Royal Commission on Transport 1928 FIRST REPORT The Control of Troffic on Roads

-1929.



ROYAL COMMISSION ON TRANSPORT.

FIRST REPORT.

The Control of Traffic on Roads.

Presented by the Secretary of State for the Home Department to Parliament by Command of His Majesty, July, 1929.

LONDON :

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Note.

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TABLE OF CONTENTS.

PARAGRAPH	г . [.]						PAGE
1	Introduction and Scope of I	Report		•••		•••	1
4	Urgent Need for Legislation	a		•••	•••		3
5	Accidents		•••	•••		•••	3
14	Regulation of Traffic		•••	•••	•••	•••	8
15	Speed Limits for Motor Car	and l	Motor Cy	ycles	•••		8
. 22	Dangerons Driving		•••	•••			12
24	" Failing to Observe a Road	l Sign "	•••	•••	•••		13
25	Drunkenness when in Charg	e of a	Car		•••		13
26	Speed Limits for Mechani	ically	Propelle	d Ve	hicles	other	
	than Motor Cars	•••	•••	•••	•••	•••	14
30	Priority of Traffic at Cross	Roads	•••		•••	•••	19
33	Road Signs	• • •••	` •••	•••	•••	•••	20
34	Control of Traffic by Police	•••	•••	•••	•••	•••	21
36	Automatic Signal Lights	•••	•••	•••	•••	•••	23
37	Compulsory Insurance	• •••	• • •••	•••	•••		25
40	Tests for Drivers			•••	•••	•••	28
44	Minimum Age Limits for D	rivers		•••	•••		30
45	Pillion Riding		*	•••			31
46	Suggested Mechanical Restri	iction c	of Speed	•••	•••	•••	31
47	Suggested Alterations in Le	vels of	Highway	78	•	•••	31
48	Lights on Vehicles	•••	•••			•••	32
50	Red Reflectors on Cycles		•••	•••	•••	•••	32
51	Dazzling Headlights			•••		•••	33
52	Drovers' Lights		•••		•••	***	33
53	Parking Places			•••		•••	33
ö 5	White Lines	•••	•••		•••		34
56	Sign-Posts and Street Name	s		•••	•••	•••	35
57	Draft Road Traffic Bill-Cla	uses	•••	•••	•••		35
74	Suggested Code of Customs		•••		•••	•••	39
76	Summary	•••	•••		•••		42

.

APPENDIX.

TABLE	A.—Street Accidents in Great Britain in years 1909 to 1928	PAGI 47
TABLE	BNumber of Persons Killed and Injured in Street Acciden in Great Britain in years 1926 to 1928	its 48
TABLE	C.—Approximate number of Motor Vehicles and total number Accidents in years 1921 to 1928	of 48
TABLE	z D.—Analysis of Causes of Fatal Motor Accidents, June a July, 1928	nd 48
Tabli	E E.—Proportionate increase in the number of Street Accider compared with the number of Mechanically Propel Vehicles	
TABL	E F.—Return of the Estimated Rate of Speed of Vehicles concern in Fatal Street Accidents in the Metropolitan Po District during the years 1920 to 1926	lice

GEORGE R.I.

GEORGE THE FIFTH, by the Grace of God, of Great Britain, Ireland and the British Dominions beyond the Seas King, Defender of the Faith, to

Our Right Trusty and Well-beloved Counsellor Sir Arthur Sackville Trevor Griffith-Boscawen, Knight;

Our Right Trusty and Entirely-beloved Cousin William Bingham, Marquess of Northampton, Companion of Our Distinguished Service Order;

Our Right Trusty and Right Well-beloved Cousin George Herbert Hyde, Earl of Clarendon;

Our Trusty and Well-beloved :--

John Jacob Astor, Esquire (commonly called the Honourable John Jacob Astor), Honorary Colonel in Our Territorial Army, Major, late 1st Life Guards;

Sir Matthew Gemmill Wallace, Baronet;

Sir Ernest Varvill Hiley, Knight Commander of Our Most Excellent Order of the British Empire;

Sir William George Lobjoit, Knight, Officer of Our Most Excellent Order of the British Empire;

Isidore Salmon, Esquire, Commander of Our Most Excellent Order of the British Empire, Honorary Major, late General List;

Horace Evelyn Crawfurd, Esquire, upon whom We have conferred the Air Force Cross, Major, late Royal Air Force;

James Learmonth, Esquire;

Frederick Montague, Esquire; and

Walter Robert Smith, Esquire.

Greeting!

Whereas We have deemed it expedient that a Commission should forthwith issue to take into consideration the problems arising out of the growth of road traffic and, with a view to securing the employment of the available means of transport in Great Britain (including transport by sea coastwise and by ferries) to the greatest public advantage, to consider and report what measures, if any, should be adopted for their better regulation and control, and, so far as is desirable in the public interest, to promote their co-ordinated working and development:

Now know ye that We, reposing great trust and confidence in your knowledge and ability, have authorised and appointed, and do by these Presents, authorise and appoint you the said Sir Arthur Sackville Trevor Griffith-Boscawen (Chairman); William Bingham, Marquess of Northampton; George Herbert Hyde, Earl of Clarendon; John Jacob Astor; Sir Matthew Gemmill' Wallace; Sir Ernest Varvill Hiley; Sir William George Lobjoit; Isidore Salmon; Horace Evelyn Crawfurd; James Learmonth; Frederick Montague and Walter Robert Smith to be Our Commissioners for the purposes of the said enquiry:

And for the better effecting the purposes of this Our Commission, We do by these Presents give and grant unto you, or any five or more of you, full power to call before you such persons as you shall judge likely to afford you any information upon the subject of this Our Commission; to call for information in writing; and also to call for, have access to and examine all such books, documents, registers and records as may afford you the fullest information on the subject, and to inquire of and concerning the premises by all other lawful ways and means whatsoever :

And We do by these Presents authorise and empower you, or any of you, to visit and inspect personally such places as you may deem it expedient so to inspect for the more effectual carrying out of the purposes aforesaid :

And We do by these Presents will and ordain that this Our Commission shall continue in full force and virtue, and that you, Our said Commissioners, or any five or more of you, may from time to time proceed in the execution thereof, and of every matter and thing therein contained, although the same be not continued from time to time by adjournment:

And We do further ordain that you, or any five or more of you, have liberty to report your proceedings under this Our Commission from time to time if you shall judge it expedient so to do :

And Our further will and pleasure is that you do, with as little delay as possible, report to Us under your hands and seals, or under the hands or seals of any five or more of you, your opinion upon the matters herein submitted for your consideration.

Given at our Court at St. James's, the fourth day of August, one thousand nine hundred and twenty-eight, in the Nineteenth Year of Our Reign.

By His Majesty's Command.

W. Joynson-Hicks

ROYAL COMMISSION ON TRANSPORT.

ROYAL COMMISSION ON TRANSPORT.

FIRST REPORT.

THE CONTROL OF TRAFFIC ON ROADS.

TO THE KING'S MOST EXCELLENT MAJESTY.

MAY IT PLEASE YOUR MAJESTY,

WE, the undersigned Commissioners, having been appointed to take into consideration the problems arising out of the growth of road traffic and, with a view to securing the employment of the available means of transport in Great Britain (including transport by sea coastwise and by ferries) to the greatest public advantage, to consider and report what measures, if any, should be adopted for their better regulation and control, and, so far as is desirable in the public interest, to promote their co-ordinated working and development, humbly submit to Your Majesty the following Report :—

INTRODUCTION AND SCOPE OF REPORT.

1. Up to the date of this Report we have held a number of private meetings and, in addition, have sat in public on 30 days for the purpose of taking evidence. We have examined orally 54 witnesses including, amongst others, representatives of the Ministry of Transport, the Railway Companies Association. the National Union of Railwaymen, the Associated Society of Locomotive Engineers and Firemen, the Railway Clerks' Association, the Automobile Association, the Royal Scottish Automobile Club, the Royal Automobile Club, the Municipal Tramways and Transport Association, the Tramways and Light Railways Association, the Commercial Motor Users Association, the Scottish Commercial Motor Users' Association, the London and Provincial Omnibus Owners' Association, the National Road Transport Employers' Federation, the National Traction Engine Owners and Users' Association. the Steam Cultivation Development Association, the Electric Vehicle Committee of Great Britain, the Furniture Warehousemen and Removers' Association, the Society of Motor Manufacturers and Traders, the Transport and General Workers' Union. the National Safety First Association, Lloyd's, the Accident Offices Association, the North Yorkshire and South Durham Regional Advisory Committee on Traffic Control, the Home Office, the Commissioner of Police of the Metropolis, the County

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Chief Constables' Conference, the Chief Constables' Association, the Cyclists' Touring Club, the Association of County Councils in Scotland, the Rural District Councils Association, the County Councils Association, the Urban District Councils Association, the Association of Municipal Corporations, and the Institution of Municipal and County Engineers.

We have also received a number of memoranda and many suggestions from other bodies and individuals from whom we have not taken oral evidence but to whom, nevertheless, we desire to express our thanks for the assistance they have given.

2. It became apparent early in our proceedings that at least three different sets of questions were involved in our very comprehensive reference, including (i) those concerning the free and easy movement of traffic on the roads and its control, mainly from the point of view of safety: (ii) those concerning the licensing of public service vehicles and the co-ordination of the various forms of road passenger transport with the object of obtaining the best and most economical public service; and (iii) those concerning the general co-ordination and development of all available means of transport, the road, the rail, canals, ferries, coastwise steamers, etc. In this Report we propose to deal with the first of these sets of questions only, and we hope to issue a Report on the second set in October. We shall leave over the third category for our Final Report.

3. It was not originally our intention to divide up our recommendations in this manner, or to present any interim Reports. Circumstances, however, have compelled us to adopt this procedure.

On the 7th November, 1928, a Bill entitled the Road Vehicles Regulation Bill was introduced into the House of Lords by Viscount Cecil of Chelwood, and later on it received a Second Reading. In the course of the debate the then Lord Privy Seal (the Marquess of Salisbury), speaking on behalf of the Government, suggested that the Bill might be referred to us for consideration. Following on this, we received on the 18th December a letter from the then Minister of Transport enquiring whether we would be prepared to undertake the consideration of the matters contained in this Bill and to present an interim Report on the subject. We replied on the 20th December that we should be willing to do this, but that, in view of the complexity of the subject and the highly controversial character of many of Lord Cecil's proposals, it would be impossible to do so earlier than June or July this year, and we further undertook so to rearrange our programme of evidence as to enable us to carry out this undertaking.

The Bill was subsequently referred to a Select Committee of the House of Lords, and as a result of its Report was rejected. In view of this fact, and in view also of the importance of dealing at once with all matters relating to public safety and the regulation of traffic on roads, we decided not to confine ourselves to the specific proposals of Lord Cecil's Bill, but to deal generally with this part of our terms of reference.

At a later stage of our proceedings the present Minister of Transport intimated to us that he hoped we should be able to deal in a further Report with the question of the licensing of public service vehicles, proposals for the reform of which had been included in Part IV of the Draft Road Traffic Bill circulated by the Ministry of Transport two years ago and, as indicated above, this we intend to do. Upon the solution of this difficult question depends to a large extent the co-ordination of the various forms of public transport services on the roads.

URGENT NEED FOR LEGISLATION.

4. We cannot sufficiently emphasise the urgency of the questions involved in this Report. Legislation is greatly overdue. The present statute law* on the subject, passed many years ago when motor traffic was in its infancy, is obsolete, and many of its provisions are generally disregarded. Probably not one motorist in a thousand observes the general speed limit of 20 miles per hour, and in many parts of the country no attempt is made to enforce it. But it may be, and occasionally is, capriciously enforced. Very few motorists rigorously observe the special speed limits of 10 or 12 miles per hour which have been imposed in many towns and villages. As regards motor omnibuses and coaches, the Minister of Transport, in October, 1928, raised the speed limit for heavy motor cars fitted with pneumatic tyres (a category which comprises most omnibuses and coaches) from 12 to 20 miles per hour, † but both before and since his action in so doing, many operating companies have issued time-tables, sometimes with the approval of the licensing authority, under which their vehicles are scheduled to travel at greater speeds than this. Such flagrant and universal breaches of the law tend to bring the whole law of the country into contempt, and the enforcement of those provisions of the law relating to mechanically propelled vehicles which are reasonable and necessary becomes increasingly difficult. The sooner an obsolete law, which is clearly no longer applicable to present circumstances and which public opinion refuses to support, is repealed or amended, the better.

ACCIDENTS.

5. The urgency of the matter is further accentuated by the greatly increased danger to life and limb on the roads, as

^{*} The Locomotives on Highways Act, 1896, and the Motor Car Act, 1903 (together cited as the Motor Car Acts, 1896 and 1903).

[†] The Heavy Motor Car (Amendment) Order, 1928 (Statutary Rules and Orders, 1928, No. 614)

shown by the very large increase in the number of accidents. From the statistics published by the Home Office^{*} it appears that last year no fewer than 6,127 persons were killed and 164,487 injured on the roads in Great Britain by accidents in which mechanical transport was involved. In the case of horse-drawn vehicles the figures are—killed 11, injured 351. The figures for accidents, irrespective of the number of persons killed or injured in each accident, during the last 20 years are set out in the Appendix (Table A).

Owing to alterations in the form of the returns furnished to and published by the Home Office, it is possible to give, for the years 1926 to 1928 inclusive, the number of persons killed or injured during those years as distinct from the number of fatal and non-fatal accidents. These figures will be found in the Appendix (Table B).

In Table C of the Appendix is given the approximate number of motor vehicles in each of the years 1921 to 1928 inclusive. These figures have been taken from the Returns published by the Ministry of Transport. Table E shows that the proportionate increase in the number of accidents has been almost identical with that in the number of mechanically propelled vehicles licensed. This is a very serious matter. The benefits conferred on the country by mechanical transport are indisputable, but 6,000 deaths in one year, with the prospect of a greater death-roll in each succeeding year until we reach what has been called "saturation point" as regards the number of motor vehicles, is a very heavy price to pay.

6. Some of the witnesses who represented motor organisations, while deploring the number of accidents and most anxious to render the roads less dangerous, attempted to convince us that if a true comparison were instituted with the railways, the road is really safer than the rail (*Shrapnell-Smith*, **M. 16/16** (*a*), Q. 4863).[†] They pointed out that there are very many more "traffic units" on the roads than on the railways; the "traffic unit" on the former consisting of each individual vehicle, which might contain only one person, and on the latter the entire train which might contain several hundreds. One witness even described a pedestrian as a "traffic unit" and added that he is a most important one (O'Gorman, Q. 4113). They further urged that pedestrians, pedal-cyclists, animals and other such "traffic units" are not permitted on the roads. In addition they pointed out that the

^{*} Return of Street Accidents caused by Vehicles and Horses, 1928.

[†] In this Report references to Memoranda of Evidence submitted to the Commission, and Questions answered by Witnesses, are made under the name of the Witness. For example, *Shrapnell-Smith*, M.16/16(a), Q. 4863, refers to paragraph 16(a) of the Memo. (No. 16) submitted by Mr. E. S. Shrapnell-Smith and to Question No. 4863 answered by him.

usual statistics of casualties on the railways refer only to passengers, and do not include accidents to railway servants (*Shrapnell-Smith*, Q. 4864). While we admit the truth of many of these contentions, the broad fact remains that the roads of the country, which were comparatively safe places before the advent of motor traffic, have now become excessively dangerous. In the year 1909, which is the earliest year for which statistics are available, there were 27,161 accidents involving life or limb on the roads. In 1928 the number was 147,582.

