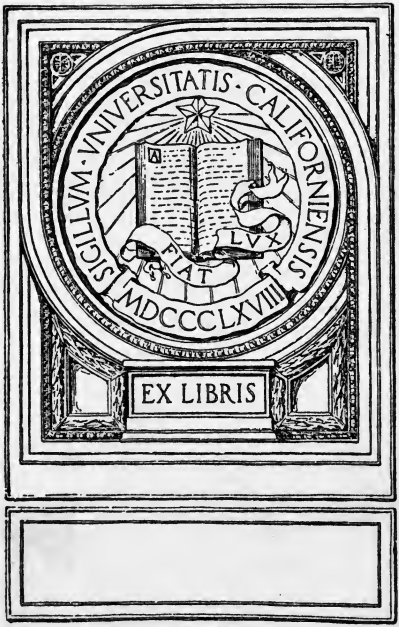
TOWN STUDY

SUGGESTIONS FOR A COURSE OF LESSONS PRELIMINARY TO THE STUDY OF CIVICS

M. M. PENSTONE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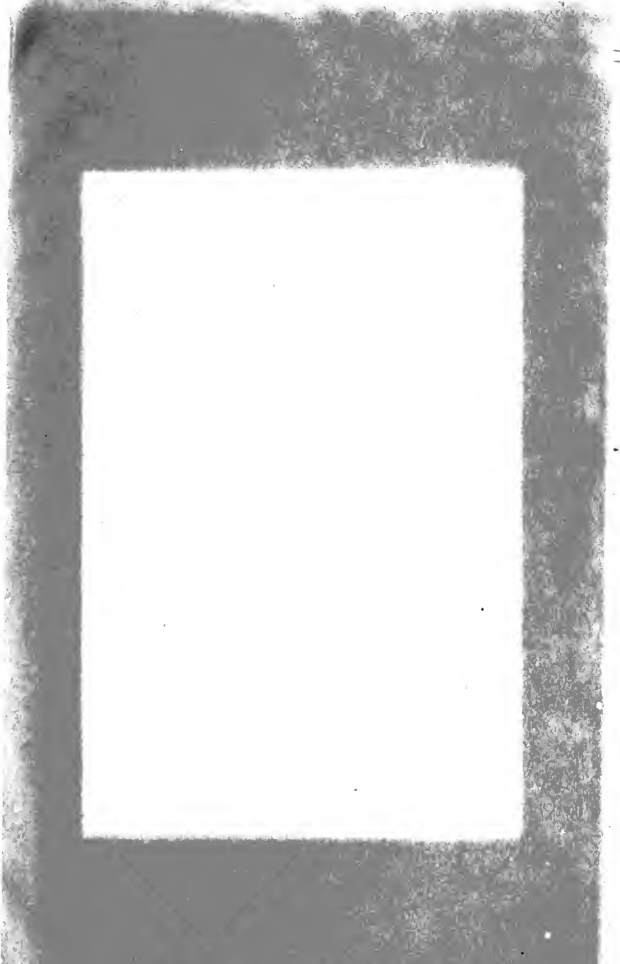

TOWN STUDY

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MARKET-PLACE OF AN OLD ENGLISH TOWN: WELLS

TOWN STUDY

SUGGESTIONS FOR A COURSE OF LESSONS PRELIMINARY TO THE STUDY OF CIVICS

BY

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WITH ILLUSTRATIONS

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I will not cease from mental strife,
Nor shall my sword sleep in my hand,
Till we have built Jerusalem
In England's green and pleasant land.'

WM. BLAKE.

PREFACE

MANY teachers are realising that Town Study, no less than Nature Study, has its claims to a place in the school programme. The School is the instrument which Society employs for the development of its future citizens. Good citizenship depends, no doubt, upon a sense of duty, but a sense of duty is deepened by interest and understanding. These chapters are offered to Teachers as suggestions for the treatment of topics which may arouse such interest, and thereby, it is hoped, add some impulse towards that movement for social betterment which is happily an increasing force in our time.

It is throughout assumed that the Teacher will vivify the necessarily bare outlines here given by constant reference to local examples and conditions.

The thanks of the writer are due to James Roberts, Esq., M.A., LL.B., of the Inner Temple, for kindly looking over proof-sheets.

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CONTENTS

LIST OF ILLUSTRATIONS

UNIV. OF CALIFORNIA

TOWN STUDY

CHAPTER I

SOME CONSIDERATIONS FOR THE TEACHER

Town Study and Nature Study.

Town study is an obvious complement of Nature study. All children must be affected, both now and hereafter, by the influences of town life. The larger number of our children of school age live in towns. It may, indeed, be said with some show of truth that in urban schools town study is of more importance than Nature study. The physical environment of the urban child consists not of woodland and hedgerow, of lane and open common, but of streets, houses, and public buildings. These are the stationary objects that appeal to his senses, and these form the mental imagery which he accumulates during the years of his childhood. And the movement of the streets, the passing vehicles, the busy workers hurrying to and fro, must supply the larger part of that native interest in activity of any kind which the country child gratifies by watching the flight of birds or the scampering of rabbits, or by tracking the shy creatures of the forest to their haunts. Since the lot of the child is cast in a town, it may be argued, we must do the best we can with what we have. The environment is "given," and we must make the best possible use of it for education.

We do not forget what has often been pointed out—that the sights and sounds of city life may have very little educative value in themselves. This is specially true with regard not only to the slum, but even more so to the mean and monotonous suburbs which form such large areas in London and other great cities. There is neither beauty nor distinction, it may be said, in these dismal streets of houses all like one another, and the streets themselves afford only a constant stream of insignificant and trivial impressions which make very little contribution to knowledge or to imagination, and of which the only variation is afforded by something sensational—an accident, or a quarrel. It is because all this is true that we welcome the opportunity for Nature study which is afforded by the school. It is right that the child should be aware, if only by fugitive glimpses, of a fairer world beyond the bounds of the only locality he really knows. It is right that some attempt should be made, as it were, to import a little of the charm of Nature into an environment from which she has been by the conditions of our life to-day so hopelessly excluded.

Limitations of the Environment in Towns.

But we do not wish this urban environment to remain as it is. Because men live in towns there is no reason why these towns should for ever become more overgrown, squalid, and devoid of interest. To draw the child's attention to the town itself and its features is one of the best ways of bringing about interest, enlightenment, and a divine discontent which may result in a great improvement in urban life as the generations grow up. It is one of the most important tasks of education to remove that mist of familiarity which blurs all features together, and makes us, through sheer inertia, acquiesce in the accustomed and the comfortless.

Limitations not Fixed.

Moreover, even in a dreary inner suburb there is

much that is interesting and significant to the seeing eye. The teacher can so act as an interpreter of the obvious and commonplace that the child comes to see the romance that lies behind them. He can show the child how his suburb affords a thoroughfare to and from the ends of the earth. He can link its streets and its shops and the occupations of its people with the life of other times and of other lands. He can give some idea of the institutions which are symbolised in its buildings and in the officials whom he sees or of whom he hears. Mr. G. K. Chesterton, in one of his whimsical essays, has remarked how the red pillar-box at the corner of the street is a vivid symbol of the reticence and security of the State which gathers all our secrets into that "flaming cylinder." Some such touch of poetry on the part of the teacher will enable him to make the town child look at the features of his environment with fresh interest and with an appeal to the imagination which will be an incalculable gain. And after all, though for purposes of argument we have assumed ourselves to be confronted with the worst, a town is not wholly composed of mean suburbs. The mill districts of Manchester are not so far from its stately Town Hall in the centre but that communication, especially in these days of cheap electric cars, can easily be made; and Hoxton and Somers Town are not farther from St. Paul's and the Guildhall than the limits of a country boy's holiday ramble would be. By the time the children are old enough to conceive of a town in general—say, about the age of ten or eleven—ways and means can be found of letting them see buildings that are really impressive and that have dignified associations. In smaller towns, of course, the problem disappears—in Warwick, York, or Chester the materials for town study, not only in the present but also in the past, lie close at hand. And for the children of the well-to-do classes there is no

Interpretation Needed.

reason why the buildings and institutions of their town or city should not be familiar objects and conceptions as soon as they are old enough to show rational curiosity in them.

The measure of value of any subject of the curriculum is found nowadays in the *interest* it affords, in its appeal to the fundamental instincts of the child. A parent writing recently to an educational paper on this subject of town study pertinently asks, "Why should this field of observation be considered less educational than the other [Nature study]? It is well for the child to know how the bird builds its nest and the bee makes its comb. Is it less well for him to watch the steady progress of a great building from the foundations upwards? The first growth of the oak from the acorn is seen with interest; the interest is in no way diminished when the massive trunk of another and older oak can be watched in the timber-yard falling into planks under the strong teeth of the circular saw. . . . The wonders of city life are too much of a commonplace to our children. The train goes thundering by overhead on its long embankment and many-arched viaduct. . . . Is it not possible to spare a little time from the habits of the hedgehog and the dormouse, who after all are seldom seen by the city child, to explain, or at least to draw attention to, how this has come to be? Is a spider web more wonderful than the telephone, or the song of a bird than the wireless telegraph? To some of them this sort of observation comes more naturally than the other." Any one who has observed the ways of children will not deny the cogency of this last remark.

The Child's Interest in the Town.

But a teacher whose own taste leans rather to Nature study, and whose lot is nevertheless cast in a town school, where he feels constrained to honour the old pedagogic maxim and "begin with the child's immediate surroundings," may be reminded that it is

mere want of imagination to assume that Nature appeals to man only in the country. To the seeing eye with a brain that has had some scientific training behind it, Nature governs city life in so mysterious and intimate a way that one is more awed by her energies than he would be on a bare moorland or in the heart of a wood. The bricks are made of the clays of the subsoil laid down through long centuries, the chalk or other limestone from which the mortar that binds them together is made is derived from the dead shells of countless myriads of sea creatures—relics of immemorial ages; the twin forces of steam and electricity have transformed the place of his abode to its present seeming. Nature pours into the city largess from the uttermost parts of the earth—here is the great receiving house of her products, here is the workshop where her powers are rendered servile to man's uses of shelter, food and raiment, luxury. "God made the country," it has been said, "and man made the town." But man also is part of Nature, and God made the mind of man —which has the tendency to interrogate Nature, to accumulate, to construct, to transform—"which has sought out many inventions."

Nature Study implicated in Town Study.

The teacher must try to think of the Town as an organism which is able to nourish the material and also the higher life of man. He must bear in mind the connection between Place, Work and Folk,* and he must realise that when the Folk have supplied their bodily needs by their work, they do not live by bread alone; but by their institutions, their schools, their governments, their churches they are at once expressing and nourishing that higher life whose issues are in the Unseen.

The Town as an Organism.

* *Vide* article by Professor P. Geddes, "Civics as Applied Sociology."

CHAPTER II

THE TEACHER'S AIMS IN TOWN STUDY

We will suppose that a teacher working in a village or in a town determines to lead the attention of his pupils to those features of the environment which are due to the constructive and ordering instincts of Man, to the houses, the church, the roads, and so forth. What are the leading motives which will guide him in this work?

Not Observation Merely.

Obviously, he will not use the environment merely as a material for training in observation. Observation, of course, will be needed, and the children will certainly gain by noticing the materials of which local buildings are constructed, the shape of the bridges, the kind of windows which pierce the walls of the church, the character of the ornament on the public fountain, &c., at least as much as they will gain by merely counting the petals of a buttercup or describing the form of a horse-chestnut leaf—exercises which often entirely satisfy the conscience of a teacher in so-called Nature study. But the mere observation of anything and everything for the sake merely of training the supposed "faculty" of observation itself is by no means a sufficient aim. The human intellect needs not only to *mark* outward phenomena but to *interpret* them; not only to see things as they are, but to "think things together." A child may be able to describe the town hall, and even to make a drawing of it, and yet remain a dunce. Observation needs for its complement interpretation.

But this interpretation does not consist in giving sheer information to be memorised. Such a procedure would leave the child as uninterested in his town and its history as he is with regard to a plant when he is required merely to schedule its parts, employing the proper terminology. The vital point is that the object which is observed, and concerning which new information is supplied, shall henceforth be to the child something suffused with a glow of *interest*. Its meaning and signification must be steeped, as it were, in a feeling-tone, so that the child not only knows, but *cares*.

Not Information Merely.

How is the teacher to effect this? How is he to contrive so that whether he is presenting to the children's consideration a "flower in the crannied wall," or a railway station, he shall make either of these objects suggest, not merely their obvious external features more clearly perceived and recalled, but a network of thoughts, and even emotions, which shall henceforth render them meaningful—mysterious, wonderful, helping to reveal more clearly "what God and man is"?

The Problem of Interest.

There is no precept of "method" which will instruct him how to secure this end. Everything depends upon two things: (1) The breadth and richness of the teacher's own conceptions, (2) his power of *suggesting* some of these conceptions to the pupil.

Let the teacher accustom himself, then, to make his own town study the means of gaining *an imaginative insight into the past*. Every building and every institution which he sees around him is the outcome of long stretches of effort extending over many generations, during which the mind of man has been at work *constructively*. Man has been, as Browning says, "Forced to try and *make*, else fail to grow." He has made himself piles in wood and stone and brick, and he has also made

Insight into the Past.

more spiritual edifices—wholesome laws, and "civil" manners, and systems of government and religious organisations—all these providing shelter for his spirit, as the cruder structures made with hands protected his body. The thoughtful teacher sees that in all this, man :

> Repeats God's process in man's due degree,
> Attaining man's proportionate result.
> *The Ring and the Book*, I. 7178.

He sees that "man's result" changes its form through the ages "lest one good custom should corrupt the world." The ruined castle or abbey, or perhaps it may be only their very names lingering in the town records, remind him of an era when man's aspiration towards God and his conception of duty towards his fellows expressed themselves far otherwise than in our own time. Yet all this effort in the past assuredly affects our life to-day. The teacher feels this, and he realises, too, that he is the transmitter of experience, the interpreter of the ages, the custodian of the key which unlocks to the child the inheritance of the past. It is not suggested by any means that he should attempt to reveal to the child *all* that he sees himself, but, to use an expressive image of "Kappa's," he must be as one who lifts the curtain of history, scene after scene, so as to show what *has been* in a series of successive pictures, preparing the mind, one after another, for the conception of what *is*.

Understanding of the Present.

The next and more difficult task of the teacher in connection with town study is to explain as far as possible the *present*. Now, modern life is very complex, and not easily analysed by a child. The late Bishop Creighton once advocated *beginning* a study of history with reference to the local policeman, and other—though not many—historians have expressed the same view. But the experience of teachers has been that little children enter far more readily into the pictures of life and action

afforded by legends of the remote past, when existence was led on a simpler plane, and one more akin to their own experience. It has, however, been forgotten that children pass very rapidly through those stages of experience which correspond to age-long processes in the history of the race, and boys and girls, as has been justly said, have been allowed to leave school with no notion of modern history beyond the battle of Waterloo, which victory they are as likely to attribute to Nelson or Marlborough as to its rightful hero. At fourteen they pass out into the complex civilisation of to-day, with no notion of the privileges and the duties they inherit, either in their own country or in their own borough.

Town Study, Objective and Typical.

It is obvious that town study affords a *via media* between the history which consists in tales and sagas on the one hand, and on the other that study of institutions and international relationships which demands riper years and wider experience of citizenship. Town study is *objective*; the town hall, the market, the police court are concrete things evident to sense. But they are also, if intelligently considered, *typical* objects, symbolical of social forces. Thus, the gulf between the concrete and the abstract is bridged over, an interest is stimulated which will be carried to a further stage, a nucleus of knowledge is created which will be added to by the force of the ideas already aroused.

Town Study and Patriotism.

In this connection we may speak of the value of town study as a means of fostering patriotism. Patriotism, we must remember, is a virtue which can be easily simulated. We need not, in our days, go so far as to say, with Dr. Johnson, that it is the "last refuge of a scoundrel," but we must admit that it can readily become the cheap sentiment of the irresponsible. We are in danger of rearing, in our schools, a generation of soft-skinned youths who prefer to look on, even at "sport," rather than take

any risk of its dangers, and whose national feeling in war time finds expression in jingoistic music-hall ditties, and in that undignified exuberance of triumph which has, unfortunately, given a new word to the English language. There is also a disposition to take all that can be got for nothing. The primal responsibility of the parent is, as we all know, in danger of being weakened by that care of children which the imperfectly-organised condition of society throws upon the State. Still more is the responsibility of the citizen sadly to seek. A pupil in a council school being asked what was meant by Roman citizenship, wrote: "The ship in which Roman citizens went fishing free of charge." This answer is amusing, but it is also significant of the attitude of mind which led to the fall of the Roman Empire itself, broad-based and magnificent as it seemed to be. When the populace came to clamour for *panem et circenses*—free food and free entertainments—and forgot the traditions of the days when all were ready to serve the Commonwealth both in purse and person, the end was not far off.

This disposition must be combated in our schools by an appeal to reason and by an appeal to sentiment.

Training in Civic Responsibility.

The young scholar should be shown as clearly as possible, considering the stage of his development, what advantages his country and his municipality provide him with, and the reasonableness of his corresponding obligations. A people attain dignity and freedom, as Mazzini reminded his own countrymen, by conceiving clearly, not, in the first instance, their *rights*, but their *duties*. If, then, *duties* are properly comprehended, the *rights* will be safeguarded and secured in the most effective way and in the most exalted spirit. And the appeal to *sentiment* must assuredly not be overlooked. That sentiment must not be "My country, right or wrong"; not a petty spirit of municipal jealousy. But the instinct which causes a wealthy man,

Local Patriotism.

who perhaps left his native town in boyhood, to spend a portion of his gains in beautifying it, or endowing some beneficent agency within it, is certainly a sound one. No one has written more nobly of England than Wordsworth, but the greater part of his poetry is lavished on the *genius loci* of the one small district where he lived. We love England better because Wordsworth has made us feel the spirit of England in the Lake Country. The child who has associations of dignity and beauty with the spot of earth which he knows best will be best trained in patriotism. What he cares for he will work for, and at the right time will be ready to defend.

Town Study and Future Betterment.

This brings us to another aim which the teacher should keep in mind. Much as we have gained from the past as to the planning and management of our towns, no one will contend that they at present satisfy the ideals of beauty, order, and health which we can form for them. Neither can we, in view of the many social evils which the town harbours, and in view of the clumsiness and wastefulness which the machinery of society shows in its working, maintain that our civic life needs no improvement. It is of the essence of civilisation, as it is also of the essence of practical religion, that we go forward. T. H. Green has well said that the collective morality of a community is expressed in its civil institutions. The men and women who are to settle the problems of the next generation are at present boys and girls in our schools. We cannot distinctly discern what will be the particular form their problems will take, although we may form shrewd guesses. For instance, many observers think that our administrative authorities have been wrong in encouraging the unwieldy growth of large towns. Professor MacDougall, in his "Sociological Psychology," thinks that London and other large towns have for a long time past exceeded the proportions that conduce to economic efficiency and to healthy

social life, and that people have massed together from a blind instinct of gregariousness, just as vast herds of bison or other animals greatly exceed the size necessary for mutual defence. It may be desirable, therefore, to throw much stress into the reactionary movement which we now see towards providing counteracting attractions in rural life, or rather towards securing for the next generation a better combination of urban and rural conditions. Direct pronouncements on this and other related matters are, of course, not possible. All we can do is to show our scholars what gains we hold from the past, with what good our own day has provided us, and then give them ideals of righteousness and helpfulness which they will apply for themselves in the coming day. We want to inspire in them a sense of gratitude towards ancestors, of responsibility towards descendants, and withal something of the spirit of Blake :

> I will not cease from mental strife,
> Nor shall my sword sleep in my hand,
> Till we have built Jerusalem
> In England's green and pleasant land.

Civic Training a Neglected Province of School Work.

At the Moral Education Congress recently held in London, it was felt that too little stress was laid on this aspect of school instruction and training. A public-school master confessed that " public schools succeed in instilling a sense of duty to King and country ; they do *not*, at present, make a boy think it his duty to become a Poor Law guardian or a parish councillor." Is not this because he gains from his history lessons, from school songs, &c., ideas and sentiments about King and country, whereas he is left in ignorance about the nearer facts and duties of civic life ? Another teacher pointed out that " discipline under authority is infused largely for the school only ; individual responsibility for self-discipline and service as a communal duty needs much stronger

cultivation." We should not, however, despair of finding methods whereby these omissions may be repaired. The essential thing is for the teacher to be impressed with the seriousness of the issue and to disprove the charge of the public-school master we have already quoted, "Schoolmasters are the least 'civic' of men."

We may here quote the words of a wise statesman, scholar and historian, Mr. James Bryce, our Ambassador to the United States :—

"To contrive plans by which the interest of the citizen in public affairs shall be aroused and sustained is far easier than to induce the citizen to use and to go on using, year in and year out, the contrivances and opportunities provided for his benefit. Yet it is from the heart and will of the citizen that all real and lasting improvements must proceed. In the words of the Gospel, it is the inside of the cup and platter that must be made clean. The central problem of civic duty is the ethical problem. What we have called 'the better conscience' must be grafted on to the 'wild stock' of the natural Average Man.

"How is this to be done? The difficulty is the same as that which meets the social reformer or the preacher of religion.

"One must try to reach the Will through the Soul." *

* *The Hindrances to Good Citizenship*, by James Bryce (Yale University Press). *Vide* also Preface by the Headmaster of Rugby, the Rev. A. A. David, to a pamphlet entitled *The Teaching of Civics in Public Schools*, by C. H. Spence (Clifton College). Simpkin & Marshall.

CHAPTER III

THE TEACHER'S DIFFICULTIES IN TOWN STUDY

EVERY school subject has its own difficulties, and we must frankly admit at the outset that town study is by no means to be taken up merely as a course of lessons "conveyed" from a handy text-book. To begin with, the young scholar will not be interested in *a* town, but in his *own* town. It would be easy to devise a course of lessons on towns and town institutions for pupils in a secondary or continuation school, but for younger pupils we must begin at home, with the special town or village which they know. The law of "physical nearness" applies here as in all elementary instruction. It is true that, as we have said, some of the buildings and officials in a town, such as those of the post office or the railway station, may be described as *typical*, as expressions of a system which will have corresponding arrangements in other towns. But in every case there will be local peculiarities and relationships to be taken into account. The history of the church, the character of the market, the vicissitudes of the local ruin, the nature of the local industry vary in each case. The teacher, therefore, will have to take the trouble to *know* his own town, its history, and its special characteristics.

The Preparation Needed.

This involves some pains, but, after all, not more than an educated man would wish to spend. The teacher owes it to himself to take an intelligent interest in his own surroundings. If schoolmasters in

the past have formed somewhat of an isolated class, this was perhaps due to the old ideal of education as a matter of books and scholarship. School studies were not utilitarian: the life of the scholar was an antithesis to that of the man of affairs. But now we are realising that, as Professor Dewey and others are so forcibly telling us, the function of the school is to serve as a means of adjustment to society, and as society evolves, the school must evolve with it. There was a time when it was supposed that a teacher was well equipped if he had studied a little psychology—if he knew something of the child. It is now realised that he must know something of sociology —of the conditions for which he is preparing the child. The schoolmaster is ceasing to be the secluded pedant, he is coming to be regarded as a public servant. His equipment for practical citizenship and for teaching citizenship to the young ought to be at least as effective as that of a man in any other profession which presumes a liberal education. A touch of the antiquarian spirit and some amount of reading in constitutional history, combined with an intelligent use of the newspapers and of the ordinary means of intellectual converse with his fellow-citizens, will do much to equip him for directing town study with his pupils, and he may well aspire to the modest distinction of being somewhat of an authority on local history and institutions.

The Teacher as a Student of Civics.

Another difficulty at which we have already hinted is to be found in the complexity of modern life and civil institutions. It is not easy to explain to the young how a great railway is managed, the various tribunals of justice at which the wrongs of the citizens are righted, the significance of the various kinds of election of which they may hear, and what kind of work is done in a bank. Where the pupil passes on to a secondary education, these matters can, of course, be postponed, but while

The Complexity of Modern Institutions.

the leaving age of the primary school is fourteen, some attempt must certainly be made to teach the rudiments of civil life to those who in a few years will exercise the duties of citizenship without any further equipment than they can pick up for themselves, which in the majority of cases is very little. These chapters are an attempt to suggest what may be done to interest young people in these subjects by teaching them objectively, through buildings and personages that may be observed and in part explained, and also, as we shall see, through the dramatic and organising instincts which are so strongly developed in the early teens. And though we have been speaking of primary scholars, we must recognise the fact, freely admitted by public-school masters and by such writers as "Kappa" and A. C. Benson, that boys of the upper classes—and most certainly girls also—have been allowed to grow up with the vaguest notions of the civic life around them. Since the specialised studies upon which these young people mostly enter claim all their attention during their later school period, the following pages, it is hoped, may be useful to teachers who are working in the middle forms of secondary schools.

The Difficulty of Finding Time.

This brings in the question of *time*. The curriculum of every school, whether primary or secondary, we are told, is already overcrowded, and it is impossible to find room for another subject. Enthusiasts for the classics will demand loftily how room can be found for new-fangled subjects like "Civics." It is enough for them to put a boy on the way to a knowledge—if he wants to acquire it—of how the Romans furnished and administered their own and subject cities. The history and geography of a greater empire than the Romans have for a long time been crowded out in the interest of studies relating to the civics of the past. It is forgotten that since the days of the Renaissance, when classical

studies were the only means of liberalising the mind of future empire-builders, many things have happened in these islands, and much territory been added to their influence. Recent years, however, have witnessed a great revival of interest both in our own national history, on the one hand, and in municipal development on the other. One evidence of the increased attention to local citizenship is a recent memorandum of the Board of Education with regard to the study of history. This document has laid down the recommendation that "in each school attention should be paid to the history of the town and district in which it is situated," so that Town Study, in one of its aspects at least, has become a matter of prescription.

Town Study and the History Course.

We think that room might be found for such observations as we are suggesting in part of the time now allotted to ordinary history. Much of the history taught in schools is wearisome and unfruitful. We do not think it is advantageous for scholars to learn particulars of the insurrections of Lambert Simnel and Perkin Warbeck. Very little is gained by laboriously memorising lists of the battles and dates in the Wars of the Roses. And there are other large portions of mediæval English history which are not very appropriate for school children. The deletion of particulars such as these will give more time for matters which bear a closer relation to the life of the present.

Local History (a) in its Military Aspects.

The Board of Education recommends not a separate course of lessons in local history, but a constant reference to the history of the locality as illustrative of the general history. The memorandum proceeds to give an example: "All the great and important events which have taken place in the neighbourhood will naturally be chosen for more detailed treatment. This applies specially to such matters as battles in any of the

Civil Wars or rebellions. In dealing with the Wars of the Roses or the great Civil War it is generally desirable that some operations should be chosen for detailed treatment. Within broad limits it is immaterial which operations are selected, but a detailed knowledge of, *e.g.* some one battle of the Civil War will explain better than anything else the general nature of the struggle." We are not sure that such matters as "battles in any of the Civil Wars or rebellions" deserve to be singled out for specially detailed treatment. The really "decisive" battles of the world are very few in number—fewer, it has been thought, than the fifteen which Creasy commemorates. A battle is a mere episode in a long clash of interests of which the importance lies in the religious, social, and economic changes which emerged when the struggle was over. The battle itself belongs to the category of "old, unhappy, far-off things" whose memories now affect no one. The disposition of the forces, the successive movements of the bodies of men which resulted in the slaughter or retreat of one side are distinctly realised only by the student of tactics, unless there are some picturesque adjuncts to help the imagination, as in the honeycombed pits at Bannockburn or the covering hedges at Poictiers. Now that the methods of warfare have so greatly changed, these combats with pikes or with bows and arrows do not throw much light on the conditions under which our soldiers fight in general in different parts of the Empire to-day. We agree that if a school is situated near Marston Moor or Newbury, near Gloucester or Colchester, near Wakefield or Tewkesbury, some detailed account of the battle may be appropriate; but we conceive that it is of far greater importance that "the part taken in any of the Civil Wars by that district should be fully explained," that the scholar should know *why* the gentry, burghers, and peasants took this or that side; what motives, whether

of self-interest or sentiment, animated them ; what was the immediate outcome of the struggle ; and what was the nature of the loss or gain that ensued to their town or district when things had settled down again.

