

MINUTES OF EVIDENCE

TAKEN BEFORE

THE COMMITTEE

APPOINTED TO INQUIRE INTO

THE EXECUTION OF CAPITAL SENTENCES.

At 8, Richmond Terrace, Whitehall.

Tuesday, 16th March 1886.

PRESENT:

THE RIGHT HON. LORD ABERDARE, G.C.B., IN THE CHAIR.

THE RIGHT HON. SIR HENRY SELDWIN-IBBETSON, BART., M.P.
SIR FREDERICK J. BRAMWELL, F.R.S.

THE REVEREND SAMUEL HAUGHTON, M.D., F.R.S.
R. M. GOVER, ESQ., M.D.
Major ALTEN BEAMISH, R.E., *Secretary*

The Reverend SAMUEL HAUGHTON, M.D. (a member of the Committee) examined.

1. (*Chairman.*) I understand that you wish to give some evidence to the Committee before we proceed to call other witnesses?—Yes, I had been for many years collecting materials to write a book on the mathematical principles of animal mechanics, and I had performed innumerable dissections to obtain materials for the purpose; but, before publishing, I observed that all my observations were made on those who died a natural death, and in order to connect these dissecting room observations with the living man it was necessary to have a co-efficient determined from a man who died in perfect health and strength, so as to convert the measurements made on the dead body into those of the living man. I watched for months in the hopes of dissecting a man who died from the result of an accident; but you are never allowed to dissect a man who dies in such a manner, and under these circumstances I waited on Lord Mayo, who was then Irish Secretary. There was a man under sentence of death in Dublin, and I asked Lord Mayo's permission to have a post-mortem dissection made for the purpose of measuring the muscles, which I wished to compare with the dead muscles. He gave me that permission. This man was executed on the 20th of July 1865. Dr. Arthur Foote and myself dissected from the body what I wished for my purpose, and we also made, as we had the case in hand, minute observations upon the circumstances connected with death by hanging. We were greatly shocked to find, from the length of the drop and the position of the knot, that the man's head had nearly been cut off. The knot was placed on the occiput, and all the soft parts of the neck except the skin were completely divided; then the blow ultimately reached the vertebræ, the transverse processes of the second vertebra were broken across, and death was instantaneous, caused by dislocation of the spinal column. The length of the drop was 14 feet 6 inches, and the weight of the man was 160 lbs. My impression was that a few inches more would have cut off the man's head. I was frightened at the result; that was the first case I ever observed, and that was the last execution that took place in public in the city of Dublin. The next execution

took place some years afterwards, on the 28th July 1870, and was the first execution in private. The culprit had nearly the same weight, and the Governor and Surgeon gave him about the same length of drop; the result was that the head was taken off. Lord Spencer, who at this time was Lord Lieutenant, sent for me and requested that I would make a personal investigation of the circumstances of the case. I did so, and found that there was nothing different in the two cases except the rope; therefore, with the assistance of our Professor of Engineering, I made an examination of the two ropes, and I found that the rope used in the first execution was much more elastic than that used in the second; the stiffness of the second rope acted like a wire rope and cut off the man's head. I communicated this result to Lord Spencer, and the officials were cleared of blame, but a wish was expressed at the same time that those who were competent would take steps to avoid such accidents in future. On making inquiry I found that a long drop, sometimes amounting to 17 feet, was in traditional use in all the Irish gaols; while in England a short drop, seldom exceeding two feet, was the usual practice. The short drop means death by asphyxia, the long drop means death from injury to the spinal column, in some case, where the drop is too long, pushed to the risk of decapitation.

2. May I ask you also whether your inquiries led you to discover the date of the commencement of hanging?—No; *sus per coll.* goes back, as all lawyers know, to remote times, but *sus per coll.* does not specify the length of the drop. I made minute inquiries about it. In the case of an execution with a short drop the criminal becomes unconscious between from one to three minutes, as in the case of drowning; but automatic convulsions unaccompanied by suffering, lasting for many minutes, will set up in the body and shock the spectator. In consequence of the fact of the two executions with the long drop, an important private meeting of the Surgical Society was held on the 10th December 1875, at the Royal College of Surgeons in Ireland, attended by many surgeons who had experience of Gaol executions. The results of

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their discussion were two ; in the first place, it was recommended that the knot should be placed under the chin instead the back of the head, that is the submental instead of the occipital knot. The object of that was this : when the knot is placed at the back of the head the rope cuts through all the soft parts of the neck before it strikes the spinal column, whereas by placing it under the chin it is like killing a rabbit by a blow on the back of the neck ; the blow comes first on the spinal column, and then after the spinal column is cracked there is a large margin left of reserve resistance in the soft parts. It was also recommended to diminish the drop to about 8 feet as a rule.

3. Was that irrespective of the weight of the culprit?—No ; that would be the length of drop for a man of average weight.

4. What I meant with regard to weight was this : do you think that with the knot under the chin and a drop of 8 feet a very heavy man might not be decapitated?—That is quite possible. I have mentioned a case where the weight of the man was 160 lbs., and the length of the drop 14 feet 6 inches. This is equivalent to an energy of 2,320 lbs., falling through a foot ; but that is dangerously close to the point of decapitation, but therefore you must never give a drop so serious as that, no matter how light the man may be. The weight of the man multiplied by the length of the drop is the energy expended in breaking his neck. The experience in these two cases has proved that that energy amounts to about a ton falling through a foot.

5. (*Sir Frederick Bramwell.*) It is not quite that. 160 lbs. is the 14th part of a ton, and you have 14 feet 6 inches instead of 14 feet?—That is quite near enough.

6. (*Chairman.*) Do you think that if the knot was adjusted in the way you have suggested, with the long drop of 14 feet 6 inches, decapitation would result?—Unquestionably. As I said, the impression on my mind was that 6 inches more would have cut the head off.

7. But that was under different circumstances. I am asking you whether, with the alteration in the knot, placing the knot under the chin instead of at the back of the head, with a fall of 14 feet 6 inches, decapitation would be likely to result?—Wherever you put the knot the head would probably have come off with that drop.

I will now give you two cases which were observed by a distinguished anatomist. Both these cases were with the occipital knot. In the first case there was 1,103 foot lbs., and in the other 1,463 foot lbs., of energy expended. The knot was on the back of the head in both cases, and death was instantaneous, without any risk of decapitation ; so my opinion would be that half the decapitating energy with the knot placed under the chin would be quite sufficient. We have 160 lbs. through 8 feet ; that is 1,280 foot lbs. ; that is what the meeting at the College of Surgeons arrived at, or a little more than half what would probably take the head off. I propose to put in evidence next week, the post mortem dissections made on certain cases executed pretty much on that rule ; they were actual dissections ; I do not trust any statement made from an external examination, as I have found them very fallacious, there must be minute dissections made by a man who

is a good anatomist and not merely a surgeon. This discussion at the College of Surgeons was not published in the newspapers, but in the Medical Press of Dublin, for the benefit of all the surgeons who wanted to have it on record. I have reason to believe that Marwood must have read a copy of this discussion, for he adopted the result with success. That explains my connexion with this subject.

8. (*Dr. Gover.*) Would you be kind enough to state the two points between which you took your measurements in giving the length of the drop?—By measurement after death. When the man drops he measures so many feet from the level of the platform.

9. From heel to heel?—From heel to heel.

10. (*Chairman.*) Has the length of the drop been uniform in Ireland since this discussion?—Marwood was the executioner, you know, and he followed very much all through his life this rule ; Binns had no rule at all. I speak without sufficient knowledge, but my impression is that Marwood carried out this rule for the remainder of his life, and that Binns and Berry have been acting without much rule to guide them at all.

11. (*Sir Frederick Bramwell.*) I gathered from you, I do know whether rightly, that in your judgment it is desirable that executions should be such as would break the neck, and not merely suffocations?—Yes.

12. And in the second place, I gathered from you that the College of Surgeons in Ireland came to the conclusion that about 1,120 foot lbs. was a reasonable energy, and therefore they do take into account the weight of the man?—They do. It was not the College of Surgeons, it was a meeting held at the College of Surgeons.

13. (*Sir Henry Selwin-Ibbetson.*) There is one question I want to ask, and I should like to ask it now. You have taken the length of the drop and the weight of the man into consideration, have you not?—Yes.

14. Do you think that the arrangements are influenced at all by the anatomy of the man ; whether he has a very stout thick neck or a thin brittle neck?—That would signify somewhat.

15. Then you think that the thin neck would not be likely to cause decapitation by the sudden blow?—Not much ; with a knot under the chin the blow falls first and chiefly on the spinal column, then the transverse processes are both fractured by that blow and death is instantaneous. The thickness of the neck does not much matter, as the soft parts of the neck are not divided at all. A ton falling through a foot would probably cut through everything, no matter where the knot was ; but half that weight thrown on the spine leaves all the soft parts undivided. It is remarkable that in the case I dissected myself, every soft structure in the neck was cut across, the jugular veins, the jugular arteries, muscles and everything but the skin.

16. (*Dr. Gover.*) Whatever standard may be fixed upon should not some deduction be made for the degeneration of tissue in cases say of men who have been drunkards all their lives or who are suffering from disease?—I think the rule laid down should be for healthy subjects, and some modification should be made in cases of diseased tissues.

Mr. LEONARD WARD called in and examined.

Mr. L. Ward.

17. (*Chairman.*) I believe you are Chief Warder in Newgate?—Yes.

18. How long have you filled that office?—About four years.

19. Before that you were in some capacity in Newgate?—I have been in the prison altogether 20 years. I was first of all Warder, then Principal Warder, and then Chief Warder.

20. Has it been your duty to attend executions?—Yes, it has.

21. During the whole of that time?—Yes, during the whole of that time.

22. During that time have there been any failures in the satisfactory performance of the executions?—There have been two rather awkward hitches, but it was in the rope itself cutting the neck of the criminal somewhat.

23. But without decapitation?—Without decapitation.

24. Then in that case was death instantaneous?—Yes.

25. Then the criminal would not have suffered physically from these injuries to his neck?—No, I think death was instantaneous.

26. Were those circumstances the same in both cases?—The first case was of a man named Harris. Two men were hanged together ; the man Harris was a heavy man, and the drop no doubt was excessive because the whole front of his throat tore right away ; he was hanged by the back of his neck.

27. What was the other case?—The other was a man named Norman, he also weighed about the same weight, 13 stone, and was given about the same amount of drop, 7 feet 10 inches I think it was.

28. What was the length of drop in these two cases?—The last case I was speaking of was about 8 feet within an inch or two ; it was 7 feet 10 inches exactly, and the other was about 7 feet 6 inches.

29. Were these men heavier than the average man?—They were ; they were both 13 stone or thereabouts, one a little over and the other a little under.

30. Have you seen heavier criminals than those executed?—I think not.

31. In those cases do you remember how the knot was placed?—It was placed on the left side just behind the ear.

32. Near the spinal column, that is to say?—Yes, just behind the jaw bone.

33. Is the knot always so fixed?—Nearly always. I remember one instance where Marwood was the executioner, when the rope slipped a little. The culprit was a woman in that case, and the rope had got to the back of the head ; I think she turned round just as the drop was in the act of falling.

34. Did death follow instantaneously in that case?—Yes.

35. Was that the only case you recollect in which the knot was placed exactly there?—That was the only case. I remember one case where it was placed very nearly, not quite in front, but as near as possible, just the least bit on one side, but just about in that position (*describing the same*).

36. Not immediately under the chin?—Not immediately.

37. Have you known any case in which the knot was put under the chin?—Not any.

38. Have you observed any cases in which death did not appear to be instantaneous?—For the first six or seven years I was in the prison Calcraft was the executioner, and the men did not die so instantaneously as they do now, because he used a shorter drop altogether. Calcraft's custom was not to give more than 2 feet, or 2 feet 6 inches. I never saw one of his more than 3 feet.

39. What usually happened so far as you could judge by the eye?—The culprit was strangled, and I saw a twitching for seven or eight minutes in this position (*describing the same*). The shoulders, hands and arms moved for six, seven, or eight minutes.

40. Were the twitchings more violent at first?—Yes, for the first few seconds ; then they gradually left off until one just saw the hands move in that way (*describing the same*).

41. Have you known any other intermediate lengths between the 3 feet and the 8 feet which you have just mentioned?—I have seen two or three hanged lately, where the sheriffs have controlled the execution to a certain extent, and I may say possibly at my advice. When I found that this new executioner was giving such an enormously long drop, and when I saw this man's head almost off, I then began to think there was something very wrong about such an exceedingly long drop. I set to work, and worked out a complete scale of the law of falling bodies at all falling distances which I thought would be required for execution.

42. Could you put that scale in?—Yes (*handing in the same, Appendix No. 1.*) I carried it out from 8 stone up to 20 stone at 1 foot, 2 feet, and up to 10 feet ; so that it shows you the exact striking force

at each distance of a body weighing 8, 9, or 10, up to 20 stone.

43. In these cases in which the length of the drop has been modified at your suggestion what was the length adopted?—It was in accordance with the weight of the prisoner. If the prisoner weighed 9 stone, according to my experiences, having seen several men weighing about that weight and given an 8 feet drop, I found that the striking force was 25 cwt., and in each case the neck was broken, although not torn ; from that I concluded that 8 feet was the right and proper drop to give ; that where a prisoner is heavier so the drop must decrease, so long as you keep the same striking force, within a little. If the Committee will observe the stars I made on that list, there are little stars that carry it out from one end to the other about the same or nearly so ; it increases a little on account of a man's neck being thicker and stronger.

44. Could you give the exact lengths of rope and weights of the criminals executed in this manner where you departed from the exact process that would have been followed by the executioner himself?—Yes. In the second case I mentioned, that is the case of Norman, he weighed 13 stone 1 lb., and he was given a drop of 8 feet ; I find by my scale that he struck with a force of 36¾ cwt., and I considered that as that was just 11 cwt. more than was necessary, therefore if that same criminal had been given a 4 foot drop he would have struck with a force of 26 cwt., which would have been ample.

45. I want to know the exact length of the rope, and the weight of the criminals, in those cases in which the sheriffs at your suggestion interfered?—The last case was that of a man who weighed 12 stone ; the hangman arranged for a 7 foot 6 inches drop, as being the proper length of drop ; the sheriff spoke to me about it on the day before, or rather two days before the Saturday, and I said, "I think that is too much ; I do not think it is necessary to have so much as that" ; I showed the gentleman this scale which I had prepared, and they arranged that he should leave it at 5 feet ; I believe the exact distance was 5 feet 3 inches, and in that case dislocation took place just the same as if it had been a longer drop.

46. Did the executioner in that case object to the shortened length?—He did ; he stood out for some time, and the 3 inches, I believe, was allowed by the sheriff.

47. What was the other case in which the sheriff interfered at your suggestion ; I want the weight of the criminal and the length of the rope?—In that case the man weighed 9 stone ; the executioner was arranging to give him as much drop as he could, 9 feet ; the sheriff said it was too much, and it was finally arranged that it should be 8 feet.

48. Did the execution pass off satisfactorily?—Very satisfactorily.

49. I suppose it may be assumed from what you have said, that in spite of these interferences the executioner, when he went into the province, acted on his own opinion of what was desirable?—Yes ; I may say that when I drew up this scale I copied it and sent a copy of it to him as a friend, I thought I was doing him a kindness, with a letter explaining it exactly ; and he wrote me back thanking me, and telling me it was just the thing that he wanted. Almost the next week he went to Norwich and pulled that man's head clean off.

50. So that he departed from the rules that you had laid down for his guidance?—Yes ; because in that case, according to his own words, the prisoner weighed something over 15 stone, and he gave him a 6 foot drop. Now, I find by my scale that with a 6 foot drop for a 15 stone man the striking force is 36 cwt. That was just about the weight when the man's neck was torn at Newgate, although it was not the same drop.

51. What is the length which, according to your scale, he should have adopted in the Norwich case?—Three feet.

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52. Have you observed different practices adopted by the different executioners in your time?—I have.

53. Will you state, as well as you can, what those differences were?—From 1866, the year I went to Newgate, until 1874, Calcraft was the executioner ; he used a smaller rope, and did not give more than 2 to 3 feet drop ; and I have seen him hang a man with an 18 inches drop, not more than that. As soon as Marwood came, he was in favour of the long drop, and wanted to give 6, 7 or 8 feet ; the Governor of the Gaol at that time, Mr. Sydney Smyth, was very much against it, and I believe he kept Marwood down to something like 6 feet 6 inches. At any rate the executioner complained two or three times to the sheriff and the Governor that the pit was not deep enough at Newgate to give him the full amount of drop which he desired, and the pit was lowered, so that it is now 10 feet ; it was lowered about 2 feet 6 inches, so that he should have sufficient drop to carry out executions according to his own views.

54. What was the longest drop ever adopted in your time?—8 feet 6 inches.

55. After Marwood, who came to be the executioner?—Then Bartholomew Binns came and hung one man, that was Patrick O'Donnell, the man who shot Carey ; that was the only execution he carried out at Newgate. He gave the man an 8 foot drop, and managed to tie the rope in such a way that it slipped 15 inches, so that by the time the man had been hanging an hour, his feet were within three inches of the floor of this pit.

56. How did he happen to make this mistake?—It was in tying the knot ; he was a very poor hand I thought at the time.

57. Have you ever seen that sort of mistake made by any of the other executioners?—No.

58. Now you told us that Binns' practice was limited to one case?—Yes.

59. Who succeeded Binns?—Berry.

60. And he is the present man, I believe?—He is the present hangman.

61. What is his practice?—He is in favour of the long drop, just as Marwood was ; he is always anxious to give as much as he can. He has only been to Newgate five times ; no, there were two men hung together on one occasion, so that he has only been four times to Newgate, and on two of those occasions the sheriff has controlled him, and not allowed him to give so much drop.

62. Where he acted on his own opinion what was the length of the drop?—8 feet 6, 7 feet 6, and 7 feet 6.

63. Being influenced as to the difference by the weight of the culprit?—Yes, of course. That was just the thing which Berry did not seem to take into sufficient consideration, as I thought. He hung two men together, the one weighing 13 stone, and the other 9 stone 7 lbs., he gave one an 8 foot 6 drop, and the other a 7 foot 6 drop.

64. Have you anything further to say with respect to the length of the drop?—No.

65. With respect to the conduct and demeanour of these executioners have you anything further to say?—Nothing ; except that they are of course a very rough class of men. Binns was an exceedingly rough man ; he did not seem to have any notion about anything. I had to show him how to put the pinioning straps on to the culprit.

66. How did it happen that he was selected?—I cannot imagine. There were 26 personal applications ; there were 1,270 applications altogether, out of which 26 were selected and written to. Berry was one and Binns was another, and it was left to Berry and Binns and one other name.

67. What had Binns been before that?—A foreman navy on the railway ; a platelayer he called himself.

68. What, so far as you know, were supposed to be the qualifications which led to his being preferred to the other applicants?—The sheriffs appeared to think

that he was a strong man ; of course he was a tall, strong man, and of good character ; they thought he was a brave sort of man who would not flinch at carrying out anything of the sort ; else he had not had any experience until he was appointed.

69. Did any person endeavour to supply that want of experience, by giving him some instructions in the performance of his duty?—Before he was appointed, the sheriffs desired the Governor to allow me to show him what was necessary to be done, and I did so to the best of my ability ; I have seen 32 criminals hanged.

70. Did he appear to be a man of intelligence as well as a man of physical strength?—No, that was just the thing that was lacking ; he did not seem as if he could grasp the subject, in fact, when pinioning a man he had the pinioning straps back part in front, and I had to take them off and put them on right.

71. You found Calcraft there, did you not?—Yes.

72. Therefore you know nothing about his appointment?—I see by the books of Newgate that he was appointed in 1828.

73. What was Marwood before he became executioner?—He was a shoemaker.

74. And was he selected in the same way?—I do not know about that. Marwood was not appointed, he was merely chosen by the sheriffs to carry out the executions.

75. What distinction do you make between being appointed and chosen?—Calfcraft was appointed by the Corporation at a fixed salary, Marwood was not so appointed ; he was merely employed to carry out an execution whenever an execution occurred.

76. He was sent for each time?—Yes.

77. And paid by the job?—Yes. Binns was appointed, but this man Berry has never been appointed by the sheriffs.

78. What was Berry before he was employed?—He has been a boot salesman in a shop in Bradford.

79. And what were his supposed qualifications for the office ? — He had carried out an execution in Leeds in a case when Marwood was over in Ireland ; and some of the sheriffs or some gentlemen thought that he was a person who could do the work, and they employed him, and he did actually carry out one execution in Leeds.

80. Successfully ?—Yes, successfully.

81. You have spoken of one of them as being a very rough man ; have they always presented themselves to you in a state of sobriety ?—No, not always.

82. How often have you seen them otherwise than sober, and how long before the execution ?—More than 24 hours ; we have been careful about that. They have usually lodged in the Prison ; and in the case of Binns we were so doubtful about him, and being that Fenian case, that we kept him in Prison ; we did not allow him to go out, by the sanction of the sheriffs, from the Saturday night until the execution was over.

83. Have you done that in the case of Berry ?—No, we have not. I believe he was a teetotaller at first for a year or so, but I do not think he is now.

84. I daresay you are aware of the sort of charges that have been made, most of them anonymously, against these hangmen, as to their behaviour both before and after executions ?—I have heard of those things.

85. Have you any knowledge of them ?—No, not any.

86. Is it, in your opinion, desirable that on all occasions, whatever may be the personal character of the hangman, he should be in the Prison some time before the performance of his duty, so as not to have access to drink ?—I do not think it makes any difference. In the case of this man, Berry, he seems to be a very sober man ; he lodges in the immediate neighbourhood, and he comes in at 6 o'clock in the morning usually.

87. We have heard stories of the executioners both before and after executions frequenting public-houses and entertaining the guests there with stories of their performances, and of selling portions of the rope

which had been used in the previous executions, and of selling portraits of the culprits, and so forth ; do you know anything of that of your own knowledge ?—No, not anything.

88. Has any such report ever reached you ?—I have frequently heard of it in different parts.

89. Have you heard of anything which satisfied you of its truth ?—There was a case at Wandsworth which I heard from the Principal Warder, who comes to Newgate occasionally. On the first occasion that Binns carried out an execution after he was appointed, it was at Wandsworth. I have heard that he went there and did get tipsy on the night before, on the Saturday or the Sunday night, and was exhibiting his ropes and his pinioning straps that he carried with him ; but I never heard of anything of that kind with Berry. I think he seems to be very careful when he comes to London. He leaves his bag with all his appliances in the Prison ; he does not take them to his lodgings.

90. And he has no opportunity to exhibit them ?—No.

91. Have the executioners received any written instruction from those who appoint them as to the manner in which they should conduct themselves ?—I think not.

92. Is it in your opinion desirable that they should do so ?—In some cases I believe it would be necessary.

93. Might not a coarse man, such as you describe Binns to be, and such as others might have been, do things from ignorance of the manner in which they affect the minds of decent people, which they might have been prevented from doing if they had been laid under an obligation to obey certain rules ?—I quite think so. I think that some of the expressions that I have heard them make use of, have been most unseemly. Marwood was a pretty careful man, but during the latter part of his time he became addicted to drink. The last time I saw him in London I had to take him to the sheriffs to get his fee (the man who was to be hanged got reprieved after Marwood arrived), and he was so tipsy that he could scarcely sign the receipt for the five guineas which he received.

94. Have they used disgusting language with regard to the executions that they have performed ?—No, not particularly so.

95. I suppose it may be conceivable that if they got drunk they would be very likely to do so ?—Yes.

96. In this particular case when Marwood presented himself to receive his fee in a state of drunkenness, was it on the day when the execution would have taken place ?—It was.

97. Was he aware of the reprieve ?—He was.

98. When had he been made aware of it ?—He was informed of it on Saturday night. It was Marwood's custom to lodge in the Prison if it was convenient, and we always made room for him.

99. Therefore if the man had not been reprieved Marwood would have been safe from committing an excess of that kind you think ?—I think so. You see of course the executioner was lodged in the Prison, but nothing was said about his not going out on Sunday morning and remaining out until 10 o'clock at night ; he would come in at 10 o'clock, and sleep in the Prison.

100. Have you ever seen them come in at that time of night ?—Yes, I am sorry to say that I have seen Marwood rather the worse for drink on the Saturday night.

101. Have you ever seen any of them the worse for drink on the Sunday night ?—No.

102. Have you ever been present when they have come in on the Sunday night ?—I have.

103. Have you ever heard of their coming in on the Sunday night the worse for drink ?—No.

104. Do you think that they themselves are more careful about getting drunk the night before an execution ?—I think they have been. Latterly Marwood did get addicted to drink ; but he used to be exceedingly careful on the Sunday night, and would not take anything on the Monday morning.

105. Have you yourself any suggestions to make

upon the question as to the choice of an executioner, and rules for his observance about the time of an execution ?—No. Of course I know that there has been a circular sent to all the Prison Authorities to lodge the executioner, if it is convenient. There is a circular now in the Governor's office to that effect, to lodge the executioner and provide him with food if necessary.

106. Do you think that that should extend to keeping him actually in Gaol from the time he entered till the time when the execution is over ?—I do not think it is necessary with a man like the present hangman ; I think he seems to be a steady man, and very careful in carrying out all the details of an execution.

107. You are aware, I daresay, that all sorts of stories are circulated with respect to the present hangman ?—I have heard them frequently.

108. Has the hangman a right to carry away the rope that has been used for an execution ?—According to the present arrangement the executioner has to find the rope himself, and in the case of the last two or three executioners, Marwood, Binns, and the present executioner, Berry, have supplied themselves with so many ropes ; say three or four ropes, and they use those ropes frequently. Several times Marwood had four ropes, I think it was ; he had one that he used to tell me that he had hung four with, and another that he had hung five with, and another that he had hung seven with.

109. Did he use all those ropes upon any principle with regard to the particular weight of the prisoner that he was to hang ?—No, the ropes were all the same ; they were all the Government pattern execution rope. The Governor of Newgate Prison has sent one here, thinking that some of the Members of the Committee might like to see it. I have it here.

110. Then he is supplied with the rope by the Authorities of Newgate ?—The executioner has to provide his own ropes, and it seems that the present executioner, Berry, before he was aware that there was a depôt for execution ropes, Government ropes, went and bought a lot of rope on his own account, and he very often uses his own rope now.

111. What do you call the Government pattern rope ; will you explain what you mean by that ?—The ropes are made by contractors, Messrs. Edgington & Co., 48, Long Lane, E.C., and approved by the Home Office Authorities. This is a pattern (*producing the same*).

112. They may be got if the Authorities choose to apply for them ?—Yes. It frequently happens in the country that the sheriffs will find the ropes themselves ; they apply to the Governor of the House of Detention at Clerkenwell to be supplied with rope.

113. (*Sir Frederick Bramwell.*) Is that rope which you have produced the same as that which Marwood used ?—It is the same sort. This is a perfectly new rope which has never been used.

114. (*Chairman.*) Is that the rope which is supplied by Government ?—Yes.

115. Are the ropes which are used at the executions at Newgate always those that are supplied by the Government ?—They have been up to the present time ; but Berry has two or three ropes of his own, and he wanted to use them on one occasion, but the sheriff objected ; he said he would much prefer that Berry would use the regulation rope.

116. Are you aware what the practice in the country is ; whether they leave it to the executioner to bring his own rope, or whether they apply to the Government to supply the executioner with rope ?—I think that in the majority of cases they leave it to the executioner, but he himself has bought three or four of these ropes now, so that he has supplied himself with them ; and the rope is not cut now-a-days, so that the same rope will hang a number of persons.

117. You said that Marwood had four ropes ?—He had several. He bought six on one occasion.

118. In the case of Berry, do you know how many ropes he has had ?—No, I am not aware. I know of

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three different instances when he has bought ropes ; he bought two ropes on one occasion, and one on another.

119. You do not know, I suppose, what has become of them ?—No. The last time that he came to Newgate, in December (our last man was hanged on the 7th of December), he had then got two Government ropes with him, one of them, he said, was the identical rope with which he had hung the man at Norwich.

120. Did you ever hear any of these executioners boast of having disposed of portions of the ropes to curious persons who wished to possess them ?—No, I have not.

121. Is there anything else which you would like to state to the Committee ?—I think not.

122. (*Dr. Haughton.*) Was this leather flange used in the ropes before Marwood's time ?—No.

123. That is Marwood's own invention ?—Yes.

124. You say that he never placed the rope under the chin ; I have seen him place it in the hollow ?—In one instance he brought it very nearly to the front, but not quite, just to the corner of the chin.

125. I think I heard you say that in cases where it was placed in the back of the neck it slipped round ?—Yes, Marwood did not place it there himself, but the woman just at the last moment, twitched round, and the rope slipped, so that it came at the back of the neck.

126. You have reason to believe that Marwood's object was to put it at the side of the chin, and that this flange was intended to close up and keep it there ?—The leather flange is merely intended to keep the rope from opening out. They are careful to push that leather flange close up. The present hangman uses an india-rubber washer instead of that.

127. With regard to this table that you have put in as evidence, I see it is based upon the principle that you multiply the weight of the man by the rate at which he is going down into the drop ?—Yes.

128. You said that you do not know of your own knowledge of the sale of rope to outside people who were not connected with the execution ?—No, I have never heard of that, in London at any rate. I have read of it.

129. I expect it is more common in the country. You do not know of your own knowledge about executions taking place in country towns on a Monday morning, when both the Saturday and Sunday evening would be a sort of entertainment for the public to smoke and talk with the hangman ?—I have heard of such things.

130. (*Chairman.*) I omitted to ask you one question, which was this, have you ever found any mischief arising from the imperfection of the gallows or the mechanical arrangements connected with hanging ?—Not in our Prison, they have worked admirably ; we have never had a hitch of any kind.

131. Do you remember a case that occurred at Exeter lately, in which a man, I think called Lee, was brought three times upon the drop and it failed to act ?—Yes, I read of it.

132. Do I rightly understand you to say that with the gallows in use at Newgate such an obstruction would be impossible ?—I can only say that it has never failed in any one instance. We frequently try it ; it is kept in a shed, where it is dry and not allowed to be damp or anything of that kind, and it is frequently looked to.

133. Do you try all these things before an execution takes place ?—Yes, several times. During the last twelve months we have tested the scaffold with the exact weights of the men that we were about to hang. We have a sack of sand or something of that sort, and just the right amount of drop and everything is given, and the sack is let down just in the way that we should let down the culprit.

134. (*Sir Frederick Bramwell.*) Can you tell me what is the height from the drop on which the man stands to the beam from which this rope proceeds ; is it fastened to an eye-bolt or what is it ?—At Newgate there is a beam of 8 feet 2 inches from the floor, with a chain hanging from that beam to which the rope is fastened ;

there are about 8 links in the chain. It was the custom with Calcraft when he was executioner to have a hook fastened in the rope at the right distance, and then he would only just hook this hook into one of the links of the chain.

135. So that if there were no drop at all the piece of rope would not be, I suppose above a foot or 18 inches long. Assuming there were no such thing as the drop there you would merely let a man hang ?—That rope is 12 feet 6 inches.

136. What I am trying to arrive at is this ; what length of rope there is for elasticity to play upon, irrespective of the drop. If you give a man 5 feet drop, the rope must be that 5 feet long, allowing for stretching, and it must also be as long as it would be if there was no drop at all in addition ?—Yes.

137. What is the length of rope needed if there were no drop at all, is it a foot or two feet, or what is it ?—May I ask whether you mean between the beam and the man's head ?

138. Yes ?—The way in which the executioner arrives at the proper amount of drop is this. Supposing that he takes a culprit 5 feet 9 inches in height, and he wishes to give him an 8 feet drop, he would affix the rope, making a noose the size of the man's neck, and then fix it to that (*describing the same on the wall*), that would come to the floor, taking the height of the prisoner at 5 feet 9 inches ; and then he would allow so much more as would reach 2 feet 3 inches below the floor ; then you see the 2 feet 3 inches and the 5 feet 9 inches would make up 8 feet.

139. That is not what I am asking ; what I am asking is, what is the length of the rope between the neck of the man as he stands stationary and the part where the rope is fastened into if the rope were hauled fast ?—It depends on the height of the prisoner entirely.

140. That is why I ask you how far this point of attachment is above the floor on which the prisoner stands ?—The beam is 8 feet 9 inches, and the chain about 14 inches hanging down.

141. That makes the rope start from a point 7 feet up ; with a 6 feet man that leaves about 1 foot 10 inches, I suppose, including the chain. Then the beam itself has very little deflection in it when the weight comes down ?—Not any ; it is such an immense beam of wood. I saw four men hanged in 1876, and the beam did not move.

142. (*Chairman.*) Were they all hanged at the same moment ?—Yes, at the same moment, standing in a row.

