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Finally, in this early paper we see, as it were, the germ of all that preventive work against disease and poverty which for more than half a century has filled our author's thoughts, words, and acts for the reformation of the communities belonging to his time. It forms, therefore, a fitting close to this part of the present memoirs.

VOLUME II.

PART III.

PREVENTION OF CRIME.

CHAPTER I.

LABOURS FOR THE PREVENTION OF CRIME.

of crime originated as far back as those which related to the prevention of disease and of poverty. They date from the year 1829, when he published his famous essay on "Preventive Police," in the London Review.

As stated in the biographical dissertation, the reading of this essay led Bentham to seek our author's acquaintance. It also led Mr. James Mill, the father of John Stuart Mill, to observe that the essay read like the work of a man of ripe experience; and it had the effect of removing its author from professional life at the Bar, for which he had been educated, into the course it was his ultimate destiny to follow.

The essay on Preventive Police is still of first rank as an effort of jurisprudence, and, in many important principles, is, perhaps, as much in advance of the present as it was of the time when it first appeared.

Ten years after the appearance of the paper on Preventive Police, our author, with Mr. Charles Shaw Lefevre and Mr. Charles Rowan, signed the first Report of the Commissioners appointed to inquire into the best means of establishing an efficient Constabulary Force in the counties of England and Wales, under which the revision of the Police took place, and the present system was established. Since then, on numerous occasions, the author has reverted to the subject of Police Administration, notably in his essay on the Functions of a General Police Force for the extinction of fires, and on other subjects to be noticed in the succeeding chapters.

CHAPTER II.

PREVENTIVE POLICE.

nate in appearing in the London Review, a periodical which, in the year 1829, possessed an influential, if not a very extensive circulation. It was the organ of the thoughtful readers of all classes and of all politics, so that every essay brought forward in it received immediate attention. At the time named also, as our author sets forth by saying, "some conspicuous portion of each day's recorded transactions adds to the impression on the public mind that the introduction of a preventive system of police has become absolutely necessary."

At that moment Sir Robert Peel was framing his famous Act for the introduction of the new body of police in London, and here again, therefore, this essay in the London Review came forth opportunely. The essay commences by showing that the then existing system of police consisted of disjointed bodies of men, governed separately under heterogeneous regulations; whereas a good police should be "one well-organised body of men," acting upon a system of precautions to prevent crime and public calamities; to preserve public peace and order; and to perform whatever other useful functions might be compre-

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hended in their duties without hindering the best performances of those of an important nature.

To the few who are interested in the development of the present as it is seen in the history of the past, this essay may be very much commended for study.

But for the many who may read these pages, I have thought it best to ask Mr. Chadwick himself to give what may be called a revised précis of it, with some account of the Constabulary report in which he was also engaged. This he has been kind enough to do in the following notes, with a few additions expository of the working of the system in practice.

PRÉCIS OF PREVENTIVE POLICE REVISED BY AUTHOR IN 1884.

"I found the parochial police partake to a remarkable extent of the Dogberry and Verges type, very much under the direction of the local Shallows.

"In the organisation of a systematised police force, I tried to deduce principles of action. I directed attention in the first place to the army of systematised depredators who lived by spoil; who rose in the morning and went out to seek a livelihood by spoil including mendicity and vagrancy, but excluding for the time the crimes of passion and what may be termed the indoor crimes,—fraudulent transactions by persons whom the police could not be set to watch.

"My examinations then led me to suggest an alteration of the treatment of all the out-door criminal class.

"In the court was seen a man on trial for picking a pocket. The public saw no farther than that one offence. The inference was that it might have been committed from want of employment or from sheer poverty. The fact was that it was

one of a long series of offences committed for a double profit, over that derivable from regular industry. At that time the wages for rude labour in the Metropolis did not exceed three shillings a day, but the pickpocket's earnings did not average less than six shillings a day; six silk handkerchiefs, which he sold at a shilling apiece, with the chances of other prizes, such as pocket-books, with cash in them; and with the exception of being once or twice 'policed,' his average chances of being at large were five years. About a fifth of the prison population of this class I found to be removable by re-commitments every year. The habitual crime of this class was not of necessity or of passion, but of calculation of comparative profit. I knew Leon Fouché, a member of the Institute of France, who took a special interest in the condition of the prison populations, and I told him of the results of my investigations as to the profits of regular depredators, and he repeated my course in France, of which he gave me this anecdote: -He found in the prison a returned convict, to whom he talked. 'Here again! I have thought you a particularly sensible man. Why will you not reform, and live honestly?' 'Tenez, Monsieur,' was his answer, 'I keep myself within bounds of moderation: yet, as a thief, I realise eighteen francs a day. But at my trade as a tailor I only earn three. I put it to you—would you be honest only on that?'

"Such fellows were noted for their frequent returns to prison, and for their imposition on religious communities, who visited the prisons to effect reformations by religious treatment. The practised thieves entered themselves as Protestants, or sometimes as Jews, and pretended to have been firmly converted to true Catholicism by the ministrations they received; which effected great rejoicings. By the influence of the nuns, they obtained extra indulgencies, and mitigation of the duration of their sentences. Some of the thieves were found to have been re-converted several times from the errors of Protestantism or Judaism.'

"The conditions of these classes of depredators suggested to me a new course of action for prevention; not by punishments or varied inflictions, as by flogging, which they disregarded, but by the reductions of the profits of their career, by the direction of the services of a preventive police. But to do this their action would be directed to carry into practice several fundamental axioms.

"First, that every arrangement which renders increased exertion necessary to obtain property illegally is so much gained to the prevention of crime.

"Secondly, that every arrangement which increased the difficulty of converting to the use of the depredators property dishonestly acquired was so much gained in diminution of the motives to commit crime.

"Thirdly, that every arrangement which diminished the chances of the personal escape of the depredator was so much gained in diminution of the motive to commit crime.

"These axioms were comparatively easy to enumerate, but it was very difficult to get the executive particulars comprehended, or to get them acted upon.

"One proper object of a Poor Law service is the reduction of mendicity and vagrancy.

"In 1837 I proposed to Lord John Russell the

appointment of a small Commission for the examination of the provincial constabulary, made up of parish constables, and to examine it with a view to the formation of a general preventive police. He gave me as a colleague Colonel, afterwards Sir Charles, Rowan, and Sir Charles Lefevre, afterwards Lord Eversleigh, as a representative of the county magistrates, but who left us when he became Speaker.

"My previous investigations served me greatly for the immediate prosecution of the inquiry; on one topic especially I went to the prison at Pentonville and examined some prisoners myself as to their past careers. I got very important aid from Mr. Clay, the prison chaplain of the Lancaster County Prison, a man of very distinguished ability, and also from the chaplain of the Lancashire Gaol, and from the governor of the prison at Pentonville. A natural son of George IV. was introduced to me who took up the subject with great ability.

"I got one most important return to show the chances of escape and the wide profits of impunity. It was from the Bank of England, to show the number of forged bank notes presented there, every note distinguishing a distinct detail and a separate offence. It was shown that during the years from 1811 to 1825 there was only one conviction to between three and four hundred offences. In subsequent years the convictions were one in 613 offences.

"The general course of the examinations taken was as to their course of life since they were in honest employment; but many of them never had been, as they had been beggars, vagrants, and thieves from infancy; where they had lived or lodged; to what houses they resorted; who did they meet there; how and where did they dispose of their spoil. These were not questions as to any offences they had themselves committed. They answered, on the whole, without restraint and satisfactorily. We had no authority to make any promises on the information given, but it appeared very clearly that by an exercise of an authority such as is exercised in relation to offenders who give Queen's evidence, giving to one a mitigation in consideration of information which will lead to the conviction of two or more, or a source of delinquency, a great advance may be made in the work of prevention. The information of one as to the place where he was accustomed to dispose of his stolen goods would be corroborated by others; that of another as to places of resort known as flash houses, would enable the superior officer of the police to direct the service of the police to effect their extinction.