" In the same way," the memorandum continues, " a school in London or the Eastern Counties will naturally make a more special study of the Peasants' Revolt ; one in Lincolnshire or Yorkshire, of the Pilgrimage of Grace ; one in the West, of Monmouth's Rebellion. The relations to Scotland will naturally be more fully dealt with in a school situated in the Northern Counties ; those with Wales by one on the Welsh border." This is obviously sound advice—local importance fitly takes precedence of historical magnitude in dealing with local movements on a scale indicated in this paragraph.

The second form of local history suggested appears to us of still greater value. " General changes, whether political, social, or economic, such as the Roman occupation, the foundation and dissolution of the monasteries, the Norman settlement, the economic changes of the fifteenth and eighteenth centuries, the Reform Bill, should always, when possible, be explained and illustrated by reference to their effect on the particular district. In this way alone will it be possible to give a concrete illustration of the broad generalisation which is all that is to be found in the usual school text-book. The origin and changes of the units of Local Government, the effect of the industrial revolution on population, the changes in land tenure brought about by the Norman Conquest, can in this way often be explained by facts which are within the personal knowledge of the pupils."

Local History (b) in its Civil Aspects.

Since a town or village is the kernel as it were of its district, the nature of these changes is generally exhibited in a most striking way by some building, or tradition, or custom, or institution still surviving.

Town study thus affords a text for the kind of local history so well described in this paragraph. And if the time for such study is to be secured by the omission of particulars concerning Piers Gaveston or Anne of Cleves, or even of the campaigns of Marlborough or the details of Grenville's Ministry, we do not think that the pupils will be greatly the losers.

The Difficulty of Scientific Explanation.

Another difficulty consists in the fact that much of the life and business of a town depends upon scientific applications which cannot be satisfactorily explained to children. The telegraph, the telephone, electric lighting, and the electric street car are instances of phenomena of which the proper explanation lies in the course provided by the technical school or class. Young children take these things as they see them—an electric lamp is "natural," and is perhaps, as Mr. Chesterton says, regarded somewhat as a big, bright snowdrop. But boys of eleven and upwards "want to know" more about these wonders, and it must be admitted that only a little can be done in this respect, and the full answers to the questions raised must be given, not in the history or "civics," but in the science course.

The Difficulty of Material in Suburban Areas.

Finally, there is the difficulty of the enormous size of some towns, which makes it a problem to find the material at hand in the child's immediate neighbourhood. Fortunately, the cheap municipal car affords, if only proper arrangements are made by the education authorities, a ready means of conveying a class to the specially interesting spots in the city. Moreover, it should be realised that London and other large towns are really congeries of small villages round a central nucleus—in the case of London, a nucleus formed by the twin cities of London and Westminster. These villages, once isolated, have been linked together by intervening houses; but each absorbed

village has its own history, its own parish church, the remnants of its own green, its own High Street, often with old houses and old inns and almshouses lining it on either side, its local place names recording old sites, as well as its own modern town hall, public library, or fire station. Islington, in London, is a case of this kind. It was once a village on the Great North Road, along which James I. and his courtiers travelled from Scotland to London. Islington Green still survives as a public garden, the parish church is a familiar landmark; near at hand is Canonbury Tower, a relic of the times when Islington was an ecclesiastical manor, and the street names—Spencer, Alwyne, Compton, &c.—recall the fact that the property of the canons passed into the hands of a noble family. If we pass to Manchester we find some of its most prosaic districts bearing such names as Newton Heath, Rusholme, Openshaw, &c., clearly indicating absorbed hamlets. Here there is some point of origin from which we may lead the imagination of the children backwards to the old-time life of their own locality, and outward to comprehend the life of towns and villages smaller and less amorphous than their own. Here, too, is a starting point for leading the children to feel that their town has a personal history, a name and a past of its own (*v.* page 59).

CHAPTER IV

METHODS AND HELPS (1)

THE methods of town study will obviously be akin to those which have been found effectual in geography and history lessons.

There must be, as in geography, a basis of *observation*. Town study is a branch of *Heimatkunde* (knowledge of home surroundings), and this implies that the pupil sees with his own eyes the objects and buildings which are discussed. The school journey—or, rather, class excursion—is as essential in town study as it is now acknowledged to be in Nature study. Visits to certain specially interesting districts, sites, buildings, monuments, &c., will be planned out in connection with some such course of lessons as is suggested in the following chapters. The difficulty of transport, to which we have already alluded, tends to diminish year by year. Now that the same local authorities are responsible for education as for other branches of civic service, it ought not to be difficult to convey children from one side of a large town to another. In the less busy hours of the day, bundles of free tickets for the municipal tramcars could surely be at the disposal of any teacher who was sufficiently earnest to desire to give his pupils the benefit of such an experience and who took the trouble to comply with the simple formalities necessary. It is to the interest of the local authority to cultivate in the younger generation such an intelligent interest

The School Journey or Excursion.

in their town as will be likely to make them instructed and attached citizens at a later stage.

The School Expedition must be Prepared for.

The school journey must not be a mere outing, nor must the teacher trust merely to a lecture *in situ* for the intellectual benefit which he desires his scholars to derive. It must be carefully prepared for beforehand. "He whose Alpha is ignorance, will have ignorance for his Omega also." The finest works of art in the world have no message for the unprepared mind; witness the listless strollers who may be seen every day gaping vacantly at the Elgin marbles in the British Museum. The children must know something of what they are going to see. A map and, if possible, photographs or pictures should be shown beforehand, and the imagination roused by any story or interesting bit of information connected with the spot. This sort of preparation, which is called in psychology "pre-perception," enables the mind to give a more ready and fruitful attention to the objects as soon as they are actually present to the senses. Teachers, anxious to avoid the reproach of giving "mere information," and having been repeatedly admonished that it is observation which is the royal road to knowledge, are apt to be timid about this sort of preparation, lest they should be teaching "words before things." They are, of course, right as to the main rule, but it is not a rule to be applied blindly. "Any mental act is the product of two factors, one derived from the external world, the other from the mind itself. . . . We may often advantageously give the ideas first, so that they may be ready, as it were, to pounce upon the things when they are presented. . . . A far-sighted teacher is constantly preparing preperceptions in the mind of his class, and the self-activity thus induced gives the children a foretaste of real intellectual pleasure. The higher forms of interest all depend on the mind's ability to bring a rich store of allied

knowledge to the presentation of the object, and to combine the two by exercise of its own activity."—Mellone and Drummond, "Elements of Psychology."

Maps and Plans.

One of the first essentials of town study is a map of the district. In England we do not pay sufficient attention to the art of map-making for schools. Our maps are apt to be insufficient in number, crudely coloured, glaring with varnish, and over-crowded. In Germany, one firm vies with another in producing softly-coloured, clear, and almost pictorial physical maps, which are easy for the children to read and pleasant for them to look at. "Further, each town has a set of maps more or less peculiar to itself, illustrating respectively the town, its surroundings, and its province. These are necessities of *Heimatkunde*." *Vide* Report on the Teaching of History in Girls' Schools in North and Central Germany. (Manchester: University Press).

It is to be hoped that a supply of such important aids to teaching will soon be forthcoming for English town areas. In the later stages, *old* maps will be interesting to the pupils so that they may compare the present size and aspect of the town with the past. The memorandum of the Board of Education on the teaching of history says: "An attempt should be made to get together a collection of maps, either originals or reproductions, illustrating the growth of towns and other changes in the district." Enlarged copies of maps can always be made by the energetic teacher, but the utmost amateur skill can hardly compete with the art which produces such triumphs as the *Anschaulichkeit* maps recently brought out in Germany.

Models.

In order to understand the physical "setting" of the town a model is also of great use. At least one such model should be in every school, on a scale large enough for the child to walk round the table on which it lies and "read" it

without difficulty. If models on a smaller scale are wanted for classroom use, they can easily be manufactured by the teacher in clay or plasticine. An Ordnance map of the district showing contour lines can be obtained for a small sum, and can be translated into a model. It is to be regretted that modelling in damp sand or clay is too often regarded as an occupation for infants only; elder children might gain much by reproducing in this way the features seen in any school expedition. If a more permanent record is desired, the children might be shown how to make a model in tissue paper or paper pulp. The tissue paper should be torn up, and then moulded with wet fingers into the relief desired by being placed over an outline previously drawn on stiff cardboard. A sheet of wet tissue paper should be stretched over the whole and moulded to fit the relief. The surface of the map may be painted after it is dry, and flags (constructed with pins and small paper labels) can be inserted at points of interest as they arise in the lesson. Such a map can be carried home in a cardboard box made to fit it, and will help to enlist the interest of parents.

Pictures.

Pictures of important buildings and of striking historical scenes associated with the district should also be collected. The originals of old views are, of course, scarce and expensive, but inexpensive reproductions are often procurable. These form one of the best possible means of making the past real. They must not, however, be merely pinned or hung in classroom or corridor, where familiarity soon blunts all interest, but exposed with some degree of impressiveness, and *discussed* in connection with the school expedition, or the history lesson on the period they represent. Some of these pictures may be photographed and made into lantern slides to illustrate lesson-lectures on such subjects as "Our Town Three Hundred Years Ago," and so on. In schools where

expense renders these devices impracticable, an expedition to the public library will almost certainly bring the pupils face to face with old local maps, old views, costume-sketches, &c., which will help to illuminate the past for them. Such helps as are afforded by mural paintings in the Town Hall, the Guildhall, or other public building will not, of course, be overlooked. For instance, the history of Manchester is illustrated by Ford Madox Brown in the Town Hall, and London children should see the paintings in the Royal Exchange and the stained glass in Southwark Cathedral or in St. Margaret's, Westminster.

The Time Chart.

Children need more help than we often realise in grappling with these two limiting "conditions," as they are called in philosophy—Space and Time. They need a time chart quite as much as a map.

Both these things, of course, are highly symbolic. We can only realise *time* when we have lived through a considerable space of it; we can only realise *space* when we have travelled, and even our adult notions are crude and infinitely fractional. But the symbols have this value, that they serve as standards of comparison, and children soon begin to take pleasure in measuring distances and years by their means. A printed chart, crowded with details which confuse the eye, is of no use for our purpose. Some teachers, amongst them Professor Miall, have advocated a blank vertical chart, with spaces blocked out so as to represent centuries and decades. In these spaces the more important events in the history of the town or of the nation as affecting the town may be inscribed, and different coloured inks or pencils can be used if necessary for ecclesiastical or military or other classes of events. "Such a chart," says Professor Miall, "gives a truer, more vivid impression of the duration of periods than mere numbers can do, and prevents

those absurd mistakes of whole centuries which harrow up the soul of the faithful teacher." The chart should grow under the eye of the class, and can be used not only for recapitulation but as a standard of time to which events in their own or in foreign history may be referred.

The Horizontal Chart.

We think, however, that the device of a *horizontal* chart which we have seen used in some schools will be more practicable and useful. A series of oblong sheets—pages from an ordinary drawing-book 10 in. by 8 in. will serve—may be fastened above the dado all round the walls of the room, each sheet representing a century and each being contiguous to the next. In a London school we visited the oblong for the first century represented 1100, and contained the entry of the founding of the Tower. If the children in their reading or in the course of other lessons came upon an earlier date—say of the kingdom of Charlemagne—they understood that Charlemagne lived before the Conqueror; the record of him was to be found in a similar chart in another—a pre-Conquest room; while in yet another there was a chart for the events occurring before the Christian era. If all the historical lessons are given in one room, with the whole of the appropriate helps and apparatus at hand—a plan which has much to commend it—the charts could of course be compared by an immediate appeal to the eye. It is scarcely necessary to remark that with younger children a drawing, a print, or some symbolic rendering such as crossed swords to represent a battle, or a sketch of the castle whose building is commemorated, could replace the written entry.

The teacher, by the by, will do good service to his borough if he induces the authorities of the local public library to follow the example of Canterbury and other towns by displaying in its entrance hall a chronological list of important events connected with the place.

Museums.

The local museum (and in London the Guildhall and British Museums) will probably be a treasure-house to the teacher who wishes to understand the history of his town with thoroughness. For example, the geology of the site of the town will probably be illustrated, and, if not, the teacher should track down some expert to supply the want. Perhaps some fossils have been found in the neighbourhood. These carry the class back to a period long before history—before any entry on our time chart. Or there may be a quarry, or a raised river-terrace of gravel, or a stretch of alluvial soil, or coal seams, or a chalk escarpment. Perhaps " here, where the long street roars, hath been the stillness of the central sea." The relief model which we have already recommended as making clear the " lie " of the town will be a great benefit in explaining the geology of its site, and there should be a section with the underlying strata exposed. Here Nature study and Town study, as is so often the case, will dovetail into one another. Whether the region be industrial or agricultural, the kinds of soil found in the district should be noted, and in the latter case the several crops raised therefrom.

If flint, or bronze, or early iron implements have been found, they will help the children to realise the gap between themselves and the old dwellers on the same site. Remains of Roman times will be certain to excite interest, since the children have heard of the Romans in their Bible stories. A bit of Roman pavement or pottery will make them feel that the history of their town is part of a wider history, and that the masters of the world, who governed Jerusalem through Pontius Pilate, really carried their eagles to London or to Exeter or to Leicester. Relics of mediæval and of more modern times will have their own value in turn, especially if the museum, like the library, is furnished with a time chart for local history. And if the town is an industrial

centre the local museum should furnish some means of enabling the children to understand, by means of specimens of raw material, models of machinery, specimens of the product at various stages, &c., something of the nature of the occupations upon which the prosperity of the place depends. Such collections may be huddled into a corner, remaining dusty, unkempt, and almost useless, or they may be made to look attractive and interesting, and may be so arranged and graded as to afford real information.

CHAPTER V

METHODS AND HELPS (2)

Incidental Town Study.

Town study may, it is obvious, be either incidental or direct. The Board of Education recommends, not a separate course of work on local history, but a constant reference to the history of the locality as illustrative of the general history. It is only quite recently that any attention has been paid to the value of this method of verifying the " outlines " which were expected to form part of the mental equipment of the secondary pupil on leaving school. In a most valuable paper by Professor Childs, of University College, Reading, published as Leaflet No. 11 by the Historical Association, the relation between the two is very ably discussed. Professor Childs remarks : " I never yet saw a paper of examination questions which contained the instruction that credit would be given for any relevant knowledge shown in regard to local history. Thus it is, perhaps, that we get such amazing results as girls in Reading or the locality being taught the history of the Stuart period and not acquiring the knowledge that Archbishop Laud was born in their own town." But he realises that the undue diversion of interest to the locality would be injurious to the broader aims of historical teaching. " It is not our aim to manufacture juvenile antiquarians." But local history can serve as a magazine or store-house of vivid and pregnant illustrations of the general course of national history. History is sometimes disliked as a dull subject because the teaching of

it lacks apt and convincing illustration. The pupil may fail to vitalise in his imagination the Roman occupation, the manorial system, the personal government of Charles I., the epoch of reform, or the industrial revolution. But once convince him that he lives encompassed by the memorials of the past, that here in this very place the Roman planted his villa, the serf toiled for his lord, the monk was expelled to beggary, the townsfolk gathered to denounce Ship-money, a self-elected corporation squandered the town revenues, and the handworkers smashed the new machinery, convince him that what he learns in the general may be proved in the particular, and the probability is that he will begin to realise and understand as well as remember." The pamphlet then goes on to apply this principle to the case of the writer's own town—Reading. Reading, it is true, may be richer than some other towns in records of the past. But even brand-new towns like Barry in South Wales, or Barrow-in-Furness, have interesting sites quite close at hand, and moreover, such towns, with their factories and docks and public buildings, have an interest of their own which makes them valuable illustrations of history in its most modern phases. It is surely desirable also to accept the principle that local history should be allowed to some extent to modify the general history syllabus. Thus at Winchester one would naturally linger longer over the Saxon period and the doings of Alfred, while at Bury St. Edmunds the ecclesiastical history of the Middle Ages would receive more attention than need be paid to it, say, in the towns of the Staffordshire Potteries.

Direct Town Study.

Many teachers, however, and their number is constantly increasing, would not be content with these merely incidental and occasional attempts to explain the phenomena of town life in the course of a general history syllabus. One of these pioneer teachers, Miss

E. H. Spalding, lecturer at the Goldsmiths' College, London, has put the case for direct teaching very forcibly. She says: "Whereas with older children I would use local history illustratively, with children of ten or twelve I would go through a definite course of local history. I would take the immediate neighbourhood as a subject of study, and treat it not merely archæologically but from every possible aspect. What a child's mind is full of is the human, the economic, and the social surroundings of his everyday life; therefore in local history at this stage I would include not merely the most striking aspects of it, but the modern shop compared with the old market, the rattling tramcar compared with the old stage-coach; I would aim at making the little child of that age observant of the things that lie around him. It seems to me that by concentrating on local history at that age one is laying the right foundation for using local history illustratively later on; and one is training that faculty of careful observation of the environment which is, after all, a very important basis of history teaching."

With this opinion we entirely agree. But we would add that, in our judgment, town study falls, roughly speaking, into two stages. The first, of the kind which Miss Spalding describes, comes after the story stage of history teaching and before or about the beginning of a more definite course. The second, which is designed to be an introduction to civic life, comes later in the school career, after the general history course has furnished the pupils with a series of pictures of the past life of their country, and with some conception of how her freedom has "slowly broadened down from precedent to precedent." By this time the pupil is interested not only in *things* but in *abstractions*. He is attracted by the complex interplay of human occupations which he sees around him, and likes to inquire into the economic and

Two Stages of Direct Town Study.

social forces which they represent. At this age he likes to belong to clubs and societies, a rather elaborate organisation appeals to him; this, then, is the time for getting him to understand the machinery of local government.

The First Stage: Method, Observational.

The lessons in the first stage will, of course, be somewhat of the nature of object-lessons. There will be plenty of observation, of buildings and sites out of doors, and also of pictures and photographs in class. There will likewise be a modicum of information given mostly by that ancient device of method associated with the name of David Stow—the device of "picturing out." But as no method can be satisfactory which does not involve the children's self-activity, they should also be told beforehand to notice a certain object or building during the week, and their observations, with any facts they have been able to find out, should be gathered together in the lesson, when also the maps, pictures, or photographs should be produced. Little "problems" may be given to stimulate curiosity—for instance: "Where are red lamp-posts found, and why? What iron plates or drains can you see in the roads? At what places in your neighbourhood is the greatest amount of trading or shopping carried on? Why are these places better situated for trading than others?" The children will, of course, be encouraged to get any possible help from home.

The Second Stage: Method, Discussion and Exposition, with Questions.

With older pupils the lecture-lesson method of the ordinary geography or history lesson will be followed—*i.e.* the teacher will see that the facts are presented in an orderly sequence in a clear exposition, but throughout he will challenge the pupils to provide some facts from their own knowledge of history, to suggest reasons for this or that procedure, to instance other illustrations of

a similar principle. Here, again, the subject should be known beforehand and questions or "problems" proposed. We may ask such questions as "What material is most commonly used in the houses of our town—Brick or Stone? Why is this? What other materials are used? Where do they come from?" The questions at this stage naturally implicate other school subjects, such as Nature study and geography. Part I. of "The Practical Geography" (1*s.* 6*d.*) by J. F. Unstead, in the series of "Oxford Geographies" edited by A. J. Herbertson, gives valuable suggestions as to the kind of questions that may be set on the natural and economic features of the district. Thus: "Is your town an important trading centre for the surrounding country? What advantage has it in this respect? What advantages in this respect have you heard that other places possess which your town has not?"

One result of such a *questionnaire* ought not to be overlooked. It has been found that town study has been of very great value in establishing a link between home and school. Parents of children in elementary, or in the new secondary schools, sometimes find themselves outside the circle of school interests. This want of touch between the older and the younger generations is perhaps an inevitable though regrettable result of progressive ideals of education. But while chemistry or algebra are as impenetrable thickets fencing off a whole region of their child's mind, town study, whether antiquarian or "civic," will supply parents with a point of contact and enable them to gain credit with the younger generation by supplying information of a kind which is obviously to be respected at least equally with the lore of the text-book or the *ex-cathedra* utterances of the class teacher.

CHAPTER VI

METHODS AND HELPS (3)

THE giving of questions to be answered is not the only means by which the activity of the pupil may be stimulated. The enthusiasm for pageants which has so strongly seized our municipalities at present may be allowed to find expression on a humbler scale in the school. The children may usefully substitute for the insipid fairy cantata or the miscellaneous programme of "pieces" and recitations which seem the only possible forms of entertainment at a school festival, a miniature "pageant" representing the chief events in the history of their neighbourhood. The preparation of scenery and costumes for such a festival, by the by, provides a form of manual training which has a real interest. The teacher can reproduce in brushwork sketches of costume from Lewis Wingfield's "Civil Costume in England" (Clowes & Sons), or from "English Costume" (The Antiquary Series, Methuen & Co.), and from these the necessary garments can be fashioned, while furniture and weapons can be imitated, in wood or cardboard, &c. from models to be seen in the museum or from prints in illustrated history books. Scenery can be painted by the elder pupils. Parents are nearly always ready to co-operate in activities of this kind. Nor should such attempts to vivify the past be confined to well-to-do neighbourhoods. The Bermondsey Guild of Play, presided over by Mrs. Kimmins, has

Use of the Dramatic Instincts: School Pageants.

shown in its May Day and Christmas Masques how colour, grace, and refinement can be brought to children's lives in the most unlikely surroundings. Here, we venture to think, is a new field for philanthropic effort in brightening the leisure of young workers attending clubs or continuation classes.

School Democracies.

All English teachers have heard of the George Junior Republic. The founder of this institution, the philanthropist William R. George, had to deal with neglected and unfortunate boys and girls whom he wished to transform into industrious and upright citizens. To do this he threw upon the members of the institution the responsibility of earning a livelihood each for himself, and these young citizens were trained to govern themselves according to the provisions of a written constitution. The plan was attended by admirable results, but it is obvious from the nature of the case that its success was due to isolated and artificial conditions which could not be reproduced in an ordinary day school.

But in the Albany (New York) Teachers' Training Schools and in one or two progressive English schools attempts have been made to give the pupils, through their own experience, object lessons in the art of self-government. The Albany school has its Senate, composed of two senators chosen from each of the classes in the elementary school above the second year, its House of Representatives, and its President, who must be at least fourteen years of age and must be chosen from one of the two upper grades of the elementary school. The Congress thus formed determines the rules of its procedure and levies taxes for the purposes of the Republic. "It has power to establish and organise a police department, a fire department, a savings bank, a department of health, an athletic department, a post-office department, a library department, and a department of school grounds; to constitute tribunals inferior

to the Supreme Court; to define wrongs against the Republic and to punish therefor." As an example of the carrying out of the principle of self-government into detail, the police department is described more fully. It consists of a chief and several patrol men. "This department has general charge of the safety and peace of pupils in and about the school buildings. It plans and carries out the fire-drills; regulates the clocks in the various rooms, and prescribes the method by which pupils shall enter the building and leave it. The department has shown considerable efficiency and ingenuity in performing its functions. At the outset there was somewhat undue activity in the matter of arrests, but the novelty soon disappeared and arrests are now seldom necessary. Pupils charged with offences against the laws of the Republic are brought before a Police Court for trial, and, if found guilty, are sentenced by the Court. A boy recently convicted of disorderly conduct at the midday 'dismissal' was sentenced to remain in his room until his class had passed out, and to pass out alone for a period of three weeks. This may be taken as a typical punishment. . . . The Republic has instituted a savings bank in which pupils may deposit money, in any amount. The bank is a branch of the Penny Provident Fund of New York, which furnishes deposit-books, stamps, and other equipment without charge. . . . The Republic has also undertaken, with varying success, such matters as the planting of trees on the school-grounds, the improvement of the appearance of streets, sidewalks, and parks in the neighbourhood of the school, the celebration of holidays and anniversary occasions, the organisation and conduct of a school library, and the decoration of schoolrooms." *

It is obvious that these institutional activities may not only help to solve problems of school discipline, and to

* Report by Dr. Jesse D. Burke. Professor Sadler's *Report on Moral Instruction and Training in Schools*, vol. ii. Longmans, 5*s*.

form a legitimate counter-attraction to that kind of instinct among boys from eleven to fifteen which, according to American statistics and to common knowledge—expresses itself in predatory organisations, in the admiration for and imitation of the robber knight, the pirate chief, or even the head of a gang of burglars, but they may also form a valuable stimulus to observation and investigation of "affairs," and may serve as an introduction to the serious duties of citizenship. And surely, as a thoughtful writer on educational subjects has pointed out, "the marvellous and complex life of a modern city is at least as worthy of idealisation as the immature life of the Knights of the Round Table and the castle and tournament of chivalry."

Text-books.

The use of text-books is a somewhat debatable question. We all know that the ordinary local guide for the use of adults is often inaccurate in statement, and in style, an example of what should *not* be. And the attempts to write a "chatty" description or narration for the purpose of a school Reader are often equally disastrous. On the whole, we are inclined to think that in the study of a particular town the instruction should be oral, and that, if any book is used at all, it should be in the nature of a brief and concise statement of facts. Such a little manual is published in Cardiff, for 4*d*., under the title of "A School History of Glamorgan." It gives in succinct paragraphs the chief features of the geography and geology of the district, the latter being made clear by very ingenious illustrations; it reviews the chief points in the history of this most interesting region, explains typical local antiquities, and in an appendix gives a clear account of the process of coal-getting, on which the industrial life of the area depends. All this is arranged so as to form a convenient summary of oral lessons in history or geography, of excursions and of diligent map study. It is rarely possible to combine

literary excellence with brevity and with an arrangement suitable for memorising, and we think that in this particular kind of work, as in Nature study, there is a danger that a "Reader" may be used merely as a substitute for a better method of approach.

Children, however, should be trained to use books, and to vary the use according to the kind of book. A really entertaining narrative history for younger readers has long been to seek; but we think that Mr. C. R. L. Fletcher's four volumes, modestly entitled "An Introductory History of England," come very near the ideal. The elder pupils will need perhaps a text-book on elementary economics, and they should certainly have access to books of reference in their own school library or in the public library, to Green's "History of the English People," to Mrs. Green's "Town Life in the Fifteenth Century," to Freeman's "English Towns and Districts," to Traill's "Social England," to the "Historic Towns Series," and to the Victoria County Histories and (projected) Geographies. Their school or class library should contain good *county* geographies such as those in the "Cambridge Series." Many towns now have a children's reading-room in the public library, where pupils not old enough for the reference library can enjoy their "Puck of Pook's Hill," or some romance recommended by the teacher which places its *mise-en-scène* in the district.