143. You never hang successively, do you ?—No ; they are hung together ; we hung two men in October 1884 ; we hung two in 1880, and these four men in 1876.

144. (*Sir Frederick Bramwell.*) Is the rope tested before each execution ?—Yes.

145. And is it tested by a falling weight ?—Yes, just in the way that I have stated ; they take a sack of sand made up to the weight of the prisoner ; then the rope is adjusted so that there shall be the amount of drop necessary for the particular weight.

146. Do you use the very rope that is used at the execution ?—Yes, that is generally done on the Saturday afternoon before the execution.

147. Do you know at all what the give of the rope is ; is it possible to check that ?—I find that the regulation rope will give about 6 to 7 inches.

148. Does it make any difference whether the rope is used for the first time or not ?—I think not. I took the precaution on one occasion to measure the rope. I measured it before it was used ; and I measured it again after it was taken off the prisoner, and it was about two inches and a half longer after it had been used than it was before.

149. (*Chairman.*) Would it recover its former length after a while ?—It appeared to be working back. Of course it was not long after the execution that I measured it. The rope, as you observe, is not pasted together, there is nothing to make it stick, so that it is very pliable.

150. I do not quite understand one thing. You say that this is a Government rope, but that yet the executioner finds them?—Yes.

151. Where does he go to buy them?—To Clerkenwell Prison. The Governor of Newgate is the proper person to apply to, but the ropes are, as a matter of fact, kept at Clerkenwell.

152. They would not be sold to any chance customer, I presume?—No; only the sheriffs occasionally apply for them in different parts of the country, and we have sent them abroad to the Colonies several times.

153. (*Sir Henry Selwin-Ibbetson.*) What is the construction of your drop at Newgate?—It is two long folding doors. Supposing that these two bits of paper might be the two folding doors, they have a hinge on each side; the hinges of *this* door extend underneath right to the further side on to a large flat iron bar lying *here* fixed on rollers, so that the hinge of *this* door extends underneath the other door, comes to the outside edge and rests on the iron bar; and in this iron bar slots are cut so that the end of the hinge drops through these slots; when you pull the lever, you simply slide the great iron bar until the ends of the hinges drop through the slots.

154. Have you ever found any instance in your experience of a hitch in the working of that?—Not in the least degree. I believe at Exeter it was something after the same pattern.

155. (*Chairman.*) At Exeter it acted perfectly well when there was no weight upon it; had they tried a sand bag in the way it is done at Newgate I think they would have discovered its defects?—No doubt.

156. (*Dr. Gover.*) I think, in answer to a question by the Chairman, you said that death was by strangulation?—In some instances; that was the principle of the short drop.

157. (*Sir Frederick Bramwell.*) In Calcraft's time was that so?—Yes; I do not remember a single instance where the man's neck was broken with the short drop.

158. (*Dr. Gover.*) Have you assured yourself of the accuracy of the length of the drop by your own measurements?—I have on one or two occasions.

159. You did not take the executioner's statement?—No; I find he is rather shaky on that point; he does not seem to know exactly how much he has given.

160. (*Chairman.*) Does he judge by the eye, or has he a rule?—He has a rule; but he does not seem to be quite up to it. In one instance I was instructed by the sheriff to watch him closely after he had confined him to a 5 feet 3 inches drop. On the morning of the execution, when the sheriff had previously instructed him to give a 5 feet 3 inches drop, I saw that the rope had been fixed at more than that a good bit. I measured it and found that it was about 6 feet 6 inches. I immediately told the executioner, "I have heard what the sheriff said to you, I do not give you any orders, but I shall have to acquaint the sheriff before the execution of what you have done; he instructed you to give a 5 feet 3 inches drop and you have now given a 6 feet 6 inches," and the rope was altered to the 5 feet 3 inches.

161. That, I suppose, was not so much from inattention, but because he preferred the length of 6 feet 6 inches to 5 feet 3 inches?—Yes; he was very anxious to give 7 feet in this particular case.

162. (*Dr. Gover.*) You spoke of drops of 5 feet 10 inches, 5 feet 3 inches, and so on; is it possible to measure to an inch, seeing the kind of rope it is?—No, you cannot. In this case where it was 7 feet 10 inches I measured the body as it hung, I measured from the feet. I know the exact depth of the pit. I went to the bottom of the pit and carried the measurement from the bottom up to the man's feet, that is the way I arrived at it. I found in that case it was 7 feet 10 inches.

163. Supposing 5 feet 3 inches were the rule for

all executions, how would you arrive at that precise drop?—I should first of all take the man's height, whatever it was, that would have to be the first consideration. If the culprit about to be hanged was 5 feet 6 inches we should then have to allow so that the noose would be just about level with the floor as near as possible, then his head would be a little above it, and the rope would stretch until you just get about that amount.

164. Have you ever known a case in which the condition or build of the prisoner has had to be considered to modify the length of the drop that would be given?—No, that is not taken into consideration. Attention has only lately been called to the way the executioner carries out his duties.

165. Has the Medical Officer ever been consulted as to the propriety of any drop being decided upon?—Upon the last three occasions the Medical Officer visited the Prison on the Saturday with the sheriffs, and advised the sheriffs.

166. This was after an examination of the prisoner, I presume?—Yes, the Medical Officer would, of course, know the weight and construction of the prisoner.

167. I gather from what you say that it would not be possible to get a rope that had been used at a particular execution of a particular criminal?—I do not know.

168. (*Chairman.*) There would be no difficulty, I presume, in getting the rope used in an execution?—It is the executioner's property, and he takes it away with him.

169. (*Sir Frederick Bramwell.*) I understand you to say that the rope which was used by the executioner at Norwich was the kind of rope that is regularly used?—He was using it; he had it with him, and said, "There, that was the rope I used in Norwich."

170. Was that one of these Government ropes, do you know?—Yes; at least the executioner said it was.

171. (*Chairman.*) You do think this accident had anything to do with the quality or size of the rope?—I may say this: that the rope which Berry has bought himself is not the Government regulation rope; it is a smaller rope than that, but it is a harder and harsher rope, and a rope, I should imagine, more likely to cut the culprit's neck than the regulation rope.

172. (*Dr. Gover.*) Is that less or more elastic than the Government regulation rope?—It is not so elastic.

173. (*Chairman.*) But I think you said he used the Government rope on that occasion?—He told me he did; that is all I know, of course.

174. (*Dr. Gover.*) What is the technical description of that rope as to width; I suppose there is some kind of description?—There is a Home Office circular describing it; I think we have it at the prison; I think it is what they call four-strand, 2½ inches in circumference.

175. Is it made of fine hemp?—It is white Italian hemp.

176. You say that at Newgate the platform is tested?—Yes.

177. When is that done?—That is done first of all a week before; we usually do it on a Saturday, eight or nine days before the execution; then it is again tested within one hour of the execution.

178. (*Chairman.*) Would you like to add anything further to your evidence?—One thing has occurred to me from having seen a number of executions, and having heard of two or three instances in the country, where the slack of the rope was hanging from the man's neck down his back. It did not occur at Newgate, but I have read in the papers of a case where the man's elbow was hooked into the slack of the rope, and in another case his wrist. If I may be allowed to suggest such a thing, in fact, in the case where Binns was the executioner, I suggested it, and it was carried out, I would suggest that the whole of the slack of the rope should be coiled up round and

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round and tied up with a piece of cotton quite out of the way of the man's head with just sufficient length left to come down to his head, and the whole of the slack of the rope above his head.

179. (*Dr. Haughton.*) Have you ever seen that done?—Yes, I have seen it done. You see, in the ordinary way the slack of the rope hangs down the man's back, and if the prisoner should happen to twist a little at the moment, the slack may hook on to his elbow, because his elbow is rigid.

180. (*Chairman.*) There was another case, you say, where a man was caught by the wrist; did that delay the hanging?—Yes, the man was hanging by his wrist, not by his neck.

181. Where was that case?—I think it was in Durham.

182. Do you remember how long ago?—No.

183. The case of the elbow was at Durham?—Then it must have been a case in Ireland where the man's wrist was hooked.

184. (*Chairman.*) You say that you test these ropes?—Yes, and they are tested enormously by the contractors. I think the breaking strain is 34 stone falling through 10 feet, giving a striking force of over 5 tons.

185. You have never known any failure?—No.

The witness withdrew.

Mr. JOHN ROWLAND GIBSON F.R.C.S., called in and examined.

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186. (*Chairman.*) Will you tell us what you were and are?—I am a fellow of the Royal College of Surgeons of England, and Licentiate of the Society of Apothecaries, and I was surgeon to the gaol at Newgate from 1855 to 1882, or nearly 27 years.

187. Was it your duty to be present at executions on those occasions?—Always. I have witnessed 40.

188. And to examine the culprit after that execution?—Yes, to a certain extent; we were not permitted to make post-mortem examinations; in only one case did I do that.

189. In what case was that?—I do not know that I can remember; I have no notes.

190. What were the circumstances in that case?—Nothing very particular; but there were two friends of mine who were very able men, connected with St. Bartholomew's, who particularly wished to see the result of an execution, and a post-mortem was made. But there was some little difficulty about it afterwards; it was thought to be illegal, and therefore we made no further attempts.

191. Now in these 27 years have you witnessed various modes of conducting executions?—Yes.

192. Will you be good enough to state them to us?—There was very little variation, I may state, in the method of execution. In the commencement of my career Calcraft was the executioner, and in the early part of his career, or rather the latter part of his career, when I entered upon my duties, he used to use a short drop, I think he was satisfied with about 18 inches; but I think we got on up to about 3 feet. The result of that, I think, was a little unfortunate, because at the first execution I saw there was an accident.

193. Of what nature was that accident?—It is nearly 30 years ago; in the year 1856. The culprit was named Bousfield. Up to that time the legs were not tied together, they were free. There were two men ordered for execution at that particular Sessions; but one was respited, and it was thought that this man was dissatisfied at his life not being spared, and he burnt himself. At that time I must also state there was an open fire in the ward in which he was; that has since been changed and a fixed guard put there. It was felt that he would not walk to the place of execution, and he was placed on a high office stool, and this stool was placed on the platform; and when he was thrown off, feeling that he was going, I suppose, he made a sort of movement with his feet against this stool. The effect was to produce a sort of pendulous movement, and he got his feet upon the edge of the platform; he was immediately thrown off, and he got his feet again on the opposite edge of the platform; he was thrown off from that, and he got his feet a third time on the edge of the platform. Then Calcraft, who was down below, seized his legs, and the execution ended. From that time a strap was placed round the culprit's legs, so that he could not do anything of the sort. I think Calcraft's career reached up to 1874. Calcraft was always fond of a short rope, and the former ordinary always used to

give him a shilling for the rope, so that he should not sell it as the rope that hung so and so. But I think toward the latter part of his career Calcraft used a longer rope, but never more than three feet, and rarely so much as that. After that the rope was lengthened, but there was always a difficulty about it, because the Governor was very jealous of any innovation, feeling that an accident might occur, and that blame might be attributed to the change which had been made; but we did get, I think, ropes as long as six feet drop. I do not think there was much more, if any, change up to the time of my leaving.

194. Was that in the time of Marwood and his successors?—No, not after Marwood; Marwood was in office when the Gaol was given up as a permanent Gaol. It was in 1882 when the Gaol was given up as a permanent Gaol and when my office ceased.

195. Then at the present time do you take any personal interest in the length of the rope?—I take an interest in it. I desired to carry out what Dr. Haughton had suggested years ago, of having a long rope, but as I have said before, the Governor was particularly jealous of any innovation and he was very indisposed always to have the rope lengthened lest an accident should occur. No mishap occurred in our gaol as the result of executions beyond the one I alluded to, which occurred 30 years ago.

196. They have had another one, but that was after you ceased to be there, when the whole of the neck was violently torn?—I know nothing of that; it was after I was in office. I believe the rope in that case was about 8 feet.

197. But the cause of death was different, in your opinion, under the system of the short rope used by Calcraft, and under the system of the longer rope used by Marwood and his successors?—I may give an incident, if you allow me. When the short rope was used it was the quickest death I ever witnessed, it was instantaneous, but I should say it was accidental. It was the case of Muller who murdered Mr. Briggs in the railway carriage. I do not think Muller had more than 3 feet, if so much, but when he dropped there was a simple flicker of his right hand and all ceased, there was not the slightest intimation of life in him after that. I never saw so instantaneous a death.

198. How long did the usual muscular movement continue in your experience?—It varied very much, from a few minutes, or an average of three or four minutes, to seven minutes. In nearly the two last, perhaps, that I saw executed there was a most remarkable thing; it was in the case of a man named Herbert, he had murdered his sister-in-law (it was a very remarkable case) at Finsbury Park, and a man named Patey, who was a short man, but the pulse in Herbert's case continued up to 14 minutes. I could feel his pulse. I was not in the habit of going down, because it is rather a repulsive business, but I went down as life seemed to last a long time. I went into the well where they dropped and I found his pulse was beating very feebly, and very slowly. I called the then Governor, who is not now living, to confirm

the fact because I thought it might be doubted whether I was right in such a fact.

199. Was that a case of a short rope?—No, I think this man had about a six feet drop; but in these long drops there is little of what I should term consciousness at all. I think with a long drop that accident that occurred to Bousfield could not have happened; that is the man who got his feet upon the edge of the platform. I consider that the arrest of the fall, when it is a long drop, produces such complete stunning of the brain and nervous system, that I should think consciousness cannot remain; any muscular movements I regard as nothing.

200. But we have been led to believe that the muscular movements were generally more prolonged under the system of short rope execution than in the other case; would you agree with that?—Yes, I may name this, that in the short rope there was a great effort at respiration; they used to bring all their muscle into play to breathe, their shoulders would be heaved up in a most violent manner, and frequently their arms would move; of course they were pinioned.

201. Do you believe that during that time there was sensation?—Yes, certainly at the very beginning.

202. How long do you think sensation, apart from muscular movements, would last?—I think a very short time; it is something like a drowning person, I think. I have never had the misfortune of being drowned, but I have conversed with gentlemen who have lost all consciousness.

203. But they would be utterly incapable of measuring time under such circumstances?—Quite.

204. Have you yourself formed any opinion as to the amount of time during which sensation was prolonged?—No, I have not, but I should say a very very short time.

205. Comparing the two processes of 3 feet and 6 feet, is it so?—I look upon the second process as deprived of sensation. I think that when the fall takes place, so great is the shock, that there is complete stunning of the brain and nervous system. I never saw any of them move to the extent I saw in the short drop. I may mention that in that case of the man who lived so long as 14 minutes, there was still some little effort, some objective signs of life besides the pulse; there was a slight effort of breathing at long intervals.

206. That was the case of a long rope?—Quite 6 feet I think.

207. In that case the spinal cord could not have been ruptured?—No, I think not. I did not discover it, I think it must have been in the case of Muller; but then that was quite an accident. When I say an accident, you might hang a hundred people with a short drop and would not get the same result; it was some particular jerk which the body received, perhaps, in the fall, which you could not secure, and could not produce.

208. Have you arrived at the conclusion that a 6 feet drop is preferable to a 3 feet drop?—Yes, certainly; my feeling was always in favour of a long drop.

209. Would you be in favour of a longer drop than 6 feet?—Yes. I think that the drop ought to be regulated, because the height of a man and the weight of a man ought to determine very much the result. A man of 13 stone would come down with much greater force than a man of 7 stone, and a man of 6 feet would come down with a much greater force than a man of 5 feet, inasmuch he would drop one foot further, but this would be dependent on the length of the drop. There is not question about the fact that the force increases as the momentum, that is to say the fall, is extended.

210. During this time were the variations made in the length of the rope dependent upon those circumstances to which you have just referred?—I do not quite catch your Lordship's question.

211. You have told us that, in your opinion, the

weight of the culprit and his length are circumstances that have to be considered in adjusting the length of the rope?—Yes.

212. Were those circumstances considered?—No. You see they were entirely in the hands of the hangman, the Governor had very little power really over it; he did not interfere much. I might exercise some slight influence, but I had no authority.

213. Have you known any instance in which the sheriff has interfered with the practice of the hangman, and ordered a shorter rope?—No, I have not.

214. Then those cases of interferences of which we heard to-day from Mr. Leonard Ward, the Chief Warder, must have taken place after your time?—Yes, after my time.

215. Do you think it would be advisable to prepare a scale of the length of the rope dependent upon the condition of the criminal to which you adjust it?—I think so very strongly. I think that each execution ought to be regulated by a competent and responsible authority. If I might venture to express an opinion, I would say that the height and weight of every individual about to be executed should be sent up to the Home Office, to some competent authority, who should determine the length of drop to be used. I think it ought not to be left to an ignorant hangman, or to a Governor who might not have the means of making the proper calculations which would secure an expeditious execution and without its ghastly results.

216. I suppose the Home Office in that case would act upon certain rules?—Yes.

217. Would it not be easy that copies of those rules should be sent to all the sheriffs, and that the sheriffs should give orders to that effect?—It might be so; but then there might be mishaps in arriving at the proper authority; whereas a competent authority would make a calculation, and would send down what was to be done. The same rope, of course, is always used, it is the regulation rope.

218. Are there any other circumstances beyond the height and weight that might determine what the proper length of the rope should be?—No; I think the height and weight should be the two elements.

219. We have been told that the state of men's necks varies; that in some cases the resistance is less than in others?—I do not think that is an element which needs to be taken into consideration.

220. Have you ever considered the expediency of preferring one method of placing the knot to another?—The position of the knot has always been at the side. I think that if the knot could be placed in front it would secure the breaking of the neck.

221. That was the finding, I think, of a very competent body who inquired into the subject?—I think it was. I recollect reading some case an execution took place rather by accident than design in that way; and it was most efficient. I can quite understand that with a knot coming under the chin a sudden jerk would be almost certain to snap the spinal column.

222. We have been told that at Newgate it was never used in that way except accidentally?—I do not recollect that it was ever used in my time.

223. Then this method having been one approved by a competent authority, was apparently one not adopted and in force at the central prison?—It was not adopted.

224. Are you conversant at all with the method in which the hangmen were chosen?—Not at all.

225. Have you had any circumstances brought to your notice with respect to the demeanour of the hangmen before or after an execution?—No; I cannot say that I have. I think they are always a low class of men, and rather prone to take stimulants.

226. Have you ever seen them in a state of intoxication?—No; I think I should have interfered if I had seen them in a state not fit to perform their duties.

227. During the 27 years you were at Newgate you never saw a hangman at all apparently affected by drink?—As a rule, the hangman was secured in the

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Gaol ; he comes there on Saturday and is kept there all Sunday, and sleeps in the Gaol on Sunday night.

228. With the power of going out all Sunday ?—I believe Marwood used to go to the different churches on Sunday very much, and I never saw on any one occasion a hangman in a state unfit to perform his duties. Calcraft used to use a smaller rope than that which is on the table.

229. With his short drop that did not matter ?—No ; but with a long drop his rope would have broken.

230. Or it would have facilitated decapitation ?—It might have done.

231. As the result of your long experience, are you of opinion that any definite improvements ought to be introduced and imposed in the conduct of executions ?—No. I should advise that the greatest expedition be used at the time of executions. It is a very painful period, a moment of time seems so great a measure of time, that it is very painful. I think the pinioning ought to be done as near to the place of execution as possible. It is a painful business to have a long procession with the funeral service being read, while the poor wretch is walking to the place of execution. Then again I should advise (I often wished that I could have expedited matters) that the strap put round the man's legs should be put round by an officer at the time the rope was being adjusted on his neck. If the executioner has to put the strap on there is time occupied in doing it ; whereas, if it were done at the same time that the rope is being adjusted, there would be a sensible saving of time. That is the only thing that occurs to me that might be done.

232. How about the funeral service ; is so much of the funeral service read as would occupy the time when the culprit is walking from the cell to the place of execution ?—Until the drop takes place ; as soon as the sheriffs move and form the procession, the ordinary reads the funeral service, keeping close to the man ; and this is continued up to the time of the drop taking place.

233. What is the space of time that elapses usually ?—It is a very short time ; it would depend upon the distance from the cell where he was pinioned to the place of execution. If the work is done quickly it occupies very little time ; but supposing there were two men to be executed there would be some delay ; supposing there were four or five there would be more delay. On one occasion there were five ; that made it a very painful business ; some of them were almost fainting ; and I have seen them standing on the drop when they were almost ready to sink, their knees gave way and bent.

234. Can you give us any idea in point of time ; of course time is measured very differently according to circumstances in men's minds ; what is the actual time by a man's watch ?—I do not know, I never measured it.

235. What proportion of the funeral service is generally read ; of course it varies, but on an average what would you say is the amount ?—I think it is a very short portion usually ; it is just a few passages. I never heard the long lesson from Corinthians commenced.

236. The execution is not delayed in order to give the prisoner an opportunity of hearing it ?—No ; everything is sought to be done in the most expeditious way.

237. Would three, or four, or five minutes usually elapse between the time the prisoner leaves the cell and the time when the drop takes place ?—I should say less ; I have never measured it, but I should think three minutes would complete the whole.

238. That of course is subject to delay ; if there were several prisoners, and some of them in a state of great depression ?—Yes ; it would take some time if there were five.

239. What do you think would be the longest time you have been present at an execution ?—I do not know.

240. Do you think there is any advantage in hang-

ing men simultaneously, or would you recommend that they should be hanged consecutively ?—I think consecutively. If I might offer an opinion, I think it is a most painful thing to see a man with a rope round his neck standing there while the others are being prepared. It is most distressing to all around, to every one. I think that separate executions would be far better than hanging a lot altogether. I never thought of it until your Lordship suggested it.

241. Are there any advantages in a simultaneous execution that occur to you ?—There are none that I know of.

242. Is there anything else which you would like to state to the Committee ?—Nothing, I think.

243. (*Dr. Gover.*) Have you ever been consulted officially as to the propriety of the method of drop, or any other conditions ?—No, I never have.

244. Was there ever a case in your experience in which hanging could not be carried out, owing to a peculiar conformation, a very short neck, or anything of that kind ?—No ; I might name one circumstance that occurred during my period of service. A man was executed who had cut his own throat ; the part was quite healed, but to my surprise and horror afterwards, I might say I did not know it at the time, the wound opened ; but that did not affect the execution and it did not affect the time occupied in any way ; the wound opened below the rope, but there was some rag over the part, and therefore it was not seen.

245. How long was that after the attempt to commit suicide ?—I do not know, it might be two months ; he might be in the hospital for some time before he was brought to us, and then certainly, he would be in prison two months, allowing for the trial before execution.

246. But it was a recent wound ?—Yes ; the suicide had been attempted at the time he committed the murder.

247. I think you said that in Muller's case there was dislocation ?—Yes, I think so.

248. You did not make any post-mortem ?—No.

249. Or examination ?—No. I should have done so in many cases but there was some objection raised.

250. Have you ever found dislocation in cases of dissection ?—No ; in the one case I examined there was no dislocation.

251. (*Chairman.*) In that case would death be very quick ?—No ; in that case it was not particularly quick. I have never scarcely known a quick death, except in the case of Muller. I have known some die quickly, but not as Muller did. Wainwright died quickly.

252. Did you form an opinion as to what vertebræ were dislocated, or what lesion did take place in Muller's case ?—No, I have no recollection of the facts of the case.

253. Have you any opinion as to what is the dislocation generally speaking, whether it is between the second and third vertebræ, for instance ?—No ; I have seen so little that I have no means of judging.

254. I do not quite remember whether you stated any opinion as to what should be the position of the knot, that is to say, the best position ?—I have expressed an opinion that if the knot were in front the fracture of the neck would be almost certain ; but I have no experience to guide me.

255. But the fracture of the neck would be much lower down than if the knot were behind ?—I do not know that it would ; I think it would be between the first and second vertebræ ; but it is a mere matter of opinion.

256. (*Sir Henry Selwin-Ibbetson.*) Did I rightly understand you to say that you did not think the condition of a man's health or the frame of a man, need to be taken into consideration if you consider the weight and the height ?—I think the weight and the height is quite sufficient.

257. Had you, when you made that answer, in your mind the Norwich case, in which the head was severed ?—No, I had not.

258. In that case it is stated that there was a con-

siderable disease of the tissues ; that might affect the case ?—Presuming there was a diseased condition, of course that would be a state of things to be taken into account.

259. Ought not a consideration of the health and condition of the man enter into the calculation ?—Yes. I think a diseased condition should be taken into consideration. I was presuming the condition of a man in a healthy state.

260. Therefore, as compared with a man whose full powers of body existed, it would be worth taking into the calculation, should a man be sentenced to be hanged, who from either disease or the formation of his neck was more liable to the action of the rope upon it ?—Any diseased condition, I think, ought to be considered ; but I think the two elements of height and weight are sufficient to form a good calculation as to the length of the drop, sufficiently guarding against the accident of decapitation.

261. As a rule, you think it need not be taken into consideration at all ?—I think not.

262. (*Sir Frederick Bramwell.*) In your opinion, is it desirable to endeavour to carry out executions by dislocation rather than by suffocation ?—Yes ; but hanging does not consist of suffocation only, there is strangulation, and if a drop of 6 feet is used, and the man is heavy, the grip would be firm and close, and the circulation to and from the brain would be almost immediately arrested, to say nothing of the stunning effect of the fall, and without reference to fracture or dislocation of the spinal column.

263. Is it your opinion that it is better to carry out executions by fracture of the neck ?—Yes, I think so.

264. Rather than by suffocation ?—Yes, it is more speedy.

265. Do you think that that could be at all times attained, if proper care were taken, without incurring the risk just mentioned of occasional severance of the head from the trunk ?—I think so, certainly ; if it was done by a competent authority. I do not think it ought to be left in the hands of an incompetent person, who might make a mistake.

266. I gather from what you said that there ought to be taken into account the weight of the man and the height of the man ?—Yes.

267. Let me ask you this : supposing there is one man of 5 feet 3 inches and another of 6 feet, and they are both of the same weight, would you make any difference in the amount of drop ?—No, I would give each man the same. I would apportion the drop to the height of the man. It is clear that if one man is 6 feet and another is 5 feet, the one would have one foot more drop than the other would, that is, the man of 5 feet would drop one foot lower, but no more, than the man of 6 feet.

268. I should have thought the drop would be ascertained by taking the position of the man's feet before the drop gave way, and taking the position of the man's feet afterwards ?—Yes, I think I may have been in error there perhaps, the drop should be estimated by taking the measure from the beam to the man's neck, and the length of rope for the drop to be then given.

269. (*Dr. Haughton.*) You have been asked about the decapitation at Norwich, and you have given answer that in such a case, being an exceptional case, the man's physical condition should have been examined, that no mere mechanical rules as I understand you, without considering the exceptional condition of a man, should be followed ?—Yes.

270. The case of Muller I remember well ; it was a short drop, was it not ?—Yes.

271. And death in this case was more instantaneous than you had ever seen before ?—Death was much more instantaneous than in any other case I ever saw.

272. Supposing in the absence of a post-mortem examination I wished to make a guess at the cause of Muller's death and were to tell you that he had a fatty heart would you differ from me ?—That might be so ; it might happen that the man fainted at the moment of the drop.

273. It was an accidental death ?—It was an accidental death. I should not state that as any ground for a short drop.

274. You have already said that the knot under the chin was preferable to the knot on the occiput, because the blow falls on the vertebræ and does not fall on the soft parts ?—Yes.

275. In the case of the man whose windpipe was cut and the wound opened, had he cut the windpipe in trying to commit suicide ?—Yes.

276. How long did he live ?—I do not think his death was longer than in other cases.

277. Did he breathe through the opening ?—No there did not appear to be anything of that sort ; there was a rag over it.

278. (*Dr. Gover.*) What was the length of the drop in that case ?—I do not recollect, I think it was in the early part of my career. It was before Calcraft left.

279. (*Dr. Haughton.*) I gather from what you have said about separate executions that you would be in favour of having the executions carried out unit by unit, then there would be less risk of accident and more promptitude ?—I would, on humane grounds, certainly.

280. Then the size of the rope was smaller in the former case you tell me ?—Yes.

281. That I presume was because the object being to strangle, and there being no great strain on it, the smaller rope suffocated the prisoner quicker than a larger rope like this regulation rope ?—Yes ; there would be a closer grip, I think.

282. (*Sir Frederick Bramwell.*) With respect to hanging in succession, if you have three or four men to hang successively, is it not still a necessity that a man should hang for an hour before he is cut down ?—That is a mere conventional arrangement ; there is no law to that effect. You may cut him down when you please, supposing you feel quite satisfied that the man is dead. Of course it would interfere with carrying out the execution if one man had to hang an hour, and others had to wait ; where there are only two to be executed the time is very little.

283. (*Sir Henry Selwin-Ibbetson.*) One advantage of hanging consecutively would be that the same hangman could do all the work, whereas now in the case of a number hanging together he has to get assistance ?—Yes, but I think he always puts the rope on himself.

284. (*Chairman.*) Have you ever seen any hitch in the drop itself or the gallows ?—Never. Every care was taken in my time by the officers. I have seen them, before an execution, testing the working of the apparatus.

285. They have always worked smoothly ?—They have always worked well, and there has been no accident with the rope.

286. And there has been no accident with the arrangements for the drop ?—No, everything passed off properly.

287. (*Sir Frederick Bramwell.*) In your early days the hanging took place outside Newgate ?—Yes.

288. And the scaffold had to be drawn out every time ?—It was erected during the night.

289. And yet it always went well, you say ?—Yes ; it is the same beam upon which they are hanged in the Prison as was in use when they were hanged out of the Prison ; and, in fact, the old scaffold was first used when the executions commenced inside.

290. (*Chairman.*) Is there any other point which you would like to mention ?—I was in the Prison once with one of the aldermen, and I suggested that it would be very desirable, and very much better, if a hole were dug instead of a man having to ascend a flight of steps, as in the case of the scaffold when it was erected outside Newgate, and in the case when it was erected inside in one of the yards, where the man had to ascend a flight of steps. That is a very trying business ; the men were very often incompetent to do that sort of thing, and I suggested that there should be a hole made so that the men could

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simply walk on level ground on to a platform where the beam would be. That arrangement was afterwards carried out. The hole now is about 9 ½ feet deep; it was 2 feet 6 inches less in the earlier part of my career, at least when they began to execute in the Gaol. Barrett was the last man executed outside the Prison; the man who was executed for the Clerkenwell explosion.

291. You would suggest that the man to be executed should have no steps to mount?—Certainly.

292. You think that the drop should be on the level; but that the hole underneath it should be

deeper?—I think that the hole underneath should be of such a depth that he should fall into it.

293. (*Dr. Haughton.*) Did you have ever any accident happen through the rain in the night falling on the scaffold and injuring the working of it?—Never.

294. Would you approve of the suggestion that the scaffolding and all the things should be under cover?—In our case it is; there is a permanent place there now; formerly the thing was erected during the night.

295. Then you would approve of the scaffolding being under cover?—Yes.

The witness withdrew.

Wednesday, 17th March 1886.

PRESENT:

THE RIGHT HON. LORD ABERDARE, G.C.B., IN THE CHAIR.

THE RIGHT HON. SIR HENRY SELWIN IBBETSON,
BART., M.P.
SIR FREDERICK J. BRAMWELL, F.R.S.

THE REVEREND SAMUEL HAUGHTON, M.D.,
F.R.S.
R. M. GOVER, ESQ., M.D.

MAJOR ALTEN BEAMISH, R.E., *Secretary*

Mr. GEORGE CUTHBERT examined.

Mr.
G. Cuthbert.

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296. (*Chairman.*) Do you hold any office or employment?—Yes.

297. What?—I am Engineer to the Home Office for the Prison Department.

298. What are your duties as Engineer to the Prison Department?—My duties are specially the inspection of boilers, and to render whatever assistance I can in the general arrangement of the cooking and heating, and washing apparatus of prisons, and such like matters.

299. Have you paid any attention to the subject of hanging?—I have to some extent. Since I visited Exeter Prison in February 1884, for the purpose of finding out the cause of the failure of the drop there when required for an execution, I have studied the matter, but not much before that time.

300. Were you sent down by the Home Office to examine into the cause of the failure at Exeter?—Yes.

301. Perhaps you will be good enough to make a statement to the Committee connected with that failure?—I examined the apparatus upon the 24th of February, early in the morning, and I believe the apparatus had not been touched since the previous day; I then found out, as I thought, the defect which caused the failure, and I afterwards made a report, with illustrative diagram, for the information of the Surveyor to the Prison Commission.

302. Are you aware of the experiments which had been made, before the use of the drop, with the view of ascertaining whether it would work?—I made inquiries as to how many times it was tested, and the manner of testing it, and I had that information principally from the Engineer of the Prison.

