at the end of that time they are either passed or rejected: who passes them?—I do, and the superintendent signs his approval afterwards.

365. And in passing them you have had them under observation for the six months?—The whole time.

366. Therefore when the time comes you are practically in a position to say?—Yes; I tell the foreman I want to see a certain man to see if he is competent to pass out.

367. Do you reject many?—No; if a man does not show sufficient skill after a certain time he is sent back to barracks as not likely to qualify within a reasonable time.

368. (*Mr. Gordon Miller.*) Do you know whether the men that come on for training as butchers have had any previous experience?—Some have; we have one man who has just come on now that had experience before he joined the service. I might say that it would be impossible to hold a bullock and give him the one tap on the forehead always; it is done occasionally, but it is impossible to do them all like that. The man who is holding the horns puts his right hand and keeps the sight of the blow from the bullock keeping the ear over the eye on the side the man is going to strike. He could not do that if he was holding his left hand under the jaw of the bullock to keep the head in position.

Mr. Palmer
(cont.).

Mr. HENRY JAMES HOLDER TUCK, called; and Examined.

369. (*Chairman.*) I understand that you are inspector to the Public Health Department of the London County Council?—That is so.

370. How long have you occupied that position?—Twelve years.

371. And before that?—I held an appointment as horse-corer in Islington.

372. You have large veterinary experience, I presume?—Yes.

373. What are your precise duties, in a few words, at the present time?—Visiting slaughter-houses and cow sheds and noxious trades for the Council.

374. With the view of seeing that the bye-laws of the Council are carried out?—That is so.

375. Have you a copy of those bye-laws with you?—I have not.

376. And it is your duty to see that those bye-laws are carried out?—Yes.

377. What authority have you over slaughter-houses when you visit them?—At the present time our only authority is really to license those places; we really visit to see that the bye-laws are carried out, although it is the duty of the local authority to administer those bye-laws.

378. Are those the bye-laws you administer (*showing a document to the Witness*)?—Yes, those are the bye-laws.

379. If you visit a slaughter-house and find that any of these bye-laws are not being carried out—that, for example, unnecessary cruelty is taking place, what power have you to intervene?—It is our duty at once to bring it to the notice of the council, and at the present time the question would be considered by the licensing authority, which meets annually.

380. Is it possible to confiscate a man's licence under such circumstances?—Oh yes, I should think so.

381. In the course of your duties you constantly visit slaughter-houses in all parts of London?—Yes.

382. And you actually see animals killed?—Yes, occasionally.

383. Do you find any considerable variation in the methods of killing cattle, for example?—Well, there are variations.

384. I am not referring to the Jewish method now; I want to leave that out of the inquiry at present. Otherwise do you find many different methods?—No.

385. What is the method employed in killing a bullock?—It is generally killed by poll-axe and a cane is used to pith it, which passes down the spinal column.

Mr. Tuck.

Mr. Tuck
(cont.).

386. You say they are generally killed with the poll-axe, is there any other method?—There is Greener's gun in vogue now, but I have never seen it used.

387. Have you seen a mask like *this* used?—No.

388. Only the poll-axe?—Yes.

389. Is the method as a rule to strike the animal first on the top of the head and then on the forehead?—No, the method principally used is to strike the animal—that is to say, in the private slaughter-houses, in the forehead, and then at once a cane is passed through the hole made by the poll-axe down the spinal column; afterwards the animal is bled.

390. Is the animal in most cases secured—is his head pulled down to a ring before that is done?—Yes.

391. Did you ever see animals poll-axed when walking about loose?—No, I never did in my life.

392. And you have not seen animals held by the horns and then struck on the top of the head first?—No. There is a method I believe employed—I have seen it in the public slaughter-houses—for instance, Islington Cattle Market, where they do strike the animal on the poll, but it is then necessary to strike the animal in the forehead before you can get an opening for the cane.

393. You do not see any advantage in the two blows?—I do not; I do not think it advisable.

394. What method of killing sheep have you seen?—They are generally stuck with a knife right through the neck; the knife is generally turned and the sheep is pithed, that is to say, the knife enters between the skull and the atlas and severs the spinal cord. Other methods are when they turn the head and break the neck.

395. Which do you consider the best of the two methods?—With an experienced person I should say pithing is the best.

396. When I say "best" I refer now to the most instantaneous in causing death?—Yes, in some sheep for instance, if you get some old tups it is very hard to break the neck with an inexperienced person, and the same refers to the ewe, as well as to the tup; if the animal is of considerable age you cannot break the neck of the animal so well as you can a young sheep.

397. And I presume it requires a very experienced man to use the knife properly in order to pith the animal quickly?—It does require some considerable experience to do it quickly, but a person soon gets used to it.

398. Did you ever see sheep stunned with a mallet before being stuck?—Never.

399. How have you seen calves killed?—Very few calves are killed in the private slaughter-houses; they have generally a rope passed round their hind legs just above their hough, which is hitched on to a tackle, and they are pulled up alive, and then the calf is hit at the back of the head and stunned and its head cut off.

400. Stunned with a mallet?—Yes, or the flat part of a poll-axe.

401. And then the head is cut right off?—Yes.

402. Is there any reason why it should not be stunned before being hauled up?—No reason so far as I can see.

403. It would be simpler, because the animal would not struggle?—I should like to see it stunned before being pulled up; if there is any cruelty at all in killing a calf it is in pulling the animal up whilst it is alive.

404. From the purely practical point of view it would probably make matters easier to stun him before tying his legs and hauling him up?—Well, there is one thing, you cannot get at it quite so well to stun the animal, because when the animal is slung up and the person takes hold of the fore legs it will remain quite still, but while a calf is on its legs and sees you attempt to strike it it is apt then to move.

405. Is a calf's head of much commercial value afterwards?—At times; the commercial value varies very much; at times a calf's head is worth considerably more than it is at others.

406. Is it ever suggested that the act of stunning a calf injures the head so that it loses its value commercially?—No.

407. It is not necessary to break the skull in order to stun it?—No, it would be rather unusual to see the skull broken.

408. And that probably would apply in the case of a sheep as well; if a sheep was stunned it would not be necessary to injure the head in a way to affect its market value?—No.

409. I see in one of your bye-laws "the occupier of a slaughter house shall, in slaughtering any animal, use such instruments and appliances and adopt such method of slaughtering and otherwise in such premises as may be requisite to prevent unnecessary suffering to the animal." That is, of course, expressed very generally, and it is left to your judgment whether that is carried out or not?—Yes.

410. The next bye-law is: "shall not slaughter or permit to be slaughtered any animal within the public view, or within the view of any other animal"?—Yes.

411. Is that carried out?—Yes, I may say that is carried out.

412. What do you understand is the object of that bye-law?—So that one animal should not see the other one slaughtered.

413. Do you approve of it as a good bye-law?—I do not think there is much in it.

414. You probably find that sheep do not pay any attention?—No.

415. What is your opinion about cattle?—Do you find they show signs of fear from either the sight or smell of blood?—My opinion is that they are more afraid of the smell of the blood than they are of the sight.

416. I think the evidence we have had tends to confirm that. You think the smell of blood does frighten them?—Yes, to a certain extent.

417. How do they show fear?—For instance, they refuse in some instances to go into the slaughter-house and there is great trouble to get them into the slaughter-house very often.

418. Do you find them sniff and snort at the blood?—Yes.

419. There is no doubt in your mind, then, that cattle, at any rate, are made afraid by the smell of blood?—That is so. There again I must say it takes more effect on some animals than on others; the more domesticated the animal, the less trouble you have in getting it into the slaughter-house through the smell of blood. For instance, you get more trouble in getting the Welsh breed or the Highland Scots into the slaughter-house because they are by nature more wild, and practically all the ranche beasts or grazed beasts are more trouble than the stall-fed beasts, because, as a rule, you find stall-fed beasts are pulled about and more domesticated.

420. Do you see many of the wild type of cattle killed—South American and so on?—No, not the South American.

421. What is the wildest kind you see killed?—The Highland Scots.

422. Do you ever see any serious trouble in the slaughter houses?—I have seen considerable trouble in a slaughter house if you get a wild bullock, not during the course of my experience as an inspector, but as a butcher.

423. I suppose the only thing to do in such cases is to pull their head down to a ring?—Yes, the head is pulled down in all cases, and most of these cattle when taken into the butchers' slaughter house, if they show the slightest symptoms of being wild or troublesome, have a rope put on them because they are not only wild with anyone going to the pen where they are kept but they are also spiteful to the other animal or animals that may be there, and they take off considerable value in borning these beasts not only with the hides but they bruise the flesh with their horns. Then they are tied, but there is considerable trouble some times to get that bullock from where he is tied to the ring in the slaughter house, and you have to be very careful how you get him in.

424. To go back for a moment, do I understand from you this bye-law about animals not being slaughtered within the view of any other animal is a dead letter?—No, I do not say that is a dead letter.

425. Taking the majority of slaughter-houses you visit, is the rule observed or not?—Yes, it is observed. In the course of my experience in the council I have had one prosecution on that ground; that was for the slaughter of sheep in view of other sheep.

426. But cattle, as a rule, you find are only slaughtered one at a time?—Yes, because in a private slaughter-house they only slaughter one animal at a time, they only keep one set of men to work.

427. But in the larger slaughter-houses?—Probably in the larger slaughter-houses in Deptford and Islington they are not so particular.

428. Are they supposed to be under the same bye-laws?—No.

429. Of course, you understand, we only ask you for your own personal opinions, and that you are not speaking officially?—Yes; I have been connected with cattle ever since I can remember, so that I have had considerable experience with them.

430. You have no experience of other methods of slaughter such as the mask?—No.

431. Or the Greener's patent?—I have seen horses slaughtered by the Greener's patent, but I should not care to put this on some cattle.

432. You think there would be danger?—Considerable danger; you get some of these Highland Scots with their horns out, and if they move their head half an inch, it means that the point of the horn moves a foot, and that would be very soon through a man's ribs, whereas you can keep, practically, behind the bullock—behind his horns at any rate—with the poll-axe.

433. To poll-axe him in the forehead?—Yes; the man who uses the poll-axe is never in front of him as they do to poll-axe a horse. A horse is poll-axed from the front; the man stands and swings his poll-axe directly over his head, but in poll-axing a bullock, you stand at the side.

434. If at a subsequent period of our inquiry we wished to see the methods that are actually in force, would you be able to arrange for a surprise visit to slaughter-houses—when you pay your own visit, for example?—Yes.

435. We should not wish to notify the people beforehand because we would want to see the actual practice. What time of day is slaughtering done, as a rule?—Generally in the afternoon and evening.

436. What time in the afternoon?—From four to six.

437. (*Mr. Gordon Miller.*) Do you know any slaughter-houses under the direction of the county council where the county council exercise any control over the men employed?—No.

438. It is all in the hands of the butchers?—Yes.

439. Do you happen to know where the butchers get these slaughtermen from—are they trained up in the establishments?—Generally.

440. From boys?—From boys.

441. (*Mr. Cope.*) Have you seen the method of slaughtering down at Deptford at all?—Yes.

442. The rule there is that first of all they strike the animal at the back of the neck?—Yes.

443. And then subsequently on the forehead?—Yes.

444. Striking the animal at the back of the neck is, chiefly, with the object of stunning it?—Yes.

445. They do not do that with sheep?—No.

446. Do you see any reason why they should not?—No, I think it is unnecessary to stun a sheep.

447. As a general principle, do you not think that it would be desirable that all animals should be stunned and made unconscious before they are absolutely killed?—Being a smaller animal the sheep is so easily killed and so soon unconscious by severing the spinal cord that I think it hardly necessary to stun the animal.

448. (*Chairman.*) It is hardly necessary in the sense that it is difficult to handle them, but for the benefit of the sheep himself it might save a certain amount of suffering, do you not think?—I do not think it would; for instance, before you can stun a sheep properly you must tie that sheep up?

449. Why?—I should not like to see a man stand with a sheep loose and try to stun it.

450. (*Mr. Gordon Miller.*) They are so fitful in their

movements?—Yes, directly you made a blow at them they would at once move.

451. (*Chairman.*) Could you not stand behind it and hit it on the top of the head?—In the first place I should think that would be the wrong direction to stand in to stun a sheep. In the case of a bullock, when you hit a bullock he is tied up with a strong rope and can hardly move.

452. (*Mr. Murphy.*) Have you any views as to the number of people who ought to be employed in killing—that is to say, the minimum number of people to a bullock?—Yes, I think no bullock ought to be killed unless there are three men there.

453. (*Chairman.*) What would those three men do?—In the first place one should attend to the rope by which the bullock is tied, another should use the poll-axe, and the other one should be there to properly throw the bullock.

454. You mean after he is struck?—It is practically done at the same time as the bullock is struck; if the bullock does not stand properly after he is struck, instead of throwing the bullock properly on his side one hind-leg will go one way and the other the other; instead of falling on his side he at once falls on his stomach by splitting his legs, and then there is considerable injury to the meat. That is commonly amongst the butchers called "splitting his aitches"; but if you have a man standing by who, at the same time as the slaughterman strikes, puts pressure on the hough of the bullock, then the feet go from him instantly instead of his falling with his legs spread out.

455. (*Mr. Cope.*) How many private slaughter-houses are there in London now?—Nearly 400.

456. (*Chairman.*) How many do you visit?—At the present time just under one hundred.

457. (*Mr. Cope.*) Have you seen the present mode of slaughtering up at Islington Market?—Yes.

458. And you know Mr. King, I suppose?—Yes.

459. (*Mr. Murphy.*) How many men should be used for slaughtering a sheep?—With proper care one man can slaughter a sheep as well as three. In the country I have seen scores of sheep slaughtered with only one man, but their method is that the man who is slaughtering will catch his sheep and as a rule take a piece of string in his mouth; he turns the sheep up on to its rump, he takes the off hind leg and the two fore legs and before he takes hold of the legs he lays the piece of string across the sheep's stomach, he pulls the three legs together, and he can hold them in his hand and tie these three legs together and the sheep is helpless.

460. (*Chairman.*) That is on the ground?—On the ground, and then he can stick the sheep with ease.

461. But it would be much more expeditious if one man held the sheep while the other stuck it?—Yes.

462. Do you see pigs killed, too?—Yes, but there are very few pigs killed at the present time in private slaughter houses in London; there is so much pork imported from Holland that the butchers can buy the pork so much cheaper without buying the pigs. The principal quantity of the pigs killed now in London are killed at the Islington Cattle Market, and I should say 75 per cent. of these are Irish.

463. Do you see them killed?—I have seen them killed.

464. Are they ever stunned before being stuck?—It is the general rule to stun them in the Cattle Market.

465. How do they stun them?—By striking them in the forehead with a wooden mallet.

466. Why is it more difficult to strike a sheep with a mallet than a pig?—A pig is not so active as a sheep.

467. They do stun the pigs there before killing them?—Yes, but it is not the rule in the country.

468. In that case I presume the pigs do not scream at all?—There may be a little screaming, because you cannot handle them without their squealing.

469. But there is no squealing after they are stuck?—No.

Mr. Tuck
(cont.).

Mr. SETH LEWIS, called ; and Examined.

Mr. Lewis.

470. (*Chairman.*) I understand you are inspector to the London County Council?—Yes.

471. How long have you held that position?—Just over nine years.

472. What were you before that?—I was chief sanitary inspector at Cheltenham and sanitary inspector before that in Lancashire.

473. So that you have had large experience?—Yes, many years.

474. What is briefly your duty as inspector under the London County Council?—The inspection of slaughter houses and offensive businesses, cowsheds and dairies.

475. I have gathered from your colleague, Mr. Tuck, the information as to the bye-laws and methods and so on, but what I would like to get would be your own personal opinion, not your official opinion, with regard to the different methods of slaughtering animals, excluding the Jewish method which we are not touching at the present moment—first of all, what you find to be the general practice in slaughtering cattle, sheep or pigs and calves; and any suggestions you can give us as to the improvement of methods we should be very glad to hear?—The ordinary method in the provincial and London slaughter houses for the slaughtering of cattle is by securing them to a ring and then striking the animal on the middle of the forehead with a poll-axe and then pithing, destroying the medulla and spinal cord by inserting a cane. Then the large vessels in the neck are cut, and it appears to me that that method is quite a humane one.

476. If the slaughterer is expert with the poll-axe?—It is very seldom that a man fails, because if there be several men in the slaughter house one is usually selected because of his expertness in the use of the poll-axe and I have not often seen more than one blow necessary.

477. How does the man acquire his practice?—With regard to the use of the poll-axe the animal is struck from behind and it very seldom turns its head; it is only in the case of a very wild animal that it may turn its head aside at the moment and get the blow on one side which would not be an effectual one; it would drop on its knees and stay there, but that is a very exceptional case. In the ordinary way the blow is a fair one struck in the middle of the forehead, and the animal falls and is unconscious and never recovers.

478. You say these men are so expert. How do they become expert?—There is a beginning for all of them, of course.

479. Are they trained on animals?—They have to get their experience on animals.

480. I presume there is some difficulty in making an accurate blow when you are a novice?—Yes, still it is usual; a young boy would not be allowed to do it, but somebody older and more reliable would be called on to use the poll-axe, and I do not think it requires a great amount of skill; it does not require so much skill even as the sticking—not nearly.

481. Have you ever seen any other method used, such as the mask?—Not on cattle, but on horses.

482. You have not seen this used on cattle?—No, but with horses I think it works very well; I think it is a better method, in fact, and if it could be used on cattle without risk I should say it ought to be used.

483. You mean that cattle are restive and there is the difficulty in putting it on?—That is so.

484. Supposing the head of the ox is dragged right down to a ring, would there be any difficulty then in putting on the mask?—Well, its head is not fast quite, the rope is round one horn and the neck and it can always move its head; with the quieter kinds of cattle one might get the mask on and use it, but with ranche beasts and some Highland cattle it would be difficult to keep them quiet.

485. I am not for the moment advocating this, but I merely ask whether you have seen it used?—I have not seen it used on cattle and it is not the practice in London or the country; I know it has been used in London, but

it is not the practice at all; in fact it was regarded as too risky on account of the men.

486. Then with regard to another arrangement called Greener's Patent Killer, have you seen that used?—On horses only; I think it does very well for them, I think it kills them instantly, and it is a safe instrument in the case of horses.

487. Is the reason why it is suitable for horses and not for cattle because the horse is quieter?—Yes, because it is quiet and the instrument is easily fixed.

488. But you do not consider the Greener is a desirable arrangement for the cattle?—Not generally speaking, and absolutely not for small cattle.

489. I want to ask you particularly whether you find in your experience that cattle show any signs of fear on entering the slaughter house either through the sight or smell of blood?—I think bullocks do a little.

490. In what way do they show it?—If an animal comes in from the pound, which is some distance away from the ring, I think it throws its head about, not merely from being pulled, because even when it is easy, it is a very difficult matter to speak about what appears to be a subjective sensation in an animal, but I think bullocks always show it by their eyes and by throwing their heads about on being brought in.

491. Do you think it is the sight or the smell that affects them?—I think it is both.

492. I see that in the bye-laws which you have to administer it is specially laid down that the occupier of a slaughter-house shall not slaughter or permit to be slaughtered any animal within public view or within the view of any other animal?—Yes, that is a bye-law.

493. Is that bye-law carried out. Is it your business to see that it is carried out?—It has been; I should say it is almost absolutely carried out.

494. Is it carried out simply because most of the slaughter-houses which you visit are so small that they would not be likely to want to slaughter more than one animal at a time?—No, it is not for that reason, because where there would be any likelihood of a breach of that bye-law the Council has interfered and only allowed a certain number of animals or only one kind of animal on the place at one time, so as to prevent a breach of it.

495. It is a bye-law that you see is enforced?—Yes, and has been most rigidly.

496. Is it a bye-law of which you approve?—Yes, it is.

497. On the ground of humanity?—Yes, particularly with regard to large cattle.

498. You do not find sheep mind so much?—I do not think they do.

499. Before you go to sheep, as to the killing of calves, what is the method?—The usual method is to tie them by a rope round the heels and wind them up with a windlass and then to dislocate the neck by a blow with the back side of a cleaver or a poll-axe and then stick them through from behind—cut all the blood vessels of the neck from behind.

500. Do they cut the head right off?—No, I have not seen it cut off. The method I have seen has been that of cutting through from behind all the vessels within the skin, right out to the skin in fact, and then put a hook through the nose, and allow it to bleed.

501. Mr. Tuck said as a rule they stunned the animal. Did he mean the same as you do—dislocating the neck?—It amounts to that practically, because the animal is hung by the heels and a very powerful blow is struck behind the head.

502. As you kill a rabbit?—Yes, the same idea.

503. Is there any reason why the animal should not be stunned before it is hauled up by the heels?—I think not; I think the animal should be struck before being wound up, speaking on the grounds of humanity, but I think the reason is that the flesh might be shaken if the animal fell, such an animal as a calf. You see they are very particular to keep the flesh of the calf white and everything else is subordinated to that idea.

Mr. Lewis
(cont.).

504. Then as regards sheep?—Sheep are ordinarily thrown on to a crutch or cradle and stuck through the neck with a knife and the vessels are cut, and then by one of two methods they are pithed. In some parts of the country it is the custom to take the sheep by the chin and the back of the head and turn it slightly on one side and break the neck by pushing the back of the head. In the second case a pointed knife is put in between the neck and head and the spinal cord is cut.

505. Which do you think the better method?—In skilled hands, pithing by the knife; in the ordinary way, considering that slaughtermen are made up of all kinds of people, I think breaking the neck.

506. Do you see any reason why sheep should not also be stunned by a mallet before being stuck?—I have thought about it lately; I think all animals should be stunned before they are stuck; but there are some difficulties in the way of dealing with sheep, and I think they arise from the density of the bones and the thickness of the head in sheep.

507. What would be the proper place to strike a sheep if you wanted to stun it?—The back of the head I think.

508. Surely a blow with a mallet, which is used a great deal, would effect that?—I have not seen it done, and I should doubt it very much, because if you try to cut a sheep's head on a block with a cleaver, you have the utmost difficulty in cutting it through; it is not at all comparable with a pig's head, which is soft in the frontal bone.

509. Do you consider there is any market reason against stunning a sheep? Do you presume it would necessarily injure the head for market purposes?—Slightly; in all these cases I think the objection is merely that—a little loss might accrue to the butcher selling the head afterwards if the animal has been struck, particularly with a mallet.

510. I do not mean that the skull should be fractured; I should not think that was necessary, only you can stun a man very effectively without fracturing his skull?—I think that might be done with a sheep; it never is done.

511. Not in your experience?—Generally speaking, I think it is not done, and not in my experience.

512. And pigs?—Yes, pigs in most cases are stunned by a blow on the forehead from a mallet.

513. You say it is easier to do that in the case of a pig than in the case of a sheep?—The front of its head is very soft.

514. And it is easily stunned?—It is easily stunned.

515. Would you be able some day, if we made an arrangement, to take us on a surprise visit to a few typical slaughter-houses?—I could take you to slaughter-houses.

516. I do not mean that we should all go?—There is very little slaughtering done in most private slaughter-houses, and we should have to make some arrangement to be sure that slaughtering was taking place.

517. It is rather essential that no notice of our coming should be given; you do not notify them when you are going?—Not at all.

518. (Mr. Murphy.) Could you tell us the price of a sheep's head?—About sixpence.

519. So that the amount of value in the head, if it is a bit damaged, is very small?—It would be a trifling loss,

and I think the same would apply even to calves if they were poll-axed. I think the loss of value on any head through poll-axing would be a very trifling matter.

520. (Chairman.) Of course the poll-axe where it is actually driven through and the skull is fractured I can imagine would depreciate the value of the sheep's head, but where the sheep is stunned with the blow of a mallet which merely affects the brain it cannot do so?—In practice you will find that the mallet does more harm than the poll-axe; the poll-axe makes just a small round hole, and when the head of it comes out there is not much of it seen. That is what happens in the case of the head of an ox, but when the blow is given by a wooden mallet, as on a pig's head, the value may become very much less, because a large bruise—a large mark—is made. I should object to the use of the mallet, and I would sooner have the poll-axe very much, because it is a more effectual blow and it covers a smaller area.

521. I understand you are considering this question rather carefully?—Yes.

522. Would you give us the benefit of the results of your inquiries after they are concluded? We shall be glad to have any information either in writing or personally, seeing that you are investigating this practically?—Yes, I will be pleased to do so.

523. What number of men do you think should be employed in killing an animal?—There should always be more than one, and I think in all cases one of the persons employed in the slaughter-house should be an expert person and licensed by the council. I think slaughtering should not be left to any odd and end of a man who can be picked up to do it, either in the interests of humanity or from the point of view of the animal at any rate.

524. The occupier of the slaughter-house is licensed already?—Yes.

525. But you would license the executioner, so to speak, as well?—Yes, I would, and secure that at any rate where slaughtering takes place one of the persons employed should be one who was recognised as an expert slaughterman, and who bore a licence to secure something with regard to his character.

526. (Mr. Gordon Miller.) Do you suppose that untrained men are frequently employed in the killing of animals?—Yes, and some of them are quite indifferent to it.

527. That would not extend to the cutting up of the animal?—No; for instance, in going round the slaughter-houses one might see unskilful men pithing sheep, and that causes what I regard to be an unnecessary amount of suffering. I saw a skilled man the other day who pithed sheep at one stroke through the joint between the head and the neck of the sheep.

528. Could the council exercise no control over the men employed?—Not at present, unless there was some particular act of cruelty, and then the council would take cognisance.

529. (Chairman.) Have you seen cattle killed with a pithing knife as well?—No.

530. I mention it because I was inspecting the new slaughter-house in Malta the other day, and the whole of the killing there is done in that way with a small dagger?—I have heard of it.

Wednesday, 10th February, 1904.

PRESENT.

Mr. ARTHUR LEE, M.P. (*Chairman.*)

Colonel F. T. CLAYTON, C.B.

Mr. ALEXANDER C. COPE.

Mr. CHARLES GAME.

Mr. GORDON MILLER, C.B.

Mr. SHIRLEY MURPHY.

Sir HENRY YORKE, K.C.B.

Mr. R. G. HAYES (*Secretary.*)

Mr. H. C. MONRO, called; and Examined.

Mr. Monro.

531. (*Chairman.*) I understand you are one of the assistant secretaries of the Local Government Board?—Yes.

532. Are you aware of the nature of the inquiry we are prosecuting?—Generally, yes.

533. You realise that our main object is in the first place to ascertain what are the most humane and practicable methods of slaughtering animals for food; of course we do not expect to get technical evidence from you on that subject, but we are very anxious to know what power there is of enforcing any particular regulations or bye-laws on this subject, and particularly what control the Local Government Board has over slaughter houses. Perhaps you would inform us of the state of the law and regulations on that subject?—I am afraid the Local Government Board cannot assist the Committee very much, because we have really no practical control over the administration of slaughter houses; the control of the Local Government Board is only indirect, and it comes mostly in connection with the confirmation of bye-laws. The slaughter houses in this country are under the control of the local authorities. Slaughter houses are generally of two kinds, either private slaughter houses or public slaughter houses. Outside London the private slaughter houses are very much more numerous than public slaughter houses. The Towns Improvement Clauses Act of 1847 is the Act under which bye-laws for the control of private slaughter houses are made.

534. I am interested to hear that, because we have been trying to trace in the Parliamentary records any legislation on this subject, and we were unable to do so, and that is not to be wondered at when you tell us the title of the Act?—That is one of the Clauses Acts which have no effect in themselves, but were intended for incorporation in local Acts. The clauses with regard to slaughter houses were incorporated in the Public Health Act of 1875, and thus they came into the general law of the land in urban districts. In rural districts the provisions do not apply, unless they are applied by an order of the Local Government Board. Under that Act the local authority—

535. Which Act are you referring to now—the 1875 Act?—The Act of 1847, which is incorporated in the Act of 1875. Under that Act the local authority shall from time to time make bye-laws, which have to be confirmed by the Local Government Board, “make regulations for the licensing, registering and inspection of the said slaughter houses and knackers’ yards, and preventing cruelty therein, and for keeping the same in a cleanly and proper state, and for removing filth at least once in every twenty-four hours.”

536. Is that in urban districts only?—It is in urban districts, but may be applied to rural districts.

537. That is very important. Do I understand then, speaking generally, that the Local Government Board can exercise supervision and authority over private rural slaughter houses if they feel disposed to exercise that power?—No, I do not think I have made myself quite clear; the Local Government Board have no control over the slaughter houses themselves; they only have to confirm the bye-laws, and have nothing to do with the administration of the bye-laws.

538. I might put it in a different way. Have the local authority, whose bye-laws the Local Government Board would have to confirm or approve, any power to make such bye-laws for the regulation of rural slaughter houses?—Well, they have to come first of all to the Local Government Board to get an order investing them with the powers of an urban authority. The Public Health Act says that “for the purpose of enabling any urban authority to regulate slaughter houses within their district the provision of the Towns Improvement Clauses Act, 1847, with respect to slaughter houses, shall be incorporated with this Act.”

539. Yes, but that applies to urban districts only?—It applies generally to urban districts, but there is also a power under the Public Health Act to invest any Rural District Council with the powers of an urban authority in respect of any matter in the Public Health Act.

540. Would you give us a reference to that particular clause?—I am afraid I have not got it in my mind.

541. Will you be good enough to supply us with it?—Yes.

542. This point is of very great interest to us, because we have been given to understand that whilst regulations could be made for the proper control of public slaughter-houses and of all slaughter-houses in any given urban district, the private slaughter-houses in the country districts were entirely without any power of being controlled?—I could not tell you in how many cases orders have been issued investing the rural authorities with such power, but they are not at all uncommon.

543. The important thing is to know whether the power exists?—Yes, the power exists and it is always granted when applied for. Section 276 of the Public Health Act says: “The Local Government Board may, on the application of the authority of any rural district, or of persons rated to the relief of the poor, the assessment of whose hereditaments amounts at the least to one-tenth of the net rateable value of such district, or of any contributory place therein, by order to be published in the London Gazette or in such other manner as the Local Government Board may direct, declare any provisions of this Act in force in urban districts to be in force in such rural district or contributory place, and may invest such authority with all or any of the powers, rights, duties, capacities, liabilities and obligations of an urban authority under this Act.”

544. That is in the Act of 1875?—Yes.

545. That is, of course, before parish councils or county councils were instituted?—Yes.

546. What would be the rural authority now understood by that Act?—The Rural District Council; there are District Councils all over the country, and outside London wherever there is not an Urban District Council there is a Rural District Council.

547. And the Rural District Council would be the authority, not the Parish Council?—That is so.

548. Could you let us have later a *précis* of the actual procedure that is followed by the Local Government Board in such cases with an illustration of an actual case?—You mean the investing of a Rural District Council with power?

549. Yes; it would be very interesting to us to have it on record?—I will do so with pleasure.

550. Will you proceed with your statement?—The Local Government Board have issued a model series of bye-laws for these purposes which perhaps I might hand in (*handing in the same*). For the purposes of the Committee the only ones I think that are material are on page 17 of that copy. There is No. 8 which requires: "Every occupier of a slaughter-house shall cause every animal brought to such slaughter-house for the purpose of being slaughtered, and confined in any pound, stall, pen, or lair upon the premises previously to being slaughtered, to be provided during such confinement with a sufficient quantity of wholesome water;" and No. 9 which is more important: "Every occupier of a slaughter-house and every servant of such occupier and every other person employed upon the premises in the slaughtering of cattle shall, before proceeding to slaughter any bull, ox, cow, heifer or steer, cause the head of such animal to be securely fastened so as to enable such animal to be felled with as little pain or suffering as practicable, and shall in the process of slaughtering any animal use such instruments and appliances and adopt such method of slaughtering and otherwise take such precautions as may be requisite to secure the infliction of as little pain or suffering as practicable." Of course that is very general.

551. But there is one precise point in it that is interesting to us, and that is that the head should be securely fastened?—Yes. You notice that we have not required that oxen should be felled. We have in a few cases confirmed byelaws containing that requirement, but generally we have not felt able to do it, and we have not felt able to include such a provision in the model in consequence of the Jewish rules about slaughtering.

552. But you attach importance to the fastening of the animal in order to insure the blow being fair?—Yes, so that the head should be fairly steady when it is poll-axed.

553. These are drawn up as model regulations, and I presume that when byelaws are submitted to you by any local authority you endeavour to make them conform as far as possible to these byelaws?—Exactly. These model byelaws are issued really for the convenience of the local authorities. We have a form on large paper with a margin with the byelaws printed upon it and we always encourage the local authorities, in fact we generally require them to send up their byelaws on this form so that they put in any modifications they think desirable to incorporate in the official form.

554. Do you find as a rule that they accept your form without much alteration?—Yes, fairly well.

555. If there are alterations, in which direction are they generally with regard to this particular point? In the direction of increased humanity or regarding some of this as superfluous?—I do not see all these cases, but I do not remember seeing any one where this has been suggested as being too stringent; in fact we have had cases under another provision which I will refer to presently, where they have required animals to be felled always.

556. By "felled" you mean struck on the poll before being poll-axed in the forehead?—Yes, stunned.

557. These were drawn up in 1900?—Yes, they were revised in 1900, but this provision has lasted for twenty-five years.

558. Will you tell us who is the official who is specially responsible for the drawing up and revision from time to time of these bye-laws?—Well, I am to a certain extent, but our legal adviser always advises the department on such matters.

559. Have you any technical adviser on the subject—a practical man?—Yes, some of the medical inspectors in the medical department have had experience.

560. I presume in drawing them up they have considered all the foreign practice in these matters?—Well, this has not been altered for a good many years.

561. The reason I mention that is that we have been collecting information as to the foreign practice in slaughtering, and we have been struck by the sort of primary regulation that exists in Germany, notably, and in Denmark: that in the case of all animals they must be rendered insensible before blood is drawn; it says nothing about method, but that is the general principle, and, at first sight, it would seem to be a very admirable provision. Presuming

that we are fortified in that belief by the evidence we have received, and by practical experiments, I presume the Local Government Board would be quite prepared to consider any revision of these regulations which might embody anything that is admittedly an improvement?—I have no doubt.

562. I do not wish to commit you in advance of course?—I am sure Mr. Long would be very pleased to consider any suggestions for improvement of the series. With regard to rendering insensible, the question of stunning sheep came up on one occasion; it was proposed by one local authority, and we consulted the Board of Agriculture, and they said that the stunning of sheep was more likely to cause pain than not, and that it was a very difficult operation.

563. On that point we see, in the German practice, that the difficulty of stunning is recognised, but is got over in this way: "Sheep and calves are stunned before slaughtering, stunning being performed only by experts." It is evidently recognised to be a difficult matter, but not as in any way impracticable?—That is so; where you have got public slaughter-houses—and there is power under the Public Health Act for the local authority to provide public slaughter-houses—you can control slaughtering very much better; but where you have private slaughter-houses, of course, the inspectors of the local authority cannot always be there, and they can only make occasional visits.

564. But until we had heard your evidence, on the legal aspect of the question we had scarcely any hope of reaching these private slaughter-houses at all, and we had been devoting ourselves entirely to the methods in public slaughter-houses?—Yes, but, of course, the Admiralty will be entirely free; your inquiry, I imagine, is really directed to slaughtering for victualling yards.

565. That is the beginning of our jurisdiction, but we have represented on this Committee the War Office, the Board of Agriculture, the London County Council, and the Corporation of London, and we hope if we come to any practicable conclusion that the area of our recommendations will be very largely extended?—Everybody recognises that there are considerable advantages in having public slaughter-houses rather than private slaughter-houses, but at the same time the difficulty is to get rid of the private slaughter-houses; there have been a certain number of local Acts which have authorised the local authority to set up public slaughter-houses, and to do away with private slaughter-houses, but Parliament has always required in such cases that due notice should be given, and that the private slaughter-house owner should be compensated.

566. Is there anything else you can tell us about this matter? So far it has been most interesting?—A clause requiring the stunning of pigs was proposed in a recent series of bye-laws, and there we took the advice of the Board of Agriculture, and they said it was practicable, and we confirmed the clause requiring that in that particular series. That is the only case I know.