Books for Reading and Reference.

With elder pupils especially, any *literary* associations of the district should be kept well in mind and should receive some attention both in the scheme for classwork in "English" and also in the direction of the pupils' reading. The many schoolboys and schoolgirls of Bedford should have more than a bowing acquaintance with Bunyan and Cowper; young people of the Lichfield area should know betimes how much there is to love and reverence in Dr. Johnson; and the young Londoner should con with

Connections with Literature and Art.

pride London's roll of great poets and writers, just as Plymouth boys will learn to be proud of Drake and Portsmouth boys will rejoice in Nelson's *Victory* lying before their eyes in their own waters. Ruskin's saying that a nation expresses itself by its art as well as by its history should be borne in mind, and a country so diversified both in scenery and in other local characters as our own, abounds in varied types of artistic expression. If a district has been described by a master hand, as, for example, Edinburgh by R. L. Stevenson, the youth should possess this description as an element in the pride he feels for his native town. If it has been immortalised by a great painter, as Salisbury by Constable or the harbours of England by Turner, this is a matter of which it is somehow disgraceful for the young townsfolk to be ignorant. They will realise that objects which seem familiar to them have to trained eyes a wonder and beauty worth recording, and this record, whether in letters or in art, will become henceforth a kind of ideal possession enriching the spiritual part of their nature.

Connections with Manual Work.

It is hardly necessary, perhaps, to suggest to the teacher how, since town study involves some acquaintance with the elements of architecture, this helps to provide interesting material for the art lessons. Handwork, it is now contended, should not be a mere set of exercises for "hand and eye training," but should be connected with the pupils' interests. In modelling and map-making, as well as in drawing architectural features, and in the various forms of manual activity involved in any form of dramatic representation, there is abundant opportunity for "learning by doing," for translating the verbal into the concrete. And in this connection we must not ignore that double movement in modern education which makes the immediate environment the starting-point of education, and which believes

that development is best secured by intelligent motor activity. A very interesting course of lessons, for instance, could be given on the lines of Mr. S. O. Addy's book, "Evolution of an English Home," * the class making models and plans by way of illustration.

"Houses, clothes, food, means of communication, social communities are, equally with natural objects, cardinal facts in the child's environment; and the process by which raw wool becomes cloth is as interesting to him as the process by which a bud becomes a leaf. The clearest explanation of the complex facts of modern civilisation is afforded by the study of the struggle of primitive man with his environment; the gradual development of agricultural and industrial processes from simplest beginnings; therefore step by step children learn to make rough looms, pottery, and little primitive blankets and rugs." † Thus a foundation for town study is laid in the lower grades through handwork which gives an insight into industrial origins in the best possible way.

* Sonnenschein & Co. 4*s.* 6*d.*

† Board of Education, *Educational Pamphlets* No. 13. Report by Miss E. H. Spalding.

CHAPTER VII

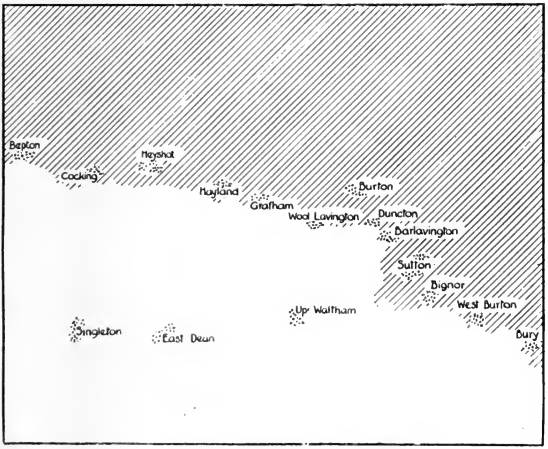
WHY TOWNS ARE WHERE THEY ARE

At about the age of ten or eleven the child has a fair conception of what is meant by a town (or village), a collection of homes in some one spot. Such a child will have had simple conversation lessons on town and country; he will have realised that for the commonest articles of food—milk, flour, meat—we are dependent on the country. Even a poor child in an unfavourable urban environment has seen pictures representing rural scenes and rural life, and can appreciate to some extent the differences between the town and the country. By this time also he will be under instruction in the outlines of geography. Help him to think of England as a very large cultivated garden—a ground cut up for purposes of cultivation by hedgerows and diversified by woods and commons. Here and there in this garden stands a town—in some districts groups of towns. Instead of merely learning lists of these towns and their situation, he may now be interested in the question, Why is this or that town where it is? and more specially, Why is *our* town where it is?

The teacher must, of course, work out an answer to this last question from his knowledge of local circumstances and history. But we give some of the conditions which account for the development of English towns of differing types, not only as a possible guide to a fascinating region of study, but also on the principle that children can only understand local conditions when there is some material for *comparison* with other places.

Prime Necessities.—The children can easily be led to see that whether one family pitches a camp in a wild place or a number of persons build their houses together, a first requisite is a supply of water for drinking and general household purposes. This accounts for the fact that we find

1. Water-supply.



MAP OF PART OF SUSSEX, SHOWING LINE OF VILLAGES AT THE JUNCTION OF THE CHALK WITH THE LOWER CRETACEOUS BEDS. IT IS ALONG THIS LINE OF JUNCTION THAT SPRINGS OF WATER RISE. THE WHITE AREA IS THE CHALK.

most towns built upon a river bank or on a freshwater lake. Let them verify this from their map of the British Isles. (At this age there is a special fascination in compiling lists.) Failing a good river supply, there must be a soil which contains water-bearing strata to which wells can be dug. There are no towns or villages on the chalk downs of Sussex or Wiltshire, but the

villages are dotted along the line near the Downs where the water-bearing beds of the greensand crop out. Reserve for the present the question of what happens when a town such as London spoils or outgrows its water-supply.

2. Food-supply.

Food must be obtained at first either from the fish in the river which flows by the town, from the wild animals in the forest which surrounds it, or, when this is cleared away, from the cultivated lands which take its place. As a town grows, it must obtain its food from a larger area; some of the folk must travel farther afield to seek it, or it must be brought to them.

3. Means of Transport: Rivers.

Here is another reason for building a town beside a river or a stream large enough for boats, for this will form a natural highway. Thus the early inhabitants of London, hemmed in by forests and marshes in their immediate neighbourhood, could obtain corn from the Isle of Thanet and other produce from the regions farther up stream.

Confluences.

This advantage would be doubled in cases where two rivers or streams meet. Thus it was almost inevitable that a town should rise where the Cherwell joins the Thames at Oxford, and where the Kennet joins it at Reading. Burton is on the confluence of the Dove and the Trent, the Avon and the Severn meet at Tewkesbury.

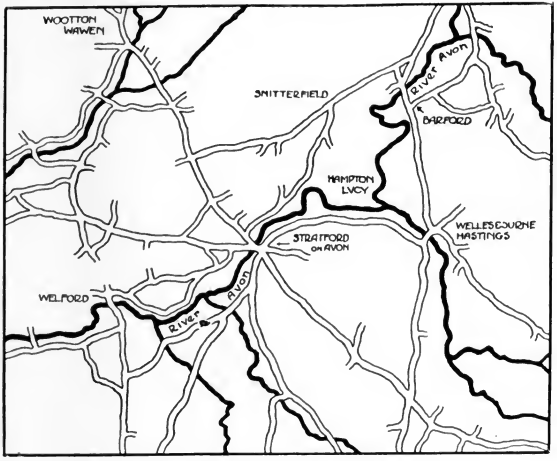
Fords.

A favourable point for a town would evidently be a place where the river could be crossed by a ford. Here inns would spring up to provide shelter and refreshment for travellers journeying through the country, and here meetings could easily be arranged. Thus we have Dartford, Deptford (the deep ford), Wallingford, Oxford, Hereford, Stamford, Stafford, Salford, and many another "ford" among English towns. Later these fords would be replaced by bridges, and the bridge might assume such importance as to

give its name to the town, as at Cambridge, which the Romans, however, knew by another name.

Though there were no roads, as we understand them, in wild England, there were tracts of flat country along which roads would naturally be made. Thus the Romans could not at first easily get across the Kent and Sussex Weald. They kept nearer to the coast, through the valley of the Stour. It was not for some time that they penetrated to what

Roads.



ROADS MEETING AT A FORD—STRATFORD-ON-AVON.

is now Winchester, and then they came by way of the river Itchen. But they were not content with the waterways of the island. They wished to be able to transport bodies of soldiers, and the supplies necessary for them, from one part of their new province to another; hence they made their great roads. If there is any relic of a Roman road near, or if only a name

survives, the children will be better able to realise how this labour of the Romans—"their wonderful straight ways through the world and the straight passage of their armies upon them"—helped to break through the pathless woods and wastes which then covered the whole of our own country. At intervals along any one of these great roads, especially at a point where it crossed or ran near a river, towns would naturally spring up. Thus in order to reach London from Dover, the nearest point to the Continent, the Stour was crossed at Canterbury and the Medway at Rochester. The great roads naturally ran through the level parts of the country; indeed, as we know, the hilly regions were never vanquished. Manchester is an example of an important Roman fort which probably owed its position to the fact that the flat ground where the Irwell and Mersey join (with the ford at Salford) is the natural meeting-place of many paths running down from the highlands of Derbyshire, Yorkshire, Lancashire. To this day it owes its importance to its position where great roads, railways, and canals all converge. "It is a goal in itself."

Other Needs: Defence.—In those wild, unsettled days from the Celtic times right down to the Middle Ages defence had to be thought of as well as commodity of water and food. On the great Roman roads we shall find towns that were used as fortresses by the conquerors. Some of these had already been chosen as strong places by the original inhabitants. Thus we have London, on a low cliff above the Thames, with forest and marsh on the other sides; Exeter on a similar but sharper cliff above the Exe, which then was tidal up to the town (if the river is tidal, obviously an enemy lies much more at the mercy of those who command the beach); Gloucester and Colchester also on tidal rivers; and Leicester on the Soar, near the meeting-place of the two greatest Roman

Defended Towns on Cliffs, &c.

roads, Watling Street, which ran north to York through Lincoln, and the Fosse Way, which joined these places to Bath. Carlisle, Chester, were, with Caerleon in Monmouthshire (now a mere village), important outposts against the Britons of the hilly regions. Chester was emphatically *the* camp, and still shows the camp formation.*

Let the children find out the "Chesters," "Caistors," and "Casters" on their map and note their position with regard to rivers and the old roads. Note the form in Exeter, a shortened form of Exanceaster, and compare with Uttoxeter, Wroxeter, &c.

All these names betoken an original camp. Sometimes the town fell into ruin after the Romans left, and another town was reared on the same site. This happened, for instance, at Bath and Chester. Some, like Lincoln and Exeter, have been occupied continuously by Briton, Roman, and Englishman.

The English and the Danes, when they came to the island, sometimes seized on towns that had been Roman forts, and sometimes occupied fresh ground. Thus, finding a cliff above the Trent, the Angles seized upon it for a fortress, and hence arose the town of Nottingham, which has always been a contested point in the internal wars of England. Since the Angles came in by the Trent and the rivers pouring into the Wash they established towns in a hitherto lonely district: at Lichfield and Stafford near the sources of the Trent, at Shrewsbury in a loop of the Severn, and at Warwick in a loop of the Avon, all these points being easily defended, and, as they stood on streams, they were also convenient for access to other parts of the Mercian territory, and made it easy to transport timber, food, &c.

Similar sites were occupied by the Danes, who gave us Whitby, Selby, Grimsby, Derby, and other towns ending in "by," and also "thorp," a village, as in Grimsthorpe.

* Vide *Plan in "Town Planning."* (Raymond Unwin.)

It is evident that the advantages of a cliff on an inland riverside as a place of defence are more than equalled by a cliff or hill above a natural harbour. Sometimes this harbour is a river mouth. At other places, though the town has no river of importance, there is a favourable curve or inlet of the coast, as at Milford, Pembroke, Falmouth, and Sligo. Among the more impressive cliff towns we have Edinburgh, with its castle above the Forth. Dover Castle, with the town beneath it, frowns on any possible invader coming across the "silver streak." On the east coast we find, perched on a cliff above the sea, what was once the royal city of the kingdom of Northumbria, Bamborough. Preston stands thus above the Ribble, and Exeter on the Exe, though in both these cases the tides do not serve for modern traffic. London is, of course, the most important example, though it is difficult for the modern Londoner to realise that St. Paul's really stands on the top of what was quite a considerable hill before the Thames had been confined to its present banks, and the intervening strand raised by successive layers of building débris.

Towns facing Great Markets.

The mention of London reminds us that many towns owe their flourishing existence to their position not only with regard to other places on their own river or in their own area, but with regard to other countries. If London was easily approached by invaders along the Thames and Medway, it was also brought into close touch with the towns on the Continent, especially the trading towns of the Netherlands and North Germany. Chester owed much of its importance to the fact that it faced not only the lands across the Dee, but was also, since the Dee had a much broader channel in those days, the best landing-place for the men of Ireland. Bristol and Liverpool, more modern creations, both look across to America.

Many of our English towns owe their existence to the fact that some great religious building was founded upon a particular spot. Sometimes, as in the case of Peterborough, a foundation in a corner of the fen-land, a monastery was established in a lonely and retired spot. But artisans were needed to build and repair the structure, the physical needs of the inmates must be supplied, provision must be made for the entertainment of travellers, and thus were gradually gathered round the building a group of workers, the nucleus of a borough and afterwards of a city. At Durham a wise bishop who was also a ruler of the district established both church and city together on a steep hill forming a peninsula above the Wear. Salisbury was built in the same way in the midst of a lonely plain, and Wells in the remote vale of Taunton. The burg or bury of St. Edmunds grew round the abbey of which we read in Carlyle's "Past and Present."

Church Towns.

After the Conquest a number of castles were built by William and his friends in the estates taken from the English. A castle, like a monastery, implies industry, traffic, supply of food, and hence towns grew up round the new castles as they had done before the Conquest round old castles such as Arundel and Bamborough. Especially in the border districts, where difficulty might be expected from troublesome neighbours, as in Northumberland, on the Welsh marshes, in Devonshire, and in South Wales, these castles were planted thickly. Some are fallen to decay and stand isolated, as Pevensey in Sussex; others, as Alnwick and Cardiff, are still surrounded by busy towns. And even in towns where a castle or abbey is not to be seen, the street names—Castle Street, Abbey Street, &c. —tell of the great structures that were once so conspicuous in the town and influenced the lives of its inhabitants to a degree that we in these days find it impossible to realise.

Castle Towns.

DURHAM.—THE CASTLE AND THE CATHEDRAL ARE IN CLOSE PROXIMITY BECAUSE IN A DANGEROUS BORDER COUNTRY IT WAS THE DUTY OF THE PRINCE BISHOP TO PROTECT HIS PEOPLE FROM INVADING ENEMIES.

Some towns owe their origin to special advantages of fine scenery, or of mineral springs, or of restorative air.

Towns Due to Special Natural Advantages: Pleasure Towns.

Places resorted to for these reasons soon become pleasure towns and their number increases with the growing multitude. The whole coast of England is studded with pleasure towns—"watering places"—as they are called—by analogy with older towns which owed their origin to the medicinal waters of their springs. Bath was a healing-place in Roman times; other examples of "watering places" inland are Tunbridge Wells, Cheltenham, Harrogate, and Woodhall Spa.

No teacher of geography neglects to show how whole groups of industrial towns have sprung up on the great coal and iron fields of England (*v.* Chapter XXV., p. 214). How the growth of such towns may be "controlled" by natural advantages is perhaps best explained by more modern instances. Barrow-in-Furness was, in the middle of 1847, a fishing village with 325 inhabitants. The discovery of rich deposits of iron ore close by is the main reason why we now find it a large prosperous town with broad streets laid out in rectangles and a handsome town hall of its own. Middlesbrough, in Yorkshire, covers a district which in 1829 was occupied by one farmhouse, surrounded by marshland. The discovery (in 1836) of iron in the adjacent Cleveland hills has given rise to a large bustling town where thousands of families are engaged at the "works."

Towns Due to Special Advantages: Industrial Towns.

The prosperity of one industrial town may be the means of raising up another. Barry, in South Wales, which was a village with twenty inhabitants in 1889, is now a large town, whose municipality has provided not only its own gas and water, but practically all the secular public buildings in the place. Its rise is due to the increased export of steam coal by its neighbour, Cardiff (*v.* page 218).

CHAPTER VIII

TOWNS AND THEIR NAMES

THE consideration of the question why towns are where they are brings with it another question: Why is this or that town so called? and, of course, the more intimate question: How did *our* town get its name? Etymology, as is well known, is full of pitfalls; but the teacher will find it easy to avoid any serious error if he consults his county history and also Isaac Taylor's "Names and Places" (new edition), or Blackie's "Dictionary of Place Names" (Murray).

Children's Interest in Names.

Children are ready to take an interest in *names* as such at about the age of twelve or earlier, and they will enjoy getting at the meaning of names in their own area. This area will probably be for children in a country town or village a district corresponding to a radius of from ten to twenty miles. They will know most of the towns or villages within the smaller circle, and one or two of the more important in the larger circle. Children in London or any large city will take that particular city as their unit, and they can add any towns commonly visited by their fellow townsmen. Thus, all London children have heard of Greenwich and West Ham and Croydon, and are familiar with at least the names of Margate and Brighton; all Manchester children know Liverpool and Blackpool, as well as Wigan, Bury, Oldham, &c. When once a little stock of place-names has been collected, the children will be very interested

in noting others that occur in the geography lessons proper.

Names Suggested by Natural Scenery.—Some names are suggestive of the natural scenery in the midst of which the original town was planted.

The Forest.

Thus, in the Weald of Kent and Sussex we frequently find the word "hurst," a forest—*e.g.* Hurst, Midhurst, Ashurst, all indicating forest settlements. Forest Row, Forest Gate, Forest Hill, Brentwood, Woodford, Woodbridge, Woodbury, Wootton (Wood-town), Sevenoaks—are names that tell a similar story.

In the same way, the children will be pleased to know that "ac" or "ock" means "oak"—hence Acton, the "ton" or settlement among the oaks; Ackworth, manor among the oaks; Oakham, dwelling among the oaks; as also Wokingham (Oakingham). Ockley is a meadow or open space among oaks.

"Birk" is the birch; so we have Birkbeck in Westmorland, Birkenhead in Cheshire, Berkeley (the birch field) in Gloucestershire, and Birchington in Kent; while Berkhampstead is really Birkhampstead, the home among the birches. Lyndhurst tells of the lime (linden); Farnhurst and Fernyhurst tell of ferny growths in the forest. Buckingham is the home of the Buccingas, or dwellers among beech trees. Relics of a wild forest England are also found in the towns containing the word "broc" or "brock" (badger). Thus we have Brockley, the meadow of the badger; Brockenhurst, the thicket of the badger; Broxbourne, the bourne or stream of the badger; Brogden (den = hollow), the badger's hollow.

Other frequent suffixes are "ley," a meadow: Ardingley, the meadow of the Arding clan; Crawley, crows' meadow; Beverley, the beavers' meadow; "den" or "dean," a hollow, as Tenterden and Rottingdean, both named after the chiefs who were the original occupants of the hollow; "field," a clearing (literally a place where

trees have been *felled*), as Heathfield, Wakefield, a field by the *way* ("waeg"); Rotherfield, clearing by the river Rother, &c. "Garth" or "guard" means an enclosed space; hence a farm, as Aysgarth, Fishguard.

Water has always much significance, not only as a feature in the landscape, but as determining the site of a village or town. We have already seen (p. 44) how frequently a town stands on a river, and the river will naturally give its name to the town. Thus Lincoln is the "colonia" on the river Lindum, Brentford is on the river Brent, Dartford on the Darenth, &c.

Water.

Wells are also important centres for the building of a village or a town. Thus we have the city of Wells in Somerset, round a fountain dedicated to St. Andrew; Bakewell (the Bath well) in Derbyshire; Ashwell, the well among the ash trees; Holywell, from the well of St. Winifred; and Ewell, which is a contraction of "at the well," in Surrey.

Pulborough is a town by a *pool* formed in the course of the river Arun in Sussex. Liverpool, in spite of the frequent representation of the black "liver" bird, appears to be the pool by the sea (Welsh, *llyr*, the sea). In the North and the Midlands, where the Danes settled more freely than in the South, we frequently find "beck," a brook. Thus, Caldbeck (cold brook), Fulbeck (foul brook), Holbeck (holy brook), &c.

A "wick" meant with the Norseman a place for ships, as Norwich, Sandwich; to the Anglo-Saxon it was merely a moist meadow, often inland, as Hampton Wick. Droitwich, Nantwich owe that termination to their salt springs, which was suggested by the salt pools of a "wich" or estuary.

All round the coasts of England we find the termination "ey" or "ea," meaning an island—*e.g.* Selsea, Pevensey, Winchelsea, Romney, Sheppey, Wallasey, Furzey, Anglesea. Many of these places are islands no longer, but at the time that

Islands.

Winchelsea, for example, became a town it evidently stood among undrained marshes. London children know of Chelsea and Bermondsey. If they realise that once the river Thames spread out into wide marshes on either side far beyond its present banks, they will see the fitness of these names; and they may be told how Westminster once stood on a similar natural platform—the Isle of Thorney, as some say.

Other names derived from scenery are such as "comb," a valley, which gives us Compton and Wycombe, as well as Ilfracombe and the many combes of Devonshire; "ness," a headland, as in Sheerness and Skegness; "forth" or "firth," as in Seaford and Seaforth; "scar," a rock, as in Scarborough.

Names as Clues to History.

It will be seen that of our English place-names some are Celtic, some Roman, some English (or Anglo-Saxon), and some Danish. With a view to future interest, it may be pointed out to the children that names give us some important knowledge of the history of the region where they occur. Celtic names, for example, do not occur in a county like Hertfordshire; while "the village names are Celtic all over Ireland, Wales, in a strip of England which adjoins Wales, in the Scottish Highlands, and in the Buchan promontory" (Mackinder, "Britain and the British Seas"). Nevertheless, the names of rivers and of most other physical features are Celtic throughout Britain. This shows that while the original inhabitants of the country were Celtic, their villages must have been taken possession of by the invaders, Saxon and Dane in turn, who drove them out and called the places by new names. In certain districts, such as Hampshire and Gloucester, the names of some of the villages are partly Celtic and partly Saxon. The children may gather a collection of place-names in their own area in illustration of this.

Early English Place-Names.—When the Saxons came, they established themselves in little groups or clans.

The common termination for the name of such a group is "ing." Accordingly we find a large number of towns and villages ending in "ing" to this day. They are specially thick on the south coast of England, where the Saxons landed first. Thus we have Angmering, Worthing, Patching, Rottingdean, Lancing, &c. The "ings" were at last sown all over England.

The "Ing."

It may be interesting to note that, while the termination "ing" by itself denotes the home of an original clan—*e.g.* Lancing, Hastings, Reading—the same termination, if followed by "ton," "den," "ce," denotes a settlement of the grandchildren or other descendants of the original founder of the "ing." These, becoming too numerous for the original settlement, had to seek fresh ground. Thus Wellington is the "ton" of the descendants of the original Wellings; Workington was established in the same way by the offspring of the Workings, &c. London children will be interested to realise that Paddington was the home of the Paddings, Kennington of the Kennings, and so with Islington, Newington, &c.

The "Ton."

Describe to the children the appearance of an ancient Saxon "ton"—the origin of our "town." There would be a little group of rough wooden buildings, and a large house or hall, which would be the joint home of the family of the Wellings or the Eppings, with its barns and cowsheds and stacks. The place-name Barton or Barnton, which means an enclosure for crops (literally what the land *bears*), brings this ancient use specially home to us. It would stand in its own garth or yard (garden), and round it would be a hedge or a wall of mud, with a ditch or moat beyond, so that the little farmstead could easily be defended. Often it occupied the site of a deserted Roman "vill," such as we may trace at Brading in the Isle of Wight, or at Silchester. If it was not so well built or so elegant as the villa that preceded it, it was at least a great advance on the group of pit

dwellings, the holes dug in the earth and roofed over with boughs, which formed the village of the vanquished Celts. The "ton" or single enclosure became the nucleus of a village which, gradually increasing, developed at last into a town or city. It has been computed that the "ton" enters into the names of one-eighth of all the dwelling-places in Great Britain. The stockade which guarded the "ton" has also served its part as a place name. We find it, for example, in Stoke, Stockton, and Basingstoke, and also in "stow," a place, as Chepstow, Stow-in-the-Wold, &c. The word "ham" is also a common Saxon termination. It means a home or residence —literally, a place of shelter, from the German *heimen*, to cover. Horsham is Horsa's dwelling, Nottingham is a dwelling near caves, Framlingham is the dwelling of strangers, Hampstead is the home-staying place, Hampton is the *home* "ton" (cf. also Oldham, Newnham, Oakham).

The "Ham."

A "worth" is a manor or estate which came to belong not to a group of free men but to one. Thus, Kenilworth is the residence of Kenelm, and Bosworth of Bosa; Wandsworth is an estate on the river Wandle, and so on. An old English "burgh" is nothing more than a larger hamlet where a number of allied families or friends lived together in their wooden thatched huts within a walled enclosure. Mostly the enclosure contained one or two small churches. Instead of, or in addition to, a wall there might be a stockade and a moat or ditch. Whereas the Angles used the term "burgh," or "borough," the Saxons used the form "bury." Thus we have Marlborough, the burgh under the chalk down; Shaftesbury, the bury on the hill like a shaft; Sudbury, the south bury; Edinburgh (Edwinsburg); Scarborough, the burgh on a rock, the termination depending on the tribe who first occupied the site. The subsequent history of these "tons" and "hams" and "burghs" is in some respects identical, as we shall see in a

The "Worth."

The "Burgh," "Borough," or "Bury."

succeeding chapter. For the present, however, we may point out that some of them developed in a special way, and that their distinction is reflected in their names. Thus we have Preston, the "ton" of the priests, to this day a stronghold of the Roman Catholic faith in the north of England. Minchinhampton is the home and "ton" which became the home of the nuns or "minchens."

We may also note how these ancient English place names have been reproduced in new towns in different parts of the Empire, in continents whose existence was undreamed of when these "tons" and "ings" were established. Thus Boston, the "ton" of St. Botolph, the patron saint of sailors, is the name of the intellectual centre of the United States of America; Washington, a small Sussex village, has for its namesake the seat of government in the same great country; the Auckland (Oakland) of New Zealand recalls (even if only indirectly) the oaks of the mother country, &c.

Diffusion of these Ancient Names.

Finally, we must warn the teacher to beware of the pitfalls that wait for the rash etymologist. Thus, Okehampton is not, as one might think, a "ham" among oaks, but on the river Oke. Berkshire is not from "birk" (the birch), but possibly from "berrox" (boxwood). Clavering is not the "ing" of the Clavers, but a clover meadow, as Godalming is the meadow of Godhelm; Bridgwater has nothing to do with bridge or water, but is a corruption of the burgh of Walter—the town of Walter Douay, its founder. Since children greatly enjoy name-hunting, and since, as we have tried to show, the name of one's town is often very significant, and it shares, moreover, something of the personal interest attaching to one's own name, we think that the teacher should not abandon the quest in discouragement, but should be on his guard to avoid guessing, and consult his authorities.

Cautions.