The only certain deduction which can be made from these figures is that mechanically propelled transport, notwithstanding all the advantages it confers, has been and is the primary cause of this deplorable state of affairs. It has been said, with some truth, that, notwithstanding the abnormal railway record of last year (when 72 persons were killed and 781 injured), the safest place in the world is an English railway train, the most dangerous a London street.

7. In considering the question of accidents difficulty arises from the fact that no comprehensive official statistics exist dealing with their causation, separating those due to the negligence of the driver of the vehicle or to the carelessness of the pedestrian and so forth. Full inquiries of this nature should be undertaken by the Minister of Transport, and the results embodied in periodical returns showing, in the case of all fatal accidents, the causes to which they are attributed. Figures, based mainly upon the admirable records kept by the Metropolitan Police, have indeed been published by the London Traffic Advisory Committee of the number of street accidents in Greater London. separating the various classes of vehicles involved in the accidents, and, in the case of fatal accidents, classifying the nature of the fatality.* From the particulars recorded in 1927 it appears that the vehicles mainly involved were private cars, trade and commercial vehicles, and motor cycles. Public service vehicles were involved in a far fewer number of accidents, and there can be no doubt of the great care and skill exercised by the drivers of omnibuses in London. But there are no official figures showing who was to blame in each case, and what the real causation was. Fortunately this gap in official information has to some extent been filled by the efforts of the National Safety First Association. Colonel J. A. A. Pickard, D.S.O., M.Inst.T., the General Secretary of that body, put in Tables compiled from information voluntarily supplied by a large number of Coroners, showing the causes in the case of fatal accidents. Though they are by no means complete, Colonel Pickard was of opinion that they convey a substantially accurate picture of what

^{*} Report on Street Accidents in Greater London, 1927.

Third Annual Report of the London and Home Counties Traffic Advisory Committee, 1927-28. (Appendix I).

has occurred, since in their general results they vary only slightly from year to year (Q. 7479). In these Tables the responsibility for accidents is shown in percentages. In Table D of the Appendix we reproduce the most recent figures, viz., those for the months of June and July, 1928, and, for the purpose of comparison, the figures for the two preceding years.

8. From this Table certain obvious deductions can be drawn. Of the accidents recorded, 39.1 per cent. are attributed to the motor driver or motor cyclist. We are persuaded that the great majority of drivers are careful and observe the usual amenities of the road, driving with skill and caution, but some of them are totally deficient in what has been called " road sense " and possibly will never acquire it, while there are a certain number who may be very skilful drivers but who, by travelling at excessive speed when speed is dangerous, but " cutting in " and by taking all kinds of unnecessary risks, are a nuisance and danger to the whole community. These " road hogs ", as they have been quite properly called, have not been dealt with severely enough under the existing law, partly owing to the state of the law, and partly because Benches of Magistrates are often too lenient. Since in many cases the offenders are persons of means, fines are of little use as a deterrent; the only effective remedies are suspension of licences for long periods or imprisonment or both.

9. It is remarkable how few accidents—only 1.4 per cent.—are attributed to inexperience on the part of drivers. The fact seems to be that the beginner, who must acquire his experience and road sense on the roads, is as a rule too frightened to take serious risks and is not therefore a serious danger, though he may be, and often is, an obstruction to traffic. This point was emphasised by several witnesses (Cooke, Q. 2609; Smith, Q. 3022; O'Gorman, M.14/47, Q. 4153; Pickard, Q. 7457). It is a very material consideration in coming to a decision on the vexed question of tests for drivers. (See paragraphs 41-43.)

10. With regard to excessive speed, Table D, put in by the National Safety First Association, shows that 15¹ per cent. of the accidents are attributable to "excessive speed having regard to all circumstances," but it may be noted that, according to figures supplied by the Chairman of the London Traffic Advisory Committee, 57 per cent. of the fatal accidents in London took place at speeds of less than 10 miles per hour (Maybury, Q. 801) (Appendix, Table F) (See paragraph 17). Weather conditions and causes due to the road account for only 4.2 per cent. and 6.2 per cent. of the accidents respectively, which are much lower percentages than might have been expected. Pedal cyclists account for 7.1 per cent. of the fatal accidents, the chief causes being classed as "swerving in front of vehicles," "riding carelessly," "lost control," "cornering carelessly." and "failure to signal." There is undoubtedly a good deal of careless riding on the part of pedal cyclists, although the figures indicate that an improvement is taking place, the percentage in 1927 having been 12.9.

11. We come now to accidents caused by the fault of pedestrians, which amount to no less than 35.4 per cent.* of the total number. Dangerous walking is indeed almost as productive of fatal results as dangerous driving. Pedestrians have, of course, had the right to use the King's highway from time immemorial, and they do not appear to realise the greatly increased danger under present conditions. They step off the pavement carelessly without turning round to see if traffic is coming up from behind, they cross streets diagonally indulging in what in the United States is known as "jay-walking," they fail to make full use of islands, and show a positive aversion to subways. People stand talking at dangerous corners, without keeping any look-out, thus blocking the traffic and endangering their lives. In country districts there are frequently no footpaths, and when there are, pedestrians usually prefer to walk on the road. This is not altogether to be wondered at, since many road authorities are careful to create a smooth surface on the roadways and to leave the footpaths rough and uncomfortable to walk on. It should be definitely laid down that road authorities should be bound to provide footpaths on all new and reconstructed roads and on all old roads where none now exists and the width of the road renders this possible, and that the footpaths should be maintained in as good a condition as the roadways.

Further, if the rule of the pavement for foot passengers could be definitely established on the principle of "Keep to the Left" instead of "Keep to the Right," which to-day appears to be the unwritten law, beneficial results would follow. We understand that, some years ago, the National Safety First Association endeavoured to introduce this rule, but it was found impossible for a private and unofficial body to effect a change of habit of such importance, and the only means whereby it could be accomplished would be for the Ministry of Transport to issue a Code of Customs for all users of the highway, as was suggested to us by a number of witnesses. We refer to this proposal later on (see paragraphs 74-75).

12. Having regard to the difficulty which pedestrians experience in crossing busy streets and the great danger involved, particularly where "round-abouts" and "one-way traffic" have been established, we think that in all these cases special crossing places should be arranged. clearly marked with notices "Please Cross Here." This has been done at some places in London with

* Children 16.3 per cent. Adults 19.1 per cent.

beneficial results. In the case of round-abouts the crossings should not be at the round-abouts themselves, but a short distance from the point at which the converging roads join the roundabouts. When simple one-way traffic exists pedestrians should be cautioned by conspicuous signals to "Look Right" or "Look Left" as the case may be. The introduction of round-about or one-way traffic without special provision being made for pedestrians is very dangerous and should never be permitted.

13. Apart from these suggestions, the most hopeful method of inducing pedestrians to exercise greater caution is by means of education and propaganda. This is being carried out with marked success by the National Safety First Association, of whose work we cannot speak too highly. In our opinion, the Association should receive much greater recognition and support. Its educational work in the schools has been particularly valuable. From the figures put in by the Association (Appendix, Table E) it appears that, so far as fatal accidents in London are concerned, the percentage increase in the number of adults killed in 1928, as compared with 1921, was 153, whereas the corresponding figure for children was only 40. This constitutes a hopeful augury for the future. We may hope that the next and succeeding generations will be far more careful in walking on and in crossing roads than is the present generation.

REGULATION OF TRAFFIC.

14. We proceed now to discuss the legislation which we hold to be necessary for the purpose both of securing greater safety and of facilitating the regulation and flow of traffic. As long ago as two years the Ministry of Transport, recognising the urgent need of such legislation, published a Draft Road Traffic Bill, inviting comments from all kinds of interested parties. The Draft Bill appears to have been well received generally, though there was considerable criticism of details. Unfortunately, no steps have since been taken to carry or even to propose legislation. Further delay would, in our opinion, be disastrous.

SPEED LIMITS FOR MOTOR CARS AND MOTOR CYCLES.

15. The first and most difficult problem to decide is whether there should or should not be a general speed limit for all mechanically propelled vehicles, with lower speed limits in particular areas, and if there are to be speed limits, what those limits should be. In the Draft Road Traffic Bill (Clause 3) the question is left open, the Ministry suggesting alternative clauses in one of which a general speed limit is proposed but the actual number of miles per hour is not specified, while in the other it is proposed that there should be no limit of speed for motor cars as defined in Clause 1 (2) (e) of the Bill or for motor cycles as defined in Clause 1 (2) (f).[•] Under either alternative, however, maximum limits of speed (as prescribed in the First Schedule to the Bill) would apply to vehicles other than motor cars and motor cycles. It is also proposed that the penalties for dangerous driving should be greatly increased; and it is suggested that a difference should be made between "dangerous" and what is termed "careless" driving, the penalties for the latter being considerably less. We have been at great pains to obtain all the relevant evidence possible on the question, and have also received statements showing the practice in various countries abroad. The evidence is most contradictory and great diversity of practice exists.

16. To take the evidence first, every one of the motor organisations interested (meaning thereby such bodies as the Automobile Association, the Royal Automobile Club, the Royal Scottish Automobile Club, the Society of Motor Manufacturers and Traders, etc.) strongly advocates the abolition of a general speed limit for motor cars and motor cycles and also of special speed limits in towns and villages, holding that, for the purpose of checking dangerous driving, it is far better to rely on the powers given or to be given in the clauses dealing with dangerous driving, than on the enforcement of rigid speed This might have been expected, but the same limits. view was put forward by Colonel Pickard as his own personal opinion (Q.7489), by the Cyclists' Touring Club (Stancer, M. 34/7, Q. 9136), and by the County Councils Association (Dent, M. 37/App. VI, Clause 3, Q. 10115), the Urban District Councils Association (Postlethwaite, M. 38/49, Q. 10544), and the Association of Municipal Corporations (Oliver, M. 39/22, Q. 10769-74). The Police were divided on the question. The Commissioner of Police of the Metropolis advocated a general speed limit of 35 miles an hour (Trinp. M. 30/7, Q. 8447), as did also a majority of City and Borough Chief Constables (Moore & Wilson, M. 32/17, Q. 8916), while

* The following definitions are contained in the Draft Road Traffic Bill:---

Clause 1 (2) (e) :

- Motor cars; that is to say, mechanically propelled vehicles (not being motor cycles or invalid carriages) which are constructed themselves to carry a load or passengers and whose weight unladen does not exceed the following, that is to say:
 - (i) in the case of vehicles constructed solely for the carriage of passengers and their effects, if the number of passengers they are adapted to carry (exclusive of the driver) does not exceed eight, and the tyres with which they are fitted are of the prescribed type, three tons;
 - (ii) in any other case, two tons.

Clause 1 (2) (f):

Motor cycles; that is to say, mechanically propelled vehicles (not being invalid carriages) with less than four wheels whose weight unladen does not exceed eight hundred weight. on the other hand we were informed that 37 out of 55 County Chief Constables were opposed to all speed limits other than those mentioned in the First Schedule to the Draft Road Traffic Bill (*Chapman*, **M. 31/2**, Q. 8568). A conference of Metropolitan Magistrates convened by Sir Chartres Biron, and the Magistrates Association, expressed themselves in favour of the retention of a speed limit.

17. The opponents of speed limits for motor cars and motor cycles put forward the view that the enforcement of speed limits diverts the attention of the police from watching dangerous corners and congested portions of roads and streets by compelling them to set traps on open stretches of road where little or no danger exists; that the psychological effect on motorists of the existence of speed limits is bad, in that it causes them to think that if they do not exceed the limit prescribed they are driving with safety, whereas 40 miles an hour may be quite safe under certain conditions and five miles an hour may be dangerous in other cases; that speed in itself is not dangerous provided the car is under proper control; and that the proper remedy is to subject the really reckless driver convicted of dangerous driving to very severe penalties which could not be inflicted on a man who had been found guilty of a technical offence only. As the representative of the National Safety First Association expressed it in the paper entitled "A Review of Road Accidents" which he put in as evidence, "One or two 'road hogs' caught and exemplarily punished (imprisonment and/or having their driving licences suspended is the most fitting punishment, fines having little effect on real offenders in the class) will do more to clear the road of dangerous driving than thousands of prosecutions for minor technical offences unaccompanied by danger." They further pointed out that many accidents took place at slow speeds. Table F of the Appendix reproduces statistics in this connection published by the London Traffic Advisory Committee.* It is doubtful, however, whether the speed referred to in this Table means the speed at the moment of impact, or the speed at which the motorist was travelling immediately before slowing down in an effort to avoid an accident. In addition we ought to point out that in any case the computation as to speed does not come from the police, but, in many cases, from interested parties (Tripp, Q. 3429).

18. On the other hand, the advocates of general and, in particular areas, of special speed limits for motor cars and cycles argued that the existence of a speed limit has a subconscious effect on motorists, causing them to moderate their speed, and that from the police point of view it would be difficult to rely only on enactments relating to dangerous driving. The witness appearing on behalf of the Commissioner of Police of the Metropolis

^{*} Report on Street Accidents in Greater London, 1927.

stated that it is impossible, or at least very difficult, to obtain a conviction for dangerous driving unless an accident has actually taken place (Tripp, M. 30/6, Q. 8439). This view, however, was controverted by the Chief Constable of Kent, who spoke on behalf of the County Chief Constables, and who said that he was frequently able to obtain convictions in cases of dangerous driving, even if there had been no accident (Chapman, Q. 8576-83). He gave instances of dangerous points where he had often succeeded in getting convictions for dangerous driving (Q. 8582, 8755). The Chief Constables of Huddersfield and Cardiff corroborated this view, although we were informed that other Chief Constables have experienced difficulty (Moore & Wilson, Q. 8904-7). A further argument used by the supporters of speed limits was that in the absence of such limits the roads, and especially the new arterial roads, would be converted into racing tracks, where speed trials would take place, to the grave danger of the public and the destruction of all amenities (Chapman, M. 31/3, Q. 8584; Moore & Wilson, Q. 8919).

19. Turning to foreign countries, we find a diversity of practice as great as the diversity of opinion here. For example, in Belgium, France, Germany, Holland, Italy, and Spain there is no general speed limit, but the car in most cases must be kept under control (which is equivalent to a prohibition of dangerous driving), and in some cases there are special speed limits in "built up areas." On the other hand, amongst the countries which have general speed limits are the following:—Austria (28 m.p.h.), Denmark (28 m.p.h.), Norway (214 m.p.h.). Sweden (28 m.p.h.), and Switzerland (25 m.p.h.). In America there are maximum speed limits in most of the States varying from 20 m.p.h. to 40 m.p.h.

20. We have given very careful and anxious consideration to the question and have examined the evidence from every point of view. As a result, we have come to the conclusion that, provided all wheels are fitted with pneumatic tyres, there should be no general speed limit for motor cars as defined in Clause 1 (2) (e) (i) of the Draft Road Traffic Bill, or for motor cycles as defined in Clause 1 (2) (f) of the Bill.* Our recommendations as regards other types of vehicles will be found in paragraphs 26-28. We considered whether there should be speed limits in "built up areas," but we came to the conclusion that there would be great difficulty in defining built up areas, and moreover. there are many points of danger on country roads where special caution and slow speed are necessary, but where no question of a built up area arises. We propose, however, that at all these points including the approaches to towns and villages special warning signs should be erected uniform in character throughout the country, bearing some such inscription as :---

" Danger Zone—Special Caution."

^{*} For the definitions see the footnote to paragraph 15, page 9.

21. We further suggest that any persons organising or taking part in or conniving at motor racing or speed trials on a public road should be guilty of an indictable offence punishable by imprisonment without the option of a fine and by disqualification for holding or obtaining a driver's licence.

DANGEROUS DRIVING.