303. Will you describe to the Committee your views as to the cause of the failure?—I believe it was entirely due to what I might call one of the long bars or long hinges being quite an eighth of an inch longer than it should have been.

304. The result of which was that the flaps did not open?—That was so.

305. And the drop did not occur?—It did not.

306. Had this gallows ever been used before?—No.

307. Had it recently been made?—It had been made, I believe, for some years; but it had been

removed from its original position and re-erected in a new one.

308. Practically, it had never been used?—It had never been used.

309. Were the tests applied those which are usually applied at Newgate?—No; the tests at Newgate always include testing by weight.

310. If that test had been applied at Exeter, would this defect have been discovered?—Yes.

311. With a view to avoiding accidents of this kind, or of any other kind, have you any suggestions to make to the Committee?—I am prepared to say that we have some apparatus which are quite good enough for the purpose; but, of course, they should always be tested previously to being used.

312. Which you would say would work without the possibility of accident interfering with the due performance of the execution?—I believe so.

313. When you say that you have such a gallows, where is that gallows?—At Ipswich.

314. By whom was it erected?—By a local contractor. It was made on the model of the Exeter one, only considerably stronger, with some alterations which were considered to be improvements.

315. Was it made upon the model of the Exeter one before or after the failure?—After the failure; immediately after, I may say, because one was required just about that time.

316. Have you been able to ascertain whether this sort of impediment ever occurred before and was discovered during the testing?—Such a thing never occurred before, as far as I know.

317. I do not mean at the moment of execution, but whether the testing has ever proved the existence of such an impediment?—No.

318. Why was the Exeter gallows taken for the model of the one at Ipswich, which you think includes in itself everything that is desirable?—The principle of the apparatus was considered good enough, but not its strength or stiffness; the thickness of the iron work, and that of the wooden shutters or flaps was increased; instead of the latter being three quarters of an inch thick, they were made an inch and a half thick, and the bars were strengthened accordingly.

319. What was the reason for taking that model rather than the one at Newgate?—We were, in a

manner, somewhat pressed for time, and had to prepare a gallows for execution. It was considered that the Exeter one, as far as the principle went, was very good, and that by strengthening the various parts and testing the apparatus properly previous to the execution, it would answer the purpose.

320. As a matter of course, the Home Office was in no way responsible for the provision of the gallows for the county of Suffolk?—I believe not.

321. Do you know how it was that they came to provide that gallows?—I cannot say.

322. Were you employed to superintend the erection of the Ipswich gallows?—No. I had something to say upon the matter, and I helped to superintend a certain portion and gave advice.

323. Was it made in London or at Ipswich?—At Ipswich.

324. Who attended on the part of the Home Office to superintend its construction?—The Engineer at the Prison and the Clerk of Works, and I saw it tested.

325. The Engineer of the Prison at Ipswich would be appointed by the Home Office, would he not?—Yes.

326. Have you anything to say with regard to any of the details of executions as to which you would make suggestions?—I believe that the apparatus we have is not the very best that could be designed for the purpose, although I believe it is quite good enough.

327. Do you think it might be simplified?—I think it might be simplified a little, and made better in some respects.

328. In what respect?—I have prepared a small sketch which I should be glad to exhibit to the Committee (*exhibiting a sketch and explaining it to the Committee*). Instead of drawing the long bolt laterally I propose to move it with a lever; the long hinge would rest upon a friction roller; the bolt would be withdrawn by moving the lever in this direction (*pointing to the drawing*), and so prevent rubbing or dragging of the parts in any way. This is the front of the lever; this is the end of the long hinge resting upon the roller. The bolt turns upon this centre, and the lever moves the bolt (*further explaining the same*). There are many different ways of making these things, all simple in themselves. I suggest this as being better than the Ipswich apparatus. It dispenses with the long deep crank, which is apt to spring, and with the lateral motion of the long bolt. There is no side motion in any way. There would be nothing to shake, move, or yield. The moment the lever was actuated in the proper direction, the roller would move from under the long hinge and the flap would drop. If the roller revolved there would be no friction, and if it did not revolve, there would only be a little.

329. Is there any other change in the construction of the gallows that you would suggest?—No; if they were properly tested I think there would be no chance of failure as far as the mechanism of the apparatus is concerned. There are several different sorts of gallows, some of them simple and some more complex.

330. Do you mean the plans of gallows, or the existing gallows?—The existing gallows. This (*exhibiting a drawing*) is a very simple gallows which exists at St. Albans, and it has been used there successfully; there are two shutters or flaps supported by a wooden beam or bar hinged at one end, and a hole at the other. The pin holds it in position until the lever is pulled; when it is pulled the flaps fall.

331. (*Sir Frederick Bramwell.*) It is the same thing, except that you withdraw the pin?—But in this case there is only one bar, and the bar is across the centre; in the other case there are two bars, and both the flaps rest upon them.

332. Then comes the question whether that would be sufficient for a long platform like that of Newgate if the simultaneous system of hanging is to continue; the platform is 12 feet, and you would hardly like to trust that to one central bar, would you?—Certainly not. This is a very short one, about 4 feet long (*show-*

ing a plan to the Committee). Many others have one flap only, not opening in the centre, but hinged upon one side—a dropping flap—many are like that.

333. (*Chairman.*) With regard to the one at St. Albans; would that be well adapted to what I may call simultaneous hanging?—Yes, if lengthened and the several parts strengthened.

334. There are several varieties of gallows in use, are there not?—Yes.

335. How many should you say there are?—At least a dozen.

336. You have just shown the Committee the plan of the one at St. Albans, where there is a single wooden bar in the place of the two iron bars that were in use at Exeter and Ipswich; have you any preference for the one over the other?—I have a great preference for the one at Ipswich.

337. Supposing the plan of simultaneous hanging, that is to say, of hanging four or five persons together at the same time, to continue, would the plan adopted at St. Albans be sufficient for the purpose?—Not as at present constructed.

338. Why would that be so?—The platform would have to be made very much longer, and either strengthened by being made thicker or having a greater number of cross-bars.

339. Is the one at Ipswich suitable for simultaneous hanging?—It is. At Carlisle, where three men were executed, they have a similar apparatus.

340. (*Sir Frederick Bramwell.*) Is that the same model as at Ipswich?—Exactly the same.

341. (*Chairman.*) The differences between these various models of gallows in use have reference entirely to the manner in which the two flaps drop?—Yes.

342. But is it not the case that in some of these drops there is only a single flap, whereas in a great number of them there is a double flap?—That is so.

343. Are you in favour of the system of single or double flaps?—Of double flaps.

344. Has any obstacle to the performance of an execution ever arisen, to your knowledge, from the use of a single flap?—No.

345. I think you said there was no other point in which these gallows did not resemble each other?—They differ in the way in which the bolt is withdrawn. There are many different ways of withdrawing the bolt. Sometimes it works over a friction roller, sometimes without one, sometimes it is a lever action direct, and sometimes it is a bent lever with a rack and pinion.

346. Having considered all those are you of opinion that the model that is used at Ipswich is the best?—Yes; I believe it is as good as any, but it could be further improved.

347. Have many places adopted the alteration which you yourself have just now suggested?—No, the alterations have been prepared more particularly for this inquiry, it having occurred to me that the present arrangement might be simplified a little more.

348. (*Sir Frederick Bramwell.*) In what way does the Ipswich arrangement differ from the arrangement at Newgate?—The bolt at Newgate is a flat bar with gaps either forged or cut into it—a wide flat bar. At Ipswich the bolt is a square section of iron forged with two gaps in it.

349. That is to say, the result is the same, but it is a different mode of manufacture?—A different mode of manufacture. I may also say that the lever is actuated differently, one has a rack and pinion, while the lever is direct on to the bar of the other. At Newgate it is the rack and pinion, but at Ipswich the lever acts directly on the end of the bar itself.

350. I suppose on the score of simplicity and certainty you would prefer to get rid of the gear?—Very much so.

351. But with respect to the manufacture of the bar, is not a broad sliding bar with two notches cut out of it, rather more steady than a bar forged into a crank form?—It is.

352. Do you know whether there is any sort of standard dimension of opening to prevent the chance of a man falling across the opening if he faints, and

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so interfering with the success of the operation?—No, it may have taken place in the original ones, but not with those I have had to do with. Those I have had to do with have been made of the same width as existing ones.

353. Do they vary in width?—Yes.

354. What is the smallest, as far as you know?—The Newgate one is the narrowest of any, 3 feet 11 inches is the width of the two flaps.

355. Would it not be possible if a man fainted that he might fall sideways and be supported upon the edge of the opening, that is to say, at the moment the rope was round his neck, when they were about to draw the bolt, he might fall sideways across the edge of the opening and so break the continuity of the drop?—I never heard of that occurring.

356. There is no minimum size of aperture recognised, is there, to prevent the chance of anything of this kind?—The new ones have been made 5 feet wide; each flap 2 ½ feet.

357. (*Chairman.*) Is every county supplied with its gallows or do some in which executions rarely take place wait for a sentence of death to be passed before they erect their gallows?—I cannot answer that question.

358. In the case of Ipswich have they a new gallows, or had they not one before?—They had a gallows at Ipswich, but it was defective, and not considered suitable for an execution, therefore a new one was constructed.

359. Was an application made by the sheriff to the Home Office to assist him in the erection of a proper gallows?—I cannot say; that would not come through me.

360. (*Sir Henry Selwin Ibbetson.*) I do not know whether you would be able to say what the practice with regard to the Home Office is, now that they are in charge of the management of prisons, whether they themselves superintend the gallows in their own prisons, and keep it in order or not, or whether it is supposed to be simply the duty of the sheriff of the county?—I do not know whose duty it is.

The witness withdrew.

Mr. JOHN J. DE ZOUCHE-MARSHALL, L.R.C.S.I., examined.

Mr. J. J. de
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L.R.C.S.I.
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373. (*Chairman.*) Where did you receive your education as a medical practitioner?—In Dublin Meath Hospital and Royal College of Surgeons.

374. Since that time where have you been practising?—I was practising four years in Limerick, and 11 years at Lamberhurst, in Kent, near Troubridge Wells.

375. Where you are at present?—Yes.

376. Your attention, I believe, has been directed to the question of hanging?—Yes, it has.

377. You have, I think, some suggestions to make for the increased certainty and humanity of the operation?—I have.

378. Will you be good enough to lay them before the Committee?—I have given a good deal of consideration to the subject, and through reading the reports of executions I have been led for a long time to think of the uncertainty of the breaking of the neck; and I have come to the conclusion that the uncertainty of producing dislocation of the vertebræ is due to the impossibility of keeping the ascending rope in apposition to the point of the chin so as to use the latter as lever. The knot used to be formerly put at the side, now, I believe, it has been put under the chin; at the same time the uncertainty still exists, except by any chance the ascending rope remains in exact apposition to the apex of the chin, which being a convex surface is very unlikely to hold a small object like a rope, but whenever the rope has come there dislocation has, I think, been certain. Then I came to consider the question; How could you make certain of keeping the ascending rope in apposition to the chin? You could not glue anything to a person's chin, so as

361. The orders are, I suppose, to give the sheriff every assistance in carrying out the sentence; but the object of my question is this, that now the Home Office is responsible for prison management, when a gallows has to be erected, have they, since they took over the prisons, in any way taken upon themselves to provide and maintain within the prisons a gallows for an execution if wanted?—I believe they provide the gallows and maintain it; but beyond that I cannot say.

362. (*Sir Frederick Bramwell.*) I see that in the Newgate gallows there are as many as five long hinges apparently?—That is so.

363. That would appear to multiply the chances of sticking?—Yes, and the spaces are very narrow.

364. (*Dr. Gover.*) I think you said that stronger gallows were being fixed up at Ipswich than those at Exeter?—Yes.

365. Do you mean stronger in every part?—Yes.

366. I suppose the flaps were made much thicker?—They were.

367. What was the advantage gained by that?—The Exeter ones were considered too weak, and a good deal of springing took place.

368. Did you say that you thought the gallows should be better made generally?—I said that I thought those on the Ipswich model were quite good enough for the purpose, but that they could be simplified and made still better.

369. You did not refer to the quality of the material?—No.

370. Or to the workmanship?—The material and workmanship are quite good enough.

371. Can the executioner now keep an eye upon the convict at the moment he draws the bolt?—I believe so; but, as I have never witnessed an execution, I cannot say.

372. Would it be possible for an executioner to prevent a convict from falling against the side at the moment of drawing the bolt?—It would be possible to fix a support that would prevent the convict from falling

to fix a ring on the tip of it through which the rope could slip upwards; so I reversed the object, *i.e.*, fix the rope and slide the chin in the direction of the rope, and thought that a trough for the chin to slide through might be firmly fixed to the ascending rope by a clamp at the front, so that without interfering with the hanging in any way it would make certain of the front of the chin being in exact apposition to the ascending rope. The chin-trough on the rope pulling the chin upward and shooting the head backwards by the sliding force upwards against the tip of the chin. (*The witness produced a padded chin-trough with a metal clamp attached.*) My object is to make sure of the ascending rope remaining under and in front of the tip of the chin and not going sideways, so that the first blow falls underneath and in front of the point of the chin. The weight of the body suddenly drags the rope into the perpendicular from the back of the neck through the chin to the attachment of the rope overhead.

379. (*Dr. Haughton.*) But could not the collar slip off the chin?—No, there are teeth in the metal clamp which hold it in position immediately outside the collar or noose.

380. Are you sure where the fracture takes place, if it is only slight enough to make a fracture, it is, is it not, in the two transverse processes of second vertebra?—I have not had any opportunity of knowing. The great thing was to devise something that you could rapidly apply, and not to keep the unfortunate wretch standing upon the scaffold while you would be talking and fiddling about with a lot of things.

381. The fastening is on the upper portion of the rope, and as the man goes down the collar tightens upon his neck?—Yes; the rope tightens from 16 inches, the ordinary collar of a man to, say, 15 inches, this trough then goes up an inch; if it was 2 inches, by the constriction going into the flesh, the trough would go upwards 2 inches also, so that the trough gives the sliding motion as it goes up; the amount of sliding being limited by the giving of the slip knot, the trough being 3 ½ inches long, to allow for 3 ½ inches slide from 3 ½ inches constriction of noose.

382. (*Chairman.*) I suppose there would remain the same danger, as before, of those cases of decapitation we have heard of in case the rope were too long, or the tissues of the neck very weak?—I should think it would put an end to any chance of that by enabling you to shorten the drop. I should think the chance of decapitation was due to the length of the drop in cases of fatty, syphilitic, or scrofulous degeneration, or anything of that kind.

383. What drop would you think would be necessary?—With my chin lever I would begin with 4 feet, because a man's neck was dislocated the other day with 4 feet of rope chancing, I presume, to get exactly on the chin. I would go back from the 4 feet, as that succeeded the other day.

384. (*Dr. Haughton*) It succeeded only by strangling the man?—If that is the Cardiff case, there was only a drop of 3 feet 6 there.

385. As far as your object goes, it quite falls in with what we wished, namely, to keep the noose under the chin?—It would keep the ascending rope in apposition to the tip of the chin; I was thinking of imitating nature to a great extent. Dislocations generally occur when your joints are in the wrong position: dislocation of the humerus when you are leaning out of the straight. Nature provides strong ligaments, and it is very seldom you get a dislocation when a man is sitting or standing in a natural position, his ligaments being comparatively loose. With that view, I would try to make the culprit, instead of letting him face forward, look sideways and upwards, at the same time my trough follows his chin all round; it is kept there by that india-rubber band.

386. I cannot see without the full apparatus, whether you completely save us from the risk of the loop rising over the man's face?—It cannot occur, because the chin-plate is immediately outside the noose and firmly screwed on then by the clamp—the constriction takes place and the trough slides up with the ascending rope; the position or movement of the trough does not interfere with the hanging process, which takes place just the same as it did before on the neck and behind my apparatus. This trough being fixed to the rope outside does not revolve or move, it being fixed to the rope by teeth. I could not fix a ring to the chin for the ascending rope to slide through, so I fix the trough to the rope and allow the chin to slide along that trough. The noose cannot possibly go over the man's neck. Then, as you will see by a drawing before you, the surplus rope is kept up over the man's head by an india-rubber band. When one of the Maamtrasna murderers was hung the executioner had allowed the rope to hang down behind, where it caught in his pinioned hands, so that the unfortunate wretch was thrown forward by it, and suspended horizontally, and the executioner had to kneel down and kick him off in the most brutal way. That is another point of objection which I have overcome by the overhead india-rubber band which also keeps the trough tight up to the chin, and I have all the feet marked out upon my rope. (*The witness exhibited the mode of the slack of the rope being taken up by an india-rubber cord.*) I have calculated the circumference of the neck (16 inches), and the length over chin and front of face (12 inches), so that I can regulate the drop at a glance from the red ring on the rope, 28 inches from the eye of the rope, and which when held

upwards, the noose being round the neck, about corresponds to the height. The india-rubber tubing gives six times its original length. The slack would in the ordinary way be allowed to fall somewhere. This would all be done before the convict came out on the scaffold at all. If you agree to give a man a 3 or 4 feet drop you adjust it beforehand. On my principle the slack, instead of hanging behind his back, is looped up by the india-rubber, and when the weight falls upon the main rope, the india-rubber gives way, thus saving all possibility of the rope catching in his arms or knees, or elbows, or anything else.

387. That is done now by a thread of cotton which breaks when the weight comes upon it?—The thread would not be so good. I should think that this india-rubber springing out the whole way and keeping the rope in the trough clamp in apposition to the chin is more useful than a thread, and the india-rubber can moreover be fixed before the culprit comes on the scene, because it allows you to pull down sufficient slack to get the noose over his head. The thread would prevent this (or break), so that it could not be applied till after the noose was arranged, and this causes needless delay and painful suspense. If the unfortunate wretch happens to wriggle or do anything in that way, it takes away the possibility of the rope catching in his elbows, as happened to one of the Maamtrasna murderers.

388. (*Chairman.*) The same thing occurred at Durham, did it not?—I was not aware of that.

389. That is a suggestion of how to meet an obstruction which has twice occurred within a very few years?—In the case of the trough you have a certain weight, half of which is on the man's neck on the noose and the other half would cause the trough to fall or dangle a little but my india-rubber overhead keeps that in its place against the chin, and that is another reason why I prefer the india-rubber to the thread.

390. As far as it went, it would tend to diminish the velocity of the descent, would it not?—I do not see how it could; the weight of the body would be too much to be influenced by it.

391. (*Dr. Haughton.*) If this was equal to a spring of 4 lbs., when the man was hung he would have a spring of 4 lbs., tending to pull him up, would he not?—Yes; but I question whether a 4 lbs. spring under a man 12 or 13 stones in weight would cause any motion; with all respect to you, I think that would be impossible.

392. (*Chairman.*) The rope goes through the metal collar?—Yes.

393. (*Dr. Haughton.*) It forms part of the rope, in fact?—Yes; it does not interfere with the constriction of the rope, you have the constriction behind that altogether.

394. (*Chairman.*) We hear that the elasticity of ropes varies greatly?—It does.

395. That would affect the length of the drop, would it not?—A great deal would depend upon the spring of the rope. If you have a man hung from 12 feet high, it is in that length that you get the redundant rope which has nothing to do with the length of the drop. An executioner the other day propounded the theory that he had calculated upon the rope giving 7 inches; but he never thought that in a 3 feet 5 in. drop the rope would give 7 inches, but that you get that amount of yielding in the whole length of the rope. The whole length of a rope from a fixed point overhead would stretch that; it would not be in the length allowed for drop that that stretch would take place.

396. (*Sir Frederick Bramwell.*) I was about to ask you if it would not be possible to fix this chin though or saddle upon the loop instead of upon the rope and to allow the rope to slide through an eye upon the back of the saddle; by that contrivance it seems to me that you would be much more likely to ensure holding the saddle in place, that is to say, if the saddle were fastened upon the loop (*exhibiting the*

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model to the Committee). If it were fastened to the eye through which the slip-knot comes, and then what you call the rising rope were slid through upon the saddle, it seems to me that would make it more secure than by attaching it to the rope because the rope does move to the extent to which the noose contracts; whereas if you have the saddle upon the eye at the end of the noose, then there would not be the contraction?—I think it would stick in the man's neck. If the eye that you have here keeps in that position (*placing the collar under his chin*) it is then in strict apposition to the man's neck, and any structure built on that eye would only act upwards on the back of the lower jaw and floor of the mouth and not on the tip of the chin where most leverage can be obtained.

397. Having got it like that (*putting the rope round his neck*) why could not the trough be attached to the eye itself and come up to the guide at the back?—You would want a solid metallic structure in connexion with the eye to do that.

398. (*Dr. Haughton.*) Is that very objectionable?—I think it is impracticable. I think the eye would prove to small a base, and it would sink into the neck with constriction, *i.e.*, away from the chin, not towards it. I make use with this apparatus of the very fact of the rope giving; I take the rope giving as one of my principal points. Supposing the man's neck to be 16 inches, elasticity of the tissues would vary, I do not know what the noose usually sinks.

399. You may say 3 or 4 inches in the length of the rope?—If you allow 2 inches round the man's neck, it would give that amount of motion upwards; so when I get this under the chin I get the motion backwards, not directly upwards but sliding, just as the wind glancing off the mainsail of a yacht propels the yacht not before but at an angle.

400. (*Sir Frederick Bramwell.*) You want the movement there, and you do not fear it coming off the chin sideways?—That is exactly what the whole invention is to prevent: if that rope were not fixed tightly in the screw clamp, and with teeth, you would have two wobbling surfaces. This rope assuming the perpendicular with the great weight of the body suddenly becomes like a steel rod, it is no longer a flexible rope; and using the leverage at the very end, it throws or levers back the chin in that way (*indicating the same*). It was to utilise that little bit of motion upwards that you get by the noose sinking which is one of the chief things I have been thinking of; but it is not absolutely essential to the purpose, because you would get a pushing upwards and back motion, though if you make use of that, and put the rope round the man's neck so that by some check in the noose it could not give. If you were to say, here is a man with a 16-inch neck, do not let us constrict it to any degree whatever, then I would have the trough in direct apposition to the chin, and it would give a push upwards and backwards

thereby giving a leverage; because the rope comes up straight directly, and that force would be sent back direct to the occiput through the jaw, and the rope would pull forward the vertebræ.

401. Assuming, as I gather, that you are entirely in favour of the death arising from the dislocation of the neck, do you think it would be as certain to be attained by something inserted round the neck which did not draw tight in the nature of a noose, as if it did draw tight in the nature of a noose?—I am sure it would, if you could make sure of that noose not getting over the head. I am sure that with this apparatus you would be quite free from danger of decapitation, and would be certain to procure dislocation.

402. Do you think that the absence of constriction would tend to prevent decapitation?—I think it would, because constriction is one of the ways, moderate or severe, you can get decapitation whether the constriction be *i.e.*, slow or sudden; I am talking of moderate drops, of course, not of the long drop.

403. (*Dr. Haughton.*) There is no evidence whatever, either of fracture or dislocation, with moderate drops; you have to go up to 8 or 10 feet to get an actual fracture?—Partial dislocation I was referring to.

404. That is only dislocation of the inter-vertebral cartilage of the spinal vertebræ; it is only when you come to long drops that you get fracture of the vertebræ; it is generally dislocation, and then we get the risk of beheading.

(*Chairman.*) That arises from the fact that the rope is not properly adjusted under the chin, but if you could be sure of the knot remaining here and so jerking the head back you would be then sure of producing the fracture.

(*Dr. Haughton.*) We can produce fracture now by moderate drops, by securing the head being thrown back; this is a step in the right direction.

(*Chairman.*) Your instances of 7 and 11 feet have reference to the actual old-fashioned way of fastening the rope

(*Dr. Haughton.*) Certainly; long drops would fracture the vertebræ, but a small drop would produce dislocation.

(*Witness.*) That is my conclusion.

405. (*Dr. Gover.*) You wish to trust entirely to leverage?—Yes, entirely to sudden leverage; I believe by doing away with the long drop you do away with the risk of decapitation altogether. Whether any amount of constriction brought about by the short drop, which I could use with this apparatus, would help to increase the chances of decapitation I deny, because any decrease of rope tends to decrease the chance of decapitation.

406. (*Dr. Haughton.*) Have you any personal knowledge of executions yourself?—I have not beyond this, that I have been to see a great many ever since I was a boy.

The witness withdrew.

Surgeon WILLIAM ALEXANDER CARTE, M.B., examined.

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407. (*Chairman.*) Will you describe yourself to the Committee?—I am surgeon in the 2nd Battalion, Coldstream Guards, and my qualifications are Bachelor of Medicine of the University of Dublin, also Bachelor of Arts and Bachelor of Surgery.

408. You have had occasion, I think, to pay particular attention to the question of hanging?—When acting as Medical Officer to one of H.M. prisons it was my duty to be present at several executions, and I made very complete and careful observations as to exact cause of death in these cases. Having the opportunity I thought it best to make all the observations I could from a professional point of view, and I tried to find out all the points of interest, both anatomical and physiological. I was desirous of stating the precise form of death at the coroners' inquests, and also furthering matters by inquiring

into the most painless and humane method of hanging. With the above objects in view I have collected a large number of recorded cases in addition to those of which I have personal knowledge.

409. Have any means occurred to you for securing certainty and humanity in the application of this punishment of hanging?—I am of opinion that there should be a regularly appointed hangman, under the control of the Home Office or whatever office the post would properly come under.

410. Is that suggestion owing to the fact that you have observed that the hangmen were not exactly the sort of persons you would have selected for the work?—Precisely; I have seen three different hangmen, and one of those men, I understand, had never hung a man before. That occurred to me as being very strange.

411. That must be the case, I suppose, with every

man once in his life when he first takes up his office?—But this man did not seem to have any knowledge; he bungled shockingly, and I believe a more experienced executioner could have been engaged at the time. I also deem it most objectionable the manner in which sheriffs bargain with an ignorant hangman for his bungling services. Not only would I have a regularly appointed hangman, but I would have certain rules laid down for him to follow.

412. Do any of these rules suggest themselves to you at the moment?—Yes. To begin with the scaffold; the scaffolds which I have seen had always a certain number of steps which the man had to ascend, and that I think is a great mistake. I think the platform ought to be quite on the level of the ground where the man is walking, and that the pit should be sunk, in fact excavated in the ground, instead of the man having to ascend to the scaffold. In no case should more than one convict be executed at the same time. I also think, going minutely into details, that one form of rope is better than another. There are different forms of rope which I have seen used, and my experience goes to show that one form I saw used was much superior to all others.

413. Do you recollect the details with reference to the quality and thickness of that rope?—It was a four stranded rope, $2\frac{3}{4}$ inches in circumference, of slight elasticity and very pliable, having a neatly adjusted eyelet; it was made of Italian hemp.

414. Have you ever made experiments upon the elasticity of ropes?—No, I have not gone into the mathematical part of the question at all. I was only interested in inquiring into the anatomical lessons and physiological phenomena produced by hanging, chiefly with a view to increasing the knowledge of my profession.

415. Does it occur to you that as between the two methods by which death is brought about by hanging, namely, strangulation and dislocation, one is preferable to the other?—The method by dislocation is infinitely preferable.

416. Has any process occurred to you by which this method of death by dislocation could be rendered more certain?—The length of the drop should in no case be less, I would say, than $7\frac{1}{2}$ feet; that is the very shortest drop which I think you could safely rely upon producing dislocation.

417. Would you say that without any regard to the weight of the person?—I would say that the length of the drop should vary from $7\frac{1}{2}$ feet to $9\frac{1}{2}$ feet, according as the man's weight varied from 18 stone to 9 stone.

418. Does not that assume that the present method of attaching the knot is continued; but cannot you conceive that even a shorter drop than that would be sufficient if the rope were properly adjusted round the neck under the chin?—I do not think that a shorter drop than that would be successful, except in the case of a very heavy man. There would always be the risk of the vertebræ escaping uninjured, and death ensuing from asphyxia.

419. Are you not aware that the process adopted is to fix the knot at the side of the neck?—In the cases where I have seen the most satisfactory results, that is to say, dislocation most perfectly produced; the knot has been adjusted almost under the point of the chin, just a shade to the left of the point of the chin; that, I think, is the best position, because the shock then falls I believe at right angles to the spinal column in the weakest part of the neck.

420. Have you witnessed several executions where the rope was adjusted in that manner?—I have witnessed five executions where the rope was thus adjusted, and in four of them death was instantaneous owing to complete severance of the spinal cord, produced by dislocation; but in the fifth case there was a hitch, the rope caught under the man's elbow. That would be one of my methods of making it more certain; you must have your knot *submental*, as we call it, that is, under the point of the chin.

421. Nothing you could do would secure the fixity

of the knot in that position, as it is very apt to shift to one side or the other, is it not?—Not if it is drawn to a certain tightness; there are two ways in which the rope may be run through the ring, whether from before backwards, or from behind forwards, and the degree of slipping will vary accordingly.

522. In all those cases you say there was no deviation of the knot from its submental position?—Afterwards when the man has fallen, the rope, of course, tightens to a certain extent, and constricts the neck, the weight of the man's body acting as the constricting force and the rope always slips back a bit; but the first shock, I think, comes just between the point of the chin and the angle of the left jaw, the force being transmitted from that point at right angles to the vertebral column.

423. Were you able to say that these men died from dislocation or from strangulation, or from which cause of the two?—I am able to say precisely in each case that I saw what the man died from.

624. What was it he died of?—Taking the six cases where I made the most careful examinations, death followed instantaneously from dislocation in four cases, while in two it resulted from asphyxia.

425. Were those post-mortem examinations?—Yes.

426. Is it possible to ascertain the cause of death without a post-mortem examination?—Yes.

427. Are you always safe in saying whether it proceeded from strangulation or dislocation without a post-mortem examination?—Not always; in many cases it is possible to say it, but not always. I do not say that every man could say it, but from my experience, and what I have seen, I could give the cause of death in some instances without requiring a post-mortem examination.

428. Have you witnessed deaths which, in your opinion, were produced by strangulation?—Yes. I have. That is to say, from asphyxia; for I object to the term *strangulation* being used in this sense; death by strangulation, strictly speaking, implies that the man's feet are resting on the ground, and that the constricting force is not the weight of his suspended body. In fact, I believe such form of death would not come under the legal signification of death by *hanging*.

429. In those cases were the sufferings of the culprit prolonged?—No, they were not prolonged to any great extent, but very much more so than in cases of dislocation, where, I believe, the suffering is almost, if not altogether nil, and death instantaneous. I have seen men struggling for five minutes.

430. Do you think that the whole of that time those men are actually sentient?—I do not think so.

431. Can you form any opinion as to the proportion of those five minutes during which they were conscious of pain?—I do not believe they were acutely sensible of pain for more than a minute and a half.

432. But a minute and a half is a very long time under those circumstances?—A minute and a half of concentrated agony is, of course, a very long time. They usually struggle violently for the first minute and a half or so, and then there would be a period of about a minute or two during which they did not struggle at all, followed by another couple of minutes when movements of an automatic or involuntary character would supervene.

433. Do you think the last period of struggle was involuntary?—I believe it was.

434. There is usually an intermediate period of repose?—There is.

435. Have you ever witnessed a death by strangulation which was immediate?—No; but I have witnessed one which, I believe was perfectly painless.

436. You think that insensibility followed immediately?—Yes, it followed immediately, because the shock was very great, there was nearly dislocation.

437. What were the circumstances of the execution?—The man got a sufficiently long drop, but the noose was badly placed, it was applied almost at the back of the neck (suboccipital), the worst possible position in my opinion, but he got such a long drop that I

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think concussion immediately resulted and sensibility was at once lost. He did not show any violent voluntary struggles, but remained in a perfectly quiescent state for two or three minutes, the initial period of voluntary struggling being in abeyance, and then ensued about two minutes, during which movements of a rhythmical and apparently automatic nature took place.

438. Do you think that the involuntary struggling was attended with any distress?—I do not believe it was; I believe that the execution failed to secure dislocation because the position of the knot was wrong, though the length of the drop was correct.

439. Do you remember what was the drop?—It was 8 feet 11 inches. I remember carefully contrasting that case with another case, both cases being almost precisely the same except as regards the position of the knot; in one case it was occipital and in the other it was submental, death being caused by asphyxia in the former, and resulting from dislocation in the latter.

440. In the case of a man of 15 stone, what is your opinion as to what the length of drop should be?—There are one or two other factors which would come into computation as well; the strength or muscularity of the man's neck, and the height of the man, would have something to do with it. A man who is tall and thin would have, generally, a long thin neck, and there might be some peculiarity, perhaps, about the bones of his neck; a man of 15 stone would probably require 8 feet 2 inches drop.