CHAPTER IX

THE DEVELOPMENT OF AN OLD ENGLISH TOWN

THE great English historian, Edward Freeman, once said of another great historian, John Richard Green: "From him I first learned to look on a town as a whole with a kind of personal history, instead of simply the place where such and such a church or castle was to be found." And again: "I learned that . . . the city itself and its history are something greater than any particular object in the city."

The "Personal History" of a Town.

In England the great majority of our towns and villages are old enough to have a long "personal history." The interest in one's own town is almost an instinct, the associations involved are so many that it comes second only to one's family in importance. The teacher, therefore, will render a real service to children, and perhaps prepare for them a lifelong intellectual interest, if he can make the story of the town real to them. This may be done either in the course of the general history, which can be illustrated by the fortunes of the place to which the school belongs, or by a short course of lessons allotted to the purpose.

The "ings" and "tons" and "hams" which we find all over the country began, as we have seen, very much in the same way. They were settlements of the English invaders (using the word "English" to cover all the tribes who conquered these islands after the Romans

Its genesis: the "Ton."

left it). Help the children to imagine a group of successful invaders from Germany settling in some desirable spot, sometimes on the site of a Celtic hill fort or of a Roman villa. This group will belong to one kindred, and the homes of the family would be placed close together, round the house of the head of the family. The first houses will be of unhewn or roughly-hewn trees placed on end, with a roof of interlaced boughs covered with rushes or turf. Outside the settlement will run the paling or stockade, afterwards a protecting wall. In the yard or enclosure there will be places for storage of food, for men and animals, sheds for the rearing of calves and other young stock, and perhaps a few fruit trees.

The families in this primitive "ton" or village will maintain themselves by agriculture. The land outside the "ton" belongs to the group, and is used partly for the pasture of sheep and partly for ploughing. The ploughed land is divided into three enormous open fields. One of these fields lies fallow every year, so that the land may recover its goodness; on the second, wheat and rye or oats are grown for food; and on the third, barley for drink. Again, each of these fields is divided up into strips, and each family has a greater or smaller number of strips allotted to it. The strips are changed from time to time, so that each family in turn has its chance of the best land; it is settled also how many sheep or cattle a family may have to graze on the pasture-land. These things are arranged by the men of the "ton," who meet in an open space amidst the houses, by the well, under a favourite tree, or on a sacred mound, which is the grave of some distinguished chief. Here, on what corresponds to the "green" of an old village, is held the "folk-moot," or village assembly. The folk-moot discusses not only the division of the lands, but the marriages and quarrels of the inhabitants, and whether it is time for the younger branches of the family to go

forth and make a "ton" of their own. For England in these days is still "wild England"; not nearly all the land is taken up. Between village and village, too, there is a space of neutral waste ground, wood, or common, called the *mark*, which belongs to no one in particular. The tracks through the fields of one village and across the mark to the fields of another are the origin of our field-paths and rights of way—the oldest roads in Britain.

The "Ton" and the "King."

Our little "ton" is not wholly independent. Its members owe some kind of allegiance to their chief—the bravest of their number—who brought them over from Germany, and who is the "king" of the district in which they have settled. In time, as we know, these petty "kingdoms" disappeared, and the rights of the local chiefs were assumed by some one overlord of all England. The king was always able to require from the men of the tribe some kind of military attendance in case he wished to go to war with another tribe. As the king is merely a fighter and ruler, not an agriculturist, each village will have to contribute to his maintenance and that of his "court." A portion of land in each village is allotted to the king, and must be tilled for him. In primitive days, these services are paid not in money, but in labour or in kind. If the king chooses to appoint one of his friends or "thegns" to live in the village, and to appropriate these "rents" of labour and kind in return for a collective rent and a more efficient military service than the villagers can give, the village now has a squire, and is caught in the network of the feudal system.*

In troubled times, military efficiency is always able to secure advantages for itself. During the long period when England was harassed by the Danes, the free

* The teacher is recommended to read *An Introductory History of England*, by C. R. S. Fletcher. (Four vols., 5*s*. each. John Murray.) The author traces in a most lively narrative way the fortunes of an imaginary English village through successive stages of our national history.

farmers or "churls" (ceorls) of the tons not unnaturally surrendered their freeholds to the thegn in order to be sure of his protection. The village community of independent holders has now become a manor (*manco*, I remain or dwell); it belongs to a lord who has "rights" over its inhabitants. The "folk-moot" is no longer an assembly of responsible freemen. It is true that the freehold of the ceorl is received back, but as a fief—*i.e.* certain services are charged on it, its holder is bound to follow his lord to the field, to render days of service on his estate or "demesne." He is now only a *villein*, a dependent of the thegn. But he is better off than the mere peasant or cottager who is "unfree," and has no land of his own except that he is allowed, in lieu of wages, to cultivate five acres for himself. Lower still are the labourers, who are actually serfs—men who have been taken prisoners in war, or have sold themselves into slavery through want. These perform humble duties about the village; they are beekeepers, cheesewrights, barnkeepers, swineherds, oxherds, shepherds, woodwards (of the woods), haywards, &c.

How the "Ton" Loses its Freedom.

As England became consolidated into one great kingdom, under one distant king in Winchester or London, the "tons" became more and more dominated by the thegn. Sometimes the thegn was a bishop or a monastic establishment, but these were just as exacting in respect of their rights over the townsfolk as a merely temporal landlord.

Some of the "tons" important by their defensive position were fortified, and these fortifications became more and more formidable. Freeman has given us instances of this transition. The proud rock fortress of Bamborough, in Yorkshire, was surrounded by King Ida, its founder, by a hedge or palisade like an ordinary "ton," but one of his successors improved on this with a wall

Some "Tons" become Fortified Towns.

or dyke of earth. Edward the Elder built a wall of stone round the city of Towcester, and Athelstan, building a stone wall round the city of Exeter, had these stones properly squared. Castles were built inside the walls, but it is probable that most of these were wooden structures, merely larger and stronger than the houses which surrounded them. It is not to be

An ancient Royal Burgh or Fortified Town—Bamborough, in Yorkshire. The Castle was founded in 547 A.D. by King Ida, the "Flamebearer."

wondered at that these towns were often destroyed by fire, but we find that they were easily restored.

Some "Tons" Develop a Special Trade.

A "ton" in times of peace would perhaps produce more agricultural produce of one kind or other than it required for its own needs. Thus the villages of Cheshire became famous for their cheeses. This would naturally lead to trade, which, as the children should realise, means in its simplest form the exchange of commodities. In many towns there would grow up, too, a class of workers who could produce some things specially well. Thus, while every town had its tannery and shoemakers,

a town such as Northampton, for instance, acquired a special reputation for leather and the leather trades. It was situated in a rich, pastoral river-valley, with plenty of cattle to yield hides, and it was also approached closely by great oak forests whence bark for tanning could easily be procured. Such towns would naturally become trading-places; the surplus men of a village community would be drawn to them, and their population and wealth would increase. From this increase the thegn would of course derive his share of profit, and moreover certain fees would be exacted by him or his steward from persons crossing a bridge or ford into the town, setting up a stall in the market-place, and so on.

Effect of the Conquest.

With the Conquest came, naturally, a change of ruler for many an English village and "ton." New Norman lords succeeded to the rights of those old thegns who would not take the oath of allegiance to William, and these continued to demand services and rent. The Conqueror, while rewarding his personal followers with liberal gifts of confiscated land, was careful to divide their "manors" * among the different shires of his new kingdom, so that they might not find it easy to raise a collective army against himself. He reserved for himself, too, about 1,400 manors, all the waste land between the villages, formerly the folk-land, and also the "boroughs" or fortified towns as well as the cities or towns which were the seats of bishoprics. Some great nobles had, however, as many as 150 manors; therefore most of these, as well as the royal manors, had to be governed by stewards or bailiffs. For a time all went on much as before the Conquest, except that, of course, the hand of a steward is apt to be heavier than that of the landlord himself.

* A manor (from *maneo*, I remain or dwell) was a district held by a lord who kept in his own hands a certain portion for the occupation of his own family and servants. The manor was subject to the jurisdiction of a "court baron" held by the lord. On the importance of the manor in relation to English town and village life, *vide* Professor Vinogradoff's *Growth of the Manor.*

This tendency was counteracted, however, by the fact that the strong hand of the Norman kings lay, except in the time of Stephen, too heavily upon the barons to allow them the rights of hanging their own thieves, or squeezing iniquitous dues out of their tenantry, as they might have done on the Continent. The king's officer or sheriff was in each county an agent of a *central* government.

The Small Beginnings of English Towns.

"The record of our towns as we find it in Domesday or under the Norman kings," writes Mrs. A. Stopford Green, "is simply that of little country hamlets, where a few agricultural labourers gathered in their poor hovels, tilling by turns their lord's land and their own small holdings, or of somewhat bigger villages which lay at the branching of a great road, at a river ford, or at a convenient meeting-place for fair and market, and thus grew into some little consequence as the centre of a small local trade; while along the coast a few seaports were just beginning to draw merchants with their wares to a land that had long been almost forgotten by the traders of the Continent."

How the Towns Bought Back their Freedom.

But as these towns grew they became impatient of the rights exercised alike by the king's officer or sheriff (shire reeve, or governor), or by the reeve of their own immediate lord. The sheriff was at once tax-gatherer, judge, recruiting officer, and military leader, and it is difficult to conceive of him as a popular functionary. The townsmen having become wealthy by their industry, desired, as self-respecting men, to deem themselves free and not tenants of a "demesne." * They resented, for example, having to grind their corn only at the lord's mill and paying for the liberty of holding a market to sell their goods. They wished to be free of vexatious dues exacted

* Demesne, or domain, from *terræ dominicales*, lands held by a lord for the occupation of himself, his family and servants.

by the sheriff or by their feudal lord, and to pay their taxes direct to the king. They wished to be allowed to try all petty criminal cases and all civil suits in which their townsmen were engaged within their own walls, and not to be obliged to travel to a royal or feudal court, probably at an inconvenient distance from them. They had formed among themselves associations or brotherhoods of merchants or artisans—the guilds—and they wished these guilds to be recognised as corporate bodies having the right to hold property.

Some of the money accumulated by their peaceful industry they were willing to part with, and to drive a bargain, so to speak, with their king or overlord. They would offer a good round sum to a needy baron or king, who perhaps was anxious to fit himself out handsomely for a Crusade, and receive in return a charter, or document stating the privileges to be granted to them.

Thus Henry I. granted a charter to the City of London in 1101. It allowed the citizens to collect taxes from the county of Middlesex, giving the king a sum instead of these. They might hunt in Middlesex and Surrey, and even as far as the Chiltern Hills, which, if we remember the severe forest laws of the Norman kings, was a great concession. They need not pay Danegeld, or murder money; they need not suffer trial by ordeal or by battle. They need pay no toll throughout the kingdom. They might settle their disputes within their own walls, and appoint their own chief magistrate, who was then called a *portreeve*. The portreeve of a town after the accession of Richard I. became the *mayor*, a name borrowed from Continental towns. Any money needed for the city expenses was raised by the authority of the city itself, and though this is not named in the charter, it seems that this authority in the case of London was exercised by a guild of knights.

London: An Example.

Other towns were very eager to follow the example

of London, and Barnstaple, Yarmouth, Canterbury, and Oxford followed suit. Any town receiving such a charter became a borough town. In the course of the thirteenth century the great majority of towns obtained rights of self-government. But the townsfolk were rarely content with what they had gained at first; in the coffers of their own town halls, as the years went on, more and more precious parchments would be accumulated, each representing a new charter, which for some fresh money payment gave them power to manage their own affairs in a fuller degree.*

Increase of Chartered Towns.

The government of such towns was carried on henceforth by their *corporations*. The teacher must at this stage explain what is meant by a corporation (Latin, *corpus, corporis*, a body). When a collection of persons act together for any purpose, and hold money or property for that purpose, it is convenient that they should be regarded in law as *one* person. Individuals belonging to the group will inevitably drop out or die, and others will take their place and inherit their share of the property which belongs, not to any one of them, but to *all*, and inherit also the task which their predecessors had taken up. Now, if the law recognised only the separate individuals, there would be endless confusion as to the sharing of the property and allotting the responsibility of the duties. Therefore the body must get the rest of the community to endow them with the peculiar position of a legal person, and to obtain this the authority of the sovereign is necessary. "The King *makes* something; he creates a body corporate." †

What is a Corporation?

There are many kinds of corporations, *e.g.* all trading companies having the word "limited" as part of their

* *Vide* Mrs. Green's *Town Life in the Fifteenth Century*; also Mr. and Mrs. Sidney Webb's *English Local Government*.

† *Vide* Professor W. Maitland's *Township v. Borough*.

names are corporations. A corporation can hold property, sue in the law courts (and be sued) as one person, choose its own office-bearers to manage the business of the body, elect new members, and make bye-laws to regulate the matters under its control, such bye-laws not being contrary to the general law of the land. There must be always some one person to represent the cor-

THE HOME OF A CITY CORPORATION: THE TOWN HALL OF MANCHESTER.

poration to the external world ; town corporations therefore elect a *Mayor*.*

A corporation must be suitably housed. Trading corporations, railway companies, &c., must always have a registered office as their legal " home." For the corporation which governs the town, therefore, we have the town-hall—a dignified building with accommodation for the business of the town. *Vide* chapters l and lii.

* *Vide* Mr. Laurence Gomme's *Governance of London.*

CHAPTER X

WORK AND AMUSEMENT IN AN OLD ENGLISH TOWN

Village Industry: Agriculture.

We learn from Domesday Book that there were eighty towns existing in England at the time of the Conquest. Some of these, however, were only villages, though they possessed a wall and some sort of tower or castle for protection. They were "villages" in that the principal occupation of the inhabitants was not trade or commerce, but agriculture.* The children will see that this is the nature of village industry to-day. We have gradually come to think of a town as a collection of houses larger than a village, whose inhabitants do not work upon the soil to provide their own food. This is supplied to them from cultivated regions, whether near them or at a distance. The townsfolk, for their part, occupy themselves in making things (manufacture) or in trade, *i.e.* in distributing goods which they themselves make or which they receive from other areas.

Town Industry: Manufacture or Trade.

The transition from village to town industries was of course made gradually. In an old Saxon "ton" there would be a man who was specially skilled in woodwork and who became the carpenter for the little community. The frequency of the name Smith reminds us how from the

Transition from Village to Town Industry.

* Vide *Landmarks in English Industrial History.* By Townsend Warner. (Blackie.)

time of the earliest use of iron there would be need in every settlement of some one to make weapons, armour, horseshoes, and agricultural tools. The state of the roads and wastes or "forest" spaces would be such that all who could afford it would like to possess leather sandals or shoes, and the man who made these would also make leather bottles, harness, &c.

At the time of the Conquest, however, we do not find that the English had much skill in the other trades for which they are now famous. Their wives wove in their own homes a rough coarse cloth or frieze (home-spun as well as home-woven), and with this they clothed themselves. A kind of frieze would be spread upon the tables, or hung upon the walls of the better houses. But those rich enough to afford finer cloth, dyed with beautiful colours, had to send to Flanders for it.

English Industries Helped by "Aliens."

The Normans, however, were great builders, both of castles and of churches. They brought over foreign architects, brickmakers, bell-makers, masons, glaziers, &c., and from these the English could hardly help learning newer methods in these trades. And when Edward III. in the middle of the fourteenth century encouraged Flemish weavers, fullers, and dyers to come and settle in English towns, and teach their trade to his subjects, he laid the foundation of our first great English manufacture. For up to this time, though the English downs and pastures had produced enormous quantities of wool, so that it formed the chief or "staple" wealth of the country, it had all been sent out of England. Some one town had been appointed as the "staple" town to which all wool must be taken for sale.* There it was bought by foreign merchants and made up into

* The term "staple" was also applied to privileged markets within the realm where alone certain commodities, of which wool was the chief, could be bought and sold. At these the wool was collected for export.

cloth by the weavers of the Low Countries. Children in the Yorkshire "woollen towns" will be interested to note the difference between those days and our own. Whereas now we have to import huge quantities of wool to supply our own looms, in those days England was regarded as an inexhaustible provider of raw material which was to be turned into cloth in Bruges or Ghent.

A man who followed a trade would naturally wish to settle in a town, but it was by no means easy for him to do so. Every trade was in the hands of a "guild" or association, or brotherhood, as it might be called. The guild was not like a modern trade union association, consisting of workmen only. It comprised the wealthy and dignified citizen who was proud to be a governor or "alderman" of the guild, and also the skilled artisan who made his goods on his own premises, buying the raw material, providing all the tools, and then selling his finished products either at the stall which he rented in the market-place or at a temporary counter let down like a shelf from the window of the room—the front shop, as we should call it—where he worked (the word "shop" signifies "a stall" or shed).

The Craft Guilds.

Beneath him, and still a member of the guild, was the hired worker or journeyman. No one might enter the trade except through the gate of apprenticeship, and the youth must spend seven years in learning his trade. When a member of a guild brought a new industry into the country the king rewarded him by giving him and his apprentices the sole right to practise the industry for another seven years—fourteen in all. (This privilege is still continued to reward inventors and importers of new manufactures.) The officers of the guild inspected the goods turned out to see that they were properly made, and fixed the prices at which they were to be sold. All the followers of a special craft lived together in a special

portion of the town—the weavers, saddlers, &c., having their shops in rows or clusters. Thus in London the bakers were to be found in Bread Street, the blacksmiths in Ironmonger Lane, the patten-makers lived in the parish of St. Margaret Pattens, and Hosier Lane was conveniently close to Cordwainers' (Leatherworkers') Street, while the tailors occupied Threadneedle Street, whence its "nick" name. London children may perhaps observe this tendency persisting to-day, though the trades have been thrust out beyond the bounds of the City proper; we find furniture shops grouped in Tottenham Court Road, booksellers in Charing Cross Road, watchmakers in Clerkenwell, &c.

Ancient Guilds and Modern City Companies.

The members of the guild wore on ceremonial occasions a distinctive dress or *livery*. (Let the class notice how this word has been narrowed down in meaning.) As, however, the dress was expensive, the poor members found a difficulty in providing themselves with liveries, and were consequently obliged to stay away from the guild meetings. Hence the power which nominally belonged to the whole guild was really exercised by the richer members. The guild would have its guild hall, in which to hold its meetings. Often this guild hall would come to be used as the town hall. As we shall see, the guilds, by their jealous insistence on their rights and privileges, gradually lost the power they had exercised over the production of goods and the persons of the producers. They were, in fact, abolished by law in 1557. London children will hear, however, of "liverymen," and of City companies, such as the Merchant Taylors', the Grocers', the Haberdashers' Company. Some of them attend schools which were founded by these companies. They may be told, therefore, that though some of these companies claim to be survivals of the old guilds, they have no necessary connection with any City trade. However, they exercise some of the powers

STREET IN EXETER WITH MODERN TRAM-CARS RUNNING PAST THE ANCIENT GUILDHALL.

belonging to the old guilds in the government of the City.*

The term " guild " is now being revived in connection with Church and philanthropic agencies. The children, especially if they belong to a guild or are interested in such an institution as the " Guild of the Brave Poor Things," should know that the old guilds had originally a religious significance. The members placed themselves as brothers under the protection of their patron saint, and formed a kind of friendly society, sharing certain religious duties, and also undertaking to help one another in need.

Religious Origin of the Guild.

But the guilds in their greed for gain forgot the ideals of their origin, and showed themselves very jealous and exclusive. It was not easy to become an apprentice to a craft; the sons of villeins were forbidden by law to seek entrance to a trade in this way; they must remain on the land. A poor freeman could not afford the fees for his son. A stranger, even if he had passed through his apprenticeship, was looked upon with very great distrust. If he came from beyond the seas he was an " alien," and if a stranger from another town he was a " foreigner." The craft guilds of any one town desired to keep their skill and their trade for citizens of that town only. Edward III. had to pass very strict enactments to protect his humble friends the Flemings.

Restrictions of the Guilds and Their Effects

This jealousy led a number of persons who had some skill in crafts to settle outside the towns and thus escape the hampering action of the guilds. Many trades came to be carried on in quiet unwalled villages, especially after the Wars of the Roses, when less danger was to be feared. Manchester, once a Roman fort, then a village manor, became known as a " weaving village," Birmingham took up the hardware industry, and Sheffield, which

Town Trades Return to the Villages.

* Vide Loftie's *History of London*, Chapter VIII. (Longmans.)

had close by a supply of stone of a kind specially fitted for grinding knives and scissors, became famous for its cutlery. Thus, while some of the older towns declined, other new ones sprang up in their place.

We must try to give the children an idea of what life was like in one of these older towns. In the first place, they must think of the old town as *walled*. The walls can be seen at York, Chester, and Canterbury, and London children can see the street called London Wall, which marks the site of a portion of the wall which once compassed the City. On the walls were towers from which missiles could be hurled or arrows shot at enemies who, before the days of gunpowder, might try to beat down the walls with thrusts of heavy timber or "battering rams." Outside the wall was the town ditch, in which sheep might graze in times of peace. A little away from the walls would be collections of miserable hovels, in which poor persons who were not citizens of the town or dependents of citizens, but beggars, outlaws, and runaways, would have to take shelter. In those times of danger the suburbs were not the pleasant retreats from town life which we now consider them. The walls would be pierced by gates, still seen in many historic towns, and over the gate might be a house or a church, as at Warwick. The wall of London had its gates, *e.g.* Moorgate, Aldersgate, Cripplegate. Within the town, as in Norwich and most other old towns, or close by, as in the case of the Tower of London, would be the castle built by the king or original feudal lord to protect his property and also to overawe the townsfolk.

The Town and its Walls.

The houses of the town would be made of wood. The framework of a new house would be put together in some open space and then carried to a site approved by the officers of the town, and finished with a roof of clay. The art of brickmaking was not practised to any great extent until after the Great Fire. There was generally

a stone cellar for storage, and this was approached from the street by a flight of steps, an arrangement still seen in some very old houses. Above the cellar there would be a room which was both shop and workroom. At the front of the shop window, as we have said, a counter could be let down. The dwelling room or rooms would be above the shop,

Houses.

Gate of an Ancient Town (Warwick) with Church Above It.

and above this often would be a great attic, generally used for storing goods which were lifted from the street by cranes. The apprentices, and perhaps the paid workmen, would sleep in the shop.

The interiors of the houses must have been very dreary, but there would be, however, some attempt at beautifying the front towards the street by carving

OLD HOUSES IN AN ANCIENT TOWN—CHESTER. NOTE THE ORNAMENTED FRONTS AND THE PASSAGE—"THE ROWS"—UNDER THE PROJECTING FIRST STORY.

the wood, and some old English house-fronts, as the "Rows" of Chester, are very beautiful. If the house happened to be in an important street we should step out on to a road paved with huge pieces of stone. There was no footway. The paved road sloped from each side towards the middle, where ran the gutter. Into this gutter was flung all the refuse of the houses, and except when washed away by a specially heavy shower or occasionally carted away outside the town, it remained there to poison the air and to breed those "plagues" and pestilences which would sweep away such appalling numbers of the townsfolk.

Streets.

Nevertheless, life out of doors must have been very interesting. The carved house-fronts and the swinging signs over the doorways would give variety, the dresses of the passers-by were gayer than now, and there were many attractive things to be seen. As we have said, carpenters' work was done in the streets; there, too, the armourer, the smith, and the wheelwright carried on their employment, so that a loitering youngster got an insight into many trades. Now and then the great bell of the town hall would ring. This was a summons to all men living in the city and its suburbs. There might be a fire among the wooden houses, or civil strife might break out among the citizens, or enemies might be drawing near to storm or besiege the city. Every man was bound to come out armed according to his rank: the prosperous citizens would have coats of mail, bucklers, bows and arrows, swords; the poor man would carry a knife or dagger or hatchet. Twice a year there was a formal muster-at-arms of all the men of the town, for war with Scotland or France, or civil war of some kind, kept the townsfolk of the Middle Ages in a constant state of unrest.

Street Scenes.

But there were also peaceful gatherings in the streets,

and, indeed, most of the amusements must have been out of doors. The watchmen were also minstrels, who went "every morning about the town piping." They survive in our Christmas "Waits" (Fr. *guetter*). Strolling minstrels, harpers, and players wandered from town to town in the summer, and were paid from the town funds.

Town Amusements.

We find from the records of the town of Lydd that "a man with a dromedary" or a "bear-ward" would knock at their gates, or the keeper of the king's lions travelling with his menagerie would ask for food for them, and archers and wrestlers would give entertainments. Christmas games and mumming were universal, and every town kept watch and feast on St. John's Eve. Each town had some special festival of its own, according to local customs. Thus, at Chester, on Shrove Tuesday, the drapers, saddlers, shoemakers, and many others met at an open place in the town, and the shoemakers gave to the drapers a football of leather, which they were to play with from there to the town hall. The saddlers at the same time gave "every master of them a painted ball of wood with flowers and arms upon the point of a spear, being goodly arrayed on horseback accordingly." At Canterbury there was a town play on the martyrdom of St. Thomas, and the "properties," including "an angel which cost 22*d.* and flapped his wings as he turned every way on a hidden winch oiled with soap," were stowed away safely each year at a cost to the municipality of 16*d.* Each town also had a pageant on the feast of the patron saint of its important guilds. Thus, at Norwich, an alderman of the Guild of St. George, followed by four hundred members in red hoods, marched behind a sword of wood with its handle carved like a dragon's head, which had been given them by Henry V. When we read that the tailors of Plymouth, who were incorporated into a society in 1496, had to bind themselves to provide a pageant every year on Corpus Christi

day for the benefit of the Corpus Christi Guild, we see that the religious instinct no longer found natural expression in street processions, and that the maintenance of these merely civic pageants had become at once more expensive and more burdensome. The modern Lord Mayor's Show in London is an artificial survival of the love of mere display which, even in the late Middle Ages, had been sobered by the stress of industrial life and an uneasy feeling concerning the number and condition of the poor who were crowded in and about the towns.*

We must remember that no part of any town was far removed from the pleasant open country. Annual "holidays" spent away from one's own roof were, of course, not thought of, though pilgrimages to favourite shrines gave opportunity for a kind of prolonged picnic such as we read of in the "Canterbury Tales." Londoners, without riding far from their northern gates, could make a short excursion into the woodlands to hunt, and it was easy for every one to go out into the thickets in the spring time "to do observance to a morn of May," as Chaucer has it. "In the month of May, namely on May day in the morning," says Stow, speaking of a much later time than Chaucer, "every man, except impediment, would walk into the sweet meadows and green woods, there to rejoice their spirits with the beauty and savour of sweet flowers, and with the harmony of birds, praising God in their kind."

Country Recreation.

* Vide Mrs. J. R. Green's *Town Life in the Fifteenth Century*, Vol. I., Chapter IV.

CHAPTER XI

THE CASTLE AND ITS INFLUENCE ON THE TOWN

The Castle as we see it To-day.

It has been calculated that no fewer than six hundred castles have existed at one time or another in England. Nearly every old town has a castle within or near it. Sometimes a castle which once stood outside the walls of the town has been enclosed by its growing suburbs, as in London, where the Tower, once beyond the boundary of the city, has long ago been hemmed in by houses. If there is no castle nor the ruins of one close at hand, there is nearly sure to be one within the limits of a school excursion, and, indeed, it is almost essential that the general history course should be illuminated by a visit of this kind.

