OF THE

COMMITTEE

APPOINTED TO INQUIRE INTO THE

Existing Practice as to carrying out of Sentences of Death, and the Causes which in several recent Cases have led either to failure or to unseemly occurrences; and to consider and report what arrangements may be adopted (without altering the existing Law) to ensure that all Executions may be carried out in a becoming manner without risk of failure or miscarriage in any respect.



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TO THE RIGHT HON. H. MATTHEWS, SECRETARY OF STATE FOR THE HOME DEPARTMENT

Sir,

Your Committee having been appointed by Sir R. A. Cross to report upon the matters mentioned in the letter hereunto appended, beg leave to say that they have frequently met, have examined witnesses, whose evidence accompanies this report, and have, through some of their members, made experiments bearing on the subject of their inquiry. The direction of the Home Secretary, to make only such suggestions as might be acted upon without demanding any change in the existing laws, has necessarily limited the range both of their inquiries and of their recommendations. Subject to this observation, they present the following Report:—

The existing practice as to the carrying out sentences of death is as follows:-The prisoner is taken from the court, where sentence has been passed upon him, to the prison from whence he came. He is there, after the established interval, hanged by the neck until he is dead, and his body is buried within the precincts of the prison. The sheriff is charged with carrying the sentence into execution, and he usually fulfils his duty through an under sheriff, who appoints and pays an executioner. It is now customary for all sheriffs to employ the same person, though it is not obligatory on them to do so. As a matter of fact county sheriffs ascertain the name of the executioner who has been chosen by the sheriffs of London and Middlesex, and employ him. Formerly the City of London gave a retaining fee of 20*l*. a year to the person whom they selected to act as an executioner, to enable the sheriff to have the first call on his services, but there was no regular appointment, and the sheriffs did not feel themselves bound to confine themselves to the service of the person whom they had so retained. The practice of paying this fee has now been discontinued, and the executioner employed is paid for each execution as it occurs, both in London and in the country. He generally receives 10*l*. for executing one man, and 5*l*. for each further execution carried out on the same day and at the same place by him. Out of these fees he has to pay his railway fares and to provide the rope and pinioning apparatus. No provision has been made for the training of an executioner in the duties which he is expected to perform, and if anything were to happen to prevent the attendance of the person usually selected, some substitute must be found who in all probability would be completely inexperienced and untrained.

The practice which existed immediately preceding the taking over in 1878 of the prisons by the Government, as to furnishing the fixed apparatus varied in different localities. In some the sheriff provided this apparatus, in others it was supplied by the local prison authority; consequently the apparatus in the prisons transferred to the Commissioners was of various types. In some the construction was such as to oblige the culprit to ascend a flight of steps to reach the platform under the beam from which he was hanged. This arrangement involved great inconvenience and distress, as the culprit, under the severe mental strain of his situation, a strain which sometimes rendered him incapable even of walking, was frequently unable to ascend the steps without assistance. In other forms the mechanism of the apparatus was unnecessarily cumbrous, or was such as to detain the pinioned culprit under the beam for some little time while the executioner passed over to reach the lever which actuated the drop. In many cases the apparatus was only erected immediately before it was required, the several parts being, as a rule, stored away so as to be out of sight. The scaffold when constructed was often placed in the prison yard, subject to the action of the weather, which affected the condition of the rope and of the woodwork of the apparatus, and caused much inconvenience to all who were engaged at the execution.

The Prison Commissioners, recognising these defects, have of late made arrangements to construct the apparatus of an improved type, and to place them under cover.

The drop at Newgate, which has always been found to work in a satisfactory manner has been followed as a guide. In this construction the culprit is placed on a platform on the level of the ground, and when the bolt is drawn, he falls into a pit of sufficient depth to admit of his remaining suspended without touching the ground. The obligation to provide a fit place of execution attaches to the sheriff under the Capital Punishment Amendment Act of 1868, but the Prison Commissioners have voluntarily made the above described arrangements with the view of reducing as much as possible the difficulties which the sheriff has to encounter.

There are no fixed rules for the use of the apparatus, for the size or make of the rope, for the method of pinioning, nor for the length of drop to be given to the culprit; and the whole of the details of the execution are practically in the hands of the executioner.