"In corroboration of our view of the effect of arrangements narrowing the hours of escape, instances were given us of burglars and thieves who, on account of the reduced profit of depredation, returned to honest occupations.

"This method of obtaining information, when systematised and regularly conducted by a public prosecutor and a chief of police, would have great advantages over the method of obtaining information through detectives.

"The method of detectives implies communication with thieves and recognition and consorting with them, which is highly objectionable; it implies a tacit recognition of the action of many for the capture of one when he is 'wanted' on a particular charge.

"I know from Sir C. Rowan and Sir Richard

Maine that they disliked detection on principle, and only yielded to its adoption on what they deemed superior authority.

"The regular examinations of the careers of the delinquents is a means of developing incorrect points or defects in the action of the service, and of making them good, which the detective service fails to do.

"One organisation of the career of a delinquent served to bring under consideration an important application of the first axiom of prevention, viz., that every arrangement which renders increased exertion necessary to get at property illegally is so much gained to prevention.

"On inquiring of a delinquent of the cleverer class -a burglar-his career, and asking him where he next went, he said to Scotland. And what did he do there? Nothing; he only went there on an excursion tour, for nothing worth while was to be done in a Scotch town. He explained that from the number of Scotch banks, and the general habit of banking with them, tradesmen, who got interest on their deposits, were in the habit of taking over to the bank, which was close at hand, their receipts every day; so that, after all the labour of a reconnaissance and of preparation, when a shop was entered at night, only a little loose silver was to be found, which did not pay the expenses. Whilst in England, where the habit of banking had then very little extended to retail tradesmen, the receipts, not only of the day, but of the week or of the month, or even longer, were kept in the till of the counter exposed for depredation. At Mortlake, there have been repeated burglaries at the shopkeepers', and large amounts stolen. There is no branch bank nearer than Richmond. On the system of the Scotch banks there would have been three branches in this place, and perhaps all the losses that have occurred in Mortlake would have been saved. When Mr. Gladstone was Chancellor of the Exchequer, I called his attention to the large differences in crime, under the conditions of the two systems of banking, to which subject he promised his consideration. The murders of lone old people may be said to be invariably for known and suspected hoards of money, from which they would have been saved had it been understood that it was kept, for the interest as well as the security, at the bank.

"The whole of the functions of banking and their returns by Government savings banks, and the payments by cheques and money orders, and the saving of the possession and the transmission of coin, are to be regarded, formulated, and cultivated as an immense source of the prevention of crime, under first axioms.

"Cattle, instead of being, as heretofore, paid for in the market in coin, are generally paid for by antedated cheques.

"By these means, and also by the mounted police patrol, the class of highwaymen is now extinct, and also the regular footpads; and, on the whole, by the preventive banking service, so far as it has been carried, it is probable that the predatory population has been reduced to one-half of what it formerly was.

"On another primary axiom, viz., the prevention of those arrangements which diminished the chances of the escape of depredators, as being so much gain for the prevention of crime, the plan adopted on the first institution of the police is still very defective.

"Its chief defect lay in the direction of the rank

and file of the force uniformly to the watching, and to the place rather than the person. It is on the military system of regular patent, by which it is appointed that the policeman shall traverse a spot every fifteen minutes, allowing to the depredators fifteen minutes of opportunity for crime or for escape,—a chance adopted systematically by them.

"The arrangement has been characterised as one of the privy sentinels everywhere to watch and guard the hen-roosts, while giving the fox a quarter of an hour's chance, instead of pursuing him exclusively. The Head Constable of Hull told me that he kept the town clear of depredators in this way. When a ticket-of-leave man, or one from the prison, came into the town, of which he had notice, he despatched a constable in plain clothes, with the instruction: Now you are to follow that man constantly, wherever he goes! If he goes near a shop you are to go there too; if he goes into a public, you are to go there too; or into a place of entertainment, you are to be his shadow so long as he remains in Hull. Hull was thus cleared of him, under the combined system, a telegraphic description from police station to police station, and keeping eyes upon him the whole route, until he was cleared into honest courses. The rank and file are of opinion that they ought, as it were, to be allowed to break step, and to act in plain clothes at intervals. The objection raised was this, that the inhabitants liked to see the police in uniform, as it gave them a sense of security. But the inhabitants should be properly instructed as to their loss of force by the present method, and that when a district is cleared they may be satisfied of the fact by the instant appearance of the police in uniform."

CHAPTER III.

PREVENTION OF ROBBERIES AND MURDERS FOR MONEY.

me for publication in the Social Science Review, of which I was the editor, a very useful and practical paper respecting two executions for murder which had just previously taken place. There are so many valuable suggestions in this short communication, that it is herewith inserted entire, as well worthy of present study. It appeared in the Review on May 16th, 1863.

"The case of the murder at Ribchester, in Lancashire, for which two men have recently been executed at Liverpool, is one of a class of murders, which, from not looking at the common causes, and from not removing them where practicable, are of almost regular repetition. I would be seech all persons in position in the press as well as the pulpit, to use every occasion to give serious exhortation to all people, of whatever degree, never to keep hoards of money at home, although they may feel sure that the hoard is unknown to any one but themselves. The recent case to which I refer is thus stated:—'The murdered woman, who was an infirm old woman, seventy-nine years of age, followed the occupation of

a beerhouse-keeper and small farmer. She was sole occupant of the premises, situate in a lonely part of the highway; and as she was of somewhat penurious habits, and did a considerable business, it was generally believed by those who knew her that she was worth money. It was further rumoured that she kept her money in the house. It was known that she had sold a cow for £18 to pay her rent, and this appears to have excited the cupidity of the two culprits and two of their companions. These four men, M'Phail, Woods, Carr, and Hartley, resolved to break into Mrs. Walne's house, and plunder her of the money she possessed. In accordance with this resolution, on the night of the 10th of November they proceeded from Preston to Ribchester, and after some considerable deliberation, and a thorough survey of the premises, they went round to the back of Mrs. Walne's house, removed the lower sash of the window, and all the men entered, Woods leading, Hartley following, and the two others bringing up the rear. A lantern was lighted, and the men went upstairs, Woods still leading. In the bedroom they found the tenant of the house, she having been alarmed by the noise, sitting up in bed; they demanded to know where she kept her money, and on refusing to tell, she was violently thrown back in bed, the place searched, and a small parcel wrapped in flannel discovered in the room. When this money had been secured, all the men went downstairs again, continuing their search of the premises, and the fatallyinjured woman, who had created considerable noise by her cries, continued to scream with much vigour.'

"Now this is one of a class of cases of lone unprotected persons, old women, unprotected females, sometimes lone old men, living by themselves, the known or suspected possessors of secret hoards of money upon their premises; and the fact coming to the knowledge of prowling ruffians, the temptation of the loneliness and the defencelessness of the victims, leads to the commission of the crime to possess the booty. The possession of money or readily convertible valuables on the premises, is the temptation to theft as well as to murder; and the thefts are, of course, more numerous than murders. The possession of a hoard on the premises is a source of painful suspicion to the possessors, and of anxiety which diminishes greatly the value of the property itself. In lone places the possessors of such property can receive little protection from the police, who cannot be expected to be constantly watching outof-the-way premises, even if they were apprised that there was money or peculiar temptation to robbers in them.