Our children see a castle under aspects which make it difficult for them to realise all that such a building meant in the life of England in the past. It is nearly always a ruin, with trim lawns in its courtyards and gravel paths leading to the chief points of interest. An air of peace broods over the place strangely out of keeping with what one imagines of the stir and clangour of bygone days. As one looks up at the frowning keep of Rochester Castle, for instance, one is literally swooped upon, not by armed men, but by flights of tame pigeons importuning to be fed. Sometimes, as at Warwick or Arundel, the castle has been transformed into a modern home; at Nottingham the castle is the municipal picture gallery; Norwich Castle is a museum, as is the Tower of London, though this is

also much more than a museum. A more ignoble fate has befallen the Castle of Canterbury, which has been converted into gasworks. Sometimes the castle has disappeared altogether; at Southampton even the mound on which it stood has been flattened, and a Zion Chapel has been built on the site of the Norman keep. It may be that a Castle Street or Castle Inn alone preserves its memory. We must try to make the children realise what was the part formerly played by the castle in the life of their district.

Let them imagine the first building of their nearest castle. The oldest "castles" were probably only square wooden towers, though at Dover and Arundel there were stone castles before the Conquest. But with the Conquest began the era of the great stone castles. London children have an excellent type in the Tower, which was built by Duke William to keep his new capital in order.

The Earliest Castles.

"Dreadful and vast its stones must have loomed up on the little wooden London of that day," and the experience of the Londoners was repeated all over the country, at Hastings, Winchester, Lewes, Carisbrooke, Canterbury, Windsor, Norwich and elsewhere, often on the site of an old Saxon fortress of wood. On the borders of Scotland and of wild Wales these castles were sown more thickly. Thus there were no fewer than twenty-five in the county of Monmouth alone.

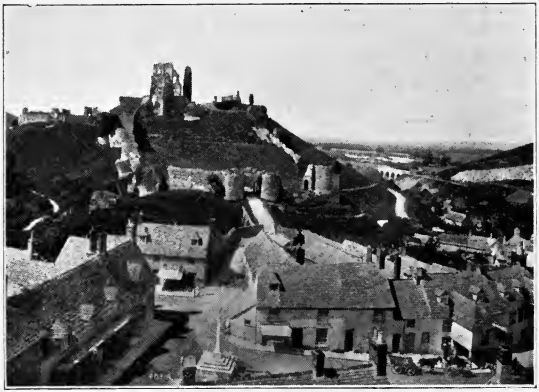
The earliest castles were comparatively simple in plan. A site was chosen which might easily be defended—a cliff above a river or a ravine would be a favourite spot, or a hill-top commanding the surrounding country. A natural or artificial mound was surrounded by a wall from eight to ten feet in thickness, and about twenty to twenty-five feet high. On the top of the wall or rampart would be a walk which would be reached by wooden or stone staircases on

the inner side. Such a wall constituted what was called a "shell" keep; it was merely the successor of the old wooden palisade or stockade. The inhabitants lived in rough buildings, often mere sheds, placed against the wall and looking into the open space within the "shell." The mound and its keep would be surrounded or approached by one or more courts enclosed by a wall and a moat.

A Visit to a Typical Castle.

But the later castles were much more permanent and more elaborate, and these are the kind the ruins of which the children would probably see. The shell keep gave place to a great rectangular *stone* keep which was the home of the lord of the castle as well as his retreat in time of danger. It was in reality a great house divided into floors, which were reached by a well staircase in one of the corner towers. The walls were immensely thick, and the openings for windows on the outer side very small—mere loopholes. In the thickness of the wall there might be small chambers, but the chief living-room was the great hall where the inmates ate their meals at a great central table, and where the humbler folk slept at night, on the rushes which covered the floor. By and by a bow window was added, looking out on the court of the keep; this was the retreat of the ladies of the castle, and was afterwards made into a separate room, a *solar* or withdrawing room. Since all the interior flooring was of timber, the castle might easily be gutted by fire. Externally, however, it was strongly protected. There were two courts or baileys to defend the central fortress itself. These were protected by walls and towers, by an outer moat, and by strong gates approached only by a drawbridge and defended by a *portcullis*—a spiked gate working not from the side, but let down from the tower above the entry. The lodgings of the men-at-arms ran along the inner wall of one of the courts, as may be seen in the Tower of London or in

Dover Castle to-day. In the courts, horses and cattle might be protected, and in the inner court, or in the keep itself, a well was a necessity. Let the children make a plan, or, better still, a model of their nearest castle as it was in the days of its splendour. They will realise that a castle constituted a little town in itself;



RUINS OF CORFE CASTLE, COVERING NEARLY THREE-AND-A-HALF ACRES, DOMINATING THE TOWN, AND GUARDING A "*Ceorf*" OR "CLEFT" LEADING BETWEEN CHALK DOWNS FROM THE SEA TO THE PLAIN BEYOND.

it had its own water supply, its own walls, its own dwellings, its own prison; it also had its own chapel. There are two churches in the precincts of the Tower of London. Let the children read in the pages of "Ivanhoe" how such a place could be attacked and how defended. Obviously it might be possible for stout walls and loyal defenders to hold out indefinitely against battering-rams and bows and arrows. But the castle might be entered by

making a subterranean mine or tunnel, or a treacherous soldier might open a gate in the darkness, or, worse still, the castle might be so closely besieged that no sallies could be made for food, and no supplies introduced by friends from without, and the garrison might give way to famine.

Most of these castles were built by the king, and were managed for him by governors or constables.

The Influence of the Castle in Olden Time.

The Constable of the Tower, as we know, was an important personage in English history. For long years the citizens of London protested against his interference with the ships that came up the river past the water gate of the Tower. But the royal castles were less oppressive than those belonging to the barons. The Conqueror and his successors were obliged to allow some of the more important barons to build castles on their own manors; indeed, many a mere farmhouse in those unsettled times would be guarded by a moat and walls. In the reign of Stephen, as the children will know from the harrowing details given in most of the history books, the barons built "unlicensed" castles with great rapidity and made war upon one another incessantly. At the best of times the castle looked for subsistence to the villages and towns in its "demesne"; but now more supplies were needed to make war, while the unfortunate tenants were also liable to be harried by their lord's enemies. However, when Henry II. came to the throne, these unlicensed castles were demolished, and order was restored.

The powers of the castle over the town or village were still, as we have seen in a previous chapter, very galling to the peaceful folk who tried to live by their industry. The castle was the home of a superior person whose occupation was fighting, and who regarded villeins and artisans as born to produce his income. He, with his train of dependants, all fighters, would,

in his own interest, protect the town against an enemy, but in return for this defence it paid dearly. All goods brought in or out of a town, or carried across a bridge or ferry, must pay a toll to the overlord, and no stall might be set up in the market-place without his leave. It was from vexations such as these that the towns freed themselves as soon as they were able, by offering a good round sum to make themselves independent of the rule of the castle.

The Decline of the Castle.

Help the children to realise how the might of the castle has become a thing of the past. A few castles, such as Dover and the Tower of London, still serve as barracks for soldiers and as arsenals; but modern artillery would prove far more effective than the old battering-ram against the thick stone walls, and this, too, without exposing the assailants to the dangers of molten lead poured upon them from the battlements. Moreover, the status of the castle-holders altered as the years went on. In the Wars of the Roses the great barons, whose chief pursuit was war in some form or other, nearly all perished. Warwick the King-maker has been called "the last of the barons." The remnant were carefully kept in check by Henry VII. The castles in or near royal boroughs had ceased to terrify the rich and self-confident townsfolk, who had their charters to show their liberties as against even the king himself. Thus most of the formidable castles which studded England either became picturesque and inconvenient homes, or were adapted to other uses, or were allowed to fall into ruin.

The Tower of London: a Unique Survival.

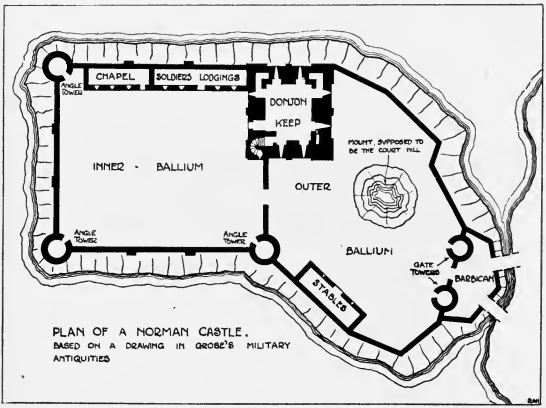
The Tower of London, which is a kind of Mecca to every schoolboy, is an excellent object lesson in the structure and function of an old castle. In the first place it is not a ruin, but a feudal castle of the highest class with its three complete series of defences, all in working order; it is still a fortress, an arsenal, and a barrack. It is a town

in itself, as one can see on a casual visit. As Frederic Harrison remarks,we are all apt to think of it as a prison ; for when we visit it, tales about racks, martyrs, the young princes, and the Traitor's Gate form the natural staple of the talk. But we forget that it was also a palace, and only a prison because it happened also to be a fortress. "From the sons of the Conqueror down to Elizabeth, it was from time to time the residence of nearly

TOWER OF LONDON. A FEUDAL CASTLE OF THE HIGHEST CLASS WITH ITS THREE COMPLETE SERIES OF DEFENCES.

all of our kings." In this way—at once home and stronghold—it is a type of all castles. It is difficult to realise that the White Tower, far older than Windsor Castle, was a place for monarchs to eat and sleep in, and that from Henry IV. down to James II. the kings left it in state to be crowned in the Abbey. Their desertion of the Tower is an illustration of the "sweeter manners" as well as "purer laws" that have come upon the land.

An abode that for two centuries was filled by a succession of royal prisoners, Welsh, Scotch, and French, that saw the deaths of two of our kings, four of our queens, and many princes and princesses of the blood, and that witnessed the injustice done to Raleigh and to More, could hardly, one feels, be a quiet resting-place for a modern sovereign. The story of the Tower, as of many another feudal castle, is an incentive to thankfulness that we have overpast the "bad old times." Yet, for better or worse, this story is part of our national history, and the children should see the importance of preserving our castles as national monuments, as records of the upward road along which we have travelled. Tell them how the Americans, who have no castles, make pilgrimages to Arundel or Carnarvon or to the Tower to see these memorials of an ancient England. Try to rouse in them a similar intellectual interest in that past which has nourished, however roughly, both them and us.



PLAN OF A NORMAN CASTLE.
BASED ON A DRAWING IN GROBE'S MILITARY ANTIQUITIES

CHAPTER XII

THE MONASTERY, AND ITS INFLUENCE ON THE TOWN

THE other great institution of the Middle Ages of which only mere traces survive in our town life, is the monastery. It is difficult, as Canon Jessopp remarks, to realise that when Henry VIII. swept away the monasteries, there was a blotting out of an order of things which had existed in our island for certainly more than a thousand years, and for how much longer it is impossible to say. As in the case of the castles, our children may have in their own vicinity objective evidence of the former importance of monasteries in two or three ways. (1) There may be an existing abbey church, now used as a cathedral or parish church. (2) There may be a ruined abbey or priory close at hand. (3) The evidences of street nomenclature may point to an old foundation, as in Abbey Street, Priory Street, The Priory, Monk Street, &c. The teacher will make the most of any of these evidences of a bygone institution, and will try to recall past conditions as vividly as possible with the help of such books as Canon Jessopp's "Coming of the Friars" and "Before the Great Pillage," and Abbot Gasquet's "Monastic Life in England."

Traces of the Monastery in Our Towns of To-day.

The words used in connection with a monastic house will require some explanation. The word monastery itself is a misnomer, for a *monk* is a solitary person,

and a *monastery* is, properly speaking, the dwelling-place of a solitary (*monos*, single). But the word " monastery " changed its meaning and came to signify the dwelling-place of a body of people who, far from being solitary units, were obliged to share a common life wherein no solitude was allowed and where privacy was impossible. It was " the abode of a society of men or women who lived together in common ; who were supposed to partake of common meals ; to sleep together in a common dormitory ; to attend certain services in their common church ; to transact certain business or pursue certain employments in the sight and hearing of each other in the common cloister ; and when the end came to be laid side by side in the common graveyard " (Jessopp). The children will probably share the common error that the word " convent " denotes an association of religious *women*. This is not the case ; a convent is literally an association of persons who have *come together* (Latin, *con*, and *venio*, " I come ") to live for a common object. " Covent Garden " in London is a district once forming a garden belonging to the abbot and *convent* of the monastery of St. Peter's, Westminster, the " Convent " standing for all the monks regarded as a body capable of holding property. The head of every convent was the *abbot*, whose power was almost that of a king. An *abbey* was a monastery which was ruled by its own abbot. But many monasteries were branches of some greater one, and the heads of these subject houses were called *priors*. A *priory*, therefore, may be defined as a monastery which is subject to an abbey. Monasteries for women were governed in the same way by an *abbess* or a *prioress*, as the case might be. A monastery was conducted according to a code of laws called a *rule* or *order*. At the time of the Norman Conquest it may be said that all English monks were professedly under one and the same rule, the rule of

Explanation of Words.

St. Benedict, which dated from the sixth century. But by the time Henry III. came to the throne there were, in addition to the old Benedictines, two other orders, the Cluniacs and the Cistercians, who represented two successive degrees of reform upon the Benedictine rule, which had decayed in discipline and fervour as the centuries wore on. These matters belong to Church history rather than to town study, but it is worth while for the teacher to make the children acquainted with the "rule" of any interesting foundation in his own neighbourhood.

The Monk's Part in the Life of his Time.

What part did these institutions play in the life of the nation, and what influence had they on the towns in or near which they were situated? To answer the first question we must try to set before the children the ideal of the monastic life. This was not, as is so often thought, merely to save the individual soul. We have to remember, indeed, that in the Middle Ages, a person of religious and quiet temperament would find himself very much out of place in the rough fighting world in which he lived. But if he retired to a monastery he was not of necessity selfishly seeking a spiritual ease, and shutting himself off from the labours of a social being. It was felt that there was a division of labour in the Church. "Some were called to do the work of God in the world, some to do the work of God apart from the world. All were bound together in the spiritual society, and each helped the other in his own vocation. The constant intercession and remembrance of the monk availed for the souls of the soldier and the farmer, as the sword of the soldier and the toil of the farmer defended and secured the life and temporal sustenance of the monk."* Moreover, the necessity for work, which always implies ministering to others, was recognised by most of the religious orders. When the children are

* H. O. Wakeman's *History of the Church of England.*

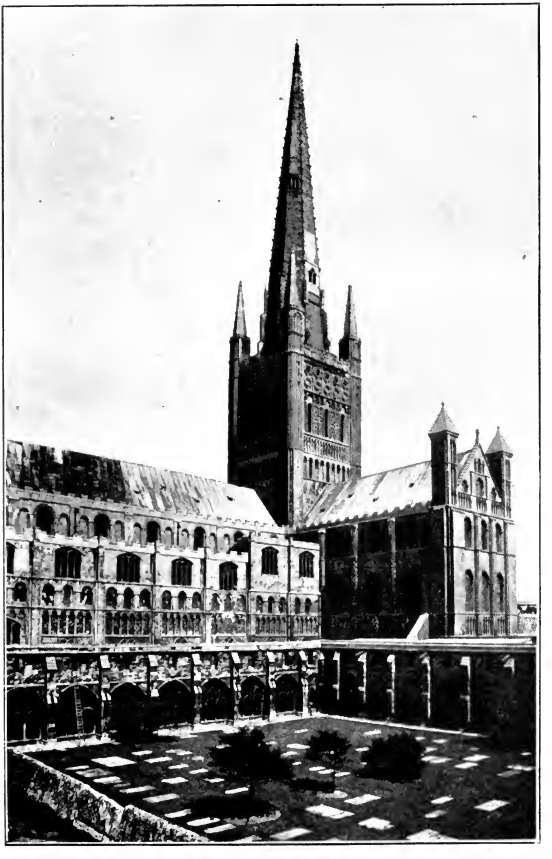
taken to the site of an old abbey, where they can trace out the plan of the monastic buildings, they can be made to understand some of the labours that were there carried on.

They will see first the great abbey or priory church, in the choir of which prayers or "services" were sung seven times in the twenty-four hours; the prayers, it should be remembered, being offered also on behalf of those in the world without who were not praying for themselves. The church of an abbey or a priory was very stately and beautiful. A monk was allowed to have no personal belongings, but the whole body might have great possessions, and of these the most precious was the fabric of the church, with all its riches and adornments. In such an abbey as Westminster we see that the choir of the church can be used independently of the nave, and, indeed, is almost entirely screened from it; we can explain this to the children by telling them that the choir and transepts, generally the most richly ornamented part of the whole building, were kept by the monks for their own worship, and were entered by a private door from the cloisters; the general public were only admitted, as it were, on sufferance to the nave.

The Buildings of a Monastery; the Church.

Then there will be the arcades of the "cloister" (a cloister really means a secluded or "shut off" place). The cloister was formed by covered walks running round a great quadrangle, the cloister yard or garth, which was often, as now, a plain grass plot, but was sometimes adorned with shrubs, a fountain, or a sun-dial. On the north side was the church, so that the high wall of the nave screened the cloister from the north wind. The roof of the arcade leaned at the back against high walls which shut off the monastery from the outer world, and on the side towards the garth it was supported by pillars or fretwork of

The Cloisters.

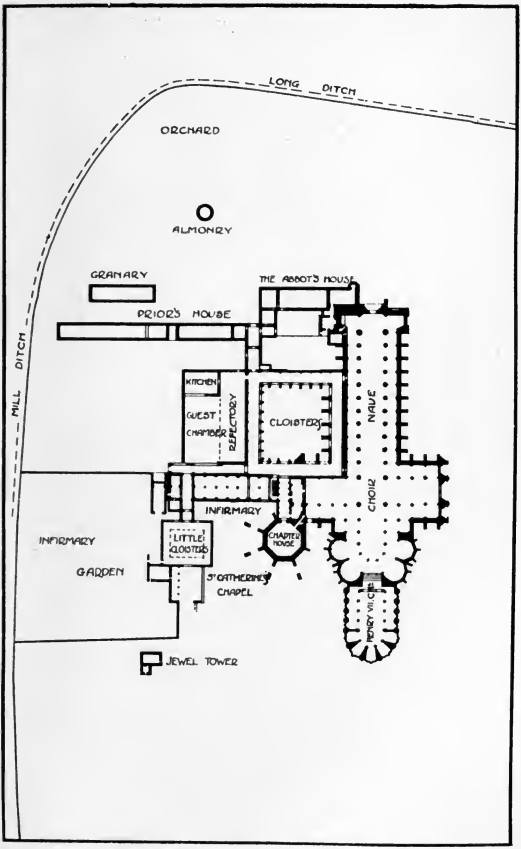


THE CATHEDRAL AT NORWICH, WITH THE ADJOINING CLOISTERS OF THE ANCIENT MONASTERY ENCLOSING THE "GARTH."

stone. The four galleries of the cloisters formed not merely a walk, but a picturesque though draughty living-room, for here, at least in earliest times, all the daily life of the monastery was carried on. The ordinary monk had no "cell," the cloister was the place where he meditated and worked with his fellows. The children will like to know that the monks kept school in the cloister; here they taught Latin, and perhaps singing, to the little sons of the neighbouring gentry. On the south side, where the light was best, some of the monks would be at work transcribing or illuminating books for the library, for the monks, it must be remembered, were the great book-producers of those times. One portion would be allotted to the abbot or the prior for the making up of his accounts. So important was the cloister in the daily life of the monastery that the history books constantly tell us of such-and-such a person who "retired to a cloister," *i.e.* who adopted the life of a monk.

On the east side of the cloister were the dormitory and the Chapter House or Council Chamber, where all the "convent" met to discuss its business, the arrangement of services, questions of discipline, &c. On the south was the refectory or dining-hall. The church, as we have said, was on the north. On the west there was a range of kitchen offices and buildings used for entertaining guests, for one important function of the monastery was the housing and feeding of travellers, rich or poor. There is in Coventry an inn called the Pilgrim's Rest, which actually marks the site of the *hospitium* or guest-house of an ancient monastery which once dispensed hospitality on that spot. At the outer gates of the monastery, too, the destitute were freely fed, and if we now rightly consider this giving of doles to be a mischievous practice, we must remember that no one at that time questioned its wisdom or looked upon it in any other light than that of a Christian duty.

The Activities of the Monastery.



PLAN OF THE MONASTIC BUILDINGS OF THE ABBEY OF ST. PETER, WESTMINSTER.

Beyond the precincts of the monastery itself lay the monastery gardens and fields, which were cultivated by the brethren. Most of the monasteries, it must be remembered, were built in lonely places, and everything that was eaten or drunk or worn had to be produced on the spot. "The grain grew on their own land; the corn was ground in their own mill; their clothes were made from the wool of their own sheep; they had their own tailors and shoemakers and carpenters and blacksmiths almost within call; they kept their own bees; they grew their own garden stuff and their own fruit." A town, as we have seen, would often grow up round a great monastery, and even such lonely abbeys as Fountains, Tintern, or Rivaulx would afford object lessons in good cultivation and thrifty management to the whole countryside. Some of the monasteries fostered the industries of their district. Thus Bath Abbey helped to develop the wool trade in the south-west of England, and Flaxley Abbey, in Gloucestershire, specialised in the smelting of iron. The wealth of the monasteries increased as time went on. Rich men gave or bequeathed their land and houses to the tithes of churches, as well as their rights to tolls and to market dues. Before long the monasteries became owners of about a third of the land of England. The tithes which ought to have gone to the parish churches and their priests, went to them instead.

All this was very dangerous to the ideal for the sake of which the communities were founded. The abbots and priors had so much to do to manage their large estates that they became merely capable men of business. Moreover they were often hard masters to their tenants; no whit better than the ordinary feudal lord. In towns like Reading, St. Albans, Norwich, or Bury St. Edmunds, in which the great abbeys were the chief landlords, there were constant disputes. "In the year 1314

Monasteries and Towns in Conflict.

the great abbey of St. Albans was kept in a state of siege for more than ten days by the townsmen, who were driven to frenzy by not being allowed to grind their own corn in their own hand-mills, but compelled to get it ground by the abbey millers, and of course pay the fee." London children may be told how one single manor of the monastery of St. Peter extended along the river from Millbank to the Fleet, and northward to the ancient highway which is now called Oxford Street. On one occasion there was so serious a quarrel between the Londoners and the Westminster monks that the mob rushed into the monastery, and the abbot had to escape by slipping out at a back door and getting into a boat on the Thames. No one could have foreseen at that time that the influence of the monastery, like that of the castle, would become a thing of nought, and that even the buildings themselves would disappear.

All children learn in a general history course something about the " suppression " of the monasteries, and most teachers, while setting before their pupils the unworthiness of the means by which this was effected, and the wrongful use of the spoils, will point out how, even if we ignore the accusations of idleness and wrongdoing which were alleged against the monks, the accumulation of riches and the cares which of necessity accompanied them must have interfered with the original ideal of the religious life. We may now find opportunity to put before them the more modern ideal. No great work can be done but by the influence of *individual character* ; the monk was justified in seeking to discipline and perfect his own personality. No great work can be done in improving the world but by *earnest co-operation* ; the monk was justified in joining a settlement of good men. But we now feel that most good men and good women can at once improve their own characters more effectu-

The Old Order Changeth.

ally, and also help forward the betterment of others, by keeping in contact with the actual life of the ordinary world and by submitting themselves not to the rule of a superior in a cloister, but to the wholesome and searching light of public opinion.

The Friars.

Perhaps there is a Friar Street or "Friary" in the neighbourhood of the school, or the children may know of a Blackfriars, Whitefriars, or Greyfriars district. Canon Jessopp gives a clear and vivid account of the "Coming of the Friars," who were *not* monks, and must not be confused with them. Whereas a monk was confined to his monastery, a friar was a wanderer, always on the move. A monk did not necessarily preach, but a friar was a *preacher*, and a preacher not to the congregations in the churches, but to the poor and outcast, to the dwellers in the horrible slums and suburbs of mediæval cities, to those whom neither the parish priests nor the monks could reach. Whereas a monastery could hold houses and lands and great wealth, the friars were to beg their way along the roads, and if they settled in one place they might have merely a shelter of their own over their heads. The story of the coming of the earliest begging friars—the Franciscans—to England is one of the most fascinating chapters in Church history, but here we can only refer the teacher to Canon Jessopp's book and to the third chapter of Green's "Short History of the English People." Green remarks:

Their Work for the Towns.

"To the towns especially the coming of the friars was a religious revolution." London and Birmingham children know of the district called the "Minories." This is a reminder that the Franciscans or Grey Brethren delighted to call themselves Friars Minors—the Minorites—the brothers of small account. There were also Dominican or Black Friars,* who preached to the learned, to those

* The Whitefriars or Carmelites were another order, so-called after their monastery on Mount Carmel. The Austin Friars were named after St. Augustine of Hippo.

who understood Latin; but the Franciscans specially endeared themselves to the poor, for they cared less even to preach than to visit, as brothers, the dwellers in the meanest and most squalid portions of each town and its suburbs. They went about coarsely dressed, barefoot, ill-fed, living in huts of mud and timber as mean and poor as those around them. Their founder's precept was: "The brothers shall not make anything their own, neither house nor place, nor any other thing, and they shall go confidently to beg alms like pilgrims and strangers in this world, serving our Lord in poverty and humility." This rule the earliest friars studiously obeyed, though their successors found it necessary to have a settled house in the towns where they ministered. The friars, like the monks, failed to maintain the ideal set before them by their founders, and the children will come across satirical pictures in Chaucer, in the "Robin Hood Ballads," and elsewhere, of the degenerate friar. It is but right, however, that they should be shown the other side of the picture, and should know that "the friars were the evangelisers of the towns in England for 300 years." *

* In addition to the books named in the text the teacher should read the chapter on "Wandering Preachers and Friars" in Jusserand's *English Wayfaring Life in the Middle Ages.*

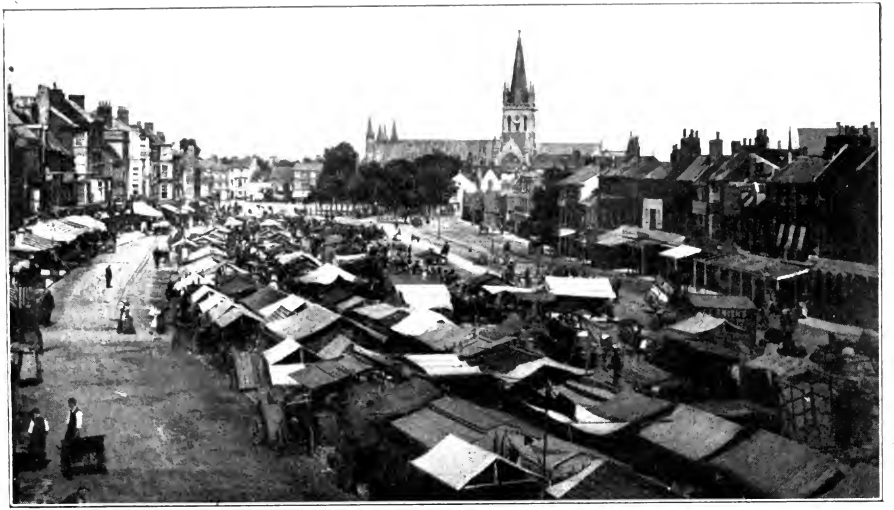
CHAPTER XIII

THE PARISH CHURCH

An Age-long Survival.