22. The abolition of all speed limits for motor cars and cycles would render the enforcement of the law against driving to the danger of the public exceedingly important, particularly as we realise that, in their present condition, it is not possible on many roads to drive with safety at high speeds. The law at present is defective in that the penalties are not sufficiently severe; its administration has also been exceedingly defective in some places owing to the disinclination of Benches of Magistrates to inflict anything beyond small fines, which, as already remarked, are useless in many cases. In this connection we would call attention to the Memorandum put in by the County Chief Constables :—

"A very strong point advanced by members was of the insufficient penalties imposed by Magistrates as a deterrent in cases of driving to the danger" (M. 31/14).

23. The Ministry of Transport proposed in their Draft Road Traffic Bill (Clause 4) considerably to increase the penalties for dangerous driving, the fines being raised to a maximum of $\pounds 50$ in the case of a first offence and $\pounds 100$ in the case of a second or subsequent offence, with imprisonment as an alternative in either case; the Court may also in either case order the suspension of the driver's licence. We approve of the increased penalties, but with regard to the suspension of the licence in our opinion there should be no option on a second or subsequent conviction; it should be automatically suspended for a period of not less than six months.

The Ministry, however, proposed in the Draft Bill (Clause 5) that a legal distinction should be drawn between "dangerous" and "careless" driving, the penalties for the latter offence being smaller and not involving suspension of licence. (*Piggott*, Q. 119, 210). We cannot understand the object of this, nor how any real distinction can be drawn between the two. How are the police to discriminate between dangerous and careless driving? (*Cooke*, Q. 2592; *Smith*, Q. 3165; *Russell*, Q. 3295; *Howe*, Q. 9001.) We believe it would be impracticable. Moreover, careless driving could only be held to be an offence if it resulted in danger, and if it did this it would clearly be dangerous driving. We are afraid that if this proposal became law, it would have the effect of rendering nugatory the severe penalties which can be imposed for dangerous driving. We think this proposal should be deleted from the Bill.

"FAILING TO OBSERVE A ROAD SIGN."

24. Although holding that a differentiation between dangerous and careless driving would prove in practice to be impossible, we think there should be a penalty for a minor offence of a definite character which could be enforced. We suggest it might be called "Failing to observe a road sign." In a subsequent paragraph (see paragraph 33) we propose that many of the numerous road signs which exist at present, more or less at haphazard, and which have often been erected by private individuals, should be abolished, and that definite authorised road signs should be erected by competent authority. We recommend, therefore, that if any driver fails to observe or obey a road sign in any of the following cases, if he fails to draw up at a white line in towns where there is traffic control, or passes an island or central lamp-post on the wrong side, or fails to go " dead-slow " on approaching a major road from a minor road (see paragraph 32), or fails to slow down and drive cautiously through a danger zone, or fails to do the same when passing, during school hours, a warning notice indicating a school, he shall be guilty of an offence and liable to the penalties proposed in the Bill (Clause 86), i.e., a fine not exceeding £20 or, in the case of a second or subsequent conviction, to a fine not exceeding £50. or to a term of imprisonment not exceeding three months. This would meet the difficulties pointed out by those who hold that there should be something else to rely upon in addition to the prohibition of dangerous driving (Piggott, M. 2/10, Q. 42-47; Howe, Q. 9073-6).

We would add, however, that in all these cases a charge for dangerous driving may be brought against the offender if the circumstances warrant.

DRUNKENNESS WHEN IN CHARGE OF A CAR.

25. With regard to the offence of being drunk while in charge of a car, a difficulty has arisen since juries are often unwilling convict drivers for this offence owing to the unto certainty of the meaning of the word "drunk." We are of opinion that a new definition is necessary in order that this most serious and dangerous offence may be adequately dealt with. The penalties proposed in Clause 7 of the Draft Bill are not too severe, viz., a fine not exceeding fifty pounds, or imprisonment not exceeding four months, or both, with suspension of licence for at least 12 months. But instead of the expression " drunk " we think that the following words, based on a suggestion by Lord Buckmaster with reference to Lord Cecil's Road Vehicles Regulation Bill, should be adopted as a definition of the offence :---

"Any person found when driving or attempting to drive a mechanically propelled vehicle to be so under the influence of drink or drugs as to be incapable of having proper control of such vehicle shall be liable on summary conviction, etc., etc."

This we think would adequately meet the case, and, in our opinion, this definition should be made applicable in the case of drivers of all vehicles, mechanically propelled or otherwise.

With regard to the suspension of licences, we were informed by the witness on behalf of the Cyclists' Touring Club that persons whose licences had been suspended frequently continued to drive, especially drivers of lorries who travelled in parts of the country where they were not known. He further stated that when convictions had been obtained for this offence, some Benches had merely extended the period of suspension for a few months (*Stancer*, **M. 34/6**, Q. 9132, 9158). If this be true, we cannot imagine any more futile way of dealing with the matter. The only proper punishment would be imprisonment without the option of a fine, which we definitely recommend for this offence. We would add, however, that no other evidence of this kind was tendered.

SPEED LIMITS FOR MECHANICALLY PROPELLED VEHICLES OTHER THAN MOTOR CARS.

26. As we have already indicated (see paragraph 20), our recommendation regarding the abolition of the speed limit applies only to motor cars and motor cycles as defined in Clause 1 (2) (e) (i) and Clause 1 (2) (f) of the Draft Road Traffic Bill respectively. The case is different with other types of vehicles, which, in paragraphs 27 and 28, we classify and in regard to which, in each case we recommend maximum limits of speed.

The desirability of limiting the speed of these special classes of vehicles is recognised in the Draft Bill, in the First Schedule to which the Ministry propose speed limits varying from 20 miles per hour in the case of heavy motor cars fitted with pneumatic tyres to two miles per hour in the case of heavy locomotives in towns. These proposals constitute a highly scientific table, the speed limits in each case being based on the damage done to the roads having regard to the weight and size of the vehicles concerned, the character of the tyres with which they are fitted and whether they are drawing trailers or not.

27. We have carefully scrutinised this Schedule, and we propose certain alterations in it, as we are of opinion that some vehicles might be permitted to travel at higher speeds than the maxima proposed by the Ministry. We accordingly recommend that the following amendments should be made in the Schedule.

Heavy Locomotives (i.e., mechanically-propelled vehicles which are not constructed themselves to carry any load (other than water, fuel, accumulators and other equipment used for the purpose of propulsion, loose tools and loose equipment), and whose weight unladen exceeds eleven tons and a half). The maximum rates of speed proposed in the Draft Bill for these vehicles are as follows :---

						Miles	per hour.
(a)	Within any	city,	town or	village	•••	•••	2
(b)	Elsewhere				•••	•••	4

We suggest that these speeds should be increased by one mile per hour in each case. This increase was asked for by the witness who represented the National Traction Engine Owners and Users' Association (Allen, M. 19/2, Q. 6101), and we think it is a reasonable concession.

Light Locamotives (i.e., mechanically propelled vehicles which are not constructed themselves to carry any load (other than as aforesaid) and whose weight unladen does not exceed eleven tons and a half, but does exceed seven tons and a quarter). The Schedule provides the following maximum speeds for this type of vehicle :—

Miles per hour.

(a) When not drawing a trailer, or when not drawing more than two trailers, all wheels	1
of both the locomotive and any trailer drawn thereby being fitted with soft or	
elastic tyres	8
(b) In any other case	4

As regards category (b) we propose that a concession similar to that made in the case of heavy locomotives should be applied, and that the maximum speed should accordingly be five miles per hour instead of four. The limit of eight miles per hour for category (a) should remain.

Heavy Motor Cars (i.e., mechanically propelled vehicles (not being motor cars) which are constructed themselves to carry a load or passengers and whose weight unladen exceeds two tons). The Schedule prescribes speed limits for heavy motor cars varying according to the tyres with which they are fitted, the fact whether they are drawing trailers or not, and whether springs are fitted between each axle and frame of the vehicle. In addition to these distinctions, we are of the opinion that vehicles constructed to carry passengers should be regarded separately from those constructed to carry a load, and that heavy motor cars should be sub-divided accordingly.

The first sub-division will include practically all motor omnibuses and coaches. At present these vehicles, if fitted throughout with pneumatic tyres, are permitted by the Minister's Regulation^{*} to travel 20 miles an hour, a speed which is notoriously exceeded every day.

^{*} The Heavy Motor Car (Amendment) Order, 1928 (Statutory Rules and Orders, 1928, No. 614).

It has been contended by witnesses on behalf of omnibus and coach proprietors that much higher speeds than 20 miles an hour should be conceded, and even that they should be subject to no statutory maximum. They stated that modern motor omnibuses and coaches are so well constructed as regards brakes and equipment generally that they are as easily controlled as motor cars and can be pulled up in as short a distance (Shrapnell-Smith, M. 16/12 (d), Q. 4760-7, 5067; Howley, M. 17/50, Q. 5284). We cannot altogether endorse these views as we think that the momentum which such heavy vehicles acquire when travelling at high speeds constitutes a real danger on the roads; besides which, they undoubtedly do much more damage to the roads when travelling fast than is the case with motor Further, we are of opinion that vehicles conveying cars. passengers should, in the interests of the latter, be subject to special limitations. (Cliff, M. 24/24.) For these reasons we cannot recommend the removal of all speed limits in the case of these vehicles. We think that 35 miles per hour is the outside speed at which they should be allowed to travel, and that this limitation should be rigorously enforced. If not fitted with pneumatic tyres, the limit should be 16 miles per hour.

The licensing authority should be bound, as a condition of granting a licence to any passenger-carrying vehicle travelling on a regular route, to insist on a time-table being provided, which should be posted in the vehicle itself. Care should be taken that the timing of the journey is such that adequate allowance is made for stops, thus reducing the all-over speed to considerably less than 35 miles per hour. This would tend to ensure compliance with the law in the case of regular services. In the case of day trips, etc., made by motor coaches and other passengercarrying vehicles, enforcement of the limit must be left in the hands of the police.

As regards the second sub-division (vehicles constructed to carry a load), we propose that the minimum unladen weight should be $2\frac{1}{2}$ tons instead of two tons as provided in the Draft Bill. The witness who appeared on behalf of the Commercial Motor Users' Association suggested this increase, and submitted that the type of modern vehicle weighing up to $2\frac{1}{2}$ tons unladen is a very useful light vehicle which can run in rural areas to the general benefit, and that it should accordingly be encouraged (*Shrapnell-Smith*, **M. 16/12** (f), Q. 4772-4). We deal with goods vehicles not exceeding $2\frac{1}{2}$ tons unladen weight under the heading "motor cars" below. For goods vehicles exceeding $2\frac{1}{2}$ tons unladen weight, and for motor tractors, we suggest the maximum speeds shown in the table in paragraph 28.

Motor Cars. - As in the case of heavy motor cars, we propose that the vehicles included in this class should be sub-divided into passenger and goods vehicles. As regards passenger

^{*} For the definition, see the footnote to paragraph 15, page 9.

vehicles, we have already suggested that the speed limit should be abolished, provided that they are fitted throughout with pneumatic tyres, are not drawing a trailer, and are constructed to carry not more than eight passengers (exclusive of the driver). (See paragraph 20.) If fulfilling the first two of these conditions, but constructed to carry more than nine persons, the speed limit should be the same as for heavy motor cars (passenger), *i.e.*, 35 miles per hour. In any other case, the maximum speed should be 20 miles per hour.

We have already said that we propose that goods vehicles not exceeding $2\frac{1}{2}$ tons in weight unladen should be classed as motor cars (goods). For these vehicles the speed limits we recommend will be found in the table in the next paragraph.

28. Tabulated, our recommendations are as follows :----

Glass of Venicle.	Class	of	Vehicle.
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Maximum speedmiles per hour.

1. HEAVY LOCOMOTIVES.

(a) Within any city, town or village (b) Elsewhere	3 5
2. LIGHT LOCOMOTIVES.	
 (a) When not drawing a trailer, or when drawing not more than two trailers all wheels of both the locomotive and any trailer drawn thereby being fitted with soft or elastic tyres (b) In any other case 	8 5
3. HEAVY MOTOR CARS.	
(I) Passenger Vehicles.	
(a) If all wheels fitted with pneumatic tyres and not drawing trailer	35
(b) In any other case	16
(II) Goods Vehicles and Motor Tractors.	
 (i) Without trailer— (a) If all wheels fitted with pneumatic tyres 	20
(1) The all muchaels fitted with soil of classic	
tyres some of which are not	16
pneumatic	10
 (ii) With trailer— (a) If all wheels, both of the drawing 	
	- 0
'il momentia tyres	16
as the strength hoth of the unawing	
(b) If all types, both valler, are of soft vehicle and of the trailer, are of soft or elastic material, some of which are	
not pneumatic	. 12
(iii) In any other case	5

Class of Vehicle.		laximum speed- miles per hour.		
4. MOTOR CARS.		•		
(I) Passenger Vehicles.				
 If all wheels fitted with pneumatic tyres, drawing trailer, and constructed to cannot more than eight persons (exclusive the driver)	arry e of not arry	No Limit.		
driver)		35		
In any other case	• • •	20		
(II) Goods Vehicles.				
(i) Without trailer—				
(a) If all wheels fitted with pneumatic	tyres	30		
(b) If all wheels fitted with soft or el tyres, some of which are pneumatic		20		
(ii) With trailer—				
(a) If all wheels, both of the dra vehicle and of the trailer, are with pneumatic tyres		16		
(b) If all tyres, both of the drawing ve and of the trailer, are of so elastic material, some of whic not pneumatic	ft or	12		
(iii) In any other case		5.		
(m) III any other case	•••	V 1		

29. The limits enumerated above should be enacted by Statute and should not be variable by Order of the Minister. We think it undesirable to confer on any Government Department too great powers of making Regulations which may have the effect of rendering nugatory the intentions of Parliament. We would, however, leave to the Minister the power to vary by Regulations questions of the construction of vehicles and of the appliances and equipment necessary to their proper and safe use on the road, since if all these matters were governed by Statute present standards would tend to become stereotyped and progress would be checked. We also hold very strongly that these speed limits should be strictly and rigorously enforced.

We further wish to make it clear that when a vehicle is constructed to carry both goods and passengers it must be classed as a goods-carrying vehicle, and that where we refer to vehicles drawing trailers we do not intend to include what are known as "articulated" vehicles, which for purposes of speed regulation should be considered as single vehicles.

PRIORITY OF TRAFFIC AT CROSS ROADS.

30. The next matter we desire to refer to is the question of road junctions and cross roads and the grave danger which exists at these at present, resulting in a large number of accidents. We were, indeed, surprised to observe that there is no mention of this in the Draft Road Traffic Bill. Until quite recently, no rule has been laid down or even suggested by competent authority; it has been left to motorists, often with fatal results. to go as they please and avoid accidents if they can.

31. In our examination of this problem, we found that two conflicting proposals were put forward. One of these, the principal advocate of which was the representative of the Automobile Association, is known as the "off-side rule," which means, in effect, that every vehicle must give way at a road junction to another vehicle approaching it from the right (Cooke, M.10/23, Q. 2632-41). It is claimed that this plan, which is adopted by analogy from the rule of the road at sea, would be thoroughly safe and effective. We have considered it carefully but cannot recommend it. The analogy from the rule of the road at sea is entirely fallacious. At sea another vessel approaching from the right or the left or in front head-on is visible, except in fog, from a long distance, and there is plenty of space in which to manœuvre. On the road a vehicle approaching from a cross-or junction-road on the right is frequently not visible until the crossing place or junction is actually reached, with the result that if the vehicle continues on its course expecting the vehicle on its left to give way, a collision is almost inevitable; in addition to which there is very little room on the road in which to manœuvre. Then it has been pointed out that if at the junction of four cross roads a vehicle were approaching from each of the four directions at the same time (as frequently happens in towns) all four would have to stop dead, since each would have a vehicle approaching on its right. The result would probably be that after momentary delay all four would start again and meet in the middle.