567. These were the bye-laws of some particular place?—Yes, a particular local authority.

568. Can you tell us where that was?—Stevenage.

569. (*Mr. Cope.*) It was some time ago, I suppose?—It was about a year or eighteen months ago.

570. (*Chairman.*) And the bye-laws were confirmed with that provision in them?—Yes, "Every occupier of a slaughter-house, and every servant of such occupier, and every other person employed upon the premises in the slaughtering of swine, shall before proceeding to slaughter any pig, cause such pig to be effectually stunned so as to enable such pig to be stuck with as little pain or suffering as practicable." That, I suppose, was really partly due to the fact that they did not want the noise of pigs being killed without stunning.

571. Of course we can find out why they do it, and whether it is practicable. Have you had any similar bye-laws suggested in the case of sheep?—No; it was suggested in one case about sheep, but on the advice of the Board of Agriculture we rejected that.

572. (*Mr. Cope.*) Have you any idea how long that is ago?—I am afraid I cannot tell you off-hand.

573. (*Chairman.*) And calves?—I do not remember the question of calves coming up at all.

Mr. MONRO
(*cont.*).

Mr. M^{ORRO}
(cont.).

574. Are there no other statutory powers you can tell us of which would bear upon this at all?—In a certain number of cases there are local Acts which give powers. I have here three local Acts of last year.

575. Are there any which go into this matter particularly?—No, I do not think they go definitely into the question of cruelty; they are rather for enabling the local authorities to establish public slaughter-houses and to monopolise slaughtering.

576. You have really told us the full extent of the powers of the Local Government Board in the matter?—Yes. The only other branch of the subject in which the Local Government Board are concerned is where the local authorities propose to set up public slaughter-houses, and want to borrow money for the purpose; the Local Government Board have to sanction the loan, and in that connection they approve the plans.

577. And the bye-laws?—The bye-laws follow afterwards.

578. Do they make the loan conditional on the approval of the bye-laws as well?—No, they sanction the loan first of all, and then the local authority have to make bye-laws for the management.

579. (Mr. Cope.) Do they ever inspect the slaughter-houses themselves?—No, not for the purpose of inspecting slaughter-houses; but occasionally no doubt in connection with the inspection of a town, where perhaps there is an epidemic or something of the kind, the slaughter-houses might be inspected.

580. (Mr. Murphy.) Can you explain to us the different position of authorities, some of which annually license slaughter-houses, and some of which have only registered slaughter-houses; or rather in some districts some slaughter-houses are registered and some licensed, and they are subject to different conditions?—The position is this: a house which was used and occupied as a slaughter-house before 1875 is registered, but a house which has begun to be used and occupied in that way since that date has to get a licence. Those licences were at first perpetual but by an Act passed in 1890, the Public Health Act Amendment Act 1890, an urban authority is enabled by adopting one part of that Act to limit those licences to periods of not less than a year, and most urban authorities have adopted that. I think, at any rate, all the important ones have; so that now licences can be granted for a period of a year or more as the authority thinks fit. That gives them a great deal more control over these licensed houses, and of course the registered houses are gradually disappearing.

581. Does a private slaughter-house in a rural district require a licence at all from anybody?—It requires a licence when the provisions of the Towns Improvement Clauses Act have been put in force.

582. In the cases you have told us of?—Yes.

583. But a country butcher practically can conduct his slaughtering in any way he pleases so long as he does not cause a nuisance to his neighbours?—Yes; of course he might be indicted as there is the general law against cruelty.

584. But I mean the power of supervision is very slight, is it not?—Of course in that case there is no supervision.

585. Could the local constable ever insist upon entering a slaughter-house and seeing the proceedings?—No, I do not suppose he could insist upon entering.

586. (Mr. Game.) Most of these bye-laws that are made and sanctioned by the Local Government Board are made more with regard to the sanitary process of killing, and so forth, than the actual business carried on?—They are made for the purposes I mentioned.

587. But they were exceptional in particular cases; are not most of the bye-laws made with the idea of giving the local authorities power to regulate the sanitary part of the work more particularly than the actual business part of it?—It is of course mainly for the purposes of sanitation.

588. And would not the sanitary officer of that corporation or borough, or district or rural council have more power than any other people for visiting and seeing how the Act was carried out?—Yes. The district council is the sanitary authority.

589. And the officers of the sanitary authority would inspect the slaughter-houses?—Yes.

590. More for a sanitary purpose than watching to prevent cruelty and other things?—Yes, that may be; but cruelty is one of the definite objects against which the bye-laws are framed.

591. "Cruelty" means cruelty generally?—Yes.

592. (Mr. Murphy.) Have any authorities power to license slaughtermen?—I do not think so; there was a clause in a Bill for a local Act, but it was struck out.

593. And there is no power in the general law?—No.

594. (Mr. Game.) Is not every slaughter-house bound to be licensed?—Where the Towns Improvement Clauses Act comes into force, slaughter-houses subsequently occupied require to be licensed.

595. The best of my belief is that you cannot slaughter in any district without a licence?—The Act says that the Commissioners, that would be the District Council, by bye-laws to be made and confirmed, shall make regulations for the licensing, registering, and inspection; but if the Act is not in force there is no licensing or registration.

596. Supposing a man chose to build a place that he called a slaughter-house, and that he slaughtered in there without a licence, could he do so without interference?—Not if the Act were in force. Where it is in force there may be bye-laws.

597. (Chairman.) But in the majority of cases there are not?—Speaking off-hand, I should say in the majority of cases there are.

598. (Mr. Game.) In every case you would expect the bye-laws to take the power to grant licences?—I would expect the bye-laws always to contain provisions dealing with licences.

599. (Chairman.) That is very interesting to know, and perhaps you could let us have subsequently some statistics as to the number of rural districts in which this power has been taken advantage of, and bye-laws have been drawn up as compared with the districts where nothing has been done; can you give us that information? Certainly, I will send that to the Committee.

600. Mr. Gordon Miller wishes to ask whether the Local Government Board would encourage the granting of licences to slaughtermen so as to prevent the employment of incompetent men; that is a matter, I suppose, that they would be willing to consider?—It is rather difficult in connection with private slaughter-houses, I think; of course, in public slaughter-houses all the men would be at any rate under the eye of the officers of the authority.

601. It is the practice in foreign countries to make what I call the executioner in the slaughter-house have a licence?—Yes.

602. And I presume there would not be very much difficulty in enforcing a regulation such as that in public slaughter-houses here?—Perhaps not, but it depends somewhat on what are the preliminaries to the licence; is the man to have an examination?

603. This is the rule in Copenhagen:—"From May 1st this year it will be made obligatory that any butcher's apprentice before he stuns cattle with a poll-axe shall undergo an examination showing his skill on an apparatus provided by the municipality, and the apprentice who after May 1st next knocks down a bullock with an axe before getting permission from the officials, which permission may be cancelled if he is not found competent for the work, will be fined thirty kroner." That is the sort of thing they do?—Of course that would be rather a large measure to apply suddenly to this country.

Mr. JAMES KING, called; and Examined.

Mr. King.

604. (*Chairman.*) I understand you are employed under the Corporation of London; what is your exact position?—I am veterinary inspector to the Corporation of the City of London.

605. And in that capacity I presume you carry out the inspection of slaughter-houses?—I do, at the Metropolitan Cattle Market.

606. Are you aware of the nature of the inquiry we are prosecuting?—I understand it is about the slaughtering of cattle.

607. It is not only the slaughtering of cattle; it is the slaughtering of all animals for food with the sole object of trying to ascertain what is the most humane and practicable method of slaughter. I understand you actually see the slaughtering taking place in these various slaughter-houses?—That is so, and I supervise the inspection of the carcasses as well.

608. You see that almost daily?—Daily.

609. And you have had a very wide experience?—About eighteen years.

610. I presume you only inspect the public slaughter-houses; in fact there are no private slaughter-houses in the City of London?—There are public and private.

611. Are there many private slaughter-houses?—At the Metropolitan Cattle Market we have twenty-one; they are private and also public—that is to say the Corporation let them to certain tenants and the places are, of course, under my supervision.

612. In the case of the private slaughter-houses are they under the same bye-laws?—The same bye-laws.

613. And you have power in inspecting to see that these bye-laws are enforced?—That is my duty.

614. Do you have deputies who also inspect?—Yes, I have one assistant at each market.

615. Whose duty it is, I presume, to constantly witness the slaughtering of animals with a view to seeing that the bye-laws are enforced?—That is so.

616. Have you a copy of the bye-laws?—I have not one with me; I did not know it was desired that I should bring them.

617. You could supply us with a few copies?—I could.

618. Do those bye-laws lay down any particular methods of slaughter?—No.

619. I presume there is a general provision that slaughtering must be carried out in a humane way?—That is so.

620. But no special method is suggested?—No.

621. Do you find that all slaughter-houses under your supervision employ the same methods?—They do at the Metropolitan Cattle Market.

622. Do you insist upon that?—Yes.

623. Would you tell us what those methods are in the case first of all of cattle, then calves, then sheep and then pigs?—Cattle are slaughtered with a poll-axe—that is by striking them on the forehead or at the nape of the neck—between the atlas and axis.

624. You say one or the other; is it usual to strike them on the poll first and then on the forehead?—Sometimes that is done; if the animal has extra large horns it is occasionally difficult to get at the forehead and it is struck just behind the poll then.

625. First?—Yes, and after the animal is down they strike it on the forehead to get the pithing cane in to destroy sensation.

626. Do you secure the head of the animal to a ring before slaughtering it?—Yes, all animals are tied by a chain to a ring.

627. Their head is pulled down to the ring?—It is pulled not down, but towards the wall; the ring is kept on the level of the beast's head as far as possible.

628. I do not know how the head can be secured; is the animal pulled tight against the ring?—It is drawn tight against the wall; some people like the ring about a yard from the ground and others like it lower.

629. Is the head of the animal pulled up against the wall?—As tight as they can.

630. Against the wall?—Yes, to leave room for as little movement as possible.

631. In many cases in slaughter-houses the common practice is to have the ring on the ground and to pull the head down to it?—I have not seen that; they sometimes put it in the wall close down to the ground.

632. Having the ring in the wall I presume, has one advantage that it makes it more difficult for the animal to move because he is tight against the wall?—That is so, and he can be held at the one side; his body is against the wall on one side and it is usual for an assistant to stand with his hand over the beast's loin on the other side, that is to steady the animal.

633. I see that there is great advantage in that over the ring in the floor because the animal is certainly steadied on one side?—If you have the ring on the floor the animal is rolling round and round the ring and it is very difficult for the man to act then.

634. That is a very important point. You have never seen any other method used in slaughter houses, such as the slaughtering mask?—I have seen the mask, but I have not seen it used.

635. You have no practical knowledge of it?—No, I do not agree with it; from what I have seen of it I think you could scarcely get an animal to stand long enough to get the mask put on properly. It is rather a dangerous instrument and I have examined it several times.

636. What class of animal do you get?—Are they all home-grown cattle?—Yes, all British breeds.

637. And therefore they are fairly quiet?—Some are.

638. Do you get Welsh and Scotch?—Yes, if you get Welsh cattle they are sometimes very wild.

639. But you get no foreign cattle?—No, not at the Metropolitan Cattle Market. Of course we get foreign cattle at Deptford.

640. Are the animals in most cases cut up in the same room where they are slaughtered?—At the Metropolitan Cattle Market they are cut into sides in the ordinary course of dressing.

641. Do you find that cattle particularly show signs of fear on being taken into the slaughter-house, either from the smell or sight of blood?—Some do; bulls do occasionally, but others do not; I have seen a bull go and lick the blood off its mate just after it has gone in, but some are very nervous.

642. What do you think it is that frightens them most, the smell or the sight?—I think it is the sight—the colour.

643. You mean seeing the red blood on the floor?—Yes, you will find that mostly; if you are killing in the ordinary way after the Jewish people have been slaughtering you will find that the floor is all covered with blood and you can scarcely get an animal to come in until it is washed down.

644. You think it is the sight and not the smell?—I think so.

645. We get a good many different opinions upon that; some think it is the smell mainly and they say the animal snorts and sniffs?—Some do, but my opinion is that it is the colour more than the smell; I have watched it very carefully and I have seen animals walk in very quietly two at a time.

646. And when they saw the blood what happened?—They took no notice, but others again would get in a terribly nervous state.

647. How do they show it?—They jump all over the place; they get excited and wild.

648. Do you find it is a certain class of animal which shows fear, or is it merely like an individual?—It is in most cases bulls; they seem to be very nervous that way.

649. Do you find it is the wilder class of cattle that get the most frightened?—That is so, the wilder the more nervous they are; if you get cattle that have been stall

Mr. King
(cont.).

fed they very often walk very quietly into the slaughter-house, but if you get animals that have been grass fed and not handled at all they get excited. The excitement is partly due to the handling as much as to the blood.

650. Is there anything in your bye-laws which prescribes that no animal must be slaughtered in sight of another animal?—No, it is left for me to insist upon the killing pound doors being closed, which we do; each slaughter-house is provided with a killing pound where the animal can be brought in and roped without any danger to the tradesman. The cattle are then brought from this pound into the slaughter-house and the door is shut. At the Metropolitan Cattle Market each slaughter-house is provided with doors which slide along and there is no difficulty in the door being drawn across when the animal is brought in and it is slaughtered out of sight of its mates.

651. You only slaughter one at a time?—One or two.

652. When you have two in, are they in sight of each other when slaughtered?—No, the one has its head to one wall, and the other to the other.

653. So that they cannot see each other?—No.

654. You recognise that it is desirable that animals should not be slaughtered in sight of their fellows?—I have always thought so, and I insist on that being carried out.

655. Then what is the method of slaughter of calves?—They are knocked on the head with a mallet and then their throat is cut.

656. You do not first of all draw them up by a windlass?—Yes, at the Metropolitan Cattle Market they are drawn up; different markets have different ways of killing calves. But with us as soon as they are drawn up they are stunned with a mallet.

657. On the back of the head?—Yes, on the crown of the head—the back of the head.

658. Is there any practical reason why they should not be stunned before being drawn up?—It is difficult with calves; you would have to fix your calf down because veal is supposed to be as white as possible, and if the animal is bled immediately after it is stunned it bleeds much better. That is one of the reasons why the trade draw them up, but I see no reason why they should not be stunned before.

659. The time that would elapse would be very small; you would stun the animal and instantly secure its legs, and run it up and cut its throat?—Yes, but there would be more risk then of having to strike your beast two or three times.

660. If you are not skilled?—Yes, you might take a long time to fix the calf; they are naturally skittish, and very likely if a man struck at a calf in the slaughter-house, he might miss it, and he would have difficulty in catching it. I think myself I prefer the drawing up, although it does not look so well.

661. But do you insist in all cases that the calf should be stunned before blood is drawn?—At the Metropolitan Cattle Market, yes.

662. But in all the markets you inspect?—Yes, in all the markets I have been in I insisted on them being stunned, and that is the general rule of the trade.

663. Then sheep?—Sheep are not stunned.

664. How are they killed?—They are simply stuck; they are put on a cradle and a knife is pushed through the neck, the vein is cut and they are pithed; the man cuts the blood vessels and he puts his knife in between the atlas and axis and cuts the spinal cord and the animal is dead at once.

665. They do not dislocate the neck?—Some do; if you have very large tups, for instance, it is difficult to break their neck, but with young sheep you can break their neck easily.

666. Do you consider that a desirable thing to do, if possible?—I do; I think if they are pithed, I do not care about the neck breaking, but I always advise pithing where possible.

667. It requires a considerable amount of skill to pith an animal quickly?—It does.

668. How long do you suppose elapses from the time the knife is first put in until the animal is properly pithed and dead?—If the knife is in the hand of a practical man, I should say about twenty to thirty seconds at the very longest.

669. Of course the animal must be suffering a certain amount of pain during that time?—Yes, but it cannot possibly suffer after the severing of the spinal cord?

670. But until then, during the twenty or thirty seconds?—It is almost as quick as cutting by the Jewish method, if you have a knife in the hand of a practical man; and it is safer, because he has a hold of his sheep at the time he puts his knife through, and the only pain there would be is in cutting the skin.

671. What objection do you see, if any, to stunning a sheep first, as is done in the case of calves?—It would be rather a difficult matter to do, as sheep have rather strong heads.

672. I think it is clear that it is somewhat difficult to stun a sheep, but we have got information from foreign countries, particularly from Germany and Denmark where it is by law obligatory to stun the sheep, in fact to stun all animals, before they are killed?—I know that is the case.

673. They recognise that there is a certain difficulty in it by saying that the stunning should be performed only by experts; it is evidently a thing that can be done. Have you ever seen it done?—I have seen appliances for stunning sheep, but I have never seen them used.

674. What appliance?—A bolt fixed in the head, after the style of the mask you have there.

675. You have never seen a mallet or club used?—No, not in general use.

676. Assuming that an expert is stunning the sheep with a blow on the head, either with a mallet or club, do you consider that it would necessarily affect the market value of the sheep's head?—It would destroy the appearance of it, certainly.

677. What would it do?—It would bruise the whole head.

678. You have not actually seen it done?—Yes, I have seen it done, and I have tried it myself, and I have found it a very difficult operation.

679. Of course if the skull was smashed I quite see it would destroy the market value of the head, but if a blow only of sufficient force to render the animal temporarily unconscious was struck, in the same way that a man might be stunned without injury to his skull, what would be the objection to that?—I think there is a considerable difference between the skull of a man and the skull of a sheep; the skull of the sheep is its only means of protection. The part of the skull where you would have to stun the sheep is very hard; I tried stunning a sheep myself with an ordinary pig mallet, and I could not do it. When I was in Manchester I asked them to try stunning, because I did not like the way they killed the sheep, and as I thought it would be an improvement on the usual method.

680. Is there no way of dislocating the neck, in the same way as you dislocate the neck of a rabbit?—They are rather strong, and you would have difficulty in catching the sheep to do that.

681. You catch your calf?—You could do it with young sheep perfectly well, but, I do not see how you could possibly do it with rams or two year old sheep.

682. Even if you ran them up by the hind legs in the same way that you do calves?—It would be rather a difficult operation to catch a sheep and run it up—they struggle so.

683. And yet one man handles him on the crutch, and also sticks him?—Oh yes, that is so. One man puts him on the crutch and another sticks him; one man usually holds the sheep down.

684. You employ two men?—Yes. There is a gang of six men, and usually one man puts the animal on the crutch and while the one puts his hand on its flank, the other catches the head and sticks it.

685. The evidence we have had so far is, that in nearly all cases one man does it alone?—In plenty of cases one does it; in the Metropolitan Cattle Market they kill so many sheep that there are usually two.

Mr. King
(cont.)

686. You said just now that sheep were so active that there would be difficulty in securing them as you do calves?—That is so, and it would take too much time; I think there would be more cruelty in catching the sheep and hanging it up by the hind legs than in putting it on the crutch and killing it right away; in the one case it would take two or three minutes, and in the other twenty or thirty seconds at the longest.

687. We hope to see these methods in actual use. Do you see pigs killed?—Yes.

688. How are they killed?—The large pigs are killed with a poll-axe the same as cattle, and small pigs the same as calves, with a mallet.

689. Do you hang them up first?—No.

690. You just stun them with a mallet?—Yes.

691. The reason you are able to stun pigs and not sheep is, I suppose, the difference in the structure of the skull?—Yes, it is much easier.

692. You strike them on the forehead?—Yes.

693. And the pig falls at once?—Yes.

694. Then what do you do next?—You cut his throat on the ground.

695. And the result is that there is no squealing when the pig is stuck?—No, with the use of the mallet.

696. Do you consider that the best method?—I do.

697. Do you consider that you have sufficient staff to properly see that these regulations are carried out?—I do.

698. Do you find that you ever have to check people for cruelty?—I used to, but not lately.

699. How long is it since the improvement began?—When I came to London first I used to check the young men and stop them from doing it, but now we have got very good men, experts, and they use the hammer themselves. There is usually one man who is expert at that work and he does it.

700. How does he get his training? He has to begin some time to do it for the first time; is there any method of training the men who actually do the slaughtering?—No, there is no proper method, but the way I advise at our market is that the beginner should strike the beast the second blow; when the blow is struck behind the nape of the neck the animal falls unconscious, and then the beginner can try and strike the forehead without causing pain, and he gets a little practice in that way. Then when there is a very quiet animal he is allowed to kill it himself.

701. How long does a man serve about a slaughter-house before being allowed to begin to strike animals?—It depends upon what the man is; some men are much cleverer than others, but it is five or six years usually before they are allowed to dress properly, and before the man can call himself a proper butcher.

702. That is dressing, but during that time does he do any slaughtering?—Not at our place. I know in certain places they do it.

703. Do you think it is advisable that a man should be employed for a long time in the slaughter-house before being allowed to use the poll-axe?—My opinion is that a man should show evidence of being an expert in the use of the knife or poll-axe before being allowed to use it.

704. You have never seen any mechanical method of teaching men to use the poll-axe, an instrument?—No, but I know there is one in Germany.

705. But you have never seen it used?—Not in this country.

706. Generally speaking, you think there has been an improvement in the class of man employed in the slaughter-houses?—That is my opinion.

707. What are the different grades of pay in a slaughter-house?—A foreman can make as much as £4 or £5 a week if they are killing by piece-work, but £3 for an ordinary man is an ordinary wage.

708. Is he the man who does the slaughtering?—Yes, he is usually the foreman, he or the second man does it.

709. What does the second man get?—He may get £3; they charge in our place half-a-crown for each beast they slaughter; that is given by the Master Butchers, and for that sum they kill and dress the meat, and they divide the money up amongst them. There are different grades;

you have the foreman and the second and the third man, and each man does a different part of the work as he learns.

710. Are they generally paid by piece-work?—Yes, mostly in our place; in fact they all are except in two slaughter-houses.

711. You do not think that encourages carelessness in slaughtering, that the man wants to kill as many as he can?—There is a tendency to that; the man wants to kill as much as he can and to get as much money as possible.

712. And therefore from the point of view of humanity, probably the better man might be on a weekly salary?—Yes, that is so.

713. I am thinking of cases where they slaughter on a very large scale, perhaps several hundred animals a day?—Yes, but the difficulty would be to get the men to do that.

714. And they appear to make as much as £3 or £4 or £5 per week?—Yes, I have known a man make £6 a week working piece-work.

715. You said half-a-crown per animal—is that only for cattle?—That is for cattle only.

716. What for sheep?—They are allowed 3d. for each sheep, depending on the size, and then 6d. for pigs, or 1s. according to the size.

717. Why do these rates vary so very much? Is this only for the actual killing; that is to say, using the poll-axe, or does it include other operations?—It includes the killing and dressing, preparing the carcass for the market.

718. And it takes longer to prepare a pig than a sheep?—Yes, you have to scrape a pig and use hot water as well.

719. (Mr. Game.) According to your knowledge, which you have gained by experience, the method of killing which you have described is the best that could be used, in your opinion?—Yes.

720. And with regard to the sheep: you think it would be too long from the time he was first caught or brought into the slaughter-house until he died if you had to stun him first?—That is my opinion.

721. (Mr. Murphy.) With regard to calf killing there is no difficulty stands in the way of stunning the calf before it is tied up?—Yes, there would be the fixing; I think there is more danger of cruelty in fixing and tying an animal up than there is in pulling them up as I have described and knocking them on the head. In any case you must fix the calf before you can kill it properly.

722. Is there any risk of the animal recovering consciousness after the blow and before it is stuck?—No, because the calf is in the best position possible to get the blow.

723. But if they were stunned before they were hauled up, in the interval between being hauled up and having their throats cut, would there be a risk of recovery of consciousness?—That is my objection, that unless the man struck the beast on the proper part there might be that possibility; he might simply stun it for the time being, and this calf might be drawn up by his legs and partly recover consciousness before the knife was put in. That is one of my objections to stunning calves before hanging them up.

724. (Chairman.) Do calves cry at all when being hung up?—Occasionally, but not very often.

725. (Mr. Game.) The act of pulling the calf up when he is alive and hitting him on the head is practically done at the same time?—Yes.

726. The calf is not pulled up and hung any time before being hit; as it is pulled up it is hit at once?—There is a double pulley with two men and the rope is adjusted so that you pull it round above the houghs; it fixes itself at once, and before the calf can realise what is happening it is pulled up by the hind legs, the man holds it and strikes it on the point of the head and it hangs dead.

727. As a veterinary surgeon you would say that the very fact of its being hung by the heels would prevent its recovering, with its head hanging down?—Yes, but of course he would struggle unless he had a proper blow.

728. If struck properly the fact of his hanging by the heels would prevent his recovery from the blow he had had?—That is so, because he should have congestion of the brain in any case.

Mr. King
(cont.).

729. (*Chairman.*) I gather that the method of killing calves is perhaps the most satisfactory of all?—That is so; I object to pigs being hung up as I think it is a cruel way, but with calves I rather favour it.

730. (*Mr. Murphy.*) Can you tell me whether the ability to divide the spinal cord when a sheep is stuck leads to 99 per cent. of the cases being successful where it is attempted or in what proportion?—I should say about 90 per cent. are successful; that is to say if the knife is in the hands of a practical man, because my contention always shall be that no one should be allowed to use a knife unless he can show evidence of being a thoroughly practical trained man.

731. If it is unsuccessful the death takes place from hemorrhage?—If it is unsuccessful. Sometimes you get ankylosis there as well as at other places, and then you catch it by the back of the neck and twist it, as they cannot wait for an animal to die unnaturally like that. It would take a sheep three or four minutes before it is properly dead and before they can start to take the skin off and dress it.

732. What method does the butcher adopt to ascertain that it is dead?—The animals come in rotation and you usually get three on the crutch at the same time and as soon as one is dead he puts another one on; the three lie together and he takes away the one killed first, they keep on doing that, because five or six men are not long in dressing a few sheep. That is the usual way in slaughter-houses.

733. (*Chairman.*) Do you say that in all cases it is three or four minutes before the sheep is dead?—No, I said it would be, unless they pithed the animal or broke its neck. I myself have timed cattle in the Jewish method and it has taken three to four minutes before they lost sensibility.

734. A sheep is always killed by pithing or having its neck broken?—Yes, that is our method here and it has been in Edinburgh and Manchester as well.

735. How often is the slaughterman who is striking the bullock unsuccessful with the first blow; in what proportion of cases?—Not very often in our place; I am sure I could take any of you gentlemen up to our place and you could pick out any animal you cared, and I will show you three or four men who would not miss once. It is the same at Deptford; but at other places the men are not so well trained; it is because the corporation have been so particular about this, and I have had to threaten to prosecute one or two, or to report them to the Society for the Prevention of Cruelty to Animals, but now I am perfectly certain the animal would be killed with one blow, except in the case of bulls which have hard skulls and the man might have to hit a bull twice, but very seldom has he to do it with a heifer or a bullock.

736. What power have you actually over a man if you thought he was being wilfully cruel, or if he was simply incompetent?—I should report his master to my committee and he would run the risk of losing his slaughter-house; they have been threatened with it.

737. But the actual men themselves are not licensed in any way?—No.

738. (*Mr. Murphy.*) Then it is the man who does the slaughtering who rents the slaughter-house from the Corporation?—Some men do; we have butchers in the central market who have slaughter-houses.

739. Do they employ their own men?—Yes, they employ their own gangs.

740. Does it occur to you that there would be some advantage if the corporation had the power of licensing the men who kill?—Yes, I would be in favour of licensing; I would insist on a man showing he was capable of doing the work properly.

741. (*Chairman.*) Would you be able to arrange for testing his powers?—Yes.

742. (*Mr. Murphy.*) Do you think there would be an advantage in improving the training of men who became slaughtermen?—They would have to give evidence that they were practical men; that is the only way I can see you could do it.

743. (*Chairman.*) The advantage of the licence is that if a man misconducts himself or is incompetent you can take away his licence and by so doing you deprive him of his employment?—Yes.

744. And you think it would be desirable to have that power?—Yes, I know it has been in Edinburgh for a considerable time; all jobbing slaughtermen in Edinburgh are licensed by the corporation.

745. How could we get a copy of the form of license?—By writing to Mr. Durie, the Superintendent of the Slaughter-houses, Edinburgh; they have, so to speak places where any casual butcher can come in and they are bound by the superintendent to slaughter any animal sent by anyone and they are not licensed unless they are proper men.

746. I presume it is a very small fee for licensing?—I do not think there is anything at all, but they may pay half-a-crown; it is very small, if there is one at all.

747. (*Mr. Murphy.*) When a slaughterman kills for the first time, is there any inquiry as to his antecedents or as to his fitness?—Not here because they are not licensed.

748. That would follow after licensing?—It would; that is in the same way as the Corporation of London license the drovers; all the drovers in London are licensed by the City Corporation; and before the licence is granted we inquire into the man's antecedents, and if he is not a suitable man we do not grant him the licence, or the Corporation does not, I should say; I think the same thing should apply to butchers.

749. (*Chairman.*) Do you consider that there is much cruelty in the method of handling the animals before they are brought into the slaughter-house? Do you find that?—Not with animals coming in at our place; our lairs are so arranged that all the animals walk in the back way and then they are made to go from that place into the killing pound where they are shut off from the others, and from the slaughter-house, and then they are handy for the chain being put on the neck. Some do struggle when they find the chain on the neck; you cannot help that—but there is very little cruelty.

750. (*Colonel Clayton.*) I take it that in your opinion there would be more cruelty in stunning the sheep first than in the present method of sticking them?—That is my opinion.

751. Do you think that by pulling the calf up there is any unnecessary cruelty?—I do not think so, because before the calf has time to realise what is happening he is killed; I do not think it will take more than half a minute to put the rope round, pull him up and kill him.

752. There is no reason why the fact of pulling the calf up by the hind legs should cause any pain at all?—I do not think it does.

753. (*Sir Henry Yorke.*) I understood you to say that you attached considerable importance to the animals being shut off from the sight of each other?—That is so.

754. Have you seen many cases where the animals have been killed in the sight of each other in your experience?—Yes, you have to keep a very careful look-out on the men or they will do it.

755. When you have seen animals killed in sight of each other, have you seen many cases where they did not apparently pay any attention?—In the case of cattle it is only occasionally that they do that; I have seen a sheep licking the blood from its companion as it was running into the receiver.

756. What I wanted to know was whether you had seen many cattle killed in the sight of each other, and whether you had seen many of those who did not apparently mind?—I have seen a lot of cattle killed like that, but it is very seldom they evince the slightest fear.

757. Then I understood you to say that you thought the animals objected more to the colour of the blood than the smell?—That is what I think myself.

758. Do you think they would object equally to the colour if it was red paint?—Some would; there is no doubt some animals are much more sensitive than others.

759. But it is not the blood you think they object to; it is the colour?—I think it is the colour more than anything else.

760. You spoke also about piece-work with reference to humanity, and I rather gathered that you thought that if a man could make a lot of money at piece-work he might be inhumane?—They would, unless you kept a careful look-out on them.

Mr. King
(cont.)

761. If that is so, it would mean having to strike more than one blow?—It might.

762. That would be the inhumanity?—Yes.

763. If a man had to strike more than one blow could he earn as much as the other man who only had to strike one blow?—Yes, he would, because the animal is always allowed a certain time to die, and suppose he struck two blows that would not take over another half a second or a second at the very most.

764. You mean to say that the inexpert man or the cruel man could earn as much, or possibly more than the expert and not cruel man?—No, because the expert does his work so quickly that he is off again dressing his bullock at once. The animal is bled by the second assistant and during that time the slaughterman will be dressing another carcass.

765. Then the expert man will earn more than the other, probably?—Yes, because he is the foreman of the gang.

766. (Mr. Game.) If some cattle were in sight of others being killed and you were to throw them a truss of hay, would they begin to eat?—Yes, I have seen them do it.

767. As if there was nothing in sight?—Not the slightest.

768. (Chairman.) I understood you to say earlier in your evidence that you attached considerable importance to the regulation by which animals are not allowed to be slaughtered in sight of each other?—I do, but that is not bearing on the question; I still say if you will throw a truss of hay into the pen the animals will start to eat although other animals are being killed in front of them.

769. It depends on the animal just as human beings differ in their sensibilities?—Yes.

770. (Mr. Cope.) You have not been abroad to see the methods of slaughter there?—No.

771. Because nearly all the information we have obtained is strongly in favour of stunning all sheep before they are killed?—I know that is so; I have read several papers on the subject, but at the same time, from practical experience I would like to see these tested. Take Greener's patent: I have given that a thorough test, and another one brought out lately with a bolt, and I find none of them come up to the poll-axe. I have myself tried stunning a sheep and I was not satisfied with it. I only speak from my own experiments.

772. Of course the views to which I refer must be based on experience or they would not make the law in these

countries requiring it?—Of course I have not seen these tried, and I would not care to give an opinion unless I saw them tried.

773. I suppose we could make arrangements to see it carried out at the Cattle Market?—Certainly; I am sure my committee would give you opportunities either at Deptford or at the Metropolitan Cattle Market.

774. (Chairman.) Before you go, have you any other suggestions to offer as to any improvements that might either be carried out or that might even be tried—any methods that are worth considering?—I have tried nearly all we know of in this country, that is, Greener's patent and also that new bolt of the German firm, and I found both wanting. In the first instance, for cattle the Greener patent is a most dangerous instrument, and we also found the other one dangerous, as the bolt rebounded and nearly sent the operator against the wall.

775. Were you at the Manchester slaughter-house before you came to London?—For five years; I managed it for five years.

776. Were the methods there as good as the methods now in force in London?—The same exactly.

777. In fact, you carried out the methods here that you learned at Manchester?—Yes.

778. (Mr. Cope.) I take it the Corporation leave you entirely a free hand to look after everything?—That is so.

779. (Chairman.) And if we so desire you could let us see the usual methods of slaughtering?—Yes, I would be only too pleased.

780. At what times of day is the slaughtering carried out as a rule?—At different times; at this time of the year there is very little slaughtering doing, but Thursday afternoon would be a good time to come.

781. At what sort of hour?—Any hour that will suit you I can arrange for; you could see the whole of the slaughtering, including the Jewish method, and I could have Greener's patent there and give you a test of that as well.

782. We are not going into the Jewish method in this particular inquiry at present, but I may ask you one question on it: do you consider that the Jewish method is a cruel one?—I do.

783. You object to it?—I do, and I have not got reconciled to that method of slaughtering for the last eighteen years. I cannot stand in the slaughter-house and see it carried out.

Mr. HENRY GRANT, called; and Examined.

Mr. Grant.

784. (Chairman.) I understand that you have had very large experience of the butcher's trade?—Yes.

785. Are you in any way connected with it now?—Yes.

786. For the purpose of putting it on record, would you tell us briefly what your experience has been and what your business is now?—My business is as a butcher, farmer and grazier.

787. And that has been your business all your life?—Yes, from a boy.

788. In the course of that trade do you also conduct the slaughtering of animals?—I used to a great deal; I have killed some thousands in my time.

789. Now, in your business, how do you have your animals slaughtered?—We have no slaughterers here, because my business premises are in King William Street, but Mr. William Reid, whom I have outside, slaughters them.

790. But you do actually slaughter cattle as part of your business?—Yes.

791. Where are your slaughter-houses?—At the Metropolitan Market, Islington, and Mr. Reid has got another at Deptford, where the American cattle are killed.

792. I presume you have slaughtering operations on a very large scale?—Yes.

793. Could you give us roughly the number of animals slaughtered a week, for example?—For myself, very few

now, because we can get it best dead, but Mr. Reid will give you a rough idea, and I suppose he kills about 200 a week.

794. We shall be glad if you will give us the benefit of your opinion as to the most humane methods, and not only humane but practicable methods of slaughtering the different kinds of animals, first of all as regards cattle?—First of all taking cattle you cannot improve on our system at the present time.

795. What is that?—Poll-axing them.

796. We would like a little more detail about the method of poll-axing, because apparently there are several methods?—Ours is simply a poll-axe.