The Committee have only been able to find one instance of the failure of an apparatus constructed by the Prison Commissioners. It occurred at Exeter in 1885. The apparatus proved unworkable at the time of execution. There was a defect in its construction of a most singular and occult character, one that resulted in causing the weight of the culprit when standing on the doors to prevent their falling on the withdrawal of the bolt although when the doors were not thus weighted they would fall freely, as had been ascertained on the day prior to the execution by actual experiment, and as indeed was shown in the course of the attempts made to carry out the sentence.

Up to the year 1856 it was the practice to pinion only the arms of the culprit, but there occurred then at Newgate a painful scene with a man named Bousfield, who struggled and threw out his legs when the drop was given, so that his feet caught against the edge of the pit, and the man, although hanging by his neck for a considerable time, was not executed until his legs were secured. This circumstance caused the executioner to give especial care to the pinioning of the culprit's legs in all subsequent executions, and the practice has been adhered to ever since, with good results.

With regard to the rope used, executioners have always preferred to provide those of their own selection; and there are no rules for testing them. In 1878 a failure took place in Yorkshire in consequence of the breaking of a rope. The Secretary of State, as a result, ordered an inquiry, and directed that a pattern rope should be made of a rope such as might be safely used for executions.

Messrs. Edgington & Co. produced this pattern, which having satisfactorily passed severe tests was approved by the Secretary of State and a stock of such ropes was ordered to be kept at Newgate in readiness for issue whenever application might be made by the sheriffs. This standard rope is 2¹/₂ inches in circumference, 12 feet 6 inches in length, and is made of white Italian hemp of four strands, each strand having 15 threads, and is provided at the lower end with a brass thimble laid in. A leather washer $2\frac{1}{2}$ inches in diameter and about $\frac{1}{2}$ inch thick is placed on the rope and made to slide rather stiffly on it, in order, as herein-after mentioned, to keep the thimble in its place when the rope is being used. No failure as regards strength has been recorded when these ropes have been employed.

The bight or noose which is required for the culprit's neck is formed by passing the standing part of the rope through the thimble, the leather washer is then slipped on up to the thimble, which at that time is so situated as to leave plenty of room in the noose to admit of its being readily passed over the culprit's head. The plain end of the rope is used to make attachment, by means of a knot with the overhead beam of the gallows, or with an iron ring suspended therefrom. This mode of attachment to the overhead beam has two disadvantages, one the difficulty of so making the knot that the length of the drop may be measured beforehand, the other that a portion of the "energy" of the fall which should be expended in dislocating the neck of the culprit is expended in tightening the knot.

Until very recently it was the custom to allow the slack of the rope to hang freely down the Ward 178culprit's back. In this manner a bight was formed, and if there was any movement by the culprit at the moment of drawing the bolt, his elbow or wrist was liable to be caught in his fall. Instances of this having occurred involving failure in carrying out the execution in a proper manner were brought to our notice.

> It is now well recognised, however, that the slack of the rope can, by means of a pack thread, be secured in a loop well above the head of the culprit; the pack thread breaking with ease on the fall taking place, and allowing the rope to fulfil its function.

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Pinioning

The rope is generally adjusted around the neck of the culprit, so that the thimble on the rope is brought close under and behind the left ear. The executioner makes it quite tight by pushing the leather washer close up to the neck so as to prevent the noose from changing its position before the drop takes place, or from slipping over the head when the weight of the body comes upon the rope. With regard to the position of the thimble the Committee have received various suggestions from medical witnesses, by some of whom it is considered that it would be better to place it as far to the front as possible, a position which according to their views would cause the shock of the fall to be delivered against the back of the neck, and would thus be more likely to secure the dislocation of the spinal column, and at the same time it would reduce the tendency of the rope to lacerate the soft tissues of the neck.

Dr. J. de Zouche Marshall, of Lamberhurst, who has given much consideration to this subject, and who with praiseworthy zeal has attended several executions lately for the purpose of noting the present practice, has recommended as an improved mode of attaining these ends the use of a chin trough, by which the rope might be held at the very point of the chin. He attaches great importance to the use of such an implement, as he maintains that the head can in this manner be thrown back by the rope when the fall takes place, and that dislocation can be effected with a drop of less length than is required by the existing system, and thus he believes there would be secured instant loss of consciousness and painless death without danger of decapitation.