32. The alternative proposal, which was supported by the Royal Automobile Club (O'Gorman, Q. 4064) and other witnesses, and which has the support of a Conference specially summoned by the Ministry of Transport,^{*} is that all the roads of the country should be graded in accordance with their degree of importance, and that traffic on the less important road should give way to traffic on the more important. The drivers on the more important roads would not be absolved from all responsibility; it would be their duty to keep a sharp look-out and to drive with special caution at all road junctions. the existence of which should be communicated to them by means of suitable

^{*} Report of Conference on Road Traffic Noises and Priority of Traffic at Cross Roads, 1929. (H. M. Stationery Office).

road signs placed short of the actual junction. They should, however, have precedence over drivers entering from less important roads. On all the latter, whether in towns or country, conspicuous notice boards, as suggested by the Conference, should be erected with the words "Dead Slow". If an accident occurs the responsibility for such accident will *prima facie*, and in the absence of circumstances inculpating the driver on the major road, rest upon the driver entering it.

All the more important roads in the country have now been classified as Class I or Class II roads. A Class I road will always be held to be of major importance to a Class II road, and a Class II road of major importance to an unclassified road. When two roads of the same category intersect, it will be the duty of the highway authority to decide which is the major road, regard being had to the amount of traffic. We recognise that it will take time to deal in this way with all the road junctions in the country, but steps should be taken at once to give this precedence to Class I roads.

Since considering this question our attention has been drawn to a Circular addressed in June of this year by the Minister of Transport to all highway authorities. In this Circular the Minister states that he has decided to adopt the recommendations relating to the precedence of traffic at cross-roads which were made by the Conference convened by him to consider the matter.

We are pleased to observe that this Conference arrived at precisely the same conclusion that we reached after hearing evidence.

ROAD SIGNS.

33. We come now to the consideration of road signs. Useful as these may be in intention, there is at present such a lack of uniformity in design and location that many drivers are puzzled by them, and such a needless multiplicity in some parts of the country that drivers are induced to disregard them altogether. In addition to useful warning boards indicating schools, dangerous hills, sharp turns to right and left, etc., red triangles have been dotted about by local authorities on some roads in great numbers, often for no apparent reason, while private owners have informed drivers of the existence of concealed drives, very often not concealed at all, with bewildering profusion. These latter warnings are a public nuisance; if erected at all they ought not to be erected as warnings to persons using the public roads, but on the owners' private drives, informing drivers thereon that they are approaching a public highway and that they should sound their horns and proceed dead slow. The Draft Road Traffic Bill (Clause 43) proposes that powers should be given to remove them and that their erection in future by any individual unless he has received permission to do so from the competent authority shall be

illegal. We entirely approve of these proposals. It is most important that the road signs which are erected should be uniform in design and intention and should be no more numerous than are actually required. We have already suggested two kinds, viz., the cautions to be displayed at the approach of towns and villages and other points of danger (see paragraph 20), and those proposed in paragraph 32 on minor roads entering major roads. Besides these two, we suggest that the only road signs permissible should be those indicating cross-roads, schools, levelcrossings, dangerous hills, acute right or left turns and double turns, these to be used as sparingly as possible. In many of these cases it may be advisable to erect a danger zone sign, in which case its disregard would constitute an offence as defined in paragraph 24. In other cases the sign would be informative only. The cross-roads sign might with advantage be used to give warning to drivers on a road of major importance that they are about to approach one of minor importance.

We think that the duty of erecting all road signs should fall on the highway authorities subject, however, to the supervision of the Minister of Transport, so as to secure uniformity. We further suggest that, where appropriate, all the more important road signs, e.g., those, the disregard of which will constitute an offence as defined in paragraph 24, should be fitted with luminous studs so as to be visible after dark. The cost of their erection and of the removal of all unnecessary signs now in existence, other than those on private property, should in the first instance be charged entirely to the Road Fund; the cost afterwards should be borne by the highway authorities as part of the ordinary road maintenance.

CONTROL OF TRAFFIC BY POLICE.

34. It will be obvious that any new regulations as regards speed limits for the various classes of heavy vehicles and for the prevention of dangerous driving will be of no value unless they are rigorously enforced, and this leads us to a consideration of the difficult problem of the control of traffic by the police. It is impossible to speak too highly of the manner in which this has been carried out by the police in A difficult and irksome duty, forming no part the past. of the original functions of the police force and which is liable to create ill feeling between the officers on duty and a section of the public, has been carried out with great efficiency, good will, and tact, and it is only fair to the great majority of drivers to remark that, as a general rule, they have shown themselves willing to conform with police regulations and to assist the police in the discharge of their duties. As motor traffic increases, however, more and more police are required on point duty, which means that more police are withdrawn from their ordinary duties and large increases in the police forces of the country become necessary. In order to ensure that greater

safety on the roads and streets which is so obviously necessary, and to carry out effectually the recommendations which we have made, more traffic control and more signalling will be required, and if the police are to undertake the whole of this the additional cost to the police funds will be a serious matter. It must be remembered that though the Government pays one-half of the net cost of the police engaged in traffic control, the other half falls on the local ratepayers, a heavy and unfair burden, especially in the case of places where there is a large volume of through traffic from which the local ratepayers derive little or no benefit. It is not to the advantage of motorists that this state of affairs should continue, still less that it should be accentuated, since it tends to create a feeling of ill-will between the general body of ratepayers and the users of mechanical transport, laving the latter open to the charge made on behalf of the railway companies that not only have they had their permanent way constructed for them, but that their signalling also is done for them. This charge, it should in fairness be observed, is not strictly true, since admirable assistance in signalling has for many years been given by the Royal Automobile Club and Automobile Association scouts.

35. In order to overcome these difficulties it has been suggested in various quarters that a new centralised force of traffic wardens or traffic guards should be established, the members of which would not have full police powers, but would deal only with traffic duties. The proposal came from several Standing Joint Committees, and the following Resolution of the West Sussex Standing Joint Committee was circulated among police authorities generally (Dixon, M. 29/2) :---

"That the Home Secretary be respectfully informed that, in the opinion of the West Sussex Standing Joint Committee, far too much time is now taken up by the police in traffic management, which is not a primary police duty, and that the Home Secretary be asked if a subsidiary force under the control of the police authorities could be formed to do this work. The pay of such subsidiary force would naturally be less than that of a police recruit, and advantage of it could be taken by selecting likely men from the force for regular police service. In the absence of any scheme in the near future to deal with traffic control the police forces of this country will have to be augmented at a serious cost to the ratepayers."

As a result of this, a Conference attended by representatives of the County Councils Association, the Association of Municipal Corporations, the Magistrates Association, and County and Borough Chief Officers of Police was held at the Home Office on the 27th February, 1929, but the proposal was not agreed to (Dixon, M. 29/6, Q. 8267). It was felt that it

was undesirable to create a sort of inferior police force with limited functions and a lower rate of pay, and that the police with full powers, including the power of arrest, must remain in control of traffic. With this view we generally concur. It was pointed out to us, however, that a number of police authorities have reinforced their police, especially in the summer, in cases where there is a large seasonal traffic, and at week-ends, by the employment of police pensioners and civilians as temporary constables with full powers and at the standard rates of pay (Dixon, M. 29/4, Q. 8249-62). To this plan no serious objection was taken, and we entirely approve of it. It enables Counties and Boroughs to employ a number of additional constables at times when traffic is heavy, without incurring the cost of permanent increases to their forces. In addition to this, some Counties and Boroughs have made arrangements with the Royal Automobile Club whereby that organisation places a certain number of its scouts at the disposal of the local police on payment (Dixon, M. 29/4(b)). The scouts have not, of course, police powers, but are very useful as signallers. We think this is an admirable arrangement which might be further extended.

AUTOMATIC SIGNAL LIGHTS.

36. Of the methods proposed to us for relieving the police and ensuring the control of traffic at points not now controlled in towns, the best appears to be the system of automatic signal lights, which is being used in several boroughs and will shortly be adopted in many others. Our attention was first called to this by the Chief Constable of Middlesbrough (Q. 8204) where it is intended shortly to install it, and at his suggestion the Chairman and several members of the Commission visited Manchester and Wolverhampton where they saw the system in operation. Wolverhampton has the credit of being the pioneer in this matter in Great Britain, the Town Council having decided to adopt the system after studying it in Berlin and other continental cities. Councillor Hayes and Alderman Wyles, speaking on behalf of the Association of Municipal Corporations. also described to us the installations at Leeds and Coventry respectively. (M. 39 (c) and M. 39 (d), Q. 11107-66).

The plan is very simple. Signal lamps are erected at the junction of four cross-streets, either one standard at each corner or a single standard in the centre. When it is intended that the traffic is to flow, say, from North to South, green lights are shown facing these streets and the traffic proceeds, and red lights on the East and West streets, so that the traffic is held up. At the end of a fixed period, say 25 seconds, amber lights are shown in all four directions, which means caution, and while this lasts vehicles which have started from North or South must complete their crossing as quickly as possible, while vehicles proceeding East or West must get ready to move. This period may last five seconds. Then green lights are shown East and West for 25 seconds and red lights North and South, and following this amber lights again for five seconds, and so on. The change over is worked automatically by an electrical contrivance, and the periods of showing red, green and amber can be adjusted to suit the traffic. Thus, if the North and South route has a heavier traffic than the East and West route, it can be given a longer period of green light. The signals can also be worked by hand if required, and this is often found to be a convenient arrangement. White lines are drawn across the roads, well back from the actual junction, at which vehicles must stop. We watched the system in operation at various busy crossings both at Manchester and Wolverhampton, and were greatly impressed with its success. We only saw one driver cross the white line when the red light was showing, and he explained that he was a stranger and did not understand the signal. We are strongly of opinion that this plan should be adopted for certain crossings in all towns, not perhaps at the most important where the presence of police officers is desirable but at many busy secondary crossings. It would be of the greatest value in London, and we understand that experimental installations of this nature are to be erected at Baker Street and The saving in cost would be great; we the Albert Gate. were informed that the cost of installation is about £100 to £150 and the weekly upkeep about 15s. to 20s. The weekly cost of a police constable, including wages, uniform, housing and pension, is between £6 and £7, and at some crossings the lamps might relieve two constables for other duty. Even if no reduction of the police force would be possible, large increases would be avoided, and as many more crossings would be controlled greater safety to the public would ensue. We would recommend, however, that the erection of these street signals should be supervised by the Ministry of Transport, so that there should be uniformity throughout the country; and that great care should be exercised in placing them in the right situation and at the right height so that they may be easily visible both to drivers and pedestrians. We are further of opinion that the cost of their installation and all additional cost thrown on the police in the way of temporary constables, payments for services of Royal Automobile Club or Automobile Association scouts, etc., should fall not on the Police Fund but on the Road Fund. Mechanical transport should, so far as possible, pay for its own signalling.

In connection with the control of traffic by the police it is important that there be complete uniformity in the hand signals given by constables on point duty all over the country. We understand that the codes used by the various forces differ in some respects in different districts. This is most undesirable. We recommend that the use of the Code of Traffic Signals to be used by the police and drivers of vehicles, which is issued with the approval of the Home Office and the Scottish Office, should be made compulsory throughout the country. We further recommend that an additional signal should be inserted in the code for use by pedestrians.

COMPULSORY INSURANCE.

37. The next question we desire to consider is that of the compulsory insurance of third-party risks. This was urged upon us with great insistence by several witnesses, including Mr. John Cliff who spoke on behalf of the Transport Workers' Union (M. 24/11, Q. 7139-56), by the Secretary of the Cyclists' Touring Club (Stancer, M. 34/4, Q. 9122-8) and by Mr. H. A. Pritchard speaking on behalf of the Association of Municipal Corporations (M. 39(b), Q. 11009-11106). It was also proposed in Lord Cecil's Bill. The driver of a motor vehicle may knock down a pedestrian and do him grievous injury, possibly maining him for life; the Court may find that the defendant was solely to blame for the accident and may award a large sum by way of damages; it may then be discovered that the driver cannot nav the damages and that he has not insured against third-party risk, with the result that the injured man gets nothing. Here is a real case of hardship and injustice. Mr. Cliff supplied the Commission with several instances where this had actually taken place, and others where his Union had refrained from taking legal action because it was known that the driver had no funds and was not insured (Q. 7141-2; 7313-4). Mr. Pritchard emphasised this and quoted the following resolution which had been approved by the Association of Municipal Corporations in November, 1928 :---

"That in the opinion of this Association every owner of a motor vehicle should be required to effect an insurance against third-party risks; that the policy of insurance should be required to cover all damage which may be found to attach to the owner at common law and that the existence of such a policy of insurance shall be a condition precedent to the owner obtaining a licence for the vehicle; that the Minister of Transport should be empowered to make regulations whereby the licensing authorities can readily and practicably ascertain that every applicant for a licence is properly and fully insured and that a copy of this resolution be forwarded to the Minister of Transport, the Home Secretary and to the Minister of Health."

On the other hand many witnesses who were opposed to the proposal (Cooke, M. 10/22, Q. 2622-30, 2952-6; Smith, M. 11/15, Q. 3039-49; O'Gorman, M. 14/38-45, Q. 4145-52, 4277-86; Shrapnell-Smith, M. 16/16(c), Q. 4868-9; Evans, M. 26, Q. 7639/7806; M'Connell & Wamsley, M. 27, Q. 7807-7928) pointed out grave practical difficulties in the way of any such scheme. In the first place it was contended that its adoption would only cover a small proportion of the accidents which occur.

This is perfectly true, since the scheme could only be made to apply to cases when the driver of the vehicle was to blame. It would be unreasonable that a person should receive compensation for an accident due to his own carelessness or fault, or when there had been contributory negligence on his part. It was also urged that the scheme would not apply in cases where the vehicle had been driven, not by the owner himself or somebody authorised by him, but by an unauthorised person, e.g., a motor thief. Insurance Companies always insert stringent conditions into policies absolving themselves if the vehicle had been driven by an unauthorised person, and these conditions conduce to safety and serve therefore a useful purpose. The witnesses who appeared on behalf of Lloyd's Underwriters and the Accident Offices Association further stated that these bodies were opposed to the proposal, on the ground that it would result in vexatious litigation and a large increase of unnecessary claims, thus adding considerably to their administrative expenses, which would necessitate a general all-round increase of premiums, as we are informed was the case in the State of Massachusetts where this type of insurance is compulsory. (Evans, M. 26/6, Q. 7646, 7693; M'Connell & Wamsley, M. 27/8, 12, Q. 7849, 7851, 7904.) This view was shared by some of the witnesses who appeared on behalf of motoring organisations, who thought that in this way a heavy additional burden would be placed on the owners of vehicles. The point was also made that if nobody could obtain a licence unless he had first taken out a third-party risk insurance policy the Insurance Companies would in some cases become in effect the licensing authorities, since they could refuse to insure certain persons at any premium. This is true, but, as Lord Russell suggested in his evidence, if the record of some drivers is so bad that no Company will insure them, it would be a public advantage if they were kept off the road (Q. 3325).

We have carefully considered all the objections which have been raised to the proposal, and while recognising its limited scope and fully admitting the practical difficulties in the way (Piggott, Q. 63-70, 173-7, 207-9, 233-9) we think that the case for compulsory third-party risk insurance is so strong that an attempt must be made to deal with it. Such attempts have been made in other countries, and last year an Act was passed in New Zealand on the subject which we have had the opportunity of studying in detail.