797. We know the axe, but we want the method of striking the animal?—We strike him on the forehead.

798. Only the one blow?—Yes.

799. You do not strike them on the poll first?—No.

800. But you are aware that is done in a great many cases?—Yes, it is done in a great many cases, but I should call that brutality.

801. Why do you call it brutality?—Because the man may not catch the proper spot and he may have to hit the beast once or twice, whereas if you chain him and run him down you do not see one in a thousand strike a second time.

802. Will you tell us how the animal is secured?—If he is tame they do not put a rope on him, but if he is skittish they simply put a chain on him and pull him down to a ring.

Mr. Grant
(cont.).

803. In the floor?—No, some place it in the floor and some place it through a post.

804. Do you ever have it in the wall?—Yes, I have had it in the wall.

805. Which do you consider the best system?—I think there is very little difference; if it is in the wall the chain is on the other side and the bullock gets his head down to a proper position.

806. It has been represented to us that there is an advantage in having the ring in the wall because the animal is steadied against the wall and it is more difficult for him to move than it would be if he were fastened to a ring in the floor?—I should say either the wall or a post would be better than the ring in the floor, because they would not be pulled down so long and I do not think the animal would suffer so much.

807. Do you find in your experience that cattle often show signs of fear upon being taken into the slaughter-house either from the sight of or smell of blood?—Never! I do not think they know. Of course we have had some skittish ones sometimes but it does not matter what you have, they walk in there and take but very little notice.

808. Do you find sometimes that you get cattle who do show signs of fear?—I do not know that I have ever noticed that.

809. You do not find that they sniff or snort?—No, in fact I do not know if I have ever seen any animal sniff and snort at the sight of blood.

810. We have had evidence to the contrary and I wanted to know your experience of it?—That is my experience, that they do not know anything about it.

811. As regards calves, how do you kill them?—There are several ways of killing calves; if I was going to kill a calf I should stun him first before pulling him up.

812. How would you stun him?—You stun a calf with the mallet.

813. Where would you strike him?—In the same place as you would a beast.

814. And do you think there would be any more difficulty about doing that owing to the act that the calf would be frisky?—No, the calf is never frisky; he stands quiet. You lead the calf out by a halter.

815. And you do not think there would be any practical difficulty about striking him with certainty in the right place and stunning him before pulling him up?—Not with a skilful butcher.

816. Then you would hang him up by the hind legs?—Yes and take his head right off.

817. Of course the animal would really suffer no pain in that way?—Really he feels nothing.

818. And that is the method you have generally employed?—Yes.

819. You do actually in practice see these calves stunned before they are secured?—Yes, in fact I killed all my own calves, when I sent real to London, in my own slaughter house in the country, on the farm.

820. As regards sheep?—We generally throw them up into what they call a crutch, and stick them and pith them in an instant.

821. With a knife?—Yes, it is done momentarily.

822. You do not break the neck as well?—No, the slaughterman turns his knife, and dives the knife into the cut and severs the spinal cord.

823. We have had the method described, but in many cases we have been told they break the neck as well, in the case particularly of young sheep?—I have never seen that done and I should not like any slaughtermen of mine to do it.

824. You do not think it necessary?—It is not.

825. I presume in order to use the knife so as to kill the sheep very quickly the man has to be very skilled?—Of course, but with a practical man the sticking of a sheep is done instantaneously.

826. You do not think it takes long before the sheep is actually dead?—No, a very few seconds.

827. Have you ever seen sheep stunned before being stuck?—Yes, I have seen that.

828. Do you consider it a good method?—No, I do not.

829. Why?—I do not think it necessary; I think you have to lug the sheep about, whereas a practical man gets hold of the sheep, and simply turns him into the crutch, and it is done instantaneously.

830. In a big business like yours, or in these big public markets none but very skilful men are employed, but in the case of country butchers in private slaughter-houses perhaps the men are not so skilful?—Then the master butcher would not allow him to stun him, and I do not think it is done as a general rule.

831. You do not think it would be a good thing to do?—I do not.

832. I rather want to press this point, you say you have seen it done?—I have, but I have never seen it done practically; I have seen it done accidentally.

833. How do you mean?—I have seen in years past a man go in, and perhaps he has not a crutch, and he cannot get the sheep out, and he walks in and taps him on the head with a mallet and down he goes.

834. On the top of the head?—Yes in the same place.

835. I press this point rather, because in foreign countries, particularly Germany and Denmark, where they appear to regulate slaughter houses very closely, the law is that sheep must be stunned before they are stuck, and it is recognised that it is a difficult thing to do because they state that the stunning must only be performed by experts?—That is quite right.

836. Therefore it is possible to do it?—Certainly it is.

837. One witness suggested that you could not do it, that the sheep's head was of such construction and thickness that you could not stun it?—Nonsense.

838. In order to stun the sheep you would strike him on the forehead?—Yes.

839. Do you consider, quite apart from whether it is a good thing to do or not, that if you stun a sheep by striking him on the forehead, of course only hitting as hard as is necessary to stun him, it injures the sheep's head so as to affect its market value?—Very likely it would injure the scrag of mutton; it would fill it full of blood.

840. It is not a question of fracturing the skull, but it would affect a part of the mutton?—I could tell in a moment if I saw a carcass of mutton whether he had been stunned or not, because he would show it all round his neck.

841. What is the market value of a sheep's head?—To-day about 5d. or 6d. or 7d., according to the weather.

842. What depreciation of value do you suppose there would be if the sheep had been stunned without the skull being smashed?—I do not think there would be any.

843. I thought you said there would?—On the scrag of mutton, but not on the head.

844. You say it affects the neck, the scrag, more than the head?—Yes.

845. This is a practical point: What depreciation of value would there be in the scrag of mutton?—It all depends on the amount of damage done to it, how far it went. You might get one with no damage at all, and another with a little damage, perhaps it might be the value of the head, or it might not.

846. As regards pigs, how have you seen pigs killed as a rule?—They generally knock them on the head if there is a quantity. If you go into a bacon factory where they do a lot, they never strike the pig there at all; the man stands in a little square box with a bracelet on his arm, and the pig is stuck and passed into another square box.

847. That is when done on a large scale; what is the reason that they do not stun them first in that case?—I do not know; in some places they stun them. They do it at the Cattle Market?

848. And it is quite easy to do?—Very easy.

849. Do you not consider it the more humane method?—Yes, it is easier for him.

850. Easier for the pig?—Yes.

Mr. Grant
(cont.).

851. And I should have thought it would be easier to secure the pig by the bracelet round his leg when he is stunned than when kicking about?—Yes; at the Cattle Market they walk up a platform and a man knocks one down, and sticks him, and then they are shot off into the water.

852. But there is no practical difficulty about striking a pig on the head?—No.

853. And it does not affect the market value of the pig?—It damages the head a little, but not to speak of.

854. What is it done with?—Some do it with a mallet and some with a little poll-axe.

855. Not with the sharp point?—It all depends upon what sort of pig it is; if it is a boar pig, or a sow, they use the regular axe.

856. They would not have to pith him?—No.

857. I understand that Mr. Reid who is with you is a practical butcher, who actually conducts the slaughtering?—Certainly, he is a very practical man, one of the most practical men you could have.

858. (Mr. Gordon Miller.) Could you tell us whether you think it would be advantageous if slaughtermen were trained, and were certificated before being allowed to slaughter animals, speaking generally?—You would not allow anyone but a skilful man to do it.

859. I am rather thinking of the country, and not these large establishments in London?—In the country in a small butcher's shop there is no doubt they are not so skilful as our men up here or at Deptford. There is one thing I must tell you, gentlemen; there is no man going more tender-hearted than a butcher to an animal. He does not want to punish the animal, and he saves it from all the pain he possibly can.

860. (Chairman.) We are not suggesting that is not the case; we find the methods vary very much, and we want to find out what is the best?—I quite see what you are trying to find out.

861. (Mr. Gordon Miller.) But even from the practical point of view the local butcher would injure his meat as little as possible in the process of slaughtering?—Certainly,

and he wants it done as quickly as possible; the quicker the animal is killed the better the flesh is.

862. (Chairman.) Of course, you are aware that very often in the small country districts you do get slaughter-houses which are very badly conducted, and where all the children of the village are allowed to come and look on?—Yes, you see that if you drive through country villages; that is a daily occurrence; but children, as a rule, have to keep out of the way when they are slaughtering cattle.

863. I have actually seen it in the country?—I could see it in my own village to-day if I went into the yard, but they do not allow children as a rule to go.

864. (Mr. Murphy.) Would you make the stunning of pigs before they are killed obligatory?—I should always stun a large pig.

865. (Chairman.) Why would you make a distinction between a large and a small one?—Because you cannot handle a large pig; the pig is the worst animal you have to handle.

866. You are considering the convenience to yourself; I was asking from the pig's point of view?—If I had to kill a lot of pigs myself I should knock every one of them down first.

867. (Mr. Murphy.) It does not delay the work very much?—No, because the moment the pig is down he is stuck directly.

868. (Chairman.) And he is quiet?—Yes.

869. (Mr. Murphy.) What interval is there between the stunning of the pig and his getting into the hot water?—As soon as the breath is out of his body, they do not allow him to get cold or they would not be able to get a good scald on, they would not be able to do their business.

870. (Chairman.) Do you think it is done so quickly that they are ever put in while alive?—No, I have never seen it, and I do not think they would.

871. (Mr. Game.) As a practical butcher would you consider that it was any more humane to knock a sheep on the head before you stuck it than to stick it directly?—I should not.

872. Which would you prefer of the two?—I should prefer to have him stuck.

Mr. WILLIAM REID, called; and Examined.

873. (Chairman.) I understand you conduct the slaughtering of animals on a very large scale?—Yes.

874. How would you describe your business exactly?—I am a carcass butcher and meat salesman.

875. But you have to do with the slaughtering of the animals?—I buy the cattle at Deptford and kill them for our markets at Smithfield.

876. And you have had very long experience?—Over thirty years in London.

877. You are aware of the nature of our inquiry, are you not?—I believe so.

878. Our only object is to try and ascertain what are the most humane and practical methods of slaughtering the different classes of animals for food; do you conduct the slaughter of sheep and pigs as well as cattle?—My business is principally cattle, but of course I have a little of all descriptions.

879. Anyhow you have practical experience?—Yes, and I see it all every day.

880. You always employ the same method of killing cattle?—Yes.

881. Would you mind describing that to us pretty closely?—The method at Deptford, which is carried on universally there, and in fact at a great many other places I have been acquainted with as well, is to rope the bullock either with a chain or a rope and it is killed with a poll-axe.

882. Would you tell us how they are secured first of all?—In some places they have a ring low on the ground, but principally in Deptford we use a ring about two feet above the ground.

883. On the wall?—Yes, on the wall; we pull the bullock alongside the wall to that ring.

884. It is not on a post?—No.

885. I presume there is considerable advantage in having the ring on the wall over having it on the floor or on a post?—It is much better on the wall, because you keep the bullock steady.

886. In poll-axeing the animal is he struck on the poll first and afterwards on the forehead or only the one blow?—Not always; I prefer—and it is generally done—to strike him on the forehead.

887. The one blow?—Yes, the one blow.

888. In what cases do you use the other method?—If the bullock is very restless and will not keep his head up so as to let them get at him fairly on the forehead they may hit him on the poll.

889. From behind?—Yes, but that is rarely done; we object to it on principle, because it really affects the meat of the animal on the neck as the blood all runs from the head of the bullock and it shows a little on the meat afterwards there. There is no doubt that hitting them in the forehead is the proper thing.

890. I presume it requires a little more skill to hit them straight on the forehead the first time?—No, it is much easier if you can get the bullock's head steady, and this ring in the wall is much the best plan for that, because the bullock cannot move himself and he cannot move his head much—he might move his head a little. Where the bullock has got horns turned in such a way that you cannot get well on to the forehead then you use the other method of hitting him on the back of the neck. They can get at him when down, but when he is on his feet if he shifts his head half an inch it might put them off if his horns are growing round towards the front.

891. That is the method you employ in all cases?—Yes.

892. We see in the bye-laws of the London County Council, and in some of the bye-laws approved by the

Mr. Reid.

Mr. Reid
(cont.).

Local Government Board, there is a regulation providing that no animal shall be killed in sight of any of his fellows ?
—Yes, I believe that is so.

893. Is that in force in your slaughter-house ?—To a great extent you might say it is ; the bullocks are killed in the slaughter-house where the dressing is being done and the live cattle are not in sight, at all events very little, if any.

894. Do you bring more than one bullock at a time in to be slaughtered ?—Only one, because we rope the bullocks or chain them. I think it is a very bad system to drive in loose bullocks, and dangerous also, both to the people doing it and the bullocks themselves, because they are very apt to get hurt instead of being killed in the first place.

895. Does it happen often that they get hurt instead of killed ?—Not often, because you see we rope them, and do not allow loose driving. I have seen the loose driving, and I think it is a bad principle.

896. You mean if they are loose they are apt to get hurt ?—Yes.

897. Because their heads are not secured ?—Yes ; he can move round the slaughter-house if he likes.

898. And probably he gets restive and upsets the others ?—Some cattle are perfectly quiet, but you cannot reckon on that as being the usual thing, because a good many are not.

899. As the result of your practical experience you think it a bad method to bring in several animals loose ?—Yes, and it is also dangerous to the men ; the bullock if he gets hurt and not killed is sure to be excited, and he may run round the slaughter-house and do a lot of damage.

900. Do you find cattle, on being brought into the slaughter-house, show signs of fear either at the sight or smell of blood ?—No, not at all.

901. You have never seen that ?—They smell at it, but there is nothing in it. I do not think they have any idea of what it is.

902. There is very conflicting evidence upon this point ?—I do not think there is anything in that at all.

903. And you never find that animals show great reluctance on being taken into the slaughter-house ?—Not generally ; you occasionally get an obstinate bullock, but, generally speaking, no.

904. Most of them go readily ?—Very freely.

905. Then as to calves, what do you say is the best method of killing a calf ?—They ought to be stunned before they are hung up.

906. And you do not think there is any great difficulty about doing that ?—No.

907. How is it done ?—They are struck on the head with a sort of mallet, or something of that sort ; it is not a poll-axe.

908. One witness suggested that it was not possible to do that in the case of calves, they were so skittish ?—No.

909. Then you hang them up and cut the head right off ?—They are bled from the throat.

910. That is the best method, you consider ?—Decidedly.

911. Then sheep ?—They are put on what we call a crutch—a small table—and they are bled there ; they are not stunned.

912. They are stuck and pithed with a knife ?—Yes.

913. Do you employ more than one man to each sheep ?—No.

914. Does one hold the sheep and another stick him, —That is sometimes done, but one man can do it ; where we are killing a lot generally one man does it.

915. You never stun sheep first ?—No.

916. Have you ever seen it done ?—No.

917. Do you consider there is any particular objection to it ?—I do not know that there is ; I do not see that there would be any objection to it, although the other method is quicker ; the moment the sheep is pithed all feeling would be gone.

918. I was only thinking of cases not so much in your big business, but in the country where slaughtering is on a small scale, and the men are not so experienced, as it

requires rather an experienced hand to pith a sheep with a knife ?—Yes, but, generally speaking, these country butchers are very expert in killing sheep ; anything they have had practice with they do very well. I have been in a great many of their places and I have seen very little to find fault with. Occasionally they may have a young man not accustomed to it, but he is not allowed, as a rule, to do it, and the older hands do it.

919. And pigs ?—I really do not know much about the pig killing ; as a rule I believe they are stunned by a mallet.

920. Do you consider it would be any advantage to make it obligatory for slaughtermen to be licensed ?—Yes, I think that would probably be a good thing.

921. I do not mean to charge a fee for the licence, necessarily, but the local authority would have some power over them, so that if a man misconducted himself, or was inefficient, he would lose his licence ?—I think it would be a good thing in this way : that a man would not get a licence until he showed so much experience ; I think it would not be a bad thing at all to have a rule to that effect.

922. What would happen if he was a man who was cruel ?—It would be taken away, of course ; no master would allow a man of that description to work for him.

923. Still it gives a pull over the man ?—Yes, and not only that, but I think it would be good for the men themselves to have a sort of pull up, because any man can become a butcher now, and if he has been in the slaughter-house a few days he thinks he is a butcher, but I do not think that is altogether right. I think it would be a good thing to have a licence.

924. Are your slaughtermen paid by piece-work or by the week ?—Our system at Deptford is this : we pay the foreman so much per head and he finds the men and pays their wages. Of course they are under our superintendence, but the foreman is really the man who pays the men their wages ; he gets so much per head for what he kills, and he employs the labour himself, as it were.

925. You do not think that piece-work tends to any carelessness in the method of killing ?—No, we would not allow anything of that kind.

926. If it was done on a large scale he might feel that the more he killed the more money he would make and therefore he would not take so much trouble ?—Yes, but they have to keep the quality of killing up, or the master would very soon find it out ; if they spoil any meat it goes against the sale of that meat, and the master has to look after it for his own interest.

927. Would it not be possible to cause unnecessary suffering to an animal without spoiling the meat ?—Not much ; I cannot see that there would be any inducement for a man to ill-treat an animal.

928. I do not mean that he wants to do it, but say he is given half-a-crown per head of cattle killed, and there is a large number to be killed, he might employ for the purpose of actually striking the animal with the poll-axe men who were not quite so skilled, either because he had to pay them less, or because he could employ more, and who might strike the bullock three or four times on the head before it was actually killed ; that would not necessarily affect the value of the meat, would it ?—Not if he struck the bullock on the forehead and put in the pith ; I do not think there is anything of that sort can take place, because the better the class of men he employs the quicker he gets on with his work, and it would not pay him to have a man who would do anything like that, because he would waste time and everything else ; and also if it was used on the back of the bullock's head it would show on the meat, and the master would soon find it out ; in fact, I think, at Deptford, Liverpool, and all these places where I have been, where there is so much killing going on, you may reckon that they do not miss one bullock in a hundred, and they kill them with the first blow. It might be even a smaller percentage than that, which may require a second blow, but it is less than 1 per cent., because they have practised men to do the work ; they do not allow the apprentice boy to do that sort of thing.

929. It has been suggested to us that the class of man employed in slaughter-houses has improved much of late years ; is that so ?—Very much.

930. What do you attribute that to?—Education, I should think; it has improved all classes of labour all over the world, I suppose.

931. But you think there has really been a great change?—Yes, and also a great change in their manners and habits of life and everything else—it is very much improved.

932. And there is really a very decent class of men employed?—Very good, indeed; there are plenty of very respectable men working there, and in fact we have got very few you could find fault with as workmen.

933. What sort of weekly wage does the average man in the slaughter-house—not the foreman—but the man employed, make?—I should think about 50s. to £3 for the best workmen, where they kill a lot. The foreman in a large place like that would be earning £5 or £6.

934. What is the lowest class of labour employed?—I should say they get nothing under about 30s., and there is only perhaps one out of the gang of five or six so low as that.

935. I suppose boys are employed too for catching blood?—Generally about one to each team.

936. He is a sort of apprentice?—He has less wages

than the others and he does the roughest work, such as catching the blood.

937. Does he work up?—Yes, generally speaking, and he becomes foreman sometimes.

938. There is nothing corresponding to the casual labourer class employed?—No, he must come up from a boy or he would be no good at all.

939. I did not mean the higher ones but in the slaughter-house there is no class of casual labour?—Virtually, no, they must have a good deal of experience, as the taking off of hides for instance wants a good deal of experience.

940. (*Mr. Game.*) The bullock here is sold in the market is it not?—Yes.

941. And if there were any careless or slovenly men doing the work you would immediately detect it when you got it in the market?—Oh yes.

942. And then you would make your foreman make such alterations as would put proper men on?—Quite so.

943. You could detect it directly?—We would see it in a moment; our beef at Deptford, I believe, is dressed as near perfection as possible.

944. And that would be a safeguard, that no inexperienced person would be allowed to go into the slaughter-house?—Oh yes.

Mr. Reid
(cont.).

Thursday, 18th February, 1904.

PRESENT.

Mr. ARTHUR LEE, M.P. (*Chairman.*)

Colonel F. T. CLAYTON, C.B.

Mr. ALEXANDER C. COPE.

Mr. CHARLES GAME.

Mr. GORDON MILLER, C.B.

Mr. SHIRLEY MURPHY.

Sir HENRY YORKE, K.C.B.

Mr. R. G. HAYES (*Secretary.*)

Mr. JOHN COLAM, called; and Examined.

945. (*Chairman.*) You are the Secretary of the Royal Society for the Prevention of Cruelty to Animals?—Yes.

946. And you have held that post for forty-four years, I understand?—Yes.

947. You have paid special attention in your official capacity to this question of slaughtering animals for food?—Yes.

948. You have not only taken a theoretical interest in the matter but you have also actually witnessed slaughtering on a large scale during that period?—Very much.

949. In addition to the ordinary slaughtering of animals as carried out in London and in the country, you have also, I understand, conducted experiments and witnessed experiments with a view to ascertaining any more scientific method?—Yes, demonstrations at least on half-a-dozen different occasions.

950. When was the last occasion you had any practical experiments?—I think the last occasion was when we attended with Dr. Adler, the Chief Rabbi, at Deptford, and I think that would be about four or five years ago; that was the third time, I think, that the question of the Jewish method of slaughtering had been investigated by us.

951. I understand that the most recent experiments, and those which have been conducted, perhaps, on the largest scale were the Leipsic series?—Yes, that was the only continental one I know of.

952. There has never been a large public demonstration in England of the same kind?—No, not at all; they have been more departmental, if I may say so; our society has been brought into the matter, and we have asked experts to attend.

953. You sent a representative of the society to Leipsic, —Professor Hunting?—Yes.

954. And he is to give evidence to-day?—Yes.

955. In view of the fact that both Professor Hunting and Professor Pritchard are coming as representing the society to-day as well as yourself, we naturally do not want to duplicate evidence more than is necessary. On what points do you propose yourself to give evidence mainly?—In the first place I am not a scientific man, but I have seen an immense deal of slaughtering, and so I have gained an experience which perhaps many scientific men have not acquired. I should say, if I may make a long story short, that the result of all my experience is this, that the poll-axe is the best instrument, when it is properly and efficiently used.

956. In the hands of an expert?—Yes.

957. Perhaps it would be better if we were to take each animal separately, and we will take oxen first of all?—As regards oxen, the poll-axe is undoubtedly the best weapon, because I have always noticed that there was an apparent death, as far as I was able to judge, after the cane had passed into the hole made by the axe—the punch hole made by the axe—which can be done very easily, as you will see by the illustrations I have given you.

958. We saw it actually at Deptford on Monday?—There was a great feeling at one time that the Bruneau mask would be better, because the animal being masked would not see the blow—a sort of sentimental feeling of that kind—so the Bruneau mask was brought over to this country with a view to its being adopted.

959. The Bruneau mask is not the mask we have, I think?—This is the Bruneau mask (*exhibiting*); it has

Mr. Colam.

Mr. Colson
(cont.)

a punch bolt which is knocked in with a mallet in *that way* (*describing*). When the mask is put on the animal you have to wriggle it into *this* position before you can put the bolt in when sometimes the adjustment is not perfect; it may slip a little, so then the cane cannot pass through in a line to the spinal column, and therefore then it is a failure as far as the cane is concerned. That is why we never touched it. I have seen it over in Paris, and there was the same difficulty, and they never could use the cane. There was another objection also. It is not every bullock that would allow this leather mask to be put on—certainly none of those you saw at Deptford, the prairie bullocks which come over from the United States. They are often as wild as can be.

960. They seemed very tame when we were there?—Sometimes they are very wild indeed. With regard to our own bullocks, unless they are very quiet stall-fed animals, they would not allow that mask to be put on. There is this difference: the Continental bullocks are used as draft animals very much and they become tame, while our bullocks that are used for food are not so trained, and they do not understand what you are about, and resent the mask when you are putting it on them. There is a great deal of difficulty in that way, so that mask was put upon one side.

961. What is the other pattern of mask—there is another pattern, I understand?—Yes, in order to obviate the difficulty I have mentioned the Baxter mask was invented (*exhibiting*). It is a similar kind of thing, and has also a punch which works out with a spring; instead of putting straps round the animal's head the mask is put on in that way (*describing*), and these two side springs fasten it on the head. It is managed very well and easily. The blow is given there (*showing*), and the method is described in a little pamphlet which I have put in. It has been used with a great deal of success. There is always a vast difference between the efficiency of carcass butchers of London and men in country slaughter-houses who only kill one or two bullocks a week; there is all the difference in the world between the skill of these men, who are a different class altogether; the former are efficient in the use of the poll-axe, but in the country places I have seen an ox struck two or three and even six times. With a very expert man, I have never seen an ox struck more than once in London, and I have seen hundreds killed.

962. I am quite ready to believe that; as regards London, the high wages the men receive in the slaughter-houses are sufficient to prove that they must be very highly skilled men?—Certainly, and there is a difference in the kind of labour they have to do and a division of labour, because one man nearly always knocks the bullock down in London butcheries.

963. We also saw that they did it very effectively in nearly every case. With regard to that second mask you have shown us, is it not difficult to adjust it in the right place?—No; one man stands with his mallet while the other is putting on the mask, and as soon as it is put on the blow is struck.

964. Are those springs sufficiently strong to hold it in place?—Oh yes, and they can be made of any strength you like; I have seen this used several times and with success. Then there is another instrument I will show you.

965. Before you pass from that mask I would like to know whether with it the difficulty about the cane is got over?—Oh, yes.

966. Because you can move it instantly?—Yes, that is what I have always said, and that is the reason I showed it to you—the springs eject the punch and the cane can be used in a moment.

967. So that the objection you describe to the first mask is not existent in the case of that one?—No, the objection to the Bruneau mask is not there. Then I exhibit another implement which was introduced to get over a difficulty to secure accurate aim (*exhibiting*). One man puts this instrument in exactly the right place, and then another man strikes it instantly. That secures accuracy of aim, but carcass skilled butchers never make a mistake; whether they strike in the back or in front it is always accurate. Even with bulls which have, as you are aware very likely, a thickness of skin over the frontal bone which it is very difficult to penetrate, and with the poll-axe

a great deal of care and precision are required when the bull is knocked down; if there are two good men in the slaughter-house the best man is always called upon to strike the blow for the bull.

968. It does not seem to me that that machine has any very great advantage over the poll-axe?—No, except when used by men who have little practice.

969. Because the man has still to strike the blow?—You must bear in mind that both by the Baxter spring and by this method you lose a little in the impetus of the blow; the blow upon it being lessened by contact with the bolt before it gets to the head.

970. But you have no doubt in your mind that in the hands of a skilled man the poll-axe and the pithing with the cane is the best method?—Very much the best, I say. We were very glad when the Greener was introduced, because we thought that method might be made applicable to small slaughter-houses, and for killing horses. I have been over to the inventor at Zurich twice for the purpose of getting it improved, for use in country places and in places where there is danger to human life in the using of it, and it does seem to me that it may be used with less uncertainty than the poll-axe when you cannot get a very efficient man to use a poll-axe. This you see is easily managed.

971. That is the Greener which fires a bullet?—Yes.

972. With that you do not use the cane?—You cannot, unless the bore is made larger; we had the bore made larger to get a small cane in the bullet hole. This is ours; Greener's is much smaller than that in the bore. We think the cane is absolutely necessary and that it ought to be used always for the purpose of breaking up the spinal column, and therefore we are very much in favour of the instrument that ensures getting the cane in, and we believe it can be done with our Greener. This is a little hammer they use to strike the detonator with (*describing*). You can easily understand, I presume, that where there is no very efficient poll-axe man this instrument might be used with greater advantage. What the ordinary Greener does as far as my experience shows is that it stuns and knocks down and it does not kill—I am pretty sure of it; I have had my watch out dozens of times to test it with the late Sir Benjamin Richardson, and we have always come to the conclusion that death did not take place until about, say, four minutes or five minutes.

973. But that would not apply if you used the cane afterwards?—If you got the bore large enough you could use the cane and death would take place immediately. That is the reason I went over to Zurich to see the inventor, for "Greener" is not the inventor, and he simply bought the invention.

974. Would the bullet not interfere with the cane because the cane would only be put up to the base of the bullet?—If that is so, it would interfere because we could not get the cane in afterwards, but one of the most singular things in connection with the use of Greener's killer is that we have tried to find the bullet several times and I think we have only found it once in thirty searches we have made. We never could find where the bullet went to, and the butchers did not know, nor did any one else. In that respect you see it is rather a dangerous instrument to use in the street.

975. Do you happen to know what weight the bullet is—what size—have you a cartridge there?—No, but I will send one on.

976. While on the subject of that, I see there may be very grave objections to a bullet of which you say the ultimate destination is practically unknown, and it is quite possible, of course, with the animal moving its head sideways that the bullet might come out of its neck, and even if it did not strike anybody, you do not like the idea of bullets flying about in buildings?—That is so.

977. But I understand there is an instrument practically of the same kind in which the bullet is replaced by a bolt like the bolt in the Bruneau mask, and that the explosion of the powder merely drives the bolt forward in the socket and performs exactly the same function as the poll-axe without any possibility of course of anybody being hurt?—I have not seen it; Professor Hunting, I think, will tell you about that instrument.

978. I understand it was an instrument of that kind that got the prize at Leipzig?—If you will just allow me for one moment I will show you the difficulty; what you really ought to aim at is to get the hole made by the bullet in exact line with the spinal column; if it is a little too high or a little too low, or a little on the one side or the other it will strike a bone and then will fly off and go out (*describing*.) The real thing, therefore, is to have it in line. When I went to Zurich the inventor said, "I think we could accomplish that by having a little larger bore, then the charge will be greater, and if the bullet should come close to the edge of the spinal column it would break away the bone and pass into the spinal column," and that was the idea we had. Our object has been to make this instrument as serviceable as possible, although we have never taken hold of it to recommend it yet without precautions and conditions—we are afraid to do it.

979. You do not really recommend it as a substitute for the poll-axe?—No. We did, however, recommend it to the metropolitan police; I will explain. Under Sir Frederick Banbury's Bill, when a horse is incurably injured in the street, it may be killed, but a veterinary surgeon must certify that it should be killed. Then a difficulty arises; the police will not kill, and the veterinary surgeon will not kill, which is not at all surprising considering that they have been made to pay penalties for killing by taking the law into their own hands, to order the killing by policemen. Our council thought, nevertheless, that it would be wise to put ourselves in communication with the metropolitan police and recommend this instrument to be used under proper precautions, and on two conditions we agreed to supply every police station in London with one of these instruments, the conditions being that there should be a man there appointed to use it, and only one person, so that all necessary precautions that could be given by him, and that we were not made responsible for the results.

980. Have you ever seen the killing of oxen by the pithing method—the stabbing in the neck?—Yes, I have seen that attempted several times but never very successfully done except once or twice in my opinion.

981. Have you ever seen it done by an expert who was accustomed to do it?—Yes, I have seen it done by a slaughterman who was accustomed to do it, and sometimes he failed; I think only an anatomist could do that.

982. Of course, as you are probably aware, in the south of Europe that is apparently the only method employed?—Yes, and sometimes, I am informed, they stab five or six times before they succeed in getting the stiletto between the vertebra.

983. I suppose it requires a most careful expert?—Yes.

984. Do you consider that, done by an expert, it is practically instantaneous death?—Certainly, because the spinal column is cut, and there can be no more sensation.

985. And therefore if it was possible to use it with certainty every time it would be as humane a method as any other?—Just so, but every man must learn it; you would have to wait until the man knew his business, before he could do it, and in even the small operation of unnering a horse, mistakes are made even, by professional men—excuse me for saying so, but it is really so.

986. Have you anything further to say on the subject of the method of slaughtering cattle?—Do you mean the Jewish method?

987. No, we are not going into that really. I think we are all agreed that the Jewish method of slaughter is a cruel method. I presume you are of that opinion?—Yes, I am sorry to say I am; I should like to be of another opinion, if I could, because I do not want to have the appearance of being intolerant, but it really is so. If you had seen what I have seen, for instance a bar as long as *this*, fastened to a chain, so as to get the animal's head twisted round so that the killer might get at it conveniently to cut the throat, you would agree with me; that is done invariably, and the poor things groan and make a terrible noise, enough to break your heart. I do not refer to venesection; venesection, in point of pain, is nothing in comparison; venesection is merely, of course, gradually dying, the casting also is bad.

988. I do not suppose it is suggested that the mere flowing away of blood is a painful thing, but the cutting of the throat is obviously painful, and the animal is left in that condition for some time?—Yes, but let me say this on behalf of the Jews, that there is the greatest possible care shown with regard to that part of the operation; the killer uses a long knife, and he never performs with it at all without putting his finger along the edge, to make sure that there is not the least notch on it; and if there is the least notch on the knife he does not use it; he is bound by ritual to do that, and in the scores of operations I have seen it has always been done.

989. I do not see that that makes any difference?—It would as regard the actual pain of cutting, of course.

990. I mean if your throat is cut and you remain alive for five minutes, the suffering you have during that time is from the fact that the throat is cut, and the fact of a notch on the knife would not make much difference?—I suppose there is not very much pain after the blood begins to flow—and yet—

991. I doubt that, but we are not following it up at present?—If you judge by the cries of pigs, there is a great deal, because in the farm-yards, where they do nothing but cut through the artery, the poor things make a terrible noise for a long time.

992. As regards calves, what do you consider the most humane method of slaughtering calves?—The best method I know is what is called the London method; straps are put on the hind legs of the animal, and a blow is given on the head with a big mallet like *this* (*exhibiting*), and the animal is hauled up by a pulley perfectly insensible when the head is really severed.

993. Do you say the animal is struck on the head before or after being hauled up?—Before.

994. I do not imagine that is the general practice in London?—I have seen it done both ways, but I think it is, and should be, done before you pull up the animal at all.

995. I presume it is quite an easy thing to stun a calf with that mallet?—Quite.

996. Where is the animal struck—on the forehead or the top of the head?—Just on the front top of the head; they do not make a bruise there more than they can possibly help, for obvious reasons.

997. And then it is run up by its hind legs afterwards?—Yes, and then the cutting takes place. I do not think the animal ever knows or feels anything. I have been knocked down twice by a blow on the head from ruffians but I never felt the blows.

998. I think that is as humane as anything can be if the animal is efficiently stunned previous to blood-letting?—I think so.

999. While on that point possibly you are aware that the official law in Germany and in Denmark, according to the information we have, is that all animals must be rendered insensible previous to blood-letting?—That is so.

1000. And we understand that effect is produced by the poll-axe; in the case of calves it is produced by the mallet, and therefore in those two cases if in the hands of an expert there is probably no pain?—That is so. May I say that the old method of killing calves was by slow bleeding; the animal had a wound opened in the neck and it was allowed to bleed so long, then a piece of tow was placed inside to stop the bleeding and this animal was fed with milk for a day; then the tow was taken out again and there was a little more bleeding and so on, and that went on for three days. When I first went to the Society we used to have great difficulty with that practice in many parts of the country but it is only in very remote parts of the country that it prevails now. The alleged object was to get what they call "white veal," but it is a delusion.

1001. Then as regards sheep?—I think there is great reform wanted in this country with regard to the killing of sheep. The theory is that the killer puts the knife into the neck there and passes the point of the knife between two joints of the vertebra, but I am sure that result is not effected, because it is not a really expert man who kills sheep; it is generally a lad or young man in the slaughter house who does that, and as a matter of fact I think perhaps they do not know how to sever the spinal column in some

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cases, and in other cases I think they often carelessly neglect to do it. Then of course the neck is broken over the edge of the cradle on which the animal lies; for after he has used the knife he forces the head downwards just to break the neck. After that there can be no suffering.

1002. We saw the killing of sheep by that method by a man who was admittedly an expert, and he was successful in a varying degree; I mean as regards time; but I quite understand it would be a very difficult operation for a man who was not an expert to perform with certainty; what do you consider is a better method?—I think Professor Hunting, our representative at the Leipzig demonstrations, will tell you more about the method of killing sheep, and I think the German method is a better one.