The Committee have carefully considered this suggestion, but have come to the conclusion that the leverage which would be thus exerted would not be sufficient to throw the head back to an angle which in all cases would ensure the dislocation required, and they are not prepared to recommend the adoption of Dr. Marshall's ingenious device of the chin trough. Impressed as they are with the necessity for the utmost simplicity of mechanism, and rapidity of action in the operations connected with executions, they are averse to the use of any apparatus involving extra time in preparing the culprit, and they are of opinion that, without resorting to this mechanical contrivance, other and simpler means may be adopted for producing instantaneous loss of consciousness and death. It would appear that death by hanging may be looked upon for all practical purposes as being in one of two ways:—

(a.) Suffocation.

(b.) Shock to the base of the brain, accompanied by dislocation or fracture of the cervical vertebræ and rupture of the spinal cord, attended with instantaneous loss of consciousness.

If the drop is too short there is danger of death by suffocation (mode "*a* ") without instantaneous loss of consciousness.

The evidence adduced makes it too certain that this form of death involves from at least one to three minutes of extreme agony, and also the appearance of intense suffering lasting for a much longer period, which even if only an "appearance", and even if we could be assured it was accompanied by absolute insensibility, is nevertheless very distressing to all those whose duty may oblige them to be present.

If, in order to guard against the danger of this aggravation of the culprit's sufferings, the drop is lengthened so as to ensure death by the mode "b", there arises the danger of decapitation, a result, indeed, not involving pain to the culprit, but revolting in itself, and affecting the public imagination. It appears to us clear that whatever may be the shock which the public may from time to time receive, it is in the true interests of humanity that the mode "a" of causing death should be given up, and the mode "b" alone should be pursued. It remains, therefore, to be considered whether instantaneous loss of consciousness, and therefore painless death, may not be produced without risk, or with greatly minimised risk, of decapitation.

All the cases stated in evidence before the Committee, in which the length of the drop was accurately known and a post mortem examination was made by careful anatomists, have been brought together by Professor Haughton, and they are given below in a tabular form in order to show the results at a glance. The energy developed by the drop has been taken as the weight of the culprit in pounds multiplied by the distance through which he falls in feet.

Case	Weight in lbs.	Drop in feet	Energy in foot lbs.		Remarks	
1	160	14.5	2320.0	Instananeous loss of consciousness and death. Almost decapitation.		
2	160	14.5	2320.0	Decapitation		
3	147	7.5	1102.5	Instantaneous loss of consciousness and death.		
4	133	11.0	1463.0	Do.	do.	
5a	194	9.02	1780.0	Do.	do.	
6b	161	9.04	1455.0	Do.	do.	
7c	152	9.08	1380.0	Do.	do.	
8 <i>d</i>	154	9.00	1386.0	Do.	do.	

EVIDENCE of the 16th March 1886 by the Rev. Dr. Haughton, and of 17th March 1886 by Surgeon W. A. Carte, M. B.

EVIDENCE of the 23rd March by Dr. James Barr.

Case	Weight in lbs.	Drop in feet	Energy in foot lbs.	Remarks	
9	158	7.00	1106.0	Death by suffocation	
10	134	7.47	1001.0	Do.	
11	142	7.67	1082.0	Do.	
12	157	7.94	1248.0	Instantaneous loss of consciousness and death.	
13	158	8.00	1264.0	Do. do.	
14	144	$9{\cdot}17$	1320.0	Do. do.	
15	118	9.50	1121.0	Do. do.	
16	155	8.62	1336.0	Do. do.	
17	130	9.25	1202.0	Do. do.	
18	142	9.25	1313.0	Do. do.	
19	144	9.50	1368.0	Do. do.	
20	118	10.75	1268.0	Do. do.	
21	130	11.06	1438.0	Do. do.	
22	131	10.70	1402.0	Do. do.	
23	130	8.75	1139.0	Do. do.	

Excluding the cases 1 and 2, in which decapitation actually or nearly took place with a drop energy of 2320 ft. lbs., and also excluding cases 9 to 11, in which death took place from suffocation with a drop energy of 1106 ft. lbs. and under ; the remaining 18 cases give a mean drop energy of 1,330 ft. lbs., in which death took place instantaneously, without decapitation.