38. We would make two preliminary recommendations on which to base the rest. In the first place we think that the holding of an insurance policy should be a condition precedent to a vehicle being licensed, not a condition required for obtaining a driver's licence. The administrative difficulties in the way of the latter would be far greater, and the owner of the vehicle is the person who should be held to be primarily responsible. This is the plan of the New Zealand Act. Secondly we think that all that is required is that there should be insurance against damage to life and limb (*i.e.*, in the case of fatal accidents and accidents involving bodily injury). Existing motor insurance policies, which usually include third-party risks, cover not only damage to life and limb but also damage to the property of a third party, and in our opinion this is unnecessary for the particular object we have in view. It would reduce the cost and also simplify administration if all that was required was a receipt showing that the applicant had insured against damage to the life and limb of a third party.

39. Subject, therefore, to the foregoing we make the following proposals, basing them largely on the provisions of the New Zealand Act and the suggestions of Mr. Pritchard :---

(i) Every owner of a motor vehicle should be required to insure against his legal liability to pay damages on account of the death of, or personal injury to, any person sustained in connection with the use of a motor vehicle.

(ii) For the purpose of the proposed scheme any person in charge of the vehicle at the time of the accident and who has been authorised by the owner to drive it shall be deemed to be the owner.

(It should be noted that the New Zealand Act goes much further than this; any person in charge of the vehicle, whether authorised or not, being deemed to be the owner for this purpose.)

(iii) Any person applying for a licence for a vehicle must produce a receipt from an authorised Insurance Company showing that he is insured against third-party risks involving death or bodily damage, such policy to run for the period for which the licence is current.

(iv) That for the purposes of (iii) Companies prepared to undertake this risk should apply to be registered by the Board of Trade, and if approved should be placed on a panel by the Board.

(v) If the vehicle is sold or otherwise passes into new ownership, the registration of the vehicle will not be transferred to the new owner until the Registration Authority is satisfied that the new owner has taken out an insurance policy in respect of the vehicle.

(vi) The insurance policy should provide that the insurance company shall be bound to pay to the third party direct all damages or compensation and costs agreed by the holder of the policy, or adjudged, to be due to him, as if such damages, compensation or costs had first been paid by the policy holder to such third party and the policy holder had thereafter for good consideration assigned to such third party his right to be indemnified by the insurance company.

The last provision will meet the difficulty which has arisen in certain cases where an owner, who was insured and had had damages awarded against him in connection with an accident, has subsequently become bankrupt, with the result that the compensation paid by the Insurance Company has gone to his estate and the injured party has ranked *pari passu* with other creditors, thus receiving a share only of the compensation money. The suggestion that the insurance money should be earmarked for the sufferer is not a new one, as the principle has been accepted in respect of insurance under the Workmen's Compensation Act, 1925.

40. We fully anticipate that these proposals may be criticised by the Insurance Companies and motor users. The former may be required to issue a new form of policy, covering only personal damage to third parties, in addition to the comprehensive policies including this risk which they issue at present, but we think that the extra trouble thus involved will be fully justified, and that when once the new arrangement is in working order no special difficulty will arise. The latter may object to the additional steps which must be taken before a vehicle can be licensed, or the registration transferred, and may fear a general rise of premiums. We do not see how such a general rise could be justified. If drivers with bad records can only be insured at high rates or in some cases not at all, what grounds can there be for raising the premiums against careful drivers? The reason for the proposed change is the grave hardship inflicted on a certain number of persons at the present moment. The fact that the cases are comparatively few, since the great majority of motor owners already insure, as was urged by some of the witnesses, is in our opinion no reason why the possibility of this hardship should be allowed to continue. We think also that in a short time the Insurance Companies would arrange for the compilation of a complete index of the holders of licences, and we have no doubt that if the record of each applicant for insurance were known a check would be put to the number of unsatisfactory drivers on the road.

TESTS FOR DRIVERS.

41. We pass to the question of the qualifications of a motor driver; whether there should or should not be any kind of test applied to an applicant for a driver's licence. At present, no test of any kind exists in this country. A driver's licence is nothing more than a receipt for a registration fee of 5s. and a means of identification, and is issued to any applicant provided he or she is 17 years of age or over in the case of a motor car, or over 14 years of age in the case of a motor cycle. We refer further to the question of age in paragraph 44. Beyond this, no sort of qualification is required; persons who have never before driven a car, know nothing of its mechanism and are totally unacquainted with the rules, customs, and courtesies of the road, and persons who are physically unfit to drive a car, cannot be refused a licence if they are prepared to pay 5s.

Indeed, there is nothing to prevent a totally blind man from obtaining a licence if he applies for one. On this question of qualification there is a great division of opinion. Of the witnesses who appeared before us the following urged that there should be some general driving test :- Railway Clerks' Association (Walkden, M. 7/43 (a), Q. 2239-41); Furniture Warehousemen and Removers' Association (Coombe, M. 21/9, Q. 6392, 6435); Transport Workers' Union (Cliff, Q. 7227); Lloyd's (Evans, M. 26/8, Q. 7667); County Chief Constables' Conference (Chapman, M. 31/15 (a), Q. 8678-83); Howe (M. 33/7, Q. 9016-21); Cyclists' Touring Club (Stancer, M. 34/3, Q. 9117). On the other hand the following were strongly opposed to it :- Automobile Association (Cooke, M. 10/22, Q. 2607); Royal Scottish Automobile Club (Smith, M. 11/13, Q. 3019-27); Russell (Q. 3306); Royal Automobile Club (O'Gorman, M. 14/46-8. Q. 4153-5, 4294); Commercial Motor Users Association (Shrapnell-Smith, M. 16/17, Q. 4871-2); London and Provincial Omnibus Owners' Association (Howley, M. 17/56, 79, Q. 5296). The arguments the latter bodies brought forward were that it would be of very doubtful practical utility and be the source of considerable expense. They pointed out that the number of accidents due to inexperience, as shown by the figures put in by the National Safety First Association to which we have already referred (see paragraph 9), were comparatively few. They further declared that the chief requisite for safe driving is what is termed " road sense ", which can only be acquired on the road itself, and the existence or absence of which could not be easily ascertained when application is made for a licence. An expert Departmental Committee set up by the Ministry of Transport in October, 1919, arrived at the same conclusion and reported in 1922^{*} against the institution of a general driving test. On the other hand it is to be observed that nearly every other country has some sort of test, including Canada, Australia, New Zealand, South Africa, the U.S.A., France, Germany, Austria, Italy, Spain, Portugal, Norway, Sweden, Denmark, Holland, Poland, Roumania, and Switzerland.

42. In considering this difficult question, we think it is well to distinguish between physical qualifications and quali-fications based on knowledge and experience. With regard agree with the proposal embodied we the former. to Road Traffic Bill, Draft which of the 15 in Clause was supported by several witnesses. It is to the effect that an applicant for a licence, whether for an original grant or for a renewal, shall make a declaration on the prescribed form as to whether or not he is suffering from any disease or physical disability which may be specified on the form, or any other disease or disability, which would be likely to cause the

^{*} Departmental Committee on the Taxation and Regulation of Road Vehicles (Second Interim Report).

driving of a motor vehicle by him to be a source of danger to the public. Certain disabilities (e.g., extremely bad eyesight or fits of an incapacitating nature) would be an absolute bar. If it appears to the licensing authority that he is so suffering, the licence shall not be granted. Various safeguards are proposed to prevent any real hardship or injustice arising -e.g., if the applicant is refused on the ground that he is suffering from a disease or incapacity he may demand a practical test which, if he succeeds in passing, driving, in | shall entitle him to receive a licence; that when the provision first comes into force an applicant, who has previously held a licence though suffering from a disability which might otherwise be held to disqualify him, may make a declaration that notwithstanding the disability he has been in the habit of driving a car, and thereupon a licence shall be granted; finally, an appeal to a Court of Summary Jurisdiction is allowed to any person who is aggrieved by the refusal of a grant or renewal of a licence. There are various other conditions attached. We approve generally of these proposals, which we think will adequately meet the situation, and we agree that severe penalties should be imposed for a false declaration.

43. With regard to qualifications based on knowledge and experience, we recognise the force of the arguments that no tests can be effective and, therefore, we do not recommend them. Although it may not carry us very far, we think nevertheless that to all applicants for driving licences there should be supplied free copies of the Code of Customs to which we refer in paragraphs 74 and 75 and of the booklet on traffic signals to be used by the police and drivers of vehicles which is issued with the approval of the Home Office and the Scottish Office. This will bring to their notice information which they will find of the utmost value on the road.

MINIMUM AGE LIMITS FOR DRIVERS.

44. With reference to the ages at which drivers' licences can be obtained under the present law, viz., 17 in the case of motor cars and 14 in the case of motor cycles, we do not think that any alteration is needed in the case of motor cars, but we hold strongly that the age of 14 is too low for motor cycles. A motor cycle capable of travelling at great speed is a very dangerous machine for a boy of 14 to ride, and by universal testimony there is a great deal of reckless riding on the part of many motor-cyclists, especially in the way of "cutting in" and at road junctions, etc. Youth is probably one of the causes of this.

We observe that in the Draft Road Traffic Bill it is proposed to raise the qualifying age for obtaining a motor cycle licence from 14 to 15. We think that this does not go far enough, and that the qualifying age for a motor cycle licence should be raised to 16.

In addition to this recommendation we are of opinion that provision should be made in the Bill to secure that a licence to drive a goods vehicle which exceeds $2\frac{1}{2}$ tons in weight unladen or a public service vehicle should not be effective unless the holder of such licence is 21 years of age or over.

PILLION RIDING.

45. Pillion riding has also been regarded as a frequent source of accidents, and it has been proposed in some quarters that it should be prohibited. The figures available to us, however, do not suggest that many accidents are directly attributable to it, and we should hesitate before proposing so drastic a change. We consider, nevertheless, that powers might properly be vested in the Minister enabling him to make Regulations restricting the number of persons in addition to the driver who may be carried on a motor cycle not fitted with a side car and as to the manner in which such persons may be so carried. Clause 23 (1) (e) of the Draft Road Traffic Bill contains a provision to this effect.

SUGGESTED MECHANICAL RESTRICTION OF SPEED.

46. We now proceed to deal with two proposals made by Lord Cecil in his Bill which are not contained in the Draft Road Traffic Bill, but concerning which a good deal of evidence has been given. The first of these is that all cars should be fitted with mechanical devices which would prevent them from travelling beyond a certain speed. Lord Cecil's idea apparently was that there should be a certain speed limit established by law (though he did not indicate precisely what this limit should be), and that directly the car reached this limit its further acceleration should be stopped automatically. Not a single witness who referred to this proposal appeared to be willing to support it. It was pointed out first of all that up to date no mechanical device of the kind has been invented which cannot be easily tampered with and that therefore any such device would not be an effective one; and in the second place, that such a plan, by preventing necessary acceleration at critical moments, e.g., when overtaking a slowmoving vehicle in traffic, might be very dangerous and a certain cause of accidents in many cases (Cooke, M. 10/22, Q. 2619-21: Smith. M. 11/14, Q. 3034-8; O'Gorman, M. 14/67-9, Q. 4174-6; Shrapnell-Smith, M. 16/17, Q. 4874-5; Howley, M. 17/81, Q. 5319-22; Allen, M. 19/39, Q. 6199-6200; Coombe, M. 21/9. Q. 6417; Hacking, Q. 7050).

SUGGESTED ALTERATIONS IN LEVELS OF HIGHWAYS.

47. The other proposal of Lord Cecil was that highway authorities should be empowered to alter the levels of roads at places which, in their opinion, are dangerous or where accidents are liable to occur, in order to compel motorists to slow down. This plan also was universally condemned by those witnesses who referred to it as being likely to cause many more accidents than it would prevent (Smith, M. 11/16, Q. 3050-3; O'Gorman, M. 14/62-3, Q. 4172-3; Shrapnell-Smith, M. 16/17, Q. 4877-8; Howley, M. 17/84, Q. 5331-2; Allen, M. 19/42, Q. 6209; Coombe, M. 21/9). In this connection it is worthy of notice that 0.8 per cent. of the fatal accidents are attributed to "defective surface of the road" (Appendix, Table D). It is bad enough that there should be roads with defective surfaces in the ordinary course of events, though no doubt this is sometimes unavoidable, but that we should go out of our way to create artificial defects in roads would hardly appear to be wise.

LIGHTS ON VEHICLES.

48. Part II of the Draft Road Traffic Bill deals with lights on vehicles and an Act based upon it was passed into law in 1927.* Section 1 of the Act contains the following provision—

"... every vehicle shall ... carry (a) two lamps, each showing to the front a white light visible from a reasonable distance; (b) one lamp showing to the rear a red light visible from a reasonable distance; and every such lamp shall ... be kept ... in efficient condition"

The Act also provides that the Minister may by Regulation prescribe conditions regulating the use of lamps showing a light to the front and of red reflectors on bicycles and tricycles. The Minister in pursuance of these powers has issued certain Regulations on the subject.[†]

The law appears to us to be adequate and we do not desire to comment upon it, but we urge that its provisions should be enforced with greater strictness than is often the case at present.

49. It has been brought to our notice that many commercial vehicles are inadequately lighted (*Chapman*, **M. 31/7**, Q. 8621; Stancer, **M. 34/5**, Q. 9129-31). In practice, many lorries have only small oil lamps, which are often practically invisible, and in any case do not afford a safe driving light. We think that all motor vehicles should be effectively lighted, and that the Minister should be empowered to make special Regulations on the subject.

RED REFLECTORS ON CYCLES.

50. Another point in connection with the working of the Act to which our attention has been directed concerns the red reflectors which pedal cycles are permitted to carry in lieu of rear lights. In the Regulations already mentioned, the Minister has set out in detail the precise conditions which these reflectors must fulfil to come within the law. Yet we are informed by witnesses that many reflectors

^{*} Road Transport Lighting Act, 1927.

[†] Road Vehicles Lighting Regulations, 1928 (Statutory Rules and Orders 1928, No. 286).

in use are often either so small or so placed as to be quite invisible in many cases, or visible only when a few yards in front. Further, it appears that there are still a number of bicycles upon which no rear lamp or reflector of any kind is fitted (*Chapman*, **M. 31/7**(*a*), Q. 8622-6; *Moore & Wilson*, Q. 8897-8902). It is useless for the Minister to make Regulations if those whose duty it is fail to see that such Regulations are observed, and we invite the serious attention of the police authorities to the subject.

DAZZLING HEADLIGHTS.

51. Next, great inconvenience and danger are caused by the use of dazzling head-lights which often temporarily blind the drivers of on-coming cars. The plan which is adopted by some motorists of extinguishing their head-lights, " blacking-out " as it is called, appears to us to be exceedingly dangerous, as depriving a driver of any clear vision in front of him with grave danger to pedestrians and cyclists. The best method of meeting the difficulty would be to provide that all cars carrying headlights should be fitted with apparatus for dipping them, thus preventing them from dazzling on-coming drivers, while still giving a certain view in front, or else for swivelling them to the left, i.e., towards the near side of the road. The exact nature of the device should be left to the Minister's Regulations. so as to provide for inventions or improvements which may be made in the future. Failure to make use of these devices should be an offence.

DROVERS' LIGHTS.

52. We are also of opinion that persons driving animals on the road after dark should be compelled to carry a light.

PARKING PLACES.