1003. You have nothing else to suggest that he will not tell us about the sheep?—Not about sheep.

1004. You do not think the present method satisfactory?—Not at all.

1005. Then pigs?—The farmyard method is the worst.

1006. I think we all know what that is?—I have often to denounce it, but I have myself stood in "Tom Cross's slaughter-house" at Copenhagen Fields during the time that ninety-four pigs were killed and I never heard a sound.

1007. How are they killed?—By this method: the man takes *this* lignum vitæ mallet and hits the animal on the head, the body is drawn forward and the throat cut, and there is an end of it.

1008. It is struck with a somewhat round-headed mallet?—Yes, lignum vitæ.

1009. Struck on the forehead?—Yes, on the top of the head; I have seen very big pigs killed in that way, and I think that is the best way.

1010. As representing the Society, have you anything to suggest in the way of bye-laws which should be enforced in slaughter-houses or methods of inspection, particularly of the smaller kind; in the bigger abattoirs there are not likely to be any abuses, but particularly in the country slaughter houses there might be; have you anything to suggest in the way of controlling them?—We cannot get into slaughter-houses if the owner says "You shall not come."

1011. You mean the officials of your Society cannot?—That is so.

1012. But you are in the same position as a policeman; a policeman cannot go either?—That is so, and therefore an inspector could not go, but if an inspector had the same power as a sanitary inspector then he could, and we are obliged to use the sanitary inspector over and over again when we have information about bad treatment in such a place; we get him to go. I think the rules made by the London County Council are very good indeed in that respect.

1013. With regard to the small country slaughter-houses, they are practically exempt from any kind of observation, are they not?—Yes, except the observation of children, who often can look in and see the slaughtering going on.

1014. But there are practically no rules at all for the control of them?—Quite so.

1015. Can you suggest any way in which control can be exercised under the existing law?—I should think the urban authorities might have power to make rules, if they have not got them, for the management of slaughter-houses.

1016. They would need a staff of inspectors?—Yes. If not, so far as we are concerned we could not undertake to inspect all the slaughter-houses of England and Wales. We have in nearly every large town an officer whose duty it would be in such a case as that to go and look on and make any suggestion or report.

1017. It should not be in the hands of a private society, but should be in the hands of the State?—Quite so; and there is a very strong feeling at Scarborough at the present time and at Whitby for instance that there should be some provision of that kind made.

1018. I presume the great safeguard is to have public abattoirs?—Yes. I should like to make one little deviation in my opinion from yours if I understood you rightly; I think there is a great need for inspection of public slaughter-houses even at Copenhagen Fields and Deptford.

I think and am told there is often cruelty there, and the appearance of our uniform would be serviceable there.

1019. I did not suggest there was no need for it; I only said there was not so much need as in the case of small country slaughter-houses?—The carcass butchers naturally do everything for expedition to get their work through, and that is why I say that inspection is needed. The cutting butchers in London who slaughter according to what they may require for to-morrow's orders, generally do their slaughtering immediately after shop business is over in the afternoon, and perhaps the master looks on or perhaps he does not; at all events it would need a very large staff to see all these people slaughtering if every slaughter-house in London had to be looked into. Some years ago when we made a special inquiry into this matter I think I am right in saying that there were about 2,000 slaughter-houses altogether in Larger London. I cannot say off-hand that that figure is right; but our inquiry was with a view to getting wider entrances into slaughter-houses; it was in the time of the Board of Works before the County Council was established, and we made a report to them and as a result wider entrances were made for the animals to pass into the slaughter-houses. You see that was a very large business.

1020. Is there any other special point you would like to bring forward?—May I call your attention to the pamphlet I have put in.

1021. We have had this before us for some time?—There is one table in the pamphlet I want to call your attention to; it is in regard to the pithing by means of the cane.

1022. What page is it on?—On pages 22 and 23. I asked the gentlemen named there, Dr. Benjamin Richardson, Dr. Pavey, Mr. Flower, Professor Pritchard, (who will come to you to-day), Professor Fleming who was a veterinary surgeon, and Professor Walley, another veterinary surgeon, various questions, and you see the questions on the left hand side. The first question is: "Does the operation of pithing cause severe pain to an animal already stunned by the poll-axe?" and you will see their answers, to which I call your attention, because the question of pithing by means of the cane is one we have been talking about, and I am sure you will consider that point very well. They say that it causes no pain. I think they are pretty well unanimous in their opinions on all the four questions we asked there; I need not go over them because I will leave the papers with you.

1023. I do not think there is any doubt in the minds of the Committee about that?—If at any time before your inquiry is finished you require me again I will be glad to come.

1024. (Mr. Game.) I should like to ask one question. You say that you consider the killing of sheep cruel, more especially in the country districts; can you suggest any way in which you think you could get over that?—No, except that Professor Hunting will give you to-day some better way which he has seen and which I have not seen.

1025. You said just now that these country slaughter-houses were not obliged to be licensed. We have here a Local Government Board paper in which it says that the Commissioners, the Urban authorities, shall from time to time by bye-laws make regulations, and license and regulate the inspection of slaughter-houses, so that it is not optional?—I intended to say that I thought they had powers which were not exercised.

1026. (Mr. Gordon Miller.) Do you think matters might be improved in the country by requiring persons to obtain a certificate of proficiency in slaughtering before being allowed to kill an animal?—Yes, but would not that be very difficult? It is more difficult than getting a certificate of proficiency for driving a horse in London which has been tried and does not often succeed. You know there is always this point you have to bear in mind, that the man has to learn his business. The old swordsmen of France had to learn it on a great cabbage which was put on the end of a pole, and he had to cut off the head sharply with his sword, and it is the same with regard to the poll-axe and every instrument in the slaughter-house, it has to be learned by degrees, and I think the practice is to let the boys try it on the sheep first.

1027. (Chairman.) I see no objection to the certificate; it need not be a certificate of proficiency, but if you have

a certificate you have a hold over the man, because you can take it away for any misconduct, so that that form of certificate is surely of very great value?—Yes.

1028. (*Mr. Gordon Miller.*) It might be possible to arrange that a man might become proficient in striking by practice on some instrument and not on an animal?—Yes, and he might be proficient in one branch of killing and not another, but of course it would only apply to those men whose duty it was to destroy life. I should like to see your suggestion carried out, because, taking a similar case, we find that the power given by the Markets Committee to the drovers, where they have a licence, is of very great service, because if we report one of these men for cruelty it is taken notice of when he asks for a renewal of his licence.

1029. (*Colonel Clayton.*) Would there, in your opinion,

be less likelihood of cruelty in killing animals if the slaughtering was done in public abattoirs, and no slaughtering was done in private slaughter-houses at all?—Certainly, for then you would have better inspection—ever so much better. That would be a blessing.

1030. (*Sir Henry Yorke.*) But would that be practicable all over England—to prevent slaughtering anywhere except in public abattoirs, in every village and every town?—I suppose it would; it is practicable in Switzerland, and in a village in Switzerland you see that the animals are all brought from the various butchers and slaughtered in one particular slaughter-house.

1031. (*Chairman.*) Is not that the case in Germany also?—I do not know about all the states of Germany, but it is done in some of them.

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(*cont.*)

Professor WILLIAM PRITCHARD, F.R.C.V.S., called; and Examined.

1032. (*Chairman.*) I understand that you are a Professor of the Royal Veterinary College of London?—I was for twenty years.

1033. Have you now retired?—No, I am in private practice now. I may tell you that I resigned my position at the College.

1034. I understand you have given a great deal of attention to this subject of the slaughtering of animals for food?—Yes.

1035. We are anxious, of course, as far as possible, not to duplicate any evidence which has been given by Mr. Colam, and I do not know to what extent you have arranged with him beforehand, but we shall be very glad if you will give us the gist of your wide experience as to the best and most practicable methods of slaughtering the different animals, taking cattle first, and then calves, sheep and pigs afterwards?—In answer to the first part of your question, I have had no arrangement with him at all as to what evidence I shall give here. To sum up on a few words what I think is the most humane way of killing an animal which involves a certain amount of dexterity, it is the poll-axe.

1036. In the hands of an expert you consider it the best weapon?—Certainly, and when I say an expert, the man must have some little experience at all events.

1037. In the country districts where perhaps you are not so likely to have expert men, is there any other method you would suggest?—I am not a Londoner, and I have seen it done in the country; I have seen animals generally slaughtered in the country.

1038. And do you consider they are as well slaughtered in the country, as a rule, as in London?—I think so.

1039. Even with a small village butcher?—I would not say that.

1040. I did not mean the provinces in the sense of country towns, but I meant actually in small villages?—I am speaking of rather a large country town now of 150,000 inhabitants.

1041. There it would be the same as here probably. Have you seen any of these masks used?—Yes, some of them.

1042. There are two patterns there by your side on the floor?—I have seen the Bruneau mask used.

1043. That has to be strapped on?—Yes.

1044. Do you believe in that?—No, I do not.

1045. Have you seen the other pattern used?—I do not think I have seen it used, but I have seen it.

1046. I presume there is less objection to that?—Well, I think one very great objection to both of them is the irritating of the animal to put them on to begin with.

1047. You say you have seen a good deal of slaughtering in the country; are there any special defects or abuses in the methods of slaughter or the conduct of slaughter-houses to which you would like to call our attention?—No; on that question I will make this remark, that I think if a man had but few cattle to slaughter in a country slaughter-house he would not be so adept as he might be. I am now speaking of a country district entirely, and not of towns with 150,000 inhabitants.

1048. But in cases where a man does not get sufficient practice to become very expert, is there anything you would suggest in the way of regulations or methods which would be in the interests of humanity?—That is rather awkward to answer. The probability is that if there were a few country villages in close contact, one man might be employed to do the whole business.

1049. That would be met, I presume, by having a general public abattoir for the three villages?—Yes, I should advise that certainly.

1050. You are generally in favour of all animals being slaughtered in a public abattoir?—Yes.

1051. And do you see any great practical difficulties to doing that in the country?—No, I do not think so; if it was made law I think it would be easily carried out.

1052. With regard to the killing of calves, what method have you seen as a rule?—Unfortunately the method I have seen has been rather a cruel one; they have generally been bled until pretty nearly dead and then allowed to recover.

1053. You have actually seen that?—Yes.

1054. Of late years?—No, not recently.

1055. Do you think that is the practice now?—Well, I have nothing to fall back upon, but I should be inclined to think it is the practice in certain places.

1056. In remote country districts probably?—Yes.

1057. But it is not the practice in the big towns you speak of?—I do not think so.

1058. What do they do there? Do they generally stun the calf before hanging it up?—Yes.

1059. And then cut its throat?—Yes.

1060. And as to sheep, have you any views as to the most humane method of killing sheep?—The principal method of killing the sheep is of course to cut its throat and at the same time to dislocate the upper vertebra from the head.

1061. Do you mean by breaking the neck or pithing with a knife?—Breaking the neck.

1062. Is it not the more usual method to pith with a knife, to thrust the knife in?—I must understand that word "pithing."

1063. The severing of the spinal cord with the point of a knife from inside?—If they broke the neck backwards it would have the same effect.

1064. And pigs?—I suppose we ought to adopt the American plan, and first stun them and then stick them.

1065. I do not think that is the American plan, at least not the Chicago plan, to stun them; there they stick them without stunning?—Well, I have been misinformed.

1066. Do you consider that animals show any signs of fear upon being brought into a slaughter-house either from the sight or smell of blood?—Are you speaking of oxen or sheep?

1067. Take oxen first of all?—I really do not think there is any importance to be attached to that.

1068. Do you consider that they do show any signs of fear or that they do feel it?—I have not been able to

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Professor
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F.R.C.V.S.
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notice it, but this I have noticed : if you take a horse to a slaughter-house you will sometimes have a little difficulty in getting him into it, but I think that depends more on the stench arising from other causes than the sight of the blood.

1069. That is a horse, but we are not going into the question of the slaughter of horses ; do you consider that cattle show any signs of fear from the same cause ?—I do not think so.

1070. But you have not paid much attention to that particular point ?—I have done ; I have seen it.

1071. You were a little indefinite ; you said you did not think so, but you have not formed any strong opinion, have you either one way or the other ?—I do not think there is any importance to be attached to it.

1072. And in the case of any other animals, have you seen anything of that kind ?—No.

1073. (Mr. Gordon Miller.) Do you think it would improve matters in country districts if facilities were afforded for instruction in the most improved methods of slaughtering at convenient centres ?—Yes, I think so.

1074. So that any person who wished to be employed in slaughtering could go and obtain a few lessons or a brief instruction as to the most approved and humane methods ?—Yes, I think instruction by a selected man would be good.

1075. (Sir Henry Yorke.) With regard to your evidence just now about the sight and smell of blood, do you distinguish, as far as you can tell any difference, between the animal's feelings at the sight or smell of blood, and the sight or smell of anything else strange ?—You are speaking now of cattle and sheep ?

1076. I am speaking of cattle ; if they see a strange thing—?—Or have a strange odour ?

1077. Or have a strange odour, I imagine they take notice of it ?—Certainly.

1078. Do you think that applies more in the case of blood than it would in the case of any other strange thing ?—No, I think it applies less.

1079. (Mr. Game.) In the case of really rural districts with a butcher doing a small trade, would he not in many instances kill his own things ?—Yes, that is the present arrangement.

1080. And they learn their trade and do their own business themselves ?—Yes.

1081. Would it not be a good deal of loss of time, and other expenses, if they had to travel six or seven miles to a public abattoir in a large town from the rural districts ? It would cause an expense on the animal ?—I think it would be very trifling.

1082. The animal would not walk back again ; he would have to be carted if he walked there ?—But the man must walk there ; that is my idea.

1083. Yes, but the bullock ; you were asked just now, supposing there was a public abattoir in a large town, that they should be obliged to kill them there instead of in the rural districts ; but would not the butcher in a rural district be put to much larger expense by having to take his bullock and two or three sheep, as the case may be, to the nearest town to have them killed at the public abattoir ?—He would be put to some expense, it is true, but I think that expense would be moderated to a very considerable extent by not having to slaughter at his own expense.

1084. (Mr. Cope.) When we were at Deptford the other day, we went to see the sheep slaughtered, and we found that the system they adopted there was to put the knife in and cut the throat, and then they raised the head backwards and exposed the spinal column (*exhibiting a sheep's skull to the witness*) ?—Yes.

1085. And then in drawing it back he turns the knife sideways and pops it in there and cuts the column ?—Yes.

1086. That, presumably, would cause instantaneous death ?—Yes.

1087. We found that occasionally the animal did not die instantaneously, and we are under the impression that unless it is a very skilful man who does it he does not divide the whole of the column ?—He should put his knife in *there* or *there* (*pointing on the skull*) ; that is the proper place.

1088. But he cannot do that at the same time as he cuts the throat ?—No, but at the time he cuts the throat, if he pressed the vertebra backwards and broke the joint between the base of the occiput and the atlas, death would be instantaneous.

1089. Do you think that would be more satisfactory than what he does by the ordinary system ?—Certainly ; the animal could not live for one moment after that.

1090. (Chairman.) Is there not the practical difficulty of pithing a sheep from the back of the neck ?—Not if the man knows how to do it.

1091. (Mr. Cope.) It is all done at one time ; the man cuts the throat and then he turns the knife and puts it in *there* (*pointing on the skull*) ?—That is done by an unskilled workman, I should say ; if he were to take hold of the sheep by the nose, and put his hand at the back of the head and push it backwards, he would dislocate the neck, and death would be instantaneous without the use of the knife at all.

1092. (Mr. Murphy.) Is there any reason why the spinal column should not be divided before the vessels are cut ?—Oh, no, not at all, but you want a very skilful man to do it. The Spanish matador does it.

1093. That is from behind ?—Yes.

1094. But I meant from in front when the knife is first passed into the throat ?—That would be rather a difficult thing to do with an ox.

1095. I am speaking of a sheep ?

1096. (Mr. Cope.) Why should he not divide the spinal cord first and then use his knife to cut the blood vessels ?—I do not see that you would gain anything by it ; he would be pretty clever to put the knife in and divide the spinal cord without getting alongside the carotid arteries ; it is an operation I should not care about undertaking.

1097. He would cut the arteries ?—He is certain to.

1098. (Mr. Murphy.) I am not suggesting that he should divide the arteries, but that his first object should be to divide the spinal cord, leaving the severance of the blood vessels to be accomplished afterwards, if they were not effectually divided at the first stroke ?—In answer to that question, if Professor Cope will put these two bones together as they are in the living animal (*Mr. Cope did so*) ; that is the living position and you see there is a very small space.

1099. (Mr. Cope.) Yes, but what the man does is that he puts his knee on the neck of the animal and then he raises its nose, and then you have a large space ?—I think the most facile mode of going to work would be to press the sheep's nose a little further back and his head a little further back, and dislocate the neck, and at the same time sever the spinal cord.

1100. I only asked you that because I thought you might be able to make some suggestion for an improvement on what they do ?—I am sorry I cannot do that.

1101. (Mr. Murphy.) Have you any experience of the stunning of sheep ?—Very little ; there would be no difficulty about stunning a sheep.

1102. (Chairman.) Where would you strike a sheep to stun it ?—Between the ears.

1103. It would not be necessary to break the skull ?—Oh, dear no.

1104. Do you consider that would injure the meat ?—No.

Mr. WILLIAM HUNTING, called; and Examined.

1105. (*Chairman.*) Would you mind telling us exactly what your official position is now?—I have no particular official position; I am a veterinary inspector to the London County Council.

1106. And in that capacity do you inspect slaughter-houses?—No; my knowledge of slaughter-houses has been obtained entirely from private observations and through the Royal Society for the Prevention of Cruelty to Animals.

1107. Have you visited slaughter-houses yourself?—Yes, all over Europe.

1108. And with the special view, I presume, of ascertaining the most humane methods of slaughter?—Yes.

1109. I have had the advantage of seeing your report upon Leipzig, but I would like to know a little more about that. I understand in the first place that this trial was arranged at Leipzig on a very large scale solely with the object of ascertaining the most humane methods of slaughter?—Yes, but solely applied to the smaller animals; oxen were not included in it, excepting for some electrocution experiments.

1110. I remember your referring to those in your report. I presume the reason for not including the larger animals was that existing methods were considered to be satisfactory?—I think that was it, and the bolt apparatus which was used, instead of the Greener bullet apparatus, was not powerful enough to kill a bullock; they had none powerful enough to knock a bullock down in those days.

1111. I presume that would be only a matter of a little difference in construction; there is nothing in the principle?—I am not very sure; they have not got the principle right yet. It is a matter of detail, of course, and no doubt it could be overcome.

1112. Then for the moment we will leave the Leipzig experiments and go back to the larger animals, cattle; can you give us generally your opinion as the result of your investigations as to the best method of killing?—The ordinary butcher's poll-axe, when used by an expert, is the very best method of killing the animal.

1113. Supplemented by the cane afterwards?—Supplemented by the cane, but the cane has very little to do with the killing. The cane is put in to protect the butcher against involuntary movements afterwards; that is all the cane is used for. The butcher does not want to kill the animal by breaking up the medulla, that is only to stop the involuntary movements; if he did not he would be kicked. To begin with, bleeding is the next stage, and the muscles of the neck twitch when he tries to cut down on the jugular and carotid, and again, when he starts to skin there are jerks of the muscles, and so on?

1114. Is it your opinion that the first blow of the poll-axe causes death?—No, but insensibility; the heart does not cease beating until nearly five minutes after poll-axing, but I never knew an animal to recover after poll-axing.

1115. The object of the cane, apart from the other object you have mentioned, is to cause death by the breaking up of the spinal column?—What do you call death? If it means movement, death certainly.

1116. Lack of sensibility, then?—Yes, insensibility; but the use of the cane does not produce insensibility any more than the blow of the poll-axe; it merely breaks up the medulla, which controls involuntary movements. There are some awful delusions about the use of canes and poll-axes.

1117. It is certainly a delusion which is supported by a good deal of professional opinion; I take as an example Dr. B. W. Richardson, who says, "The process of pithing kills them outright and immediately."—Well, Sir Benjamin Richardson was not much of an authority.

1118. And Dr. F. W. Pavay says, "The process of pithing at once kills."—I do not know what they mean by killing.

1119. And there is also the opinion of Professor Flower of the Royal College of Surgeons. He says, "Pithing if effectually performed must cause certain and instantaneous death."—It is simply a matter of the definition of death; I suppose they mean movement.

1120. There is a good deal of professional opinion upon that point; after all, what we are concerned with is the humanitarian aspect, and the pithing undoubtedly has the effect of preventing the animal feeling any further pain?—It has the effect of stopping movement; he feels no more pain after being poll-axed, or after concussion of the brain from a hammer even; there would be absolute painlessness.

1121. Does that last for any amount of time?—No, he might recover from concussion of the brain, but he never recovers from poll-axing.

1122. (*Mr. Cope.*) Or pithing?—Or pithing. The word "pithing" is strangely mixed up; pithing is not really the use of the cane at all, but the division of the spine in the neck such as is used in Portugal, Spain and Italy.

1123. (*Chairman.*) Have you seen the method used in Italy of pithing with a small dagger?—Yes, in Portugal it is the same.

1124. Do you consider that effectual?—Very, in the hands of an expert.

1125. But I presume it requires very expert hands?—I never saw a man make a mistake; I never saw a man hesitate a moment. Of course all their animals are very quiet; they have nearly all been worked, and the man stands in front and gives the bullock a tap on the nose to make him bend his head, and that opens a space between the first and second vertebra, or the brain and the first vertebra, and he never makes a mistake. The younger men all used a dagger and struck downwards; the older men simply laid their knife over the frontal enlargement that connects the two horns in that direction (*showing*) and gave it a forward and downward movement, and the work was done just as effectually as when struck with a dagger.

1126. Do you consider that that causes instant lack of sensibility?—All behind the wound; it is a very old physiological question as to what happens to the head, and I do not know.

1127. It is the old controversy as to what happens when a man is guillotined?—Yes.

1128. But everything behind the wound is rendered insensible at once?—Utterly.

1129. Do you consider then that that is as good a method as the poll-axe or even perhaps better?—You would not be able to do it so well with the wilder cattle; if you have animals that have to be roped up to a ring then their noses would be extended, and difficulty might arise.

1130. I presume it depends a good deal upon the animal's coat and the breed of the animal; I mean there might be more flesh?—Not in the hands of an expert.

1131. Of course that means really a man with certain anatomical knowledge?—No, they have no anatomical knowledge, it is simply a matter of practice. How he gets on with the first one I do not know.

1132. They do not use the cane with a dagger?—No, because you have divided all connection with the brain.

1133. (*Mr. Game.*) Does that make the bullock so that you can open the veins of its neck afterwards?—Yes, they bleed them immediately they fall; they fall utterly paralysed.

1134. There is no danger from its fore legs?—They never move.

1135. (*Chairman.*) It really has the same effect as pithing with the cane?—Yes.

1136. What other methods have you seen that are successful, I do not care about those which are not?—There is the use of these masks; at Leipzig all the bullocks were killed with Bruneau's mask and a large heavy mallet. Then there is the ordinary London poll-axe.

1137. With regard to these masks there are two patterns, one Bruneau's, and one which clips on; do you know both?—No, only Bruneau's.

1138. What do you think of it?—It did remarkably well there, they were all quiet animals, and it was easily put into place, and although the animal falls with it on there is no such great hurry to get the cane in; it does

Mr. Hunting.

Mr. Hunting (cont.) not take more than a minute or half a minute to get the mask off, and then they use the cane.

1139. The advantage of the other mask with the clip is that you can use the cane at once?—I am not very sure about different sized heads with that fixing spring of Baxters; if there is a certain size of head it does all right, but animals vary.

1140. I suppose it is quite possible to use those masks when you have a quiet animal?—Yes.

1141. And then it is a very good method?—Yes.

1142. Particularly when you have not got an expert?—Yes, a slaughterman cannot very well go wrong.

1143. But in the case of a rather wild animal or an excited animal it would be very difficult to put it on, would it not?—With an excited animal they might rope him and fix the head up somewhere; if he is fixed more or less I do not see how they could not get it on then. He would have to be roped and pulled up to a ring.

1144. But generally speaking would you advocate the use of the mask in small country districts, for example, where you are not so likely to get an expert?—Certainly; I do not know about South of England country districts, but in the north the hammer is still used, which I think is a most abominable way of stunning them—simply a big hammer.

1145. And where do they strike them—on the poll?—No, on the frontal bones just below the horns.

1146. Which merely stuns them, of course?—It would be all right if it did that at once, but it takes five or six blows to stun a thick-headed bull or ox.

1147. Is it a sort of sledge hammer?—Yes, such as a blacksmith uses.

1148. Is that done now?—Yes; it is commonly done in the North of England in the villages and small towns.

1149. The only way to get over these sort of local abuses is to have public abattoirs, I suppose?—That would be the proper thing, but it is difficult.

1150. We were very much interested to see in the German laws on the subject the one simple preliminary provision which was that all animals should be rendered insensible previous to blood letting; that seemed to me to be a very admirable law, if it could be carried out; can it be carried out?—All animals, including the small animals.

1151. Do you find it is enforced in Germany?—In all that I have seen in Germany, yes.

1152. I suppose there they go in for large public abattoirs, with a great many inspectors and so forth?—Yes. In France, at La Villette at any rate, the smaller animals are not stunned, even in the abattoirs, and I am inclined to think that death is very rapid and comparatively painless.

1153. Before we come to the smaller animals, I wish to ask you one more question about the larger ones. In the course of your practical experience have you been able to form any impression as to whether cattle show any signs of fear either from the sight or smell of blood?—I do not believe they pay the slightest attention to it. In Portugal and Spain, in particular, where animals have worked, it is very difficult to get the two apart to do anything with them, and the result is that they walk the two animals which have been working together into the slaughter-house, and one of them is pithed, and when his mate has fallen dead the other one walks out just as comfortable as can be, but as long as his mate was alive he would not. Up at Islington here you could see, not so much now but a few years ago, when they used to sell all the "wasters" there, a dead one lying in a pen and another one eating hay across him, perfectly happy.

1154. It is not so much the question of death as a large quantity of blood?—I think the smell of blood seems to upset some animals until they get used to it, the first time they come across it.

1155. But the first time they come across it is also the last, is it not?—It is not a fear; it may make them excited, but plenty other smells may do the same thing. I do not think there is any horror of death or fear of death.

1156. I do not suggest they know what is to happen to them, but does the smell of blood produce a state of

excitement in the animal, do you think?—No, not particularly; I have known cattle get a little excited, but plenty of other circumstances occurred, and I did not know which to blame for it, when they have been pulled about, knocked about, and driven into the slaughter-house. Otherwise you see cattle pass through a slaughter house without a sign of excitement.

1157. Do cattle perspire? Is it a natural process in an ox?—No.

1158. They never perspire?—I never saw healthy cattle perspiring.

1159. The other day at Deptford the only unnatural thing I noticed about the cattle was that they seemed to be in a profuse perspiration?—They were packed closely, perhaps.

1160. Then it is possible for them to perspire?—Yes.

1161. I have heard it suggested that cattle could not perspire under any circumstances?—Like the dog? It is not common, but I have seen cattle and I have seen a dog perspire, but it is very rare. It is not as with a horse.

1162. That state might be due to some unnatural excitement?—I never saw it as the result of excitement; I think it was more due to pain, or heat, or something of that kind.

1163. It was the only symptom I noticed at Deptford the other day which I could not quite explain—that several animals, whilst they were perfectly quiet appeared to be in a profuse perspiration, and the weather was not hot, nor were they crowded?—I do not know how to account for that.

1164. Now with regard to the smaller animals—can you tell us the general result of your experiments at Leipzig and your experience generally?—At these experiments they used all sorts of appliances for the production of insensibility, Green's killer, and various other things, which fired a bullet, and then some modifications which fired a bolt.

1165. The bolt did not leave the instrument?—No. An instrument of that kind, something like one of Green's killers, took the prize. It propelled a bolt which did not leave the instrument and was struck *here*, not with a mallet, but on the end of this needle there was an enlargement the size of a halfpenny which the man struck with his own hand, and it seemed to me very much simpler. You could imagine that it would be possible for a man to miss that with a mallet, but with his own hand he could not miss a thing the size of a halfpenny.

1166. (*Mr. Gordon Miller.*) Is that the Blitz apparatus?—I forget the name.

1167. (*Chairman.*) The bolt of it was like the bolt of a poll-axe or the bolt of a mask?—Yes.

1168. And then the instrument was withdrawn, I presume, and the cane used?—No, no cane was used, neither for pigs, calves, nor sheep.

1169. Did you find this work equally well with sheep?—Yes, it worked equally well with all three.

1170. Was there any difficulty in finding the exact place to apply it?—No.

1171. It was the forehead in each case?—The forehead in each case.

1172. Was it suggested that in the case of sheep, for example, any injury was done either to the sheep's head or to the scrag of mutton, which would depreciate the market value?—No, I never heard anything of that kind.

1173. Was that point considered at the time?—I do not see how it could arise exactly with the bolt.

1174. Only that it has been suggested to us by practical butchers who have given evidence that even to stun a sheep with the mallet would injure the market value of the carcass?—The price of a sheep's head is very small.

1175. It was not so much the head that they said would be damaged, but they said it would cause a certain suffusion of blood, which would affect the scrag of mutton?—No, I do not believe any such thing. There is a curious and very widely accepted idea—I do not know whether it is true or not, but it is so widely accepted that possibly it is—and that is that a shot animal will not keep so long as a poll-axed animal; nearly every butcher and every horse slaughterer will tell you that.

1176. Do you believe it is true?—Do you see any scientific reason for it?—No, I see no reason for it, and they have so many queer notions that I do not think it likely to be true.

1177. The instrument you described did not have a bullet, it was simply a bolt?—Yes.

1178. And therefore the effect on the animal would be precisely the same as if it was poll-axed?—Yes.

1179. And therefore there would be no question of difference there as to keeping?—No, there could be no difference there in keeping.

1180. And that was applied to calves?—Calves, sheep, and pigs.

1181. With perfect success in the case of one instrument?—Yes, there was never a failure.

1182. And you would therefore advocate the use of an instrument of that kind for the slaughter of the smaller animals?—Yes, I should, the object being to produce insensibility.

1183. You have seen sheep killed, of course, in England?—Yes.

1184. Do you consider it a humane method?—No, I do not; I consider it an utterly abominable sight to see the men (and I cannot understand why they do it) lay the sheep on its side and stick it, and try to find the blood vessels with their knife, when they might divide the whole lot with one stroke.

1185. Are they not trying to find the vertebra through this opening?—Only afterwards, only after he has bled, towards the end of his bleeding.

1186. We saw some sheep killed at Deptford the other day, and the process appeared to be that the man put the knife first of all through behind the ear, and after he got it inside he twisted it and got the point into this opening (*describing*)?—Yes, towards the end; he twists it so as to make sure of dividing all the blood vessels first, and then he uses it to pith them really, but you see some of them trying to break their necks at the same time; a man will use his knee and his hands three or four times in an attempt to break the neck, and he will try to get his knife in below *there*.

1187. We saw a man who was thoroughly expert, and in one or two cases he apparently killed the animal instantaneously?—Yes.

1188. But I must also say that in three out of five cases it was not instantaneous, and therefore it is probably not an absolutely certain method?—It is much more difficult to enter the spinal canal below than it is from above.

1189. Do you think it would be possible to pith them from above?

1190. (*Mr. Cope.*) It requires you to use the knife twice?—Yes, but I cannot see the objection to the extreme simplicity of the French method, and that is simply to stretch the animal's neck and cut its throat down to the bone at one stroke; that is really the same as the Jewish method of killing oxen.

1191. (*Chairman.*) Yes, but do you consider the Jewish method of killing oxen a good method?—Barring the casting and extending the head, I do not see anything wrong with it.

1192. When you say you cut the throat right through, that does not sever the spinal cord?—No.

1193. (*Mr. Game.*) If it did, that would be different from the Jews?—Yes.

1194. When he cut the throat right through he could soon do the pithing?—With the sheep he had only to bend the head a little over and he could pith it with absolute certainty with a cut like that.

1195. (*Chairman.*) What is the advantage of that method over stunning them first and then bleeding them?—Only that it saves time.

1196. How?—Stunning a sheep is easily enough done with a mallet, but I have seen a man have to hit twice at a sheep to stun it—the prominent poll rather protects the sheep's head from the ordinary mallet. Abroad they use a thing like a policeman's staff loaded at the end, a size larger, and that does very effectually both for calves and sheep.

1197. Surely that gets over the difficulty of lack of expert knowledge better than anything else, does it not, because the animal is stunned by the blow and then even if the man is not very expert with the knife the animal probably feels nothing?—Yes, I do not think you would get quite as much blood out of an animal when you have damaged his brain and stopped his heart as you would by throat-cutting without any of these processes on the brain. The more effective and more thorough bleeding means the better keeping of the carcase.

1198. You think that the French method as you describe it is the most humane of all?—I do; I never saw a sheep suffer less, and it is perfectly simple—you cannot make a mistake with it.

1199. (*Mr. Cope.*) Do you mean that they make a complete gash right across?—Yes.

1200. And break his neck to finish it up?—Yes, they are laid in a trough shaped thing.

1201. (*Chairman.*) What is called a crutch?—I do not know what they call it.

1202. Have you anything else that you could suggest to us in the way of approved methods or appliances?—I do not think so. I think the poll-axe is the simplest thing of the lot.

1203. In the hands of an expert?—Yes, and next to that the least objectionable is the Greener.

1204. Do you mean the Greener or this instrument with the bolt?—For the large animals they have not got that right yet. There is this instrument in the box here, a perfectly useless thing (*exhibiting an instrument shaped like a pistol*). First of all the weight of it is an objection, and in the second place it is exceedingly difficult to lay a thing like that on a flat surface and hold it there. Every one of the pistol shaped apparatus at Leipzig were failures, and many of them simply because the man could not steady them—they wobbled.

1205. That shoots a bolt out?—Yes, and the bolt protrudes like that and is drawn in again, or ought to be (*describing*). When we tried it up at the abattoir the first animal that was submitted to it went down wonderfully; you saw nothing; you heard very little, and the animal fell. Then the men commenced to bleed it and the result showed the bolt had not reached the medulla; you could not pass the cane in because the hole was too small and the twitching of the muscles made it difficult to bleed the animal so that they had to poll-axe it. At the next shot we had a thicker skulled animal, and instead of the bolt penetrating the skull it went on to the skull and the pistol was driven back with the man's hand like that (*showing*). At the third shot the animal went down and the bolt remained protruding and we had the greatest difficulty in getting the bolt back; it stuck, and when they wanted a fourth shot I left the building wondering at which end the explosion would come out, because when the bolt stuck out it was very difficult to get it in and I thought it might stick in. There are two or three details about the thing that are wrong; it is tapered like that (*pointing*), and that makes an extremely small hole, one you cannot get the cane into. The bolt ought to be the same thickness all along, and then the cane might be used.

1206. We are quite ready to accept your view that it is not a good instrument, but judging from your report there were two instruments that were effective and they are both on the bolt principle—like the Greener instrument but with a bolt?—Yes.

1207. And you have seen nothing else in the course of your foreign investigations which was more effective?—No.

1208. Therefore you have really nothing else that you can suggest to us to try?—No, I have no further suggestion to make.

1209. (*Mr. Cope.*) Do you think we could improve on the method by which we kill our sheep now?—Yes, I think the simple throat-cutting with a long knife would be a distinct improvement.

1210. You mean they would die from bleeding?—Yes.

1211. (*Chairman.*) But I understood you to say you would break the neck at the same time?—I do not think it is particularly necessary; they are not in such a hurry; they have only to wait a moment or two and these reflex actions all cease.

Mr. Hunting
(cont.).

1212. But the question is whether the animal is suffering pain?—Oh, dear no, certainly not; as soon as the animal is done with the struggle which inevitably takes place from bleeding there is no pain.

1213. But how long does that take?—To bleed a sheep? I suppose two or three minutes, or three or four.

1214. Do you mean that the animal is suffering all that time?—No, I do not think, after it receives a cut which divides the whole of the nerves and blood vessels of the neck, there is any pain.