441. Do you think, supposing the man to be not exceptionally weak in the neck, that the length of drop would not be accompanied by the danger of decapitation?—Not the slightest, unless there had been an enormously rigid rope used which would not give in the smallest degree; I think the rope should possess a slight degree of elasticity, and should not be too slender.

442. Have you any other suggestion to make?—The slack coil of rope should invariably be tied over the man's head so as to obviate the possibility of its hitching beneath his elbow or elsewhere, and so breaking the fall.

443. You think there is no mechanical difficulty in doing that?—There is no mechanical difficulty whatsoever.

444. How would you do it?—It could be done before the man came onto the platform at all; it need only be lightly secured with a piece of thread; I suggested it to one of the executioners after I had seen one of the accidents I have referred to.

445. There was no such precaution taken then?—There was no such precaution taken, and but for the occurrence of this hitch I have no reason to doubt that death would have been caused instantaneously.

446. Are you aware that there was such an accident at an execution in Durham?—I do not remember the Durham case, but I am aware that such has taken place on more than one occasion.

447. (*Dr. Haughton.*) Have you made careful post-mortem examinations upon the bodies of executed criminals, and with what authority?—I have; I regarded it as my duty to learn all I could from such dissections, for the reasons I have stated before. The coroner, in every case, authorised and directed me to make such an examination in order that the jury might be aware of the precise cause of death.

448. Without stating any names, give the particulars of any case in which you examined the neck and the lower part of the skull?—Yes, I can do so.

449. You saw this case hanged?—I did.

450. Where was the knot placed?—The knot was placed just a shade to the left of the point of the chin.

451. At the concave surface of the angle of the lower jaw?—It was very near the point of the chin.

452. Not at the tip of the chin?—No, bearing to the left beneath the symphysis menti.

453. Was it put down there with the view of not

slipping?—It was drawn very tightly with that intention, I believe.

454. Did the knot slip?—I did slip to a certain extent, but not far; it slipped back, and finally rested, as the man was suspended, just anterior to, and beneath the angle of the left jaw.

455. Did the shock come where the knot was first placed?—Yes.

456. And the slip came after death practically?—Such is my opinion.

457. Was this a powerful man?—Yes, unusually powerful and strongly built.

458. Can you give the man's age?—21 or 22.

459. What was the length of the drop?—The drop was 8 feet 11; that was measured as the man hung afterwards.

460. That would include the stretch of the rope?—Yes.

461. Do you remember his weight?—194 lbs.

462. You examined this case carefully; what did you find in the tissues of the neck with regard to the vertebræ; what injury had the vertebræ suffered?—There was a complete separation between the second and third cervical vertebræ.

463. What else did you note?—Of course the spinal cord was completely severed.

464. Not merely torn?—It was torn; ruptured is the term I would prefer to use; there was a regular rupture of it; indeed, I may say it was completely disintegrated from the medulla oblongata one inch and a half down the cord. In no other case have I observed so great an amount of damage done to the cord; there was a gap of fully an inch between those two bones as the man hung. The axis was fractured at its left pedicle.

465. You would call its pedicle what I should call its left transverse process?—Well, yes; the transverse process is just at the extremity of the pedicle, but it is rudimentary in this bone. I would prefer to put it this way: the axis sustained fracture through its left pedicle at the margin of the superior articular, and through the posterior arch of the canal for the vertebral artery, accompanied by displacement downwards on that side; the tip of the left transverse process was also broken off. On the right side there was an imperfect fracture or cracking of the pedicle at its junction with the superior articular facet.

466. The left transverse process of the axis was fractured?—Yes.

467. What injury was done to the third vertebræ?—I think it escaped.

468. Was the fourth vertebra fractured too?—No.

469. Now will you go on to another case, if you please?—The weight of the body was 161 pounds.

470. What was the age of the man?—22.

471. What was the length of the drop?—9 feet ½ inch measured after death and after the stretching of the rope; the man's height was 71 inches. These drops were all measured in this way: from the platform where the man stood to his heels.

472. Were the toes drooped after death?—Very slightly; but the toes, I think, would be anterior to the line of centre of gravity.

473. The knot was placed where?—As before; a shade to the left of the *symphysis menti* (just to the left of the point of the chin), the noose being drawn tight.

474. Did you see the knot tied in both cases, or drawn home?—I saw the knot drawn home; there was no knot as a matter of fact, it was a loop with an eye.

475. Was there any idea of fitting that into the cavity of the lower jaw, a place where it would not slip?—I believe so.

476. Meeting under the chin it would be in unstable equilibrium, so that the executioner fitted it into the cavity of the lower jaw?—I believe he had some such idea in his method of adjusting the rope.

477. Now will you describe the injuries to the spinal column; in no case was the atlas hurt, was it?—In no case was the atlas hurt. I have collected all

the particulars I could of a very large number of authentic cases, and in no single instance was there evidence of injury to the atlas. I might add that I have only heard of one case where the *odontoid process* of the axis sustained fracture, and this was believed not to be due to the direct violence caused by the drop; therefore it is a popular fallacy to suppose that the *odontoid process* is frequently broken, or the *transverse ligament* ruptured. The seat of injury is invariably below these structures.

478. Will you now describe the injuries to the second and third vertebræ?—In making an incision along the vertical spines the finger ran suddenly into a cavity between two of the bones, which were discovered to be the third and fourth cervical vertebræ; there was also a gap of nearly an inch between these vertebræ.

479. Was the axis injured?—The tip of the transverse process of the axis on the left side was completely broken off.

480. In both those cases you noticed the knot was placed to the left of the chin, and that the axis suffered upon the same side that the knot was, is that correct?—Yes; I might say generally that the injury to the bones was always greater to the left side and to the soft parts upon the right side; I think that is readily explained. Generally the bones are broken upon the right side also, but never so extensively as upon the left. The posterior root of the canal for the vertebral artery on the left side of the axis was also fractured; the right side retained its integrity. The anterior tubercle of the transverse process of the third vertebra was also broken off on the left side and the tips of the transverse processes of the fourth bone were torn off on both sides.

481. Now will you give us another case; what was the age and weight of the man and length of the drop?—Age 19; weight 152 pounds; and the drop was 9 feet 1 inch.

482. Who regulated the drop in all these cases—the hangman?—I believe the hangman did.

483. The drop was always measured by yourself after death?—Yes; it was measured after death.

484. Now will you describe the injuries to the spinal column; where was the knot in this case—was it submental?—It was just as before—a shade to the left of the point of the chin, and it finally rested beneath and slightly anterior to the angle of the left jaw.

485. But after all, you agree with me in the opinion that there was no failure in the way of the knot slipping?—No; I have never seen the position of the eyelet much altered after the fall when properly adjusted beneath the chin.

486. Now would you describe the injuries after death, if you please, beginning with the second vertebra?—As before, there was a dislocation between two bones, the second and third cervical vertebræ. In all the cases I have seen of dislocation, the dislocation has been between the second and third cervical vertebræ, except in one case, and in that case it was between the third and fourth; that was the last case I gave you.

487. In every other case it has been between the second and third?—Yes; I think that will be found to be the weakest part of the spine.

488. What was the injury in this case?—The transverse processes of the axis were both torn through and separated.

489. On both sides?—Yes; and also the transverse processes of the third bone on both sides.

490. Both the processes of the third?—Yes; but on the left side the injuries were more severe, more comminuted.

491. Was the fourth injured?—The fourth was uninjured.

492. Now take another case, if you please?—In this case the position of the knot was just as described in the previous cases; they were all almost precisely similar in this respect, except that the executioner varied the degree of tightness with which he would adjust

the noose, in accordance with the formation and muscularity of the man's neck.

493. Were they by the same executioner?—Yes.

494. What was the age and weight of the man and the length of the drop?—His age was 31, and his weight was 154 lbs.

495. What was the length of the drop?—Nine feet.

496. Now will you describe what you observed after death as regards the second vertebra?—The dislocation was between the second and third; the axis had sustained fracture through the canal for the vertebral artery on the left side; the tip of the transverse process was also separated; upon the right side, the transverse process was broken off, but there was no fracture through the canal for the vertebral artery. The tips of the transverse processes of the third vertebra were broken off on both sides; there were also fractures of the anterior arches of the canals for the vertebral arteries on both sides.

497. The fourth vertebra was never broken, was it, although the third and fourth were totally separated?—The tips of the transverse processes of the fourth vertebra were torn off on both sides, in the second case. It is almost impossible for dislocation to take place without the transverse processes being touched, I believe.

498. Now in all those cases the knot was practically as near as possible under the chin?—It was.

499. It strikes me, and it has struck me before in studying the question in other cases I am familiar with, that a shorter drop would have secured sudden death without producing all this fracture. In a case that I myself am familiar with, the fracture of the two transverse processes of the second vertebra was accompanied with absolutely instantaneous death. We then said, Why give such a drop, or why should such a drop be given as to separate the vertebræ sometimes more than an inch, and fracture them even to the fourth. It is a question for consideration whether the amount of shock caused by a fall to fracture the transverse process off one vertebra would not be sufficient for our purpose of causing instantaneous death. Seeing the injuries you ascertained by post-mortem examination after death were much more serious and extensive than were necessary to cause instantaneous death, would you adhere to the opinion you expressed in the early part of your evidence as to the length of drop you would give in each case?—Yes, I would; I do not think death can be produced instantaneously and certainly by a mere fraction of the transverse process. I do not think that can take place if there is not some dislocation causing pressure upon, or at all events, great shock to the upper region of the spinal cord, or medulla oblongata.

500. I think you said in your evidence that in the case of a man weighing 15 stone or 210 lbs. you would give him a drop of 8 feet?—About 8 feet 2; that is roughly speaking.

501. Was not one man given a drop of 6 feet, and his head came off?—I was not aware of the circumstances of the case; but the rope must have been very rigid, I think, or else the tissues were very much weakened by his being in bad health; much would, as I stated, depend on the formation of the man's neck, and also upon the thickness of the rope.

502. Then I clearly understand that you would hang a man with a submental knot to throw the weight upon the back of the spinal column before the soft parts were cut across, leaving a margin of safety for the rope cutting through the soft parts?—I would.

503. Did you ever see a case in which a man's head was nearly cut off, and then, on hanging nearly an hour after death, it was seen that he was only saved by an inch or two of skin from the head being severed from the body?—No, not to that extent; I have seen a great deal of injury done to the softer parts inside, but the skin is very tough—I think the skin would be one of the very last parts to give way—but another 6 or 8 inches, I believe, might have taken the head off.

504. With that on your mind, if you had the

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responsibility of regulating the drop, would you then think that the length of the drop you have suggested should be adopted?—I would; six or eight inches would of course make a great difference—a difference representing from two to three stones weight.

505. You would take that responsibility?—I would.

506. (*Chairman.*) Is that because you do not attach any practical importance to whether the head comes off or not, or because you think there is little risk of such a catastrophe?—I think there is little risk of such a catastrophe under the circumstances I have mentioned. I do attach considerable importance to the possibility of the occurrence of decapitation or to anything which would shock the public mind in these unfortunate cases.

507. (*Sir Frederick Bramwell.*) You have mentioned twice that for a man of 210 lbs. or 15 stone in weight you would have given an 8 feet 2 drop; that is a minute calculation, and you said it very readily; I presume you have some mental rule you can apply?—I was only striking a very rough answer in my mind; I said, first of all the drop should, I thought, vary in every case between 7 ½ feet and 9 ½ feet, according as the man's weight varied from 18 to 9 stone. I merely struck a mental average in reply to the question.

508. I think you said that your view was that there should be a hangman appointed by the Government, and that that man should have rules to guide him. Have you ever considered the preparation of a table of the proper drop to give in reference to weight?—I have thought of it, but I have never myself considered it seriously for the simple reason that Dr. Haughton's celebrated table upon the subject was before my mind, and I did not like to suggest it.

509. Let me ask you this: Do you think it would be safe to rely upon death by dislocation, without any constriction upon the throat by the rope tending to produce strangulation?—I certainly think so, if a more perfect method of producing dislocation could be ensured; but I think it would in all cases be wiser to employ constriction, so that there would be the death by asphyxia to fall back upon in the event of the non-production of dislocation.

510. You think it would be safe? For example, supposing the rope were drawn just so tightly round the neck as to prevent any chance of its slipping off, and then there were a stop to prevent its being drawn any tighter when the man fell, do you think there would be as good a chance under those circumstances of producing death by dislocation as if the knot tightened when the man fell?—I do not think it would be easy to thus produce a shock at right angles to the vertebral column. I think the knot would be apt to slip round a bit if it were not drawn tight home.

511. I suggest that it should be drawn tight to begin with, but with no power of the rope becoming tighter. I am trying first of all to find out your view as to the principal thing; the details would come afterwards. Assume there were some means by which you could suspend the body from a point near the chin by something which did not constrict the neck in the act of falling?—That would be just as efficient if it caused dislocation.

512. But would it be as efficacious in causing dislocation?—I could not say unless you describe the process more clearly.

513. Supposing you surrounded the man's throat with an iron collar and put the knot under his chin?—I think it would be very difficult to get the power on at right angles to the spinal column then.

514. Do you think that constriction has anything to do with producing decapitation; would there be greater or less liability of decapitation if there were no constriction?—I think if there were no constriction there would be a greater likelihood of decapitation; the rope would come suddenly against the tissues with a more cutting action.

515. Supposing you were to endeavour to tear a dead body apart in a chain-cable-proving machine by

laying hold of the head at one end and the feet at the other, do you think that the process would be assisted if at the same time you were to pass a rope round the neck and were to put a violent constriction on the neck?—I do not think it would be materially influenced one way or the other unless the constricting force were extremely great.

516. Could you tell me this: you said that there was one death by strangulation; what was the reason in that case that the death was by strangulation and not by dislocation?—There were two cases amongst those I have particularly referred to; one in which the hitch occurred under the man's elbow so that there was an imperfect drop, and the other was where the knot was placed under the back of the man's head, it was what we call suboccipital, and the force was directed badly.

517. (*Sir Henry Selwin Ibbetson.*) I think I understand you to say that the three factors you should consider are the length of the drop, the weight of the man, and the formation or condition of the man's neck?—These are the principal factors as regards the man himself.

518. And that you would vary your drop in accordance with these conditions?—Yes, but I should also take into account the circumference and elasticity of the rope and other minor details.

519. I ask you that because you have made a statement about a 15 stone man and an 8 feet 2 drop, which you would not have provided unless you had taken into consideration the health of the man and the condition of his body; but in the case of the man at Norwich, where the head came off, his weight was 15 stone, and the drop 6 feet?—I do not remember that case; but either the man's neck must have been very delicate, or the rope very inelastic, I imagine.

520. In any recommendations you made on the subject, you think the health of the man and the physical condition of the body should be important factors to consider?—Certainly.

521. Would you have those rules laid down by a central authority?—Certainly I would.

522. The hangman should be appointed by the central authority and the rules laid down?—Yes.

523. Would you go further and say that the central authority should have the supervision in all cases of the gallows on which the man was executed?—I think so.

524. So as to ensure uniformity of machinery?—Such would be desirable.

525. (*Dr. Gover.*) You mentioned the transverse processes of the second and third cervical vertebræ, was the fracture of these transverse processes due to direct or indirect violence?—I believe it was due to indirect violence; that is to say, I hold that it was secondary to the dislocation between the vertebræ.

526. You mentioned one case in which there was a fracture of just the tips of the transverse processes; would that be secondary to the dislocation, or would it be due to the direct blow?—I think that is due to the soft parts which connect the tips. When the two vertebræ connected with each other are pulled apart, the soft parts connecting the tips are pulled asunder and may tear off the tubercles of the transverse processes, the bones are closely locked together, and I cannot conceive dislocation taking place unaccompanied by some form of fracture.

527. You stated that the injury to the soft parts was on the opposite side to that on which the knot was placed generally?—Yes; the greatest injury to the soft parts I have usually found on the opposite side to the eyelet of the rope.

528. Could you remember what was the greatest amount of injury to the soft parts which occurred?—I have seen the jugular vein torn, and most of the large muscles of the neck divided; I could mention the names of them—the sterno-mastoid and the trapezius chiefly; almost all the ligaments connecting the dislocated vertebræ, the right thyro-hyoid, and glosso-epiglottidean ligaments and the superior corner of the thyroid cartilage, &c. were injured. I never

saw the skin touched beyond a slight abrasion where the eyelet rested and impressions made by the strands of the rope.

529. (*Dr. Haughton.*) The sterno-mastoid was nearly always ruptured?—Not always; but it generally suffered rupture of a few of its fibres in all events.

530. (*Dr. Gover.*) In which case was there struggling after the dislocation of the spinal column?—There was never any struggling after dislocation of the spinal column; there never was the slightest movement; the only indication of life was the continuance of the heart acting and pulse beating for some time.

531. Did you examine the heart in any of those cases?—In every case.

532. What do you say as to the length of time that it would continue beating?—I have heard the heart beating in dislocation cases for 11 minutes and 10 seconds, not a healthy beat, but a peculiar beat which I could only describe in medical terms, which I would liken to the sounds of the fortal heart.

533. Have you ever examined the state of the arteries to see whether they have lost their tension?—I have always taken the pulse.

534. Have you noticed the yielding character of the artery after death by dislocation of the vertebræ?—It generally becomes softer; the arteries lose their tone until their tension falls as low as that in the veins, due no doubt to *vasa-motor* paralysis from the lesion of the cord. I have endeavoured to take sphygmographic tracings, but have failed.

535. Was the state of the health of those four men otherwise than fairly good?—One of them was not in good health, the condition of the others was fairly good.

536. Do you recollect what are the particular relations of the articular surfaces of the cervical vertebræ to each other?—I think they are oblique; that is to say, the superior articular processes look upwards and backwards.

537. Then why should you wish that the energy of the dislocation should be transverse?—You get the force directly at right angles to the vertebral column then.

538. But if the relation of the articular surfaces to each other is oblique I do not see why the dislocating force should not be oblique?—If you got the force sideways you have also got to overcome the resistance of the transverse processes and pedicles and lateral projections from the bones. The cervical vertebræ are also much broader transversely than antero-posteriorly and their bodies are deeper anteriorly than posteriorly. These conditions, I believe, all favour the probability of dislocation being more easily produced by applying the force at right angles from before backwards.

539. Could you tell me what was the injury to the soft parts, particularly to the larynx in the case in which the knot was occipital?—Both the fibres of the left sterno-clino-mastoid muscle had been ruptured just beneath the rope's track.

540. There was no injury to the larynx?—No vessels had sustained injury; the larynx and the tongue bone—the hyoid—were uninjured, but all the force then came in under the occipital protuberance, I fancy, and was lost in this thick region of the cranium.

541. (*Sir Frederick Bramwell.*) Supposing you had had the solo responsibility for the execution in Norwich, and you had known before that execution took place that the condition of the man's neck was such that a drop of 6 feet would have caused decapitation, what would you have done?—I would have used a thicker rope; a rope of greater circumference, and I would have drawn the noose very tight.

542. It was a regulation rope, but you would have used a rope of greater circumference?—I would have used a rope of greater thickness, and I would have drawn it tighter.

543. You would have given the man the same drop, then, would you?—I do not remember what the weight of the man was.

544. He weighed 210 lbs.

545. (*Dr. Haughton.*) If he had been healthy you would have given him a drop of 8 feet 2?—I would.

546. (*Sir Frederick Bramwell.*) What I am trying to arrive at is if he had been a man who upon examination you ascertained was not a man to whom you could safely give a drop of 8 feet 2 with the ordinary drop and appliances and the ordinary rope, and the man had to be executed by you what course would you have adopted?—I think a shorter drop might have been efficacious if his neck was a very thin one, and I would have used a thicker rope of considerable elasticity.

547. Would you have expected with that shorter drop still to have caused death by dislocation, or by strangulation?—By dislocation.

548. But in order to save the shock to the feelings arising from decapitation you would diminish the drop, and that might result in a lingering death?—It might, there is that chance certainly. There must always remain some chance of dislocation failing. Even in that event death by asphyxia, produced by a medium drop, cannot be very painful.

549. (*Sir Henry Selwin Ibbetson.*) But supposing your knot is placed as nearly as possible under the chin, you say that you believe that a 15 stone man would have died from dislocation of the neck even with the shorter drop?—I think if he was very attenuated he probably would.

550. (*Sir Frederick Bramwell.*) If he had been very attenuated he would not have weighed that weight?—I refer to local attenuation. In some exceptional cases it might be dangerous to allow even a very light man a drop of six feet; there are diseased conditions in which the tissues become simply rotten.

551. (*Sir Henry Selwin Ibbetson.*) I understand you to say that you would have a publicly appointed hangman, and rules laid down by a central authority for the guidance of the executioners, and that you would have all the gallows under the supervision of the central authority; do you think it would be an advantage also that the carrying out of those rules should be subject to the instruction and guidance of somebody appointed from the central authority in each instance instead of being left as now to the different localities?—I think it would; it would be an extra precaution.

552. I meant by that, and I think your answer would show, that a person going down from the central authority should see that all the rules that were laid down, both as to the health, weight, and length of drop, were complied with?—Certainly.

The witness withdrew.

*Surg. W. A.
Carte, M.B.*

17 Mar. 1886.

Tuesday, 23rd March 1886.

PRESENT:

THE RIGHT HON. LORD ABERDARE, G.C.B., IN THE CHAIR.

SIR FREDERICK J. BRAMWELL, F.R.S.
THE REVEREND SAMUEL HAUGHTON, M.D.,
F.R.S.

R. M. GOVER, ESQ., M.D.
MAJOR ALTEN BEAMISH, R.E., *Secretary.*

Mr. JAMES BARR, M.D., examined.

*Mr. J.
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—
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553. (*Chairman.*) What position do you hold?—I am a Doctor of Medicine of the University of Glasgow and Licentiate of the Royal College of Surgeons, Edinburgh.

554. You have been connected, I think, with the county gaol of Lancashire?—I have been connected with the county prison of Lancashire at Kirkdale since the year 1877.

555. And in consequence of that have you paid special attention to the question of executions?—Yes.

556. Have you formed any opinions with respect to the mode of conducting executions which you desire to lay before the Committee?—I have.

557. Would you be good enough to state them?—If your Lordship would like it, I would take the ordinary mode of procedure, and take the order in which executions are usually carried out. Of course the first part of the process is the pinioning. I think that we have an unnecessary amount of detail about the pinioning.

558. Is that the pinioning which takes place in the gaol?—Yes, it takes place in the gaol, in the reception ward, or somewhere near the place of execution.

559. Will you state what you object to?—I think that there is an unnecessary amount of strapping of the arms, and that a loose strap, say about a foot in length, might strap the hands, or handcuff a man behind his back. The object of pinioning is to prevent a man raising his hands.

560. I suppose if a culprit could raise his hands when pinioned, he might project his elbows considerably beyond that which he is able to do under the present plan?—He might a little, but not much, if his hands were tied behind his back.

561. What is your objection?—That it takes an unnecessary amount of time.

562. How much time does pinioning take as practised present?—Three or four minutes.

563. Is it so conducted as to cause any physical suffering to the culprit?—I have heard a prison minister on one or two occasions protest against a man being pinioned, as he declared, too tightly.

564. And you thought that objection well founded?—I did.

565. Did you yourself express any opinion on the matter?—No, I did not express any opinion on the matter.

566. What is your next point?—The next point is about the construction of the scaffold.

567. Do you mean as to whether it should be level with the ground, or should have steps, or what?—No, I do not think that that is a very material point. Of course it is a point, and it is an advantage to have it level with the ground; but I do not think there is any very great objection to having it a certain distance above the ground.

568. It has been suggested that some men are so overcome by their situation that they are unable to walk up the steps without assistance; have you found that to be the case?—I have frequently seen them assisted, but it was only simply this: the assistance of the warder catching the arm; there was no great amount of assistance required.

569. You do not remember a case in which a man might not have walked with ease up the steps without being assisted?—No.

570. Have you ever seen a man faint on the scaffold?—No.

571. How many executions have you witnessed?—Fifteen.

572. What is the change in the scaffold which you would suggest?—I should think that the floor of the scaffold ought to be always heavy.

573. You think it is too light occasionally?—Yes. In Kirkdale it is not too light; but from what I have read about other places I think it is too light.

574. Do you refer to any other cases besides that of Exeter?—No; Exeter is the chief case. Of course the atmospheric resistance of such a large surface as composes the floor of the scaffold would be considerable, especially if there be a strong gust of wind; and owing to this resistance it is quite possible that the body might be falling even more quickly than the scaffold.

575. Have you ever seen anything of that sort?—No.

576. (*Dr. Gover.*) What you refer to was when the shutter was very light?—Yes; if the shutters were very light the atmospheric resistance would be relatively great and so prevent the floor from quickly clearing the way of the culprit. The body would thus tend to fall more rapidly than the floor, and coming between the wings or shutters might hitch against one of them. Light shutters would also vibrate more than heavy ones.

577. (*Chairman.*) Have you any suggestions to make as to the method of drawing the bolt so as to allow the drop to take place?—No, I think the leverage action is as good as any.

578. In your experience have there been simultaneous executions?—Yes.

579. How many at the time?—Two have been the greatest number executed at one time in my experience.

580. Did any additional delay take place in consequence of two being executed at the same time?—No, I cannot say that there was any material length of time.

581. Had the executioner an assistant on that occasion?—With one exception he always had an assistant, and that was the occasion when Marwood executed two at Kirkdale.

582. When Marwood executed the two he had no assistant?—No.

583. On that occasion he had to fasten the legs?—Yes, and to adjust the rope round the neck.

584. What additional delay did that cause?—A very short time, not more than a minute I should say. Marwood was very expeditious in that case; much more so than any of his successors.

585. Are you yourself taking all the circumstances of every kind into consideration in favour of the continuance of simultaneous executions, or would you prefer to see them successive?—I am in favour of simultaneous executions.

586. For what reasons?—I do not think the objections are sufficient to justify any change.

587. Supposing the number, as it occasionally is, to be four or five, do you think that there could be five simultaneous executions without some delay occurring?—I think five would be a great number because I am not aware of any scaffold being wide enough to allow of five simultaneous executions except they are closely set together.

588. Have you ever seen the one at Newgate?—No, I have not.

589. I suppose you would be of opinion that where so many as four or five were executed together, the executioner should have assistance?—Yes, I think so. In the case of four or five, he might divide them into two executions, but there are rarely more than two executed at one time.

590. Taking the next point: have you any suggestion to make as to the rope which is used?—The rope should be fine and pliable, of good Italian hemp not thicker than about three-quarters of an inch in diameter, and the eyelet or ring should run very smoothly over the rope.

591. Are you satisfied with the rope as now supplied to the executioner?—Yes.

592. You have no improvement to suggest upon that rope?—No, I think that rope is very good.

593. We are told that at present the executioner supplies himself at his own cost with rope not made on behalf of the Government; are you aware of that circumstance?—I am not aware where he got his rope from. He now says that he gets them from the Home Office, but where he may have got some of them from I am not certain.

594. The next point is the adjustment of the rope with a view to the form of death?—May I ask whether your Lordship means the adjustment of the rope as attached to the beam?

595. You may take it in what way you please. There have been, as you know, unfortunate incidents where the rope has caught either the elbow or the wrist, are you of opinion that precautions might be taken to prevent the recurrence of such an interference with an execution?—Precautions should always be taken.

596. What precaution would you suggest?—I would simply tie the slack of the rope up with thread.

597. That is done now, is it not?—Yes. Thread offers scarcely any resistance to the fall.

598. In the executions which you have witnessed has there been any misadventure arising from the slackness of the rope?—No misadventure from the slackness of the rope.

599. Now we come to the question of fitting the knot. You are aware that there are two systems of execution, either by strangulation or by fracture of the spinal cord. Which of these two forms of death are you in favour of?—Of dislocation.

600. And dislocation, I think, depends mainly upon the length of the drop, but partly also on the adjustment of the knot under the chin?—It depends almost entirely on the length of the drop.

601. Coming so lately into office as 1877, I suppose you never witnessed any executions carried on by Calcraft?—No; I have never seen any of Calcraft's executions, but I have seen Calcraft's ropes.

602. Are you aware that he sometimes used a drop of 18 inches?—I have heard so.

603. What is the shortest drop that you have ever seen?—The shortest drop that I have ever seen has been 7 feet.

604. What was the result when that drop was used?—Asphyxia.

605. No dislocation?—No dislocation.

606. Was that in your opinion due to the rope not being long enough, or to any peculiarity in the formation of the culprit?—It was due in that case to the drop not being long enough.

607. What was the weight of the man that you first mentioned, in the case where the drop was 7 feet?—He weighed 158 lbs.

608. What is the next shortest drop that you have met with?—The next shortest drop was 7 ft. 5 ½ in.

609. What was the weight of the man in that case?—The weight of the man was 134 lbs.

610. He was an unusually light man, was he not?—No, not unusually light.

611. What was the result there?—Asphyxia.

612. What were the dates of those executions?—

The date of the first case that I mentioned, that of Ernest Ewerstaedt, was December the 8th, 1884, and the date of the second case, that of Henry Dutton, was December the 3rd, 1883.

613. Which was the next shortest drop, and also the weight of the person?—The next shortest was 7 ft. 8 in., in the case of Arthur Shaw, that was on December the 8th, 1884, and the weight of the person was 142 lbs.

614. What was the result there?—Asphyxia.

615. (*Dr. Haughton.*) All those three cases that you have given are cases of asphyxia?—Yes.

616. (*Chairman.*) What was the next case?—The next case was George Thomas; weight 157 lbs., length of drop 7 feet 11 ¼ inches.

617. What was the result there?—Dislocation.

618. Did any cases of asphyxia happen where the drop was longer than 7 feet 11 ¼ inches?—No, there were only those three cases, out of 15 cases, where asphyxia was the result.

619. The other 12 were by dislocation?—Yes.

620. Will you be good enough to state the length of drop generally?—The drop varied. In the first case, that of James Trickett, the weight of the man was 158 lbs.; the length of drop, 8 feet, and the *vis viva* I have put down as 1,264 foot lbs., and Marwood was the executioner. In the next case of dislocation, the weight was 144 lbs., with a 9 foot 2 inch drop. In the next case the weight was 118 lbs. and the drop 9 feet 6 inches. This case was rather an important one, because there was a dislocation with 1,121 foot lbs., whereas in certain other cases with asphyxia one was very close upon that. In the next case the weight was 155 lbs. with a drop of 8 feet 7 ½ inches. The next case was 130 lbs. and the length of drop 9 feet 3 inches. The next was 142 lbs., and the length of drop 9 feet 3 inches. The next case was 144 lbs. and the length of drop 9 feet 6 inches. The next case was 118 lbs. and the length of drop 10 feet 9 inches. The next case was 130 lbs. and the length of drop 11 feet ¾ inch. The next case was 131 lbs. and the length of drop 10 feet 8 ½ inches. The next case was 130 lbs. and the length of drop 8 feet 9 inches. There are also those four cases which I have already mentioned.

621. Were these variations of length made upon any fixed principle?—They were made by the executioners. I do not think that any executioner has ever had any fixed principle to guide him but that of experience.

622. Generally we have heard that the drop is longer when the prisoner is light; but that rule is not without exception?—No, it is not. If you calculate their *vis viva* in the number of foot lbs. of energy expended you will find that there is a considerable difference in the amount of energy expended. The energy expended for those cases of dislocation varies from 1,121 foot lbs. to 1,430 foot lbs.

623. Do you attribute the failure to produce death by dislocation in the three cases which you have mentioned, entirely to the shortness of the drop?—Almost entirely. I think it was too short in each case.

624. It has been suggested that if the knot of the rope were fixed so that it could not shift under the chin, death by dislocation would be much more sudden and might be effected by a shorter drop than that in use. What would you say as to that?—I think that the leverage action by placing it under the chin does assist, but very much less than what is generally supposed.

625. In those three cases of failure to dislocate, is there anything to be attributed to the manner in which the rope was fixed around the neck?—In the first case the rope was too thick.

626. Do you remember what the thickness of the rope was?—1 ½ inches in diameter.

627. Who used that rope?—Binns. It slipped round to the back of the neck.

628. That was not a rope furnished by the Government?—No. I think it must have been his own.

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629. In the next case, what was the thickness?—In the next case the rope was $\frac{5}{8}$ inch in diameter.

630. That is less than the average, is it not?—Where the circumference was $2\frac{5}{16}$ inches it would be about $\frac{3}{4}$ inch. The diameter was calculated from the circumference. From my figures here, I am not exactly certain whether it is $2\frac{1}{10}$ inches or $2\frac{5}{16}$ inches. I think it is $2\frac{5}{16}$ inches, because my tape measures by 16ths.

631. Could you give us the diameter so far as you can remember?—The diameter was calculated from the circumference, in the proportion of 113 : 355. The circumference is $2\frac{5}{16}$ inches, and the diameter is rather better than $\frac{3}{4}$ inch.