53. We pass now to the consideration of a question which has more to do with removing obstructions to the smooth and easy flow of traffic than with the direct prevention of accidents, though it may be observed that anything which impedes and obstructs the flow of traffic thereby increases the dangers of the road. We refer to the practice of leaving cars and other vehicles standing at the sides of streets and roads, thus seriously curtailing the space through which traffic can pass. We are of course aware that this cannot be avoided altogether. Commercial vehicles must have opportunities of loading and discharging at places of business, and private individuals must have reasonable facilities for shopping, etc. But in many places cars are frequently left on the public roads for long periods at a timeoften on each side of a street-and many people seem to think that they have a perfect right so to leave their cars. This is an entire fallacy. The streets are intended for the movement of

traffic of all kinds, not for the purpose of parking cars while the owners or persons in charge are engaged on business or pleasure. But the evil is constantly growing, and the available space on the roads is seriously reduced. Among the worst offenders are the owners of long-distance omnibuses and motor coaches, who often leave their vehicles for hours together while waiting for the return journey, unless special regulations are made by the local authority. It appears to us that these persons should be compelled to provide their own garages at the terminal points just as the railway companies have to provide their own stations. That they should be allowed to occupy part of the public roads as a garage appears to us to be an infringement of the rights of the public. With regard to private cars and commercial vehicles, the latter should be moved on " by the police as soon as their business at the shop or warehouse is concluded, while as to the former, the proper solution would appear to be the provision by local authorities of adequate garages or parking places where no sufficient facilities of the kind already exist.

54. Section 68 (1) of the Public Health Act, 1925, enacts that where, for the purpose of relieving or preventing congestion of traffic, it appears to the local authority to be necessary to provide within their district suitable parking places for vehicles, they may provide them in accordance with the provisions of the Section. For this purpose the local authority may (a) by order authorise the use as a parking place of any part of a street within their district, or (b) acquire land suitable for use as a parking place, or utilise any lands which may lawfully be appropriated for the purpose. No charge can be made by the local authority in respect of parking places in streets. The Section also vests in the local authority power to make regulations as to the conditions upon which any such parking place may be used, and in particular as to the vehicles or class of vehicles which may be entitled to use any parking place. We recommend that all local authorities should be authorised to provide car parks on land acquired for the purpose or garages at convenient places and to make a charge for their use in order to recoup themselves for the expense to which they have been put. We further think that they should have the power to compel drivers of vehicles to make use of these facilities if they wish to remain in the town for more than a certain time.

WHITE LINES.

55. Another serious obstruction, and one fraught with considerable danger, is frequently caused by drivers leaving vehicles at corners, both in town and country, where they may be invisible to on-coming traffic. This should be an offence, punishable by fine. It also frequently happens that vehicles are left standing between the kerb and a white line, thus rendering

it impossible for other vehicles to respect the white line. We think this too should be regarded as an offence, though we cannot recommend that such a rule should be enforced until the location of white lines has been completely reconsidered by local authorities in conjunction with the Ministry. The white line is undoubtedly an admirable device which has probably conduced more to safe driving than any other plan hitherto adopted, but we are suffering now from an excess of white lines, just as we suffer from an excess of roadside signs. Their multiplicity puts a premium on non-observance. These proposals relating to the obstruction of roads should be made applicable to all kinds of vehicles and should not be confined to those mechanically propelled.

SIGN-POSTS AND STREET NAMES.

56. It has been represented to us that obstruction and delays are frequently caused by inadequate sign-posting in country districts and in many towns, and particularly by the failure of most municipal authorities to have the names of streets conspicuously posted at all corners. This is undoubtedly the case. Motorists frequently lose their way in towns, taking wrong turnings, and obstruct the traffic in their endeavours to ascertain the name of a street or in turning round in order to retrace their way. The Minister of Transport should be empowered to secure the provision of adequate directions in towns and vil-The name of the town or village should always be lages. posted on the approach roads. In this connection we feel that we ought to express our sense of the excellent work which has been done by the motoring organisations in sign-posting towns and villages, and in indicating temporary routes in cases where the ordinary route is closed for repairs or other reasons. In many places the only clear directions are those provided by these organisations.

DRAFT ROAD TRAFFIC BILL-CLAUSES.

57. We now proceed to deal with minor amendments of the law required to secure greater safety and the easier flow of traffic on roads. In doing so we shall take in order the Clauses of the Draft Road Traffic Bill which are germane to the subject and to which we have not already alluded.

58. We approve of the proposed classification of motor vehicles in Clause 1 (Application to, and classification of, motor vehicles), subject to our recommendations in paragraphs 26-28.

59. We approve of the terms of Clause 2 (Prohibition of motor vehicles not complying with regulations as to construction).

60. We approve of Clause 6 (Restrictions on prosecutions under preceding sections) whereby prosecutions for dangerous driving and other offences should be invalid unless notice of prosecution has been given to the driver within a reasonable period of the commission of the alleged offence.

61. Subject to the views expressed in paragraph 25 we approve of Clause 7 (Drunkenness while in charge of a motor vehicle).

62. We approve of Clause 8 (Duty to stop in case of accident) and Clause 9 (Duty to give name and address and power of arrest in certain cases) whereby it is the duty of every driver to stop and report any accident which has occurred, and to give his name and address, and which further empower the police to arrest in cases where a driver refuses so to do. We think that the same principle should apply to the drivers of all vehicles.

63. With regard to Clause 10 (Requirements as to drivers and attendants) which re-enacts the present law that locomotives (as defined by the Bill)* should have two persons driving or attending to the locomotive and one person in attendance on each trailer in excess of one, we think that this may be modified, and that it should be sufficient to enact that there should be, in addition to the two men on the locomotive, a third man in attendance only if there are more than two trailers.

We approve of an amendment proposed by the Ministry that, for the purposes of this Clause, a vehicle used solely for carrying water for the purposes of the drawing vehicle, or any vehicle not constructed to carry a load, should not be considered to be a trailer.

With regard to trailers generally, we are informed that the Ministry propose a new Clause laying down definitely the maximum number of trailers which may be drawn, with a power to the Minister to reduce the number by Regulation, but not to increase it. The number of trailers proposed is as follows :---

(a) In the case of a heavy locomotive or light locomotive—3;

(b) In the case of a motor tractor-1 laden or 2 unladen;

(c) In the case of a heavy motor car or motor car—1.

We approve of these suggestions.

64. We approve of Clause 11 (Restrictions on persons being towed by clambering on to or tampering with motor vehicles) which makes it an offence if persons are towed by holding

^{*} Heavy locomotives; that is to say, mechanically propelled vehicles which are not constructed themselves to carry any load (other than water fuel accumulators and other equipment used for the purpose of propulsion, loose tools and loose equipment), and whose weight unladen exceeds eleven tons and a half.

Light locomotives; that is to say, mechanically propelled vehicles which are not constructed themselves to carry any load (other than as aforesaid) and whose unladen weight does not exceed eleven tons and a half, but does exceed seven tons and a quarter.

on to vehicles in motion, or if a person tampers with a motor vehicle. We think the scope of the latter part of this Clause should be confined to cases of tampering without reasonable cause.

65. With regard to Clause 12 (Weighing of motor vehicles) we have had a good deal of evidence of the damage done to roads (including damage to buildings from vibration) by the excessive weights carried, especially on heavy lorries, which are frequently far in excess of those permitted by law. At the present moment the law is cumbersome and not satisfactory. Clause 12 of the Draft Bill proposes that the police or anybody authorised by the highway authority may require the person in charge of a motor vehicle to proceed to a weighbridge for the purpose of having the vehicle or the axle-weights weighed, and it gives power to County, Borough or District Councils to erect weighbridges or to join together for the purpose of erecting them. We think these proposals should be approved.

We also recommend that the Ministry should be enabled to make grants from the Road Fund towards the cost of the erection of weighbridges and towards the cost of the use of private weighbridges for testing the weights of vehicles.

66. We approve of Clause 13, which deals with the method of calculating the weight of vehicles.

67. We also approve of Clause 16 (Disqualification for offences), Clause 17 (Provisions as to disqualifications, suspensions and endorsements), and Clause 18 (Appeals against orders of disqualification) which deal with suspension of licences, and of Clause 19 (Power to councils to authorise on specified highways carriage of greater weights) which allows County or Borough Councils to permit weights in excess of the legal limits to be carried in a trailer drawn by a locomotive. This last provision is necessary, as there are certain heavy articles of such a size that they can only be moved by road, *e.g.*, very large boilers.

68. We agree with the proposals of Clause 20 (Power to probibit the use of bridges by motor vehicles) with regard to the prohibition of heavy weights on weak bridges. In this connection we were glad to be informed that an Act[•] was passed last Session to facilitate the reconstruction of weak bridges owned by railway companies and other private owners, since the continued existence of these bridges greatly impedes beavy traffic, causing it to be diverted to round-about routes and adding to congestion elsewhere. We defer further consideration of the question of bridges, including that of toll-bridges, to our final Report.

In view, however, of the serious nature of the accidents which have taken place at railway level-crossings and of the obstruction which these crossings constitute, we cannot refrain from expressing our opinion that the time has arrived when these should be abolished altogether. We are informed that in some eight or ten cases the Ministry have either made or indicated grants from the Road Fund towards the abolition of level-crossings in different parts of the country. This is a move in the right direction, but we consider that the Department should, without delay, formulate and give effect to a programme on a very much wider scale for the speedy elimination of these crossings on all classified roads and the substitution therefor of bridges or tunnels.

The only real difficulty is that of cost, on which various considerations arise. Some witnesses have urged that the work should be carried out solely at the expense of the railway companies and have suggested that they would save in annual maintenance a sum which would repay them for their capital Lord Russell, for example, said, "I am informed outlay. that these (*i.e.*, level-crossings) cost railway companies £400 a vear to maintain " (**M. 12/5**). "I think it quite proper that the railway companies should pay the cost (*i.e.*, of abolition). They would be the people who would benefit by the abolition '' (Q. 3270). Although we have not verified this figure, we have no doubt that there would be a certain annual saving. It would not, however, be fair to place on the railway companies, who obtained Acts of Parliament years ago authorising them to cross roads on the level when road traffic was infinitely less than it is to-day, a heavy charge largely for the benefit of competing traffic. It would appear to us that the cost should be borne partly by the railway companies, partly by the highway authorities, and partly by the Road Fund in proportions to be settled in accordance with the local circumstances.

69. We welcome the powers proposed to be conferred on the Minister by Clause 21 to order, should he think fit, an inquiry into the cause of an accident, but we consider that the scope of the Clause is too limited. In our opinion the Minister should be empowered to order an inquiry into the cause of any accident in which a motor vehicle is involved, and that such inquiry should be made compulsory in the case of all accidents to public service vehicles which involve the death of a passenger or passengers. The inquiry should be a public one and be conducted in a manner similar to inquiries held by officers of the Ministry in the case of railway accidents.

70. We approve of the proposals contained in Clause 22 (Keeping and use of petroleum).

71. With regard to Clause 23 (Regulations) generally we have already said that, in our opinion, questions of the construction of cars, e.g., brakes, silencers, steering gears and tyres, must be left to the discretion of the Minister (subject to the Regulations being presented to Parliament in the usual manner and the right of either House to veto them or to amend them) in order to admit of progressive improvements. But we think that such important questions as speed limits, maximum unladen weights and axle weights should be definitely decided by the Act and not be capable of alteration except by new legislation. We are of opinion, therefore, that the Clause should be considerably modified in this sense.

We understand that it is proposed to introduce a new sub-Clause requiring the Minister before making Regulations to consult with such representative organisations as he may think fit. We approve of this.

72. It is proposed by the new Clause, of which the Ministry has approved, to make drivers' licences issued in Great Britain available in Northern Ireland and vice versa. We see no objection to this.

73. We approve of the Clauses contained in Part V (General) of the Bill. These provisions relate to forgery, etc., of licences, penalties, application of fines, special provisions as to Scotland, interpretation, etc.

SUGGESTED CODE OF CUSTOMS.

74. We now proceed to consider the proposal for a Code of Customs to be issued by the Ministry for all users of the road. We attach very great importance to this proposal, which was first brought to our notice by Sir Arthur Stanley, who appeared on behalf of a Conference of Motor Organisations, and was subsequently elaborated by other witnesses, including representatives of the Automobile Association, the Royal Automobile Club, and the National Safety First Association (Stanley, M. 9/11; Cooke, Q. 2633; O'Gorman, M. 14/28 et seq., Q. 4073-9; Pickard. M. 25/12, Q. 7472). We think that in course of time these customs, though in some cases not possessing the force of law, will become universally respected and obeyed, and will do more to ensure safety than any legislation. In the first place it must be laid down that all users of the road, whether they are drivers of motor vehicles, or of horse-drawn vehicles, riders of horses, or pedestrians, or persons driving or or leading animals, or cyclists, have equal rights on the road, and that their first object should be neither to damage nor to impede each other. There is at present, unfortunately, a certain antagonism between motor drivers and a section of the public. Both are to blame-some motorists seem to think that the road belongs to them and that if they blow their horns everybody must get out of their way, and some pedestrians and some cyclists appear to think that all traffic must give way to them and that they have a right to hold it up whenever they please. Every effort should be made to replace this antagonism by a spirit of co-operation. We are confident that everybody on the road will play the game, but the rules of the game must be settled first.

75. We do not conceive it to be our province, nor have we received sufficient evidence, to set out in detail the Code which should be adopted, but we suggest the following, based largely on suggestions made to us from various sources, for consideration by the Minister of Transport.

Although we describe the Code as one of "Customs" it must clearly be understood that non-observance of several of them will constitute an offence to which a penalty is attached.

I.—FOR DRIVERS OF MOTOR VEHICLES.

(a) Drive down the left side of the road. Only come out to the centre of the road in order to overtake a slower-moving vehicle, or to avoid pedestrians or vehicles standing on the left of the road. Always signal in a definite manner your intention in good time before moving out. After you have passed the vehicle or obstruction, revert to the left.

(b) Never overtake another vehicle at a blind point—e.g., a bend of the road, or when climbing a hill the crest of which obscures the view for some distance in front of you.

(c) Never overtake a vehicle or approach a danger point without sounding your horn; otherwise use your horn sparingly and with consideration for the feelings of others, remembering it is intended to convey a warning, not a threat.

(d) If the driver of a vehicle following you indicates by sounding his horn that he wishes to pass, give him the proper hand signal to do so if you are satisfied that the road is clear in front.

(e) Never accelerate while another vehicle is passing you this is a most dangerous form of racing.

(f) Traffic on a "major" road has precedence over traffic on a "minor" road. This does not absolve a driver on the major road from keeping a sharp look out and driving cautiously at road junctions. It is the duty of a driver on a minor road to approach a major road dead-slow and to give way to traffic on it.

(g) Before any alteration of your course, give the appropriate signal with your right hand on the right-hand side of the car.^{*} Signals should be given well in advance of the intended manœuvre.

^{*} The Home Office issues a book explaining the correct signals for each manœuvre.

(h) At a controlled road junction if the signal, whether of a human controller or of a mechanical apparatus, is against you, draw up behind the white line across the road or street and remain motionless until the signal to proceed is given.

(i) Always leave your car standing on the extreme left of the road. Never leave it at a corner or bend where it may be invisible to on-coming traffic. Never leave it between the side of a road and a white line.

(j) Respect the rights of pedestrians who indicate to you their wish to cross the road. Always give way to aged or infirm persons, young children and those in charge of them, and horses and horse-drawn vehicles. These call for your special courtesy.

(k) Never turn your car round unless you can do so on one lock, unless you can see that there is no other vehicle on the road for a considerable distance. It is generally simpler to proceed to the nearest side road or entrance, back into it and then retrace your way.