1215. (*Mr. Cope.*) The real pain is simply in cutting the skin?—With the first cut no doubt there would be some feeling, but it would be followed so immediately by paralysis that I do not think there is any pain.

1216. (*Chairman.*) That is a very difficult point to determine, of course?—Yes, but there are plenty of cut-throat cases from which you could get experience.

1217. Do you suggest that in the Jewish method of slaughtering cattle the animal feels no pain?—Very little; he would suffer a good deal more from being cast on the stones and the way in which his head is forced back. That I think is the cruellest part of the Jewish method—the forcing of the head back.

1218. (*Mr. Game.*) That is cruel?—Yes.

1219. (*Chairman.*) But surely after that the animal suffers a good deal of pain?—I do not think so. I cannot imagine that they do. They are a very important set of nerves which run up the neck, and that alone I should think would paralyse the animal.

1220. (*Mr. Game.*) The wounds do not hurt while the blood flows; is that so? Is it the air that makes the wound hurt after the blood is done flowing?—No, it is the injury to the nerves, but the injury is such an extensive one—that is how I want to put it, and it would cause so much shock as to produce insensibility.

1221. (*Chairman.*) But the struggling is terrific?—Yes, the struggling that accompanies bleeding is perfectly involuntary; if a man bleeds to death there are always struggles.

1222. (*Mr. Cope.*) You would not be opposed to the stunning of sheep?—Not at all; what was in my mind was that in doing large numbers they should be done as painlessly as possible, that the bleeding should be thorough, and that they should be able to get on with their work rapidly. These are the things that are in my mind.

1223. (*Mr. Game.*) Could that be done better without stunning?—I do not know; it would occupy a little longer I think.

1224. It would occupy a longer time?—Yes. One man could stun the sheep; if it is lying down he holds the sheep by the nose and strikes it with a mallet, or if it is standing up he uses one of these instruments I have described like a policeman's staff shod with iron.

1225. (*Chairman.*) As far as I saw the process, the man who sticks the sheep also picks him up and puts him on the crutch?—Yes.

1226. And I do not see that there would be any loss of time in his hitting the sheep on the head as he goes to pick him up, and then he would pick him up insensible instead of alive and kicking. I do not see that there is any loss of time in that.

1227. (*Mr. Game.*) It was a small sheep about seven stone that the Chairman saw killed; a man could not pick up a big Lincoln sheep and carry it along in that way.

1228. (*Chairman.*) I do not see that that affects the point of lifting the sheep in an insensible state instead of alive and kicking.

1229. (*Witness.*) At La Villette the man who cuts their throats does nothing else; they are put on to these tray things and pushed along in front of him and then along at right angles to the other men.

1230. (*Mr. Cope.*) They do not divide the vertebrae at all with the knife?—No.

1231. (*Mr. Game.*) If eight or ten bullocks were put together in a place that would just hold them, would not a vapour arise which on a cold day would look like steam or perspiration?—I do not know, there would be some vapour I suppose.

1232. Because the law is that no tenement should be used for dwellings above, in consequence of the vapour which does arise from the cattle; the Chairman's idea was that that might be from fear.

1233. (*Chairman.*) I was referring to the witness of their coats and not to the vapour.

1234. (*Witness.*) I can give no opinion about it.

1235. (*Sir Henry Yorke.*) In those experiments you saw how did they arrive at the fact of insensibility? Had anybody to settle that question?—There was a medical man, a veterinary surgeon, and the superintendent of the slaughter-house; they were the judges, and I think they went by the eye reflex more than anything else.

1236. Does that take place in ordinary killing? I understand the rule is that no animal is to be bled until it is insensible, but in the ordinary operations how do they arrive at what is insensibility?—Want of movement is the usual thing.

1237. There is no special inspection to see that the animal is insensible?—No.

1238. (*Mr. Murphy.*) Do you remember how long the French animal remained sensible after the throat was cut?—No, I could not say, probably a few seconds.

1239. When the skull was penetrated by that apparatus you were speaking of in the first instance, did life cease at once?—Nobody there made a special examination because there was perfect want of movement, and when they went on to the bleeding there was no twitching of muscles, so that I suppose they concluded it was insensible from the absolute want of power and its falling at once.

1240. Could you illustrate from any knowledge of your own whether the meat of animals that are killed first of all by a shot penetrating the skull decomposes more rapidly?—I have none; that remark I made was simply a quotation from butchers and horse slaughterers. Only yesterday I was down at a horse slaughterer's at Wandsworth, and the manager there pointed to a dead horse lying with one leg perfectly stiff in the air, and he said, "Now, if that were a shot horse that leg would not be up there; this horse has been lying here three or four days, but if it had been a shot horse it would have given way at the knee, and the leg would have been down now." They reckon that at this time of the year a disembowelled carcass killed with a poll-axe will keep for three weeks, while it will only keep for ten days if shot. That is the manager's notion.

1241. You have seen horses killed many times probably with the Greener cartridge?—Yes.

1242. Is there much more damage to the skull and to the brain tissue by the Greener?—No, there is a little more damage to the base of the skull because the majority of the Greener bullets, which are theoretically supposed to pass down the spinal cord, do not do anything of the sort, but nearly all of them pass through the base of the brain and you find the bullet in the muscles of the neck about half way down.

1243. (*Chairman.*) You do find it?—Yes.

1244. One witness has said that in thirty cases they had never been able to find it at all?—Well they picked one out for me yesterday.

1245. In the muscles of the neck?—Yes. I think they must hold the "killer" wrongly; one would think that if there was no difficulty in holding it straight it would go right through the brain.

1246. (*Mr. Cope.*) The animal moves sometimes just at the most inopportune moment?—Yes, and then it comes out on which ever side the neck is convex, but it is not that; with the Greener killer what you would like to happen—and what theoretically does—would be for the bullet to pass through the cerebrum into the medulla and down the spinal canal if possible, and I cannot see any reason why it should not, if held properly.

1247. (*Chairman.*) Except that it requires a very accurate shot?—What I think is that the slope on the bottom of the instrument might be altered to do it; the bullet is wanted to pass higher up towards the poll; they have got it so that it catches the base of the brain, but some alteration so as to throw the bullet further up would, I think, meet the difficulty.

1248. (*Mr. Game.*) Would it not depend partly on the position the bullock's head was in?—If you held it down he might get it clear through?—No, because the instrument is laid on a flat surface whichever way it is, and if the man holds it on the flat surface it does not matter in what position the head is, because the brain will always be exactly the same relative position to the frontal bones.

1249. (*Sir Henry Yorke.*) That is if he holds it?—Yes.

1250. (*Mr. Game.*) Is the eye of an animal that has just been killed any great indication of either pain or death?—I do not think it is any; I never could see anything in it.

1251. (*Chairman.*) Apart from this particular inquiry, in vivisection, or even in the case of a human being, is not that the only accepted way of detecting death?—By the eye?

1252. Yes?—It is one of them, no doubt.

1253. Do you know any more reliable method?—No. Except the stoppage of the heart.

1254. I understood you to say just now that it was no guide at all?—I understood the question to be, did the appearance of the eye enable you to say whether the animal had suffered or not?

1255. (*Mr. Game.*) Suffered pain or death.—Previous to death?

1256. (*Chairman.*) No, whether it was suffering at the moment?—I do not think there is anything about the eye except the want of reflex action or motion.

1257. (*Mr. Cope.*) It is really only an evidence that

it is or is not dead?—You may have it in the case of an animal under chloroform to the same extent. *Mr. Hunting (cont.).*

1258. (*Chairman.*) But a person under chloroform is not suffering pain?—No, he is insensible, but he is not dead.

1259. (*Mr. Murphy.*) May I put it this way: while the conjunctiva is sensitive is one to assume that the animal is sensitive to pain?—I should say, yes; I should say that as long as you have the eye reflex there is consciousness and therefore sensibility to pain?

1260. With the view to preventing unskilled persons from being employed in slaughter-houses, do you think that there is any necessity for some State regulation either with regard to the training or to the giving of sanction for a man to be so employed by licence or otherwise?—I think they ought to be licensed, because in the horse slaughterers' places, as well as in butchers' places, I have seen gross cruelty, not wilfully inflicted, but simply from ignorance.

1261. (*Chairman.*) At present there is no method of checking that; there is no inspection?—No.

1262. (*Mr. Gordon Miller.*) If it were considered expedient to have a system of licensing would it not be as well to have some central establishments in country districts where instruction could be given in the latest methods?—Yes, and they would not have to go very far now-a-days to get them; there are abattoirs in at any rate a large number of the large towns.

1263. A short course of instruction might possibly be arranged?—Yes, if an apprentice was sent there for a week he would learn in that time all that was necessary.

Captain W. MELVILLE LEE, called; and Examined.

1264. (*Chairman.*) You have taken a great interest in this subject for many years?—For many years.

1265. You have studied it privately, and also probably in connection with your researches into police questions?—Not so much with regard to the police, except so far as concerns the utilisation of such powers as they may subsequently have conferred upon them.

1266. From the point of view of supervision, inspection, and so forth?—Yes.

1267. I understand that your knowledge of the subject is not connected so much with the different methods of killing, as the abuses which may exist in country districts or in small slaughter houses?—For many years, I have taken every opportunity of talking to journeymen butchers and master butchers, and so on, about it, and most of the stuff I have collected is hearsay. I have seen a certain amount of slaughtering, but very little.

1268. But the points to which you wish to draw attention are mainly the possibility, if not the actual existence, of abuses which should be rectified by bye-laws in the first place, and efficient inspection afterwards?—Yes.

1269. Could you suggest to us what those points are to which you wish specially to direct attention either with regard to the arrangement and construction of slaughter-houses or to proper supervision?—I think you have covered most of the ground already in the previous minutes, which you have shown me. The conclusions I came to are, I think, all covered. I think that all slaughtermen ought to be licensed, and before they get that licence they ought to serve a regular apprenticeship, and, as in the case of a man driving a motor car, there should be some minimum age at which a man is actually allowed to do it. One butcher, I think I can trust, told me that the first sheep he killed—the master butcher, who happened to be his own father, told him to go and kill a sheep—he asked: "How am I to do it?" and he was told to kill it the best way he could. Of course that is very exceptional, I grant, and I know it is not done generally.

1270. It suggests that the father did not pay much attention to the value of his mutton afterwards?—I dare say he wanted to blood the boy. However, that sort of thing should be made impossible.

1271. You would suggest a minimum age at which a slaughterman should get a licence?—Yes. Then I think, secondly, the methods should be systematised; you have

heard to-day of the extraordinary difference in different parts of the country, and even in a small town you will get a different method in one slaughter-house from another. I think if the methods were systematised, it would be easier for men to learn the business; sometimes a journeyman butcher is in the habit of killing by one process, and when he goes to a new place he has to take on a method he really does not know much about.

1272. Of course our inquiry would rather be directed to finding out what was the best method, and then trying to get it adopted as far as possible?—Of course. I only meant to say that if there were three or four methods equally good, a good deal would be gained if one was always employed.

1273. In order to simplify regulations and bye-laws and so forth?—Yes. Personally, I am in favour of public abattoirs, and where there are bye-laws in existence, I think it should be imperative on the butcher to exhibit in his slaughter-house a copy of these bye-laws in the same way as, if you go into any factory, you see laid down in a few words the requirements of the Home Office.

1274. Of course no system of that kind would be effective without effective supervision?—No.

1275. Do you consider that that supervision could be exercised by the police or by any special inspectors appointed by the local authority?—Of course one does not wish to create a new department for a matter of this kind?—No, but the powers of the police have been widening and widening for the last 100 years; they have always been getting some odd job put on the top of another, and it has often been feared that that would work against their efficiency, but it has not proved so; every job they get to do they seem to be able to digest, and I think if they had the power they would be able to do this too.

1276. Certainly the country policeman is not overworked as a rule?—No.

1277. But you think it would be better that any inspection of the kind should be in the hands of the policeman who is a recognised authority in the district rather than have to introduce a new authority who might be resented as a sort of intrusion?—Yes; I mean it would be done like the inspection of weights and measures, or anything like that; it does not interfere with the policeman's other work at all. He gets the inspection of petroleum stores, for instance, and there would be some slight

Captain Lee extra pay attached to the man or men, according to the size of the town, who were doing the job.

(cont.).

1278. I was thinking more of country districts, in large public abattoirs you would probably have special officials for the purpose?—Yes, but in a moderate sized town, like Oxford, for instance, there is a police force consisting of something under 100 men, and I do not know how many slaughter-houses there are actually, but there are a good number; and I do not think it would be necessary to have any official otherwise than one or two chosen by the head constable.

1279. From the police force?—Yes.

1280. To pay surprise visits when necessary?—Yes, you see, they are always passing, and if they had the power of going in and out, and if there were simple regulations, I think they could see them enforced.

1281. Simply in order to see that the bye-laws, which you have suggested should be hung up, are carried out?—Yes. Another thing I put down here, which again only touches, I hope, more or less obscure places, is this: I followed what you said about the high wages keeping these men in London straight from every point of view, but I think in the case of a great number of local butchers the men are not always sober when they are slaughtering.

1282. In the country?—In the country. I would only suggest that if the police took over this kind of inspection, I see no reason why it should not be an aggravation of the offence of simple drunkenness that a man should be drunk on premises licensed for slaughtering. If a man is drunk in charge of a horse and cart he is treated by the magistrate in a different way from a man who is simply drunk by himself on the street and perfectly prepared to go home.

1283. But that is all within the discretion of a magistrate at present?—Yes; the constable brings the charge against a man: "Drunk whilst in charge of a horse and cart," and I do not know what the details should be, but I say that being drunk while engaged in slaughtering should be an aggravation of the offence of drunkenness.

1284. And I think it would be reckoned as such by any magistrate, but surely the remedy for any possible abuse of that kind is licensing, the most effectual punishment being to take away the licence, which would deprive the man of his appointment?—Yes, that is my reason for being so strongly in favour of licensing.

1285. And any abuses of that kind would be necessarily met by a system of licensing and a system of inspection?—Yes.

1286. Are there any other points?—I am afraid I hold a different point of view to many with regard to this question of the fear felt by animals; it is said that oxen do not feel fear, some say because they ruminate, others because they will eat, and some because they will drink. I may say, to begin with, that there is a good deal of different opinion about that. I have been told by butchers that if an ox is stalled close to a slaughter-house you cannot get him to eat. However, if an animal is dumb, how are you going to say whether he is suffering mental pain or not?

1287. Fear, you mean?—Yes, terror. Many horses have been known to go on racing and run the last 200 yards of the distance with a broken fetlock, and horses with the cannon bone broken right across have gone on quietly eating, but you cannot say he is not in pain. I once had to shoot a horse which was crushed by a steam-roller having overtaken it; they had not put any wagon or anything with shafts between the roller and the team, but they whipped up the horses and the steam roller caught up with one of the horses and crushed both his hind legs. The injured horse tried to get up, he did not sweat particularly, and if you looked at his eye you could not see any signs that the animal was either frightened or in pain, but we know he must have been. As a matter of fact, I got a gun and shot him; but what I mean to suggest is that because an animal shows nothing, does not snort, or does not sniff, does not sweat, and so on, is no absolute proof that he is not suffering.

1288. It probably is impossible to tell whether the animal is suffering or not?—I think the presumption is that the animal does feel fear, unless you can prove the contrary. If a stoat is chasing a leveret, or if it is being killed, the

victim cries most pitifully, but there is no good reason for concluding that the hare feels pain any more than a bullock, who is silent.

1289. I am not yet satisfied in my own mind until I see experiments tried, which we hope to do at a later stage?—I only meant to say with regard to any experiments, that supposing you did see them eating—I do not want to treat it lightly—but if an animal saw a man take a whisky and soda just before he was going to be hanged, and so concluded that he was indifferent, his opinion would not be worth much as he has no means of gauging human sensibility.

1290. Of course, men eat even in a state of extreme fear. I believe a man on the morning of execution has a special breakfast, and as a rule disposes of it. I mean the practical effect of that is, in your opinion, that you should give the animal the benefit of the doubt, and so arrange slaughter-houses, if possible, that animals should not be brought into contact with the sights and smells of the slaughter-house until the last moment?—Yes.

1291. (*Mr. Gordon Miller.*) Eating is a natural process with an animal, and if it sees food it generally proceeds to eat, without feeling in the same way about it as we should.

1292. (*Witness.*) Colonel Clayton, do they still slaughter in the field at Aldershot?

1293. (*Colonel Clayton.*) Yes.

1294. (*Witness.*) I have no means of knowing better than any one else, but it seemed to me that the blind-folded beast taken up to that place at Aldershot apparently took much less notice of it than the beast not blind-folded which was being hauled into the slaughter-house.

1295. Which slaughter-house are you referring to?—The old slaughter-house.

1296. The entrance to that slaughter-house was very bad and old-fashioned, and it was a very difficult place to get cattle to go into. I think their hesitation in going into that old slaughter-house was more due to the awkward entrance than anything else, and it is very different now. I think that an animal taken to be slaughtered out in the open, as we practice the butchers in doing in preparation for field work, naturally would not show any fear because he sees nothing but a field in front of him; so that if he does show any fear he does not show it in the open?—Then, of course, if I may come to a few details, in the country, I think it is very seldom, for instance, that a calf is stunned before being pulled up. Of course you have had various opinions about that. If I may come to a thing which is hardly my job, what possible objection is there to cutting the sheep's head right off? It is easy enough, they can do it with a calf, which is more difficult, and the ordinary trooper can cut a sheep in half, so that I do not think it would be difficult to do it. You get the jugular and carotid and everything cut at once, and it seems to me you could not have anything more perfect than to chop the beast's head off.

1297. (*Mr. Game.*) I do not think you would get any good by doing it, because it would take very considerably longer to cut it off than only to cut his throat and let him bleed; you would still have the sheep under your hand and would go on cutting him, and directly the sheep got cold you would find the veins would shrink up from his neck and leave the scrag bone projecting out. I do not see the advantage, and I think there would be a practical disadvantage.

1298. (*Chairman.*) From the point of view of the meat there is an obvious disadvantage.

1299. (*Witness.*) I only asked the question, if they do that with the calf why not with the sheep? I think if the beast were standing up it would be done at once; you would go through the whole neck at one blow, instead of dragging him up and putting him on a crutch and finding the right place, etc.

1300. (*Mr. Murphy.*) I should like to ask a question about the authority to supervise the method of killing. You probably know that the sanitary inspector goes into the slaughter-house to enforce the bye-laws of the sanitary authority as to cleanliness and so on?—Yes.

1301. And then the sanitary inspector also is empowered to seize unwholesome meat?—Yes.

1302. Where it is practicable to do so it is very important that the animal should be seen at the time of the slaughter by the meat inspector; in view of those circumstances does it occur to you that it might be well rather to fall back on the sanitary inspector for supervising the method of slaughter than to bring in a police constable from outside?—I have no knowledge as to the amount of work the sanitary inspector has already, or whether more sanitary inspectors could be appointed; I mean my opinion is worth nothing on that because I know nothing about it.

1303. Your point is that there should be inspection at the time of slaughter so as to see that it is properly done?—Yes, I have discussed the question with various chief constables and they seem to think that they would be quite prepared and would be able to take on the job. That is all unofficial—just the opinions of individuals.

1304. (*Mr. Gordon Miller.*) You mentioned just now

that you thought there should be a system of apprenticeship. Have you considered how that would be worked out? Would that mean a definite apprenticeship of a youth to a butcher?—No. I do not mean bound in that way necessarily, I merely mean some system by which they would get instruction; the butcher at Aldershot does serve an apprenticeship in the way I mean—he has instruction in the way it can best be done before being allowed to do it.

1305. In other words, it would mean a course of training which would lead up to a man obtaining a certificate by examination?—Yes.

1306. (*Mr. Game.*) In part of your evidence you were talking about the possibility of men being drunk in a slaughter-house; do you think a drunken man could do his work in a slaughter-house?—I think a man full of beer often does so.

Captain Lee
(cont.).

Wednesday, 24th February, 1904.

PRESENT.

Mr. ARTHUR LEE, M.P. (*Chairman.*)

Colonel F. T. CLAYTON, C.B.
Mr. CHARLES GAME.
Mr. GORDON MILLER, C.B.

Mr. SHIRLEY MURPHY.
Sir HENRY YORKE, K.C.B.

Mr. R. G. HAYES (*Secretary.*)

Mr. WILLIAM HAYDON, called; and Examined.

1307. (*Chairman.*) I understand that you are in business as a master butcher now?—Yes.

1308. And at one time you were an inspector under the London County Council?—No, I was a member of the London County Council.

1309. But not in any official capacity?—Oh, dear no.

1310. I understand now that you appear rather as the representative of the Master Butchers and Pork Butchers' Association?—The London Master Butchers' Association—yes.

1311. They were anxious that someone representing them should give evidence?—That is so.

1312. Are there any particular points you are anxious to bring forward?—I understand your object is to ascertain the most humane mode of killing animals?

1313. Yes, killing cattle, calves, sheep and pigs?—Of course I have had practical experience in slaughtering, because I was born the son of a butcher, and I early went into the slaughterhouse, in fact I killed my first bullock before I was twelve years old, and I have killed many hundreds since. In my opinion there is nothing so prompt as the poll-axe; it is quite momentary.

1314. I think the Committee are probably disposed to agree with you on that point, if the poll-axe is in the hands of an expert?—Quite so; of course a man that is accustomed to his business would hardly ever make a mistake in knocking down a bullock.

1315. Still they do sometimes?—They do occasionally, perhaps a small butcher killing only one or two bullocks per week; in the hands of a non-expert like that, probably he might hit the animal on more than one occasion, but very frequently even if he makes a mis-hit you know the animal is stunned at the same time.

1316. Was your original experience in the country or in a town?—At Brixton, in London.

1317. You said you killed your first bullock at the age of twelve?—Yes.

1318. Was it not very unusual for a boy as young as that to be allowed to do it?—It was simply because I was home from school, and we were just inaugurating a new slaughter house, and my father said, "My boy shall

knock down the first bullock killed in that slaughter house," and I did, and did it well.

1319. But you would not advocate on general principles the employment of boys at that age?—Certainly not. I was only mentioning that to give you an instance of my long experience in the business.

1320. Only it raised a point which has been before the Committee, and that is the age limit at which slaughtermen should be allowed actually to slaughter animals, and I think you will probably agree with me that it is not desirable that boys should be employed in work of that kind?—No, it is not usual to employ boys to do that.

1321. What do you consider should be the minimum age at which a boy should be allowed to use the poll-axe?—I should think eighteen.

1322. Do you consider it would be desirable that slaughtermen should be licensed?—No, I do not think so; I think it would be entirely unnecessary. It would be a very difficult matter to see then that none but licensed men carried out the work in the slaughter house.

1323. Why should that be? I understand drovers are all licensed?—That is so.

1324. Why should there be any difficulty about licensing slaughter-men?—I do not suppose there would be any difficulty about it.

1325. I thought you said there would be?—I meant in seeing that none but licensed men were employed.

1326. But you can see that none but licensed drovers are employed?—Yes, but they are comparatively few in number compared with the butchering trade.

1327. I do not quite see where the difficulty comes in; there are inspectors, and as long as it is understood in the trade that only licensed men are to be employed I do not think there would be any difficulty?—You mean that a man before he received the licence should give evidence of his skill in slaughtering?

1328. That is one form of licence?—I believe if you did not have a test it would be of no use whatever.

1329. Just let me explain what I mean; take a parallel case; the drivers of motor cars have to be licensed now, but they do not have to show that they possess any

Mr. Haydon.

Mr. Haydon
(cont.).

knowledge of a motor car at all in order to get a licence, the object of a licence being that if a man misconducts himself in any way the licence can be withdrawn, and he is thereby deprived of his employment whether he is a skilled or unskilled man?—Just for the purpose of identification?

1330. Identification and control?—Yes.

1331. It is quite as effective to prevent scandals and cruelty and things of that kind to have merely a licence which can be withdrawn by whatever the authority is?—I do not know that there would be any objection to that.

1332. I may say that evidence has been given to us by a great many practical men and they have been almost unanimously in favour of licensing?—I do not think there would be any objection to it.

1333. Have you seen any other methods used of killing large cattle?—No, I have never seen the Greener mask used.

1334. I was not referring to that especially; that happens to be on the table in front of you, but that is just a coincidence. Have you seen any other methods?—No.

1335. Have you ever seen the method used in southern Europe?—You mean stabbing?

1336. Yes.—Yes, I have seen that, in fact I have done it.

1337. Is it carried out at all in England?—Very little, I should say; the practice at Deptford Market among the slaughtermen there is to what is termed poll the bullocks.

1338. With the poll-axe?—Yes, but not with a stiletto or anything of that kind.

1339. You say you have actually done it in the other way?—I have done it with a sharp-pointed knife.

1340. Did you find it effective?—Not so effective as the poll-axe—not so quick.

1341. I suppose it needs considerable skill?—Yes, unless you happen to make the puncture exactly in the right place you do not sever the spinal cord.

1342. We understand that in the countries where that method is employed they have, of course, expert men, and that it is very effective?—Undoubtedly it would be.

1343. You have seen no other method at all?—No.

1344. As regards the calves, what method do you consider the best?—Our practice has always been to stun them first.

1345. Before you hang them up?—We pull them up, and then stun them immediately; it is a momentary operation, you know.

1346. But I understand sometimes they are stunned before they are run up?—It may be done.

1347. Do you see any objection to that?—No.

1348. One would imagine it would be easier to handle the calf and run it up when it was insensible?—Yes, but the practice usually observed is to run it up first.

1349. And then cut the head right off?—The first thing the man does is what we call pith the calf—sever the spinal cord.

1350. From behind or from the inside?—Before its throat is cut; before it begins to bleed, and we pith it, as we term it, immediately.

1351. Would you mind explaining how the man piths it?—With a sharp pointed knife, and in a similar way to puncturing the neck of a bullock.

1352. That is from outside, at the back of the neck?—Yes.

1353. You are the first witness who has described that to us; the other witnesses said either the throat was cut or the head was cut clean off?—That has always been our practice, and I have seen it carried out in other cases. In some cases I know calves are stuck—they are stunned first, and then stuck and bled in that way. That leaves the neck part of the carcass somewhat cleaner than the practice I have always adopted.

1354. Than pithing?—Yes.

1355. But after you have pithed what do you do next—just stick them?—No, we proceed to cut the head right off.

1356. Why not cut it off straight away? After the animal is stunned the cutting of the head is a momentary operation, is it not?—Oh, no. You see the object in hanging the calf up is to cut the head under what is called the pelt of the calf's head; there is a portion of the skin, three or four inches, which makes the calf's head more valuable than if it was cut straight through; the practice in foreign countries is to cut them straight off, but those heads, as Mr. Game will tell you, never command so good a price as those which have the portion of the skin, which is termed the "pelt" in the trade, left on them.

1357. Why is that?—You see the skin is rather thick just at that portion of the neck, and calves' heads, as you know, are used principally for mock turtle, and that creates the idea that people have got a little bit of the turtle swimming about in the soup. That is the object of it.

1358. Then as regards sheep, what method do you consider best?—I do not think there is anything quicker than sticking them; it is a momentary operation. The proper way is that the sheep is usually laid on a crutch, a framework of wood, and you take over the sheep's head in your left hand, if you are a right-handed man, and pass the knife immediately behind the ear, and in drawing the knife back you insert it in the neck and sever the spinal cord.

1359. We have seen the operation at Deptford, but we did not find that it was always successful; that was the method, but we found that frequently the spinal cord was only nicked, and was not completely severed; in other cases it was completely severed; and it seemed clear to us that it required the man to be very expert to be certain of severing the spinal cord?—It is usually as well when the man takes the sheep's head, and presses the neck down with the one hand and the head up with the other, and breaks the neck.

1360. Do you not consider it very desirable that that should always be done?—Yes, I think so.

1361. I understand it is not the practice to do it always?—I do not think it is, perhaps.

1362. When the neck is broken, of course, all sensibility is gone, as in the case of a man who is hung?—That is so; that was always my practice, and I have always insisted upon its being carried out by my men.

1363. Have you ever seen sheep stunned previous to being stuck?—Never.

1364. At the same time we have evidence that it is done in some places?—I have never seen it.

1365. Do you see any objection to it?—No, I do not think there is; of course, it wants doing properly, or it damages the head somewhat you know.

1366. Our point is rather this, that as in the case of the poll-axe the pithing method with the knife is probably as quick as anything could be when it is done absolutely perfectly by an expert, but, of course, there is no denying the fact that sheep killing is carried out, particularly in the country, in different places by those who are not experts and particularly by the younger men in the slaughter-house?—I see no objection whatever to their being stunned.

1367. It has been suggested that the stunning, whilst it might not injure the value of the head commercially, might affect the value of the scrag of mutton?—I do not think so.

1368. I should think that would be a very small affair?—It is not the most valuable portion of the sheep if it is injured at all.

1369. There could only be a slight effusion of blood?—Very slight indeed, I should say nothing whatever.

1370. You do not think it would depreciate the market value?—Not at all; the injury would be to the head only.

1371. The injury to the head could be made very slight; you do not want to batter the head to pieces?—No, but you know what fellows are sometimes; they give a blow that is unnecessarily heavy, because it is a very slight tap that does it. It is just the same in the slaughtering of a bullock; it does not want a tremendously hard knock if you hit them in the right place. I used to knock them down with one hand, and I used to be rather proud of the performance.

1372. To go back for a moment to using the poll-axe, you advocate, I presume, the method of the one blow on the forehead and not striking them on the poll first?—Striking on the brain.

1373. Yes.—Yes.

1374. Instead of the method of striking them on the poll first and then poll-axing them in the forehead after they are on the ground?—Really why the polling is done is a matter of convenience, because in that case they do not rope the bullock, but the usual practice is for the bullock to be roped and drawn down to a post. That is done in most slaughter-houses. It is done to some extent in the public slaughter-houses, but in many cases these bullocks walk in out of the pound, and they are polled and knocked down at once.

1375. You mean in cases where the animal is not fastened it is better to poll them first?—Yes, because you would be more likely not to hit in the right place unless they were roped.

1376. Have you any experience of killing pigs?—Yes. We always stun them.

1377. How do you stun them?—With a mallet—just an ordinary carpenter's mallet.

1378. On the forehead?—Yes.

1379. Why do you suppose that in Chicago, for example, where pigs are killed on the largest scale in the world, they never stun them?—Although I have not been to Chicago the pig there, I believe, is caught up by the hind legs.

1380. On a great revolving wheel?—Yes.

1381. There can be no advantage either from the butcher's point of view or from the slaughterman's point of view in omitting the stunning and having the pig struggling and squealing?—No, it is to avoid the noise principally, but of course the pig is best not stunned, because it does bruise the head.

1382. Do you find it destroys the market value of the head?—Oh yes.

1383. I understand it is the practice in England?—Yes.

1384. And therefore it cannot be very serious, otherwise they would not do it?—It is regarded as serious, especially by the London County Council, because they get complaints if people hear pigs squealing when they are being killed, and you know it does not take much to make a pig squeal, whether he is going to be killed or whether you are going to do him a kindness—he will kick up a row in either case.

1385. He may not be aware of the fact that it is a kindness?—I do not think he is aware he is going to be killed either.

1386. But it is obviously desirable to stun them if possible?—Yes, but if I were in a place where I was not likely to be interfered with I should never stun them. A pig properly stuck is an animal that soon dies; still there is no objection to the stunning, and it is rather more humane.

1387. Humanity after all is an important question?—Quite so.

1388. You are, of course, familiar with the slaughter-houses at Deptford?—Yes.

1389. Do you consider that the construction—the plan of the slaughter-houses there is satisfactory? I am referring particularly to the pen where the animals waiting to be slaughtered are enclosed, which is practically the main drain from the slaughter-house; I mean the animals are standing in a pen and the whole of the refuse from the slaughter-house, the blood-water, and so forth flows out into the pen the animals are standing in?—It is blood principally is it not?

1390. Yes; the pure blood of course is collected, but the garbage flows past into the pen; do you think that is right?—I should say that is undesirable and might be avoided.

1391. I am not referring to the alteration of existing slaughter-houses, but if you are building a new slaughter-house you would bring the animals in at one end, would you not, and let the refuse flow out at the other?—I should.

1392. I mention that because it was rather suggested to me that the slaughter-houses at Deptford were very

well constructed and very well designed, and I should have thought exactly the opposite from what I saw?—I think in the more recent ones that have been erected that has been avoided, Mr. Game, has it not?

1393. (Mr. Game.) Not exactly what the Chairman speaks about, but it has to a great extent. It is like this, that if a bullock has to be knocked down in a given position and the blood is caught there, naturally some goes over or is splashed over, and then a pail of water is thrown down to wash that away from the bullock, to prevent its hide and all the rest of it from being saturated; it was only the blood water out of the slaughter-house that the Chairman saw running into the pound, but, of course, there is no blood in it, and it is only the colour of the water?—Still it is a thing that might easily be avoided.

1394. The only way would be to drain it the other way where all the men would have it?—The Chairman means simply reversing the position of the pound. It is not an advantage for the bullocks to be standing on the slippery concrete or flags, whatever it may be, because they are more likely to slip in coming out and that very often creates an injury.

1395. (Chairman.) Do you consider that cattle ever show signs of fear from the sight or smell of blood on being brought into the slaughter-house?—No, I have never noticed it. You mean the one being killed in sight of the other?

1396. No, I did not mean the killing?—Every animal resents the smell of blood.

1397. Do you think it is the smell or the sight of it?—I think it is more the smell.

1398. That would be my impression?—Because I have seen cases where if you attempted to drive bullocks or sheep into a slaughter-house where there was blood before they had the opportunity of seeing it, where they could not possibly see it, they showed signs that they did not like it.

1399. From the smell?—From the smell I take it.

1400. And you think that would have more effect on them than the sight, say, of partially flayed or disembowelled carcasses?—I think so.

1401. It is the smell of the blood?—Yes.

1402. You have seen that in the case of sheep as well?—Yes they notice it as well.

1403. But I suppose cattle notice it more than sheep?—They do.

1404. And from your long experience you are convinced that is the case?—I am certain of it.

1405. Do pigs show that?—Not nearly so much.

1406. I suppose it really depends largely upon the sensibility of the animal; I mean the ox is a more sensible animal than the sheep and probably has keener appreciation of such a thing?—That may be so.

1407. Do you find a difference between the stall-fed cattle or home grown cattle, and the wilder foreign cattle in that respect?—Well, I have had no experience of the foreign cattle, but animals, of course, that have been stall-fed and have been accustomed to be handled are always more amenable to being got into a pen or anything of that kind than animals such as Herefords that have been grass fed.

1408. I did not mean so much the handling as this question of the smell of blood?—I have had no experience with the foreign cattle.

1409. Are there any other points you would like to bring forward yourself with regard to the methods of slaughter for our consideration?—I think not; I think you cannot adopt any more summary method of killing than the poll-axe with the cattle; and with regard to the sheep, as to your suggestion that they should be stunned I see no difficulty about it.

1410. It is actually the law in Germany that they should be stunned?—Yes, and I do not think there could possibly be any injury to the carcass of mutton by the process of stunning; and your suggestion as to the stunning of calves before being pulled up could easily be carried out.

1411. You do not see practical difficulties in the way?—Not at all.

Mr. Hayden
(cont.).

Mr. Haydon
(cont.).

1412. I was rather meaning anything you would like to bring forward from the point of view of your Association?—I think not; I do not think that any of the suggestions that have been made would be found objectionable by the trade.

1413. Of course you can well understand that the Committee, whatever conclusions they came to, would not wish to do anything which would injure the meat; I mean it would be absurd to attempt to enforce methods of slaughter which would make the meat unsaleable or depreciate its value?—In my opinion it would not.

1414. It would be useless to kill the animal at all under these circumstances?—Quite so.

1415. But we are very anxious to ascertain the most scientific methods compatible with expense, practicability, and the preservation of the meat?—Quite so.

1416. And there is nothing you wish specially to bring forward in that connection?—Nothing whatever.

1417. (Mr. Game.) The only question I have is with regard to licensing the men. The drovers' licence I believe is more a matter of the public convenience or for identifying the people driving the bullocks in an improper way, or in an improper state?—That is so.