Case	Weight in lbs.	Drop in feet	Energy in foot lbs.	Remarks
1	147	7.0	1029	Death by suffocation.
2	193	4.0	772	Do.
3	134	6.5	871	Do.
4	144	6.0	864	Do.

EVIDENCE of the 15th June 1887 by Dr. J. de Z. Marshall. Four cases (without post mortem examination) confirm the preceding.

In these four cases the heart beat naturally for 10 minutes after the fall.

Cases of malformation and disease, however, require to be taken into consideration. There was a case in 1885 of a man named Goodall, who was executed at Norwich and who was decapitated. The evidence shows that the energy developed by the drop was only 1,260 ft. lbs.; but the culprit had a slender neck, Barr, 748 and his tissues were degenerated. The clamour raised by the public in this case led to a most unfortunate result. The executioner was frightened, and some of the executions which followed were effected with too short a drop; and there is reason to believe that the sufferings of the culprits were thereby considerably prolonged.

Although no doubt the simple process of multiplying the weight of the culprit into the number of feet of fall results in giving correctly the stored up energy produced, the question still remains, "What proportion of this energy will be employed in doing the intended work of giving shock to the brain, instantaneous insensibility, and painless death?" There are various incidents necessarily occurring at every execution by hanging which are found to affect the energy of the drop, the principal of these are-

The stretching of the rope.

The springing of the beam.

The tightening of the knot at the top of the rope.

The constriction of the neck of the culprit.

With the object of forming some opinion of the practical value of these absorbents of energy experiments were carried out on the drop at Newgate under the direction of the Committee by the aid of a dynamometer. The weights employed were sacks filled with sand, and to these a fall was given similar to that which would be given to a culprit of the same weight.

The sacks were made up in various ways, shins of beef, and flannel, being inserted in their orifices to represent, more or less, the yielding nature of a human neck.

In these experiments the stretch of a new rope of the approved pattern was found to be 10 inches in 10 feet at first, but decreasing to such an extent, after several times of using, as almost to disappear.

After a rest of some 24 hours, however, the rope was found to have nearly returned to its original length and elasticity.

In these experiments the constriction of the human neck could not, of course, be measured, but Barr, 716 from observation made at executions the diminution of the circumference has been found to amount to from five to seven inches.

Recommendations.

The Committee are precluded by the terms of the reference from making any suggestions which Appointwould involve a change in the existing law ; they believe, however, that they will not be infringing ment of this limitation if they point out some objections to the method of appointment of an executioner.

As has already been stated, the sheriffs of London and Middlesex select and appoint a person, who is thereupon generally employed by the sheriffs of England, Scotland and Ireland.

Confining our comments to the last three executioners, it appears that Marwood, otherwise an efficient officer, was during the latter part of his career frequently drunk. On his death Binns was Ward, 93. selected as recently as September 1883, from among hundreds of candidates.

He is represented by Dr. Barr as a drunken fellow, strong, but very clumsy and "obviously Barr, 652, et unintelligent". Dr. Barr has seen him drunk while executing criminals on more than one occasion, seq.

executioner. De Keyser, 851

and had observed the clumsiness with which he did his work.

For his drunkenness he was dismissed, but not until he had given frequent proofs of his utter unfitness for his duties.

The scandals caused by the misbehaviour of this man led to some regulation as to the housing of the executioner when on duty in county towns, resulting in his being accommodated in the gaols on his arrival and during his stay; these regulations have worked well, and seem calculated to prevent the repetition of the scandals which previously occasionally occurred; and so far as we have been able to ascertain, the conduct of Berry, the present executioner, has in this respect been irreproachable.

Some suggestions for the improvement of the present practice have been made, which although they do not recommend themselves to the Committee, may be submitted to the consideration of the Secretary of State. One is, that executions should be performed in London and elsewhere by the warders of prisons. This might possibly done without any change in the law by the appointment of a warder *ad hoc* by the present authorities, viz. the sheriffs, with the sanction of the Secretary of State. It has also been suggested that an officer of surgical education and of special knowledge of the subject should be appointed by the Secretary of State to be present at all executions, and to exercise supervision and authority, so as to secure the observance and proper application of general rules framed to ensure death in the speediest and least revolting manner.

It is for the Secretary of State to determine whether, having no authority or official responsibility in the appointment of an executioner, he would venture to assume the practical responsibility for the details and incidents of every execution.