632. That is the second case; in the third case what was the thickness of the rope?—In the third case the rope was of the same thickness.

633. Who officiated in the second and third cases?—In the second and third cases Berry executed one man, and his assistant executed the other at the same execution.

634. Have you been present at more than one execution by Binns?—I have been present at four executions of Binns'.

635. Did he always use a rope of the same thickness?—No; after the first case he used a rope from $\frac{3}{4}$ inch to $\frac{7}{8}$ inch in thickness.

636. In those other three cases did dislocation ensue?—In the other three cases by Binns dislocation ensued, but then the length of the drop, the *vis viva*, was very much more, viz., 1,268 $\frac{1}{2}$, 1,438, and 1,402 foot lbs.

637. You have mentioned that in the first case the rope was unusually thick; were there any circumstances in the other two cases besides the shortness of the drop to account in your mind for the failure to dislocate?—In one case the rope slipped to the back of the neck; in the other case it did not.

638. In those cases of death by strangulation were the sufferings of the prisoner prolonged?—In two of the cases they were very much prolonged.

639. Could you give us the circumstances?—Sensation evidently lasted for about two minutes.

640. And do you think that the sensibility to pain also lasted?—Yes, I think so, in both those two cases; they struggled and heaved their chests, and tried almost to raise the whole body in their efforts to inspire. In the third case there was less struggling.

641. What do you think is the shortest amount of conscious suffering that takes place where death is by strangulation?—I think it will last for about a minute.

642. Convulsive movements are continued for a considerable time?—Yes, but the convulsions do not occur till about the third or fourth minute. There is a period of at least two minutes' quiescence and then convulsions ensue.

643. How long do they usually last?—They may last for four or five minutes.

644. Have these executions been witnessed by the representatives of the press?—Some have, and some have not.

645. What is the rule as to admission to an execution?—At Kirkdale now a certain number are admitted; there are four or five representatives of the press admitted to witness each execution.

646. Have you usually read their reports of the execution?—Yes.

647. Are they written generally truthfully or with a view to excite emotion?—I should say that they are written truthfully, but perhaps on one occasion the report was a little sensational.

648. Has it ever occurred that they dwelt upon the subsequent convulsive movements to which you have referred as evidence of the continued suffering of the criminal?—No, not in Kirkdale.

649. Have you seen a suggested method of ensuring what should be certainty of death by dislocation invented by Dr. Marshall?—No, I have not seen it.

650. Have you observed much difference in the general intelligence and demeanour of the executioners

within your experience?—I have only seen the three executioners and their assistants, Marwood, Binns, and Berry.

651. Would you mind giving us your impressions of those men?—Marwood was much the superior executioner, he was much more intelligent, more active about his work, less clumsy, and altogether more expeditious.

652. What was Binns' character?—Binns was a drunken fellow.

653. But over and above that, were there any defects in his mode of execution?—He was clumsy.

654. He was a strong man, I believe?—Yes, he was a strong man.

655. Was he a man of intelligence?—No.

656. Was he a man obviously unintelligent?—Yes.

657. How about Berry?—Berry is an ignorant man.

658. Is he handy or clumsy in his method of doing his work?—Medium.

659. Should you say that he was an unintelligent man?—I should say so. There is a certain amount of intelligence about him, but he is a man with no accurate conception as to what length of drop or anything of that sort should be given.

660. Is it a sort of knowledge which might be acquired by a man of ordinary observation and intelligence?—Yes. I think Berry has not as much intelligence as he ought to have to do his work.

661. And Binns, you think, had less than he?—I think so.

662. You said Binns was a drunken fellow; could you state your experience on that point?—I have seen him drunk when he was executing a criminal.

663. In what state of drunkenness was he?—He was like a man recovering from a drunken bout.

664. Do you think he had been drinking that morning, or that he had been drinking the night before?—It was the remains of the previous night.

665. Is there any rule pursued in the gaol at Kirkdale as to the confinement of the executioner before the execution?—The executioner now sleeps in the gaol the night before.

666. At what hour is he obliged to present himself?—I am not exactly certain, it is either 8 or 10 o'clock the night before.

667. Had Binns done so?—No, Binns never slept in the prison so far as I remember.

668. The rule perhaps had not been made at that time?—The rule had not been made.

669. In the other three cases did Binns show any signs of having been drinking?—On the morning when Flanagan and Higgins were hung he evidently had been drinking, but he was not drunk.

670. Drinking the night before, or that morning?—I think the night before.

671. Did the state that he was in augment his natural clumsiness?—Yes.

672. Did you observe him do anything which prolonged the preparations for hanging?—He was a very clumsy fellow anyhow, and I think that morning he was especially so.

673. What did he do in particular which attracted your attention?—He was a very long time in adjusting the rope and pinioning the criminals. He did it in a very clumsy fashion.

674. Was that the case to which you referred just now?—No, I referred to the case of McLean. I should also say that the first case that Binns executed in Kirkdale was in the case of Henry Dutton, and in that case he was also drunk.

675. In how many cases was he drunk?—He was drunk in two cases out of four, but one of the four was a double execution, so that he was only three times at Kirkdale.

676. So that three out of four prisoners were attended by him when he was drunk?—Two out of four prisoners were attended when he was drunk; and in the other case, which was a double execution, he had had drink, but was not drunk.

677. Have you ever seen Berry in liquor?—No, I have not seen Berry in liquor.

678. You say that the rule at present is that the executioners should spend a certain portion of their time before the execution, in the gaol?—Yes, that is the case.

679. Can you tell us what is the rule with respect to their remaining within the prison?—They are always the previous night in the prison.

680. They arrive on the Saturday, do they not?—They arrive as a rule on the Saturday, sometimes, if the execution is on Tuesday, they arrive on the Monday night.

681. Do they only spend one night in the gaol?—If the executioner arrives on the Saturday of course he spends two nights in the prison, but he is allowed out a certain time on the Sunday.

682. Can you speak from your own direct knowledge or from trustworthy information as to how he spends his time in the interval?—I hear various reports, but I have no authentic information upon the subject.

683. None of those reports come to you in the form of information to which you could attach any importance?—No, I could not attach very much importance to those reports.

684. Have you heard stories of their talking in a disgusting way about executions?—Yes.

685. And of their selling portions of the rope, and selling photographs of the prisoners?—Yes, I have heard such reports, but I have never known it as a matter of fact.

686. Do you believe them to be well founded?—I can scarcely say that.

687. There is nothing in the men themselves that would make it improbable?—No.

688. I think you mentioned that on one occasion an assistant was employed?—An assistant was employed on two occasions; an assistant was employed by Binns in the case of hanging Catherine Flanagan and Margaret Higgins, that was in a case of a double execution.

689. What was the other case?—The other case was an assistant that Berry had when Ernest Ewerstaedt, and Arthur Shaw were hanged; a double execution.

690. Were those assistants found by him on the spot, or did he bring them with him?—He brought them with him. I do not know where he brought them from.

691. What sort of men were they?—Binn's assistant, I believe, was Samuel Heath; he was a sharp intelligent young man.

692. Were they as good men for the work as himself?—They were much better than Binns.

693. Who was the other man?—On one occasion, the last time that Binns was at Kirkdale prison, he came drunk on the Saturday, and he was in such a condition that Major Leggett, the Governor, at once communicated with the sheriff, and the sheriff telegraphed to the assistant to come to assist Binns in the prison on the morning of the execution, but Binns would not allow him to execute the man.

694. Were you able to judge of his fitness for the work?—Yes, he executed one woman, and he did it fairly.

695. How many of these 15 were women?—Two were women.

696. Having regard to all these facts which you have mentioned, have you any suggestions to make to secure greater certainty and humanity of executions?—Yes. I think in the first place you should determine what force you are going to expend in the death of the criminal.

697. Would you like that to be entrusted to the executioner, or is it a thing which might be settled by the surgeon in gaol?—In might be settled by the surgeon in the gaol.

698. In that case the executioner should be bound to comply with the rule laid down?—Yes, I think also it is most important that the criminal should be weighed the day before his execution.

699. Will you explain why?—My reason for doing

so is that prisoners frequently gain weight during their confinement. I have known them gain as much as 16 lbs. during their incarceration, and that would make a very considerable difference.

700. Is the weight at the time of incarceration usually adopted as the actual weight of the prisoner?—It used to be the way with us, but for some time I have insisted upon their being weighed the day before their execution.

701. Then is the weight communicated to the executioner?—Yes; the weight is communicated to the executioner, and the height of the prisoner.

702. Has the executioner usually shown a desire to comply with suggestions made to him by the authorities, by the surgeon or any other authority?—No, he wishes to be his own master.

703. Has he ever refused to comply with suggestions made, and adopted his own scale of drops in preference to any suggestion by the prison authority?—In the case of the last man that was hanged at Kirkdale, I asked Berry previous to the execution what drop he was going to give, and he said he was going to give 7 feet.

704. What was the weight of that man?—The weight of the man was 157 lbs., and I advised him to give him 8 feet, but he said he wished he dare do so, but he had been furnished with a table from the Home Office which regulated the length of the drop.

705. Do you believe his statement?—I asked him to let me see his table, and I afterwards got a copy of it from him.

706. Have you reason to believe that it was furnished him from the Home Office?—No, I have been very pleased to learn that it has not been furnished by the Home Office.

707. Do you know where he got it from?—I believe he got it from Newgate. I do not know what such mathematicians as Professor Haughton may think of it, but it seemed to me about the most absurd production I have ever perused. At first I tried to understand it and see if I could possibly arrive at the conclusions, or come to any definite idea of how the author arrived at those conclusions, but I soon found that it was not worth the trouble. The most peculiar part of the whole thing was the greater force seemed to be gained during the fall of the first foot; for example, a man of 8 stone weight falling a foot was supposed to have acquired a force of 8 cwt. Everyone knows that during the first foot the increase in energy is very slight indeed, but the chief increase in energy seemed according to this table to be during the first foot.

708. Can you give the Committee any suggestion, or some rule which should be laid down with reference to the length of the drop, having regard, I presume, to the weight of the culprit?—Yes, regard must be had to the weight of the culprit.

709. Have you any further suggestions to make?—I myself have estimated the energy to be expended as somewhat about 1,260 foot pounds. I have estimated that as the maximum energy required, I think 1,260 pounds is sufficient in any case to dislocate the vertebræ. If a man has got a very thin neck, or there is any reason to suppose that his tissues were degenerated, I would use a smaller force. In a paper which I have written upon the subject I have said 1,120 foot pounds in such cases.

710. Have you ever witnessed the executions of prisoners whose necks were exceptionally formed?—I have never seen an execution in which any such condition existed, but we had a female prisoner under sentence of death, on one occasion, with regard to whom I was very much afraid about the execution. In her case the risk of decapitation, I thought, would have been so great that I would have been inclined to have run the risk of asphyxia rather than run the risk of decapitation, but she was reprieved.

711. Have you any further recommendation to make?—I think it is a very simple matter, calculating the length of drop that should be given. I think that the difficulty is that the executioner generally determines the length of the drop. We hear about execu-

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tioners saying that they give a drop of so many feet and inches, and that they measure their drop beforehand to an inch or couple of inches. I think that within two or three inches it is impossible to measure the exact length of the drop before the execution. The conditions do not admit of extreme exactitude.

712. Is that due to the elasticity of the rope, or what?—It is due to several causes, if you will allow me to explain.

713. Would you be so good as to do so?—This has been forced very much on my attention lately, on finding that executioners never gave the drop which they said they were going to give. For example, in the case of Flanagan and Higgins, Binns said that he was going to give Flanagan a drop of 9 feet 8 inches, whereas, as a matter of fact, the drop was 10 feet 9 inches; he said he was going to give Higgins a drop of 9 feet 6 inches, whereas, as a matter of fact, the drop was 11 feet $\frac{3}{4}$ inch.

714. These deviations are so large that they could hardly be due to the elasticity of the rope?—They show that you cannot rely upon the executioner for an accurate measurement beforehand or for an accurate determination as to measurement beforehand. In the case of Michael McLean, he said he was going to give 9 feet 6 inches, but the drop was 10 feet 8 $\frac{1}{2}$ inches.

715. You have no difficulty, have you, in estimating the actual length of the drop?—Of course it is a very simple matter to measure it after the execution, but not so simple to arrange it beforehand. Berry stated in the case of Ernest Ewerstaedt that he was going to give a 9 foot drop, whereas he only gave 7 feet. In the case of George Thomas he stated that he was going to give a drop of 7 feet, whereas it was 7 feet 11 $\frac{1}{4}$ inches.

716. To what cause do you attribute these great variations?—It requires a little accurate calculation in the first place regarding the circumference of the neck. The circumference of an ordinary neck is about 14 to 16 inches, and if you deduct 14 to 16 inches off the length of your rope, in order to make an allowance for the circumference of the neck, you will find that after the prisoner has dropped, and the fall has taken place, there will be about 6 inches difference between this 14 to 16 inches, the rope tightens for about 5 or 6 or 7 inches during the fall.

717. Then that ought to be a matter of easy calculation?—Yes, it ought to be a matter of easy calculation; and this is easily measured, because the rope is tightened up with a washer. The washer of course does not move, but the rope tightens, and then you can easily measure the distance from the ring to the washer upwards, and that is usually about 5 to 7 inches. At this stage I may say that I think that a leather washer is much preferable to an india-rubber one, for the simple reason that sometimes an india-rubber one will not slide so easily as a leather one; it will roll; and if the india-rubber is half an inch thick, with one roll it may either be too slack or else too tight; instead of slipping down the rope it may roll, and form a complete circumference of the india-rubber ring half an inch in diameter, and thus take an inch and a half to perform one roll; therefore india-rubber, more especially if the rope be wet, will not slide easily on the rope.

718. Was that the only cause, do you think, for the miscalculation to which you have referred?—I think not. They did not take into accurate calculation the height of the prisoner, and of course if you have one man 5 feet high and another 6 feet high, and the executioner uses the same rope and attaches them to the same point in the beam, there would be a difference of about a foot in the length of drop.

719. In not the intelligence of the hangman sufficient to discover that?—If a rule were laid down he could easily discover it, but I do not think he carefully measures it.

720. Is there any other point that you wish to mention?—Then there is the distance at which the rope is attached above the man's head. For example,

in one case, when Berry first of all disputed our measurements, he said the man must have got more than 7 feet drop, because he had 9 feet of rope; he could not see that 9 feet of rope might only give perhaps 3 feet of drop according to the point in which he attached it.

721. The beam is always a certain distance from the drop, is it not?—The beam should always be a certain distance, but it varies in different scaffolds.

722. Do you think it would be a good thing for the purpose of facilitating these operations and preventing these mistakes, if all the scaffolds were on a similar plan with respect to height?—Yes, I think so; I think if there was a uniformity of plan there would be less likelihood of disputes with the executioners.

723. Is there any other suggestion that you have to make?—I have just put down a mode of calculating the length of drop required, and to estimate the length of rope required to give a certain drop. For example, if you want to give an 8 feet drop, after the execution the usual way of measuring the length of the drop which the man has received is to measure from heel to heel; to measure from the scaffold to his heel after he has fallen. That of course cannot be done beforehand, and therefore the factors which you have got to work upon are the height of the man and the height of the cross beam, or the height of the chain attached to the cross beam, from the floor of the scaffold to the point of attachment of the rope. You have also to calculate the circumference of the neck, and the distance from the angle of the jaw to the level of the vertex. That might be taken as a fixed quantity, because the variation is very slight in different individuals. Necks may vary an inch or two, or, say, 3 inches in thickness; but I think it would be better to make that a fixed quantity, and to say that for the length of the required drop you are to add one definite length for the circumference of the neck and for the depth of the head. For example, the rope usually tightens, I should say, 5 to 7 inches round the neck, and therefore that only leaves 8 to 9 inches for the circumference of the neck; and I think if you allow 8 inches for the circumference of the neck that would be ample.

724. (*Sir Frederick Bramwell.*) When you speak of the circumference of the neck, I suppose you mean just close to the skin?—That is measured close to the skin.

725. When you consider the length of the rope, I presume you have got to allow for two half diameters of the rope in the circumference. Supposing an inch diameter rope, the centre of the rope would be 3 inches longer than the mere circumference of the neck would take?—Yes, two half diameters.

726. Of course the increased circumference would mean three diameters?—Yes; so that I should think that from about 8 to 10 inches would be almost sufficient to allow for the circumference of the neck. Then you have got the depth of the head to add to that, and that I think taking the average is somewhere about 8 inches. I have here allowed for the circumference of the neck and the depth of the head, 18 inches, which I think would be a fair average allowance. It might vary within and over that, two or three inches in individual cases, and of course it would vary according as the rope tightened. If you used an inelastic rope, one that did not run smoothly, it might not tighten much at all, but I think you must try to arrive at something like an average. In order to arrive at a correct average, I have taken the measurements of the circumference of the neck and depth of the head of 70 adult males with a $\frac{3}{4}$ -inch rope. I have found that the length of this rope required to make a noose round the neck with the eyelet under the chin, and to reach the level of the vertex, varied from 22 to 27 inches, with an average of 24 inches in these 70 cases. If you deduct from this 6 inches for the tightening of the rope, you have 18 inches left, which I have proposed to make a fixed quantity. Then to the required drop you add this fixed quantity. Supposing you wanted to give a drop of

5 feet 10 inches, you would add 1 foot 6 inches, which would equal 7 feet 4 inches, so that if even the rope were attached at the level of the vertex of the head, it would require to be 7 feet 4 inches in length to give a drop of 5 feet 10 inches. Supposing the point of attachment was 1 foot 8 inches above the head of the prisoner the length of rope required to give a 5 foot 10 inch drop would be 9 feet. If you have 9 feet of rope in order to give a 5 foot 10 inch drop, you will require to attach that rope 1 foot 8 inches above the head of the prisoner. In order to make this method of calculation easy of application, I would have a beam of a certain height, say 6 ½ feet from the scaffold, and I would have a chain attached to the beam with links of about 2 inches in length, this chain being about 18 inches long. That would bring the lower point of the chain down to the vertex of the head of a man 5 feet high, and then instead of allowing the executioner to knot the rope up to this short chain, I would have a series of ropes, each rope varying a foot in length. The length of the rope would of course include the hook at the one end for the point of attachment to the chain, and then with this series of ropes and with these links you could accurately measure within a few inches the length of any drop that you wished to give,

727. (*Chairman.*) Those ropes should be acquired by the prison authorities and kept there?—Yes.

728. Have you any other suggestions to make?—I cannot at the present moment think of any other. If any questions are suggested to me I shall be only too pleased to answer them.

729. I suppose you would have the question of the state of the culprit's neck to be settled by the surgeon of the gaol?—Yes.

730. And that any alteration which might take place in the drop should be that which he would suggest, having regard to that state?—Yes. Of course there is a little difference in ropes as to how they will tighten. I think it is always of importance to see that the ropes are kept perfectly dry; in the case of a wet morning, if the ropes are hanging for any length of time before the execution, they might get wet, and I think to prevent that they ought always be covered.

731. Then the ropes would be tested and their elasticity ascertained?—Yes.

732. May I ask whether in Kirkdale prison experiments are made so as to secure the proper action of the drop?—It is always tested beforehand.

733. In what way?—It is always tested to see that the scaffold is in working order beforehand; the prison engineer is present, and he tests it to see that the scaffold is properly working.

734. Such test was applied at Exeter and was found to be a very insufficient one. What is the test that you use?—To see that the lever is working and that the scaffold with a light weight on it falls at once.

735. They put a slight weight at Exeter, but it was for the want of putting a heavy weight that the failure seems to have occurred. At Newgate the scaffold is tested by a weight equivalent to the supposed weight of the prisoner. Do you do anything of that sort?—I think that if the scaffold falls without any weight at all, it is proof that it will fall more readily with a weight on it.

736. That was assumed at Exeter and exactly the contrary occurred?—But the man stands in the centre between the two wings, and any pressure upon the centre tends to drive them apart.

737. (*Dr. Haughton.*) You have told us about the conduct of some of the executioners. Did you converse with the assistants that Berry brought with him; the first of them, you say, was a shopkeeper?—I do not know what was the trade of Berry's assistants.

738. Had you an opportunity of conversing with them?—No, I did not speak to Berry's assistants at all.

739. Did it strike you that they were persons of

higher education than they appeared to be?—No, there was no refinement about them.

740. I think you said that Berry seemed to have no fixed rule to go by?—He said he had got a table, but I think that that table was most inaccurate.

741. He hanged a man at Norwich with a 6 foot drop, and the poor man's head came off, and I noticed in the papers that the next person he hanged he gave 3 foot 6 inch drop to the culprit, which caused death by suffocation?—Yes.

742. This man died of asphyxia, so that Berry could not have got any proper rule to go by. He had a table that he professed to work from, which you think was not founded on any principle?—It was a most absurd production, and the Newgate official who drew it up must have been ignorant of the most rudimentary knowledge of physics.

743. The Committee have before them another table from Newgate which was very creditable to the man who worked it out, and it was based upon the principle of momentum; but I think you have given your opinion that it is energy, not momentum, that you should go by?—Yes.

744. If there was a proper table drawn up, based upon the evidence laid before us here, your own included, and that of others, why should not the length of the drop be fixed; why not make a table not to be varied by any authority? I know that some surgeons are highly competent, like yourself; but there are other surgeons who have not paid attention to the subject, and perhaps have never seen an execution before, would not a fixed table to be applied to persons of apparently good health, be a good thing?—With some exceptions I think it would be very desirable.

745. As far as I gathered from you, you would consider something like 1,260 foot lbs. to be the average energy that you would expend?—The average energy required; I think that would be right.

746. Then a table could be constructed by dividing the energy by the weight in pounds?—Yes.

747. I think you said that 1,260 foot lbs. was the maximum that you would use?—Yes I think that sufficient in any case.

748. With regard to this unfortunate man at Norwich, his head was cut off at 1,260 foot lbs., did that case enter into your mind?—Yes, that case entered into my mind. I was much interested in the case on that account. My paper was written long before that execution took place, and it struck me as most peculiar that the man's head should come off with my maximum limit, because I thought, in fixing the maximum limit at 1,260 foot lbs., to keep well within the region of safety. I thought the decapitation point perhaps would be more likely between 1,400 and 1,500 foot lbs. for a healthy person; therefore, I was surprised to find it stated that this man's head exactly came off with my maximum limit; I tried to ascertain if this were correct, and what was really the drop which he got at Norwich, whether he got 6 feet, or 7 feet, or 8 feet; but I have never yet been able to find out what was the length of the drop; there has been no proof whatever that the man only got a 6 foot drop; the only proof that he got a 6 foot drop was Berry's statement; and I have reason to believe that that is not reliable. One could not measure the drop afterwards when he was at the bottom of the pit. You could do that in the same way that I told you for calculating it beforehand, by measuring the height of the person and the circumference that you will allow for his neck and the depth of his head, you can estimate then the height of the drop if you know exactly the length of the rope and know the point of attachment, but not otherwise.

749. In consequence of the decapitation of the head, you would query the accuracy of the drop?—Yes.

750. I think I notice in your statement that the deviations for the proposed drop were generally more than less what he anticipated?—Yes, in the majority of cases they were more.

751. Could you give a reason for that?—The only

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reason I can give is that I think all the measurements are performed very roughly.

752. Certainly, as I understand, he was led astray as to the height; but having the average height, with about 6 inches for the interval between the ring and the washer, it would be 18 inches, and that would cover all the deviations?—Yes, that would cover the deviations.

753. So far as I understand, you have explained all the deviations from what he anticipated by these two things?—Yes, I think so, especially from his not taking the correct height of a man. There is another point which I should mention, and that would also account for using a much longer rope. Where the rope was tied, instead of being attached by a hook, if it were tied up and shortened—of course knots cannot be tied too tightly—there would be a considerable amount of stretching, and the knots will allow of stretching several inches.

754. I see that you approve of the place of execution being always under cover, to avoid the wetting of the rope?—I think the rope ought to be covered if it was a wet morning; but it is not necessary that the execution should be under cover. The rope could be easily covered by means of a board or oil-cloth thrown over it till such time as the execution commenced.

755. I wanted to know why you have a strong opinion that the place of execution should be covered?—It would be an additional safety if it was under cover, but that is not the case in Kirkdale.

756. What facilities have you for dissecting prisoners after death?—I always dissect them after death.

757. Who gave you authority?—I took the authority upon myself.

758. The coroner did not object, I presume?—No, our coroner does not object to it.

759. Will you describe generally the nature of the injuries that you found in the vertebral column on *post-mortem* examination?—The injuries vary very much.

760. Could you give me one or two details; between what vertebræ generally is the dislocation?—I should say that it is more frequent perhaps between the second and third, but not necessarily so; I have seen it as low down as between the fifth and the sixth.

761. What fractured bones did you observe generally?—I have seen a fracture of the transverse process, of the second, third, fourth, and fifth also, but that was in different cases. I have seen fracture of the odontoid process; fracture of the body of the axis, and fracture of the arch, &c. The destructive effect occurs at the point on which the strain is brought to bear, and so the seat of injury varies in different cases. The vertebræ are separated at the point of injury for at least an inch, the spinal cord is severed, and the vertebral arteries and all the ligaments are torn across.

762. Was the main observed dislocation generally between the second and third or between the third and fourth?—Between the second and third. I have seen the odontoid process injured. I have never seen the atlas itself injured, but I have seen a separation between the first and second.

763. In your opinion, how would you answer this question: taking into account the injuries in the neck which you have described, might not a lesser drop than those with which they hang people be sufficient to cause death rapidly? The idea that your evidence has given to me of the executions described by you was that more injury was produced in the neck than was absolutely necessary to cause death by shock?—In some cases there was, and in some cases there was not. I was taking that into account, and that made me fix the energy between 1,120 and 1,260 foot lbs.

764. You considered 1,260 lbs. as being the middle limit of safety; was 1,120 the average?—Not the middle limit of safety, but the limit that was necessary.

765. Where was the ring or eyelet placed, or did

the position of the ring at starting vary in those executions which you witnessed?—Marwood, as a rule, placed it underneath the angle of the jaw, and he generally used the left angle of the jaw.

766. He did not put it under the ear?—No, rather in front of the ear.

767. It was not strictly a submental drop, but it was an approach to it. In other evidence we had before us on Marwood's executions, we were informed that he invariably put the ring as far forward, as close to the chin as he could; that, in fact, his practise appeared to vary?—There is not so very much difference. I do not think that Marwood went so minutely into the matter as to say that it is half an inch here or there; he pulled his rope round and he tightened it down, and if it happened to be the angle of the jaw well and good, and if it happened to be an inch or so forward he did not much mind.

768. What is your own opinion as to the proper position of the knot, so as to produce fracture and dislocation of the neck with the smallest drop?—I think it is better underneath the chin; but the position of the knot is not of so much importance as is generally supposed.

769. Let me ask you a question bearing on that. You put the knot upon the occiput; would not the rope then have to cut asunder all the softer parts of the neck before it fractured the vertebræ of the neck?—No, the rigid parts go first.

770. Then you would not attach much importance to the position of the knot?—My own opinion is that it should be placed underneath the chin. There is a slight leverage action and it also tightens better. If it is placed on the occiput, probably the rope will not tighten at all, but the ring will get fastened up against the occiput, and the rope will not be tight; but if it is placed underneath the chin the head is thrown so far back that the tightening takes place very quickly.

771. Did I understand you aright in saying that your chief factor is the energy of the fall?—Yes.

772. And the position of the knot is of less importance?—Of secondary importance.

773. The submental knot is best?—Yes; and the ring should be directed forwards so that there would be no risk of its slipping back to the nape of the neck.

774. You have already explained to us that in the case of death by asphyxia, you think that sensation lasts from one or two minutes, or perhaps from one to three minutes?—Yes.

775. But afterwards spontaneous convulsions are set up?—Yes.

776. But you think that these are not accompanied by pain?—I think not.

777. Do they not always shock spectators who are not medical men?—Yes, they are apt to shock spectators.

778. I think you said that, anticipating the execution of a woman, you were not quite clear about the strength of her neck, and you thought beforehand, although she was reprieved, that she ought to get a smaller drop than was laid down by the rule?—Yes.

779. Would you say that, whatever rule is laid down as to the amount of energy to be given for a prisoner in health the surgeon should carefully report if he is a person in average health?—Yes.

780. I think you went so far as to say that in the case of that woman you would prefer death by asphyxia?—Yes, rather than run the risk of decapitation.

781. The suffering is so small from asphyxia, that altogether you prefer that to the risk of decapitation?—Yes.

782. Would not that be open to the objection of having two rules for execution laid down?—The application of the second rule would occur so very seldom that it would be the exception rather than the rule.

783. (*Sir Frederick Bramwell.*) I should like to ask you whether, when decapitation does happen, you

are of opinion that the criminal suffers any more than if decapitation did not happen?—No.

784. Then may I ask whether in your judgment it is not more merciful to the criminal to give such a drop as will ensure injury to the spinal column, even at the risk of decapitation ensuing in certain cases, rather than diminish the drop, and so to cause death by asphyxia, in order to prevent the chance of decapitation?—Yes, I think it would be much more humane to the person executed.

785. In the formula which you gave arising upon the length of the rope, you do not appear to allow anything whatever for the stretching of the rope?—No, because I think that that allowance would require to be tested beforehand. I think that the chief stretching power of the rope is 6 or 8 inches, and I think that is due to its being tied up; that I think is due to the knots and not to the rope itself. I think that the elasticity of any rope is not so great as to allow 6 or 8 inches for stretching. I think that 10 feet of rope, even with the *vis viva* of 1,260 lbs., probably would not stretch more than a couple of inches. The elasticity of the rope should be previously tested and the proper allowance made, *e.g.*, a 9 feet rope should only measure 9 feet when it was stretched with a force of 1,260 foot lbs.

786. Supposing that the object is to produce death by injury to the spinal column, and not by asphyxia, do you think that that object could be so securely attained if the noose were so contrived that it should not draw together and act by constriction upon the neck?—That could be secured, but then you would be bound in every case to be sure that it did so dislocate the neck, because if it happened not to dislocate the neck he would not be asphyxiated, and you would always be running the risk of taking the head off owing to the extra energy.

787. Then you think that there would be as much risk of taking the head off if the rope were not allowed to tighten round the neck, other circumstances being equal?—I do not think there would be any great risk of not taking his life, but I think it would amount to establishing the higher maximum, because it would narrow the point of dislocating; you would not be sure but that sometimes an accident would occur, and the neck would not be dislocated, and therefore the man not being dislocated he could not be strangled either. So you would be bound to use in every case a greater force than is necessary.

788. My question was not as to whether there would be more risk of taking his life, but whether there would not be less risk of decapitation, that is to say, do not you think that a part of the cause of the severance which occasionally takes place is the actual tightening of the rope round the neck?—I do not think that it is the actual tightening, and from that alone the risk of taking the head off is not so very great, because, if you take and simply tighten the rope without giving any downward force to it, you simply bruise the muscles, you do not tear them, you compress them, and therefore what tears the muscles is not this bruising, but it is, that the bruising of the muscles shortens the muscle and produces another fixed point. It produces a new point of origin, as it were, so that by shortening the muscles they will tear and stretch from the tearing force working from this fixed point.

789. Supposing that you were trying to tear the neck and the body asunder by laying hold of the head and the feet, in some such manner as we use for proving chain cables and matters of that kind, do you think that the process of severance of the neck would be facilitated if at the same time you put a cord round the neck and drew that cord tight?—Yes, but you would have to pull by the cord and not by the head.

790. Does the tightening of the noose round about the neck facilitate decapitation?—It facilitates decapitation by lessening the length of the muscle, that is to say, the muscle will not tear until such a time as you exceed its elasticity. A muscle, say 12 inches long will stretch more than one 6 inches

long, and by tying this rope round the neck you only affect perhaps half the length of the muscle, and therefore, instead of the muscle stretching from the point of attachment to the head, it only stretches from the point where the rope constricts it, and therefore it is more apt to tear.

791. (*Chairman.*) Supposing instead of an ordinary rope you used a wire of say 2/16ths, do not you think that decapitation would be more likely to ensue than under the present system of hanging by rope?—I think so, because it would tend to cut the skin, and it would do away with the elasticity by the act of cutting.

792. (*Sir Frederick Bramwell.*) You do not think that with an ordinary rope the pressure of the rope itself materially aids decapitation?—It aids to a certain extent, but not to a great extent.

793. (*Chairman.*) Have you known of any considerable rupture short of decapitation?—Yes, I have seen muscles considerably torn.

794. That is when you dissect, but have you ever seen a case where the skin has been torn?—I have never seen the skin torn, the skin has been abraded in one or two cases, but it has never been torn.