(1) Obey all road-side signs, particularly those on approaching major roads, special caution notices and notices of schools. If children are playing on the road, or a large number of cyclists or pedestrians are on the road, sound your horn and drive slowly and with great care.

(m) If, owing to traffic conditions, you are compelled to pass a standing transcar on the near (*i.e.*, left) side, go dead-slow and sound your horn, and if passengers are getting in or out of the transcar, stop dead.

(n) Extinguish your headlights when passing through an illuminated urban area, or when you leave your car standing. Dip your headlights or swerve them to the left when meeting on-coming traffic—do not extinguish them.

(o) If you are passing the scene of an accident, stop and render any assistance you can.

II.—HORSES AND HOBSE-DRAWN VEHICLES.

The above rules are *mutatis mutandis* applicable to horse-drawn vehicles, especially the rules as to keeping on the left and as to giving the necessary signals to show the drivers' intention; the signals, however, may be given by the whip instead of the hand. A man leading a horse, whether riding himself or walking, keeps to the right of the road with the led animal on the inside. He therefore meets other traffic on the "wrong" side.

III.-PEDAL CYCLISTS.

(a) Never ride more than two abreast, and if motor traffic signals its intention to pass you, get into single file except on very broad roads.

(b) Ride down the left side of the road. If you wish to overtake a vehicle or pedestrian come out to the centre of the road, after signalling your intention to do so, and get back to the left of the road as soon as possible (d) Pay attention to all road-side signs, especially at cross roads. Remember that the traffic on a major road has precedence over that on a minor road.

(e) When riding at night take care that your red reflector (if you have not got a rear lamp) is so placed as to be visible at a reasonable distance, and see that it is not hidden by a great coat or a parcel on the cycle or otherwise.

IV.—PEDESTRIANS.

(a) Always walk on the pavement or footpath if there is one.

(b) Walk on the left side of a footpath or pavement This will enable you better to see traffic coming up from behind before you step off, if you are walking in the same direction as the traffic is going.

(c) Before beginning to cross streets and roads, except when there is one-way traffic, look first to the right, then to the left.

(d) In towns at controlled street junctions, never attempt to cross till the traffic is held up. Walk straight across, stopping at "island" if necessary.

(e) Where there is one-way traffic, always cross at the approved crossing places signified by notices such as "Please Cross Here." It is very dangerous to cross at a place where a round-about is actually in operation.

(f) Never stand about at blind and dangerous corners.

(g) Learn the hand signals used by drivers of motor vehicles and assist by giving signals to drivers entering main roads, etc., when you have the opportunity.

This Code might certainly be added to almost indefinitely, but it will lose in effectiveness if made too long. Its adoption by the public generally in its entirety cannot be expected immediately but if it gradually becomes the accepted practice of the majority, it will have the most salutary effect in the conduct of traffic, producing a kind of spontaneous and automatic control.

SUMMARY.

76. The following is a summary of our recommendations.

(i) Legislation on the subject of the general control of traffic on roads is long overdue and should be enacted without delay. (*Paragraph* 4.)

(ii) The Minister of Transport should compile comprehensive statistics of the causes of all road accidents. (*Para*graph 7.)

(iii) The Minister of Transport should be empowered to order an inquiry into the cause of any accident in which a motor vehicle is involved, but such inquiry should be obligatory in the case of any accident to a public service vehicle in which the death of a passenger is involved. (*Paragraph* 69.)

(iv) There should be no general or special speed limits for motor cars or motor cycles provided all wheels are fitted with pneumatic tyres. (*Paragraph* 20.)

(v) With regard to speed limits for mechanically propelled vehicles other than motor cars and motor cycles, certain alterations should be made in the present law. Motor omnibuses and coaches, if all wheels are fitted with pneumatic tyres, should be permitted a maximum speed limit of 35 m.p.h. Goods vehicles, if not exceeding 2½ tons unladen weight, and if all wheels are fitted with pneumatic tyres, should be allowed a maximum speed limit of 30 m.p.h. Certain other alterations are recommended in the case of vehicles falling within other categories. These speed limits should be rigorously enforced. (Paragraphs 26-29.)

(vi) The penalties for dangerous driving should be considerably increased; fines should be raised to a maximum of $\pounds 50$ in the case of a first offence and $\pounds 100$ in the case of a second or subsequent offence, with imprisonment as an alternative in either case; upon a second or subsequent conviction the licence should be automatically suspended for a period of not less than six months. (*Paragraph* 23.)

(vii) In addition to penalties for dangerous driving, there should be a penalty for a minor offence of a definite character which could be enforced. This offence might be called "Failing to observe a road sign."

If any person fails to observe or obey a road sign in any of the following cases, if he fails to draw up at a white line in towns where there is traffic control, or passes an island or central lamp-post on the wrong side, or fails to go "deadslow" on approaching a major road from a minor road, or fails to slow down and drive cautiously through a danger zone, or fails to do the same when passing, during school hours, a warning notice indicating a school, he should be guilty of an offence.

Any person guilty of the offence should be liable to a fine not exceeding $\pounds 20$ or, in the case of a second or subsequent conviction, to a fine not exceeding $\pounds 50$, or to a term of imprisonment not exceeding three months. In all the abovementioned cases the charge of dangerous driving may be brought against the offender if the circumstances warrant. (Paragraph 24.)

(viii) Any person organising or taking part in or conniving at motor racing or speed trials on a public road should be guilty of an indictable offence punishable by imprisonment without the option of a fine and by disqualification for holding or obtaining a driver's licence. (Paragraph 21.) (ix) A new definition of the offence of being drunk while in charge of a car should be adopted and should be made applicable in the case of the driver of any vehicle. (*Para*graph 25.)

(x) Prosecutions for dangerous driving and other offences should be invalid unless notice of prosecution has been given to the offender within a reasonable period of the commission of the alleged offence. (*Paragraph* 60.)

(xi) Every applicant for a driving licence should be required to make a declaration as to his physical fitness to drive. Severe penalties should be imposed for a false declaration. (*Paragraph* 42.)

(xii) The qualifying age for an applicant for a licence to drive a motor cycle should be raised from 14 years to 16 years.

In the case of a goods vehicle which exceeds $2\frac{1}{2}$ tons unladen weight or of a public service vehicle, a licence to drive should not be effective unless the holder of such licence is 21 years of age or over. (*Paragraph* 44.)

(xiii) The Minister of Transport should be given power to make regulations regarding pillion riding on motor cycles. (*Paragraph* 45.)

(xiv) At points of danger on roads where special caution and slow speed are necessary special warning signs, uniform in character, should be erected bearing some such inscription as "Danger Zone-Special Caution." (*Paragraph* 20.)

(xv) All roads throughout the country should be graded in accordance with their degree of importance and, at road junctions, etc., traffic on the less important road should give way to traffic on the more important road. On all minor roads, conspicuous notice boards should be erected at such junctions bearing the words "Dead Slow." The adoption of this recommendation should not relieve drivers on the more important road of responsibility for caution at road junctions. (*Paragraph* 32.)

(xvi) Road signs should be uniform in design and intention and not more than are actually required should be erected. The duty of erecting road signs should fall on the highway authorities, subject to the supervision of the Ministry of Transport. All unnecessary or unauthorised signs should be removed. The initial cost of this should fall on the Road Fund. (*Paragraph* 33.)

(xvii) The Minister of Transport should be empowered to secure the provision of adequate direction posts and street name plates in towns and villages. (*Paragraph* 56.)

(xviii) To relieve the police and to secure the control of traffic in towns at points not now controlled, the use of automatic light signals should be encouraged, but to secure uniformity throughout the country the erection of these signals should be supervised by the Ministry of Transport. (Paragraph 36.)

(xix) The provisions of the law relating to lights on vehicles should be enforced with greater strictness than is often the case at present. (Paragraph 48.)

(xx) Persons driving animals on the road after dark should be compelled to carry a light. (*Paragraph* 52.)

(xxi) To prevent dazzle, all cars carrying headlights should be fitted with apparatus for dipping or swivelling them. Failure to use these devices should be an offence. (Paragraph 51.)

(xxii) The Minister of Transport should have power to make Regulations relating to the construction of vehicles, e.g., brakes, silencers, steering gear and tyres, but questions relating to such important matters as speed limits, maximum unladen weights and axle weights should be definitely decided by Act of Parliament and should not be capable of alteration except by legislation. (*Paragraph* 71.)

(xxiii) All local authorities should be authorised to provide car parks on land acquired for the purpose or garages at convenient places and to make a charge for their use. Local authorities should have power to compel drivers of vehicles to use the facilities provided. (*Paragraph* 54.)

, (xxiv) It should be an offence to leave a vehicle standing between the kerb and a white line, but the enforcement of this is not recommended until the location of white lines has been completely reconsidered by local authorities in conjunction with the Ministry of Transport. (Paragraph 55.)

(xxv) The case for compulsory third-party risk insurance is so strong that an attempt must be made to deal with it. The holding of an insurance policy should be a condition precedent to a vehicle being licensed. All that is required is that there should be insurance against personal injury to a third party. (*Paragraphs* 37-40.)

(xxvi) In the case of a locomotive drawing trailers, not more than two persons should be required to be employed unless the locomotive is drawing more than two trailers. (*Paragraph* 63.)

(xxvii) The Ministry of Transport should be enabled to make grants to highway authorities towards the cost of the erection of weighbridges and towards the cost of the use by such authorities of private weighbridges for testing the weights of vehicles. (Paragraph 65.)

(xxviii) The Ministry of Transport should, without delay, formulate and give effect to a programme for the speedy elimination of railway level-crossings on all classified roads. The cost should be borne partly by the railway companies, partly by the highway authorities and partly by the Road Fund. (Paragraph 68.)

(xxix) Road authorities should provide footpaths on all new and reconstructed roads and on all old roads where none now exist and where the width of the road renders this possible. Footpaths should be maintained in as good a condition as the roadways. (*Paragraph* 11.)

(xxx) The Ministry of Transport should issue a "Code of Customs" for the education and guidance of all users of the highway. (*Paragraphs* 74-75.)

ALL OF WHICH WE HUMBLY SUBMIT FOR YOUR MAJESTY'S GRACIOUS CONSIDERATION.

ARTHUR GRIFFITH-BOSCAWEN

(Chairman).

J. J. ASTOR. CLARENDON. H. E. CRAWFURD. ERNEST HILEY. JAMES LEARMONTH. WM. G. LOBJOIT. F. MONTAGUE. NORTHAMPTON. ISIDORE SALMON. WALTER R. SMITH. MATTHEW G. WALLACE.

ROBERT H. TOLERTON,

Secretary.

A. SPENCE,

Assistant Secretary.

19th July, 1929.

46

APPENDIX.

TABLE A.

STREET ACCIDENTS IN GREAT BRITAIN IN YEARS 1909 TO 1928.

		Numl	be r of	Vehicl	es, etc., ta	which	accident	is attri	buted.	-
Fatal Accidents.						Non-1	Fatal Ac	oidents.		
Mechanically Pro- pelled Vehicles (excluding Trams).	Trains and Trackless Trolleys.	Pedal Cycles.	Horee-drawn Vehicles.	Total.	Mechanically Pro- pelled Vehicles (excluding Trams).	Trams and Trackless Trolleys.	Pedal Cycles.	Horse-drawn Vehiolee.	Total.	Total of all Acci- dents.
$\begin{array}{r} 373\\539\\727\\916\\1,54\\1,329\\1,810\\1,606\\1,280\\1,746\\2,010\\2,091\\2,222\\2,435\\3,019\\3,401\\4,155\\4,485\end{array}$	$112 \\ 105 \\ 117 \\ 128 \\ 168 \\ 147 \\ 256 \\ 344 \\ 318 \\ 260 \\ 184 \\ 185 \\ 98 \\ 111 \\ 98 \\ 113 \\ 124 \\ 110 \\ 112 \\ $. poque 160 169 149 143 117 158 166 194 170 209 241 229 311 229 311	585 597 605 620 640 584 614 534 428 437 400 343 295 265 237 258 217 225	1,070 1,241 1,449 1,664 1,962 2,220 2,878 2,295 2,297 2,678 2,295 2,094 2,488 2,704 2,488 2,704 2,678 2,768 2,979 3,631 3,971 4,803	8,301 10,940 14,401 17,751 21,660 25,290 28,511 23,439 18,575 14,053 25,609 31,219 36,609 31,219 36,609 42,058 53,084 64,318 79,377 86,890	4,540 4,848 5,368 5,226 6,539 6,909 8,211 8,996 7,840 7,152 6,518 6,288 5,031 5,175 5,124 5,615 6,067 5,587 5,587	paquiparties in the second sec	13,250 13,162 12,910 12,764 13,091 12,713 11,640 9,582 7,885 6,896 7,362 6,896 6,127 6,635 6,198 6,288 5,733 4,989 4,722	26,091 28,950 32,679 35,741 41,290 57,626 58,457 49,980 41,759 34,591 47,202 53,734 59,943 67,491 80,122 94,584 111,502 119,484	27,161 30,191 34,128 37,405 59,846 61,306 52,658 44,054 36,685 49,750 56,438 62,621 70,259 83,101 98,215 116,473 124,287 133,943
	Bargen and a second sec	Alechanically Pro- Mechanically Mechanically <td>Fatal Accid Fatal Accid Fatal Accid Jeopanicalla Jeopani Jeopanicalla</td> <td>Fatal Accidents. Fatal Accidents. Fatal Accidents. ord Action of the property of the proper</td> <td>Fatal Accidents. Fatal Accidents. Image: State of the s</td> <td>Fatal Accidents. Fatal Accidents. Total Accidents. output to the second se</td> <td>Fatal Accidents.Non-1Fatal Accidents.Non-1Tratal Accidents.Non-1odd Same Same Same Same Same Same Same Same</td> <td>Fatal Accidents.Non-Fatal AccFatal Accidents.Non-Fatal Accof the problem of the probl</td> <td>Fatal Acoidents.Non-Fatal Acoidents.outputoutputSelectionoutputSelection</td> <td>$\begin{array}{c c c c c c c c c c c c c c c c c c c$</td>	Fatal Accid Fatal Accid Fatal Accid Jeopanicalla Jeopani Jeopanicalla	Fatal Accidents. Fatal Accidents. Fatal Accidents. ord Action of the property of the proper	Fatal Accidents. Fatal Accidents. Image: State of the s	Fatal Accidents. Fatal Accidents. Total Accidents. output to the second se	Fatal Accidents.Non-1Fatal Accidents.Non-1Tratal Accidents.Non-1odd Same Same Same Same Same Same Same Same	Fatal Accidents.Non-Fatal AccFatal Accidents.Non-Fatal Accof the problem of the probl	Fatal Acoidents.Non-Fatal Acoidents.outputoutputSelectionoutputSelection	$\begin{array}{c c c c c c c c c c c c c c c c c c c $

Note.—Each accident causing death or personal injury is counted as one accident only, irrespective of the number of persons killed or injured thereby. An accident in which more than one vehicle is involved is also counted as one accident only. Cases in which only the driver or rider is killed or injured are included.

Number of Persons Killed.				Number of Persons Injured.							
Yes	u.	Mechanically Pro- pelled Vehicles (excluding Trams).	Trams and Trackless Trolleys.	Pedal Cycles.	Horse-drawn Vehicles.	Total.	Mechunically Pro- pelled Vehicles (excluding Trams).	Trams and Trackless Trolleys.	Pedal Cycles.	Horse-drawn Yehicles.	Total.
1926 1927 1928	•••	4,234 4,606 5,378	112 113 111	312 417 429	228 193 220	4,886 5,329 6,138	99,417 112,324 126,975	5,994 6,111 6,456	23,191 24,990 26,483	5,286 5,150 4,924	133,888 148,575 164,838

TABLE B.