"The real preventive of these murders is simply not to keep money upon the premises, but always to go with it at once to deposit it in a Post Office Savings Bank, or some other well-known place of security. If the poor widow, -widow Walne, -after selling her cow, had gone and placed the £18 in the bank,—and she might with a little arrangement have left it at the bank at the market-town, where perhaps the cow was sold,—she would have slept in security from the robbery, and there would, of course, have been no murder. People should also be informed of the mode of carrying money about them as a preventive of robbery, namely, to get payment when they can, in cheques, dated a day or two after the time of payment.

"Many persons live at a distance from the old savings banks. To these persons the modes of paying money into the banks, and of drawing it out from them, is inconvenient. Many do not wish to be seen going to deposit money there, or to have it known by poor relations (and consequently to be plagued by them to lend) that they have savings. Many put money into savings banks at a distance to avoid such persecution, and many are not convinced of the safety of savings banks. But the new Post Office Savings Banks are free more or less from all these objections. They have the highest amount of security,—that of the nation. They are now so much more numerous than savings banks, as to be within reach of most persons in every part of the country. It need not be known that the visit to the post office is a visit to deposit money, or that it is not a visit to inquire about a letter. But I would urge that every one should be impressed with this rule, that it is far more safe, far less uncomfortable, to be known to have money deposited in a bank than it is to have any hoard kept in the house, though it is believed to be securely hidden, and the fact of the hoard unknown to any one else. The income and the expenditure of a person is known to many, and the hoarding suspected; and the tortures of the robber and of the murderer compel the disclosure of the place where it is secreted. Moreover, poor people should be impressed with the fact that the money hoarded, or kept upon the premises, is generally kept there at a loss. The poor widow would have got ninepence a month as interest from the bank for keeping the money. The legal interest paid to the depositors in the Post Office Savings Bank is a half-VOL. II.

penny per month, or sixpence for the year, for every pound kept; or five shillings for every ten pounds of savings in the year;—a respectable reward for frugality. The habit of banking, as a habit of security and of comfort, and of the prevention of crime, as well as being a habit of frugality, has yet to be made popular amongst the great mass of the population including artisans and the smaller shopkeopers, in most parts of Great Britain, except in Scotland.

"The vast amount of money kept in greater or less sums on the premises by retail dealers, farmers, and others, and hence kept exposed to depredation as well as to the loss of interest, is highly discreditable to the good sense and frugality of the persons who do it. Of this publicans are a common example, and they are frequent victims of depredation. In the course of some investigations of systematic depredation, a police officer stated to me that when the extent of culpable exposure of property was considered, there ought to be little surprise at the extent of habitual depredation. Thus he said he might almost undertake to find blindfold large sums of money kept by publicans as well as by other tradesmen. He would grope his way to the bedroom on the second floor, and he would find a chest of drawers with three large drawers and two small drawers at the top; in the right hand small drawer, which had the commonest lock, one that might be opened by a nail, or by a piece of bent wire, would be found a bowl in which there was silver and gold, and now and then notes, kept for paying the brewer and the distiller. These stores are from time to time swept away by thieves. And so it is frequently with other tradesmen, who keep for months as well as weeks their quarterly collections in the most exposed manner on the premises. One common course of depredation in London is on the Sunday, when a tradesman goes out on a pleasure excursion with his wife and children, leaving a servant girl alone in charge of the house and shop. A young fellow, a thief, pays court to her, and gains admission to the premises, finds out where the money is kept, and in regular course it is stolen. I do not see why some of the more popular banks should not make arrangements for receiving cash boxes with the money collected up to Saturday after banking hours, and save the risk of keeping it on the exposed premises during the Sunday.

The Scotch are much more prudent in this respect. Shops close early on Saturday in Scotland, but the shop-keepers make exertions to clear away everything, and carry it to the banks; so that on the Sunday they have the satisfaction of reflecting on the balances which they have in safety there.

"The practice of frugality in this respect, besides being a duty to ourselves, is in fact part of the Christian duty towards others: 'Lead us not into temptation.'

"The ancient proverb says it is 'opportunity'—
in other words, temptation—'makes the thief.' On
every example of the crimes of murder or robbery
for money, exhortations as to the duty of prevention
ought to be inculcated by judges and by magistrates.
It would form an important topic of exhortation from
the pulpit by the clergy. The clergy of Devonshire
have set an admirable practical example in this
respect by constituting themselves a collecting
agency for the county savings bank. Many people
have not opportunities of carrying small sums to the
savings bank, which is at the county town, and the

clergy perform that service for them. They take even single shillings, and deposit them regularly in the bank. In doing this, besides powerfully promoting frugality, they practically apply the doctrine, 'lead us not into temptation,' and they certainly do deliver the people from a great deal of evil, including the evil arising from spending money as fast as it is got, of making no reserve for rainy days, and the crimes arising from intemperance. Of this I can give statistical evidence. In Lancashire the ordinary wages of the families, cotton workers and others, have been on the average double the wages of families of the working classes in Devonshire. In the Exeter Savings Bank there is a large amount of deposits from agricultural labourers, heads of families who received no greater average wages for full work than I am informed is now given as pauper relief to Irish and other labourers, for at most nominal work.

"Frugality, through temperance, in all things, has close connection with sanitary conditions, and I am induced to add to the statistical contrast, as to frugality, that of the duration of life as resulting from sanitary and social states in the two counties, Lancashire and Devonshire.

In Lancashire. In Devonshire. "Amount of saving per head of the popula-tion; from deposits in the savings . £1 6s. 5½d. £3 2s. 2½d. Crimes against property with violence and malice; proportion to every 10,000 of 1.91 0.44the population . . . Crimes of violence and passion (chiefly 0.61 0.18 arising from drink) Average age at death of all who die-men, 22yrs, 10m. 38yrs. 0m. women, and children Average age at death of adults above 20 50yrs, 2m. 60yrs, 3m.

" My lamented friend, the late Rev. John Clay, the Chaplain of the House of Correction, made particular inquiries into the causes of crime, which corroborate my view as to the causes of these relative proportions. The excellent institutions, the co-operative stores, and the money invested in them, would, to some extent, but not to a very considerable degree, reduce the extreme disparity of savings as evidence of frugality on the side of Lancashire. The general causes of crime, as shown by such researches as those of Mr. Clay are infrugality, exposure of money, insecurity, and intemperance. He would have agreed with me that if by exertions the first figures as to relative frugality could be reversed, the reversal of most of the lower figures as to crime, as well as some of those as to the relative sanitary condition, must follow.

"I intended to have brought the whole of these facts before my friend and efficient colleague of the Poor Law Commission of Inquiry, the late benevolent Archbishop of Canterbury, and to have submitted to him the expediency of exhortations to extend the application of the example set by the clergy in Devonshire.

"Without depreciating the necessity of measures for efficiency of the police and the certainty of punishment, the course of exertion which I have indicated is one of several others which may be commended in the way of voluntary exertion for the prevention of crime; exertion which will avail where the present means of penal administration fail or are of far inferior efficiency."

CHAPTER IV.

ON THE BEST FORCES FOR THE SUPPRESSION OF RIOTS.

N the beginning of the year 1881, Mr. Chadwick published a review of the experience he had gained by the work he had done for police organisation on the subject of the suppression of riots, a topic which at that moment was creating almost as much attention as it is at the present hour.

In the passages subjoined a summary of his views is supplied direct from the original essay, the great lesson conveyed throughout being that for all local disturbances the police rather than the military force should be utilised, a principle embodied in the three following propositions.

THE AUTHOR'S PROPOSITIONS.

"1st. That for the restoration of law and order recourse should be had to a skilled and responsible force, free from local connection and from local feeling and passion.

"2nd. As against riots, and attacks made with weapons or means that are not deadly, never to use for repression weapons that are deadly.

"3rd. Not to use the ordinary military force except

in cases of the greatest emergency; and in those cases of greatest emergency, only against armed and disciplined forces, under skilled commanders.