The castle and the monastery are institutions which once played a most important part in the life of our towns and villages, but which now survive only as relics. There are amongst us, however, buildings representing a yet older and more powerful organisation—which still remain to serve our needs to-day—the historic Church of this country. The Saxon "ton," which was the origin of our modern town, contained within the enclosure of its stockade the "tunkirke"—the ancestor of our parish church of to-day. The parish church is still the main feature of many a town and village, and its tower or spire gives a touch of dignity to the flattest landscape or to the most squalid town area. It is still the pride of the humble homes round it. The "old parish church" appeals even to unsentimental men and women, who do not frequent it except on the solemn occasions of life—a christening, a wedding, a funeral—when the most careless feel the need of its services. The teacher may well strive to deepen this sentiment by carrying back the minds of the children to the origins of that of which they will hear their parents speak with pride and respect.

"It may be stated pretty confidently that the great majority of our old parochial churches, whatever the



YARMOUTH, WITH ITS GREAT PARISH CHURCH, FOUNDED BY A BISHOP OF NORWICH IN THE REIGN OF WILLIAM RUFUS, OVERLOOKING THE MARKET-PLACE.

date of the existing fabrics, stand on the site of structures dedicated to religion before the Norman Conquest. Before the Perpendicular, before the Early English church, there there was one built by Norman or by Saxon workmen, the associations of which carry us back to the earliest periods of our national history."*

The Outward Tokens of a Great Society.

Even the position of the parish church has its significance. In many old towns, such as Yarmouth and Nottingham, the chief church stands beside the great market-place; in villages it is often by the village green. To understand the reason for this we must go back to the time of "Saxon" England, when the land was still heathen, and almost every trace of the Christianity associated with the Roman occupation had disappeared. Missionaries from Ireland and Scotland, and the successors of St. Augustine and his monks, wandered from hamlet to hamlet preaching to the people. The natural place for a meeting would be out of doors, or in the open space in the middle of the "ton," or on the mound, where might be the graves of the ancestors of the tribe. Here, when the inhabitants were converted, a wooden cross would be set up as a sign of the new faith. At the foot of this cross the missioner would stand to preach, and here baptisms would take place. This is the origin of the village crosses that yet remain in some places.

The First Churches of the "Ton."

By and by the want of a building would be felt, and a church would be built on the site of, or quite near, the cross. It was natural that the church should stand conveniently to the open space which

* Professor Baldwin Brown, *The Arts in Early England*, vol. i. p. 116.

CHICHESTER CROSS, AT THE MEETING OF FOUR ROADS.

was the common haunt of the people, and first the church would be merely a rough oblong building formed of woven wattles filled in with daubed mud or of the trunks of trees, split lengthwise and placed side by side. As the "Saxons" were brought more and more into touch with the Continent—and we must remember that kings and Bishops and thanes would often go on pilgrimage to foreign shrines—they became anxious to build *stone* churches like those which they saw abroad. At the Norman Conquest even small towns were well supplied with churches. Norwich, for example, had no less than fifty-four.

It is thought that many of these churches belonged to the people themselves, to the inhabitants of the "ton." The church was their own church, supported by themselves. But many of the churches were built by the local thane or lord for the use of his family and his tenants, and the lord often chose to build not on the open space belonging to the villagers, but a little apart on his own land. Thus we often find a church standing close beside the gates of the manor-house, or even in the squire's park.

In order that the church might be served a priest would be appointed, and a portion of the land of the ton or manor—the *glebe*—would be set apart for his maintenance and for the services of the church. From the eighth century the Saxon kings directed that a tax called the tithe, or tenth part of the proceeds of an estate, should be allotted for this purpose.* Even if appointed by a lay landowner the priest was under the direction, not of his "patron," but of the Bishop.

The "Rector" and his Parish.

He (the priest) had a real authority over the inhabitants of the little township where he served, and came to be called its *Rector* (or Ruler). The township, to whomsoever

* Stubbs's *Constitutional History*, vol. i., chap. viii.

it might belong, became at the same time the priest's domain. It was called his *parish*, from the Greek word *paroikia*, meaning "dwelling-place of a priest," and all the people living in that area, rich or poor, high or low, became his *parishioners*. As the population grew, the original parish church might become too small for the needs of the people. Smaller parishes were therefore carved out of the larger ones, and "daughter" churches were built to serve these newly created parishes.

A priest in charge of a church is sometimes called by the somewhat ugly word "incumbent." A proper term for the parish priest from the time of his first establishment was *rector*, or ruler—*rector ecclesiæ*. "Many incumbents in the present day are still rectors of their churches, and in theory their position is the same as that of their remote ancestors of Early Saxon times." A rector has for his maintenance the endowments of the church he serves. Children are often puzzled as to the difference between a "rector" and a "vicar." We may explain it simply in this way. Very often it happened that lay landowners who had founded churches would give them over to the great monasteries, believing, no doubt, that bodies of good men were the fittest persons to arrange for the welfare of the parishes. Now, if the church were at a distance from the monastery it would be inconvenient for the monks, although there might be clerics among their numbers, to send any one of them to take charge of the church. They therefore chose some other priest, as a *vicarius* or *substitute*, hence our word *vicar*. A reasonable portion of the income of the parish church was allotted for the vicar's support.

What is a "Vicar"?

When the monasteries were dissolved their rights over the churches passed into the hands of laymen,

who now became rectors of the churches and holders of all the lands and tithes and dues in connection with them. "The vicar who was serving the church for the monks continued to perform the same service for the lay-rectors, and this has gone on ever since, the Church having never recovered what she lost."*

Another ordained officer of the Church is the *curate*. The children should be led to notice that since the time of the Prayer-book the word has changed its meaning. Then it meant one who had the cure or care (Latin, *cura*) of souls, *i.e.* the parish priest himself, to whose charge the congregation was committed. Now it means an assistant-priest.

The Curate.

The word "parish" has more than one meaning, and it is worth while making clear the distinction between these meanings. A parish may be thought of as an area under the oversight of a priest. Help the children to think of all the land in England as mapped out like an enormous picture-puzzle into irregularly shaped parishes.† A group of parishes makes up a Bishop's *diocese* (his "great household"). Or a parish may be thought of as the *community* inhabiting one of these areas. A great authority, Bishop Hobhouse, says: "The parish was the community of the township organised for Church purposes, and subject to Church discipline." This community had its own parish meetings, and the president or chairman was the rector of the parish. It could hold property as a corporation (*v.* page 67), for

The Parish.

* Baldwin Brown, *The Arts in Early England*, vol. i. p. 341.

† The ecclesiastical parish and the civil parish were originally co-extensive with one another. The "civil" parish will be treated in a following chapter.

pious people by gift or will were constantly giving to the Church. Canon Jessopp enumerates some forms which these gifts would take—houses and lands, flocks and herds, precious jewels and costly vessels of silver and gold, ornaments and church furniture, bells and candlesticks, crosses and organs, tapestry and banners, fine linen, carpets and hangings, and the great parchment service-books, often beautifully illuminated.* A poor widow would leave her wedding-ring as a legacy, or so many hives of bees to provide wax for the church candles. The church was the centre of the parish; it belonged to the people, and they took an immense pride in it. The churchwardens or keepers of the church, and not the rector, were responsible for the care of the property; these officers were elected annually, and were not paid for the work, for, indeed, the post was felt to be a distinction.

Its Property.

All through the Middle Ages the priest of the parish exerted his influence side by side with that of the lord of the manor or the corporation of the town. The country "parson" was *the* "person" of the place. His influence, or rather that of the great invisible Church which he represented, tended to lift the people up from the condition of serfdom to which the feudal system tended constantly to pull them down. Within the church, the tenant, the villein, and the serf could stand side by side with the lord. On a church feast, though it might be a day on which the tenants were required to perform their customary ploughing or reaping for the lord, the people came to church and the lands were untouched. Sundays were secured in the same

The Influence of the Parish Church in Mediæval Times.

* *Parish Life in England before the Great Pillage.* By Canon Jessopp. (Fisher Unwin.)

way. When the parish priest wished to discuss the business of the parish he would gather his people round him in the *vestry* or robing-room of the church, for neither the lord nor his steward would dare to interfere with a meeting held in the sacred building. This vestry meeting has lasted on to our own time. In another chapter we shall touch upon an institution in modern life which has taken a similar title—the parish meeting. But if the class have heard of the Poor Law of Elizabeth they may be reminded that in this reign each parish was made responsible for the relief of its own poor, since it was felt that this care of the poor had always been one of the recognised duties of the Church. Hence we still hear of people receiving "parish relief," though by an Act of Parliament of 1834 the duty of attending to the relief of the poor was removed from the parish to a *Union* of parishes. *Vide* chapter 1, pages 330-331.

The Vestry Meeting of the Church.

The parish church, however, was in olden times the centre of far more activities than those connected with poor relief. Mrs. J. R. Green says: "All the multitudinous activities and accidents of this common life (of the towns) were summed up for the people in the parish church that stood in their market-place, close to the Common House or Guildhall. . . . There on Sundays and feast days the people came to hear any news of importance to the community, whether it was a list of strayed sheep, or a proclamation by the bailiff of the penalties which had been decreed in the manor court against offenders. The church was their common hall where the commonalty met for all kinds of business—to audit the town accounts, to divide the common lands, to make grants of property, to hire soldiers, or to elect a mayor. It

The Parish Church a Centre of Town Life.

was the natural place for justices to sit and hear cases of assault and theft; or it might serve as a hall where difficult legal questions could be argued out by lawyers. In the middle of the fifteenth century, when the Bishop of Exeter and the Mayor of Exeter were in the height of a fierce contest about the government of the town, they met for discussion in the cathedral. "When my lord had said his prayers at the high altar he went apart to the side altar by himself and called to him apart the Mayor, and no more, and there communed together a great while." The people even found it natural to overflow into the church from the market-place outside and carry on their bargains—a practice which had to be forbidden "for the honour of Holy Church."* The children will often see on the church doors notices relating to elections and other matters of local administration. This is a survival of the social customs which even in Saxon times centred round the church, its porch, and its churchyard. The church, too, was the centre of their pleasures. The "holy" days became *holidays*, days of feasting and outdoor sports. Miracle plays were represented in the churchyard, and sacred pageants and processions were organised in connection with the greater Church festivals and with the feasts of patrons and saints.

Perhaps the parish church was even more essential to the life of a mediæval village than to that of a town. All writers, whatever their views on modern Church matters, agree in testifying to what Canon Jessopp calls "the blessed relief and utter change in their surroundings which the churches afforded to the villages of the fourteenth century." The village folk lived hard lives, staggering behind the bullocks that

The Parish Church in the Villages.

* *Town Life in the Fifteenth Century.*

dragged the plough through the furrows, huddling at night in hovels that had no artificial light, and around the ashes of a smouldering fire whose smoke escaped through a hole in the roof, and eating coarse monotonous foods. Without the refinements and interests of the Church, "the people must infallibly have become more brutal, stupid, sodden, and cruel with each successive generation." *

* *Parish Life in England before the Great Pillage.*

CHAPTER XIV

THE PARISH CHURCH (*continued*)

Churches other than Parish Churches.

It may be that in the neighbourhood of the school there is a church which is other than the parish church. The teacher therefore may well spend some little time in explaining differences of title, illustrating always from local examples if possible, and, failing these, from towns familiar to the children through their geography and history lessons. A parish church, as we have seen, is one belonging to the inhabitants of a certain area, and the country is so mapped out that, practically speaking, no area in England is without its parish church. This may be a "mother" church or a daughter church serving a subdivision of the original parish.

Cathedrals.

A cathedral may be regarded as the central church of the diocese. It is not always historically the "mother" church, for when Christianity was introduced into the towns by the efforts of missionaries small churches would be built for the converts, and it was not until some pioneer work had been done that a missionary Bishop would establish a church as the seat of his authority, setting up in it his chair or *cathedra*, and thence directing his further work. The first cathedrals were not always built where we see them now. Often these were in remote country

regions; thus the first cathedral in Sussex was on the promontory of Selsea, on a site now washed away by the sea. Afterwards the Bishop's chair was moved to Chichester. It was customary, as the land became settled, for the kings to desire the Bishops to be near them in their chief towns. Sometimes, as at Durham, the Bishop was the temporal guardian of the district, and the cathedral and the castle would alike be a refuge in fighting times. The cathedral building itself is managed by what is called a "chapter." This consists of a president or *dean* and a number of clergy called "canons." The word "canon" originally signified one who lived according to rule. Bodies of monks living apart from the world were *canons regular*; other associated clergy who continued to give service in the world were *canons secular*.

Some cathedrals were once also the churches of monasteries, *e.g.* Canterbury, Durham, Winchester, Bath, Carlisle, Ely, Norwich, and Rochester. On the other hand, St. Paul's Cathedral in London, and Wells, Chichester, Salisbury, and Exeter were governed by a chapter of secular canons.

Abbeys and Minsters.

An abbey is the old church of a monastery. Thus Westminster Abbey was the church of a convent of Benedictine monks who formerly had a settlement there. Some of the old abbeys of England are no longer used as churches, but have been converted into private houses, as Battle Abbey near Hastings, and Newstead Abbey, where Lord Byron was born. A *minster* also is a church once belonging to a monastery (*monasterium* = minster), though it is now sometimes applied to cathedrals which have had no connection with a monastery, *e.g.* York Minster.

The cathedral governed by its chapter is an

example of what is called a "collegiate" church.

Collegiate Churches.

A *collegium* among the Romans was an association of persons working so closely together that they were regarded as one body, and were able to hold property together. The children will have heard the word applied only to associations whose chief purpose is study and education. Now they may realise that originally it had a wider meaning, and included also religious associations for the upkeep of Church services. Not only the cathedrals but many of the larger English town churches, such as Manchester, Ripon, and Southwell, were collegiate, *i.e.* governed by a "college" of clergy. These three have now become cathedrals. St. George's Chapel at Windsor and Westminster Abbey are now the only two collegiate churches left other than cathedrals. The fact that most of these great churches once belonged to religious bodies who led their own life apart from the life of the town explains how it is that so many of our cathedrals —St. Paul's and York are exceptions—have their own quiet "close," or enclosure, and sometimes gates and walls. Sometimes, too, we find a ring of town churches surrounding a cathedral church, reminding us that the cathedral was not built for the townsfolk, who, though admitted to worship in its nave, naturally desired to have places of worship which were really their own. Often, indeed, an abbey would provide such a church for its neighbours.

Chapels.

The origin of the word *chapel* will interest the children. It comes from *cappa*, a cloak. The cloak of the soldier saint, St. Martin of Tours, which he divided with a poor beggar, came to be regarded as sacred, and was carried to the battlefields of France, where it was

safely guarded in a tent, hence called a *capella*. The tent itself came to be looked upon as sacred. Gradually the word *capella* was applied to a small building in an outlying part of a country parish where the young and old and infirm who could not, especially in those days of bad roads, attend the parish churches might come together for worship. One of the parish clergy would ride out to serve as chaplain to this little "chapel of ease," for we are told that provision was to be made for a little tenement where he could put up his horse. If the population grew the "chapel of ease" would become a district church.

The word "chapel" is also used for any small place of worship, *e.g.* in a castle, palace, or private house, in a hospital or almshouse or college. We find chapels which form recesses or enclosures in larger churches. These were built by private donors or by guilds who wished to honour some particular saint. Finally, the children will know that the places of worship of Nonconformists are generally called chapels. But we cannot here enter into the historical origins of the many sects thus represented in our town buildings.

Dedication Names.

The dedication name of the church should receive attention. There are about six hundred dedication names in England, and some of these, St. Nicholas, St. Margaret, and St. George, are quite unknown to the children, though there are very interesting stories behind them. Again, how many London children, although they have heard of Bartholomew in the Gospel story, connect St. Bartholomew's Church and Hospital with the story of Rahere, who founded both church and hospital in consequence of a vision of St. Bartholomew that appeared to him on his way home from Rome? It is well to revive

these old stories thus fossilised, as it were, in local names, for they may have no slight influence on the fostering of similar ideals which may operate in modern life under different forms. Thus Archbishop Benson, speaking of Rahere's return from Rome, said: "He must have seen the noble tower of St. Bartholomew which was first in those years (twelfth century) added to the great church upon the island in the Tiber. That island had for immemorial centuries been dedicated to the healing of the sick. There had been the Temple of Æsculapius, and there the shrine of a yet older deity of healing. It suggests itself that the vision he really saw was a transplanting of church and hospital that Bartholomew who dwelt on Tiber might dwell on Thames. But if so, then into what dim and shadowy ages the continuity of good runs back." And into what dim and shadowy ages, we may add, the continuity of good may run forward if the same enthusiasm for service can be maintained in unbroken succession through those who, from age to age, are the light of their own times. Let us, therefore, tell the children the story of the names associated with their churches so that they may not be mere names, remembering with St. Augustine: "We build not temples unto our martyrs as unto gods, but memorials unto dead men whose spirits with God are still living."*

The Fabric of the Church.

Meanwhile the teacher will have spent some time in drawing the attention of the children to the fabric of the church itself. Obviously this will be more interesting if the church is an old one with claims to architectural dignity. But in any case the various parts of

* *Studies in Church Dedication.* 3 vols. Frances Arnold-Forster. (Skeffington.)

the building should be known and their relations with one another understood. The children should draw a plan of their parish church and of any historic church in their vicinity. The earliest churches built in the old English "ton" were probably rough structures of wattles or timber, of an oblong form, with a small square space at the end (presbytery) marked off for the seats of the clergy and for the altar.

When the churches became larger and more important they would be built of stone. Bede tells us how Benedict Biscop, founder of a monastery at what is now called Monkwearmouth, went over to Gaul in the year 675 A.D., and brought back with him some masons to build for him a stone church "after the manner of the Romans in which he ever took delight." The most frequent type of church as to shape was the oblong hall with a raised portion at one end, which was the form of the Roman court of justice or basilica, though Professor Baldwin Brown thinks it probable that the most primitive form of all would be merely the lodge-room where the early Christians could safely meet as members of the "burial associations" so frequent in Rome. This simple lodge-room afterwards took on some of the characters of the prouder basilicas, rows of pillars supporting the roof and forming aisles, smaller chambers opening from the main building, &c. The raised end of the oblong towards the east, where the clergy with the altar could be seen by the people below, was rounded into a semicircular form called an apse. "Undoubtedly the true form of the Christian church was an oblong terminated by an apse." But in England we have generally preferred the square eastern end to the semicircular or polygonal apse.

Its Shape.

The Normans, however, favoured the fashion of

building churches in the form of a cross. Transverse additions to the oblong on either side made the arms of the cross, or *transepts* as these are generally called, and the nave was prolonged beyond the crossing. The space westward of the crossing of the two arms is called the "nave" (Latin, *navis*=a ship). The early Christians liked to regard their long-shaped hall of assembly, with its modified eastern end, as a ship of which the Bishop was the captain, the clergy the crew, and the laity the passengers. The roof of the nave is often supported on rows of pillars or piers. Spaces outward of these piers form the *aisles* (Latin, *ala*=a wing). The shorter eastward end of the cross is the chancel, so called because it is separated from the rest of the church by *cancelli*, or railings. Sometimes a screen takes the place of low railings.

Parts of the Building.

A visit to a cathedral or to a former monastic church often presents unusual features to children. The choir is very large, sometimes as large as a whole church, because the whole "convent" or "college" formerly chanted the services there. In former times it was reserved exclusively for the clergy and for those who took part in the chanting. The choir does not generally extend to the extreme eastern end of the cross, but there is a space behind the altar usually called the "Lady Chapel." Sometimes there is a space between the altar and the Lady Chapel called the "presbytery," or priests' room.

A Visit to a Cathedral or Monastic Church.

The choir is only between the piers, and the space between the piers and the outer wall of the church serves as a passage (ambulatory) to the Lady Chapel. Besides the Lady Chapel we often find smaller chapels built opening from the aisles of the nave and the choir (*v.* page 114).

In former days the walls of the parish churches were often painted so as to present to the eyes of the people pictures from Bible history or from the lives of the saints, and the windows were similarly filled with pictures in stained glass. These were "the books of the poor and illiterate," and in the days before reading was common must have made a great impression on the worshippers. The children will notice that in most cases the church is built so that the altar is in the east. Opposite the altar are, we generally find, the great doors of the church, though often there are doors in the north and south transepts also, and in smaller churches at the sides. Let them look up into the highest portion of the roof, generally at the intersection of the arms of the cross, and note how this is surmounted on the exterior. The building above the roof may be called a "steeple." If it be square topped it is a tower. Let the children notice the position of the tower in an old church. Generally it is at the west end, where it still sometimes serves as a belfry. Help them to realise that in olden times the church tower was often the stronghold of a little township, where the people would retreat in cases of attack. Hence its square massive strength; hence also its small windows, whence arrows could be conveniently shot; hence also its battlements behind which defenders could crouch or from which they could pour molten lead or hurl missiles upon their assailants. At Clymping, in Sussex, the remains of a drawbridge are still to be seen in the church tower. In more peaceful times the tower would be modified, and perhaps crowned with a soaring spire.

Within the Parish Church.

The Church Tower.

It is impossible in a chapter of this kind to discuss

the various types of architecture which may be seen by the children in the churches of their district. In any case comparison would be necessary in order to distinguish the Norman, Early English, Decorated, and Perpendicular styles, with their variations and transitions. The teacher, it is assumed, will be at the pains at least to spell out the architectural features of any interesting church in his own neighbourhood, distinguishing not only styles but modern imitative work from original work. The children should be encouraged to make sketches of its best features and of the details of its architectural ornament. The materials for the "Art" lesson can scarcely be drawn from a better source, and the much-talked-of principle of correlation can be applied in the most natural way.

The Porch.

We have already noticed the importance of the church porch (Latin, *porta*=a gate). The porches of early churches were very large, and the children will like to know that they were sometimes used as schoolhouses.* Here also trials by ordeal of hot water and iron were carried out. Here some parts of the marriage and baptism ceremonies were performed, and rents were collected on quarter days. The porch was a recognised resting-place and meeting-place. The watchman in Shakespeare's play of "Much Ado About Nothing" sat "on the church bench till the morning." The porch is still a resting-place for travellers, and the children will see notices of public transactions still affixed to its doors.

The land about the church—the church garth or yard, God's Acre—was also in the care of the wardens of the church. Though the Romans

* Hence the word "usher," formerly applied to an inferior class of teachers from L. *ostiarius*, a doorkeeper.

ordained that burial should take place "without the walls" of a city, the Christian feeling led to the disposal of a piece of ground near the church itself as a sleeping-place for the dead. This received the name of *cæmeterium* or dormitory—a name which has been passed on to the crowded cemetery which has in towns replaced the parish churchyard. Many people, however, were not satisfied with reposing *near* the church —they wished to be buried *within* it. At first only personages of great piety were admitted to this distinction. The tomb of a martyr, however, would be regarded with so much veneration that it might be used as an altar, and a church would be anxious to acquire bodily relics of anyone recognised as a saint. Interments within the church fabric came to be secured not only by piety but by worldly distinction. Sometimes the tombs were placed in the floor of the nave or choir, and stone slabs, or, later, memorial brasses, as more durable, would be used to denote the position of the body. Or the tombs would be raised so as to stand up from the floor, or would be placed in a recess. In every old church we find these memorials of distinguished worshippers in the past, though at present the less unwholesome device of a stained-glass window or a mural tablet is happily preferred to actual interment within the walls. The children will know, however, that Westminster Abbey and St. Paul's Cathedral are still used for the actual sepulture of illustrious Englishmen—a modern survival of a practice which can be traced back as far as the combination of church and sepulchre in the catacombs of Rome.

The Churchyard or Cemetery.

CHAPTER XV

THE MARKET, THE FAIR, AND THE SHOP (1)

The Attraction of the Market: its Explanation.

THERE is a perennial attraction to a child as to the grown-up in visiting a market, or even in looking at a row of shops. Froebel, in a note to one of his pictures, explains this by pointing out that since a market displays all the various productions and needs of man, the child finds in it a mirror of life. He finds himself, too, expanding his personality, as it were, for he cannot pass along without choosing and appropriating, at least mentally, among the wares displayed in the many-coloured variety of the market. Here also he learns, perforce, the lessons of spending wisely, temperately admiring, and not unduly coveting, so that he is prepared, as Froebel says, for his progress through the great market of life.

Different Types of Market.

In many country towns general markets are still held in the open air, on one or more days in the week, in the ancient market-place. Hither the farmers of the districts bring corn, cattle, and other produce of the land, and deal with each other and with the local tradesmen. In large towns, such as London, there are special areas assigned for the sale of special merchandise. Thus meat is bought at Smithfield, vegetables at Covent Garden, poultry at Leadenhall, fish at Billingsgate, and live cattle are received and

sold in the Caledonian Road, north of King's Cross. The "Haymarket" had a real market for hay up to about seventy years ago. In many county boroughs, as in some boroughs of London (Whitechapel and Woolwich, for instance), smaller retail covered markets are provided by the authorities. Market-places also exist by right of custom in some thoroughfares, where stalls are placed along each side of the road and patronised by the poorer class of consumers. Elder children whose fathers are in business may realise that places like the Stock Exchange in London and the Cotton Exchange in Manchester are likewise markets, although no commodities may be seen.

The children will be interested in hearing something of the origin of these markets. It is probable that the market had much to do with the origin of the town. As we have said, a town naturally arose where two or three important roads joined. Here, at the cross-roads, various sets of people would meet, and in early times would exchange with one another what they had to spare from the produce of their own homestead. and would watch others making similar bargains. At first these transactions were matters of barter—a stage of civilisation which nearly all children rehearse with their own possessions. The Romans would teach the Britons the use of coins. In the days when written receipts were impossible, no bargain was valid unless made in the presence of "law-worthy" witnesses. Such witnesses could most conveniently be found at the cross-roads, and here is another reason for the site of the market. The market at Leeds was formerly held on the Bridge—also a likely place of resort, and the street to which it was after-

The Origin of Markets: how our Ancestors managed their Shopping.

wards removed is still called the Briggate. A boundary-stone was also a favourite place. "These triangular spots (at the meeting of roads) are the first cradle of that giant Commerce whom we now see with his seven-leagued boots—ships and railways—striding across oceans and continents."* Here two most necessary commodities, salt and iron, would be brought from the distant regions where they were found in nature. Here would be refreshment booths, and afterwards the common inn. Other houses would follow; a blacksmith's forge would be set up, and other trades would cluster round. If the population grew, there would certainly be a church. Soon the market would be the centre of a little town which might afterwards enlarge around it. Thus at Great Yarmouth we find the wide market-place with the parish church on one side of it; Nottingham, which boasts the largest market-place in England, has an arrangement of the same kind; at Northampton, a famous market centre of the Middle Ages, the central market square, a meeting-place of many roads, was insufficient for the stress of business, which overflowed into the side-streets—a fact testified by their names—Sheep Street, Mercery Lane, the Drapery, &c. London children in the East End may know Stratford Market—an open place near the street over the ford of the river Lea. In the town of Kingston-on-Thames, now almost a suburb of London, the importance of the market-place is shown by the fact that the stone on which the Saxon kings were crowned—for it was a *king's town*—is carefully preserved in it, the market stalls being grouped quite near it around the market hall. Cheapside, in London itself, denotes the site of an old market. In the time of the

Markets in Old English Towns.

* *Archæological Journal*, xxxiv. 200.