Whoever may be the person or body who hereafter appoints the executioner, we are of opinion that it is very important and desirable that this same person or body should also appoint a permanent assistant or deputy executioner who might gradually acquire experience, might assist where several criminals were simultaneously executed, or might replace the executioner when he was ill, or when his presence was required in different places at the same time, but in the present condition of the law, the Committee cannot do more than give expression to this opinion.

The Committee now proceed to recommend some general regulations which, if intelligently acted upon, would, in their opinion, greatly improve the existing practice, and would tend to secure the objects for which they were appointed.

The result of the 18 successful executions recorded in the evidence is, that the culprits were executed with instantaneous loss of consciousness without being decapitated, the average energy developed by the drop being 1.330 ft. lbs. The statistics before the Committee, however, tend to show that an energy not greater than 1,260 ft. lbs. may be fully depended upon to produce instantaneous loss of consciousness and the speedy death even of the most robust.

For those, however, of very light weight, such as 8 stone and under, who have thin necks and a light build, it is considered that it would be not advisable to adopt a greater energy in the drop than 1,120 ft. lbs.

The Committee therefore recommend that there be adopted a provisional standard for future executions of the following scale of drops:—

Weight of Culprit		D	rop	Energy developed
Stone.	Pounds.	Feet.	Inches.	Feet Pounds.
7	98	11	5	1,119
8	112	10	0	1,120
9	126	9	6	1,197
10	140	9	0	1,260
11	154	8	2	1,258
12	168	7	6	1,260
13	182	6	11	1,259
14	196	6	5	1,258
15	210	6	0	1,260
16	224	5	7	1,250
17	238	5	3	1,250
18	252	5	0	1,260
19	266	4	8	1,241
20	280	4	5	1,260

Barr, 662. Barr, 675. Gowan, 828. Metcalfe, 894-6.

Gowan, 827. et seq. De Keyser, 862. Metcalfe, 944, et seq.

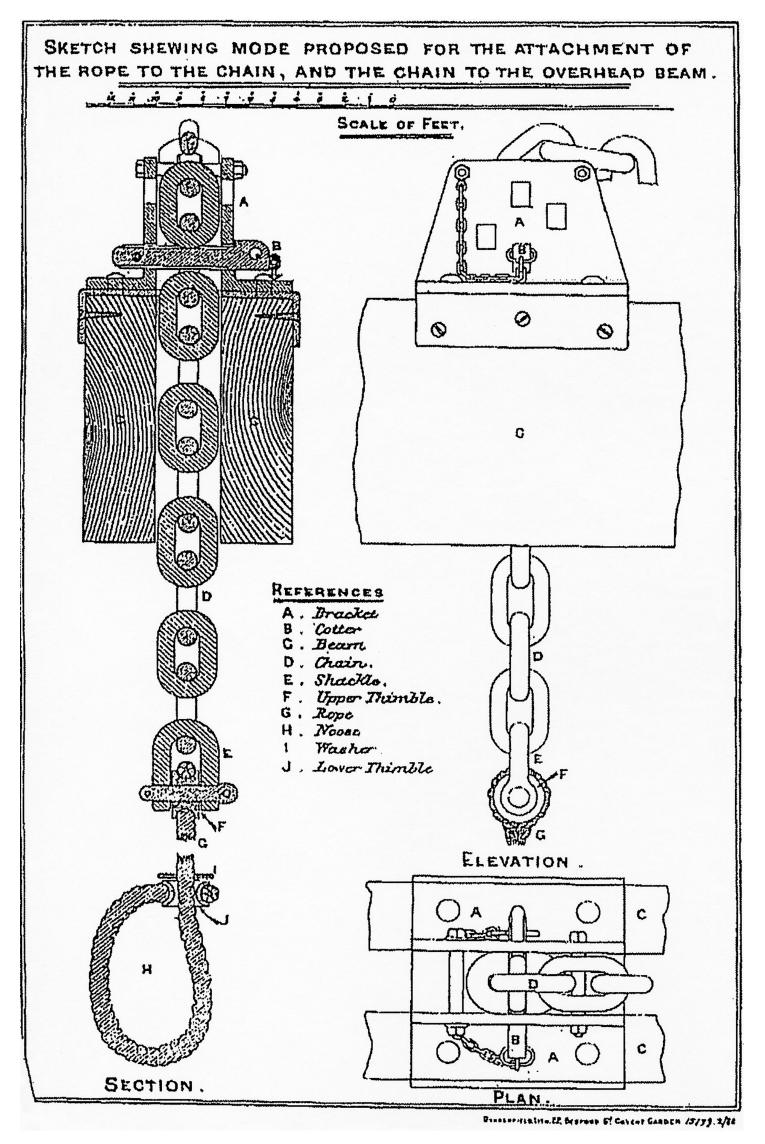
A standard scale for

Berry, 1156-

1163

scale for drops.