But in the first instance, of civil force as of the Metropolitan Police Force, it is assumed that there would not be time to effect the organisations requisite to the full application of these conclusions to immediate conditions like those in Ireland. There are grave portents of conditions of insecurity from the ill-educated and ill-trained masses, including large masses of Irish population, and the extending use of arms amongst them, which, it may be submitted, renders an extended organisation of the civil force for use in place of military force a subject for early and serious consideration.

"I expect that if the present commanders of the police were required to act with their force against a mob armed with firearms, but imperfectly trained, they would prefer, in the first instance, to act against them without firearms, or at most with cutlasses, and by personal encounter, and would keep firearms in reserve for the last extremity. There is, however, a pernicious and dangerous change taking place in the extended use of the revolver, which is becoming almost general amongst town populations. These implements are now made in various forms so cheaply that they are getting into unguarded use even by very young boys. The now general use of the revolver in America appears to be a return to the time when all men went about armed with mortal weapons, and is a return to their frequent use on sudden impulses of passion, leading to fatal frays. The police there are sanctioned in their use almost at their discretion, and they do use them almost with impunity, and to an extent which would here excite strong public feeling. In the treatment of serious riots there, military force is more freely used than with us. The militia, which may be considered as the equivalent of our volunteer force, is the force generally used there, and they display little of the weakness which it is there considered we use here.

"If the Spafields Riot in London had been dealt with as a theatrical riot,—the 'Aston Riot,'—was dealt with in New York—not one, but some hundred of the rioters would have been slain. The Irish riots in New York were suppressed with deadly volleys, and the rioters were slain by scores—probably, it was presumed in defence of liberty, law, and order. The rioters at a recent strike in Lancashire would have been confronted—as large strikes have been by our republican kinsfolk—with an array of infantry, and of cavalry, and of artillery, with grape and canister, which experience had shown would have been used unsparingly for the maintenance of the freedom of trade in service.

"In one case, indeed, of railway trade unionists, the unionists who came forward with arms were met and borne down by the militia with bloodshed, which was sanctioned by public opinion. A distinguished philanthropic republican general has expressed to me his opinion that our volunteer force should be utilised in the same way for the defence of liberty—but, for the reasons stated, it is submitted that even on extraordinary occasions the police force is preferable. Nevertheless, with the increasing use of revolvers in this country, it may be necessary for the due protection of the police itself to allow the ordinary use of them at night and also on special occasions.

"But it should be known that for extraordinary service, or for large military service, a civil police force is capable of conversion into a force that might be, in case of need, more overpowering than any ordinary military force. To support this proposition I must enter into distinct military topics; but I do so with the information derived from discussion with distinguished military officers with whom I have had the honour to be associated in civil service, including my friend the late Field-Marshal Sir John Burgoyne.

"It was a leading axiom of Napoleon, in the organisation of military force, that whilst physique is as one morale is as two.

"The superiority of a properly organised police force is in morale. They are all selected men, having the guarantees of two householders for their moral character, and they have all had an elementary education sufficing for their ordinary duties. A regiment of police officers would be more than a regiment of sappers and miners, who receive about one-third more of pay than an ordinary regiment. General Hay, the Commandant of the School of Musketry, used to say that the shooting he got with the new arms of precision was as the intelligence. It is notorious that in the rifle competitions the fast or the intemperate, though intelligent, go down before the temperate. From their greater aptitude, the recruits of the police attain better drill in weeks than the recruits to the Guards do in months. In after-dinner speeches it is usual to vaunt the valour of the British soldier, which has been very well hitherto; but for the present purposes the strict truth should be carefully regarded, and the declaration of the old Duke should be remembered—that the rank and file with which he had to fight was composed of the dregs of British society, and that they could not bear properly either victory or defeat.

"The progress of science, and the new arms of precision, create grave differences. These have to be estimated with statistics to aid the estimation. In the police-force, on the sound footing on which it is placed, there are no desertions. If any one is tired of the service, or finds anything better to do, it would be detrimental to the morale of the force to retain him. Ninety per cent. of the police are married men. Out of a total force of ten thousand seven hundred and eleven men last year, only eleven constables were charged before magistrates during the year; one was acquitted, three discharged, and six fined and imprisoned, and one held to recognisances. In the army there have been some twenty thousand court-martials, and six thousand imprisonments annually. During the last three years an average of 4,844 deserted, and 1,968 were discharged as bad characters, being a total annual loss of 6,812 from these causes alone, excluding the failures in training, from bad constitution, which are equal to rather more than two brigades of infantry on a war establishment. Now the minimum cost of an English soldier is £100 per man. Hence the direct loss from such sorts of force of low morale may be estimated. The sense of military officers on the morale of the force is denoted by their contention for the power of flogging, and also of branding, or rather of marking, for the restraint of desertions. Mr. Forbes, the able correspondent, contends strongly for the retention of the power of flogging. Such proposals to flog and mark policemen would be deemed an outrage. The popular estimate of the state of the morale of the military force at present is denoted by the resistance made by householders to having any barrack constructed near them.

"The performances of the army in the field with the new arms of precision have been in accordance with the morale in its widest sense, and have excited serious misgivings for consideration as confirmatory of the axiom quoted of the most sagacious warrior of late times. Certainly a force of the intelligence and morale of the police force would not have required forty shots to kill one Zulu with the new arms, the stated average of late military performances. None are admitted into the police force under twenty-five years. Let the value of the temperament of strictness for wielding the arms of precision at that age be estimated as compared with that of a force at an age of only eighteen or nineteen!

"The experience cited, when duly considered, will be found to justify the conclusion that one regiment of the police is worth more than two of the Guards as a protective force, and that (results considered) the police force is the cheaper force.

"This, however, takes into account the relative value of the two descriptions of force for one purpose only, as a military force, for internal or external security—that is to say, if the force of the higher efficiency were kept in barracks, could it remain without detriment to its efficacy, doing nothing. There is to be added to the account of the police force all the value of daily service against crime; all the administrative services for the regulation of traffic; all such services as the prevention of loss of life and property by fire, which in the case of the police in

provincial towns with proper equipments has amounted to a saving of two-thirds of the previous losses; such social services as the restoration of some eight or nine thousand lost children, and three thousand lost adults, besides the care of three thousand persons from accidents in the Metropolis—these social cares add to the moral force of the police for the extraordinary service in question.

"These beneficent services gain an extent of popular moral support and implicit obedience to the police which excites the admiration of foreigners, who see with admiration, the regulation of the traffic, in which the wave of the hand of the Metropolitan policeman has more effect than the flourish of a sword in the hand of a policeman of Paris. Formerly the instinct of bystanders was to join the assailants of the police. It is now that of all, except the delinquent class, to support them, as M. Taine shows. The expectations and the exigencies of the public as to the qualities of discretion to be exercised by every private of the force are, however, it must be submitted, somewhat excessive. He appears to be expected to have the individual exercise of the acuteness of a high law officer (without any due preparation), the knowledge of the law, and immediate action upon it, with the equanimity of a judge, amidst brutal assaults without any ushers to protect him, and, indeed, with the forbearance of a saint under every provocation. Moreover, the knowledge of a physician or of a surgeon in dealing with the cases of suspended animation, whether from drunkenness or disease, which he has to deal with in the streets. All this is expected for eighteen or twenty shillings a week from every private.

"A review of the experiences cited will reaffirm our conclusions as Constabulary Force Commissioners of the efficiency and economy of a general force, of which a county, including all the towns within it, should be the unit.

Instead of that, only fragmentary forces, in towns and counties, have been adopted, at increased expense, with inferior results at all points, rendering it necessary to keep reserves of inferior military forces at various points in barracks. The separation and isolation of the county forces from each other, and from the borough force within each county, is obstructive of information, and destructive of the efficiency and economy of combined action both of which are essential to the ordinary preventive as well as to the repressive action of a police force. It is very much as a military force would be if it consisted only of separate companies of varying and inferior organisations, each acting independently of every other, without concert, the gradations of organisation, or cohesion of any considerable parts to the whole.