795. (*Dr. Haughton.*) I think you said that if a man was hung with a collar, with a rope attached to it, if you failed to break his neck you would not choke him?—No, he would not be choked.

796. (*Dr. Gover.*) What is the real cause of dislocation?—The real cause of dislocation of the neck is the energy imparted by the fall.

797. What was the position of the knot in that case in which there was a separation between the fifth and the sixth vertebræ?—The position of the knot in that case was exactly on the chin.

798. But I presume that the separation must have been due to the leverage in this case?—No; the fact of it being attached to the chin caused the other end of the noose to be very low down; it placed the end of the rope about the fifth cervical vertebra, and the force acts exactly where it comes to bear upon it; that is the point of attachment of the rope, the point where the rope constricts the neck. If the rope was placed very high up, it would cause dislocation very high up, if the rope was placed low down it would cause dislocation low down. In the case where the dislocation took place between the fifth and sixth cervical vertebræ, the rope was not drawn tightly enough round the prisoner's neck, and an india-rubber washer was used in the place of a leather one, and the result was that the ring fortunately caught the chin of the prisoner, otherwise it is quite possible that if it had drawn a little beyond the chin the head might have slipped through.

799. Will you tell me in general terms how long it will take an average human body to fall through a space, say, of 8 feet?—Of course that is a matter of calculation, you can easily arrive at the calculation by estimating that the time equals the square root of twice the space travelled through, divided by

gravity; it is about .7 of a second. $T = \sqrt{\frac{2S}{G}}$

I have prepared the following table, showing the periods of time occupied by drops of different lengths up to 12 feet, and also the duration of shock in each drop.

The time occupied by falling bodies equals the square root of twice the distance, divided by the square root of the intensity of gravity, minus the atmospheric resistance, which in the case of a human body falling through a limited space is so slight that it may be left out of account.

Thus T (time) = $\sqrt{\frac{2S}{G}}$. Reckoning the intensity of gravity at 32, the times occupied in falling different distances up to 12 feet are worked out in the following table:

Mr. J.
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Time occupied in falling :—

6 in. — = .1767	second.	6 ft. 6 in. = .6374	second.
1 ft. — = .25	"	7 ft. = .6614	"
1 ft. 6 in. = .30613	"	7 ft. 6 in. = .6846	"
2 ft. = .3535	"	8 ft. = .7071	"
2 ft. 6 in. = .3953	"	8 ft. 6 in. = .7288	"
3 ft. = .4332	"	9 ft. = .75	"
3 ft. 6 in. = .4677	"	9 ft. 6 in. = .7705	"
4 ft. = .5	"	10 ft. = .7905	"
4 ft. 6 in. = .5303	"	10 ft. 6 in. = .8101	"
5 ft. = .559	"	11 ft. = .8291	"
5 ft. 6 in. = .5864	"	11 ft. 6 in. = .8478	"
6 ft. = .6121	"	12 ft. = .866	"

Time occupied in falling last :—

6 in. of 1 ft. = .0733	second.	6 in. of 7 ft. = .024	second.
" of 1½" = .05618	"	" 7½" = .0232	"
" of 2" = .04732	"	" 8" = .0225	"
" of 2½" = .0418	"	" 8½" = .0217	"
" of 3" = .0379	"	" 9" = .0212	"
" of 3½" = .0345	"	" 9½" = .0205	"
" of 4" = .0323	"	" 10" = .02	"
" of 4½" = .0303	"	" 10½" = .0196	"
" of 5" = .0287	"	" 11" = .019	"
" of 5½" = .0274	"	" 11½" = .0187	"
" of 6" = .0257	"	" 12" = .0182	"
" of 6½" = .0253	"		

It is during the last six inches of the drop, when the stretching and tightening of the rope takes place, that the shock to the nervous system occurs. When the drop is sufficient to produce dislocation of the vertebræ and severance of the spinal cord, the shock produces immediate loss of consciousness. It will be seen from the foregoing table that the time occupied during the last six inches of the drop is exceedingly short; and even if we add an equal time for the elasticity of the rope, the whole period during which the shock could be felt in cases of rupture of the spinal cord can never exceed the one-twentieth of a second.

800. During what portion of that time would the shock be felt?—It would only be felt during the last 6 inches, it would only occupy about the 50th of a second. The time when the prisoner feels the shock is during the tightening of the rope, and the tightening of the rope is just during the last 6 inches, and that would occupy about the 50th of a second.

801. How long may the heart beat after the loss of consciousness in cases of strangulation?—I have seen the heart beat as long as 17 minutes.

802. Have you ever known of a case in which there has been an immediate cessation of the action of the heart?—In one case where it was almost immediate, it lasted two minutes.

803. What was the cause of death in that case?—Syncope, I think.

804. What were the physical injuries in that case?—The physical injury in that case was separation between the 5th and 6th cervical vertebræ, but I think that syncope has as much to do with the cessation of the heart's action, or more even, than the drop which in that case measured 10 feet 9 inches.

805. Did I understand correctly that the *vis viva* is the energy acquired by the weight of the criminal and the length of the drop?—Yes.

806. Would you say again how you arrive at this *vis viva*?—The *vis viva* is estimated by half the mass, multiplied by the square of the terminal velocity. That is expressed in foot pounds by multiplying the weight of the prisoner by the space through which he travels. The formula for calculating is—

$$\frac{MV^2}{2} = \frac{1}{2} W \cdot 2 GS = WS$$

807. Have you arrived at any conclusion as to the energy that should be expended in breaking the neck when you desire to displace the vertebræ?—I think

from 1,120 to 1,260 lbs. is the energy which should be expended. I think 1,260 is perfectly safe in nearly every case.

808. I should just like to know what, in your opinion, should be the height of the beam above the head of the culprit or the point of attachment?—I think it is better not to be too high, with a lower beam of course you can do with shorter ropes, and, therefore, I should say that a beam 6½ feet high would be quite high enough for any purpose. You rarely have a man to execute higher than 6 feet, and he could stand easily under a beam 6½ feet high.

809. In order to arrive at the length of drop, so as to give the energy required for a man weighing so many pounds, you would divide the number of foot pounds by the weight of the culprit, would you not?—Yes, I should divide the number of foot pounds by the weight of the culprit.

810. Would you tell me the lowest number of foot pounds at which dislocation has been inflicted?—The lowest number at which it has been inflicted in my experience has been 1,121 foot lbs.

811. What was the highest number in which only asphyxia occurred?—The highest number in which only asphyxia occurred was 1,106 foot lbs., the lowest dislocation was 1,121 foot lbs.

812. How would you proceed in the case of some such peculiarity of conformation as this: say a very small chin, so that the throat and the line of the face were almost continuous in one direction; how would you prevent the noose slipping off?—I think you would require in that case a very fine rope, which you could draw very tightly, and have a good leather washer to prevent it slipping. In that case it is possible that it would be better to apply the ring at the back of the neck; because if you had it in front of the man's chin it would be specially liable to slip over the chin because the head would be thrown up; whereas if it was placed at the back then the head would be thrown forward and it would prevent that tendency to slip over.

813. If I understand you correctly, the leverage has some slight effect in producing dislocation, has it not?—It has a slight effect, but it must be very slight, and I will tell you for what reason. In the first place, the lever to act properly should be rigid, and it should have a fulcrum to act upon, in the case of hanging you have got neither a rigid lever nor have you got a good fulcrum. Even when the ring is placed under the chin there is only a leverage of about 6 inches, which is very short, and the most that this could possibly do would be to throw the face at right angles to the spinal column, and it never accomplishes so much as this. The head is set obliquely on the spine, and there is no very free antero posterior movement between the occiput and the atlas; anyone can throw his face up to an angle of 70 or 75 degrees. So that when the lever was acting under the most favourable circumstances there would be only a leverage through an angle of 10 degrees. I say that I have watched it and I have never seen a face thrown up even to an angle of 90 degrees.

814. Supposing the face were thrown up to a right angle, do you not think that dislocation would naturally occur?—I would not, unless you had got the energy expended in throwing the head back would be sufficient to dislocate it.

815. Have you any suggestions to make as to what should be the depth of the pit under the scaffold?—I think that the pit should always be sufficiently deep to allow of a maximum drop, and to allow plenty of safety for any miscalculation in the length of the rope. I have known a prisoner's feet to be within 4½ inches of the ground. In that case there was a miscalculation in the length of the drop by the executioner of 1½ feet, and if he had only miscalculated 4½ inches more he would have landed the prisoner on the ground.

The witness withdrew.

Mr. JOHN J. DE Z. MARSHALL, L.R.C.S.I., further examined.

816. (*Chairman.*) Have you in the interval since you appeared before us put yourself in the position of explaining to us more satisfactorily the effect of your invention?—Yes.

817. Will you be good enough to do so?—(*The witness described the mode of attaching the chin trough to the rope, the adjustment of the knot to the neck, and the action of the leverage produced under his system, proving to the satisfaction of the Committee the impossibility of the noose relaxing and getting over a culprit's head, the clamp being screwed firmly on the rope and taking the place of the leather washer at present in use.*)

818. You have been kind enough to exhibit the

details of your invention, is there anything you wish to add to the evidence which you gave the other day?—Nothing that I am aware of; except that in case of your deciding upon doing away with, or limiting the constriction, I have designed and had made a brass check ring with teeth inside, which can be firmly fixed on any part of the noose by means of a wing nut, same as the clamp of trough but smaller. I have also prepared a rough plan of a drop, the bolt being worked by similar connexions as exist for railway points. This plan enables the executioner to draw the bolt while standing in front of, and within touch of the culprit, who frequently requires to be supported at the last moment. The majority of drops have the lever some distance from the drop.

The witness withdrew.

Mr. J. J. de Z.-Marshall, L.R.C.S.I.

23 Mar. 1886.

Friday, 26th March 1886.

PRESENT:

THE RIGHT HON. LORD ABERDARE, G.C.B., IN THE CHAIR.

THE RIGHT HON. SIR HENRY SELWIN-IBBETSON, BART., M.P.
SIR FREDERICK J. BRAMWELL, F.R.S.

THE REVEREND SAMUEL HAUGHTON, M.D., F.R.S.
MAJOR ALTEN BEAMISH, R.E., *Secretary*

COLONEL PHINEAS COWAN examined.

819. (*Chairman.*) You were, I believe, sheriff of London?—Yes.

820. In what year?—In 1883-84, that is for part of both years; we enter at the end of the year, from September to September.

821. During that time were you concerned in the selection of an executioner?—No, not in the selection of an executioner; I was only concerned in one execution.

822. Have you had anything to do, at any time, with the selection of an executioner?—No; of course, the responsibility was on the sheriffs to obtain the services of an executioner.

823. In two cases, that is to say, the cases of Calcraft and Binns, the executioner received a regular appointment; but we are informed that in the cases of Marwood and the present man, Berry, the employment is only occasional?—I think I must remove that impression; there is no regular appointment of an executioner. The only thing that occurred is this, that the Court of Aldermen of the City of London upon the death of Marwood received applications from certain persons willing to perform the office of executioner, and they made an arrangement—it is the usual arrangement—and they give a fee of 20*l.* a year, which enables the sheriffs to have the first call for this man's services; but there is no appointment whatever, and the sheriffs have no obligation upon them to take the service of this man.

824. Then when the Chief Warder stated that Calcraft was appointed by the Corporation at a fixed salary, and that Marwood was not so appointed, he was merely engaged to carry out an execution whenever an execution occurred, and when he said that Binns was appointed and that Berry was never appointed by the sheriffs, that is a mistaken view?—Yes, there is no appointment whatever, it is a sort of retaining fee.

825. Are you satisfied with the present mode of selecting an executioner?—No, I am not.

826. In what respect do you think it is defective?—I think leaving it to the discretion of the sheriff to select a person is not so perfect, and not so good, and is not likely to be a good appointment, or a good

employment rather, as would be the case if the authorities selected the man and gave him the necessary amount of instruction and superintended and authorised certain experiments which would ensure the successful performance of his duty. It has always occurred to me that a new executioner can only arrive at moderate skill by experiment, and that experiment means so much human suffering.

827. It has been suggested that in all cases an assistant should be appointed to the regular executioner, who should be present in order to acquire the experience which, as you truly say, cannot be acquired without practice; what do you say to that?—My own idea has been always that the office of executioner should be allied with another office, that of warder of the gaols where executions are carried out. I have several reasons for thinking so. In the first place they have the habit of the thing, and therefore the experience. Then, again, there is not the stigma attaching to an individual who is an executioner first, and something else after, who would do his duties in the ordinary current; and I have always felt, too, that there is an element of unreality in throwing the responsibility upon the sheriffs. I have felt, I say it with great respect, that the fiction that a sheriff has to carry out an execution with his own hand is not such as should be allowed to remain.

828. The great practical object is to secure a fit man for the office, who shall conduct it with skill, and at the same time be a fairly respectable man who is not likely to disgrace an office which in itself is not too much respected; you would agree with that, would you not?—My experience of this solitary execution leads very much to that. My colleague and I were brought face to face with the difficulty of an execution, and at that moment the conduct of the man Binns was very much before the public, so much so, that we had very grave doubts as to whether we should select him for the purpose or take someone else. We made very great inquiry, and I am afraid that we found he was occasionally intoxicated. What we did was to ensure ourselves against his being in-toxicated but we felt that even although he was certainly an improper man, the fact of having

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experience was better for us than to employ a more respectable man without experience, and so we employed him, and conveyed to the Court of Aldermen that if we had unfortunately had another case we should still continue to employ him, and we gave that reason for so doing.

829. We were told that at the time of Marwood's death over 1,200 applications for the office of executioner were sent in ; that 26 of these were selected ; and that out of the 26 were three who were ultimately selected, of whom Binns was the one who was chosen. We have been also told by several intelligent witnesses that Binns was not an intelligent man ; that he bungled over his work, that the only qualifications which he had apparently were physical strength and a certain amount of courage ; that in other respects he seemed unfitted for the work ; and we have, as you have, received evidence not only that he was drunk previous to the execution, but that he was actually drunk when he carried some executions into effect. How can you account for the selection of such a man to an office which requires, as you evidently feel, the union of several qualities which Binns certainly did not possess ?—I was not in office at the time that Binns was selected ; he was selected by our predecessors shortly before our election to the office of sheriff ; but I have heard, as your Lordship says, that a large number of applications were made for the office ; indeed my own experience afterwards, when Binns fell into disgrace, was that a large number of applications were made ; but I cannot say why Binns was selected. I have heard that he was selected from the fact of his having no family, as one reason, and from the fact of his having an excellent character for sobriety and good conduct in the neighbourhood where he resided. I caused him to be examined once afterwards as to his conduct, that was before he was finally allowed to fall into disuse, and I certainly formed a very strong impression that he was the wrong man.

830. You have suggested that for the purpose of securing a man in a better position the office of warder should be joined to that of executioner ; that would practically put an end to the present practice, which is that the sheriffs throughout England usually employ the man who has been selected by the sheriffs of London, would it not ?—When a man is usually selected by the sheriffs of London that is done I believe ; but I do not see why the sheriffs should do so. If they have the responsibility upon them of selecting an executioner, and if, unfortunately, the sheriffs of London make a bad selection, I do not see why other sheriffs should follow their choice ; but, as I have said before, I feel that that responsibility should not remain with them.

831. You see it would be rather difficult for the counties to combine ; in many counties an execution does not take place more than once or twice in a generation, and you could not get the necessary experience ; therefore, it seems reasonable enough that there should be one or two men appointed of whose experiences they might avail themselves ; and that gives you, the City of London, this advantage, that it makes the place better worth having, inasmuch the executioners get better fees for their work ?—Yes, that is so ; but it has always occurred to me that if it was done within the prison there would be less of that morbid curiosity which unfortunately attaches to an execution. In the execution, to which I have had to refer, we had particularly to guard against that being satisfied, and it occurred to me that that would be done more as a matter of course by the plan I suggest.

832. (*Dr. Haughton.*) What do you think would be the position of a warder in a gaol who is also the hangman, do you think it would be rather an unenviable one ?—I do not think it would be so ; I do not think they would look upon it other than as a matter that came in the routine of their duty. The man who would apply for the office of warder would know that the other duty went with it. Practically they do conduct executions.

833. It was one particular warder I thought you meant ?—No, I did not mean that ; I should put certain warders on the rota for the executions during the year, and let them perform them ; the visiting judges would do that.

834. And you do not think they would feel it a degradation ?—No, I think not.

825. I just want to ask you a question that bears in the direction of your suggestion. It has been suggested to us here, and in fact it is a thing that must be done, that we must lay down some rules for an executioner, that we should not leave so much to his discretion, because the questions involved in an execution are far more difficult than a man in his position can carry out. If rules were laid down for an executioner, and his duty brought down simply to perform the mechanical details under this provision, do you think that a warder could do that as efficiently as a professional man ?—I think so. I think that the traditions of their office and, the experience acquired by their comrades would be at their disposal much more than that of any man taken at haphazard to perform executions, it also secures sobriety.

836. In the case of a place in the country where executions only occurred once in every 10 or 12 years, who would carry those out ?—No doubt it would be necessary to make a warder go from one prison to another.

837. Then he would become more marked as the hangman ?—Yes ; but what I want to convey is this, that if all the warders of the prison perform this duty according to a rota of duty that would be laid down, it would not be the only man who would perform an execution.

838. (*Chairman.*) You have had your attention specially fixed in the case of London ; it is no business of yours to provide for executions throughout the country, and your answer was framed upon that supposition, I suppose ?—My answer is based upon the idea in gaols wherever executions are performed all the warders should be prepared to perform the duty ; and from the fact of its being every ones duty, the same stigma would not apply. Military and naval executions, I apprehend, do not carry with them any stigma upon the firing party.

839. It might be so there if only one man was to fire, but there the stigma is shared among the whole company ?—Yes, clearly.

840. (*Sir Frederick Bramwell.*) In the event of the punishment of flogging being ordered, who carries that out ?—That is carried out by the warders.

841. And is there any stigma attached to that ?—No.

842. (*Sir Henry Selwin-Ibbetson.*) Might there not be some little difficulty in getting what we have heard is necessary, that is practical experience and knowledge among this class of warders which would make their performance of the duty a certainty ?—I think the very contrary. It seems to me that having been there constantly, an amount of instruction and indeed surgical knowledge might be imparted to them that you cannot impart to a person selected as at present the executioner is.

843. It occurs to me that where an execution only happens very rarely, which is the case of course in rural counties, for instance, although, as you say, the warders might be instructed in the routine of work that would make them efficient on certain occasions, they would gradually lapse in efficiency from the fact of having them only rarely ; and when you come to have to hang a man you might not have an efficient man from that neglect ; would that be better than having a man properly taught and educated in the mode of hanging who could go the round as the executioner does now ?—It seems to me that the absolute hanging of a convict is the simplest thing possible ; but what one wants is that you should have control over the execution.

844. And you would prefer that the executioner

should be a man selected from among the warders by rota rather than that such an office as the Home Office should have control over the appointment of a person instructed efficiently to undertake the duties of an executioner, only under proper supervision?—I should prefer the Home Office to have the supervision and regulation of executions; but I should prefer that they made the selection from the warders of the prisons.

845. And you think they would be able to ascertain on the sudden emergency of an execution that they had a fit and proper person?—I have no doubt of it.

846. (*Chairman.*) Is there anything else you would like to say to the Committee?—I do not know whether it applies, but it certainly has occurred to me, and I have had some conversation with more than one judge upon the subject, that where a judge knows that the capital sentence will not be carried into effect it seems a cruelty rather that the sheriff should be made to go to the convict and announce the day and hour of the execution. I do not know whether that is pertinent to the inquiry.

The witness withdrew.

Mr. ALDERMAN POLYDOR DE KEYSER examined.

848. (*Chairman.*) You are an alderman of the City of London?—Yes.

849. And you have been a sheriff?—Yes, in 1882.

850. Have you ever been concerned in the selection of an executioner for the City of London?—In 1882 I was.

851. Will you kindly describe to us the steps that were taken then in order to get an efficient executioner?—In 1882 it was suggested to the Corporation of London, I believe by Sir William Harcourt, that the sheriffs of London and Middlesex should select an executioner. The answer was that the sheriffs would undertake the duty, as far as they were concerned, but could not in any way bind the sheriffs of other counties. What we did upon that expression of opinion on the part of the Government was to select a man to carry out executions in the city of London and the county of Middlesex only.

852. Had not this always been the practice of the sheriffs?—I believe it was in the case immediately before, in the case of the last executioner; I am not prepared to say it was before that, but I believe it was in the case before the last.

853. Then who was the man who was selected by yourselves before the present one?—We first of all put an advertisement in different papers, and we had about 200 applications, and out of those 200 applications we selected about 20 of the most likely. My colleague, Alderman Savory, and myself were sheriffs. The 20 were asked to call at the Old Bailey, and from 20 we reduced them to two, and the two were Binns and Berry. I objected to all applicants who had large families. I said that they had no right, in my opinion, to take that position, where the consequences might be very injurious to the children, so we selected those two men, Berry and Binns. Berry came with recommendations, and with letters also, from different gentlemen of position in his own county, and also from London, but I cannot remember from whom. At all events he was very strongly recommended. On the morning of the selection we had a telegram from Bradford, where Berry came from, stating that he was subject to epileptic fits; but on asking him whether that was the case he answered no; but that he had had one some years ago, we thought it was quite sufficient not to run the risk of having a man who was subject to fits, which might be brought on again at any moment, so we selected Binns who had no family, who had been for years employed as foreman of a gang of platelayers on the railway at Dewsbury, and who had a very good character from the station-master and also from the company.

854. A good character for what?—For sobriety

847. But the judge has no such knowledge; the judge passes the sentence of execution after the jury have found the verdict of murder, and cannot know exactly what will be done. It is quite true that if the judge has made up his mind to recommend a man to mercy the Home Secretary acts upon his decision; but surely it would hardly be proper to make that announcement before consulting the Home Secretary?—That is what is in my mind. We know where a convict is strongly recommended to mercy, and the circumstances of the case are such that in all human probability the extreme sentence will not be carried out; and it has seemed to me a needless addition to the torture of the criminal that he should have this announcement made. It has been my duty to make it in several cases, and I have seen the great pain which has been caused by it, and *per contra*, I have had the more pleasing duty of telling them when their sentence was remitted, and I have seen the mental relief. Therefore I hope I am not impertinent in suggesting this; it seems to me that such an inquiry as this ought to have the matter brought before it.

and attention to his work, especially sobriety. I mention that, because it turned out afterwards that he was not sober. I telegraphed to the head of the police at Dewsbury, and I had again a very good character from him.

855. Were the 20 men you selected out of the 200 all bachelors or widowers?—I cannot answer that; it is a question of whether it was stated in their applications whether they were or not; they may not have stated that, and I suppose the action taken on the principle I have mentioned that we should not engage a man with a family would only take place at the moment when they were before us. I do not suppose in answering advertisements they would refer to that.

856. It has been stated to us by many witnesses who have been present at executions, and paid great attention to the subject, that Binns was not only occasionally addicted to drink, but that he was a rough unintelligent man. Now I suppose you would consider the possession of intelligence a very desirable one in the performance of the duties of a hangman, where a great deal is left to the judgment of that officer?—Undoubtedly; and I thought that if a man was able to have the management of 100 or 150 and sometimes as many as 200 men under him, as platelayers on a railway, requiring order and so much attention, that would have been a certain guarantee of intelligence.

857. That does not appear to have been so, practically, does it?—The last I heard of the man was this: I have heard many reports since, but I have not paid much attention to them. I believe that the first case of an execution that was reported, took place at Liverpool. I immediately communicated with the authorities at Liverpool to find out the truth about the statement; both the sheriffs and the authorities at the prison denied the statement, and said that the execution on that occasion, when so much was said in the papers, had been conducted to their entire satisfaction.

858. But you have heard, I suppose, complaints of him quite apart from that particular case?—I have not; it is a matter belonging to the sheriffs from year to year. I believe it was in July the man was appointed, and I went out of office in September; immediately upon that, the two other sheriffs came in and employed Berry without an appointment.

859. Then Binns was deprived of his employment; they ceased to employ him?—Yes.

860. That was probably due to the complaints made that he was attending executions under the influence of drink?—It might have been, unless they

Col. P. Cowan.

26 Mar. 1886.

Alderman P.
De Keyser.

Alderman P.
De Keyser

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had cause of complaint and reason to suspect the man, they would not have discharged him.

861. In the performance of your duty as sheriff, have you to be present at these executions?—I was very fortunate in my year; I had none.

862. Have you yourself any suggestions to make in order to secure efficient and respectable persons for this disagreeable office?—I do not like the official appointment of a person for that office, and my belief is that if in every gaol where executions must take place, the warders were obliged to carry out the sentence of the law as part of their duties, you would save by that the official appointment, which is disagreeable and must be ruin to the man and his relations. I believe that if it could, and I see no reason why it could not, be performed by the officials of the prison itself, the fact of an actual warder of one of our gaols having at times to act without his name being brought forward as the actual common hangman of the country, officially appointed as such, would not be so injurious to the position of the man, and would not in the least increase the difficulty of obtaining an efficient man to carry out the duties in prisons.

863. In populous counties, where executions take place pretty often, and where the prisons being large there is a considerable number of warders, it might be assumed that you could depend upon having a warder fit to undertake the office, having the necessary nerve and the necessary aptitude; but that would hardly be the case in small counties where executions are rare, and where the number of warders is small. It might there happen, might it not, that you might find a warder unwilling or unfit to undertake the office requiring steadiness of nerve?—Then the remedy to my mind would be to remove the execution to a place where you are sure to find a warder who could discharge the duty.

864. That is to say, the remedy is, you would limit the executions to certain places where you are sure to find efficient warders to do the work?—Yes.

865. What do you think the sheriff of Lancashire would say if he were obliged to be responsible for the Westmoreland and Cumberland prisoners who were committed to his gaol to be executed? I am thinking over your suggestion and assuming that the prisoners from rural counties where executions rarely take place should be removed to some populous county where executions take place more frequently, and where there might be what would be called a hanging centre?—I think if part of the duty, they would not object; it is then only a question of expense.

866. The sheriffs have already found it a very disagreeable portion of their duty to be responsible for

executions arising within their own counties, and they would hardly like to undertake the responsibility for executions arising out of their own counties, they being, as you are aware, responsible for the proper performance of the executions?—Certainly. The important centres where the executions would take place would only increase the responsibility of the office. I cannot understand why the sheriffs in a case of this kind should object to do the duty imposed upon them in consequence of their holding a position in important centres where executions should take place. It would be to my mind a sentimental objection which, certainly, in the interests of getting over the great difficulty, I would not consider.

867. (*Sir Henry Selwin-Ibbetson.*) As I understand you say you would be in favour of leaving the responsibility as it is, but of removing the criminals from the smaller gaols to be hanged in certain centres where you could get experience?—Yes.

868. Let me put a very strong case. Supposing, in London, Newgate was supposed to be the best centre for all criminals to be brought; that is to say, supposing that for the sake of obtaining uniform skill in the warders to carry out these executions you brought all the criminals when they were to be hanged to the London centre from the whole country, would the sheriffs of London like their responsibility so increased?—I think you can expect but one answer from me. I hope you would always find sheriffs in London ready to do the duty, if it is their duty to do it.

869. The possible case you have suggested of centres would practically throw a largely increased duty upon the sheriffs for the time being of that county where the centre existed?—Yes.

870. Then, comparing that with the question of transferring the authority, if possible, from the sheriffs to the Home Office, would not that, in your opinion, be a preferable method?—You come back, then, of course, to the official appointment of the common hangman.

871. That is what I mean?—Upon the point as to whether the common hangman should be appointed by the Government is advisable, or not, I have no doubt in my own mind. I think if you can do without an official appointment it would be advisable to do so, if you can get over the difficulty.

872. And you would get sufficient ability, in your opinion, in the warders of the gaols to carry the duty out when occasion requires?—Yes.

873. And you think that warders could be got to take the place when you charged them in addition with the possibility of such a duty?—I think so.

The witness withdrew.

Mr. FREDERICK KYNASTON METCALFE examined.

Mr. F. K.
Metcalfe

874. (*Chairman.*) You were under sheriff of the city of London for some years, I believe?—On two special occasions.

875. Does each pair of sheriffs appoint their own under sheriff?—Yes, as a rule.

876. And you have been under sheriff on two occasions?—Yes.

877. In what years?—In 1883 to 1884 and 1884 to 1885.

878. Did the duties of your office make you acquainted with the manner in which executioners are selected for their work?—Yes.

879. In which cases were you concerned when an executioner was appointed?—The first case in which I was concerned was when O'Donnell was sentenced to death, and a man called Bartholomew Binns was employed.

880. Was that the first time that he was employed?—It was the first time the sheriffs of London employed him; he had previously, I believe, acted in about three of four cases in the country.

881. He had been previously selected for work by the sheriffs?—By the previous sheriffs.

882. But his first employment was out of London?—Yes.

883. Do you remember anything connected with the circumstances of this selection?—I was not present when he was selected, but I pretty well know the reasons for his selection.

884. He succeeded Marwood?—Yes; Marwood died about the middle of September 1883, and the sheriffs were going out of office on the 29th of September, and they thought it their duty to appoint somebody in the place of Marwood.

885. What steps did they take to secure a good selection?—Marwood's death brought in several hundreds of applications from all parts of the country from men asking to act as executioner.

886. Do you know how many?—I think about 400.

887. The chief warder said, I think, 1,200 and Alderman De Keyser, I think, mentioned 200?—It was a great deal more than 200; I am pretty well certain that it was between 350 and 400, without any exaggeration. I had the letters in my room or in the sheriff's room and I turned them out when Binns behaved so badly. I read 60 or 70, I put those away

which I thought were better than the others; there must have been at least from 350 to 400. I personally had upwards of another 100 applications subsequently.

888. When Binns was dispensed with?—Yes, Binns got intoxicated at some execution in the North.

889. Do you remember the circumstances connected with Binns' selection?—Yes, there were something like 20 applicants left in, and finally that number was reduced to two.

890. On what principle were these 20 selected from the rest?—A good deal from their personal applications and from their testimonials, which in many cases they enclosed.

891. Before they were seen?—Yes.

892. Were the whole 20 seen?—I do not know whether the whole 20 were seen; I was not present; I was not under sheriff when Binns was appointed.

893. Were you under sheriff when Berry was appointed?—Yes; I came in to office a fortnight after Marwood's death, on the 29th of September, and Binns had just been appointed a day before I came into office.

894. Was he employed during the time you were in office?—Yes; he executed O'Donnell, and I was present at that execution; and I may say that I was very much dissatisfied with the way in which he carried that out.

895. In what respect were you dissatisfied?—He seemed to have no method at all; he gave a drop of 8 feet 6 inches, I think from memory, and the rope strained about another 5 inches; it was a new flaxen hemp rope, and the doctor told me, and I looked down the pit, and I saw that the soles of his feet were within a very short distance of the ground, and I came to the conclusion that he was a very improper man to employ; he had no method; he had not even measured the distance.

896. How long had he been executioner?—I believe he had executed four before that; there may have been one or two more.

897. Did you ever have a talk with him?—Yes; I had to examine him.

898. What impression did that make upon you?—I should think he was an habitual drunkard.

899. What did you think of him as regards intelligence?—He was a man of average intelligence for a navy.

900. Do you think that he was a man who ought not have been appointed to an office requiring judgment and discretion?—Certainly not.

901. Do you know the circumstances connected with Berry's selection?—Yes. In Berry's case the first execution I saw was in the following October, 1884, when two men had to be executed, and Berry had then, I think, carried out 12 or 15 executions.

902. But you had nothing to do with his selection?—No; the local under sheriffs had employed him; he was not appointed executioner by the city in the same way as Binns. Binns had 20*l.* a year, I think, from the city to act as executioner when wanted.

903. As a sort of retaining fee?—Yes.

904. And he was paid besides that for each job?—Yes, for each job.

905. Then Berry had no retaining fee?—No; the city did not renew the retaining fee.

906. In the case of Marwood what was done?—I do not know of my own personal knowledge. As a matter of fact, I never paid Berry more than 10*l.*, and he had to pay his railway fare out of it, and provide his own rope; if there were two men executed on the same day I gave him an extra 5*l.*

907. What did he pay for the rope?—The last he had I made him buy from the prison, the regulation Home Office rope. I went and looked at them, and in my judgment I thought them better than his own, and I told him he must use them.

908. What did he have to pay for it?—1*l.* 1*s.* He got it from Her Majesty's prison, Clerkenwell.

909. How did Berry impress you?—As a very respectable man indeed.

910. With regard to intelligence, what did you

think of him?—He was a man of average intelligence, there was nothing very particular about him.