"Anglo-Saxons" and the Normans there was a large open space in the midst of the city, between St. Paul's and the spot where the Royal Exchange now stands, allotted partly to tournaments and sports, partly to the stalls of the merchants. This was called the *Cheap*, and there the *chap*men, or merchants, congregated,

THE MARKET-PLACE OF KINGSTON-ON-THAMES, SHOWING CHURCH, TOWN HALL, AND PUBLIC FOUNTAIN. CLOSE BY IS THE STONE ON WHICH EIGHT "SAXON" KINGS WERE CROWNED.

and there the city housewives did their shopping. What is now Cheapside was a road that ran on one side of this open space or Cheap, hence the name which it bears to this day. Opening into the present Cheapside we find streets bearing such names as Milk Street, Bread Street, Old Change (where the stalls of the money-changers stood), and the Poultry. These indicate the rows of booths that occupied part

of the Cheap, and when this was built upon, as happened when the land became more valuable, the rows of new houses bore the old names.

Various mechanical arrangements were necessary in order that the market might be carried on in comfort. There must be water; accordingly conduits were made. There were two conduits or fountains in the great Cheap of London, one in the Poultry and the other near Old Change. On great festivals these were filled with running wine. In some country places we still find the pump or well in the market-place, perhaps covered with a more or less elaborate shelter. A Market House was provided for the officials who managed the market. It often stood on posts and was reached by a staircase from outside; the space underneath forming a shelter from the rain in wet weather. The stalls or booths, on which fruit, butter, &c., were displayed, were rough, primitive arrangements of boards, of a kind that are still used after hundreds of years. Pens for cattle had to be provided, and in a large market-place such as that of Devizes these were and are close to the ordinary stalls. In a place like Canterbury, however, where the market was originally held in the main street itself, a separate cattle-market has been provided in another part, just outside the old city walls. In the earlier markets a cross would be set up, perhaps in place of an old boundary stone, to serve not only as an ornament but as a reminder of religious duties. There are beautiful market crosses still to be seen at Chichester and Malmesbury. Sometimes the market cross is called the "butter cross," because the farmers' wives stationed themselves with their butter-baskets on the steps of the cross. Every class of commodity had its appointed place; thus the

The Arrangements of the Market.

children will see in a country market all the stalls for poultry, crockery, &c., are ranged together in groups or alleys.

It must be remembered that it was not only the humbler kind of salesman who would be represented in the market. Thus we find, in the story of Dr. Johnson, that his father, who was a bookseller, had, in the early part of the eighteenth century, a stall on market days in the market at

Remains of Market Cross and Stocks, Bottesford.

Uttoxeter, in doing which he was keeping up a long and quite honourable custom. Samuel Johnson, when a boy, felt this against his dignity. "Once indeed," he says in later life, "I was disobedient. I refused to attend my father to Uttoxeter market. Pride was the source of that refusal, and the remembrance of it was painful. A few years ago I desired to atone for this fault. I went to Uttoxeter in very bad weather, and stood for a considerable time bareheaded in the rain on the spot where my father's

stall used to stand." This was a noble penance. It may be worth while reminding the children of less lofty acts of expiation. For it was in the market-place that the stocks and whipping-post and pillory of which we hear so much in the annals of the past were set up; this was done on the mistaken principle that the sight of the punishment of offenders was a salutary warning to those who had not yet offended.

Control of the Market.

The markets of old England were a valuable prerogative of the king. For the convenience of having a market in some definite place, which every one knew, people could be made to pay. Markets were therefore a source of income, and special note of them is made in Domesday Book. The justices of the King's Bench regulated the tolls and customs which should be paid, and an officer called the King's Clerk of the Market might ride into a town with a troop of horses and servants carrying weights and measures signed with the sign of the Royal exchequer; he would call for all the town measures, test them by his models, see that the false ones were burned, and then demand a fresh relay of horses to carry him on to the next market town.

Perhaps the king would sell or give his rights to some feudal lord or to a corporate body. The lord had the power of regulating the market and of charging various sums or dues for the privilege of putting up stalls in the market-place and of collecting tolls from the people who used the roads, ferries, and bridges necessary to bring them to the market. These proved so irksome to the townspeople that one of the things they always demanded when they sought for a charter was the freedom to manage their own markets. Hence it is that most of the markets in our towns are now under the charge of the corporation. Some markets, how-

ever, belong to private persons; thus in the town of Marlborough the lord of the manor receives the market tolls, and Covent Garden Market in London is the property of the Duke of Bedford. The City of London Corporation controls most of the central markets of London, while the smaller markets are managed by the boroughs in which they are situated. When a new market is wanted in a town it is almost always established by Act of Parliament, because it is necessary to have authority to make such a use of a public place.*

In early times the corporation watched very jealously over the rights of the market. Strangers from other countries, or even from other towns, were allowed to put up stalls only on payment of higher dues than a citizen: "the town clock, which tolled the hour when the market might begin, struck for the burgher an hour or two earlier than for strangers or visitors." But the citizens also were sharply looked after, their weights and measures, and the wares they sold, were supervised, and they were obliged to keep the rules of the market and pay for the privilege of selling therein. The corporation even now takes a toll on objects sold; thus it has been settled in our courts of law that a penny is a reasonable sum to pay for each pig and a shilling for a cartload of fish. A sum is also charged for the liberty of having a stall in the market, and no one can set up a stall without permission. In the case of the private market the owner can claim similar fees.

The Market and the Corporation.

Besides the convenience of having a definite place where goods and sellers were always to be found, and where they could be sure to meet their friends, our forefathers enjoyed other advantages

* Markets and Fairs Act, 1847.

from attending a market under proper control. The expression "in open market" ("in market overt") is a reminder of the customary law that if a person buys goods in such an "open market" they are lawfully his, even if it be proved that the seller came by them dishonestly. The rule of the market is that the "buyer gets good title though the seller might not have good title."* This was obviously an encouragement to people who might well, in unsettled times, be timid of making purchases, *e.g.* of cattle, &c., which might afterwards prove to have been stolen.

The Law of the Market.

* But this only holds until the thief has been convicted, when the goods revert to the true owner.

Note for London Teachers.—All sales to the public (but not purchases from the public) in any shop in the City of London are sales "in market overt."

OLD MARKET HALL, ROSS

CHAPTER XVI

THE MARKET, THE FAIR, AND THE SHOP (2)

The Fair: Time and Place.

THE fair of to-day, which school children will associate with noisy amusements of the merry-go-round type, is the squalid remnant of what was once a great institution. The fair of the Middle Ages was, in fact, a huge market. Unlike the market, which was held weekly or oftener, the fair was held at certain fixed seasons of the year. Such seasons were often the times of Church festivals, for when the people came together for religious purposes it was obviously a convenience for them to use this same period for supplying themselves with things they could not get in their distant homes. Thus Bartholomew Fair was formerly held in London in August at the time of the feast of St. Bartholomew. Even at the present day the fairs held in remote villages nearly always coincide with the feast of the saint to whom the local church is dedicated. A fair, indeed, was frequently held in the churchyard, or even in the church itself; thus a fair was anciently held on All Saints' Day in All Saints' Church and churchyard, Northampton. But gradually the influence of the clergy caused this practice to cease.

In the Statute of Winchester (Edward I) we find: "... and the King commandeth and forbiddeth, that from henceforth neither fairs nor markets be kept in churchyards, for the honour of the Church." No fair might be held on Sundays, on the feasts of

the Ascension, and on other specified holidays. A statute passed in the reign of Henry VI is still in force forbidding "the shewing of any goods or merchandises, necessary victual only except," on these holidays, and no sale on these days can be enforced in a court of law—a curious relic of a past state of things.

The Fair: A more Important Market.

The fair, as we have said, was a market, though every market was not a fair. It is a less ancient institution than the market, and this is what we should expect. For a market served the needs of a small area only, and the buying and selling were on a comparatively small scale. But as trade widened, and wants increased, it would be natural for special markets to be held at which rarer kinds of goods could be bought, often from a great distance. At these special and occasional markets people would come to buy and sell such things as foreign wines, for instance, which could not be had at ordinary times in sufficient quantities. Thus in the thirteenth century the fair was a very popular institution, and the fairs in the English towns were frequented not only by visitors from the surrounding shires, but also by many foreigners. Such a great market was an occasion for a holiday; indeed, the word "fair" itself (Latin *feriæ*) means "holiday." The children's notion of a modern fair is derived from the holiday element which has survived.

Control of Fairs.

Since a fair was a market, we shall expect to find that it was subject to the same restrictions as those of a market. Like the local market, it was under the jurisdiction of some overlord who, in return for the protection he was supposed to afford it, took care that it should be a source of gain. A fair, indeed, could not be held

without the authority, direct or deputed, of the king. Henry I granted a charter for holding a fair at Smithfield, in London, on the Feast of St. Bartholomew in each year, to Rahere, who also founded the adjoining hospital (*v.* pages 114, 115). Other kings or lords of the manor would grant simliar privileges to the corporations of towns. Thus Edward I in 1278 granted to what was then the little fishing town of Aberystwyth the right to have a weekly market and two yearly fairs.

A fair might only be held on certain days in the year and in a certain place, and there were many rules as to how it should be managed. There were functionaries corresponding to the market-searchers and market-lookers, who inspected the wares—in fact, a whole array of officials. There were severe laws against what was called "forestalling," *i.e.* buying up things before they arrived at market with intent to sell again at a higher price. It was equally an offence to buy up goods in the market itself and sell again at an advanced price. Offences against fair dealing were dealt with in special courts held in the fair itself, and the decisions of these courts were final. Those who had grievances often came from a distance and had to depart to their ordinary business directly the fair was over, with the dust, as it were, still powdering their feet, or *pieds poudrées*, as the phrase ran. Hence these courts, which came to be called "Courts of Pye Powder," dispatched the cases very quickly, and there was no appeal from their rulings.

Market Courts at the Fair.

The most famous of these mediæval fairs was that held annually at the town of Stourbridge, in Cambridgeshire. Here not only wheat and wool and cloth from the Eastern counties, but lead from Derbyshire and tin

Stourbridge Fair.

from Cornwall, would be sold, and sheep and cattle would be driven in from all the surrounding counties. There would also be crowds of strange-looking foreigners displaying Italian silks and velvets, French and Spanish wines, fine linen from Flanders, spices from Oriental lands to dress the meat which had to be preserved as food for the winter months, pottery and metalwork, and all kinds of luxuries from "outlandish" places which could not be produced by the simple English farmer or craftsman. This great market was opened under the authority of the corporation of Cambridge on September 18 in each year. Booths were erected in the open country on a piece of ground half a mile square, and they were so arranged as to form streets like a temporary city. Even so late as the time of Daniel Defoe, the author of "Robinson Crusoe," we find Stourbridge Fair still, as he thought, the greatest in Europe. In his day Manchester goods were borne to the fair on more than a thousand pack-horses, and in Kent, Essex, and Surrey no prices would be fixed for hops "until they know how they sell at Stourbridge Fair." The fair lasted for three weeks, and when this period was past no more business might be done. Defoe says: "If the field be not cleared of the corn before a certain day, the fair-keepers may trample it underfoot to build their booths and tents. On the other hand, to balance that severity, if the fair-keepers have not cleared the field by another day, in the ploughman may re-enter with plough and cart and overthrow all into the dirt."

St. Giles's Fair at Winchester.

A similar fair was held at Winchester under the control of the Bishop, who was overlord of a large portion of the South of England. The fair was opened formally by the Bishop's officers on the eve of

St. Giles, on a hill overlooking the city, which was covered with stalls so as to look like another city. During the sixteen days of the fair, all shops and stalls, not only in the city, but for a circuit of seven leagues round and even at Southampton, were closed by the Bishop's orders; and all business, except the purchase of perishable articles of food, must be done at the fair and there only. The convent itself dealt largely in foreign wines. It kept also a "spicery," or grocery stall, and sold furs for the winter. The fair at Winchester was important because, by the river Itchen and by road, there was easy access to the port of Southampton, the most convenient point of departure for the Continent, while it could easily be reached from London by way of the Thames valley. The profits of the fair, indeed, enabled one of the early Bishops, in the reign of Rufus, to build a great part of the cathedral church, with its chapter-house and cloisters.

Other fairs were held in various parts of England, often on the boundaries of ancient provinces, or near famous churches or cathedrals frequented by flocks of pilgrims. Some of the more famous were those of Boston, St. Ives, Stamford, Oxford, Abingdon, Bury St. Edmunds, Carlisle, Lincoln, and Nottingham. The great horse fair at Barnet has lasted down to the present day.

Though the main object of the market or fair was buying and selling, yet where crowds of people came together, especially for a period sometimes as long as three weeks, they would take the opportunity for merry-making, and there were always at the fair a host of hangers-on who provided amusement—and often, in the Middle Ages, amusement of a rough kind. Mummers, jugglers, minstrels, tumblers, wrestlers,

The "Fun of the Fair."

were always at the fairs, and pedlars, with their small goods, did a brisk trade on the fringes of the crowd. Autolycus, the thieving pedlar in the "Winter's Tale," jogged along "the footpath way" to local fairs, with his pack of laces, tapes, ribands. "He haunts wakes and fairs and bear-baiting," some one says of him. Moses Primrose, in the "Vicar of Wakefield," was cheated into buying his case of "shagreen spectacles" at a fair. The "fun of the fair" comprised a good deal of horseplay and gave opportunities for all kinds of small offences, so that we are not surprised to find that in later years a town like Manchester would arrange that the fair should be held farther and farther from the centre of the town and should at last be abolished altogether. The name "Fairfield" sometimes found attached to an open space in or near a town is a reminiscence of the time when the space was used for the local fair.

Decline of the Fair and the Market.

The fair and the market, especially the fair, gradually declined in importance. As it became easier to transport goods along safe roads or in barges, and still more so when the steamer and railway served to distribute them rapidly to any town, it was no longer necessary for buyers to meet at one point. The weekly market, or the market held on two or three days a week in the country towns, is still found a convenient arrangement for the disposal of corn, cattle, sheep, and the more perishable kinds of agricultural produce. But the markets in big towns are now mostly centres where the shopkeepers get their supplies, and the shops bring not only the necessaries but also the luxuries of life close to the doors of those who are to consume them. The fairs are practically obsolete, the merry-making element alone surviving, and this is mostly of a senseless kind provided by

itinerants who have no interest in the life of the place where the fair is held, and maintained by a section of the inhabitants who have no conception of the historic significance of their revels.

Fewer Restrictions on Marketing.

As time went on, it was no longer possible for markets to maintain their privileges and to prevent outsiders from selling the same goods, if they wished to do so. It was no longer thought wise and necessary, as had been done in olden times, first by the king and then by the rulers of the market, to proclaim the prices at which the necessaries of life were to be sold, on the principle that "victual being a necessary sustenance for the body should not be esteemed at the seller's liberty." The "market price" of any article is now settled, not by authority, but by the relation between the supply of the thing to be sold and the demand of the persons who desire to have it. In other words, competition has taken the place of custom and of statute in determining prices.

One interesting survival of the exclusiveness of the ancient market may interest the children. A "patent" is literally an "open" letter (*pateo* = "I open") held by the inventor securing to him the sole rights of the device or object he has invented. No one may imitate his invention and sell it as his own. The patentee holds his privilege for fourteen years. This corresponds to the old period of apprenticeship. He may not hold it for more than fourteen years, for it is "contrary to public policy" that a good thing should be withheld from the public use for a longer time—all may share the fruit of the inventor's brains in the end.

Another example of exclusiveness is the right which a mediæval company, the Goldsmiths', still holds of affixing their mark—their hall-mark, as it is

called—on gold and silver articles as a warranty of their genuineness.

Children are always interested in shops. Let them tell where are the most frequented shops of their district, and why those shops attract more customers than others. The modern "shop" (*v.* page 71) is an evolution of the board which was set down in front of the window of his living-room by the mediæval tradesman. Tell how each kind of trade formerly hung out a sign above the shop—a practice still surviving in the barber's pole and the pawnbroker's three balls. Explain the words "and Co., Limited," often seen over a shop. This shop is not owned by one man, but by an association or company of persons, no one of whom, however, is liable for more than the amount of money which he has either invested, or undertaken to invest, in the business. All such companies must have the word "Limited" as part of their name, and no persons other than those companies can so use that word.

The Modern Shop.

Are our shops under any restraints corresponding to those formerly placed on markets? The children may be led to see the difference between hampering and wise legislation. Nowadays any one may trade, though some sellers—*e.g.* publicans, tobacconists, hawkers, &c., have to obtain a "licence" to do so. It is thought "contrary to public policy" to hamper a man in his desire to trade. And shops may be set up where the owner of the land thinks there is a demand for them. Prices (as we have said) are not fixed. But the Government still conceives that it has duties towards buyers; weights and measures are still tested by Government in order that the poor may be protected from fraud by short weight, &c., though a baker who sells

Laws Affecting Shops.

light loaves is no longer drawn upon a hurdle through the market-place with the faulty loaf hanging from his neck. Bakers formerly had to sell loaves of a particular weight; this is not now required, but bread must be sold by weight, and not in any other manner. The same is true with regard to coal. Also, no man may sell any article under a name which may lead a buyer to think he is getting a better article than that which, as a matter of fact, he receives. Thus "margarine" must not be described as "butter" either by word of mouth or on an enclosing wrapper, and all substances that are not pure butter must be labelled "margarine." Unwholesome food—*e.g.* vegetables, and meat which have begun to decay—may be seized, and a would-be seller punished. The chief provisions of the Merchandise Marks Act and the Food and Drugs Act should be known to householders, and in poor neighbourhoods and where children execute shopping commissions these will be interesting from their practical application.

The Shop Hours Act, regulating the hours of shop assistants, should also be noted (no young person, *i.e.* person under eighteen, may serve more than seventy-four hours, including meal-times, in any one week). People are often very inconsiderate in the hours they choose for shopping; they should avoid making the day unnecessarily long for shop assistants. Teachers should take every opportunity of putting weight on the side of these unregarded moralities.

In those towns where Co-operative Stores are to be found, the teacher should make himself acquainted with the principles of Co-operative Trading, and explain its advantages as a form of social combination.

CHAPTER XVII

ROADS AND STREETS (1)

After considering the church and the market we may now draw attention to the ways by which they are approached. The churches and markets of the country are bound together, as it were, by a network of highways connecting one town with another. In each town, besides the highways that intersect it, there are streets which branch off from these main thoroughfares and link the various districts together. It is extremely difficult for even an imaginative adult to realise how greatly the life of a town or village depends upon the maintenance of these streets and roads. Children are naturally apt to take such things as they find them, and to regard them as original features of their environment. They may be helped to see how much human labour in combination was necessary to make England habitable by transporting them in imagination back to the times when there were no roads as we now understand them. Or, following the fancy of Richard Jefferies in his strange romance called "After London; or Wild England," we may lead them to picture to themselves what would happen if the roads were neglected. Jefferies imagines a sudden deportation or emigration of the English folk who kept the soil under cultivation and the roads tended. By the second

A Roadless England.

year all the footpaths were concealed by the docks, thistles, sorrels, and bennets of the meadows. The brambles and briars on the hedges that bordered the roads put out their prickly runners farther and farther until the hedges themselves had widened to three or four times their first breadth, and in about twenty years the former roads were in this way completely blocked. Hawthorns and self-sown saplings sprang up in the fields, and the whole country became converted into an immense forest. Moreover, the ditches having long since become full of leaves and dead branches, the water in them stagnated, rose and filled all hollow places, forming marshes, and the same fate befell all the lower lands adjacent to streams. So that from an elevation there was nothing visible but endless forest and marsh.

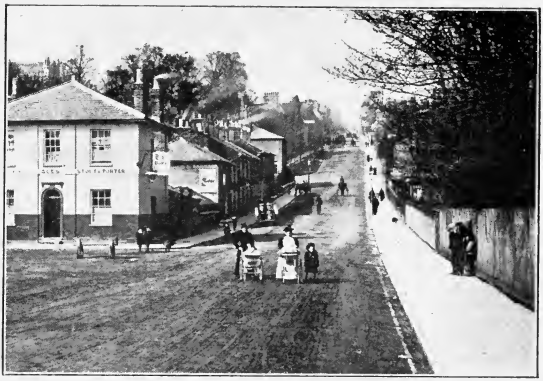
A word-picture such as this gives some idea of the roadless, undrained, forest-covered Britain to which the Romans came. It has been calculated that even in the reign of Elizabeth about one-third of England was waste, so we can imagine that in the earliest historic times the amount of "cleared" ground was very small. So dense were the forests to the north of London that the Romans did not attempt to penetrate them. In order to get from London to their "colonia" at what is still called Lincoln —the colony of the Lindum—they went round either along the borders of the Fenland by Colchester and Cambridge on the east, or by Leicester and Towcester on the west. The huge Forest of Arden in Warwickshire was similarly avoided, and the wild tribes of this district, secure in their woods and river swamps, remained unconquered by the Angles for a long time after the Romans left. The whole island, indeed, must be thought of

The Earliest "Roads."

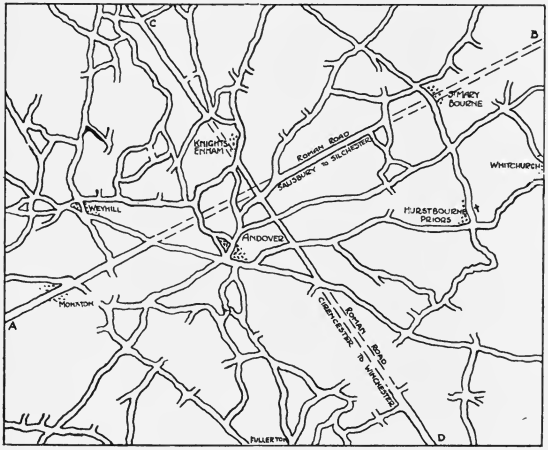
as a series of isolated forest "kingdoms," the inhabitants of which would have little communication with the rest of the world. There were trackways from one British settlement to another, and these, the most ancient of all "roads" in our country, remain in many cases as field-paths or "rights of way" even down to the present time.

The Roman Roads.

When the Romans came they made the wonderful straight paved roads or streets (Latin, *strata*) for which they were famous throughout the known world (*v.* page 45). The streets, as may be seen from a map, connected their chief fortified places or "castra." They also connected London with the mines of Cornwall and Wales. Traces of these roads may still be seen in out-of-the-way places such as the Forest of Dean in Gloucestershire, where the original pavement has not been overlaid. In many cases, however, the "streets" of the Romans have been used as the foundations of more modern roads. Thus Watling Street from Dover and Canterbury through London along the Edgware Road to Lichfield and Worcester still follows the Roman track. This is quite explicable, for the Roman thoroughfares were built in a very solid fashion, and were better than any that were made until quite our own time. First, along the line of the destined road loose earth would be removed until a solid subsoil was reached. On this would be placed no fewer than four layers of material: (1) flat stones; (2) rubble, masonry, or smaller stone or coarse concrete; (3) finer concrete; (4) blocks of hard stone fitted carefully together. The firmly prepared bed prevented these from sinking, and they were probably bound together by finer material—pounded sand, &c. The road would be at least sixteen feet and sometimes even a hundred feet wide; raised



A Roman Road Still Used as a Highway : St. Albans.



Map of Part of Hampshire, showing line of two Roman Roads—one from Cirencester to Winchester and the other from Salisbury to Silchester.

causeways ran on either side of it, and beyond the causeway an unpaved sideway such as we often find by suburban roads to-day.

When the Romans left, some of their roads at any rate were still used by the inhabitants. But when the Teutons came we find that as a rule they avoided the great roads. They settled down in detached bodies, the various families keeping apart from one another, each choosing a homestead where a spring of water, or a cleared space, or the sheltered side of a wood offered them attractions.

Teutonic Villages Apart from the Great Roads.

If the teacher in any country district through which a Roman road passes shows an Ordnance map of the neighbourhood it will be seen that, as Professor Baldwin Brown has pointed out, the villages bearing Teutonic names lie a mile or two from it. Even in the south-east corner of England, which has always invited invaders, this may be noticed. The great Dover road does, indeed, pass through the military stations of Canterbury and Rochester, but the old hamlets of East Kent, the "ings" and "hams" that denote Teutonic founders, lie off this great artery, along by-roads and in the folds of the hills.

But though these village communities remained through the Middle Ages isolated and self-contained, we gather that the tracks between them were kept open, and indeed were the only means by which a village could be entered by people from without. An ancient law in Kent decreed that if a stranger approached a village in any other manner than by the road he had to shout or blow a horn, or he would be considered a thief and be dealt with as such. The lanes which form so many of our by-roads in the country are doubtless survivals of these old ways, and their great

Old By-roads.

age can often be divined by the fact that, especially in sandy districts, they run between high banks on either side, the original road, which was once on the level of the top of the banks, having been worn down by centuries of traffic.

"The Saxon word 'road' seems to mean 'clearing,' and to be connected with the colloquial Scottish expression 'to red up' in the sense of clearing and putting to rights; and these tracks would at first be clearings through the woodland and waste in which the separate settlements were islanded." If the track were such that a cart and horse could pass, a "road" would soon be made. As time went on and towns sprang up, a network of more important roads would be formed to connect these with one another. Thus we hear, soon after the Conquest, of "the ancient roads that run from city to city and from market to market." These, with the Roman roads that remained in use, were the "king's highways." Their maintenance in good order was provided for by law, and the king's peace was to be kept upon them.

The Network of English Roads.

In his ingenious book called "Anticipations," Mr. H. G. Wells, following the late Grant Allen, points out how much in the social order depends upon the velocity at which a man and his belongings may pass about the earth. He shows how families in scattered farmsteads find a certain convenience in trade, and how their meeting-place becomes a market square, with its inn and blacksmithy, and thus forms the germ of a town. "Now, if this meeting-place were more than a certain distance from any particular farm it would be inconvenient for that farmer to get himself and his

The Length of Road between Town and Town.

produce there and back and to do his business in a comfortable daylight. He would not be able to come, and instead he would either have to go to some other nearer centre to trade and gossip with his neighbours, or, failing this, not to go at all. Evidently, then, there would be a maximum distance between such places. This distance in England, where traffic has been mainly horse traffic for many centuries, seems to have worked out according to the gradients and so forth at from eight to fifteen miles, and at such distance do we find the country towns. . . . Agricultural districts have their towns at about eight miles, and where grazing takes the place of the plough the town distances increase to fifteen." The horseless man could measure only a smaller distance within the hours of daylight, so that we find the villages sown at shorter distances than the towns.

The Upkeep of Roads in Olden Times.

The upkeep of the roads seems to have been regarded in early times as the task of those to whom the adjoining land belonged, and their tenants had to execute the repairs for them, but this duty was fulfilled with varying degrees of thoroughness. It was generally to the interest of the landowners, whether nobles or Churchmen, to keep open the ways of communication, for, since their manors and branch religious houses were often a considerable distance apart, they were of necessity frequent travellers. Likewise the roads to the great fairs must always have been passable at least. But in many districts the work of keeping the roads in repair was much neglected. A story is told that so late as 1499 "a glover from Leighton Buzzard travelled with his wares to Aylesbury for the market before Christmas Day. It happened that an Aylesbury miller,

Richard Borse, finding that his mill needed repairs, sent a couple of servants to dig clay, 'called ramming clay,' for him on the highway, and was in no way dismayed because the digging of this clay made a great pit in the middle of the road ten feet wide, eight feet broad, and eight feet deep, which was quickly filled with water by the winter rains. But the unhappy glover, making his way from the town in the dusk, with his horse laden with panniers full of gloves, straightway fell into the pit, and horse and man were drowned. The miller was charged with his death, but was acquitted by the court on the ground that he had no malicious intent, and had only dug the pit to repair his mill, and because he really did not know of any other place to get the kind of clay he wanted save the high-road." *

The art of draining the roads was not understood. The "influence of the floods" in winter kept people from going to their parish church even to bury their dead. Even a royal summons to Parliament could not be obeyed in bad weather because of the state of the roads. Heavy rains or a fall of snow would make them quite impassable even for those who were provided with good horses. On one occasion at least, in the third year of Edward III, the sitting of Parliament was delayed for no other reason than this.