1418. They are not subject to any examination nor is any effort made to test them, except that they are in the habit of driving cattle?—That is so.

1419. Then you said the age of a boy beginning the work should be about eighteen, of course that would depend on what previous experience he had?—Yes, but with regard to being entrusted as a foreman in a slaughterhouse with the killing of cattle, as the Chairman was suggesting.

1420. That would be of course according to the manner in which he got on; the master would not entrust him to do work which he did not consider he was capable of doing?—No.

1421. (Sir Henry Yorke.) As, if there is a limit of age, it must be an actual limit; you consider all round about eighteen would be the safest limit?—You see at the present time boys do not begin work until about fifteen, and it is not desirable to trust a boy just to practise on a poor animal until he has acquired some knowledge of his trade.

1422. And you think roughly about eighteen would be the thing?—Yes, some boys would be competent at sixteen.

1423. But if you had your limit you would have to stick to it of course?—Yes.

1424. (Mr. Gordon Miller.) Do you not think under those circumstances it is just as well that the youth who is just becoming competent to slaughter an animal should exhibit his competency and obtain a certificate?—I do not see any objection to it; I daresay a great many would be very glad to do it.

1425. It strikes one that if a young man could obtain a certificate of competency, it would be much to his interest that he should hold that certificate?—Yes, he would probably be able to demand higher wages as an expert.

1426. And if he went into the country he would carry with him the latest methods of killing and the most humane methods of killing?—Yes, I think it would be rather desirable.

1427. And it would afford a means of imparting that knowledge to butchers in the country who would not possibly have other means of keeping themselves up-to-date?—Quite so.

1428. It practically amounts to a man under those circumstances working up for a certificate?—Yes.

1429. And making himself acquainted with the best methods?—Quite so.

1430. (Mr. Murphy.) You thought that breaking the neck was essential in killing a sheep?—Yes, I think so.

1431. We have been told, I think, that old sheep cannot always very readily have their necks broken; have you any experience of that?—No, I do not think there is anything in that. You mean on account of the fibrous tissues being tougher?

1432. Yes?—Oh no; it is the sudden jerk that does it, like hanging a man.

1433. (Chairman.) I wish you would explain just now how the neck should be broken, because I noticed at Deptford the man who was killing them did not break the neck over the edge of the crutch, but he twisted the head sideways and upwards?—That is the way; usually it is done as I pointed out to you by taking the sheep's nose in the left hand and the neck in the other and just giving it a sudden jerk back.

1434. Against the hand?—You pull it back towards you.

1435. One hand against the other?—Yes.

1436. Not on the edge of the crutch?—No, the other method is much quicker.

1437. (Mr. Murphy.) In stunning a sheep would you propose to use a blunt mallet or something that would be sharp and penetrate the head?—I should say not to penetrate the head; you should use a mallet as you would with a pig.

(A round headed wooden mallet is shown to the Witness.)

1438. (Chairman.) Is that the sort of thing?—Ours is square, but still a round one I should think would be better.

1439. Because it would make less of a mark on the head?—I think so.

1440. Would not that one which has just been shown to you be unnecessarily large?—That is too heavy for the purpose.

1441. (Mr. Game.) Do you think it would really be more humane to stun the sheep before you stuck it, or would it be more likely to prolong it?—I do not see how it would prolong it; if it was properly stunned you would produce insensibility at once.

1442. Would it struggle as much after it was stunned as it would if it was stuck without being stunned?—I should say not.

1443. (Chairman.) The struggle does not necessarily indicate pain because animals go on kicking after they are dead?—Oh yes, but the sheep certainly seems rather more tenacious of life than many other animals, because you will notice that a sheep when the spinal cord is severed kicks and struggles for some time afterwards. I have often noticed that.

1444. That probably does not mean that it is sensible?—It cannot be sensible.

1445. You would advocate a mallet?—With a much shorter handle so that a man might use it with one hand with facility, and not quite so heavy as this one which has been shown to me. (Another mallet with a shorter handle is shown to the Witness.) That is about the length of the handle I should suggest, but it does not want the iron rings round the head. A round head would be preferable.

1446. So as to be easily used with one hand?—Yes.

Mr. W. N. WYCHERLEY, called ; and Examined.

1447. (Chairman.) We understand you are the Chief Meat Inspector to the Corporation of the City of Liverpool?—Yes.

1448. How long have you held that position?—I have been Chief Meat Inspector for the past three years, and I have been fifteen years in all in the service.

1449. Were you a practical butcher at any time?—Previously I was ; I have been in the trade all my life.

1450. You do not have anything to do with the foreign animal wharves at Liverpool?—No, we had when the Canadians were landed at Liverpool, but that was just for a few years.

1451. So that you really only have to do with the home-grown animals?—Yes, in the City of Liverpool only, and they are Irish cattle principally.

1452. Cattle, sheep, and pigs, I presume?—Yes, and calves.

1453. That is as far as our inquiry extends. I would like to ask you first of all what is the system in Liverpool as regards abattoirs ; do you have several large public abattoirs, or do you license private ones?—We have a number of private slaughter houses and one public abattoir which is held by a Company.

1454. And that is a very large one, I presume?—Yes, it is a large one.

1455. It does not belong to the Corporation?—No, it is a private company.

1456. Is it licensed by the Corporation?—Yes.

1457. Is there any system of inspection by the Corporation officials?—Yes.

1458. I do not mean as regards the meat, but as regards the regulation of the actual slaughter-house?—Yes, it is all controlled by the Corporation inspectors.

1459. Are there any methods laid down in the Corporation bye-laws by which cattle and other animals are slaughtered?—No.

1460. You are perhaps aware that the London County Council have regulations of that kind?—Yes.

1461. But there are none in Liverpool?—None.

1462. And therefore the people who either own or lease these slaughter-houses carry out the various methods they think best?—Exactly.

1463. Is any supervision exercised with regard to possible cruelty or lack of experience?—Yes.

1464. Who does that?—I and my assistants.

1465. How many assistants have you?—Three.

1466. Do you consider that a sufficient number to efficiently supervise the whole of these slaughter-houses?—Well, we have a large place, but still we have very little slaughtering owing to being in close proximity to the foreign animal wharf at Birkenhead ; we are principally supplied with Birkenhead slaughtered cattle. Our average slaughtering at the public abattoir at present will only be about 100 cattle per week, although years ago I have experienced myself as many as 600 or 700 being slaughtered each week, and in one private slaughter-house we have had as many as 100 to 150 slaughtered in a week.

1467. But you say that now you have not more than 100 a week slaughtered at your biggest slaughter-house, and how many do you suppose in the whole of the rest of the private ones?—Perhaps another 100 or 200 cattle in all.

1468. But really comparatively it is on a very small scale?—Very small ; we get a large number of pigs and sheep to slaughter.

1469. What method is employed in Liverpool for the killing of cattle?—They are felled by the poll-axe.

1470. What is the method of killing with the poll-axe—are they struck on the poll first and then poll-axed on the forehead or only the one blow?—Only the one blow.

1471. That is, in your opinion, the best method?—Well, it is the best that has been carried out so far ; the butchers have adopted several trials with a Greener's patent and also the mask. I think the mask is a very good method of slaughtering.

1472. Which kind of mask?—The mask with the drilled pivot in the centre—the Bruneau.

1473. We have two kinds here and I now exhibit to you the Baxter mask, which works with a spring, and Bruneau's mask with the straps?—It is Bruneau's that I have seen.

1474. That is the one which fastens on with the strap?—Yes.

1475. Do you see the point of the other one ; that it fastens on without any straps?—Yes, that is an improvement and the bolt is permanent there ; the other one is removable.

1476. You have not seen the Baxter mask used?—No.

1477. Have you seen the other one used on a large scale?—Not on a large scale ; the butchers do not like them.

1478. Why?—There is too much trouble in putting them on ; they would sooner use the poll-axe.

1479. You mean that cattle are sometimes restive and there is difficulty in putting it on?—Yes.

1480. Are the cattle secured before being poll-axed in Liverpool—are their heads pulled down to a ring?—Yes, to a ring in the floor ; it is sometimes in the wall about five inches from the floor and the head is pulled down to the ring.

1481. Do you not think it better that the ring should be in the wall than in the floor?—Exactly.

1482. It allows less movement on the part of the animal?—It does.

1483. I do not want to go over ground that has been covered very fully by other witnesses more than is necessary, but I would like you to tell me what is the method of killing sheep?—The sheep are placed on a cradle or rack and three legs are tied ; then there is an incision made right through the throat severing the jugular veins and the vertebra is separated in order to destroy feeling.

1484. What is commonly called pithing?—Yes.

1485. Do you consider that the best method?—Yes I think it is about as good a method as you could adopt.

1486. Do you see any reason why the practice which is enforced by law in Germany, that is the stunning of sheep previous to bleeding, should not be carried out?—No, it would be better if it was carried out ; of course when the pithing takes place there is no feeling afterwards.

1487. Yes, but it requires an expert to be certain of pithing with the knife?—Yes.

1488. As I understand, it is the custom in slaughter houses to allow the younger men to stick the sheep?—Yes, they do frequently ; but we always draw their attention to that ; we stop them allowing youngsters to practise that kind of thing.

1489. Still, with a great many slaughter-houses and few inspectors it is not very easy to carry that out?—No.

1490. Do you see any practical objection, from the butchers' point of view, to stunning sheep before sticking them?—None whatever.

1491. You do not consider it would injure the value of the carcase?—Oh, dear, no.

1492. It has been suggested to us that if you stunned a sheep there would be a certain suffusion of blood, which would injure the scrag of mutton, and affect its value?—That would be of no consequence whatever.

1493. Are pigs stunned too?—Yes, large pigs are stunned with a spike and sometimes a poll-axe ; small pigs are stunned by a hammer.

1494. An iron hammer?—Yes, or if not an iron hammer a large stave with an iron band on it, which answers the same purpose.

1495. I suppose the iron hammer would be as effective as anything else?—Exactly, for small pigs.

1496. Does that injure the market value of the pigs head?—Not at all, it is quite understood that they do kill them that way, and they do not seem to find any fault with it. It certainly breaks the brain up and causes a little clotting.

Mr.
Wycherley.

Mr.
Wycherley
(cont.).

1497. It is not necessary to strike as hard as that?—No.

1498. And you feel sure that is a better method than to stick the pig without stunning it?—Much better; in crowded cities we could not do with the noise they would create.

1499. I was thinking of it from the point of view of the pig?—It is far the best method.

1500. Much more humane?—Yes.

1501. Do you consider your slaughter-houses in Liverpool are up to date as regards construction; are they modern in construction?—No, they are old slaughter-houses.

1502. Have you any new ones there—lately built?—No, we have no really new ones—what I could term modern slaughter-houses.

1503. Have you any views as to the ideal arrangement of a slaughter-house?—Yes.

1504. Where do you consider the animals that are going to be slaughtered should be kept previous to being slaughtered—I do not mean those in the lairs, but those that are to be immediately slaughtered?—Outside of the slaughter-house, in suitably constructed lairs.

1505. Perhaps I will explain quicker what I mean in this way. I noticed in the slaughter-house at Deptford that the pen in which the animals just going to be slaughtered are put is immediately outside the door of the slaughter-house, and all the refuse, the blood that is not caught, and other refuse, flows out into the pen, and the animals are practically standing in blood water, and so on. That is not a good arrangement?—Oh, no; they should be a little distance away, so that the animals should not see anything that is going on, or see any of the refuse about.

1506. And it is quite practicable, is it not, to construct a slaughter-house in that way?—Yes.

1507. Then I come to another point. You say they should be away from sight of the slaughtering operations?—Yes.

1508. Do you find from your experience that animals show any signs of fear from the sight or the smell of blood?—No, they do not seem to exhibit any signs whatever.

1509. How would you tell if an animal was afraid?—It would show its fear?

1510. How?—It would be distressed by bleating, or moaning, or moving about as if with some discomfort.

1511. I rather press this point, because the evidence is so contradictory?—I have seen animals lying down actually within a very few yards of those being slaughtered, and they have been chewing their cud quite content, and that shows they have had no feeling in the matter.

1512. It is extraordinary what a difference of opinion there is on this point?—Is that so?

1513. The previous witness, a man of very great experience, says he is perfectly convinced that animals, particularly cattle, dislike the smell of blood, and show signs of fear with regard to the smell?—I have no doubt they would dislike the smell of blood if it was left about, but at the same time if the animal is not disturbed in that way by blood or water flowing near to it, it would not be distressed with what was going on.

1514. Quite so, that is perfectly clear; but supposing the animal is kept perhaps for an hour, previous to being slaughtered, in a pen very close to the slaughter-house, only separated by two or three yards, so that the blood water and refuse and everything is flowing out under his nose?—I should say that would distress him—oh yes.

1515. Of course if the slaughter-house was arranged so that that should not happen, the object is attained, and he is not brought into contact with it at all?—That is so.

1516. Your slaughter men are not licensed, are they?—No.

1517. Do you not think it would be an advantage for men in the slaughter-house to be licensed?—Yes, I do.

1518. Do you think that the licence should be a test of their competency, or merely a check on them in case they misbehaved?—A test of their competency, I should say.

1519. How would you ascertain if a man was competent?—By judging of his work by competent judges.

1520. Supposing it was decided in Liverpool to institute a system of licensing slaughter-men, how would you advise the corporation to carry it out?—I should advise them to have the slaughter-men witnessed during their work.

1521. By you or one of your assistants?—Yes, by competent persons.

1522. And then you would grant the slaughterman a licence which might be of considerable value to him in his trade?—Yes, and allow only licensed persons to slaughter animals.

1523. And then the licence could be withdrawn at the pleasure of the corporation?—Yes.

1524. Therefore although a man was thoroughly expert with the poll-axe, if he was detected in being deliberately cruel, or drunk we will say, you would have the power to withdraw his licence or to suspend it, and that would give you better control?—Exactly.

1525. You would like to see that done?—I would very much.

1526. Are there any other points you could bring forward for the information of the Committee with regard to methods of slaughter? Have you ever seen any experiments tried with different devices? We have had a great number brought to us here?—No; I have only seen the mask. The slaughtering of calves might be improved upon; if they were stunned it would be much better than the mode adopted at present.

1527. Are they not stunned in Liverpool?—No.

1528. Would you tell us how they are killed?—They are raised up by the hind legs with a rope, and then a string is attached to the lower jaw to keep the animal's head still; then an incision is made through one side of the neck, on the lower side, and the vertebra is separated, and the bones being soft that is easily done with a knife.

1529. They are pithed?—Yes, and they are hung there until dead. The Jewish mode of slaughter is simply cutting the throat and letting them dangle about in any way.

1530. But they are not stunned?—No.

1531. I understand the practice in London is invariably to stun them?—They are not stunned in Liverpool.

1532. And there is no practical objection to stunning them before running them up?—No, it would be a much better system to adopt.

1533. (Mr. Gordon Miller.) Do you mean to stun them after being run up?—No, to stun them before, because it seems an unnatural thing to raise the calf up alive and have him dangling about for a second or two.

1534. (Chairman.) And that is not necessary?—It is not long; if the calf was stunned as he came in, and hoisted up and bled, it would be all right.

1535. Is what you have described as the practice in Liverpool also the practice generally in the North of England?—Yes.

1536. Stunning is not carried out in the North of England?—No.

1537. Are there any other points you could suggest to us?—No, I do not think there are.

1538. (Mr. Murphy.) Do they break the neck of the sheep?—Pithing—yes.

1539. At the time of killing the neck is broken?—Yes.

1540. Is that an easy thing to do with old sheep?—It is with an expert. I have stuck many a hundred myself and pithed them within half a minute.

1541. (Colonel Clayton.) And broken the neck?—Yes.

1542. (Mr. Murphy.) But the neck breaking is easy with the old sheep as well as with the young?—They are rather tougher with the old sheep, but still if you are an expert you ought to do it very quickly. All you have to do is to have a sharp knife, and you put the back of the neck to your knee, you run your knife through and you press on both sides with one hand on the jaw and the other on the neck, and your knee helps to break the neck of the sheep. It is done in an instant. Still, if youths were doing it they would find great difficulty in breaking the necks of the older sheep.

1543. You would make it a definite requirement that the neck of a sheep should always be broken?—Exactly.

1544. You would insist upon it?—Yes.

1545. (*Chairman.*) I believe in France they break them on the edge of the crutch; that is to say, the sheep is lying on its back, and they bend the head down over the edge of the crutch, and break the neck in that way. I suppose that would be really easier for a man who was not an expert?—Yes, if they had a good cradle or crutch to work on; some of them get worn down and are very awkward to work upon. I always found the knee the greatest help.

1546. With an expert a great many things are easy. I am taking the case of a lad?—It would be much better to have a good crutch with a good square front to it.

1547. There is one point about the licence: supposing you licensed slaughtermen, what would be the minimum age at which you would grant the licence?—Twenty years of age.

1548. You do not think anyone younger than that should be employed?—I do not think so—not as an expert.

1549. Another witness suggested eighteen.—I have seen strong youths at fifteen quite capable, but still they are exceptions.

1550. You would have to make some rule and stick to it?—Yes, and I think twenty would be quite young enough.

1551. (*Sir Henry Yorke.*) You said you were in favour of a test of competency in killing animals; how would you arrive at whether they were competent or not?—By having competent persons to witness their work.

1552. Would their work be performed on live animals?—Exactly.

1553. Then in that case you would hardly reduce any cruelty, would you?—You would, because if a man was not competent to slaughter you would prohibit him doing so.

1554. But in the first place you cannot tell whether he is competent until he is tried on the animals?—Exactly, but if he was a smart youth and had seen it done several times he would be able to accomplish it quite perfectly, and if not he would not be capable of being licensed.

1554A. I cannot see how you would reduce the amount of cruelty?—Supposing you had a youth you wished to train, and you showed him several times how to slaughter sheep or cattle or pigs, as the case might be, after he had seen a number of slaughtering performed he might try, and if he tried once and did not perform it effectually we would discontinue allowing him to do it; it would be only one case in which cruelty might arise.

1555. (*Chairman.*) And the cruelty to one animal might prevent cruelty to 500 or 600 animals?—Yes, to a great number.

1556. (*Sir Henry Yorke.*) But it is part of your duty to see that there is no cruelty?—Yes.

1557. If there is any what action do you take?—We have power to prosecute them under the bye-laws or to report them to the Royal Society for the Prevention of Cruelty to Animals.

1558. Could you tell us how many cases you have, roughly?—I could not—the Royal Society have had several, but they are infinitesimal.

1559. Does it amount to one a month?—Not one a year. We find them very careful. Our system of inspection is that we visit our slaughter-houses three times daily—morning early, 7 a.m., noon, and when sales are on in the afternoon.

1560. (*Chairman.*) At fixed hours?—Oh, no; in the meantime sometimes I send one of my assistants in between, if I think there is likely to be anything, so that we are constantly visiting them, and if we were to catch

them being cruel or careless we should report the matter to the Royal Society and support them in evidence. We should also report a case of cruelty to the owner, to the master butcher, and in all probability the employee would be discharged, unless he was a very good man, and an old servant.

1561. I suppose it may be taken that it is the interest of the master butcher to employ competent men?—Exactly.

1562. (*Mr. Gamc.*) Who would you suggest would be a suitable person to judge of the competency of a lad of eighteen to twenty years of age?—A practical man—a man who would know.

1563. Do you think the action would be taken by the corporation and that they would nominate somebody to go and see the practical work of the lad beforehand, and then you would grant him a licence for the whole slaughtering of animals altogether?—Yes, if he was competent; his work would have to be witnessed in the slaughtering of all animals if he wished to carry it on. We have some slaughter-houses in Liverpool licensed only for the slaughter of pigs, and they will perhaps slaughter 500 or 600 pigs per week. We have one place where they slaughter from 1,000 to 2,000 pigs a week, principally Irish pigs; that is the public abattoir belonging to the company.

1564. And you think the men would study to make themselves competent for the work?—Yes; if I were to tell you what they earn you would be surprised; I knew one man who earned £23 in Christmas week slaughtering pigs. He had a helper with him, I think the helper would probably get £5 or £6, but the man I have referred to was the slaughterman, and he finished all the pigs, that is to say, when the pigs were scalded and hung up he disembowelled them and put the belly-stick in them.

1565. (*Chairman.*) Do you not think that the demanding of the licence would be really well received by the slaughtermen themselves, that is to say, by the better class men, because it would prove their standing, and if they moved to a different part of the country they would not have to go and exhibit what they could do; they would say simply "Here is my licence"?—Exactly.

1566. Is there a slaughtermen's union?—No, but there is a butchers' union.

1567. They would not be likely to oppose any such proposal?—No. Since the cattle drovers were licensed in Liverpool we have found a great improvement.

1568. (*Mr. Gamc.*) The drovers are licensed more for the public convenience?—Yes, but we find a great improvement; the men are much steadier and they look after their work and take an interest in having their licence.

1569. (*Chairman.*) You propose that the testing of slaughtermen previous to licence should be carried out by yourself and your assistants?—Exactly.

1570. Do you think it would be practicable to institute what I might call a class of instruction for slaughtermen?—Yes, it would.

1571. In Germany they have an instrument for teaching the use of the poll-axe, and I now exhibit to you a sketch of that instrument in a volume; you see the idea of that?—Yes.

1572. It shows the force of the blow requisite as well as the direction?—Exactly.

1573. Do you think that would be useful to teach the men how to hit with accuracy?—Yes.

1574. Would it be possible in Liverpool, for example, for you to institute a short course of instruction for slaughtermen under the supervision of your department?—I think so.

1575. It might enable men to get certificates more easily?—Exactly.

1576. And it would also prevent the necessity of allowing an absolutely untrained man to practise on a living animal before he had shown some power of striking accurately, and so on?—Yes.

Mr.
Wycherley
(cont.).

Mr. PETER DURIE, called; and Examined.

Mr. Durie. 1577. (*Chairman.*) You are the superintendent of the Edinburgh slaughter-house?—I am.

1578. How long have you held that position?—Eighteen years.

1579. And before that?—I have always been associated with the slaughter-house; I have been there all my days.

1580. At Edinburgh?—Yes.

1581. And therefore you have a very wide experience of the slaughtering of all animals?—I have.

1582. We had a letter from you on the 11th February, which gave us a little information, but for purposes of record I think I will ask you one or two points again. Do you slaughter cattle, calves, sheep, and pigs at Edinburgh?—Yes.

1583. Those are the only animals that we are considering at the present time. With regard to cattle, I understand this is the pattern of poll-axe you use? (*Exhibiting.*)—Yes, I brought an axe-head with me, but I do not know that it is exactly the same as that one you have. I now show the Committee the axe I have brought with me; it is my own patent, as it were. In the case of these other axes the hollow bolt at the one side of the poll-axe gradually becomes filled up with skin and other matter until it becomes solid, but in the case of this one of mine the bolt can be screwed out at once and quite easily cleaned. I originated this principally for the War Office; for some officers at Edinburgh; they at one time used the mask, but I considered this idea of mine was much better.

1584. You prefer the poll-axe to have a sharp axe like that on one side of it rather than a hook?—You must always have the axe on the one side, because as soon as the animal is knocked down the axe is required for taking the head off. You must use the axe, and if you use a hook you must have the axe also.

1585. I was asking why the London poll-axe had a hook on it, and it was explained to me that it was merely for the convenience of hanging it up; there is no difficulty of putting that form of poll-axe away when you have done with it?—There is no difficulty in the world.

1586. Where do you put them when they are not in use?—They have a cord round the end of the handle and it is hung up out of the way.

1587. By a loop on the handle?—Yes, but of course you must always leave the face of the axe for taking the head off, because when the animal is knocked down as soon as the head is skinned you want the face of the axe to take the head off.

1588. I presume it is done in London with a cleaver afterwards?—That is placing too many irons in the fire, in my opinion.

1589. I presume that axe of yours would have the extra advantage that you could let a less experienced man take the head off and that would give him some experience in the handling of the poll-axe before he actually knocked down cattle with it?—That is so. There are forty-six licensed men in the Edinburgh slaughter-houses.

1590. Licensed slaughter men?—Yes, what I call badge men, men who wear badges to show that they are expert men.

1591. And do they do the whole of the knocking down of the animals?—They do the knocking down, but they usually have young lads to assist them, and after the animal is down no objection is raised if they then make a stroke at it to see what they can do, to bring them forward, as it were.

1592. That is very interesting to us, because it is the first knowledge we have had of the licensing of slaughtermen?—Yes, slaughter men must be licensed within the gates.

1593. Who grants the licences—the Corporation of Edinburgh?—The Corporation of Edinburgh.

1594. On your certificate, I presume?—That is so.

1595. How do you determine whether a man is entitled to a licence or not?—In this way: The man applying

for a licence receives an application form from me which he presents to the Chairman of the Master Butchers' Association, and if they consider, and know that the applicant is qualified to take the head off properly and to dress the carcass properly, they will sign it. The man also requires references from two or three of the largest butchers in the city to say he is honest and that he has been known to them for so many years as being honest, trustworthy and a good slaughterman. That information is given on the application form duly filled up and sent to me.

1596. But after that do you pass him yourself practically?—Yes, but I send him to get this application form filled in before I give him the badge; I send him to these master butchers to see if they will give him what is termed "a character"; if he gets this character he will receive a badge.

1597. Do you give him the badge without really seeing him work?—No, he has been employed for years and has come to me and said, "I have worked for four years and it is time I had a badge now." It is the same as a journeyman working forward from a boy.

1598. (*Mr. Gordon Miller.*) An apprentice?—Yes.

1599. (*Chairman.*) Do you or one of your inspectors actually see the man knock down an animal before you give him a badge?—Oh, yes.

1600. Probably many times before?—Many scores of times before.

1601. Therefore it is not the law of your bye-law that a man is not allowed to knock down an animal unless he has a badge?—No.

1602. He is allowed to knock them down, but he is not a certified slaughterer?—That is so.

1603. And therefore he has not as high a standing?—That is so.

1604. And in addition to that do you have any system of licensing, not necessarily to show the man's skill, but simply to have a hold over him in case he misconducts himself so that you can withdraw his licence?—We have that for all within the gates; provided for in the rules, regulations, orders, and bye-laws.

1605. Everybody within the gates is licensed?—No, only in the case of the "jobbers," whom we call the "licensed men within the gates." If there is a word out of place, or bad language used, or if they are touched with drink, they are peremptorily ordered to go outside, and are thus prevented from working for perhaps a week or ten days.

1606. But they are not given a licence which is withdrawn; they are merely told to get outside?—To get outside for a fortnight; perhaps I do not withdraw his licence for being the worse of drink, any more than just giving him a week or ten days to regret his past misconduct.

1607. I am afraid I have not made myself quite clear; I want to know whether these men who are employed in the slaughter-house, but who have not badges, have any licence?—No.

1608. Do you see any reason why a licence should not be required from these men?—These other men who are occupied in the slaughter-house have nothing to do with regard to the slaughtering at all.

1609. You mean with the actual knocking down?—That is so, or the dressing of hides either.

1610. But take the men who have to do with that, who have to flay the animal, and cut him up, and so on?—These are the badge men.

1611. These are all badge men?—Yes.

1612. Still they have to learn the business before they get the badge?—Yes.

1613. Whilst learning their business, do you not think it would be good a thing that they should have a licence which would be withdrawn in case of misconduct?—No; it is not necessary. The young man works himself forward, and when I find that he is qualified to receive a

badge, by showing his proficiency to dress a carcass, and knock the animal down, I give him one.

1614. And you think that is a sufficient amount of licensing?—I do.

1615. Are your cattle fastened up? Do you draw them down to a ring before they are poll-axed?—We do. The rings are fastened to the walls, the cattle are driven in from the back door, the door is shut and the animal is drawn close in to the wall, the head put into position, and the animal is knocked down at once. The axe having penetrated into the brain a cane is then run into the spinal cord.

1616. We have seen the thing done practically, and I think we are convinced that that, in the hands of an expert, is a very humane method?—Yes; I think it is the best system that could be adopted.

1617. I do not want to go over the same evidence we have had a good many times; in Edinburgh using the poll-axe, I presume, the animal is only struck on the forehead; you do not strike him on the poll first?—We only strike him on the forehead.

1618. How are your sheep killed?—Three of the legs are tied and the fourth is allowed to go loose. The sheep is then placed on a stool, with a bucket underneath the head, to catch the blood; the knife is inserted straight down, and turned instantaneously, thereby cutting the spinal cord.

1619. Do you call that "pithing" in Scotland?—Yes.

1620. Do you break the neck as well?—No; I may tell you, gentlemen, that some years ago I went into those matters with Professor McFadyen, who informed me that they break the neck in England, but it is not done in Edinburgh nor do I consider it advisable or necessary.

1621. Why?—The knife is inserted under and slightly behind the ear, and as soon as the knife is put down right through, it is turned up and cuts the spinal cord at "the atlas."

1622. If it is done effectively by an expert, but in the experiments we saw at Deptford, even in the hands of an expert man, the spinal cord was not always completely severed; it was nicked but not severed. We had the Report of Professor Stirling, the great physiologist, who accompanied us, and he said that in several cases the spinal cord was not completely severed, and was only nicked. I do not know what is the practice in Edinburgh, but in England it is largely the practice to allow the younger lads in the slaughter-house to do the killing of the sheep?—With regard to the slaughtering of sheep, the rule is that all sheep must be quite dead before the carcass is touched with a knife, otherwise the mutton is spoilt.

1623. I am thinking only of the killing; I am disposed to agree that if the pithing is done by an expert it is almost instantaneous?—It is quite instantaneous.

1624. But if not done by an expert the animal may live for some time, even after the knife is passed through its throat, if the spinal column is not quite severed?—Yes. The reaction of the muscle might last half a minute.

1625. But even half a minute is an unnecessary length of time?—It is too long.

1626. What is the practical objection to breaking the neck?—I see no reason for doing so; we have never allowed it in Edinburgh.

1627. Do you see any practical objection to it?—No, I do not see any practical objection, only that it cannot be done without some considerable effort.

1628. It is done in England almost invariably?—I have never seen it done.

1629. That is a difference of local practice, I suppose. Do you see any practical reason why sheep should not be stunned with a mallet before being stuck?—I have never seen that done.

1630. I am not suggesting things which are theoretical, but it is the law, for example, in Germany, that the sheep are stunned before being stuck, and therefore it is obviously a thing that can be done. I wanted to know if you saw any practical objection to it from the butchers' point of view?—No, I do not see any practical objection, only that the forehead of a sheep is pretty hard. I may tell you that we stun every pig.

1631. What with?—With a wooden mallet, and with a handle the same as that which has been shown to me here. The pig is dropped at once and then stuck.

1632. At Liverpool they do it with an iron hammer?—I may state that the class of pigs chiefly used in Edinburgh are termed "chicken pork"; Liverpool, Manchester and Glasgow can do with a different class of meat from Edinburgh; what Edinburgh requires are young pigs, pigs from six to eight months old. The wooden mallet will drop them instantly.

1633. And the blow on the forehead does not injure the carcass, or affect the market value?—No.

1634. I understand your slaughter houses in Edinburgh, merely as regards the construction of the buildings, are modern?—No, they are about fifty-five years old.

1635. Perhaps it is in Glasgow that they have got some new ones; do you know?—No, Glasgow is in part inferior to Edinburgh. Yorkshire is of a more recent date.

1636. Do you consider the construction of your slaughter houses is as good as it could be?—No, we are going in just now for new slaughter houses.

1637. And you probably have very clear ideas as to what is the best arrangement for a slaughter house.—We have. One of the best arrangements, in my opinion, is this: I have a killing booth reserved for all dead animals, it is to my interest in supervision to keep this place, so that these dead animals coming into the slaughter house belonging to Dick, Tom, or Harry, receive immediate and minute inspection, being isolated from other carcasses.

1638. Dead animals?—Yes, for instance, an accident happens, such as a broken leg, or anything of that kind, the animal having been slaughtered in the street, or elsewhere; if it is brought into the slaughter-house for dressing, it must go into this reserved booth to which I have referred to. We have it there for inspection, in case of disease, as there might be any sort of contagious disease, and it is thus kept away from all other meat.

1639. I do not think that point quite comes into the investigation of this Committee. We are only considering the humanity aspect of the question at the present time. We noticed at Deptford, where there are very large slaughter-houses, that the pen in which the animals are kept just previous to being slaughtered—I do not mean the large lairs, where hundreds of them are kept, but the ten or twenty that are to be slaughtered in one slaughter-house—is a little pen immediately outside the two doors of the slaughter-house, and in such a position that all the blood, water, and refuse, from the slaughtering flows out into the pen in which these animals stand. That is not a suitable arrangement?—No.

1640. What I want to come to is this: do you consider that to put an animal in a position where it can get the sight and smell of the blood, and offal, and so forth, tends to cause the animal discomfort, and frightens it, and so forth?—I do not say that either a bullock or a sheep is sensitive to that. At the Edinburgh slaughter-houses the door shuts itself whenever an animal is brought in.

1641. With a spring?—Not exactly, but the door is put on in such a way that it shuts forward; whenever the animal is brought in (there may be six or seven behind), it comes away by itself, and the door is shut so that no other animal can see it slaughtered.

1642. You catch all the blood you can, but there is a certain amount of blood-water and refuse which has to flow away; where does it flow to?—Our booths at the back have from five to six inches of an incline to the door at the front; the animal enters from the back and the blood or blood-water flows to the front.

1643. It flows in the opposite direction?—In the opposite direction to which the animal is standing.

1644. In Deptford it flows the way the animals are waiting?—That is a mistake. We have built some new additions to our slaughter-houses in Edinburgh, and these have formed six to seven inches of an incline at the back so that everything goes out the other way.

1645. Also no animal is slaughtered in sight of another animal?—No.

Mr. Durie
[cont.]

Mr. Durie
(cont.).

1646. You bring them in one at a time?—Yes, one at a time.

1647. I notice it is the practice in England sometimes in slaughter-houses to bring in several animals at a time and slaughter them in the one room?—Our place is not constructed for that; it will only allow of one at a time.

1648. And you think it should be enforced, one at a time?—Well, I should say it is more humane.

1649. Is there anything else you could suggest to us from the point of view of humanity? I may say in starting we do not want to adopt or even to consider any methods which are impracticable, or which would injure the meat, or which would cause any great delay or expense, or anything of that kind; but without that is there anything you could suggest to us in the way of improvements that could be introduced either in the methods of slaughter or in the construction or regulation of slaughter-houses?—I think not. The slaughter-house regulations, as applied to Edinburgh, are perfect, but I would desire to suggest that the cattle coming off ships, say from America or from a sea voyage, should have at least forty-eight hours' rest before being slaughtered, both for the sake of the animal and for the sake of the consumer of the meat, because these animals as a rule are all more or less fevered—you may call it sea-sickness—and to slaughter these animals right off I think it is wrong, and they ought at least to have forty-eight hours, with a little hay and water, to allow the flesh to return to its normal state.

1650. Have you seen any of these masks used for slaughtering?—No.

1651. We have had all sorts of instruments sent to us?

(The Witness is shown Baxter's mask.)

1652. Have you ever seen that used?—No, I have never seen anything of this kind used.

1653. You see the idea of it?—Yes.

(The Witness is shown Bruneau's mask.)

1654. Have you ever seen that mask used?—No. Bruneau's would not work with our cattle, because our Highland cattle usually have from three to four feet of horn, and before you could get this instrument on to the head of these Highland cattle or Scotch cattle, as they are called, they would put their horns through you. That is why I had this instrument of mine made longer. I have occasional classes of ladies desiring to learn meat inspection and the means for prevention of cruelty. This instrument was, therefore, principally for these classes to show how it worked, and was adapted for these Highland cattle. It is a Greener, but it is longer. If the animal is inclined to be wild, and, having long horns, the short "Greener" would be of no use, because the animal would put its horns into your side before you could get the instrument placed on its forehead; but I can safely say that, although the bullock may be very restless and troublesome, with my longer weapon there would be very little resistance or danger to the operator.