REPORT.



Should this scale be adopted it will be necessary to effect some changes in the apparatus, which Alterations to existing is at present constructed only to meet the requirements of the shorter drops which have hitherto apparatus. been in use.

In order to secure the utmost uniformity in the action of the rope, it is recommended that for all The rope. executions it should be of the same length, quality, and manufacture, and that the pattern already approved by the Secretary of State should be adhered to.

The ropes should, before being issued for use, be tested by a drop test of double the strain to which they will be subjected at an execution, a sufficient number of times, upon loaded sacks of the weight of the culprit, and having the fall which will give the determined number of foot pounds so that it may be ascertained for certain that they are in good condition, and that the stretch is taken out as much as is necessary.

Instead of attaching the rope by means of a knot to a ring suspended from the overhead beam, according to the usual practice, it is recommended that after the noose for the culprit's neck has been made, the rope should be worked round a special thimble at its upper end, in order that it may be suspended from a strong inextensible chain, so fitted to the overhead beam as to be capable of being raised or lowered, and secured at any desired height by means of a cotter slipped into one of the links and a bracket fixed on the beam. The attachment of the rope to the chain to be by means of a shackle and pin passed through the special thimble.

Al risk of drawing tighter or slipping, which can take place with a hand-made knot would thus be entirely avoided. The arrangement is shown in the sketch. The cotter can be inserted between the links of the chain at intervals of 4 inches. The four slots in the bracket above the beam are at intervals of 1 inch vertically, so that the cotter can be placed in the link and slot, which will give the point of suspension of the rope to within an inch of the height required, according to the scale, for all weights and heights of culprits.

In the 18 successful cases above quoted, it was found that the average length of the drop was 9 Length of rope. ft. 3 in., and therefore this length of rope at least was required between the point of attachment to the beam, viz. the knot, and the washer at the culprit's neck. In order to maintain about the same extension due to the stretch of the rope, it is recommended that this length should in future be adopted.

The average circumference of a man's neck is 1 ft. 3 in. To form a noose around this with a 2¹/₂inch rope a length of 1 ft. 5¹/₂ in. is required. The compression or stricture of the tissues of the neck Barr, 716. is about 6 inches when the drop takes place, and therefore the length of rope to be allowed for the noose should be 1 ft. $5\frac{1}{2}$ in. -6 in. = $11\frac{1}{2}$ in. The total length of the standard rope may therefore be Barr, 716. 9 ft. 3 in. + $11\frac{1}{2}$ in. = 10 ft. $2\frac{1}{2}$ in. from centre to centre of the thimbles.

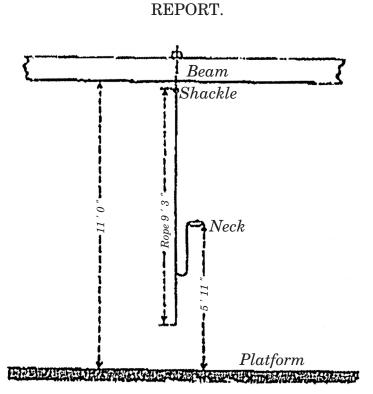
The height of the point of suspension of the rope would then determine the amount of the drop, Height of and this point of suspension should vary with the weight and height of the culprit being regulated so that the "bight" of the rope, or of the rope and the lower part of the chain, as the case may be, measured from the culprit's neck down to the bottom of the bight and up again to the same level, shall equal the drop.

The height of the overhead beam would be determined by the height of the point of suspension of Height of the rope for the heaviest man. Thus:—A man weighing 20 stone, with a total height of 6 ft. 6 in., or 5 ft. 11 in. to his neck, to receive a drop of 4 ft. 6 in., according to the scale, would require the point of suspension of the rope to be 10 ft. 8 in. above the platform; allowing then room for the shackle clear of the underside of the beam, the latter would have to be 11 feet above the platform.