911. But as compared with Binns which would you prefer?—I should say that Berry was decidedly superior.

912. If he was of average intelligence and superior to Binns, Binns must have been below the average?—Binns was of a lower class than Berry. Berry, I think, was in the boot trade, and consequently would be rather superior to a navy. Berry had good average intelligence for a man in his trade, and Binns fairly so for a navy.

913. Have you seen Berry conduct executions?—Yes, three times.

914. How did he appear to you to conduct them?—Personally I was satisfied on one occasion, but on another I was not.

915. In what respect was he then deficient in your judgment?—I think he had got enough nerve, but I do not think he carried them out altogether well; he had not enough method.

916. Did he lose time unnecessarily?—No, he was very quick, but he gave too long drops; in one case he very nearly had a man's head off in Newgate; it was a terrible sight altogether, it did not get in the papers. I was on the scaffold and would not let any of the press representatives come up; I told the warders to put the shutters up while I talked to the press to keep them away.

917. What was the length of the drop?—7 feet 6 inches.

918. Was the man a heavy man?—Yes, he weighed over 14 stone, I think.

919. Who was that?—Joseph Harris.

920. What was the nature of the injury then inflicted on the man?—His throat was cut from about here to here (*describing it*).

921. Do you think, having regard to the weight of the man, that the drop should have been less than 7 feet 6 inches?—I cannot pretend to speak with scientific knowledge, but I should have thought that death would have been instantaneous with a drop of 2 feet 6 inches or 3 feet with a man of that weight. I noticed that this drop was within a few inches the same with a man of 14 stone as with a man called Orrock, who I should not think weighed above 8½ stone, the drop was practically the same within 12 inches.

922. Were you in office when the complaints were made of Binns' intemperance?—Yes.

923. And it was in consequence of those complaints that his employment ceased?—In consequence of those complaints I wrote to him to attend at the Old Bailey once when the sessions were on, to be examined before the sheriffs and myself; he had evidently been drinking heavily for some time past; he was more or less incoherent in his answers, and he had been showing his ropes. I may say I would not let him take the rope out of the prison that was used for O'Donnell, he being a more or less notorious person, and I gave instructions to the chief warder to have it burnt.

924. Then when Binns appeared before you to be examined, he was in a semi-drunken state?—He had been drinking heavily for a month, I should think.

925. Had there been many complaints of Binns' intemperance?—I cannot say off hand; there were a good many in the papers I saw.

926. What I want to know is, how soon, in consequence of these complaints of intemperance, was Binns brought before the sheriffs?—Within a week or 10 days of our finding it out.

927. Was that the first time?—Yes, we had him up then for the first time.

928. Have you had any complaints reach you of Berry's misconduct?—Not in that way.

929. In any way?—No, I think not in any way.

930. Do you think it probable that if he had misconducted himself at all really you would not have received some complaint?—I do not see why I should have heard it; I have been out of office for the last six months. I heard nothing during the time I was

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in office. I may say that a number of country under sheriffs wrote to me to ask whom they had better employ. I said that I made a point of not recommending anybody, but that on two or three occasions I had employed Berry, who had done his work satisfactorily.

931. During the time you were there was an assistant ever employed?—No, there is not the slightest need for it with two men; with three I think you would want it.

932. There was no such case while you were there?—No; I had two men once.

933. And he executed them?—Yes, Berry executed them alone.

934. Then the want of intelligence in Berry to which you refer was a want of a proper adjustment of the length of the rope?—Yes, I thought it showed a want of common sense.

935. Did you speak to him upon that point?—Yes, I did.

936. What did he say?—He said there must have been something the matter with the man's neck. I asked the doctor afterwards, the surgeon of Newgate, I said, had he ever attempted to cut his throat or had a wound, and he said none, so far as he could see. I know he came to the same conclusion as I did that the drop was really too long for the man's weight, and that the force of going down cut through the throat.

937. Did Berry justify the use of a drop of the same length in the case of a heavy man as in the case of a light one?—He said he had made a difference of 12 inches, but that is not enough for the proportion, which was nearly 2 to 1. I told him that in future he had far better give a shorter drop, and I also suggested on that occasion whether the rope was not too thin, it was not a Home Office rope.

938. We heard of Binns using a rope of very great thickness?—Yes, I saw the rope he used; it was a dreadful thing, he showed it me.

939. But Berry used the Government rope?—He did not always use the Government rope. I made him buy a Government rope last July, when he executed a man. In consequence of what occurred at Harris's execution I said, for one thing, I must insist upon a Government rope being employed, as after what took place at Harris's execution I was afraid that something might happen again. He came up to my office and saw me, and I had a talk with him for about a quarter of an hour on the point, and he went to the Governor of the prison, and got one of the ropes.

940. Do you think it should be made a rule that the hangmen should be obliged to supply themselves with these Government ropes?—Yes, I do on the whole; there are some drawbacks in the regulations made by the Home Office about it.

941. What drawbacks are they?—I did not much like to sign a letter (I do not know whether I did it or my co-under sheriff) taking all the responsibility for the testing of the ropes; we have no means of testing them, and I thought the Home Office ought, in common sense, to guarantee them.

942. But they do as a matter of fact test them?—They say they do; but they throw the responsibility on the under sheriff, the sheriff nominally, but it comes on the under sheriff.

943. Did you ever see a rope tested?—Yes, I did once with bags of sand. I do not mean to say that I have the slightest objection to the Home Office rope. I looked at it carefully and I thought it was excellent rope, but I did not much like having to sign the document.

944. Have you any suggestion to offer to the Committee?—In addition to the four executions that I have had to carry out, I have had about half-a-dozen people sentenced to death as to whom it was very doubtful up to within a week or less whether they would be hanged or not. The sheriff is more or less

taken by surprise in these cases; you have to give three Sundays after the sentence, and frequently prisoners are sentenced on Friday or Saturday, so that that leaves a still shorter time, and we do not know up to the last moment whether the men will be hanged. I think the Home Office should appoint in each gaol one or two warders who might be on the rota; there would be no stigma attached to them for carrying out executions, and I am sure they would be carried out in a far better way by men of that class than they are at present.

945. Have you ever talked the matter over with the warders?—Yes.

946. Have you ever found any objection on their part?—I do not think they care. I know the Chief Warder in Newgate very well, because I went to look at the scaffold just before I came out of office. I noticed at the last execution in July that the man had a bruise on his face. It appears that the shutters as they go down rebound, and they came back and hit the man on his face. I saw this man when he was cut down and put in his coffin, and though they have an arrangement that acts very well, that thing struck me at the time as wanting alteration. I do not think the warders personally would object.

947. Your reason, as far as I understand, for employing warders, at least the reason you allege now, is that the final decision by the Home Office as to whether a man is to be executed or not, arrives very late?—Very often.

948. Does it mean this: that whilst the case is being considered by the Home Office no arrangements are made?—I may say that is a rule. I did not make any arrangements. In many cases you could tell pretty well whether they were going to be respited or not from the judge's remark or from what the judge said privately to one, and I did not make arrangements for a week under those circumstances. I have one case in my mind where a woman called Gibbons was respited about a week before the date fixed for the execution; and in that case I did not know what to do, whether to write down and engage Berry or not. I wrote and told him that he might be required; but I would not engage him. He wanted a payment of 5*l.* as a retainer. I believe he used to get larger sums out of the country sheriffs, because he looked upon being employed in London as a kind of testimonial; but I absolutely refused to pay him more.

949. Your difficulty would be that he might have been employed in some other executions?—Yes.

950. (*Dr. Haughton.*) There is reason to believe that everyone is not qualified to act as executioner, is there not?—Certainly.

951. There is a certain moral courage and determination of will required, which everybody is not possessed of; do you think that the warders in rotation would be competent to take over this responsible duty?—Yes, I think so. I had a great horror of anything of that for the first time, but you get accustomed to it. I had a tremendous objection to seeing an operation at a hospital and things of that sort myself, to start with.

952. You think from your knowledge of warders that they are a class of men who possess the moral courage and vigour to do it?—Certainly.

953. You would put them in rotation in order to avoid the stigma of any one individual being known as the executioner?—My idea is that such an office as that of public executioner is a very bad one.

954. How would you do in the country where there are only executions once in 10 or 12 years?—In those cases, say, on the 1st of January every year out of 20 or 30 warders in a gaol two names should be taken off and put on the list of executioners for the year.

955. If they have not seen an execution how would you get over that?—I do not think that matters much; the governors would be able to tell them what to do.

The witness withdrew.

Wednesday, 15th June 1887.

PRESENT:

THE RIGHT HON. LORD ABERDARE IN THE CHAIR.

THE REV. SAMUEL HAUGHTON, M.D., F.R.S.

R.M. GOVER, ESQ., M.D.

MAJOR ALTEN BEAMISH, R.E., *Secretary*

Mr. J. J. DE ZOUCHE MARSHALL, L.R.C.S.I., examined.

956. (*Chairman.*) Since you were good enough to attend before the Committee, you have been authorised, have you not, by the Home Office to be present at several executions for the purpose of prosecuting your inquiries?—Yes.

957. Will you be good enough to state the additional experience which you have obtained from those cases?—The first execution that I attended was a double one at Winchester, in the case of James Whelan and Albert Edward Brown. Whelan was a man of about 13 stone or a little over, and he had a drop of about four feet. Brown was a much lighter man, a little over 10 stone, and he had a drop of six feet six, as well as I can remember without referring to notes. Whelan when he fell did not make any movement, except of the diaphragm. I took off the cap to see, by the facial expression, whether there was any sign of suffering,—that is one of the chief ways I imagine in which you would arrive at a conclusion, another being the relaxed or contracted state of the fingers—and he certainly did not seem to suffer at all. His pulse beat for ten minutes and his diaphragm moved for about three minutes. The efforts at inspiration could be easily seen, but he had no sign of pain upon his face. Brown's face was rather congested and he made very violent efforts at inspiration, much more so than Whelan, and for a longer time, nearly four minutes, and his pulse beat for 12 ½ minutes. That was reported in the papers as an instantaneous death. I may say that I make it a point never to tell the newspaper men anything.

958. When do you consider death to have taken place in those two cases?—In about three minutes in the one case and about four minutes in the other. Of course, absolute death did not take place until the heart ceased to beat.

959. When you say "absolute" death, do you understand by that loss of consciousness and sensation?—Yes, loss of consciousness and sensation. I think that as long as a man is trying to breathe he may be conscious. It is not of necessity that he is conscious, but he may be.

960. Have you any observations to make as to the length of the drop used in those cases?—Berry said, that in the case of Whelan, the 13-stone man, another foot would have decapitated him. I am certain that in Whelan's case he did not suffer an atom; although his pulse beat for ten minutes he had not the slightest sign of suffering, so far as I can give an opinion. Brown must have suffered very little, if anything. His face was congested, but there was no sign of his suffering much.

961. Have you any observations to make upon the length of the drop used in those cases with reference to the weight of the men?—No; that is the recognised drop with the "knot" under the ear.

962. Will you go to the next case?—The next was the case of Edward Hewitt at Gloucester in June last year.

963. Have you any observations to make upon the execution at Gloucester?—Hewitt was a light-weight man, about 10 stone 4, and he got a drop, I think, of six feet. I immediately took the cap off his face, and he gave unmistakable evidence of intense suffering in his face. His eyes were open and starting out of his head, and his tongue was protruding.

964. Referring to the moment of your taking off the cap, were there signs of his having suffered?—At the

time that I was watching him after taking off the cap.

965. You think that there was then consciousness and sensation?—I am of that opinion most distinctly.

966. In your opinion was that execution imperfectly performed?—It was carried out exactly the same as in the other cases.

967. But could it have been carried out under conditions which would have prevented that suffering to which you have referred?—I could not recommend any improvements in the system, without shifting the "knot" to the front and reducing the drop. It seemed to me to be done exactly in the same manner as at Winchester.

968. Was this due to the fact of his being a light-weight?—No, I should say not; he got about the same drop as the other one (A. E. Brown) in proportion to his weight.

969. I gather that your opinion is that there are no absolute means of securing immunity from suffering?—That is my opinion of the present system. This man, Hewitt, made distinct efforts to free his hand, instinctive efforts, one might say, to get hold of the rope.

970. How long do you think that the suffering lasted?—About 2 ¼ minutes.

971. Do you say that the suffering lasted 2 ¼ minutes from the time that you first observed it?—Yes.

972. Have you no criticisms to offer upon the manner in which the execution was performed?—None whatever.

973. Will you pass to the next case?—Thomas William Currell was the last one that I saw executed, at Newgate.

974. When was that?—On the 18th of April.

975. What were the circumstances of that execution?—He was a light weight too, of about 10 stone 7, and 5 feet 5 inches in height, and he was to have had a drop of 5 feet, but Berry said that he would give him an extra 6 inches, that is 5 feet 6; that is the drop that he told me that he was going to give him, and he was arranging the length of the drop when one of the warders came up to me and said, "He is going to give him about 7 feet, and I looked then, and I saw that the warder was perfectly right, as there were about two feet of rope dangling down below the board that stood over the mouth of the pit.

976. Did the execution take place with this length of 7 feet?—There was no alteration made in the drop that I saw, because he made it fast.

977. Did you ascertain otherwise than by the eye what the length of the drop was?—No, not by measurement, till afterwards. I did not think it right to interfere and make him nervous perhaps.

978. But you are yourself satisfied that the length of the drop was actually 7 feet or thereabouts?—Thereabouts.

979. Did you say anything about that to Berry?—I did not.

980. What was the effect upon the person who was hanged?—He was absolutely motionless when he fell; there was no effort whatever at breathing or any movement in the diaphragm, though the pulse continued to beat for 10 minutes.

981. In that case it is your opinion that death was instantaneous?—Yes, I think it was absolutely instantaneous in this case, as far as consciousness went.

982. Were the conditions those which you would

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have yourself suggested if you had been directing the execution?—I would have been afraid of so long a drop.

983. That is to say you would have been afraid of decapitation?—Yes.

984. Did you examine the neck of the man?—I did afterwards.

985. Were there any indications which showed that the danger which you apprehended of decapitation had been imminent?—Partially so; there was a great deal of bleeding from the mouth.

986. Was that due to the length of the rope?—It was due to a rupture of blood-vessels and tissues and the pharynx which is next to the spinal column—the food passage.

987. Was there any other indication?—That was the only indication of a rupture of the tissues and of the blood vessels; the skin itself was not ruptured. I think the skin would be the last tissue almost to give way; the skin would crumple up by being constricted.

988. Did you observe any peculiarity in the manner in which Berry treated the criminal?—He seemed to tighten the knot with extra severity in Currell's case.

989. What indication of extra severity was there?—I had no opportunity of judging but the eye, at least before he fell, because Berry put on the cap first. You could see no expression on the man's face showing whether he was hurt or not.

990. What were your means of judging that extra severity was applied?—By the great muscular exertion which Berry used, and afterwards by the leather washer having risen but 3 instead of 6 inches from the eye.

991. Was there more muscular exertion in this instance than in the previous instances?—There seemed to me to be.

992. What would the effect of this extra exertion upon the sufferer?—It might make the man faint, I should think, and that it would be a cause of suffering undoubtedly; it would cause a difficulty of breathing if not almost an impossibility of breathing.

993. In fact, the greatest suffering to which he would be exposed, would be this suffering that you speak of?—It would be the suffering while he was standing on the drop. I mean his mental suffering from the knowledge that if he was to fall or stagger he might make a bungle of himself.

994. Do you mean physical suffering?—Yes, and also the mental suffering of the criminal feeling, as I have said, the fearful constriction upon him, and knowing that if he were to faint he might be the cause of giving himself a doubtful fall, that is to say, falling sideways; but of course that is only my imagination.

995. Do you think that there was a risk of such a thing happening?—If Berry was not very quick in drawing the bolt in a second or two or three seconds, the man could not possibly have stood there.

996. Is it your opinion that this suffering was unnecessary?—I consider so.

997. Is this the only occasion, I think, on which you have observed any such extra severity of constriction applied?—I always myself, before that, thought that Berry used a great deal of power from the way that he drew out his arm, and I have noticed it in my reports on other executions. But in this case I noticed that he used more muscular power on the man's neck than usual. He had previously told me that that was his improved system, and that drew my attention to it to a great extent.

998. When he told you that this was his improved system, did you raise any objection to it on the score or the pain which it inflicted upon the culprit?—I could not do that, but if I said anything, I certainly said to him that I thought he had tightened it up quite enough in the previous cases which I had seen.

999. Have your observations on those three occasions led you to modify in any way the conclusions to which you had arrived when you last gave evidence

before the Committee?—I have come to the conclusion that with a simple rope placed under the left ear, there is no possibility to break the neck except with a very long drop.

1000. But that conclusion is identical with that at which you arrived when you gave evidence here before?—Yes.

1001. The question I asked you was whether these additional observations have led you to modify or to change any of your conclusions?—Not in any way.

1002. (*Professor Haughton*). In the first case, that of James Whelan, you said that the pulse continued to beat for 10 minutes at 80 beats per minute, and that there was no dislocation of the vertebral column. I am not inclined to agree with you that a man whose pulse beat regularly for 10 minutes at 80 beats per minute was not conscious and suffering; will you reconsider your evidence upon that point?—I judged by the appearance of his countenance.

1003. You state that the pulse beat at 80, which is the regular fair beat, for 10 minutes?—Yes.

1004. I think it is very doubtful whether the man was not conscious and suffering for 10 minutes; but you have given your opinion that that man was not conscious during the whole of the 10 minutes during which the pulse beat?—Yes, that is my opinion.

1005. I now pass to the case of Albert Edward Brown, in which you say that the pulse beat strongly at 84 for 12 ½ minutes. You add in your report, "regular respiratory movement continued for some time;" do you still think that, with the pulse beating strongly for 12 ½ minutes at 84, the man was not conscious, and did not suffer much?—Not longer than the respiratory action; that is my idea.

1006. You say the regular respiratory movement continued for some time. Have you any idea how long that time was?—About three minutes. It was longer than three minutes in Brown's case. In Whelan's it was three minutes.

1007. You have answered me already that you do not attach much importance to the pulse beating strongly at 84 for 12 ½ minutes, and that the suffering could only have continued during the three minutes of respiration?—That is my idea.

1008. Did not you say in your direct evidence that you thought there was no suffering at all?—Neither of them seemed to suffer, I thought, by the expression of the face.

1009. In your letter you say, "the chest walls, as well as the diaphragm, being involved;" what difference do you make between the chest walls and the diaphragm being involved?—The chest seemed to be expanding, I think I described it at the time, as if he was trying to haul himself up on a horizontal bar.

1010. The chest walls being, of course, the intercostal muscles?—Yes.

1011. The diaphragm being a muscle over which you have no control?—Yes. The only inference that I would draw if the chest walls continued to move is that the man was conscious and suffering.

1012. This is inconsistent with your direct evidence?—I can see the inconsistency myself, but I must give my own opinion about it.

1013. The impression that you would have produced on the Committee, if I had not cross-examined you, was that Whelan and Brown practically died without suffering, but that Hewitt, the third man, whose pulse continued beating at the rate of 80 per minute, did suffer?—Yes, for the six minutes that his pulse beat.

1014. The important point is, that the man struggled desperately to get free?—Yes.

1015. Did the man struggle desperately to get free?—Yes; no doubt that was my impression.

1016. And the struggling continued for 2 ½ minutes or 2 ¼ minutes?—Yes.

1017. And during that time the man was suffering and conscious?—I have not the slightest doubt about that.

1018. You are speaking now about the first two?—Yes; that was my opinion at the time, on account

of the placid appearance, especially on Whelan's face. I thought I said in my report that the muscular action was more involved than anything else.

1019. In the case of James Whelan and the injury inflicted by hanging, you say there was no dislocation of the vertebral column. How did you ascertain that?—By examination of the structures of the neck.

1020. By an external examination of the body?—Yes.

1021. In the case of Albert Edward Brown, you say there was no dislocation?—No, there was not.

1022. Did you make a dissection in that case?—No, I made no dissection.

1023. In the case of Edward Hewitt there was no dislocation?—No, there was no dislocation.

1024. In the case of Currell did you make a post-mortem examination?—No, we did not. In the case of Hewitt we cut down to the spine.

1025. Then did you make a scientific dissection of the body?—No; I regret very much that we did not. I went to a great deal of trouble in manipulation; and I do not think that I could possibly have been deceived. In Currell's case I found in a second that there was a dislocation, because I took the spine itself, where it is connected with the head, and I pulled it laterally away from the head, which I failed to do in the other cases; but in Currell's case there was no dissection.

1026. You did everything you could short of dissection?—Yes.

The witness withdrew.

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Z. Marshall,
L.R.C.S.I.

15 June 1887.

Saturday, 18th June 1887.

PRESENT:

THE RIGHT HON. LORD ABERDARE IN THE CHAIR.

THE RIGHT HON. SIR HENRY SELWIN-IBBETSON,
BART., M.P.

SIR FREDERICK J. BRAMWELL, F.R.S.

THE REV. SAMUEL HAUGHTON, M.D., F.R.S.
R. M. GOVER, ESQ., M.D.

MAJOR ALTEN BEAMISH, R.E., *Secretary*.

Mr. J. J. DE ZOUCHE MARSHALL, L.R.C.S.I., further examined.

1027. (*Chairman.*) We will not further examine you with respect to those cases which you observed, and as to which you gave evidence here the other day but we understand that you have made some modification, and according to your views an improvement in the instrument which you invented for the purpose of insuring the successful and painless execution of criminals by hanging, and therefore we desire to give you an opportunity of stating what changes you have introduced in that instrument?—I have a model with me (*producing the same*). The first one I made is on the table before the Committee, and this is a modification which will explain itself better than I could. The difficulty in the original invention was that it had a tendency to fly away from the chin, and also another difficulty was to get it completely under the chin without an excessive constriction of the noose. In thinking recently over the matter I have acted upon the suggestion of Sir Frederick Bramwell, who suggested that that trough might be put on the eyelet of the rope. For a long time I looked upon that as impracticable, because I thought that Sir Frederick meant to have a rigid piece of metal; but when I thought of a hinge it struck me that it was very practicable and would have the advantage of following in towards the neck instead of running away from it, consequently I got this model made which I now exhibit. I at first thought of having it all together with a permanent hinge, but I thought subsequently that a good opportunity would occur of having it dis-jointed so that the eyelet could be applied, as in the case of the simple noose which is at present used, and then the hinge could be very quickly completed afterwards by means of a centre pin.

1028. (*Sir Frederick Bramwell.*) You mean that the two parts of the hinge should be afterwards connected by means of a pin? Yes, the ascending rope is to be kept in the centre of the trough by means of a spring fork. I will put it in and leave it with the Committee. A difficulty arose in the present method in finding a substitute for the present leather washer.

1029. (*Chairman.*) How do you overcome that difficulty?—I overcame it by means of a hinged toothed spring attached to the eyelet, which would catch and penetrate the ascending rope and thereby prevent the enlargement of the noose in the same manner as the leather washer prevents it. With this modification, it does not matter how comparatively loose the noose is put round the neck, because the trough slides back towards the spine. The former invention would require to be put on very tightly so as to get the chin to run the full length of the trough. I have made the hinge with a stop in front so that the trough can only come down to a horizontal position when the noose is in a horizontal position, but it can go upwards and backwards against the chin to any angle that it may be forced. The apparatus would be required to be held by an india-rubber band to the chin to do away with the necessity for a too tight application of the noose. An india-rubber band would be very quickly applied to hold the trough to the chin. I originally designed with the hope of having an india-rubber tubing hanging from the beam to take the weight of the metal trough and keep the latter up to the chin.

1030. The advantages which you hold out of adopting this chin trough, I understand to be, in the first place, that it secures what you consider an absolute certainty almost of the immediate death of the culprit, and in the next place that you run no risk of what is called decapitation?—Perfectly so, those are the two advantages.

1031. (*Sir Frederick Bramwell.*) What is the reason of your suggestion that in applying it to the culprit the hinge should be disconnected; what is the difficulty of its application with the hinge connected?—In appearance only, it would be a large thing dangling on the rope instead of a plain eyelet.

1032. I should have thought that that was less objectionable than the interval of time, small though it may be, which would be occupied in putting that hinge together?—I thought this plan would be a great advantage.

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1033. Is it the fact that with the apparatus the ordinary leather washer is not applicable?—It would catch in the spring fork when the contraction would take place by the body falling.

1034. Would you be good enough to explain in what way you suggest that this diminishes the chance of decapitation?—In the first place in the diminished necessity for a long drop.

1035. I want to know whether you make it on that ground that by means of adapting the drop to the weight this apparatus was less likely to cause decapitation than the old noose on the existing system?—Quite the opposite, it would be more likely to cause decapitation with the long drop.

1036. (*Dr. Haughton.*) Therefore it is of the essence of your system that there should be a short drop?—Yes.

1037. (*Sir Frederick Bramwell.*) If that apparatus of yours is used from what cause do you expect the death to take place?—Rupture of the spinal cord by dislocation of the vertebræ.

1038. To what cause do you attribute death by a long drop without your apparatus?—If the spine is dislocated, to the very same cause.

1039. If it is not to what do you attribute it?—To strangulation, if it were not due to dislocation.

1040. There has been suggested a third cause of death which might occur neither from dislocation nor from strangulation, but from concussion; what do you say to that?—I should think that that is possible from the shock.

1041. I want to know to which of the causes you attribute the death with your apparatus of yours, if dislocation did not take place?—To strangulation.

1042. Therefore I think I follow you in this way that you believe that if dislocation takes place death must ensue, and that with your apparatus dislocation is almost certain to take place, although the drop may be made very much less?—Exactly so.

1043. And the drop being less of course it follows that the chance of decapitation is also less?—Yes.

1044. (*Chairman.*) You have stated that were your system adopted a shorter drop than is now in use would be required; have you prepared any scale of the length of the drop proportioned to the weight of the culprit?—No.

1045. Have you the means of preparing such a scale?—No, I have not.

1046. But is it, I gather, your opinion that under your system the length of the drop must to some extent be proportioned to the weight of the culprit?—Not necessarily. I do not think that with any drop within three feet that I would give now to a light man, you would decapitate even a heavy man.

1047. Do you propose under any circumstance any variation in the length of the drop?—I would not think it necessary to give a heavy man as much drop as to a light one, certainly, but I would not avoid the same length of drop from any dread of decapitation.

1048. Then you would give a shorter drop to a heavy man than you would to a light man?—Yes.

1049. But you would probably shorten the noose in proportion?—I would.

1050. (*Dr. Gover.*) You say that you would effect dislocation by throwing the face backwards by the trough at a right angle to the spinal column?—Yes.

1051. Would it be a right angle?—It would be so

nearly vertical that the face itself would be nearly horizontal.

1052. Then it would be an angle of 90 degrees?—Yes.

1053. But you may throw the face back to an angle of 75 degrees without injury?—Yes, slowly. I should not like to do it suddenly myself, that is to say, throw the head back to the maximum extent.

1054. You would admit that the face can be thrown back to an angle of 75 degrees without injury?—Yes, slowly.

1055. Then the greatest lever action that you would secure by the use of your trough would be a movement through an angle of 10 or 15 degrees?—Yes, more than that. Then there would be the impetus from the weight of the head thrown backwards from the blow, which would be in addition. In minor railway collisions, as you know, when a carriage gets suddenly stopped, people get a fearful pain in the back from the sudden jerk of the head, coming unexpectedly.

1056. What would be the point at which the dislocation would occur?—I think it is likely that it would occur between the second and third vertebræ. It would be below where the atlas grows with the skull.

1057. What is the precise object which you gain by keeping the trough in apposition to the head. I do not see why it should not fly off the chin. The first one would fly off the chin, would it not?—That would depend upon the amount of constriction. With a limited drop the constriction of course would be limited. The constriction would also be limited by the position of the rope being in front.

1058. (*Dr. Haughton.*) Dr. Gover asked you on a former occasion if you wished to trust entirely to leverage, and you said, "Yes, entirely to leverage"; are you still of that opinion?—That is still my opinion.

1059. Have you ever seen a proposal to hang persons from the horizontal position of the body, taking a vertical position after the end of the rope was reached?—I have not.

1060. You have anticipated one of the questions that I wanted to ask you. You spoke on the last day of your examination of the hangman pushing the washer too much on the neck of the culprit before pulling the bolt; that is of course exceedingly objectionable on every ground; but I think I understood you to say that you claim for this invention before us that all necessity for violence before death would be done away with?—Completely done away with.

1061. Were you aware that this practice of choking a man before hanging is very old, at least 17 years old?—Not until you told me so the last time I was here.

1062. (*Dr. Gover.*) You spoke of dislocation of the vertebræ having been produced by a railway accident; have you ever known of such a case?—Not dislocation, but painful strain on the ligaments caused by a sudden jerk coming unexpectedly, the head being thrown back. That accounts for my idea about the effects of an impetus given to the head.

1063. (*Sir Henry Selwin-Ibbetson.*) Did I rightly understand you to say that you have not considered or made up your mind what the minimum drop would be—I have no means of judging of that; it would be only a conjecture.

1064. You have made no observations on the dead subject with a rope?—No, I have not. I tried to put it to the test, but I failed. There are difficulties in the way of doing it, so that I abandoned it.

The witness withdrew.

JAMES BERRY examined.

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1065. (*Chairman.*) You are the executioner appointed by the City of London?—Yes.

1066. How long have you held that post?—Three years and six months.

1067. What were you before?—I was a boot salesman in a boot shop.

1068. Had you ever assisted at any execution before your appointment?—Never.

1069. May I ask you what induced you to apply for that office?—Mr. Marwood used to come to our house when he came to Bradford, and we put him up at our house for a night or two when they could not

do with him at his relations, and he put me in the method of doing it. He pinioned me in my own house, and showed me how the process was performed, and I took it into my head when he died that I would apply for the situation.

1070. Did you succeed to him or Binns?—I was appointed first by the sheriffs of London, but owing to my parents being well off they engaged some solicitors at Heckmondwike to withdraw me from being executioner, as it got into my family circle.

1071. Were they opposed to it?—Yes, they were opposed to it; but after my mother died I determined to apply for the post again.

1072. But practically you succeeded Binns?—Yes.

1073. Did you know Binns?—No, I did not know him only just to see him. I went to see him when he got the post.

1074. Did you ever see him conduct an execution?—No, never.

1075. You have applied to be examined, have you not?—Yes.

1076. And you wish, no doubt, to be examined on certain points?—Yes.

1077. Would you tell me what those points are upon you wish to be examined?—One thing that I wish to give evidence on is this, that I should like to have a certain stipend from the Home Office, and to be under the regulations of the Home Office, so that I should not have to depend upon a criminal's neck for my livelyhood.

1078. You wish to be paid by a fixed salary instead of being paid by the job, in fact?—Yes.

1079. I do not know that that comes strictly within our business. We have only a certain number of things to inquire into and that is hardly one, but at the same time I do not know that there would be any objection to our stating your desire. What other point is there?—The authorities wished me to shorten my drop, and I have done so.

1080. What authorities do you allude to?—It came to Newgate after that man had been decapitated at Norwich that it would be better if I would shorten the length of my drop.

1081. How did you regulate the length of your drop before that?—It was by taking the weight and height of the man. Then I worked a scale out from experience of the different weights of falling bodies at different distances, and then I got one made out, and I went on working from experience and improving on it, and then I showed it to the chief warder at Newgate, Mr. Ward, and he worked out a scale and this is what he worked out, and I have always worked from it since (*delivering in a paper to the Committee*).

1082. Have you adopted the scale which Mr. Ward after consultation with you drew up?—Yes, I have worked to it very closely.

1083. That is to say, you proportion the length of the rope to the weight of the culprit?—Yes.

1084. How long have you used that scale?—Twelve months, or a little over that.

1085. How many executions have there been within the last 12 months?—I think it is 25, but I am not sure.

1086. And have you adhered closely to that scale?—I have adhered to it very closely and watched it closely.

1087. What has been the result of those 25 executions?—That death has been caused in every case instantaneously, not even the muscles moving after the body had fallen through the trap doors. I have a number of testimonials here from different governors and doctors (*delivering in the same*).

1088. We have a report here from Dr. Marshall dealing with the case of Edward Hewitt, at Gloucester; do you remember that case?—Yes.

1089. He stated that Hewitt was 34 years old, that he was 5 feet 5 ½ inches in height, and that he weighed 10 stone 4 lbs., and that he was allowed a drop of 6 feet; is that correct?—Yes, that is so.