TABLE C.

Year.			Approximate number of Motor Vehicles.	Total number of Accidents.	
				873,700	62,621
1922		•••		979,000	70,259
1923				1,141,400	83,101
1924		•••		1,335,600	98,215
1925				1,547,000	115,473
1926			•••	1,729,000	124,287
1927	•••			1,898,500	133,943
1928	•••		•••	2,036,000	147,582

TABLE D.

FATAL MOTOR ACCIDENTS.

June and July, 1928.

Summarised from Returns furnished by H.M. Coroners to the National Safety Fir.	8t
Association.	

			1928.	1927.	1926.
lumber of Coroners who sent returns	•••	•••	241	225	193
» » " " nil returns	•••	•••	81	68	68
" Inquests reported	•••		723	617	529
" Deaths recorded	•••	•••	732	625	545
" Contributory causes recorded	•••		933	774	669

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TABLE D.-cont.

I. ANALYSIS OF CAUSES.

	1928.	1927.	1926.
(A) Causes presumably under Control of Motor Driver or Motor Cyclist.	39.1%	36·0%	3 6•6%

Order of	Cause.	No. of	Per cent. of total causes.			
frequency.	Cause.	times recorded.	1928.	1927.	1926.	
1	Excessive speed having regard to all circumstances.	141	15.1	12.9	10.9	
4	Inattentive, confused, or lack- ing in judgment.	56	6.0	6.2	7.0	
5	Failed to exercise care at road junction.	54	5.8	4.8	2.9	
7	Improperly overtaking, cutting in or out.	37	4 ·0	2.5	2.7	
. 9	Failed to keep to near side of road.	29	3.1	8.6	2•1	
20	Inexperience	13	1.4	1.3	1.6	
25	Cutting corner	9	1.0	0.8	2.1	
25	Failed to sound horn	9	1.0	1.8	0.6	
35	Lost control due to pillion riding	6	0.6	1.2	4.2	
39	Failed to signal	4	0.4	0.1	0.5	
45	Under influence of drink	3	0.3	0.8	0.7	
50	'Physically unfit	2	0.2	0.4	0.5	
50	Leaving vehicle insecure	2	0.2	0.1	0.2	
57	Reversing negligently	0	0.0	0.0	0.5	
57	Forcing way through tramway queue.	0	0.0	0.0	0.5	
	• Total	365	39·1	36•0	36 · 6	
	· · · · · · · · · · · · · · · · · · ·	1928	. 1	927.	1926.	

1928. 7·0%

1926. 4•8%

8.9%

(B) Causes due to vehicle—driver not necessarily responsible.

Order of	0		No. of	Per cent. of total causes.			
frequency.	Сацве.		times recorded.	1928.	1927.	1926.	
14	Defects in equipment- than brakes or steering burst tyre, etc.		20	2.1	1.5	1.0	
21	Insufficient lights on vehi	cle	12	1.3	0.3	1.2	
23	Defective brakes		10	1.1	0.5	0.7	
31	Dazzling lights		7	0.8	0.8	0.7	
31	Fault of Passenger	•••	7	0.8	0.6	not re-	
37	Defective steering		5	0.2	0.5	0.3	
39	Overloaded vehicle	•••	4	0.4	0.0	not re- corded.	
· 57	Left-hand steering	•••	0	0.0	0 • 1	0.5	
	Total	•••	65	7.0	5.9	4.8	

TABLE D.—cont.

(C) Causes due to pedestrians,	cyclists, and	1928. ↓ 43 · 2%	1927. 48·1%	1926. 48.6%
others than the driver.				

Order of	Cause.	No. of times	Per cent. of total causes.			
frequency.	Cause.	recorded.	1928.	1927.	1926.	
ĺ	Children—					
3	Running into road (e.g., chas- ing toy, etc.)	61	6.2	4.5		
6	Crossing road carelessly or confusedly.	- 45	4.8	4.9	} 9·4	
11	Crossing from behind vehicle	22	2.4	1.5	2.5	
22	Playing games in street	11	1.2	1.5	1.8	
25	Crossing in front of vehicle	9	1.0	0.8	0.3	
39	Stealing rides on vehicles	4	0.4	0.9	0.7	
	Total children	152	16.3	14.1	14.7	
	Adults- Crossing road carelessly or	73	7.8	6.7	8•4	
	confusedly. Stepping off footway without looking.	35	3.8	3.8	5.7	
14	Crossing from behind vehicles	20	2.2	2.3	2.5	
17	Physically infirm	15	1.6	1 7	1.2	
17	Boarding or alighting from moving vehicles.	15	1.6	1.5	1.6	
25	Crossing in front of vehicles	9	1.0	1.8	1.3	
39	Boarding or alighting from stationary vehicles without looking out for other traffic.	4	0.4	0.8	1.0	
39	Intoxicated	4	0.4	0.5	0.6	
45	Failing to use footpath	3	0.3	0.8	1.1	
	Total adults	178	19.1	19.9	23 - 4	
	Total pedestrians Pedal Cyclists—	330	35-4	34.0	38 • 1	
13	Swerving in front of vehicle	21	2.3	3 · 1	not re- corded	
17	Careless riding other than as specified.	15	1.6	3.0	8.7	
25	Lost control	9	1.0	2.2)	not re-	
25	Cornering carelessly	9	1.0	1.8	corded	
37	Failed to signal	5	0.5	0.5	not re-	
45	Overtaking on wrong side	3	0.3	0.1	corded	
50	Holding on to vehicles	2	0.2	0.8	0.7	
55	No rear illumination at night	1	0.1	1.3	0.5	
55	Riding too many abreast	1	0.1	0.1	not re-	
					corded	
	Total cyclists Animals—	66	7.1	12.9	9.9	
39	Animals (other than dogs) not under control.	4	0.4	0.8		
45	Dogs not under proper con- trol.	3	0.3	0.4	\$ 0.6	
	Total animals	7	0.7	1.2	0.6	
	Total other road users	403	43.2	48.1	48.6	

TABLE	Dcont.
•	

				1928.	1927.	1926.
(D) Causes due to the road	•••	•••	•••	6.2%	7•6%	6.6%

Order of	Cause.	No. of	Per cent. of total causes			
frequency.	Cause.	times recorded.	1928.	1927.	1926.	
10	Restricted view at corners	25	2.7	8.2	2.5	
23	Tramlines—oyclewheelscaught, skidding, etc.	10	1.1	2.2	1.2	
31	Lack of warning sign	7	0.8	0 · 1	not re-	
31	Defective road surface	7	0.8	1.4	0.3	
35	Inadequate lighting of street or obstruction.	6	, ⁰ ∙6	0• 3	0.6	
50	Level orossing	2	0.2	0.1	1.3	
57	Lack of proper footway	0	0.0	0.3	0.7	
57	Permanently slippery road sur- face.	0	0.0	0.0	0.0	
	Total	57	6 ∙2	7.6	6.6	

				1928.	1927.	1926.
(E) Weather Conditions	•••	•••	•••	4 ·2%	4 • 1%	<u>s·</u> 2%

Order of	a		No. of	Per cent. of total causes.				
frequency.	Cause.		times recorded.	1928.	1927.	1926,		
11 16 50	Temporarily greasy road Rain Mist or fog		22 16 2	2·3 1·7 0·2	2·2 1·8 0·1	2·4 0·3 0·5		
	Total	•••	40	4.2	4.1	3.2		

						1928.	1927.	1926.
(F) Fire	•••	•••	•••	•••	•••	0.3%	0.3%	0·2%

Order of		~			No. of	Per cent. of total causes.				
frequency.		Caus	Cause.		times recorded.	1928.	1927.	1926.		
45	Fire			•••	3	0.3	0.3	0.2		
		Total		•••	3	0.3	0.3	0.2		

TABLE D.—cont.

II.-VEHICLES INVOLVED. (Motor accidents only.)

			No.	Pe	r cent.	No.	Per	cent.	No.	Per cent.
Private Passenger Vehicles-	→									
Private Motor Cars						287	- 29	9.1		
Motor Cycles (Solo)	•••	•••	181]	l8·4					
Motor Cycles (Pillion)	•••	•••	83		8•4					
Motor Cycles (Combinati	ions)	•••	47		4.7					
TOTAL, Motor Cycles	•••	••••	_			311	3	1.5		
TOTAL, Motor Cars and	Cycles	• • •			-				598	60.6
Public Passenger Vehicles-					•			•		
Motor Omnibuses						85		8.6		
Trancars and Trackless	Trolle	y 8		•••		16		1.6		
Motor Coaches		·		•••		17		1-8		•
Motor Cabs	•••	•••		•••	•••	10		1.0		
Toner Dublic Dessences	. 17 -1.:.	100				<u> </u>		<u> </u>	100	13.0
TOTAL, Public Passenger	r venic	les		•••	•••				128	13.0
Goods-Carrying Vehicles-						101		<u> </u>		
Motor Lorries	•••	•••		•••	•••	104		0.6		
Heavy Motor Tractors	•••	•••		•••		18		1.8		
Motor Vans	•••	•••		•••	•••	34		3.2		
TOTAL, Goods-Carrying	Vehicl	es		•••	•••				156	15-9
Other Vehicles—	•									
Pedal Cycles						83		8.4		
Horse Drawn Vehicles	•••	•••				16		1-6		
Miscellaneous	•••	•••	•	•••	•••	5		0.5		
TOTAL, Other Vehicles							·		104	10.5
_	•••	***	•	•••	***				104	10.5
GRAND TOTAL	•••	••	•	•••	***	•	• •	•••	986	100.0
	Ш	-Da	VLI	יייבנ	or Da	DIZ				
		2.4				INB •		1928	2	1927.
							1	Per ce		Per cent
In daylight	• • •		•••					85-6		87.7
During hours of darkness				••	• ••	•		14.8		12.3
IV.—Por	PULOUS	3 P	LACE	s o	r Open	n Cou	ITNU	BY.		
In populous places	•••		• • •	••		•		66-3	3	68.5
In open country	•••		•••	••	• ••	•	•••	33.3	7	31.5
•	⊽. —Mı	JCH	OR	LIT	TLE TE		n			
Much traffic on road									~	- - .
Little traffic on road	•••		•••	••	• •	•	•••	20-9 79-		22 • 4
			••••	•	•••••	•••••	•••	19.	1	77.6
VI.—S	TRAIGI	TT .	Roa	D, E	BEND,	ов Ји	INCI	FION.		
On straight road	•••						•••	66.	7	67 - 9
At a road junction	•••		•••		•• •	••	•••	19.		20.1
On a bend	•••		•••		•••••		•••	13.		12.0
17 17	C	•				~				•
VII	-SEX C	DE 1	1010	DR I	RIVER	а Гил	OLV			_
Male								No	-	Per cent.
Female	•••		•••	•	•• •	••	•••	802		97.8

•••

18

2.2

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Female ...

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TABLE D.-cont.

VIII.-SUMMARY.

	P	ercenta	ge.	P	ercenta	ge.
1. Pedestrians, Cyclists, (Adults	1928.	1927.		1928.	1927.	1926,
	19-1	19•9	23.4			
members of the public Children		$14 \ 1$	14•7			
other than the motor Cyclists		$12 \cdot 9$	9•9			
driver, etc.	07	1.2	0.6			
			<u> </u>	43 •2	48.1	18.6
2. Motor Drivers				39.1	36.0	36.6
3. Defects in the motor vehicle		•••	•••	7.0	8.9	4.8
4. Road conditions			•••	6-2	7.6	6.6
5. Weather Conditions		•••	•••	$4 \cdot 2$	4.1	3.2
6. Fire	• •••	•••	•••	0·3	0.3	0.2
					100	<u> </u>

IX.-PRINCIPAL FAULTS (1928 as compared with 1927 and 1926).

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	F	ercentag	(e.
	1928.	1927.	1926.
1. Motor driver—travelling at excessive speed having regard to all circumstances.	15.1	12•9	10.9
2. Adult-crossing road carelessly	7.7	6.7	8.4
3. Motor driver—Inattentive, confused, or lacking in judgment, other than as specified.	^6∙0	6•2	7.0
4. Children—crossing road carelessly	4.8	4.9}	<u> </u>
5. Children—running into road (e.g., chasing toy)	6.2	4.5	9•4
6. Motor driver—lack of caution at road junctions	5.8	4.5	2.9
7. Adults-stepping off footway without looking	3.8	5.8	5.7
8. Motor driver-failing to keep to near side	3.1	5.6	2.1
9. Road—restricted view at corners	2.7	3.2	2.5
10. Pedal Cyclist—swerving in front of vehicle 11. Pedal Cyclist—miscellaneous careless riding	2·3 1·6	$\left. \begin{array}{c} 3 \cdot 1 \\ 3 \cdot 0 \end{array} \right\}$	8.7
12. Motor Driver—improperly overtaking, cutting in, etc.	4.0	2.5	2.7
		4°0	~ 1
Total	63·4	58.7	60·3

TABLE E.

Year.	Children killed in London.	Adults killed in London.	Mechanical Vehicles licensed in Great Britain.	Street Accidents in Great Britain.		
921						
922	26	14.5	12	12		
923	13.5	18-5	31	33		
924	25	59	53	57		
925	18.5	61	77	84		
926	26	99-5	• 98	98-5		
927	19.5	116	118	114		
928	40	153	134	135		

	Rates of Speed.														
1 to 5 mile per hour. Year.		5 miles hour.		l0 miles hour.	s 10 to 15 miles per hour.		15 to 20 miles per hour.		Over 20 miles per hour.		Unknown.		Stationary.		Total.
Iear.	Number of Fatalities.	Percentage of Total.	Number of Fatalities.	Percentage of Total.	Number of Fatalities.	Percentage of Total.	Number of Fatalities.	Percentage of Total.	Number of Fatalities.	Percentage of Total.	Number of Fatalities.	Percentage of Total.	Number of Fatalities.	Percentage of Total.	
1920 1921 1922 1923 1924 1925 1926	248 204 219 185 227 206 208	$\begin{array}{r} 38.87\\ 35.73\\ 32.44\\ 27.69\\ 26.9\\ 24.53\\ 20.74 \end{array}$	250 231 285 282 339 364 366	$\begin{array}{c} 39 \cdot 19 \\ 40 \cdot 45 \\ 42 \cdot 22 \\ 42 \cdot 22 \\ 40 \cdot 17 \\ 43 \cdot 33 \\ 36 \cdot 49 \end{array}$	79 79 94 119 150 132 221	12.38 13.83 13.93 17.81 17.77 15.72 22.03	21 27 28 39 39 50 98	3 · 29 4 · 73 4 · 15 5 · 84 4 · 62 5 · 96 9 · 77	9 3 11 13 17 25 45	$ \begin{array}{r} 1 \cdot 41 \\ 0 \cdot 53 \\ 1 \cdot 63 \\ 1 \cdot 95 \\ 2 \cdot 01 \\ 2 \cdot 98 \\ 4 \cdot 49 \end{array} $	28 22 31 26 65 57 55	4.39 3.85 4.59 3.89 7.7 6.76 5.48	3 5 7 4 7 6 10	$ \begin{array}{c} 0.47 \\ 0.88 \\ 1.04 \\ 0.60 \\ 0.83 \\ 0.72 \\ 1.00 \end{array} $	638 571 675 668 844 840 1003

TABLE F.

RETURN OF THE ESTIMATED RATE OF SPEED OF VEHICLES (INCLUDING BICYCLES) CONCERNED IN FATAL ACCIDENTS IN STREETS IN THE METROPOLITAN POLICE DISTRICT DURING THE YEARS 1920-1926.

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