1655. That is a Greener instrument only with a longer barrel?—Yes; our Humane Society consider that this is the best they have seen.

1656. Do you like it?—I may say that any time I have brought it into use I have used it myself; the classes of ladies and medical students desire and are anxious to see the best method for slaughtering and the most humane. (The axe is generally used on another animal afterwards for comparison).

1657. Is there not a danger in using that instrument that if the animal moved its head the bullet might come out of the side of its neck?—I have never seen that, because the animal's head is drawn close up and the head is quite steady. We have not the ring in the floor but in the wall, and the head is held quite steady; there is not a man within the gates who could make a mistake in these circumstances. If a man took two strokes at a bullock (using the axe) we would dismiss him; we must have the work as humane as it can possibly be done.

1658. I would like you to look at this instrument (showing the Witness the Blitz apparatus). There were some experiments held at Leipzig in Germany two years ago to determine the best kind of killing instrument, and these Greener instruments were tried, but the objection

was that the bullet was unsafe—that it might go astray and hit somebody. Therefore this kind of instrument was devised; this I may say, was only for killing the smaller animals such as sheep and so on, and the bolt is therefore small, but you merely put in a blank cartridge and shut it up and then strike and the bolt is shot into the brain like the poll-axe; but of course the bolt is fixed, and cannot get away to injure anybody?—I see that.

1659. I presume that would be more effective than a bullet, because you would be able to use the cane afterwards?—You can use the cane after the bullet, and I always use the cane. The cane must be used.

1660. Do you use the cane with the Greener?—Yes. A small cane about the same thickness as the Greener bullet is used which will go up the spinal column. You must use the cane; this instrument is of no use without it.

1661. It has been suggested to us that you could not use the cane?—You must have a cane or a light wire to penetrate into the hole.

1662. Where does the bullet go to when it is fired?—We want if possible to put it into the spinal column.

1663. (Mr. Game.) How can you use the cane then?—To put the cane right in it will push the spinal cord before it.

1664. If the bullet goes into the spinal cord does not that destroy part of the spinal cord?—It does, but I mean to say, that the cane following up the bullet will not harm the flesh of the animal and that the spinal cord will go before the cane as it is pushed in.

1665. The bullet would not stop the cane from going in?—Not a bit.

1666. (Chairman.) How far does the bullet go in?—Perhaps a foot or a foot and a half, and then you get the cane to follow it up into the spinal cord.

1667. (Mr. Game.) Then the spinal cord would be damaged for the foot and a half the bullet went in?—There is no value in the spinal cord; I mean for human consumption we do not place any value on the spinal cord of an ox. That instrument you have shown me, sir (the Blitz), is a very good one, and if it were adapted—if it had weight enough it would do very well for knocking down bullocks, because with the Greener, as I have said before, there is some danger, especially in the hands of a man who is not an expert.

1668. (Chairman.) There could not be any danger with this, because the bolt cannot get out?—That is so. I have not seen it before, but it is to be recommended, because there is no danger attaching to its use.

1669. We propose to try it; in this large series of experiments at Leipzig they said it was effective on every occasion, and was used twenty or thirty times, but you would need a larger bolt than that for cattle?—Yes, and you would want it to be very strong, too, to send it on.

1670. Are there any other points you could bring forward yourself which would assist us in our investigation?—No, there is nothing else I could suggest.

1671. (Mr. Murphy.) The slaughterers killing in the public slaughter-houses in Edinburgh will kill for a number of butchers, will they not?—Yes, there are about 200 butchers.

1672. And the slaughterer is not in the service altogether of one butcher?—No.

1673. He kills for a number?—These licensed men are under my supervision, and they can kill for Dick, Tom, or Harry; therefore, as soon as they are disengaged they are open to accept of employment from another.

1674. (Chairman.) What wages do the licensed men get a week?—They receive 4d. a sheep, and 2s. a bullock.

1675. What do they make in the week?—According to their killing.

1676. On the average?—Some of our butchers can make from £3 to £4 a week easily.

1677. (Mr. Murphy.) As to the people who assist, are they paid by the slaughterer?—No; for example, three or four men go together; two of them are working at one beast and two are next door at similar work; the payment is equally divided at the rate of 2s. a head

for the dressing of the carcase of a bullock ready for the butcher's shop, and 4d. per sheep.

1678. I did not quite understand whether the badge was a permit for a slaughterer to come and kill in the slaughter-house, or whether it was only evidence of his proficiency?—That man is efficient; he has served his time and is an expert at slaughtering. The badge means that he is an expert at the slaughtering. Before he gets his badge he must be a qualified man able to dress a carcase.

1679. May men come and slaughter in the slaughter-house before they have got a badge?—No, they might learn as young lads but they are only then apprentices and assistants to the experts.

1680. So that the corporation does actually control the people who come and kill in their slaughter-houses?—They do.

1681. (*Colonel Clayton.*) I believe Edinburgh is the only town where you do not allow any private slaughter-houses?—We have only the one slaughter-house in Edinburgh.

1682. You do not allow any private slaughter-houses there?—No.

1683. And there is no difficulty in working that, is there?—Not in the least.

1684. (*Chairman.*) Is every animal slaughtered in Edinburgh slaughtered in your slaughter-house?—Yes. Also the offal is cleaned; every ox foot has to be cleaned there before being sent to the shops; the tripe and everything else must be made clean.

1685. (*Mr. Gordon Miller.*) You mentioned just now that if a man were clumsy at slaughtering you would not allow him to go on?—No.

1686. That means to say that you insist upon a man killing an animal in a satisfactory manner before you give him a badge?—Yes, he has been known to kill many a dozen or many a score of animals, and to do it satisfactorily before he gets his badge.

1687. Under inspection in the slaughter-house?—Yes; he is a competent man before he is allowed the badge.

1688. But there must be a beginning?—If I were to drop a bullock, I would have no objection to a young man trying his hand after the animal was dead or dropped.

1689. Then when he has had a course of instruction of that sort, you put him on to a live animal?—Yes, bring him on by degrees.

1690. First on the dead animal and then on the live animal?—Yes, so that there is no cruelty used whatever.

1691. And you endeavour to ensure as far as possible that before a man touches a live animal he is proficient?—That is so.

1692. But on the other hand, it is quite conceivable that when he goes to a live animal he may prove to be not so efficient as he ought to be?—That may be; on occasion I have had two or three gentlemen looking on, and it is then when you would specially desire exemplary workmanship, that the man makes a mistake. That is only a mistake, because as a rule we get the work done instantly and well.

1693. But what you said just now was that if a man comes along and takes two or three strokes to kill a bullock, you send him back?—I could not stand that at all; we would send him back.

1694. What I mean is this, that sooner or later it comes to that stage that a man has had what is considered to be sufficient practice on a dead animal to enable him to begin to practise on a live animal before you?—Yes.

1695. He does it before you?—Yes.

1696. And everything is done that can be done to train the man up before he practises on the live animal?—That is so.

1697. He might fail on the live animal, and in that case you think he is not perfect, and send him back?—Yes, we send him back for a little time and give him a caution to see that such a mistake does not occur again.

1698. (*Chairman.*) How often does it happen that you send a man back?—Not very often; they are very anxious to get forward because four or five years is a long apprenticeship, and they take very good care.

1699. (*Mr. Gordon Miller.*) Do you know anything about the country districts about Edinburgh? What area does your slaughtering system cover—only the city?—Only the city.

1700. The slaughtering in many places around is done by the local butchers?—That is so.

1701. Do any of the local butchers ever come to you for any instruction or information as to the methods of killing?—We have them coming from all parts, hundreds of miles round, to see the methods of slaughter in Edinburgh. We have had inquirers from all parts.

1702. So that the butchers in Scotland take the trouble to try and find out the best methods?—Yes. We are always open for improvements; our magistrates and council give every encouragement to promote humane treatment and to prosecute against and prevent cruelty.

1703. You mean outside the city as well as in?—Well, I am only speaking for inside the city.

1704. I am talking of outside the city. I wanted to find out whether you encouraged the butchers outside the city in districts around to come in and see the system of slaughtering?—Oh yes, from three to four miles round the butchers are in each week bringing their hides and skins to our hide market in Edinburgh, as they have no market of their own. They are in every week from these districts round about.

1705. And by those means they see the latest methods of slaughtering?—That is so.

1706. Because we have heard of cases where in country districts they hit the bullock several times over the head with a hammer before he was insensible?—I should give that man twenty days.

1707. (*Chairman.*) But there is no law by which you could do that.

1708. (*Mr. Gordon Miller.*) It may arise from ignorance and old custom?—That is so.

1709. But by bringing them into touch with the more modern systems of killing you might induce them to follow?—That is so. I may state as regards all these local butchers round Edinburgh that they are all for using as little cruelty as possible.

1710. Have you seen much slaughtering in private slaughter-houses?—For example, we have had representatives in from Haddington, Dunbar, Berwick, Dalkeith and Melrose; they have all visited Edinburgh to see the methods of slaughtering.

1711. (*Sir Henry Yorke.*) I want to be quite sure of one point; I understand from you that there are hundreds of animals killed in your slaughter-house by men before they get a badge?—No, these men who get the badge are practical men, and do the knocking down, but a learner might get a chance after an expert has been at it, and after the animal has been knocked down.

1712. I will put it in another way; does any man in your slaughter-house kill an animal before he has got a badge?—Yes.

1713. But not hundreds?—Not hundreds.

1714. You said you were in favour of animals that had come out of a ship being kept about forty-eight hours before they were killed?—Yes.

1715. As to animals that come to you by rail, say fifty or 100 miles, what sort of time would you give them?—If, for example, they were brought in from the auction sales, and were put into pens with straw and water during the afternoon, and allowed to rest that night, they could be slaughtered at 4 a.m. the following morning. That is after coming from twenty to thirty miles by rail.

1716. How long do you think they ought to be from the time they reach the lair until they are killed—animals that have been driven twenty or thirty miles, or which have come 100 miles by train?—If they are driven six or eight miles these animals should be allowed to rest all night before being slaughtered.

1717. But you would allow them to be slaughtered the next morning?—Yes, after a night's rest.

1718. You think that is sufficient?—With animals coming such a short distance; I was previously referring to animals for a week or ten days on the water.

Mr. Durie
(cont.).

Mr. Duric. 1719. Have you seen animals slaughtered in sight of each other?—Yes, I have seen them, but not very often.

1720. Did it occur to you when they were slaughtered in sight of each other, that the animal that was to be second slaughtered was impressed?—Not a bit—not with a dumb animal at all? we have entered into that question with our experts and we cannot see it.

1721. (*Mr. Game.*) As to the badges which are granted, would you grant a man a badge because he was an expert hand at knocking a bullock down or poll-axing it, or would you require him to be able to finish dressing the bullock before he got the badge?—He must be qualified

to dress, to knock down the bullock and dress the carcase thoroughly before he gets the badge.

1722. Cutting hides and things of that kind would prevent him having it?—Yes.

1723. Therefore the badge he gets is no particular specification that he is a first class hand at knocking down?—Not for a first class hand at knocking down, but a first class butcher all through.

1724. It is given for the dressing of the bullock?—Yes, and as an expert all through.

1725. (*Chairman.*) He has to be an expert in knocking the bullock down as well as in flaying him?—That is so.

Monday, 28th March, 1904.

PRESENT.

Mr. ARTHUR LEE, M.P. (*Chairman*).

Mr. ALEXANDER C. COPE.

Mr. CHARLES GAME.

Mr. GORDON MILLER, C.B.

Mr. SHIRLEY MURPHY.

Sir HENRY YORKE, K.C.B.

Mr. R. G. HAYES (*Secretary*).

Mr. CLARE SEWELL READ, called; and Examined.

Mr. Read. 1727. (*Chairman.*) I understand you have been very largely identified with the agricultural interest of this country?—Yes, all my life.

1728. And for twenty years you were a Member of Parliament?—Yes.

1729. You have taken especial interest in this question of slaughtering animals for food, I understand?—I have.

1730. I think I have seen several letters of yours in *The Times* and other papers on the subject?—I have written to *The Times* and to the agricultural papers on the subject.

1731. I think you are aware that the object of this Committee is to ascertain the most humane and practicable methods of slaughtering animals for food, and at any rate to enforce those methods in Government establishments?—Yes.

1732. We have taken a great deal of evidence from people engaged in the slaughtering trade and others, and we have visited large slaughter-houses and witnessed different methods of killing—the methods in use, and also suggested methods—and we shall be very glad if you would give us the benefit of your ideas as to what you consider are, first of all, the best methods of slaughtering animals, and secondly, if you would tell us what you consider are the abuses under the existing system?—I think for the purpose of killing cattle there is nothing like the poll-axe, I am almost positive on that point, because I have seen other methods tried, and you must have something that is handy and cheap and quick. I am sure that the poll-axe is by far the best instrument you can have for unsensing bullocks.

1733. In the hands of an expert?—Well, in the hands of anybody after a little practice. I have seen country butchers; I have had them come into my yard and knock cattle on the head, and they kill them in a moment, and I should not call these men experts, but common country butchers. There is a very nice little instrument which you have most probably seen here, a humane cattle killer.

1734. Is it the Greener instrument?—I do not know the name of it, but I have seen that. I do not think, however, it is at all applicable to killing any sort of strong or wild animal, it would be excellent if you had a Jersey cow, for instance, that did not mind having its head handled, or a horse, or anything of that sort; but it will not do generally to apply it in the case of wild and strong animals that have to be killed. I do think something of that sort ought to be in the hands of every local

authority where the police can get at it. I saw the other day a horse near the Bank, and they had to send for a butcher to come and poll-axe him, whereas if he had just had one of these things in his hand, and put it on the beast's forehead, he could have killed it without any demonstration.

1735. I think the Committee will quite agree with you on that point; I think they are persuaded that the poll-axe, at any rate in the hands of an expert, is the best method of felling cattle and also that it would be very desirable that the police should have the Greener killer or something of that kind to deal with cases of accidents to horses; but that is a little outside our reference; we are only engaged with the slaughtering of animals for food?—Then you come to calves, and I understand that they are in a measure unsensed, but I have never seen it; they are generally pulled up by the hind legs and their heads are cut off. I think you must be very careful in regard to the calf's head, that you do not injure it, because it is a very considerable item of the value of a calf; it is worth 10s. I should think, from 7s. 6d. to 10s., and, therefore, you must be very careful in suggesting that that should not be injured in any way; whether it could be done by separating the spinal cord at the back of the head or not, I do not know, but I should think it might.

1736. I understand the methods of killing calves vary very much in different parts of the country, and we were informed that the usual practice is to run the calf up and then stun him by a blow on the head before bleeding him or cutting his head off?—That may be the case, but I have never seen it.

1737. What is the method you consider most usual in the country?—I think simply hauling it up by the hind legs and cutting its head right off, but still I have not had much experience with calves for some time.

1738. Do you think that in many parts of England the old practice of bleeding the calf gradually from day to day still exists?—I do not think so at all; I am sure it does not in our part of the world—Norfolk.

1739. It used to be the practice, was it not?—It used when I was a boy, but it has been abolished these twenty years I should think, as a rule.

1740. Then as to sheep?—The common method—I do not know any other—is to bore a hole right through the sheep's neck, and let it bleed to death. I am told that soon after that is done they break the neck, but I should much prefer breaking the neck before the sheep is stuck.

1741. Do you think that is possible?—Well, I only know what I saw of it in America.

1742. I wish you would tell us what you saw there?—The sheep are all laid on their backs with their heads over a trough, as it might be *here* (*describing*), and a man comes and breaks the neck *so* (*describing*), just the same as you would break the neck of a rabbit, and then they are stuck, and the blood goes into the trough.

1743. That is very interesting; did you gather that it was a difficult thing to do?—Well, I should think you require to be a real expert to do it so far, but I should have thought that the better plan would have been to have had a miniature poll-axe and to have hit the sheep on the forehead to unsense it.

1744. One objection to that is that the sheep's forehead is the hardest part of the whole body; that is his natural fighting weapon?—So it is of a bull, I believe, but you have to do it.

1745. But the top of the head is comparatively thin in a sheep?—Yes, I do not doubt that; I say that you can unsense them in a similar way to what you do to an ox, and something of that sort I think ought to be done before their throats are cut.

1746. Do you know that it is the custom in many parts of Germany and in Denmark, and altogether in Switzerland, that sheep have to be stunned before they are stuck, and they are usually stunned with a blow on the top of the head with a mallet, such as the one I now show to you, which is a Danish mallet (*showing the same to the Witness*): Do you think the American system is equally efficacious?—It is done on a very large scale; it was one of those large slaughter-houses that I saw.

1747. Where was this?—In Texas, I think, and there they had different means of killing cattle as well; I do not know whether I should say what that was.

1748. You might tell us?—These very wild cattle have to be driven up into pounds, and then they are pushed along until they come into a place where they cannot move.

1749. (*Mr. Cope.*) Like a funnel?—Yes, like a decoy. It is a small boarded passage, and a man is above; he whistles to the bullock and the bullock puts up his head and the man generally plants the bullet from a pea rifle right in his forehead; it is done in a moment, and he is pulled right through. Another way is that the man is armed with a very long iron bar about six or seven feet long, with a very sharp point; the bullock has its head down in the usual way and the man strikes it at the back of the head and separates the spinal cord, and he tumbles down in the same way, but otherwise in America they seem to use the poll-axe very much as we do here on what I may call the domestic animals. As to pigs, in those large slaughter-houses they seize them by the hind legs and haul them up; they come along a plane, and a man with a knife cuts their throats as they pass as rapidly as *this* (*describing*), and, I do not know how it comes to pass, whether being hauled up by the legs has a little to do with rendering them insensible, or whether it is that the blood so rapidly flows as to choke them—they make very little noise after they are stuck.

1750. (*Chairman.*) But they make a lot of noise while being hung up by the legs?—They do indeed; the pig is very apt to call out before he is hurt. For instance, if you have to ring a pig he makes a great deal of noise then.

1751. He is not enjoying himself even in that case?—No, but it is very singular to me how soon they cease to make a noise after the throats are cut in America, whereas in the common way of killing them in the country they shriek for five or ten minutes or longer.

1752. We are told that in Wiltshire where they kill on a large scale they always stun them with a blow on the forehead before they stick them?—That ought to be made universal.

1753. I would like to hark back for a moment to what you were telling us about the American method of killing sheep; this is the first we have heard of it, and it is very interesting to the Committee. As I understand, the sheep are laid on what is called a "crutch" by English butchers?—They have their legs tied up and they are laid on their backs; they look very much like the Americans themselves when they are going to be shaved; they lie back and

hang their heads over, and I suppose you might dislocate a man's head very easily in that way as you would do a sheep.

1754. Do I understand that the operator takes the sheep by the mouth?—He takes the sheep's head in his hands, and gives it a wrench or jerk.

1755. Straight down?—Straight down.

1756. Do you not think in the case of an old sheep that would be rather difficult to do?—I should think it would, particularly in the case of a ram with a very thick neck; I should not recommend that, but I only tell you what I saw in America, and I believe if a sheep is unsensed, it would be so much more easy to finish slaughtering it.

1757. Besides, it is much more humane, obviously?—Yes.

1758. Could you tell us where we could get information on that point. Do you know the address of any big firm that kills sheep in that way?—No—it is such a long time since I was there—1879. My colleague Albert Pell has been over to America since, I think, and he might be able to tell you something. I should not recommend this method at all, and I only submit it casually.

1759. On the Continent they have a general rule, in Switzerland, for example, that all animals must be unsensed before blood is drawn, and in the case of the smaller animals they do it with a mallet; in the case of the large animals they do it either with the poll-axe or with a mask, or some method of that kind, but the law stands that they must be rendered insensible before blood is drawn?—That ought to be the law in England.

1760. Of course it would be a great gain from the humanitarian standpoint?—It would not really injure anybody at all, I think, after they had once taken to it.

1761. Can you tell us what you consider the chief abuses in the present slaughter-house practice in this country?—I do not think anything in a well-regulated slaughter-house; they are rather dirty, but I do not think anything else is to be complained of, as a rule.

1762. Do you not think it would be much better if there were more of these big central abattoirs to replace the small private slaughter-houses, which cannot be supervised?—It depends on where you are; if you are in a large town I should think it would be.

1763. In Edinburgh there is only one slaughter-house, and private slaughter-houses are forbidden?—I have seen private slaughter-houses that, in my opinion, are as well conducted as any public abattoirs.

1764. But it depends on the individual, there is no supervision?—That is so, but from a humane point of view there is nothing, I think, wrong with the exception of not unsensing the animal before his throat is cut, and that, I believe, ought to be done, and could be done without any serious detriment to the worth of the animal after he is dead.

1765. I quite agree that is the most important thing of all, and I am very glad to have your view upon that; but I want to know if there is anything else you would like to suggest to us—for example, I would like to know what your view is as to the feelings of cattle upon being brought into contact with the sight and smell of the slaughter-house—the smell of blood, and so forth; have you formed any opinion on that?—That is an opinion that I should think a veterinary surgeon would be much better able to give.

1766. We find all the doctors differ on this point?—Animals do not like blood anywhere; horses, for instance, sniff and do not like blood, but I do not think they are really painfully frightened.

1767. Of course it is a point no one can really ascertain until the animals can talk?—No, but by observation I think you might judge whether they really feel; of course they are frightened, there is no doubt about that.

1768. That is what I mean, do you think they are frightened by the smell or sight of blood or whatever it is?—I should think they are frightened, but in no great degree; they are not half so much hurt, at any rate, as when one bullock horns another.

1769. It is not a question of hurting; it is a question merely of fear, because we get the most extraordinarily conflicting evidence upon this point from men who have been engaged in slaughtering all their lives; some say that,

Mr. Read
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Mr. Read
(cont.).

undoubtedly, the animals are frightened, and others say that there is nothing in it, and it is the most difficult point we really have had to consider?—I would rather not give an opinion upon this, because those men who are accustomed to slaughter must know a great deal more about it than I do. I remember the time when a sheep used to be killed just directly in front of the pen containing the other sheep, but they do not do that now. There are slaughter-houses in some towns which I should think would be best closed. I remember on one occasion hearing of a biggish child having charge of a little boy, and saying, "Now if you are a good boy, I will show you a sheep being killed," as if it was a great treat. I should think they do all they possibly can to make them private.

1770. Of course that would not be permitted in a public slaughter-house; that could be only in a private one?—There are some public slaughter-houses where it might be possible; the children do not get in, but the door is now and then open.

1771. (Mr. Game.) As to the sheep in Texas, they are more what we call the merino breed than anything else, small sheep, are they not? They are nothing like the Lincoln and the Leicester?—Oh dear me, no; they are more like a mountain breed.

1772. Of course, you being in Norfolk know the Leicester and Lincoln breed; do you think you could break the necks of those sheep without sticking them?—They break the necks of those sheep after they are stuck very often.

1773. Yes, after they are stuck, but you must remember that a lot of the veins are cut?—I do not think the veins have much to do with it.

1774. When they pass the knife right through the neck they sever a lot of the veins?—The veins would not stop the breaking of the neck, would they?

1775. The question I ask is, do you think they could break the neck of a Lincoln or a Leicester sheep before they had stuck it, by the force of twisting his head?—I know they do it after the sheep is stuck, and I should fancy they could do it before, but I do not wish to give an opinion on what I know nothing about, for I have never tried it myself and I have only seen it done in that one particular case.

1776. You said as to the cattle that they had a long spear that they stabbed them behind the head with; do they have to hit them in the forehead as well?—No.

1777. Then they do not pith them?—No. We went to two slaughter-houses in Texas; in one the animal was unsensed with a pea rifle, and in the other case they were killed with a bar of iron at the back of the head.

1778. That sufficiently destroys his power to allow them to cut his throat?—He tumbles down; he is on a sort of movable platform, and he is pulled into the slaughter-house through a trap door, and the next bullock comes in.

1779. (Mr. Cope.) This is something like twenty years ago?—Yes.

1780. I expect they have altered their system now very materially?—They were unsensed either in the one way or the other, but the general practice was to use a poll-axe, and I do not think they have altered that.

1781. (Mr. Game.) In many of the public slaughter-houses here they hit the bullock at the back of the head, and directly he drops they hit him in the forehead again and then put the cane down to pith them; they did not do that where you saw them killed in America?—No; I have seen lots of bullocks killed and they tumble down as dead as possible from the moment the poll-axe entered.

1782. (Sir Henry Yorke.) Have you formed any opinion on the subject of licensing slaughtermen, whether it would be an advantage that before a man was allowed to slaughter an animal he should be in possession of a licence?—I have never thought of it; I do not think I have ever heard it suggested.

1783. The licence that I had in my mind would be a licence for which the man would not pay and he would not require any special efficiency, but it would be a weapon by which you could get rid of the man if he misconducted himself in any way?—The licence would be as to his capabilities of slaughtering?

1784. No, there are two kinds; the first would be the ordinary licence such as these motor-car men require to have, which does not involve any knowledge of motors or of driving, and the second one of course would be one of proficiency, and I wanted to know whether you could give me an opinion as to whether either of these would be a good thing?—The second one would be, as to the efficiency of the man as a slaughterer?

1785. Yes, but you might have only the first one or you might have the second one if you like. I wanted to know whether you could give an opinion on that point?—I have not considered it; I should think that in towns it would be very well, but there are men who go about and slaughter pigs and sheep in a farmhouse and that sort of thing, and I do not know whether they would be any the better for being licensed.

1786. (Chairman.) It would be only this, that supposing a journeyman butcher was going to a farmhouse to slaughter and was drunk, he could be had up and cautioned probably the first time, and if it was repeated or if he was wantonly cruel his licence could be withdrawn, that is the only object?—That might apply to a good many other things besides killing cattle.

1787. (Sir Henry Yorke.) You have not any very strong opinion upon that point?—No, I have no strong opinion upon it at all, simply because I have not thought of it; it might be a very good thing, in fact the whole of my endeavour is to insist upon every animal being unsensed before he is killed, and that I am sure ought to be the law, and I should like to have an Act of Parliament passed very swiftly to make it compulsory.

Captain E. F. INGLEDEN, R.N., called; and Examined.

Captain
Ingleden.

1788. (Chairman.) I understand you have seen the methods of killing cattle prevalent on the River Plate in South America?—Yes, at one of the places where they kill the cattle and make the "jerked beef" as it is called, which is very largely consumed by the black population in the West Indies and on the African Coast.

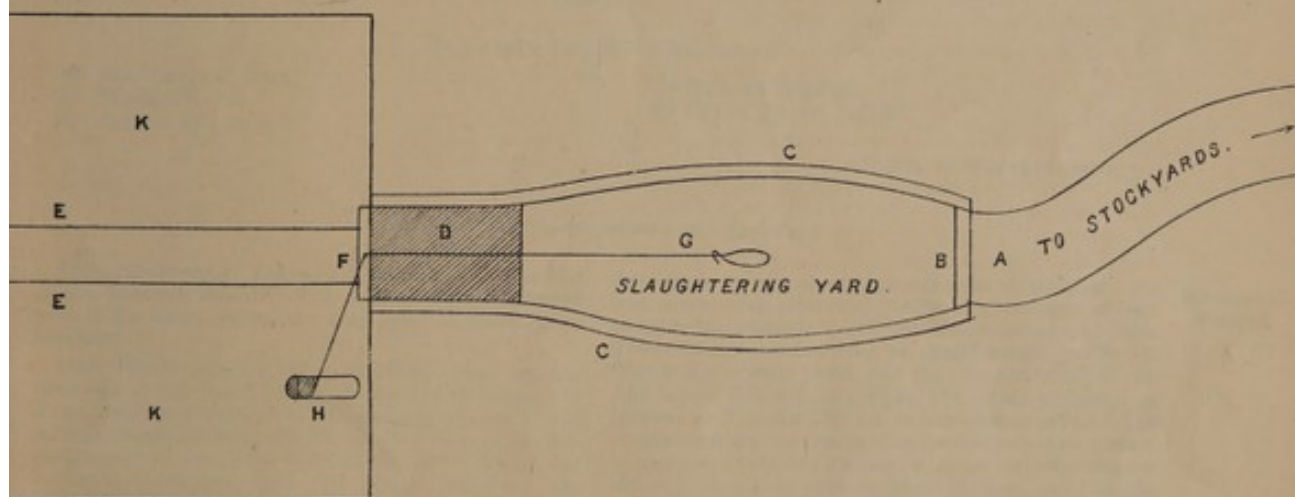
1789. What type of cattle are they; are they very wild or tame?—They go in largely for Herefords there, especially at Liebig's place, and I think that, considering the wild life they lead, they are wonderfully tractable and tame. They wander in large herds and they have mounted natives to look after them.

1790. Like in Western America?—Very much the same, they go and round them up when necessary; for instance, if they want any of them for branding, etc.

1791. How do they kill them?—The animals are driven in from up-country to the slaughter-houses, which are all on the banks of the River Plate for convenience of transport, as there are few lines of railway in the country. The "saladeros" (salting places), as they are called, are generally on a big scale, and during the season sometimes

1,000 or 2,000 head a day are killed in a single saladero, but as they are mostly in the hands of natives, who neglect all sanitary measures, the stench from them is often quite sickening, even at a distance of three or four miles. On the other hand, at Liebig's place at Fray Bentos, some way up the River Uruguay, things are done on a much larger scale, but very scientifically, and the utmost regard is paid to cleanliness. The accompanying sketch shows the usual method of slaughtering. The animals come from the stock yards through the passage A, which is formed by palisades about 6 feet high, and they are admitted into the slaughtering yard through the gate B. The slaughtering yard is large enough to hold about ten head of cattle at a time, and its sides C C are formed of palisades about six feet high with a plank walk on top just wide enough for a man to walk on. The shaded part D shows the top of an iron trolley which runs on the two tram lines E E. The trolley is large enough for the carcass of a bullock, and when in the position shown in the sketch it forms part of the floor of the slaughtering yard, and is level with the rest of it, which is paved with flat stones. F is a heavy wooden gate which, when

TO ILLUSTRATE CAPTAIN INGLEFIELDS EVIDENCE,
QUESTIONS. 1791-1794.



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closed, keeps the trolley in position. G is a lasso, one end of which is rove through a lead on the gate F and brought to the steam winch H. The cattle are admitted into the slaughtering yard eight or ten at a time. A man walking about on top of the palisades C throws the lasso over the horns of one of the beasts, which is then dragged close up to F by means of the steam winch. Another man sitting on the gate F runs a stiletto into the back of the beast's neck, close behind the centre of the skull, and the animal instantly drops down apparently dead. The gate is then opened, the lasso taken off, and the trolley, with the carcass on it, is run along the lines E E, which are inside a large building K K, where the cutting up is done. This building is large enough to cut up probably sixty or eighty carcasses at a time, and the trolley is stopped in any part of the building where required, and the carcass is pulled off on to the floor, where the bleeding, flaying, and cutting up is done. The trolley is then run back into its place, the gate is shut, and the process repeated.

1792. What happens if more than one animal is standing on the trolley?—There is hardly room for more than one; and owing to the noise of the engine, etc., the tendency of the animals is to hold back against the gate B.

1793. Do they do it with a short dagger stiletto?—Yes, and it is so sharp, and the man has such a knack of doing it from constant practice, that it goes down as easily as if he were sticking it into butter. The moment it is in, the animal drops as if he were dead.

1794. It severs the spinal cord, I suppose?—Yes, I suppose so.

1795. I believe the practice in Southern Europe, in Spain and Italy, is to kill the animals by stabbing in the back of the neck, but without this special arrangement you have described; this could only be done when animals were being killed on a large scale, I suppose?—Yes, as regards getting up steam for the winch; but you could have a hand winch to pull them up. There is practically no struggling, as the floor is smooth and slippery.

1796. (*Mr. Cope.*) I take it this is done because they are much wilder animals, and they can draw them with the winch tighter?—Yes, and the animals have their heads in the right position at the time they are killed.

1797. (*Chairman.*) And the pulling really opens the vertebrae?—Yes, I suppose it does.

*Captain
Inglefield
(cont.).*

Wednesday, 18th May, 1904.

PRESENT.

Mr. ARTHUR LEE, M.P. (*Chairman.*)

Mr. ALEXANDER C. COPE.
Mr. CHARLES GAME.
Mr. GORDON MILLER, C.B.

Mr. SHIRLEY MURPHY.
Sir HENRY YORKE, K.C.B.

Mr. R. G. HAYES (*Secretary.*)

Sir SAMUEL MONTAGU, called; and Examined.

1798. (*Chairman.*) You are, I understand, President of the Shechita Board?—Yes, I have been connected with it for thirty years, but only about eighteen years President.

1799. Would you tell us very briefly what are the functions of the Board?—The Board has to engage the slaughterers and those who examine the carcass of the animal after it has been killed to see that there is no commencement of any vital disease. Then we license the butchers, poulterers, and the carcass butchers, the carcass butchers being mainly non-Jews. We give yearly licences without charge. It is a very large organisation. I have brought the two last accounts current, and the last report shows that our revenue is very large indeed; we deal with about £15,000 a year of revenue, and the charge averages about one-eighth of a penny per pound, that covers all the expenses and leaves us a small amount over.

1800. I presume the original reason for the Board was to prescribe the exact methods of slaughter, which should be in accordance with the Jewish religious law?—The Biblical laws, yes. We have nothing to do with what may be termed the ecclesiastical control, that is left to the ecclesiastical authorities. We are rather a commercial or an administrative and executive body, and we carry out those regulations in support of the ecclesiastical authorities.

1801. In fact, you convert the ecclesiastical law into the practical methods of slaughter?—I think we follow almost literally the regulations; we certainly endeavour to restrict the opening of butchers' shops in the congested area of East London, and we try to get them on the outskirts, so that they should not increase the numbers dwelling in East London.

1802. We are only concerned with the actual slaughtering of the animals; by our terms of reference we are limited to that, and what we are anxious to ascertain is, in the

first place, where the exact methods of slaughter are laid down and prescribed?—The original basis of our slaughtering comes from the Old Testament, which I think fifteen times commands that we should not eat any blood, that is the arterial blood, and the commandment of the oral law is followed in making the actual slaughter as humane as it is possible for human skill to effect. The slaughterers are constantly examined, either once a week, or perhaps a little less frequently, to see that their knives are as keen as it is possible for them to be, and that the man has got what are termed the sensitive fingers, so that he can detect the smallest notch in the knife.

1803. Of course, you will understand that, as a Committee, we thoroughly recognise the fact that the Jews have every desire to slaughter their animals in a humane manner; there is no question of that kind at all; we are only examining these methods on their merits, entirely apart from any question of religious observances?—As I mentioned, if by touching the spine there is the slightest notch on the knife, the animal is not fit to be eaten according to our law, and in order to obviate any bruise or any pain to the animal in casting, we have india-rubber pavement, so that the animal shall fall as harmlessly as it is possible.

1804. Where do you have these india-rubber pavements?—In the slaughter-houses.

1805. Which ones?—We have several slaughter-houses in Deptford, and we have spent, and are now spending, over £300 in putting these india-rubber pavements there.

1806. Are they in general use? because we did not see them when we were down there?—I have seen them myself when I have been down, and I understood they were adopted everywhere. Where the animal is thrown, it is thrown on an india-rubber pavement in the slaughter-house level with the ground.

1807. I accept your statement, but we have not seen that, and certainly in the killing we witnessed there was

*Sir Samuel
Montagu.*

*Sir Samuel
Montagu
(cont.).*

no such thing in use?—I know it is in several, but I cannot be positive that it is in all, but wherever many cattle are slaughtered for Jewish use, I think invariably they have it. I will make inquiries; I did not ask about the point, but I know we have expended money in having them.

1808. Is it a regulation of the Shechita Board?—Yes, we have tried to obviate as much as possible anything painful to the animal, and of course that only affects the big cattle; our great difficulty is that the imported cattle are rather wild, much wilder than the tame English cattle, and we have to be in some degree careful of the men who are about them so that they do not get injured.

1809. That is one of the inherent difficulties of the casting process?—Yes, because of the wildness of the cattle; abroad and even in the provinces they have not that difficulty, as the cattle are very docile.