1090. In that case, in your opinion, was death instantaneous?—Yes.

1091. I will read to you what Dr. Marshall says: He said, "I descended immediately into the pit where I found the pulse beating at the rate of 80 to the minute, the wretched man struggling desperately to (I presume) get his hands and arms free. I come to this conclusion from the intense muscular action in the arms, fore arms, and hands, contractions, not continuous but spasmodic, not repeated with regularity but renewed in different directions and with despatch. From these signs I did not anticipate a placid expression on the countenance, and I regret to say my fears were correct, for on removing the white cap (about a minute and a half after the fall) I found the eyes starting from the sockets and the tongue protruded; the face exhibiting unmistakable evidence of intense agony. The efforts at inspiration were spasmodic and far from regular as at Winchester," and so forth. You see that statement is not exactly in accordance with yours that death was instantaneous and that there was no muscular action?—The doctor of the prison gave it in that the death was immediate; and not only that but that the culprit had never even suffered anything at all.

1092. Dr. Marshall says, "All the muscular action ceased in 2 ¼ minutes, the hands becoming relaxed, and the eyelids retracted from the protruding eyes, leaving a fearful stare. The pulse, which was weak and irregular, ceased in six minutes from the drop; the heart, weakened probably by intemperance, being equally worn out by the exhausting struggles." Was the prison surgeon Dr. Clarke?—I believe he was.

1093. Dr. Marshall states that Dr. Clarke and he examined the corpse, but failed to discover any signs of dislocation or fracture; and that he subsequently, with the help of Dr. Clarke, made a post-mortem examination which verified their previous conclusions, and therefore they were of opinion that he died of strangulation and not fracture of the vertebræ?—In that case the man's neck was not broken, but at the same time the arteries were severed inside the neck, which caused instantaneous death just as well.

1094. However, Dr. Marshall says that the muscular action continued for 2 ¼ minutes, and that there was violent and intense muscular action in the arms, and so on, which in his opinion showed considerable pain. Are the papers which you have given in testimonials which you have received after each execution?—Yes.

1095. This execution of Hewitt was somewhere about the 15th of June 1886; have you that testimonial with you?—I believe I have not that one with me.

1096. Have you in your possession any testimonial from Dr. Clarke with respect to that execution?—No, I did not ask him for one. At the execution that Dr. Marshall came to at Gloucester when he went out with me after the body had dropped he said, when he was going out, that it was very well done indeed. Then when he took me out he took me to a place where we got some lunch, and as we came back again he went with the doctor to examine the body, and when he came back he told me that the poor wretch had suffered, but he did not tell me so after he had examined him when he was in the prison. As soon as I dropped the body he ran down the steps and was loosening the pinioning apparatus from his hands, and I said, "Dr. Marshall, you must not loose that apparatus yet; you have no right to touch the body at all, only to examine his pulse." He was dead then, and the governor said he was satisfied, and so was the sheriff, that the man never moved a limb; there was not even a contraction.

1097. Do you remember the case of hanging a man named Currell, who was executed at Newgate on the 18th of April?—Yes.

1098. He was 31 years of age and he weighed 10 stone 7 lbs., and Dr. Marshall says: "Berry told me at first that he intended to give him a drop of

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“but 5 feet, but that he thought he would give him 5 feet 6 inches, the latter being even 6 inches less than he usually allows for similar weights”; do you remember that?—Yes, I remember that well.

1099. Did you give him any reason why you reduced it?—I would not harbour him that much. I did not care to talk to him about it.

1100. He says, “His reason” (that is your reason) “for this reduction was that he had been recently improving his system by reducing his drop, and “by himself drawing the noose much tighter than “before”; do you remember that?—Yes, I believe I did tell him that.

1101. Was this alteration of the system due to your adopting the scale of the chief warder, Ward?—Yes, I was following it more closely. I found that that scale was as little as I could get.

1102. He also says that the improvement of the system consisted not only in reducing the drop but in drawing the noose much tighter than before; since when have you adopted the system of tightening the noose?—I always have tightened it, but I have never pushed the apparatus well up. I have generally left it to tighten of its own accord. But I was advised by several doctors to tighten it, and it would do a lot better, and I have done so ever since; but still at the same time I am following up my scale of the weights of falling bodies in different positions.

1103. Dr. Marshall states that on this occasion his attention was drawn by an experienced warder to the fact that you were going to give him 7 feet on the rope, and that thereupon Dr. Marshall said he looked very closely, and he found that 7 feet was accurately the amount given?—No; the ropes that I get from Newgate are made very pliable, and they have a very varying elasticity about them, and they always give 12 inches. I have known them to give 14 inches.

1104. What do you say to the facts stated by Dr. Marshall, that whereas you stated that you intended to give him 5 feet 6 inches you actually did give him a length of 7 feet?—I did not do so.

1105. He says, “An evidently experienced warder “drew my attention to the fact that he” (that is you) “was going to give him about 7 feet”?—No, I never mentioned 7 feet at all.

1106. He said you mentioned 5 feet 6 inches, but that the warder drew his attention to the fact that you were going really to give him 7 feet?—It was not so. The engineer measured it, and I asked him whether he had done so, and he said yes, he had measured it with his own tape, and he said, “Have you not really given him 5 feet 6 inches”? That was before the execution. The length of the rope was exactly 5 feet 6 inches. I had not allowed the regular minimum inches for the neck; that is to say, 7 inches round the neck. I had not really given him 5 feet 6 inches clear, but owing to the stretching of the rope, it being very elastic, I gave him more; and then with the tightening at the top I believe the rope always gives a little; and then there is the stretching of the rope, which we cannot help, and it is better that way, because if it was not that way it is very likely the rope would break; but I have never found such ropes in my life as those I am getting from Newgate just at present.

1107. (*Sir Frederick Bramwell.*) When you say 7 inches round the neck; do you mean that 7 inches would girth the neck?—When the rope is tightened up it is exactly 7 inches.

1108. Before the drop is let go?—No, after he has gone down; there is no more than 7 inches round the neck.

1109. Have you any notion of how much there is round the neck at the time that you tighten up the noose?—That depends upon the size of the man’s neck. If a man like myself took No. 16 collars, I should tighten it up to 14 inches before I let him go.

1110. (*Chairman.*) You say that you always tighten the noose?—Yes, always.

1111. But do you now tighten it more than you used to do?—I have followed it up of late, tightening

the noose, but at the same time I have worked to the scale of the weight of falling bodies at different distances.

1112. Can you tighten the noose to the extent to which you do it now without inflicting considerable pain upon the culprit?—Yes, because if you have noticed the report of my last execution at Manchester, I was only a minute and a half from going into the condemned cell and placing the man on the scaffold, and he was dead. Both the doctors at Strangeways prison said so.

1113. That does not answer my question as to whether this tightening of the noose is not most painful to the culprit?—No, I do not think it is.

1114. Dr. Marshall said that you use considerable strength in tightening the noose?—He made use of that remark at Newgate at the time, and Dr. Morgan and Dr. Gilbert told him that it was much better that it should be so. And not only that, but he wanted to say at first that the neck was not dislocated, after he had felt the muscles of the neck.

1115. I am now examining you as to this question of the tightening of the noose, and you say that your opinion is that even with the increased force which you now use you do not cause any special pain?—No, I do not think there is any pain at all.

1116. Are they able to speak when you are adjusting the knot?—Yes.

1117. Do they ever make any observation to you that they are suffering pain or inconvenience from the adjusting of the knot?—No, they have never mentioned anything of the sort to me.

1118. Do they ever make any observations to you?—Yes, sometimes in pinioning they have told me, “Don’t pinion me so tight,” but that is before they come on to the drop.

1119. But on the drop, whilst adjusting the noose, has any observation been made to you by the culprit?—No, none whatever; not about the tightening of the knot. At York Castle Murphy made some kind of remark when I was putting the noose round his neck, but it was not regarding the knot.

1120. When you go down into the country to an execution where do you usually stay?—In the prison the night before.

1121. Has that always been the case?—Ever since I commenced.

1122. Have you ever had to take lodgings in the town?—No.

1123. Supposing that an execution is fixed for Tuesday, when do you go down?—On the Monday.

1124. Do you go at once to the gaol?—Yes, straight to the gaol.

1125. And do you leave the gaol in the course of the evening?—Yes, I come out again during the evening; but I am in charge of one of the warders, and we have a nice stroll out of the town.

1126. Do you do this always in company with a warder?—Yes.

1127. Do you ever go to a public house on those occasions?—Very seldom.

1128. We have been told, I do not know that it has been said of you, but it has been said of an executioner (I think of Marwood) that he was in the habit of exhibiting the ropes with which he had hanged various criminals and, in fact, of selling portions of those ropes to people who were curious about such things; have you ever done anything of that sort?—I gave one to a gentleman of high position in the city, but I have never sold any in my life.

1129. I suppose people are very curious in talking to you about these things, are they not?—Yes, there are some very inquisitive people; but when they begin to talk about the subject of hanging I leave the company at once. I will not introduce it at all.

1130. What is the usual number of persons who are present at an execution?—The warders, the Chief Warder, the Governor, and the Press.

1131. How many of the Press are usually present?—At the last execution I had at Gloucester there were six present.

1132. I think one of the witnesses told us that in London they only admitted the reporter of *The Times*?—Yes, they only admit one reporter in London, and wish they took the same course throughout the country.

1133. Do you think that the admission of many reporters is inconvenient and improper?—I think so.

1134. Are there any other persons admitted occasionally in order to gratify their curiosity?—If it is so it is on behalf of the sheriff's orders; it is the sheriff who gives the orders to the officers and to the other gentlemen to admit such-and-such persons.

1135. Is that often done?—In some cases it has been done, but it is very rarely that it takes place.

1136. Have you known it done?—Yes.

1137. Do you object to it?—It lies with the higher authorities.

1138. I mean personally would you rather that they were not there?—I should very much rather that they were not there.

1139. We have heard of amateur executioners, not real professional ones, but amateurs, offering themselves and being present at executions, do you remember any such occasion?—I scarcely understand what the question refers to.

1140. There was a paragraph in the newspapers about a baronet taking part in an execution not a very short time past, do you remember that?—Yes, that was at Carlisle.

1141. Did he take any part in the execution?—Yes.

1142. What did he do?—He pinioned one of the prisoners.

1143. That was in the cell, I suppose?—Yes.

1144. Were you present?—Yes.

1145. Did he ask you to allow him to do it?—Yes, he asked me to let him do it.

1146. That was done in the presence of the Governor, I suppose?—Yes.

1147. Did he take any part in what was done on the drop?—Yes, he put the straps on the legs while I was putting the ropes and the white caps on the heads, and the reason that I allowed him to do that was because it was quicker for the culprits and better for me, because I do not like to go from one to the other, and I wanted to get them out of their punishment as soon as I possibly could.

1148. There were three men hung at the same time, I think, in that case?—Yes.

1149. You had the advantage of having received some instruction from Marwood?—Yes.

1150. Supposing you had received no such instruction from Marwood, you would hardly have been so handy as you are now, I presume?—No.

1151. When you began were you perfectly aware of the sort of work that you had to do?—Yes, by talking to him. I used to be frightened at the position at first, but when he came into our house and explained things I got familiar with him and attached to him.

1152. Where was your first execution?—I had two in Edinburgh first.

1153. Did you get through them satisfactorily?—Yes; I have handed in the certificate that they gave me there.

1154. Do you suppose that you have improved in any respect since them?—Yes, I have improved in my plan a good deal since.

1155. Is that from experience or from your having a better system?—It is from experience and also from the system which I am working up to at present. I worked the scale out before that myself, and then I worked to a finer scale—to a less drop.

1156. When more than one criminal has to be hanged do you have assistance, or do you do it all yourself?—I have done the last eight or ten double executions myself without any assistance whatever.

1157. You had special advantages in having made the acquaintance of Marwood, and having received some practical lessons from him. Supposing you were to cease to hold this office it would be necessary to employ somebody who had not had those advantages;

—Yes, if I was to cease to hold this office, it would be necessary to appoint some one.

1158. Supposing, for instance, that you died suddenly they would have to appoint somebody who had never had any experience?—Yes.

1159. Do you think that that could be done without some risk of things going wrong?—I think it would be utterly impossible to get a man to carry it out who has never done it before.

1160. Could an experienced warder give sufficient instruction to a man to enable him to do it?—He could assist him and put him in the way.

1161. I ask you this question with a view to consider the expediency of having an assistant at an execution to attend when there are double executions, and also to obtain a certain amount of experience and to replace the executioner in case he were ill or met with an accident. What do you say to that?—I think that would be a very good plan. I have studied many times about it myself.

1162. Have you always been able to perform executions since you were appointed?—Yes, but on two occasions I was very ill when I performed them.

1163. And you would gladly have been replaced by an assistant if there had been one?—Yes, if there had been one.

1164. Are you aware whether any charges have ever been made against you for inefficient performance of your duty?—No, never. I always think it is this way, that when people get into loose company, that is when they get slang thrown out to them.

1165. You keep clear of all that sort of company?—Yes, I keep select to myself.

1166. (*Dr. Haughton.*) Are ropes always supplied to you, or do you supply all your own ropes?—I write to Newgate for a rope, and then they send a letter to the sheriff to say that I have ordered one, and then he writes back to me, and says he is very glad and thankful because I have done so, and then they forward the rope, not to me, but to the person who applies for it when the culprit is going to be hanged.

1167. (*Chairman.*) Those ropes, I suppose, have very varied degrees of elasticity, some giving more than others?—Yes.

1168. Would it be impossible to make ropes of the same amount of stiffness in every case?—I do not think they could improve upon what they are making at present, excepting in the brass eyelet hole. The brass eyelet hole was in my opinion the very reason that caused the decapitation in the case of the execution at Norwich, and that was the opinion of the doctor as well, and not only that, but, being a large eyelet hole, in cases where a man has a lot of loose skin round his throat, the elasticity of the rope in descending into the pit causes the loose skin to vibrate, and the rope coming through a big eyelet hole causes the blood to flow in some cases. I think it would be an improvement if the eyelet hole which I had reduced at first, when I took up the position, was made exactly like the one that I am now using, but with smaller dimensions, and with a centre hole, so that it would not allow the flesh to come through.

1169. You say that your ropes are everything that can be desired now?—Yes, they are.

1170. Are they all of the same degree of elasticity?—There are some that do not give as much as others.

1171. Is there any reason why they should not be all of the same degree of elasticity; could not they be tested?—If you test them beforehand they will go back again same as india rubber.

1172. Supposing they were tested by a weight the day before they were used, would they go back again then?—Yes, they would. When the rope is stretched it is a five-eighths rope. Before you start it is a three-quarters rope, but when the body is at the end of the rope it is really five-eighths; the elasticity causes it to give.

1173. Then could you not by testing it many times over with a sufficient weight, reduce it to that condition of five-eighths, as you say?—No, you could not reduce it to keep it five-eighths.

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1174. Could you, by testing it the day before its being used, reduce it to this condition of five-eighths?—No, you could not; if you let it stop there it would go back to what it was before. I tried it myself in this way. I have one rope at home that I have executed 16 persons with, and every time that I have executed a criminal with that rope I have taken very particular notice where the leather washer stopped compressing the neck, and how far the rope has given, and I have taken notice where it has not given, and at the end after I had executed a lot of people, I found that it did not give above 6 inches or 6½ inches, but at first when I started it gave 14 inches.

1175. Then you do reduce the elasticity by constant use?—Yes, by constant use, but it is a risk to do it.

1176. I suppose it would be a great advantage to reduce the elasticity, would it not?—Certainly.

1177. Because then you can depend upon the length of the rope?—Yes.

1178. Why should not that elasticity be reduced by making experiments upon other than living bodies—upon dead bodies or dead weights—because you say that this rope after 16 executions has had its elasticity considerably reduced; why should not get you that reduction by other means?—I have some ropes in my garret where I put my appliances, and I have large weights to hold them down to and try to reduce this stretching process, and I have kept them on until I have had to be called upon for the next execution, and then I have taken the weights off and put them into my bag packed up ready for use, and the next day when I have had to begin again it has given again.

1179. Have they given as much as they would have done if you had not weighted them before?—No; where it would have given 12 inches at first, or getting up to 14 at the latter end, it gave only about 6½ inches.

1180. (*Sir Henry Selwin-Ibbetson.*) Would there be any disadvantage, or the contrary, if you could reduce the elasticity to a certain amount in every rope so as to allow it to be say six inches in each rope?—That would be a great advantage.

1181. By making experiments with the rope previously you might exhaust its elasticity in the same way that you do practically by a number of executions exhaust your rope?—Yes.

1182. Would not it be an advantage in your opinion to get the rope that was served out for an execution in each instance so reduced in elasticity that you might count exactly upon the amount of elasticity that you would have in the rope?—That could be done; but, you see, by trying the rope so many times with dead weights it causes it to stretch too much, so that I prefer to try and stretch it myself and then when it comes into my hands the first culprit that I drop with it, if it was a heavy culprit, the weight might have torn the fibre, so that when I get hold of it it might break the very next time with the fibre being pulled too fine.

1183. It would be necessary to leave therefore a certain amount of elasticity in each rope in order to prevent its breaking when used?—Yes.

1184. (*Chairman.*) Would 6½ inches be sufficient?—Yes, that would be plenty.

1185. (*Sir Henry Selwin-Ibbetson.*) So that your experiments with the rope previous to its being issued for execution should be carried out to such an extent that you would reduce the elasticity in each case to about six inches?—Yes, or 6½ inches.

1186. And, therefore, you might count in every execution upon having a rope of exactly the same elasticity?—Yes.

1187. And that would be an advantage?—It would.

1188. (*Sir Frederick Bramwell.*) With respect to this question of the rope, you were saying that you wrote to Newgate and asked for a rope?—Yes.

1189. Do you do that now habitually with every fresh culprit?—No. When I am engaged by the sheriff of the county to which I have to go, he writes

to me and he says will I order a rope or should he do so or let his under-sheriff do so, and then I write back and tell him if he desires me to get him one from Newgate I will do so, or if he likes to get it himself he can do so. I then write back to him to say that I can send to Newgate and get one.

1190. What I want to know is this: supposing a culprit is to be executed what becomes of the rope, do you keep it?—I keep it.

1191. By keeping it, as you say, you have it ready for another execution, but when you are asked to carry out an execution in some county town why do you order a new rope from Newgate; why do you not use the one that you had used before?—Some sheriffs will not pay for the rope, and then I have to find one myself. I take one out of my box which I have at home, and when I have agreed about an execution I put some weights on it to stretch it before going away to an execution to see whether the end gets out of repair, and if the end gets out of repair I take the weights off and put them back again.

1192. Supposing there was no question about payment, would you rather have a new rope for every execution or one that had been used before?—I would rather have one that had been used before.

1193. Because some of the elasticity has been taken out of it?—Yes.

1194. Is it the practise now to have any sort of trial of the working of the drop and machinery prior to execution by the use of a weighted sack, we will say, at the end of the rope?—Yes, it is the practise.

1195. With the rope that you intend to use with the culprit?—Yes.

1196. What I want to ask you is this: supposing that the day before the execution you were furnished in every instance with a new rope, and that with that rope with a weighted sack placed on the drop you performed the operation of execution, if I may say so, any number of times that use and experience might suggest, say twice or three times, or four times, and you did that within 20 hours of the execution, could not you in that way be sure that when you came on the following day to execute the culprit the ropes should be identical as regards their elasticity?—No, the rope would have gone back again in 12 hours.

1197. But it would not have gone back, as I understand you to say, to the condition of a new rope?—No, it would not if it had been constantly kept dropping so many, many times.

1198. I will say six times?—Yes; but under the rule by which we do it now, when I arrive at the gaol then I try the scaffold, and tie my rope on the links of the scaffold and get my sack of cement, and then I put my rope round the top of the sack of cement of the weight that the culprit is; then, according to the scale that I have formed, I take the weight of the culprit and note it down in the presence of the Governor, and then the sheriff and the under-sheriff ask me if everything is right and satisfactory, and if there is any alteration necessary to be made; then I pass it as all right. Then I leave my rope tied on the scaffold, and then on the Monday morning I try it again with the same rope and the same bag of cement in the presence of the Governor at 7 o'clock prior to the execution at 8. Then we pull that sack up and if it goes up all right, we take the noose off the sack, and I make it all ready then for the execution of the criminal.

1199. Do you say that you tie the rope on to the beam?—Not on to the beam, on to the chains that are hanging down.

1200. When you are letting the sack fall down where is the sack? What is it standing on?—It is on the scaffold where the man stands.

1201. From the bottom of the sack to the neck of the sack is not above 2 feet, is it?—No.

1202. From the bottom of the man's feet to his neck may be 5 feet or whatever it might be?—5 feet 8 inches or 5 feet 10 inches.

1203. When, therefore, you experiment with the sack the sack has not so much fall, has it, as the man

would have?—Yes, I give it the length of the rope to test it.

1204. Then when you experiment with the sack you have a greater length of rope out than you would with a man?—Yes.

1205. Supposing, therefore, that the rope is elastic, as you say it is, and as we know it is, it would stretch more with the sack than it would with the man because there is a greater length of it?—It would.

1206. How do you pay out a certain length of rope, is it by undoing the knot?—Yes, by undoing the knot, and tying it up afresh.

1207. Is not there a considerable amount of tightening of the knot itself by the action of the fall of the culprit. If I follow you, what you have done is this, for the purposes of the sack you have knotted your rope in one place?—Yes.

1208. And for the purposes of the culprit you have to put the knot in a different place?—Yes.

1209. And that knot you cannot check by the rope because you immediately apply it to the culprit?—Yes.

1210. Must not the knot itself be drawn tight by the action of the fall of the culprit?—Yes.

1211. There is a certain give in the knot, is there not?—Yes, there is a certain give in the knot.

1212. Are the hooks or eyes of the chains to which you tie your rope all of the same height above the drop upon which the culprit stands?—No.

1213. So that if you go to one gaol, and you have a man 6 feet high, and you determine to give him a drop, we will say, of 6 feet, you will have a certain length of rope from the point where you tie it?—Yes.

1214. If you go to another gaol to execute a man of a different height and the same drop you may be compelled to have a different length of rope, might you not?—I always take two with me.

1215. I mean there is a different length of rope in use from the knot to the neck of the culprit?—Yes.

1216. Depending upon the height of the apparatus above the drop?—Yes.

1217. That must affect the question of the amount of stretch given by the rope, because you have got more rope in one case than you have in another?—Yes, I have.

1218. Let me ask you this: suppose you had a culprit 6 feet high and you wished to give him a 6-feet drop, and the point at which you were going to tie the rope was 8 feet, how would you set about measuring your rope in order to give the man a 6-feet drop; what would you do?—I should tie my rope and leave 6 feet clear, so that his head would be where his feet were when I had done it. The top of his head would be where his feet would be with a clear 6-feet drop.

1219. You mean that in that case he falls his own height?—Yes.

1220. What length of rope would you give?—Eight feet.

1221. Would that be the whole without the allowance that you spoke of for the neck?—No, I should not give any allowance in a case like that.

1222. Supposing that a man were 5 feet high, and you wanted to give him a 6-feet drop, and also that the attachment again was 8 feet above you, and everything the same as before, except that the man was a foot shorter, what length of rope would you give then to give him a 6-feet drop?—I should give him 8 feet just the same.

1223. Say that you are 8 feet above a man 6 feet high with a 6-feet drop, what length of rope would you give?—I should give him 9 feet of rope.

1224. Now then, supposing the same thing, except that the man is 5 feet high, what are you going to give him then?—I should give him 9 feet.

1225. Would you give him a 6-feet drop?—Yes.

1226. It would be the same as you give a 6-feet man?—Yes, but that depends upon the weight; I should want to know his weight.

1227. I am supposing that you determine on giving a 6-feet drop in both cases, the point of attachment is 8 feet above the scaffold, and that you have got a man 6 feet high, what length of rope would you give?—If he was 6 feet high I should give him 8 feet of rope, allowing 2 feet above his head to the beam; he would not feel it with 2 feet of rope above his head; the rope has nothing to do with the drop.

1228. You have got a hook or an eye or something of that kind 8 feet out from the drop?—Yes.

1229. With a man 6 feet high what length of rope would you give in order that there might be a drop of 6 feet?—Eight feet of rope.

1230. Supposing a man were only 5 feet high, and you wanted to give him the same drop, what would you give him?—I should give him 9 feet.

1231. (*Dr Haughton.*) When you talk of the height of a man, do you mean the height of the man to the top of his head or the height of the man to his neck?—The height of the man to his neck.

1232. (*Sir Frederick Bramwell.*) Let me ask you this: if the execution is to your mind thoroughly successful, do you expect the neck to be broken or not?—Yes, I should expect the neck to be dislocated.

1233. That is to say, your aim would be that the neck should be dislocated, and that the head should not come off or the neck be torn so as to cause blood?—Yes.

1234. This plan has been shown to the Committee by a gentleman (*showing to the witness Dr. Marshall's second invention*). The suggestion is that the eyelet of the loop should be made the means of carrying what has been called a trough to go under the chin of the culprit, and that instead of the leather washer to prevent the noose loosening after it has been tightened, there should be this little spring, as I have shown you, so that the rope can run out when the drop comes, and tighten round the neck, as you see, prior to the execution, and cannot go back again after the noose has been drawn; do you see that?—Yes.

1235. You also see that there is a spring clip upon the trough into which what I will call the ascending rope can fit, and it is suggested that with this arrangement the result would be to put an upward strain of the rope which should be upon the chin?—Yes.

1236. And it is thought that with this the rope could not get away at either side of the chin?—Yes, I see what you mean.

1237. Can you at all tell the Committee whether in your judgment that would be a likely means of ensuring the dislocation of the neck, more likely, I mean, than the ordinary mode of applying the knot with an equal fall, to begin with? Supposing you are about to hang a man, and you determine that you will give any fall you like to say—we will say 6 feet—and you give it with the ordinary mode of attaching the noose and the ordinary apparatus, do you think that the apparatus which I have just shown to you would be as likely or more likely or less likely to produce dislocation, or do you require time to think about it?—I should like to study about it before giving an opinion.

1238. (*Dr. Haughton.*) Where do you usually put the knot?—I generally put it just at the back of the left ear. (*The witness examined and put on Dr. Marshall's apparatus, which was explained to him.*)

1239. (*Chairman.*) Now that the working of this gentleman's plan has been explained to you, do you wish to make any observations?—No, none whatever.

1240. Is there any other question for your own satisfaction which you wish to be put to you?—No, not any that I am aware of.

1241. Have you said all you wish to say?—Yes. I have carried out every execution excepting one to the satisfaction both of the Governors and the different doctors in the different prisons ever since I commenced.

1242. Which was the one exception?—That was the case where the trap would not work.

1243. (*Sir Frederick Bramwell.*) It is only reasonable to say, speaking as any other man would, that if

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the drop would operate by itself without any weight upon it, still more must it operate when there is weight upon it?—Yes.

1244. And it was entirely unexpected, and almost an impossible thing, that the result of putting a weight upon the drop should prevent it falling?—Yes, I think so.

1245. Have you any suggestion to make about any improvement of the machinery of the drop as compared with the drop at Newgate?—If they were all made the same as the one at Newgate I do not think there would be any failure whatever.

1246. You are quite satisfied of that?—Yes.

1247. (*Chairman.*) Do you know the drop at Leicester?—Yes, it is a round house in the exercise yard, with a wooden beam 10 feet high, and the apparatus itself is thoroughly strong enough, and will go off, like the cock of a gun, in a minute—a child could pull the lever and it would go off.

1248. Have you found any drops in the country imperfect?—I have complained of one or two. I complained of the one at Exeter before I started, but since the Exeter to-do they have made them nearly all new, and they have made them nearly all on one principle, and very strong and substantial scaffolds they are.

1249. (*Sir Frederick Bramwell.*) This Leicester drop, I gathered from you, was light in its construction, how many could be executed upon it at once?—I believe it will execute four.

1250. Supposing that you had four persons to execute, have you formed any opinion as to whether it would be less shock to the prisoners if they were executed one after another with an interval between, or whether they had better be executed all four at once?—All four at once.

1251. It takes you a longer time to prepare them, does it not?—Proportionally. If I had them all together it would not occupy above three minutes on the scaffold, not all four of them.

1252. Supposing that you had only one on the scaffold, how long would it occupy?—It would occupy about a minute.

1253. (*Chairman.*) Have you ever had any difficulty or trouble in the country in dealing with the sheriffs and those appointed to supervise the executions?—I have only had trouble once; I had to put it into my solicitor's hands.

1254. What sort of trouble was it?—It was in Kilkenny, in Ireland. I had agreed upon the terms and it was a question of recovery of payment.

1255. I mean were you interfered with in your method of conducting the execution?—No, they generally leave it all to my charge.

1256. The only difference of opinion that there has been was with regard to the question of remuneration?—Yes.

1257. Sometimes they allow you the price of the rope, and sometimes they will not?—Yes, that is so.

1258. You know that beforehand?—Yes; I have to correspond with them. Some sheriffs are not particular to a pound or two, and others are very particular. You will find them vary.

1259. What is the cost of a rope?—A guinea. Every rope that is paid for at Newgate is one guinea.

1260. Is that its real value?—No; I could have it made at Woods', one of the largest rope manufactories in Lancashire, for about a quarter of the price, for 5s. or 6s.

1261. Who gets the profit?—I do not know. A guinea is a long price for a rope 12 feet long.

The witness withdrew.

APPENDIX.

APPENDIX No. 1.

LAW of FALLING BODIES, showing the TIME and INCREASE of WEIGHT.

	Feet falling.	Time in seconds.	Weight increases.
			Times.
	1	$\frac{1}{4}$	8 .
	2	0 . 35	11 . 3
	3	0 . 43	13 . 9
	4	$\frac{1}{2}$	16 . 0
	5	0 . 56	17 . 6
	6	0 . 61	19 . 6
	7	0 . 66	21 . 2
	8	0 . 70	22 . 7
	9	0 . 75	24 . 1
	10	0 . 79	25 . 3

SCALE showing the STRIKING FORCE of FALLING BODIES at DIFFERENT DISTANCES.

Distance falling in Feet Zero.	8 Stone.	9 Stone.	10 Stone.	11 Stone.	12 Stone.	13 Stone.	14 Stone.	15 Stone.	16 Stone.	17 Stone.	18 Stone.	19 Stone.	20 Stone.
	wt. qr. lb.	wt. qr. lb.	wt. qr. lb.	wt. qr. lb.	wt. qr. lb.	wt. qr. lb.	wt. qr. lb.	wt. qr. lb.	wt. qr. lb.	wt. qr. lb.	wt. qr. lb.	wt. qr. lb.	wt. qr. lb.
1 feet - -	8 0 0	9 0 0	10 0 0	11 0 0	12 0 0	13 0 0	14 0 0	15 0 0	16 0 0	17 0 0	18 0 0	19 0 0	20 0 0
2 feet - -	11 1 5	12 2 23	14 0 14	15 2 4	16 3 22	18 1 12	19 3 2	21 0 21	22 2 11	24 0 1	*25 1 19	*26 3 9	*28 1 0
" 6 inches -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	*26 3 2	- - -	- - -	- - -
3 feet - -	13 3 16	15 2 15	17 1 14	19 0 12	20 3 11	22 2 9	24 1 8	*26 0 7	*27 3 5	29 2 4	31 1 2	33 0 1	34 3 0
" 6 inches -	- - -	- - -	- - -	- - -	- - -	- - -	*26 0 18	- - -	- - -	- - -	- - -	- - -	- - -
4 feet - -	16 0 0	18 0 0	20 0 0	22 0 0	24 0 0	*26 0 0	28 0 0	30 0 0	32 0 0	34 0 0	36 0 0	38 0 0	40 0 0
5 feet - -	17 2 11	19 3 5	22 0 0	24 0 22	*26 1 16	28 2 11	30 3 5	33 0 0	35 0 22	37 1 16	39 2 11	41 3 15	44 0 0
6 feet - -	19 2 11	22 0 5	24 2 0	*26 3 22	29 1 16	31 3 11	34 1 5	36 3 0	39 0 22	41 2 16	44 0 11	46 2 2	49 0 0
7 feet - -	21 0 22	23 3 11	*26 2 0	29 0 16	31 3 5	34 1 22	37 0 11	39 3 0	42 1 16	45 0 5	47 2 22	50 1 11	53 0 0
8 feet - -	22 2 22	*25 2 4	28 1 14	31 0 23	34 0 5	36 3 15	39 2 25	42 2 7	45 1 16	48 0 26	51 0 8	53 3 18	56 3 0
9 feet - -	*24 0 11	27 0 12	30 0 14	33 0 15	36 0 16	39 0 19	42 0 19	45 0 21	48 0 22	51 0 23	54 0 25	57 0 26	60 1 0
10 feet - -	25 1 5	28 1 23	31 2 14	34 3 4	37 3 22	41 0 12	44 1 2	47 1 21	50 2 11	53 3 1	56 3 19	60 0 9	63 1 0

(Signed) L. WARD, Chief Warder, Newgate.