"I was in Lancashire in 1844, in communication through our department with the Home Office, on the occasion of the general turn-out and riotous assemblages threatening manufacturing property. There was a police force of some 600 in Manchester, where very dangerous tumults were threatened. There was a greater force in Liverpool, which, for the time, might have been brought in aid, if Liverpool had been disposed to give aid, which it was not; and there were forces throughout the county so scattered as to be incapable of that concentration which would have rendered any stationary military

force unnecessary. Riots have subsequently occurred that, under a competent organised force, would have been rendered hopeless, and property has been destroyed before the military force could be brought up to arrest the destruction and restore order. On the latest occasions the repugnance to, and inconvenience of, manufacturers and large employers of labour acting in the exercise of magisterial functions, and the bitterness of the feelings engendered by it, were manifest in a higher degree than that stated as early manifested in the rural districts.

"The service was of increased danger as well as of increased expense to the locality. Throughout the country there are outeries for the reduction of local taxation, very generally by action on the principles first propounded, chiefly those for the better administration of the poor-rates. I am dealing with the question of the one branch of relief claimed by charging on the Consolidated Fund the whole of the expenditure for the maintenance of the local police forces.

"In the mounted police, which will be augmented by the proper addition of the fire service, the police organisation affords cavalry as well as infantry of a superior order. For security, the artillery of the volunteer forces, and indeed their arms, might be left for security at the police stations safely, in charge of the police. I am well advised that on occasions some thousand men might be detached from the police for several days of distant service. To this force might be added, on occasion, contingents, in like proportion, from the rest of a national police, making up an élite of some three thousand men, equal, for reasons stated, to double the number of ordinary military force.

"To such gain on extraordinary occasions, with collateral advantages which I need not specify, is to be added the gain derivable from unity to the ordinary every-day service of a police without any material addition to the ordinary expenditure, whether it were to be continued from the local rates or not. In administration, as in other things, there is nothing so wasteful as ignorance and want of system. It was proved before a committee, by the chief of the Essex Constabulary, Captain (now Admiral) McHardy, that the cost of the county police did not exceed the total cost of the old, and often ostensibly unpaid, separate parish constables, and the parish administrations. The same economic results were displayed by Captain Harris in respect to the county police force for Hampshire. Farmers with land on the border folded their sheep within the area of the police jurisdiction for their better protection, and acknowledged that it gave an additional value to their land. All the additional protection to life and property and new local administrative service, which is now acknowledged to be indispensable, by administrative organisation, was, in fact, given to the inhabitants gratis. It may be confidently averred that the like advances in administration would be made in the boroughs with the like advances in economy, and in efficiency for all purposes, from a superior organised force of some thirty thousand men.

"Uncontrolled or insufficiently controlled subventions made to loose local administrations, frequently augment expenses, and almost always fail to give the full amount of the relief intended for the ratepayers. Since the subventions in aid of the provincial police

the expenses of those forces have been raised above the rate of expenses of the Metropolitan Police Force. Under a good general organisation the expense would be within or below it for an increased service. It is a characteristic fact that officers, as well as privates of the Borough Forces, have exchanged, even at lower pay, into the County Forces, for the sake of action under superior rule—the rule of the Borough Forces being comparatively disagreeable to them. The dislocated jurisdictions, under existing conditions, occasion gaps, and in a great measure reduce the immense benefit derivable from electrical communication in directing the attention of the whole force, and mobilising it, from one end of the kingdom to the other, to prevent the escape or the action of criminals, or for use in other ways, for which the unity of the force would give double efficiency, without increased expense.

"'The danger of centralisation' will be repeated as an outery, as against that of the police force. An advancing intelligence will perceive that such centralisation in England will participate of the character of the centralisation of the postal service, and of the telegraph service, in a largely augmented, superior, and more responsible way, at a reduced cost, or without increased cost. The real danger of centralisation will be great to professional crime which is centralised; its evil will be to jobbery which is localised in the boroughs. No doubt, however,to use the medical aphorism, Remedia non agunt in cadaver,-no sort of evidence will work on minds closed to it by sinister interest and ignorance. Nevertheless, though we had compulsory powers we always preferred to proceed by voluntary adoption of

our measures. But then we did not accept the voice of the rate expenders as the voice of the ratepayers. An Assistant Commissioner was sent to examine the local defects, and expound them by printed reports. He also, at open public meetings of the inhabitants, answered objections verbally, by which violent opposition on the part of the rate expenders was almost invariably overcome. When it is put to the ratepayers by a plebiscitum or a house-to-house collection of the votes whether they will vote to continue paying heavily for a notoriously inferior service or have a superior service gratis, my experience is that the results of proper expositions may be confidently anticipated."

CHAPTER V.

THE POLICE AND THE EXTINCTION OF FIRES.

Arts in 1876-7, Mr. Chadwick pressed strongly for making the police everywhere, under one uniform system, the practical fire brigades of the country. This was in accord with the recommendations which he had advanced in the essay on Preventive Police in 1828, and with his colleagues in the Constabulary Report of 1839.

The arguments in support of this service by the police were supplied in the following extracts from the paper now in hand.

THE ECONOMY AND EFFICIENCY OF A POLICE FORCE.

"An elementary principle of political economy ruling administrative economy, is the economy of force for the public service—a principle which is displayed in its contravention in the separate arrangements of the functions of the police service and of the fire brigade service of the Metropolis.

"I may claim in an accepted position as a political economist, and in my public service as a Commissioner of inquiry, to have elaborated, with my

colleagues, some of the leading administrative principles bearing on the subject-matter in question. These principles were, indeed, expounded in a paper so early as 1828 as grounds for the establishment of a preventive police in the Metropolis, and again in our first report of 1839, as Commissioners of inquiry, as to the state of the local Constabulary, and into the means requisite for the establishment of a provincial police force.

"The appointment of a separate force to deal independently with the work of fire extinction, is an example of the dereliction of the administrative principle there enunciated.

"The Metropolitan Fire Brigade, under the Board of Works, is a force of 400 trained firemen acting under an independent command. It has been declared by the chief officer of the force that it is strained by the ordinary fire service, and that to meet the requirements of the Metropolis it ought to be augmented to a force of 930 men, it being assumed that the general police force will have no more to do with the fire service than they have at present; that is to say, of only waiting, on the occurrence of a fire, until the arrival of the special force, and then maintaining order and preventing obstruction to its action by the crowds. Our first report served as a text book for the first organisation of provincial police forces, and the principles recited were subsequently generally adopted, together with our further recommendation that the extinction of fires should be a primary service of the police force, and that every police-station should be a fire-station, with engines, hose, fireladders, and other apparatus requisite for that service. In our report of 1850, from the General Board of

Health, we recommended for the fire service as well as for the sanitary service that the water supplies should be placed on a public footing, on the constant system at high pressure, and that hydrants with hose, to which the police should have keys, should be placed in all the streets, so that they might apply hose at once for the extinction of fires.

ECONOMY OF THE COMBINED POLICE SERVICE.

"The cities of Manchester, Liverpool, and Glasgow, present examples of the application of these principles. In these cities the entire police force, it may be said, is constituted, with more or less of variation, as a fire force. The greater proportion of the men have been taught the use of the hose, a special body being trained, as a brigade, on the principles elaborated by the late Mr. Braidwood, to the working of steam and hose or of manual engines, under the general command of the chief of the police, supervised by a fire committee.