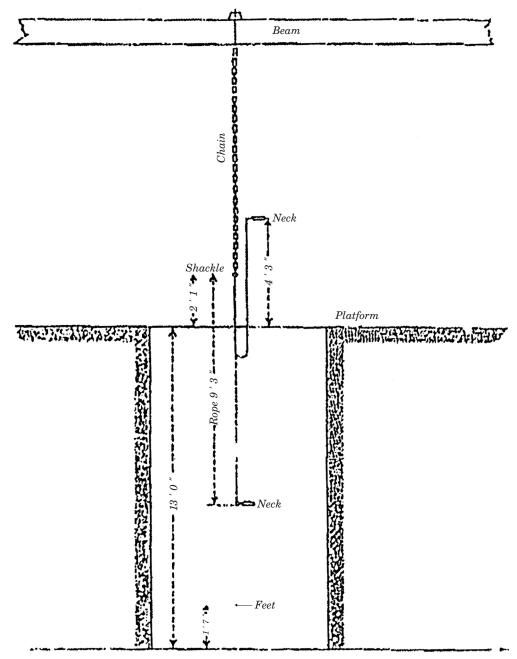
Mode of attachment of rope.

point of suspension of rope

the overhead beam.



Depth of pit. The depth of the pit would be determined by the length of drop given to the *lightest* man. Taking this to be 11 ft. 5 in., viz. the drop for a person weighing 7 stone, according to the scale of drops recommended, and allowing 1 ft. 7 in. for clearance below his feet, the pit would have to be 13 feet in depth.



The overhead beam should be of sufficient depth and thickness so as not to yield appreciably. The beam. when the drop takes place; and it should be made double, so as to allow the chain to hang vertically between the two parts anywhere over the centre line of the flaps of the platform. Several executions could thus be equally well carried out at the same time at a single gallows.

No alteration in the construction of the platform's levers or flaps lately adopted at the prisons is thought to be necessary, but the whole apparatus should be carefully tested several days before an execution is expected to take place with loaded sacks of the weight of the culprits, and finally at the testing of the rope within 24 hours of the time appointed for the execution.

Such testing with weighted sacks would make it clear that the drop would work successfully when the weight of the culprit was on it. Your Committee are of opinion that if measures can be taken to give effect to these recommendations, the failures, imperfections, and unseemly occurrences at executions may be to a large extent avoided.

We are desirous, however, of recording our opinion with respect of "decapitations," that if the condition of the culprit is such as to suggest the risk on the one hand of decapitation, or, on the other, of death by strangulation, *i.e.* of pain needlessly prolonged, we have no hesitation in saying that the risk of decapitation should be incurred. It involves no pain, for the culprit is already unconscious; whereas the fear of public censure has, as we have already stated, on several occasions led to an unnecessary prolongation of his sufferings.

We have a well grounded hope that by a careful observance of the precautions suggested in this Report the occurrence of this shock to public feeling will be of extreme rarity.

> We have, &c. ABERDARE H. SELDWIN IBBETSON. FREDERICK BRAMWELL. SAMUEL HAUGHTON. R. M. GOVER.

TO THE RIGHT HONOURABLE LORD ABERDARE. THE RIGHT HONOURABLE SIR HENRY SELWIN IBBETSON, BARONET, M.P. SIR FREDERICK JOSEPH BRAMWELL, F.R.S. REVEREND PROFESSOR HAUGHTON, M.D., F.R.S. ROBERT MUNDY GOVER, ESQ., M.D.

I, the Right Honourable Sir Richard Assheton Cross, one of Her Majesty's Principal Secretaries of State, hereby appoint you as a Committee to inquire into, and to report to me upon, the existing practice as to carrying out of sentences of death, and the causes which in several recent cases have led either to failure or to unseemly occurrences, and to consider and report what arrangements may be adopted (without altering the existing law) to ensure that all executions may be carried out in a becoming manner without risk of failure or miscarriage in any respect.

And I appoint you, Lord Aberdare, to be Chairman of the said Committee.

RICHARD ASSHETON CROSS.

Whitehall, 30th January 1886.