1810. Would you mind if I started rather from the beginning of the process? It is divided practically into two sections, is it not; first of all, there is the preliminary operation of casting and of forcing the animal's head into position for the cut?—Yes.

1811. Then comes the cutting operation?—Yes; the casting is seldom done by Jews.

1812. But it is an integral part of the operation?—Yes, preparing the cattle.

1813. Let me deal with those two subjects separately, if I may; first as to the casting, do you not consider that the process of throwing an animal over on its side as it has to be thrown, and the forcing of the head back for the cut is necessarily a painful process?—I think we have obviated the effect of casting, and the other is discomfort rather than pain, I should think; the animal might feel discomfort, but I cannot see that the stretching of the head back is actually painful.

1814. In the way it is done, a rope is put round the lower jaw, a crowbar is inserted in the rope and by leverage ing against the lower part of the jaw?—I have seen it done.

1815. But surely that must be a painful process?—Very likely they are somewhat tougher than we think, and they are accustomed, like horses, to have bits thrust in their mouths, and such like.

1816. Cattle?—I say it is not considered painful in respect to horses, and I do not know whether it is in respect to cattle; I cannot fathom the feeling of an ox myself.

1817. We are trying to do so?—I have not heard it remarked as being actually painful.

1818. Still on the subject of casting, have not you found frequently that the animal, when cast, particularly if it is a restive animal and is cast with some difficulty, is very badly bruised by the fall?—That we have obviated; unfortunately you have not seen the effect of the pavement; it used to be so, and we have endeavoured to prevent it. Certainly your statement that you did not see the pavement is new to me, and I shall investigate it, because it is some neglect on the part of our officials. Where there are cattle killed for Jewish use, that is by casting, there should always be a large india-rubber pavement to prevent any bruise.

1819. I think you will find that is very often neglected; it certainly was in the cases we saw?—It is new to me; I shall make it a point to see that that is not neglected, because we do not mind the expense; we do not work our organisation for profit, therefore if it necessitated buying twenty more pavements we would do it directly. I am very glad that you have stated that; no doubt it was so, but was it a slaughter-house where there were many cattle killed for Jews?

1820. Yes, at Deptford?—There are slaughter-houses at Deptford which are mainly for Jewish cattle, and there are also places where a few may be taken to be killed when they are overworked at the other places.

1821. Seeing there were nine killed in succession, the place we saw was not likely to be one of the latter?—It sometimes occurs that they have to go to other slaughter-houses when they are fully occupied in those specially intended for Jewish cattle.

1822. Supposing an animal was bruised, would that affect the suitability of the carcase for Jewish consumption?—It would not; the unsuitability of the carcase would only arise if it had some disease which would eventually or in the near future have killed it, but still from the humane point of view we should certainly avoid bruising the animal.

1823. I ask you this, because in a letter I received from the Chief Rabbi, Dr. Adler, on the subject of bruising, he says: "Should the animal be badly bruised, indeed bruised at all, there would be a risk of its being unfit for consumption by Jews in consequence of an internal lesion."—If it was so bad that it caused something wrong in its inside it would be found out by the examiner. I may say that we pay very large salaries to these people.

1824. To the inspectors?—And slaughterers, we pay to the older employees as much as £208 a year, with superannuation and fees for overtime; they are very very well paid, and therefore we expect that they will carry out our regulations.

1825. What I understand happens is that if an animal is bruised, not sufficiently badly to cause an internal lesion, but if it is bruised on the surface of the body, when the carcase is being dressed the bruised portions are simply sliced off?—I should think so. Personally, I agree with Dr. Adler, that if it was so badly bruised as to do it some internal damage, it would be unfit, but still a bruise caused by falling I do not think would make it unsuitable. It ought to be avoided, because it ought not to be done; there ought not to be any bruises at all.

1826. Have you noticed when an animal has been cast sometimes, particularly if it is a restive animal, that it beats its head upon the ground before the head is secured for the cut?—I suppose all cattle would resist any kind of bondage, as you might so term it.

1827. If that takes place it must be a painful thing to the animal?—I should call it discomfort; I do not think the fact of the animal being tied up would necessarily mean that it was painful.

1828. But beating its head on the stone floor of the slaughter-house?—But we have the pavement for that; I assume it is carried out properly by the pavement, and then it would not hurt the animal at all except in the matter of discomfort.

1829. Whose duty would it be to see that these rubber pavements were always used?—Mr. Van Thal, our investigating officer.

1830. Would there be inspectors under him whose duty it would be to see that the same thing was carried out?—He has an assistant, and we have also what is termed the head slaughterer, whose duty it would be to report any irregularity. We have really three people whose duty it would be to report any irregularity.

1831. I presume the casting forms no part of what I might call the religious portion of the killing, it is simply in order to make the cut according to law possible?—That is so, and I know in Germany they hoist the animal in some way so as not to cast it at all, but as I mentioned, they are tame animals, and you can do as you like with them. I fancy in Deptford you do not get a good specimen of the slaughtering system, because of the wildness of the beasts, and they have been in captivity on board ship.

1832. In Deptford they are all wild, or at least all foreign cattle?—Yes, and many of them very wild, the Spanish, American, Canadian and Argentine.

1833. Now we come to the second part of the operation, the actual cutting: I understand from Dr. Adler and from certain information which he has furnished to me, as also from Dr. Dembo's treatise, which I believe is recognised as the best official explanation of the Jewish method?—It is a very good treatise.

1834. I understand that the contention is that the cutting of the throat causes practically instantaneous loss of consciousness?—And also the exceedingly sharp knife does not inflict pain.

1835. Is it the contention that it does not inflict pain at all, even momentarily?—Well, when I used to shave I used to see the blood before I felt the razor, and before anaesthetics were introduced the surgeons always used to cut round the limb below the skin before they amputated, because there is no pain under the skin; there

can only be very little pain and very rapidly it enters below the region of pain. I think it is far better than poll-axing, unless the poll-axing is absolutely perfect, because in large slaughter-houses they often miss, and that must be agony to the beast.

1836. That was not the result of our observation; we have not found that they miss when trained men are employed?—They never miss?

1837. Very seldom?—But if they miss once it is something horrible.

1838. We have also found that the cutting of the throat by the Jewish method is not always successful, and that it varies very much in its effect as regards rapidity?—It must be the same thing if the knife is sharp.

1839. If it is done in exactly the right place and with the same amount of skill, but according to the report?—The slaughterers have to be well examined, and if they are at all old and weak they are superannuated; I think we reach efficiency as far as it is possible to do.

1840. I only mean that that applies equally to the poll-axe method?—Excepting that a cut, wherever it is made, below the skin with a sharp knife causes no pain.

1841. I do not know whether I am altogether prepared to admit that on the evidence?—The ancients seem to have adopted that sort of death as being painless—opening the veins.

1842. But the whole of the second part of the operation is absolutely prescribed by the Jewish law, that is to say, the throat has to be cut in a certain place in a certain way?—To sever the arteries of the throat.

1843. I need not go into detail, because we have seen it, and also had full descriptions?—And of course with sheep and calves and smaller animals, I think you will admit that we are much superior in our mode of killing.

1844. I am not standing up for the method of killing calves or sheep as in use by the rest of the community?—We kill many more sheep and calves than we do cattle.

1845. Now to come to a rather different point, supposing it were possible by any scientific discovery to render the bullock insensible without causing any damage to his body, would there be anything in the Jewish law which would make that objectionable?—That personally touches me; I should think fifteen or twenty years ago I offered a fairly large reward or prize for any one who could invent a moderately priced anæsthetic that would not impede the flow of blood, that is the essential point, and I had one professor and his friend, I forget their names, who paid a great deal of attention to it, and they said the animals suffered more by the administration of the anæsthetic than they did by the cutting.

1846. I presume an anæsthetic might affect the taste of the meat afterwards?—I do not think it is beyond science to make it so that it should not taste, and we should be very glad to have an anæsthetic that would not impede the flow of blood, and so that the taste of the flesh should not be affected prejudicially. We should welcome that, but of course we have not discovered it.

1847. Do you know as a matter of scientific interest whether when a man is operated upon under chloroform there is more or less flow of blood than under other conditions?—I am not quite sure. I have heard diverse opinions about it. I repeat that we have tried to find an anæsthetic, and we would be only too delighted if we could find something of the kind.

1848. Leaving out the anæsthetic question for the moment, that objection is there to causing unconsciousness by stunning?—Because that, we believe, does cause the blood to coagulate; the Mohammedans with their teeming millions follow the mosaic dietary laws, except that they will hunt an animal or shoot it, and then they will cut its throat, but they do not get the blood out completely.

1849. I cannot find that that theory is borne out by scientific experiments; there are scientists who state very clearly that there is no additional weight of blood obtained from a carcass killed according to the Jewish methods as compared with a carcass killed by poll-axing, and then having its throat cut. I know that is in direct contradiction to Dr. Dembo?—I believe it is not so; the moment the animal is killed, which you expect to do with the blow from the poll-axe, because it is not stunning only, it is the actual deathblow and then the blood begins to coagulate.

1850. I am not considering the poll-axe for the moment, but suppose that by simply striking the animal with a mallet (from the theoretical point of view) in such a way as to stun it, and in such a way that if it were left it would of course recover from the stunning and would be no worse off than a man who is stunned playing football or anything of that sort, would that in itself be an objection from the Jewish point of view?—It would risk the transgression of another commandment in the Old Testament, that we must not eat anything that dies, that is not killed in our fashion.

1851. But this animal would be perfectly alive after it was stunned and then you would cut its throat?—But supposing it were dead, supposing the stunning did kill it, then of course it would be unfit to eat from our point of view.

1852. But supposing it were not dead, because in most cases stunning does not kill?—I should think then you run the risk that I do not think we should be prepared to take; you see an animal might be passed in that way that was not quite alive and healthy. It is desirable that they should see the animal and be quite aware that it was in good health before the process of killing.

1853. Yes, but you take your animal and instead of casting him you merely strike him?—It would not be eaten by orthodox Jews—the flesh of an animal that was first stunned and then cut.

1854. I understand that is so, but I wanted to know whether you could give me any explanation of it?—The explanation of it would be that the process is rendered complex, inasmuch as the animal has a pain given it by stunning and then if it revives under the throat cutting it is worse than a notched knife.

1855. There can be no pain in the stunning, can there?—I should think so. I should think there must be pain in being stunned, and I should not like to undergo the process.

1856. Supposing poll-axing is carried out in the most efficient manner there can be no pain?—There it is; it is a question whether the poll-axing even so done causes no pain. In America they shoot the animal; in Chicago I have seen the cattle shot, but you must allow for imperfections and possibilities, and we maintain that our process of killing is not painful, and therefore how can we improve upon it?

1857. I am aware you claim that, but we were trying to get an explanation of that phenomenon?—An anæsthetic, if it could be devised, I think would be welcomed and would settle every question, but it has not yet been done. I would be very pleased to renew my offer—I think it was a couple of hundred pounds—for anybody who would devise an anæsthetic that would not taint the meat and would not impede the flow of blood. We should be very glad to find such a thing.

1858. The difficulty I find is in seeing where the line of demarcation comes between rendering insensible by an anæsthetic and rendering insensible by a stunning blow which does not injure the carcass and which would not cause death of itself?—I am afraid, however skilful, they could hardly draw the line; they would either do it too slightly or too much. Too slightly would be painful in both processes, slightly in the cutting and much in the stunning, and if it is overdone, then the animal is killed. I am afraid it would be very risky.

1859. Still, the present system of casting can hardly be described as satisfactory?—I think that, pending the discovery of an anæsthetic we have avoided pain. I think all experience would bear out the fact that there is little or no pain with a sharp knife, and of course your idea of stunning would not touch the enormous number of sheep.

1860. Certainly; we have actually carried out experiments in stunning sheep quite successfully without any injury to the sheep's head?—And poultry?

1861. That is outside our Reference, we have nothing to do with poultry.

1862. (*Mr. Murphy.*) There has been no recent experimental work done?—No, it is about ten or fifteen years ago; I was very strong on the subject until I got cooled by these failures; I could supply the name of a very well-known professor who gave a great deal of attention to it, and he could not do it—he could not devise a scheme.

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Of course it must not be too costly or the poor people could not eat the meat, if we had to pay a great deal per head, but still even that might not stop us if we could find something, because it is not a question of money.

1863. Do you think that the rendering of an animal unconscious by a blow, if it could be effectually carried out, would be deemed to be objectionable?—I think it would; I am not so well up in the Ordinances as Dr. Adler, but I feel sure that it would not be allowable. As I said, if a notch in the knife when killing the animal renders the meat unfit, stunning as well as cutting it would certainly render it unfit.

1864. That, I suppose, is very largely based upon custom?—No, it is in the Rabbinical Laws, in which is embodied the Oral Law, which it is assumed Moses prescribed when he judged the people from morning to night, and we cannot distinguish between the two, the authority of the one from the other—but where reasonable, as these Ordinances seem to have been, they have been adopted as authoritative. Even as to anaesthetics, a great number of people would not at first venture to eat the meat; however they might be satisfied if they went and saw the experiment made and weighed the sheep. If you took a sheep and weighed it and saw that the flow of blood by the one method and the other was the same, I think that might be done, and if it were so it would be generally adopted.

1865. Have you any experience of what happens in countries where stunning is obligatory?—In Switzerland where it is obligatory it is largely evaded, and where not they import the dead meat from other countries over the border; they have the carcasses fitted for Jewish food sent over the frontier. They think that that law in Switzerland will be abolished because it does not apply to pigs and all sorts of animals that are just as much liable to suffering.

1866. (*Mr. Gordon Miller.*) There is no law of the kind in Germany, for instance?—No; I am not sure whether in some parts of Saxony there is not.

1867. (*Chairman.*) I think I have information upon that; in the kingdom of Saxony I see it is forbidden in Saxe-Meiningen?—I think I heard that, but it is the same thing there, that they do without eating it or get the dead carcasses over.

1868. (*Mr. Game.*) Is the india rubber you speak of a pad put under the bullock?—No, it is a thick mass of india rubber like a mat, but it is imbedded in the pavement so that it is even with the pavement.

1869. Is there any exception made in the law that necessitates your having impervious pavements because the india rubber joining with the other it would not be all over the slaughter-house?—Yes, I think they either wash it directly after each slaughtering into the drains or they manage it in some way; I think they are well drained.

1870. Is there any slaughter-house of your organisation in Whitechapel? I have been in several slaughter-houses there, and I have seen never these india-rubber mats?—I think it is chiefly for Deptford, because in Whitechapel they are English cattle, and there is no great difficulty; they can cast them much more softly and easily than they can these foreign animals; it is at Deptford chiefly that our trouble exists.

1871. Of course I have no desire to doubt it in Deptford if you say so, but as Chairman of the Markets Committee and having been there for five or six years I have never heard of it or seen it, and I have seen hundreds of Jewish cattle killed there?—I think if you will allow me, I will get our investigating officer to give a list of the slaughter-houses in which the india-rubber pavement is used, and you can go and see them.

Wednesday, 8th June, 1904.

PRESENT.

Mr. ARTHUR LEE, M.P. (*Chairman*).

Mr. GORDON MILLER, C.B.
Mr. SHIRLEY MURPHY.

Sir HENRY YORKE, K.C.B.

Mr. R. G. HAYES (*Secretary*).

Dr. CARL BUDDING, called; and Examined.

*Dr. Carl
Budding.*

1872. (*Chairman.*) Would you mind telling us in the first place what your official position in Coblenz is?—I am Councillor of the Prussian Government.

1873. What is your special function?—I am a member of the Local Government's Board at Coblenz.

1874. What is your especial duty with regard to slaughter-houses?—Our Board has, to some extent, to superintend the administration of the slaughter-houses, especially from a sanitary point of view. I had better explain the whole matter from the beginning. Our municipalities are entitled by law to erect public slaughter-houses, and if they do so all the private slaughter-houses can be closed; in that case the owners of those houses get compensation. The municipality takes over the administration of that public slaughter-house, subject, as far as the sanitary arrangements are concerned, to the regulations of the police authorities, which are not identical with those of the municipal authorities. In nearly all our large towns the head of the municipal administration is at the same time the police authority, but then he is specially appointed in that function by the king; his functions as municipal authority and as police authority are quite distinct. If a public slaughter-house has been erected, all the cattle must be slaughtered in that public slaughter-house. Before the municipality starts building the slaughter-house, its plan must be approved by our Board.

1875. And that is the case in Coblenz?—Yes, that is the case in Coblenz and, as a matter of fact, in all the large towns in the country. We are as much as possible pressing the municipalities all over the country to erect public slaughter-houses, because from a sanitary point of view private slaughter-houses are not so satisfactory.

1876. You are trying to get rid of the private slaughter-houses?—Yes, as much as possible. For the use of the public slaughter-house the butchers have to pay fees to the municipality, in order to defray the cost of erecting and running those public slaughter-houses.

1877. You mean that the butchers who go there to kill animals have to pay fees?—Yes.

1878. Do the butchers kill the animals themselves, or are there men at the slaughter-houses who do the killing?—Generally speaking the butchers do the killing. The municipality appoints a veterinary surgeon, if necessary more than one, who examines every animal before it is slaughtered.

1879. But that is from the sanitary point of view?—Yes.

1880. Has he anything to do with the method of killing?—Yes, he has to do with that as well. There are foremen in the slaughter-houses who have to superintend the slaughtering by the butchers and to keep the place clean. Rules are laid down for the slaughtering to guarantee as far as possible the painless death of the cattle. I desire to declare here that I cannot verify my present statements by official documents; I make them simply from memory.

1881. Still you have had great experience during many years?—Yes, I have had many years' experience of dealing with such questions. We have several appliances to guarantee, as much as possible, the painless slaughter of cattle. As a general principle to start with, as far as my experience goes, I would always prefer automatic appliances; take, for instance, the stunning of sheep and cattle, if that is done skilfully by a careful butcher it is all right, but I have seen myself very often, especially

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when pigs were killed, if the stunning is not done properly, it is rather a shameful business to look at. Therefore, from my experience, I would always prefer appliances which work automatically.

1882. What would you call an automatic appliance?—I mean those appliances to kill big cattle; you put on a sort of mask; which contains a shooting apparatus.

1883. The Bruneau mask, for instance, do you know it?—Yes, I know it, but so far as I have seen I prefer the mask with the shooting apparatus. I have seen the biggest cattle immediately slain; they tumble down at once; I did not see any motion besides the reflex motions.

1884. I think that is probably quite true when you can adjust the mask properly, but we have here in England, particularly at Deptford, a very large number of animals killed which come from North and South America which are very wild indeed, and they will not allow anybody to touch their heads, and it would be very difficult to put a mask on those animals. I presume you do not have that kind of animal to deal with in Germany?—No; there may be exceptional cases; we get sometimes from Austria and Hungary cattle of rather a wild nature. There may be cases of that kind also in some of the seaports outside Prussia.

1885. The members of the Committee who went over to Germany and Switzerland the other day told us that the cattle were very much tamer and more quiet than the cattle here?—Yes, it may be so; it is rather the exception to find them wild. I have very often assisted in the slaughtering, and I daresay it was the exception to find them wild in the slaughter-house, but I should say it would be possible, even if the cattle are of a very wild nature, to make provision for those cases.

1886. To put on the mask?—Yes; I am a little puzzled how to explain it, but it seems to me that you could fasten the mask after you have secured the cattle by an overhead running chain or rope.

1887. We found, as the result of experiment, that it was very difficult to use anything like the Greener killer; do you know that one?—Yes.

1888. Or this Behr, which is a German patent; we found it very difficult to use these, because if you put it near the animal's head he would throw his head about and you could not get it into position?—Yes.

1889. Of course, if the animal was very quiet it was easy to do it, but if it was a wild animal, the instant you put it near his head he moved?—Yes, the mask is always the best, as far as my judgment goes.

1890. What pattern of mask do you use in Germany?—My memory fails me as to the name of the mask I have seen and which I found very satisfactory. (*The Witness is shown the Bruneau mask*). It is probably something like that. I found a leaflet about it edited by a private association at Leipzig for the protection of the life of animals; that leaflet contains all the information regarding the painless slaughtering of cattle. It is a very cheap leaflet and it might be useful to you.

1891. Could you let us have a copy?—Yes, I can send it on from my place later.

1892. Do you have assistants who visit these slaughter-houses and make inspections?—Yes, there is on our Board a veterinary surgeon who regularly inspects those slaughter-houses. Our veterinary surgeon has to make a report which deals with all questions concerning the management of the slaughter-houses and the slaughtering of the cattle, and so on.

1893. Does your veterinary surgeon have any discretion as to altering the method of slaughter? Can he relax any of the rules when he makes his visits?—No, he could not do so; in matters of small detail he certainly could do so, but he has to apply the rules which are laid down for the administration of the slaughter-houses.

1894. Whatever the rules are, he sees that they are carried out?—Yes, but he could make suggestions; for instance, if he sees that the slaughtering is not done properly in a particular place, he makes a report to our board, and we look after it and write to the municipal authority about it.

1895. But his duty is to see that there is no unnecessary cruelty as well as to supervise the sanitary regulations?—Yes, his superintendence or control comprises both points.

1896. Is it the general rule in Germany for the manager or director of a slaughter-house to be a veterinary surgeon?—Yes; it is provided by law in Prussia.

1897. It is compulsory?—Yes, it is compulsory. In Prussia the inspection of the cattle in public slaughter-houses must be carried out by a veterinary surgeon; that is again a provision of the law in Prussia.

1898. The chief of the slaughter-house must be a veterinary surgeon?—Yes; he has, if necessary, veterinary surgeon assistants.

1899. You are familiar, of course, with the Jewish method of killing cattle?—Yes.

1900. What is your opinion of it generally?—Generally speaking our Board would like to abolish it, but we met with such opposition on religious grounds from the Jews that we did not do so.

1901. Would you tell us why you wish to abolish it?—Because, in the first place, it does not secure that painless slaughtering which is guaranteed by those other appliances I have just mentioned.

1902. Do you think it is a cruel method?—I would not go so far, but I think it is unnecessary to put the cattle to such a trial; if it is done in a careful and skilful way, as I have seen it done sometimes, it may not be so objectionable, but before the animal is got into such a position that the knife can be used to cut the throat it requires so many preparations that the animal gets frightened.

1903. And then the throwing of the animal down must be painful?—No, I would not go so far; it may sometimes be painful. I do not know if you are familiar with that method; they put the animal down on the ground on its back and try to throw it in such a fashion that its throat can be cut sharply. I do not believe that alone would cause much pain to the animal.

1904. Not to throw the animal down on the hard floor?—It is done rather skilfully as I have seen it, and I think it is much more in the long preparations before doing the work, and the fact that the effect of the cut does not cause immediate death that the objection lies; these two things I consider objectionable. As to the throwing down of the animal, I should not think it was so painful.

1905. It would depend a great deal on how skilfully it was done?—Yes, and for that reason, starting from my general principle, I think it is a bad system.

1906. Are the animals thrown by a mechanical arrangement in Germany?—In the Jewish fashion?

1907. Yes.—Just so; they chain them with an overhead running rope and pull them down; I suggest such a system for your wild cattle.

1908. Do they have indiarubber pavements or floors made of indiarubber for the cattle to fall upon?—No, I have not seen them; such may be used, but I have not seen them; besides you get such excellent pavements now without any joints, that anything else is hardly necessary.

1909. You do not consider that the cutting of the throat with a knife in the Jewish fashion causes immediate death?—No, but that is more a question for a medical man. I venture to say it would not cause immediate death.

1910. Is it the custom in the German slaughter-houses to have a large number of officials whose duty it is to be present at the slaughtering of animals, and to see that no unnecessary cruelty is used, and that the regulations generally are carried out?—Yes, the veterinary surgeon, who is the head of the slaughter-house, and his assistants, and the foremen, if I may call them so, have to see that all those regulations are carried out.

1911. In a large slaughter-house like that at Coblenz how many inspectors are there?—There is one veterinary surgeon, and he has, I think, two veterinary surgeon assistants, and then again you have a number of what we call lay inspectors to do the work of inspecting the pigs' flesh for trichinosis. The law allows that work to be done by lay inspectors who have passed a certain examination.

1912. What class do they come from? They would be men who had been in the Army, of course, as everyone serves in Germany, but they would not have any medical

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or veterinary knowledge?—A new bill has been carried for the Empire and additional bills for the different kingdoms and states of Germany concerning meat inspection; on the strength of those laws the federal council, Bundesrath, and the different governments, have given special instructions as regards the training of these lay inspectors. They must have a certain knowledge of the body of the cattle and of the different diseases which cattle can have; but their activity is restricted to the trichinosis and to the healthy cattle. If they find any case of disease they have to apply to the veterinary surgeon. These instructions apply as well to rural districts.

1913. You educate everybody in Germany to know their business, and I am afraid we do not do so over here?—In our district I have myself organised the meat inspection, and it was quite a new feature as far as the rural districts were concerned; we prescribe five weeks' instruction in a public slaughter-house for the lay inspectors.

1914. Do you have any course or system of instruction for training the actual slaughtermen themselves—the men who do the killing?—No, not so far as I am aware.

1915. How does a man learn how to slaughter?—The butchers take in young people who would like to go into the trade, and they learn it from their employers.

1916. But there is no official method of teaching how to kill?—No, it may be in some cases. I do not know if you are aware that we have a law in Prussia whereby compulsory trades unions can be organised; so the butchers' trade can organise itself into a union; in that case there might be rules.

1917. But that is a private matter and not official?—It is not official; the rules must be approved to some extent by public authority, but that is a question by itself.

1918. Would it not be a good thing in each of these big slaughter-houses, like Coblenz or Cologne, to have a system of teaching men to slaughter in a skilful and humane manner?—There is no doubt about it.

1919. I am only surprised, seeing you do everything else so thoroughly, that that has not been done yet in Germany?—So far as the cattle are concerned and those automatic appliances, the question is practically solved.

1920. Then about killing sheep, what have you to say?—It is generally done by stunning.

1921. With a large club?—Yes, and, if it is done skilfully, it is all right; however, starting from my general principle, I am not in favour of it.

1922. There should be no great difficulty in teaching a man to do it skilfully?—No, but I may be allowed to say, it is not only a question of ability, in my opinion; it is a question as well of carefulness on the part of the individual; as a matter of fact, I think I can state, without being unjust to the butchers' trade, they are rather rough people on account of the work they are doing. I do not know if that applies to the English people.

1923. You mean they are careless?—Yes, careless to some extent, and rough.

1924. (Mr. Murphy.) I think you said that the men who do the killing of the animals are the servants of the butchers?—Yes, the butchers themselves, or their servants.

1925. Do these people before they kill have to get a licence from the municipality?—No.

1926. But they are under the inspection of the veterinary surgeon who is the director of the slaughter-house?—Yes.

1927. Would he have power to forbid a man to come into the slaughter-house if he did his work badly?—He could not do it by himself, generally speaking, but he could apply to the administration for that purpose.

1928. (Chairman.) To the police?—To the municipal authority in the first place.

1929. (Mr. Murphy.) It is a police law that regulates the way in which these animals are to be killed?—Yes, to some extent, the municipality issues regulations which concern matters of sanitary regulation; those and all other police regulations must be approved by the Government Board, so far as they do not depart from the police authority itself. For instance, bye-laws containing fines can only be issued by the police authorities.

1930. What about such a regulation as requiring animals to be stunned?—Generally, as far as I am aware,

that question has not been dealt with in the regulations; it may be in some cases, but so far as I am aware at the present moment I do not believe it is comprised in the existing regulations with regard to the slaughtering of cattle. For the rural districts the police authorities have issued such regulations.

1931. The responsibility of seeing that the animals are killed in the best way devolves in the first instance upon the director of the slaughter-house?—Yes.

1932. Is it the Province of Coblenz?—No, it is the Regierungsbezirk.

1933. Your board sends inspectors to the slaughter-houses, and those inspectors watch to see whether the veterinary inspector, the director of the slaughter-house, is doing his work properly?—Yes.

1934. That board has to do with how much of Prussia—a large area?—Yes, a veterinary surgeon is appointed as member of our board for each Regierungsbezirk.

1935. How large are they?—Some are large and some are small; sometimes it is in consequence of historical events. Generally speaking, it comprises about a million inhabitants, speaking broadly.

1936. So that really a department of the Government makes it its business to see that the killing is done properly?—Yes, that is so.

1937. And if the inspector going there found there was neglect or carelessness, he would report that to the Government?—Yes.

1938. And then the Government would communicate with the municipality?—Yes, and possibly if it fell under the criminal law the butcher might be punished.

1939. That would be something in the nature of direct cruelty?—Yes; of course if police regulations exist, the careless butcher will be punished according to them.

1940. (Chairman.) But does this board have no other work to do besides the regulation of the slaughter-houses?—Yes, that is only a small part of its duty.

1941. What other duties does the board have?—It is like a local government board for the district to some extent; that is the best way to express its duties.

1942. And this part of your duties is very small?—Yes, but as far as the meat inspection is concerned, it is very important. Questions as to the diseases of cattle, and so on, and the veterinary inspection form a great part of our duties, but so far as the slaughter-houses are concerned, that is a small part.

1943. (Mr. Murphy.) You are a member of the board?—Yes.

1944. And you have your officers who inspect, and sometimes you inspect yourself?—Yes, it is considered more a sort of technical inspection, and the veterinary surgeon of our board has to go to those places. I have to deal with those questions more from the general point of view, and I go there myself in order to obtain information. The veterinary surgeon is obliged to go.

1945. You have often been in the different slaughter-houses?—Yes.

1946. Have you ever seen any cattle so wild that they could not be killed by an apparatus like this (*showing an instrument to the witness*)?—No, I should say not.

1947. It has never within your experience been necessary to use what we call the poll-axe (*exhibiting the same to the witness*)?—No; I have not seen it myself, but it may be used.

1948. In preventing the risk of cruelty to animals do you attach importance and value to the fact that in the public slaughter-houses they are killed in one large hall or room?—No doubt.

1949. You think that is important?—Yes, it is important because of the better control.

1950. Because the inspector can see what is taking place in all parts of it?—Yes, the inspector is going round and there is always a sort of security in the fact that the slaughtering is done under the public eye, so to speak.

1951. If the hall were divided up into different parts by partitions that went up five or six feet high, do you think that would prevent the proper control that is wanted?—Yes, I think there is great importance in making the

slaughter-house in one hall only, not only from that point of view, but, so far as I may be allowed to hold that opinion, from the sanitary point of view as well, they can clean it much better.

1952. (*Chairman.*) As to these visits of inspection which you say your veterinary surgeons make, are they at regular intervals or in the nature of surprise visits?—He is really responsible for the management to our board; generally speaking, he must do it as a matter of surprise in order to get the right impression; he is obliged to go round to every house once a year as a minimum.

1953. But he may go at any time, and as often as he wishes?—As often as he thinks fit; if a slaughter-house is not in a good condition he would go more often.

1954. (*Mr. Murphy.*) Have you ever observed whether animals are at all conscious that they are about to be slaughtered?—I have seen it just when the slaughtering was done in the Jewish fashion; I have not seen it when those shooting masks were applied. I have seen in a slaughter-house cattle driven in, and some other cattle tumbled down in the neighbourhood, but I did not see the cattle in any state of excitement or fear; but when it is done in the Jewish fashion you can often see the trembling of the limbs of the animal.

1955. (*Chairman.*) What was that from—from the smell or the sight of the blood?—It takes such a long time to make all these preparations, but with those masks it is an affair which is over very quickly.

1956. Do they put the mask on the animal before it comes into the place where it is killed?—That is a matter of arrangement in every case, the hall is so large where the slaughtering is carried out; generally it is done in the hall itself.

1957. When the animal comes to the spot where it is to be killed?—Yes, but you do not see, as a rule, much blood on that particular spot.

1958. In the English slaughter-houses, as a rule, the whole floor is covered with blood, and the animal is brought in, and, of course, he probably does not like either the smell or the sight of the blood as it makes him afraid; you think animals do mind the smell of blood, or the sight of blood?—Yes, I think to some extent, but if it is a large hall you can make all the arrangements much better.

1959. (*Mr. Gordon Miller.*) You can wash the blood away?—Yes.

1960. (*Chairman.*) Do you have a hose to wash it off?—Yes; a well-kept slaughter house must look quite clean immediately after a slaughter.

1961. And there must be no blood after the animal is killed?—Yes, that is one of the chief duties of the veterinary surgeon and his staff.

1962. Do you sell the blood afterwards?—I could not say; as far as I am aware the pigs' blood is used for sausages, but the cattle's blood is seldom used.

1963. (*Mr. Murphy.*) You have seen many sheep stunned at the time of killing?—Yes.

1964. Have you ever seen any reason for thinking that that is not the best way for killing the animals?—Yes, as a matter of fact I would always prefer, as I stated before, the automatic appliances; even for sheep.

1965. To shoot the sheep?—Yes, I think the shooting gives the best results; it kills instantly.

1966. (*Mr. Gordon Miller.*) It is more than stunning; it is instant death?—Yes, and it works quite automatically; it is quite independent of the ability of the operator; even a boy can do it, and it is quite an easy affair.

1967. (*Chairman.*) You do not think there is any danger from the bullet coming out and striking people?—No. You put just as much power in it as from a matter of

experience is necessary; you have those ready-made cartridges prepared as the result of experience.

1968. (*Mr. Murphy.*) Have you seen these often used upon sheep?—No, it is my personal opinion, about the best way to kill sheep, but I have not seen it; it is rather difficult in our place, as sometimes it would entail rather large expenditure, so that you cannot force the municipalities to provide for such apparatus.

1969. That is the expenditure of the apparatus?—Yes.

1970. But the cost of the cartridge would be very small?—Yes, I think it is a very small outlay.

1971. Has it ever been considered in Germany whether there should be a requirement that sheep should be shot in this way?—Not as far as I am aware.

1972. You have seen many stunned; do you look upon that as the next best way?—Yes, if it is done skilfully it is all right, the animal tumbles down immediately.

1973. And do you think that ought to be required in all cases where the animal is not shot?—Yes, as much as possible you must guarantee painless death for the animal.

1974. And you think that is the best method to adopt?—I should think so.

1975. (*Mr. Gordon Miller.*) I think you said that the butcher killed the animal?—Yes.

1976. So that any fees charged for the use of the abattoir would be merely for its use, and not for any services of that kind rendered?—No, those fees are for using the public slaughter-house; they have the ice box to put the meat in, and other facilities.

1977. The staff of the abattoir would do the washing and cleaning, and everything of that sort, and the fee includes all that?—Yes.

1978. (*Mr. Murphy.*) Can you tell me whether the public slaughter-house is a cost to the towns, or whether it is a source of profit to the towns?—As far as the existing laws go it is a good business concern.

1979. (*Chairman.*) It pays well?—Yes, that comes partly from the fact that the meat imported into a town from any other area outside the town must go through the inspection of the meat inspector of the town; no meat can enter the town which has not been inspected, and even if it has been inspected in other places the municipality have the right to inspect it again, and they collect fees as well from that imported meat.

1980. But apart from that, do you find that the fees paid by the butchers for the use of the slaughter-houses are sufficient to pay the expenses?—Yes, those fees are fixed according to the outlay of the capital, with regard to the interest on the capital, and the cost of the management of the slaughter-house. They cannot charge too high fees, because the ratio of the fees must be approved by the Government Board.

1981. (*Mr. Murphy.*) Do you remember what the fees are in Coblenz?—Generally speaking, from memory, five marks, which is equivalent to 5s. for big cattle.

1982. (*Chairman.*) For each animal?—Yes, and for the smaller ones it may descend to 8d. or 1s.

1983. That is rather a large fee, is it not—five marks for one animal?—Yes; but if you consider that it gives safety to the inhabitants of the town, and if you consider the cost of every animal correspondingly, it is rather a small outlay.

1984. (*Mr. Gordon Miller.*) Do you stun calves in the same way as sheep?—Yes.

1985. Small calves?—I could not answer that question offhand; I believe they generally use those shooting apparatuses for the calves.

Dr. Cort Budding
(cont.).