"The results yielded by these cities show that the cost of protecting life and property, under the existing conditions of the separate brigade force, in the Metropolis is more than double, and approaches to threefold the cost of a combined police force system, with the command of hydrants, on the administrative principles originally propounded. But whilst this separate system of the fire brigade force is thus more than double, or some forty thousand pounds of annual cost to the ratepayers, it has been proved not to have above one-third of the beneficial result in the protection of life and property that it has in

the provincial cities administered in conformity to principle.

"In those cities the calls for brigade engines amount only to 3 or 4 per cent. of the cases of fire. At Glasgow so little have the brigade men to do, that at the chief brigade station the men are mechanics employed in manufacturing hydrants and hose, and other apparatus, who are paid about six shillings a week extra wages, on condition of their attendance with the engines on the occurrence of calls for them. Mr. Bryson, the chief of the fire service, has stated, that if London had a constant system of water supply at high pressure, about onehalf even of the present number of men of the Metropolitan Brigade force would suffice for the same amount of service. Glasgow, he observed, has been increasing its population at a rate of 10,000 a year, but the brigade has not been increased under the present system. On the system of the Metropolis, Glasgow would have required a fourfold brigade force, and yet would not have been by any means so well protected. In the instance of Manchester, which has been well compared with London, Mr. Tozer, a distinguished fire brigade officer, states that in Manchester the losses of life and property are less than one-third the rate they are in London. He observes upon the comparative expense: 'In London and Liverpool a considerable sum is expended in supporting a salvage corps. We do the work in Manchester with the fire brigade. In fact, in Manchester we hardly know what it is to have a fire requiring the work of salvage; 97 per cent. of our fires are confined to the room in which they occur.' The calls for the Metropolitan Fire Brigade average at present

from four to five per diem. On correct systems, as above displayed, of calls in 4 per cent. of the cases of fire, the calls for the service of the Metropolitan Brigade would be about one a week.

SUPERIOR EFFICIENCY OF SMALL FORCE NEAR, TO LARGE FORCE DISTANT.

"On the principle we propounded in our report,* that fire extinction, and small appliances near, are of more importance than great appliances at a distance, we stated that, 'taking the point of actual ignition, the value of a supply of water diminishes in a ratio rapidly increasing with the lapse of time before the arrival of such supply. In the first minute of the ignition a jugful of water may suffice; in the second not a pailful; in the third not three or four pailfuls; and in a few minutes more nothing will suffice but supplies that can be applied only by engine-power.' Five minutes was the limit of time laid down by Braidwood, in his evidence as the limit of time for relief to be effectual for the protection of life and property. But the runs from the brigade stations, as maintained by the Board of Works, average more than a mile and a half, and are not executed, at the quickest, in less than fifteen minutes, and their requirement then is 2,000 gallons a minute—i.e., a thousand pailfuls a minute—according to Captain Shaw's evidence. Very likely, under the continuance of such a system, when fires have got ahead! But in the cities where the service has been arranged in conformity with the principles here laid down for the Metropolis, water is applied from the hydrants in little more than three minutes, or in less time than it usually takes to attach horses and start the distant brigade engine, when, in the majority of cases, scarcely a fifth of such a quantity of water is used for the whole time.

SUPERIOR EFFICIENCY OF THE PRESENT METROPOLITAN FIRE POLICE SERVICE.

"Nevertheless, good as these provincial police fire services are, I think it just to the Metropolitan Police Force to state, from information as to what they now do when they have fire services to perform, with the proper appliances of a constant supply and hydrants, as at Woolwich, the Houses of Parliament, and other public establishments—in such instances they have brought jets to bear from hydrants at forty yards' distance in about one minute, and at sixty yards in about two minutes. In the fire drill of the Metropolitan Police at Woolwich, the men usually rig out an engine and get it into play through four forty-feet jets in about one minute and three-quarters of time. On a trial to test speed, on a false alarm of fire by telegram from Plumstead gate to the main gate of Woolwich Arsenal, stating that the Carriage Square saw mills, 700 yards distant from the main gate, were on fire, the police off duty started with fire-hose, reels, and the engine, and they arrived, the first reel in five minutes, the second in five and a half minutes, the third and fourth in six minutes, and the fifth, with the engine, in seven minutes, and they were all ready. But it may be expected that the efficiency of the Metropolitan Police services will be much in

^{• &}quot;On the Supply of Water to the Metropolis in 1850," pp. 245 to 261.

the order of the magnitude of the establishments in which they have practice. Portsmouth Dockyards are under the charge of a Metropolitan Police force of 200 men; the Devonport Dockyards, 160 men; Chatham, 150; Woolwich Arsenal, 140; and Pembroke Dockyard, 30 men,-altogether, a trained fire force of 680 men, having charge of manufactories, large workshops, containing combustible materials and property amounting to some millions of money in value, and guarding against the carelessness and recklessness amongst some thousands of workpeople. This force, besides that in charge of the Houses of Parliament, the British Museum, and other public establishments in the Metropolis, is necessarily of superior training, from constant occupation in the work of prevention, as compared with a force which has no such charge of local apparatus, and is engaged only on the work of extinction.

ELECTRIC SCIENCE AVAILABLE FOR FIRE EXTINCTION.

"In fires even seconds of time are precious, and these Metropolitan Police services are the closest of any which we have hitherto had in this country. Electrical science has shortened the time of sending 'calls' to stations; but it has yet to receive a more developed application than it yet has in this country. Upwards of three minutes of time is expended here in getting the horses put to, when the call arrives at the brigade stations. But in Philadelphia and other American cities, by an arrangement of an electric telegraph, the horses at the station are detached from their stalls in an instant, and, being drilled, turn round of their own accord, run each to their

station at the engine, and are hitched on and start in less than half a minute. Electric communication is made available there from houses to the police, as well as from the patrolling police to the fire engine stations.

Loss of Time from Excessive Distance.

"The fatal excess of distance from relief in the Metropolis is due to the original and continued dereliction of settled administrative principle for the constitution of a police force, by the institution of a separate force, exclusively, for fire service. By this arrangement, as shown by Mr. Swanton, the experienced director of the Salvage Corps, the public safety has not only not been increased, but has been diminished; neither, as he asserts, has the progress of serious fires been arrested, nor can they be further arrested considerably by the means proposed by the Metropolitan Board of Works.

"There are now fifty brigade stations which the Board of Works propose to extend or to enlarge. But this enlargement, the numbers remaining the same, will not bring relief nearer to the public, for the distances apart must remain the same. The arrangement in accordance with our original principle of administrative organisation, of assigning the fire service as an integral and primary function of the police service is verified in practice in the instance cited of the provincial cities, where the principle has been applied, and creates more than double the stations and more than double the security. As stated by Captain Harris, there are now 152 convertible stations, of which police-stations seventy-

five are within and seventy-seven beyond the boundary of the Metropolitan Board of Works. The police-stations have not, I consider, been arranged systematically, but as circumstances permitted, at the time of the first institution of the force. A rearrangement for the paramount object of fire service, that might be brought about by a return to correct principles, would be conducive to the improvement of the efficiency of the general force for its ordinary service. It would lead to important improvements in the sanitary construction of the stations. But in respect to the gain from the increase of stations derivable from amalgamation and unity, it may be stated as a rule, that the force of one man for fire service at half a mile is worth four men at threequarters of a mile, worth six men at a mile, and worth eight men at a mile and a half. How much longer time will it take to get this elementary principle of fire prevention perceived and applied!

"The augmentation of the separate brigade force from 400 to 900 is, then, in contravention of correct principles, and has no support from officers of very long experience in the brigade, such as that fire brigade officer, Mr. Tozer, of Manchester, who has had experience of the working of combined force, which Captain Shaw has not had. The Captain's proposed augmentation of the force at distant stations will not bring them nearer to the fires in the essential point of time. It would, doubtless, bring an increase of the existing force to check the extension of extraordinary fires,—such as the fire at the Pantechnicon,—which only occur once in some twelve months. But the proposed increase of independent brigade force to 900 men would be very

inferior to the combined police force, which, as Captain Harris puts it, would be a fire service of 10,000 men.

REDUCTION OF CRIME OF INCENDIARISM BY POLICE SERVICE.

"By keeping the police fire service out of the house, the opportunities of immediate observation, and pursuit, and detection of incendiaries has been very much kept from their knowledge. The fire brigade have no crime preventive functions, neither have the salvage corps. It is held by the insurance companies that it is not to their interest to prosecute, even in cases of loss to themselves, and that they only add to their losses by acting as public prosecutors. Under the existing conditions, the practice of incendiarism for insurance money is far more prevalent than the public are aware. It is estimated by officers of extensive experience, that full one-third of the fires in the Metropolis have been not accidental, but by design. In the feeling prevalent upon the subject, but under loose notions of administrative principle, it has been proposed that there shall be some distinct inquiry, by some distinct authority, into the origin of every fire, and a distinct service appointed to conduct it, with distinct means of prosecution.

"The present conditions, maintained by the Board of Works in the Metropolis, of the large brigade stations at a mile and a half distance, gives time for the fire work of the incendiary to get full hold of the building and to obliterate the traces of its preparation. At the time of the promulgation of our

original measures, systematic incendiarism for insurance money was rife at Hamburg. When those measures were adopted as they were there, with the street hydrants under the charge of the police, and smoke was seen arising from some closed premises, the door was burst open by the policemen and a jet of water immediately applied, and the fire was promptly extinguished; at the same time, an incendiary trail was displayed with which the fire had not time to communicate. It takes time to spread a fire through premises which an application of water in two or three minutes arrests. In Manchester they have rarely any trace of the practice of incendiarism for insurance money. In Liverpool it has received a very satisfactory check.

PROTECTION FROM FIRES AND PANICS AT THEATRES, AND OTHER PUBLIC ESTABLISHMENTS.

"Securities should be taken, by a public authority, for protection against these calamities before such edifices are constructed or opened for the reception of the public. All large places of public entertainment and large hotels, many stories high, and for the accommodation of several hundred persons, ought to be included in the like provisions for protection. It was suggested by witnesses before the Select Committee, that an independent special fire authority should be appointed for the purpose. But this proposal is objectionable in principle, as involving either a separate and weak establishment, or, if it be a strong one, an excessively expensive one. On consideration, it will be seen that the most

eligible course will be to charge such duty upon the fire service of the general police force, because, of necessity, it must have the largest amount of experience for its guidance, and the greatest executive force to see to the constant application of that experience in any provision for security that science and practice may suggest. At present the special fire service of the Metropolitan Police has a greater amount of practical experience in fire prevention than any other force in the country. But for a high order of skill, and a vigilant patrolling force, combined with a force of engine power, Portsmouth, and other dockyards, would have been repeatedly

destroyed.

"Under the existing arrangements, such provisions as there are for the prevention of fires in the Metropolis fall to district surveyors under the Board of Works-architects in private practice, not of the highest practice, but in practice much needing amendment, as the frequent destruction of property in houses of their construction shows. The work of fire prevention increases in speciality with the magnitude of the building and the numbers of the people to be accommodated and protected, and the speciality of service applicable to the purpose rises above the highest architectural practice. The care against fire necessarily accompanies the elaborate provisions now required in public edifices for warming, for lighting, and ventilation. The new great theatres are becoming elaborations of new practical science. The new Grand Opera at Vienna has some twenty miles of pipe to be regulated for the distribution of warmth, and between five and six thousand jets of gas to be regulated for its lighting, with electric communication from a central office to collect thermometrical conditions of all parts of the theatre. The provisions against fire, in progress when I visited it, were correspondingly elaborate. These developments of science, in the larger constructions, are applicable in their degree to lesser buildings. Provision might, it should be submitted, be most advantageously made for them in connection with the present high practice of the general police service, which might conveniently have such consultative scientific aid as is now provided for the Houses of Parliament for the guidance of the large executive service of rank and file available for the public protection."

CHAPTER VI.

TRICYCLES FOR POLICE.

to the world—published, in fact, in the present year, 1887—has reference to the use of the tricycle by the police for the

prevention of crime.

From the first introduction of the tricycle, Mr. Chadwick has taken the greatest interest in the science and practice of cycling. Not one of our youths interested in the race or the tour on the bicycle or tricycle, has shown more enthusiasm on this matter than he. At the Sanitary Congress at Leamington, ten years ago, over which I had the honour to preside, there was one of the first great exhibitions of cycling machines, in which he took the greatest delight. He considered that the Exhibition was one of the most legitimate as well as the most interesting parts of the Congress, and was full of suggestions to the manufacturers respecting the construction of machines to meet various national necessities.

The value of the tricycle as a means of obtaining healthy exercise, was at once seized by him as a matter of course. But he was not less quick at perceiving and explaining the advantage which the

machine would be to the police, and on the 30th of November, 1886, he conveyed to the Society of Cyclists his latest views, in the essay which follows, and which forms the concluding pages of these volumes.

recollection of the time when the modern policeman was an officer who had no existence. I am one who has the most perfect recollection of that time, and am also the one who took, perhaps, the leading part in the suggestions which led up to the system of preventive police which we now possess.

"When I tell you that my first essay on this subject was written in the reign of King William IV., you will be able to form an opinion how great an interest I have taken in the body of men to whom we entrust so much authority and so much responsibility.

"In the early days of which I speak the small number of officers that belonged to our badly-organised police establishments performed a far greater amount of service than the whole of the officers attached to the parochial establishments of the country. Of the men belonging to each of the police offices, five or six of the most active often performed more duty than all the rest of the men belonging to the establishment. The best organised body of officers was that of the Thames Police, which was formed under the superintendence of Mr. Harriot and Mr. Colquhoun. It soon put an end to all the immense extent of systematic depredation which was formerly committed on property on the river Thames.

"At that same period I ventured to point out that all testimony and all experience proved that in the government of a body of men like the police their pecuniary interests could alone be relied upon as motives of constant and sure operation. 'If,' I said, quoting my own words of fifty years ago, 'if these interests were carefully and skilfully adjusted, they would act with the certainty of gravitation.' I pointed out that in order to determine correctly the reward due to police officers as preventors of crime, their real service in prevention ought to be ascertained, and that to arrive at correctness on this point, the amount of crime committed, then most imperfectly calculated, should be correctly discovered and made known. The service of the police would then be determined by comparing the number of their detections with the returns of crime committed. I had no doubt that by thus giving the officers an interest in diminishing crime, a great and necessary step would be attained towards creating an efficient police.

"I judged also that it would be expedient to place the police on a more respectable footing, to give them an adequate remuneration for valuable and responsible service—cheap service being in a police, as well as in most things where talent is required, uniformly bad service. It was requisite, I contended, to establish among them gradations of rank; to make their appointments for life, with pensions or superannuation, as in the army; to make promotion determinable by the amount and value of services; and, cæteris paribus, by seniority; to concentrate responsibility at each step on individuals; and, as the best security against improper appointments, to let the officers be chosen in general by magistrates, who should be considered responsible for peace and security within their district.

"I regret to say that many of these original propositions have not been carried out. At the same time, I admit that the general organisation of the police force has been, on the whole, a distinguished success, and that we rely for our protection on a body of men who are every day becoming more conspicuous for their intelligence, activity, respectability, and discipline. The introduction of the drill system has been conducive, not only to their efficiency as a protecting force, but to their own health and regulation of habit and life.

"These few notes bearing on the history of a great national development will not, I hope, be taken amiss as introductory to one or two new suggestions on a subject which is specially germane to the work of a society of cyclists, which has for one of its principal objects the utilisation of the art of cycling for national wants and national necessities—namely, the use of the

tricycle by the police.

"I had the pleasure of introducing the attention of your president, Dr. Richardson, to the use of the tricycle as a sanitary exercise at the Leamington Sanitary Congress in 1877; and at that same period I was also led to suggest the employment of the tricycle as a means of additional security by the service of the police forces. With the object of eliciting a few minutes' discussion on a subject so important by a learned society which may be said to make cycling a speciality, I have thrown together a few new notes in continuance of my original suggestion.

"At present in the suburbs of the Metropolis the police patrol singly at the rate of three miles an hour, and the present arrangement as to single patrol is that the policeman shall pass every part of his beat once in a quarter of an hour. The defect of this arrangement is that depredators calculate upon the opportunities afforded to them during this quarter of an hour, and arrange for it; they watch for the approach of the patrol, and may hear his footfall, or may, in the event of pursuit, outrun him, and make their escape. If surprised, they may overmaster the single unarmed policeman, as they have repeatedly done, by murdering him.

"As a Commissioner of inquiry into the organisation of a general force, I have proposed a patrol by a tricycle worked by two men abreast, armed with revolvers. The patrol with the tricycle would be regulated to be worked at eight miles an hour instead of three. There would be no footfall to be heard, and the patrol would be silent for all suburban districts. If there are any men perceived at night with a trap that takes to flight, the tricycle patrol may put on extra speed which will keep them in sight or overtake them, for the tricycle has now attained a possible speed of eighteen miles an hour. The difficulties of the escape from two men would be enormously increased.

"Another great advantage which would spring from this method of following and detecting crime and criminals would be the greater rapidity and certainty of detection. These influences alone are powerfully deterrent, because, when the best is said of him, and the strongest excuses are made for him, the professed criminal is by nature, as a rule, a timorous man at heart. He may be desperate when he is at bay; but he is usually a man of a physical constitution, has an extreme dread of being caught, and trusts far more to cunning than to courage. He lives, in fact, by concealment, is powerless in the light of day, and when once outwitted, is undone. In those early days of which I have spoken, Mr. Wyatt, a magistrate of Lambeth, when asked if he had anything to suggest for the benefit of his district, said he would employ gaslights at the openings of the different courts and alleys, the known resorts of thieves in the streets, and which lights, of a different form from the ordinary lamp, would warn passengers to look about them. 'I consider gas,' said Mr. Wyatt, 'without presuming to play upon the word, essential to an enlightened police.' Mr. Lee, the High Constable of Westminster, also told us that the widening of the pavements had done more than anything to prevent pocket-picking.

"In like manner the invention of modern times, the Tandem Tricycle, could be pressed into the service of an enlightened police. The lamps could either be used to conceal the armed officers in their approach, or to throw light into dark courts, alleys, or lanes. Near a house threatened with burglars one can imagine no surer method of protection. The deterrent effect would be invincible.

"On occasions, as on the outburst of serious fires or of calamities, by telegraphing or telephoning to the police stations, more rapid concentrations of available force may be effected than is practicable with the single mounted police force, if the tricycle were brought into use for this purpose.

"Tricycles may be used with great economy for the collection and movement of volunteer forces, ordinarily, to the practice grounds, and for their return home from thence. "Cycling has been pronounced to be an eminently sanitary exercise, as good at least as pony-riding. It would admit of much use for curative service, for the relief of the police from the diseases to which they are liable from long exposure to the lethal influences of the ill-conditioned urban districts,—a relief which may be given by changes of service and the tricycle patrolling of well-conditioned suburban or rural districts on the prescription of the health-officer.

"It is nine years ago since the idea of using the tricycle by the police was proposed by me, and I expected that by this time some practical application of it would have come into force. I am glad to say that the Chief Constable of Coventry has introduced the tricycle there, and finds it highly successful.

"He makes to me the following report:-

Norris, has much pleasure in stating that a tricycle ("Salvo") has been in use by the members of this force for the last six years, and he can endorse all that is said by Colonel Cobbe, one of the Inspectors of Constabulary, and even say more in its favour."

"Extract from the Colonel's official report to the Home Office: 'Lately the Watch Committee have provided a tricycle, at a cost of eighteen guineas, for the use of the force. It is represented that it has been in constant use, and has been found most useful, easily ridden, and comparatively noiseless; the night inspector is able to visit all parts of the city in his supervision, very frequently and with ease; it is considered a good substitute for a horse and cart where this conveyance is not provided, and is used for the purpose of officers serving summonses and making inquiries within a short radius of the city.'

"Mr. Norris adds further that the use of the tricycle in his district is in course of extension.

The sanitary benefits that cyclists, as it appears to me, may achieve, would also accrue by their agitating, with the concurrence of the police, for the amendment of all our roads,—civic, suburban, and provincial,—so as to bring roads everywhere into the same uniform condition of solidity for saving of friction and consequent loss of power.

"The cycling fraternity, containing as it does so many thousand observers, must, I should assume, by this time have obtained a very accurate knowledge of the state of all the roads in the kingdom, and if the police could be made to adopt cycling as a part of their efficiency and equipment, the reconstruction of the roads, so as to bring them all into unity, would be found to be a national necessity that could not be set aside, because the reformation would be to the saving of traffic and locomotion of every kind.

"I was told by the great inventor of the modern tricycle, Starley, that he could produce a vehicle on which, on a level asphalte road, one man could move four men and two men eight. My own plan of such a road would be the provision of a wheel track of the hardest asphalte on the main road and the hardest concrete on the bye-roads. Three miles of the hardest asphalte wheel tracks could be laid at the cost of one mile of iron tramway, and with as good results in the saving of force; and, in the end, the construction would lead to a great saving in the rates. In my own parish I found that the plan would save forty pounds a mile on our eight miles of road, whilst it would also save a third of the force now lost in propulsion of cycling machines and all other classes

of wheel conveyances. At the same time there would be great saving from dust, which is as injurious to the lungs as to the clothes of those who meet it.

"I throw out these hints to show that cyclists have lefore them a larger economical and sanitary reform than has yet been thought of, in regard to roads, by political parties, and which has been ignored shame-

fully by vestry and local authorities

"The only objection that I can see to the use of the tricycle by the police force is the expense. But again I urge that expense for intelligent service is always the best economy in the long run. My friend, the late Field Marshal Sir John Burgoyne, was wont to say that the sappers and miners, as an intelligent force, were, notwithstanding their double pay, a cheap force when all the results obtained from them were considered. Before a select Committee of the House of Commons it was proved in detail in regard to the Essex Constabulary that, omitting the towns which diminished the economy, the total expense of all was within the expenses of the unpaid parish constabulary. The like conclusions were established in respect to the Hampshire Constabulary; and I believe on testimony, in spite of the increased pay of men and officers, the police are, all results considered, as cheap a force as any in the public service.

"In conclusion I would point out, as another illustration of the value of the tricycle for police purposes, a rule I insisted upon so far back as the year 1829—namely, that in order effectually to diminish the chances of success which so often form the motive to depredation, it is requisite that all practicable measures to insure detection should be taken upon

'each' of the individual acts, from the aggregate of which those chances are made up.

"The speedy publication of any act of delinquency, by exciting general alarm, creates general vigilance, and thus increases to the depredator the danger and difficulty of all future depredations. By a speedy and complete collection and publication of information concerning all sorts of delinquency committed, more would be done in reducing crime, and at a cheaper rate, than by any possible increase of the existing establishments. For by this means the public at large will be converted into a police; and each individual member, by being put upon his guard, would perform unconsciously a great portion of the duties of a police officer."

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