It is no wonder that travellers by land as well as by water were objects of commiseration, to be specially remembered in the Litany. It was considered a pious and meritorious work, of the same sort as visiting the sick or caring for the poor, to help to make their journeys less perilous. Thus we find that in 1311-16 the Bishop of Durham

* Parker's *Manor of Aylesbury*, quoted by Mrs. J. R. Green in *Town Life in the Fifteenth Century*, vol. ii. chap. ii.

remitted penances to those "who shall help by their charitable gifts or by their bodily labour in the building or in the maintenance of the causeway between Brotherton and Ferrybridge where a great many people pass by."

Town Thoroughfares in Olden Times.

Even in and near the great towns the roads were very ill-kept. A Bishop of Worcester, Bishop Giffard, is remembered for having laid the first stone of a pavement for the streets of his city, at a time (1281) when few towns in England could boast such a luxury. In the wealthy manufacturing town of Norwich the market-place was not yet paved in 1507, but a judicious order was issued that no one should dig holes in it to get sand without the Mayor's licence. A decree of Edward III in 1353 orders the paving of the high-road running from Temple Bar (the western limit of London at this period) to Westminster. This road, being almost a street, had been paved, but the king explains that "it is so full of holes and bogs and that the pavement is so damaged and broken that the traffic has become dangerous for men and horses and carriages. In consequence he orders each proprietor on both sides of the road to remake at his own expense a footway of seven feet up to the ditch. The middle of the road is to be paved, and the expense covered by means of a tax laid on all the merchandise going to the staple at Westminster." *

Turnpike Roads.

Under the vigorous rule of the Tudors the various persons responsible were made to keep their roads in better order. In 1663 Turnpike Trusts were created—associations of persons united to keep the roads of a certain area in better order, defraying the cost of this by a

* Jusserand, *English Wayfaring Life in the Middle Ages*, chap. i.

toll on the passengers who used them, and making a profit on their undertaking. The old "turnpike gate" by the house of the toll-keeper can now be seen in pictures only, for this system disappeared on all public roads in 1878. The turnpike system certainly improved the roads, yet even in the eighteenth century that sagacious traveller, Arthur Young, tells us that in eighteen miles of the turnpike road between Preston and Wigan he measured ruts several feet deep and passed three broken carts; while in Essex, "a mouse could barely pass a carriage in a lane filled with bottomless ruts and choked by strings of waggons deep in the mire, which needed to be dragged out by thirty or forty horses."

If it be thought that these particulars are of merely antiquarian interest, it must be remembered that pictures of this kind form the best basis of establishing in the minds of the younger generation a sense of contrast between the "good old times" and those in which they live. And this sense of contrast is very efficacious in disposing them to be interested in the modern ways of managing these matters, and in inducing them to bear cheerfully their share of public burdens later on.

References.—Baldwin Brown, *The Arts in Early England*; Mrs. J. R. Green, *Town Life in the Fifteenth Century*; Jusserand, *English Wayfaring Life*; Traill, *Social England*.

CHAPTER XVIII

ROADS AND STREETS (2) : BRIDGES : INNS

When we think of the difficulty of making and keeping in repair the high-roads over the country, we must not forget the *bridges*, which are roads or paved streets carried over water. The ordinary grown-up person, intent on his business, takes bridges for granted; but children are always fascinated by them, and the village lounger, a child of a larger growth, unconsciously makes the bridge his favourite haunt. But the teacher is, or should be, something of a philosopher; he will realise that the bridge is a marvellous witness of the domination of mind over brute force. The stream would drown the man easily, it would keep him apart from his fellows; but he constrains it by the yoke of the bridge. "The building and sustaining of a bridge is always a wonderful and therefore always a perilous thing. For a bridge is a violation of the will of Nature, and a challenge. Hence man in the general may be properly called, not merely *Homo Sapiens*, but *Homo Pontifex*, or the Bridge Builder, and his symbolic summits of office will carry some such title. Witness the title of *pontiff* (*pons*, a bridge) applied by the Romans to their highest order of priests,

The Bridge in Human Civilisation.

whose head was Pontifex Maximus, the chief Bridge Builder." * Something of this may be pointed out to the children, who will know that the head of the great Church of Rome is still called the Pontiff. In official documents in Latin he is styled "Pontifex Maximus." A "bridge-maker" is rightly regarded as a title of the highest honour, and, indeed, bridge-making is a symbol of much significance in art, in philosophy, and in religion.

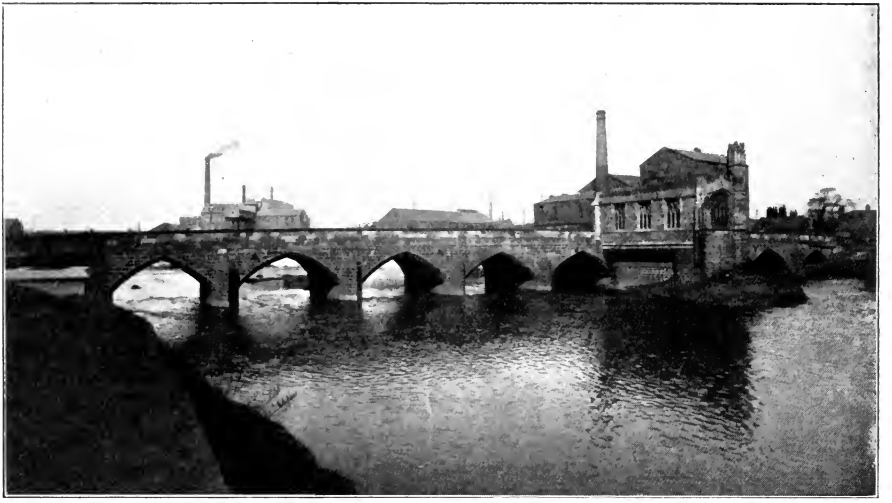
Lead the children to consider what the first bridge would be like. A log of wood would be thrown across the stream, or stepping-stones would be arranged and connected by planks, thus foreshadowing the piers and arches of later times. In deeper streams a pile of stones would be raised to form a loftier pier. For many generations men were content with some simple variation of the log bridge, or with a dam or mound of earth forming a raised causeway in the bed of the stream or across the undrained marsh. At last the Romans found out the secret of the arch, applied it not only to the roofing of buildings, but to the making of bridges, and taught it to the peoples whom they conquered. The Britons who lived under the Roman Conquest must have helped their masters to build arched bridges over English rivers, for bridges were necessary to the continuity of the great Roman roads which they drove through the woods and marshes of our island.

Earliest Types of Bridges.

Bridges were always subject to peril through streams in flood or through workmanship not fitted to the strain of the current. It is on this account that we have legends of sacrifices—sometimes of human sacrifices—made to the river god at the building of a

Bridges and Human Fear.

* Hilaire Belloc.



Bridge over the Calder at Wakefield in Yorkshire, with a Chantry Chapel standing upon it, built by Edward III and rebuilt by Edward IV in Memory of his Father.

bridge in order to avert his anger at the indignity put upon him by this chain of wood or masonry. The grim hint of the "prisoner" in the popular children's game of "London Bridge is broken down" is thought to be a reminiscence of this kind of sacrifice.

In Christian times the bridge was put under the protection of a saint in order to ensure its safety.

Chapels on Bridges.

Thus we find chapels built near the bridge or upon the structure itself. Here the traveller could pray for protection on his journey or give thanks for his safety. London Bridge had a chapel dedicated to St. Thomas of Canterbury. Chapels on the bridges of St. Ives in Huntingdonshire and Wakefield in Yorkshire may still be seen.

It was very important that bridges should be kept in good repair. This duty ought in feudal times by

Repair of Bridges in Olden Times.

rights to have fallen on holders of land—it was one of the three * imperative duties, the others being upkeep of roads and arrangements for military defence. But since landholders could not always be made to do their duty, and poor travellers crossing dilapidated bridges were in danger of perishing, religious people formed themselves into guilds for the upkeep of bridges as well as of roads. One of these—the Guild of the Holy Cross in Birmingham—existed for two centuries, from the reign of Richard II to that of Edward VI, and kept in repair "two greate stone bridges and divers foule and daungerous wayes." Sometimes a pious and charitable person would build a bridge and leave a sum of money to keep it in repair —give it an endowment. Thus, Queen Matilda in the twelfth century built a bridge of stone over the

* *Trinoda necessitas.*

river Lea at Stratford, near London, which, with its great "bows," or arches, gave a name to the suburb of Bow.

Queen Matilda's bridge was first cared for by a neighbouring monastery, but one of the abbots gave over his charge to a certain Godfrey Pratt, who built a house on the causeway beside the bridge, put iron bars across it, and charged a toll to all who passed "except the nobility," whom he took good care not to molest. A toll was an obvious way of meeting the expense of repairs. Another way was to ask for voluntary contributions. The priests who had charge of the bridge chapels of which we have spoken would receive alms from travellers, some of whom, indeed, might be sheltered in a guest-house formed by the crypt. But the care of bridges, as of roads, was a haphazard matter. We read of such neglect as to cause not only the piers to be easily swept away by floods, but also of the floor of the bridge being so grooved into ruts that the arches were worn through, and every time a cart passed fresh stones disappeared into the river.

Forms of Bridges.

The children will see the advantage, considering the peril of bridges, of having them put under the care of "authorities" who are responsible for their repair. These authorities for road bridges are now the County Councils. Engines or large loads above certain weights are prohibited from crossing certain bridges. Let them notice the bridges in their own district. They pass, not only over rivers and streams, but over ravines and valleys (viaducts). Railways and even canals are carried on bridges. Are they of stone, iron, or wood? The bridges are supported in various ways. Let them mention local instances of *arched* bridges, note and roughly sketch the shape of the

arches. How many arches are there? Are there any buttresses against the piers?

Are all the arches equal, or are some higher than the others? Ruskin has a beautiful note on this, the substance of which children who live near some of our old bridges should certainly hear, and the fact pointed out to them, or, better, rediscovered by them: "All rivers, small or large, agree in one character—they like to lean a little on one side; they cannot bear to have their channels deepest in the middle, but will always, if they can, have one bank to sun themselves upon, and another to get cool under; one shingly shore to play over, where they may be shallow and foolish and childlike, and another steep shore, under which they can pause, and purify themselves and get their strength of waves fully together for due occasion. Rivers in this way are like just men, who keep one side of their life for play, and another for work; and can be brilliant and chattering and transparent, when they are at ease, and yet take deep counsel on the other side when they set themselves to their main purpose. . . . Now the natural way in which a village stonemason therefore throws a bridge over a strong stream is, of course, to build a great door to let the cat through, and little doors to let the kittens through; a great arch for the great current, to give it room in flood time, and little arches for the little currents along the shallow shore. . . . And thus we have the general type of bridge, with its highest and deepest arch towards one side, and a train of minor arches running over the flat shore on the other: usually a steep bank at the riverside next the large arch; always, of course, a flat shore on the side of the small ones; and the bend of the river assuredly concave towards this flat, cutting round with a sweep

Ruskin on Unequal Bridges.

into the steep bank; or, if there is no steep bank, still assuredly cutting into the shore at the steep end of the bridge." *

Modern engineering, as Ruskin goes on to point out with some severity, prefers a level roadway and equal arches. But this is sometimes inevitable. We cannot go into questions of mechanics, but the children may at least notice different forms, such as the *plain box girder* of an ordinary railway bridge, or the

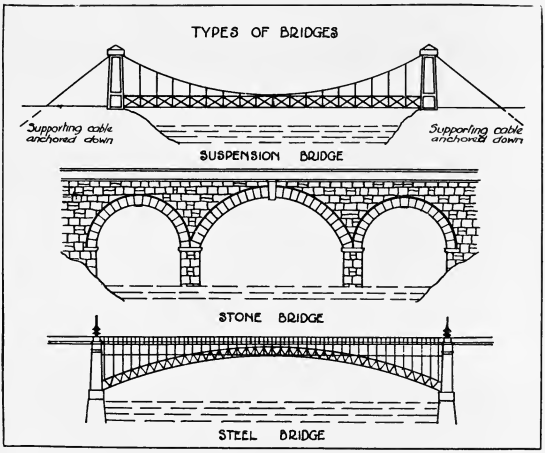
Common Types of Bridges.

Bridge with Unequal Arches, Abingdon.

tubular arched bridge, of which the supporting members are arched tubes. These are the highest forms of the principle of the plank across the stream; they are strongest in the middle, where the tendency

* *Elements of Drawing*, iii.

to bend is greatest. In the *cantilever bridge* (cant = angle), the cross-beams are supported on brackets from below. This principle is found in its primitive form in the Himalayas. The brackets are to lessen the length to be " bridged " by the " plank " in the middle. Its highest development is the Forth Bridge. Arched bridges keep together and carry



weights by the pressure of the stones against each other; therefore are thin in the middle. A *suspension bridge* is often quite beautiful in its way: it is a roadway actually suspended or hung by ropes, chains, or wire cables from massive towers of masonry at either end, and securely fastened into the earth beyond.

Collect any stories or pictures relating to an historic local bridge—*e.g.* London children should hear of London Bridge at the time when it was the *only* bridge, when houses and a chapel were built upon it, and when a wooden drawbridge, introduced into the midst of nineteen stone arches, protected the city from invaders, a tower of masonry just by the drawbridge showing the dismal garniture of the heads of those who had perished for treason. In some towns the children may be reminded once more how the bridge, replacing perhaps an ancient ford or ferry, and making part of a continuous road, was of such importance that it gave its name to the town. Thus, Bristol, or Bristowe, is the "stow" of the bridge over the Avon. *Cf.* also Brixham, Brixton, &c.

Bridges in Town Story.

The Inn

Another necessity of travel on a road is the inn. This is a good opportunity of bringing out the difference between a genuine inn and a mere shop for selling alcoholic drinks. An inn, as the word shows, is a place which is *in*—*i.e. out of* the discomfort of travel, perhaps in bad weather and on bad roads. In London great nobles were accustomed to keep what we now call a town house, but which was then called an "inn"—a place which would serve as a resting-place and home when they left their feudal estates in the country—*e.g.* Lincoln's Inn, now the home of lawyers, was the town house of the Earl of Lincoln. A rich man could have his own private "inn"; a man of moderate means must seek a "common" inn—a "public house" of entertainment. Inns thus fulfilled a very useful purpose in towns.

"Inn" and "In."

They were also necessary on the great roads, especially in days when the roads were ill-kept and wearisome to traverse to a degree we cannot now imagine. On account of conspiracies between innkeepers and highwaymen, the common law evolved the principle that innkeepers are responsible for guests' baggage, etc., placed in their keeping.

Inns for the Rich: Monasteries.

Rich people were received as guests at the monasteries, for "most of these houses had been endowed by the nobles, and each one, recognising his own land, or that of a relation, or friend, or an ancestor, felt himself at home in the monastery." * These were lodged in the guest-house, a building raised for the purpose. "Hospitality was also exercised in castles; barons who were not at feud willingly received one another; there were much stricter ties of brotherhood among them than there are now. In the Middle Ages men received their equals, not by way of simple charity, but as a habit of courtesy and also for pleasure. Known or unknown, the travelling knight rarely found himself refused the entry to a country house. His coming in time of peace was a happy diversion from the monotony of the days." †

In the Castle.

As the children will probably know from the reading of historical tales, the new-comer ate with the family on the daïs in the common hall; his followers sat at the tables in the lower portion of the room. The hall, when the movable tables had been taken away and mattresses had been spread upon the rushes covering the floor, was also the sleeping-place for the meaner folk, while the guest probably slept in a room on the first storey above the daïs near or in that of the lord,

* Jusserand: *English Wayfaring Life in the Middle Ages.*
† *Ibid.*

with a window in it looking down into the hall. Monasteries and castles thus formed, as it were, free hotels for the aristocracy.

While very rich people were received in this way by their friends, very poor people were received at monasteries for the sake of charity. The places provided for them were often called "hospitals" (*vide* pages 94 and 247-248).

For the Middle Classes: Inns.

The inns were for the middle classes, such as merchants, farmers, or packmen on their way to markets, fairs, or on pilgrimages. A number of beds would be placed in one room—a bed would cost 1*d.* or 2*d.* in the money of those times—and the guests would pay separately for each article of food they ordered, wine 1¼*d.*, meat 5½*d.*, and so forth. As time went on, and rich men became less isolated, less dependent for excitement on chance guests and more inclined for privacy, the castles ceased to be places of entertainment. The monasteries also were destroyed, and inns became as necessary for the wealthy as for the middle-class people who travelled. As trade increased, too, there were more travellers on the roads, and so in every way there was need for inns.

Alehouses.

But, besides the regular inns there were also to be found upon the roads small alehouses, each with a long pole with a tuft of branches on it hanging over the door. This was more like the ordinary modern public-house of our towns, which does not aim at providing travellers with a temporary home, but only with drink, or, as it is still called, "refreshment." We are reminded of the original use of inn and alehouse by the still existing law "only *bonâ-fide* travellers" may be served with refreshment during the hours of Divine

Service on Sundays, though in many cases the ordinary patrons of these places are not travellers. Even now, all innkeepers must by law accommodate soldiers on the march; this is termed "billeting." For this purpose the police keep lists of the houses, showing the accommodation.

Licensing.

Until the middle of the sixteenth century any person could keep an alehouse; there were no licences necessary as now. But there must have been abuses of such places, for we find that in 1552 justices of the peace were given power to "remove and put away the common selling of Ale and Beer as they thought fit." Henceforward only houses "admitted and allowed in the open sessions of the peace" were to be used for sale of liquor, and justices of the peace were further instructed to take bond and surety of the occupiers, "for which recognisance the party so bound shall pay but 12 pence."

Problems of the Liquor Traffic.

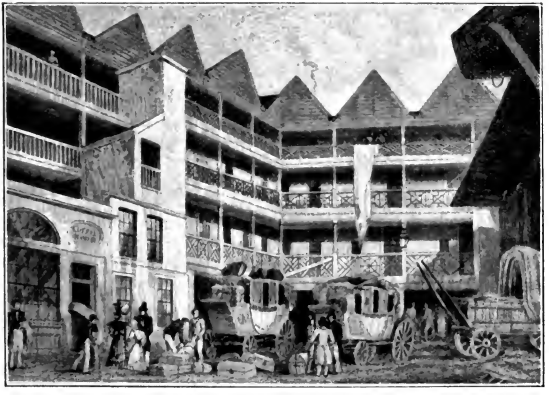
This was the beginning of what are known as licensing laws.* In 1643 also liquors containing alcohol were taxed, so as to be made to yield an income to the State. Even teachers who are not strong advocates for temperance, in the sense of total abstinence, will probably feel that there are in our towns too many "licensed houses" for the mere sale and consumption of drink. Some will feel it their duty to suggest to the growing generation how the number of these may be still further reduced. Others will rather note

* Jusserand's *English Wayfaring Life in the Middle Ages* gives interesting descriptions and illustrations of bridges and roads.

Teachers who wish to deal more thoroughly with questions of the liquor traffic, licensing, &c., should consult the various works of Messrs. J. Rowntree and A. Sherwell; also Mr. and Mrs. Sidney Webb's *History of Licensing in England.*

what attempts have been made, or may still be made, to transform these places from mere drinking shops into "poor men's clubs." The legitimate use of the inn in recent times may be illustrated by stories of coaching days, when inns were a necessity. The "public house," we must remember, was once a "common inn," as distinct from a private "in." In our own times its newer analogues are, of course, the roadside inn with motor "garage," and the big hotels at railway termini, as well as the seaside lodging or boarding houses, and the humble, but very useful, cyclists' rest.

Modern Substitutes for Inns.



THE YARD OF AN OLD INN, SERVING THE SAME PURPOSE AS A MODERN RAILWAY STATION

CHAPTER XIX

ROADS AND STREETS (3)

We will suppose the children to have obtained some imaginative glimpses of the miserable roads of the past, full of ruts, littered with heaps of stones thrown down anywhere, and often mere bogs in winter. This will help them to appreciate the order and convenience we now enjoy, and they will be interested to know something about the construction and upkeep of a modern road. In this country, as in all civilised countries, we look upon good roads as a matter of course, and by "good" we mean smooth, properly provided with bridges, and not too steep. For instance, if the road is paved, its slope ought not to be more than one foot in every sixty-three feet; if it is macadamised, the slope may be twice as steep; and, if it is laid with gravel, a horse can trot down even a slope of one in fifteen with safety.*

What is a "good" Road?

Let the children realise that there is a certain dignity in road-making and even in road-mending. Tell them how John Ruskin once led out a party of undergraduates to work upon a road near Oxford. But as late as the eighteenth century our roads were made so badly because able men regarded such work as beneath their attention. Thus we read that in one instance when a blind

* The teacher should read the interesting chapter on "Transport" in Professor Lyde's *Man on the Earth*.

carrier proffered a contract for a portion of a new turnpike road his offer was accepted because it was the lowest. But at last two talented engineers, Telford and Macadam, turned their attention to the roads of the country, and considered how to make them, not in the old haphazard fashion, but on scientific principles. One of these, Macadam, has given a new word to our language. He saw first of all that the roads must be drained not only of the ordinary rain-water, but of water that is often to be found just below the surface, or that might flow upon the surface from higher ground. He therefore arranged to have open ditches at the sides of roads and, where necessary, drains beneath the surface. In making the roads, too, he saw the necessity of a slight downward curve (about one-sixth of the surface) from centre to sides. The children will notice this curvature in any ordinary road, and may also see the drain pipes that sometimes open from below the surface of the road into the ditches at the side, and the culverts or larger drains that here and there carry running water beneath the roadway. He also saw that it was of no use to put stones or pebbles on to ordinary soil, for the water trickled in between them, mud worked up, and stones and pebbles sank under the traffic. He therefore removed the top soil for a depth of fourteen inches, laid down a depth of seven inches of coarse cracked stones, filled the interstices of these with finer cracked stones, and then above this were spread seven inches of small broken stone or "road metal," of which each piece was to be capable of passing through a ring two and a half inches in diameter. This upper layer was rolled, finished with stone crushed to dust, and again rolled

The Beginning of Modern Road-making.

"Macadamised" Roads.

smooth. This is the way in which an ordinary "macadamised" road is made.

Town children, especially in London, will notice variations of this "macadam" treatment in the streets. Remind them that a "street" is merely a paved road. The houses standing on either side are not really parts of the street itself, they are so placed for convenience of access to the paved road. Many streets in towns are paved with large pieces of stone called "setts," which are more durable and less dusty than the ordinary macadam. In thoroughfares where the noise of the traffic over the "setts" would interfere with the work or comfort of the people living along the street wood pavement is substituted. Blocks of hard wood dipped in tar are laid on a foundation of cement and concrete. These, however, wear out somewhat speedily. It is now becoming usual to employ asphalt. The substance laid down, which is manipulated in a heated powdered condition, is a limestone which has been impregnated with bitumen. This has three advantages; it is extremely durable, it is elastic, and it is very easily repaired. When it is first laid down the tracks of the wheels passing over it are noticeable, but when it is thoroughly compressed no trace remains of the heaviest traffic. The children will know that very much less jolting is experienced when riding over wood or asphalt than over stones.

Thoroughfares in Towns.

Let the children note the curvature in a wide street and notice also the position of the gratings that are provided to carry off the surface waters. Roads in and near towns are constantly watered to bind together the dust raised by the traffic, and thus lengthen the "wear" of the surface.

The pavements of the "sidewalks," as the Ameri-

cans call them, are flagged or asphalted in towns wherever the traffic is great, though tarred, gravelled, or ash-strewn footpaths are allowed in "new" neighbourhoods. A "flag"-stone means one that easily separates into flakes or layers, and at one time flat stones were actually used. Now, however, artificial "flags" are made of crushed granite, gravel, or other suitable material mixed with Portland cement and cast in moulds. When the moulds are set they are saturated with a chemical substance (silicate of soda) and look like natural stones. The kerbstone or curbstone must be specially strong in order to withstand blows from wheels. Kerbstones are made of granite or York stone. Let the class notice how they are set relatively to the "flag"-stones.

Pavements and Kerbs.

The question may now be considered, Who is responsible for all this varied work? Who keeps in order the roads between our towns and villages and the paved streets of the towns? Some few roads belong to private persons, but most of our roads are "highways" or public roads over which all persons have full right of way at all times for walking, riding, and driving. These highways have either been such from immemorial times, or special Acts of Parliament have caused them to be constructed to meet the public needs. Private owners, too, may "create" a highway by dedicating the soil to the use of the public for that purpose, or if they do not so dedicate the land, but merely allow the road to be used for a certain number of years without interruption, it becomes a highway. Hence private owners of roads who do not wish to lose control of them, though they allow the public to use them, will close them for one day in the year in order to maintain their ownership.

What is a Highway?

All the highways, then, belong to the public, and indeed a highway may be defined as a road which has to be kept in repair by the public. Some of them, as we have seen, are regarded as *main* roads because they connect important places and have a large amount of traffic; others, which are less used, are bye-roads. The "public," using the word in a loose sense, is responsible for the upkeep of all these. But since that portion of the "public" which uses a road generally resides in the district through which it runs, the burden of maintaining the highways falls naturally upon *local* areas. And, indeed, except for "motor" journeys, our roads are now seldom employed for long-distance traffic; their chief use is to distribute to the country-side goods brought by rail or sea to the nearest station or port.

Who maintains the Highways?

We have not yet discussed the various forms of local government, but some of the terms used to designate the various "authorities" will be known to the pupils. They can be told, therefore, that the *main* roads of any area are kept in order by the council of the *county* through which they pass. But all other roads are under the control of bodies administering smaller areas, such as Borough Councils and Urban District Councils. Let children look for the letters U.D.C., or any other letters, on roadside stones. The full title of the Urban District Council used to be Urban *Sanitary* District Council, because, when the Act of Parliament which created these bodies was passed, it was felt that the questions of public health which our forefathers had neglected—with evil results in the form of epidemic diseases such as cholera, for instance—were of the most urgent importance. It was obvious that the same body which overlooked the sewers should have charge of

the highways, with the channels used for draining land. Borough Councils usually, and the Urban District Councils can, if the inhabitants wish it, retain the control over the main roads in their own areas instead of giving them into the care of the County Council. They should protect all public rights of way and prevent encroachments on the roadside wastes, and help in maintaining public rights in common land. Another body, the Parish Council, has the duty of keeping in repair any public *footpaths* within the parish other than footpaths at the side of public roads.

How Highways are paid for.

The provision of highways in any area is paid for by local rates. The Urban District Councils levy what is called a General District Rate to enable them to meet their expenditure as sanitary authorities, and the care of highways, as we have seen, is classed with matters relating to public health. It has been felt, however, that local rating is not altogether equitable in these days of motor traffic. The local rate assumes that the people who pay for the roads are those who use them for going to market, &c. Travellers are welcome if they bring "custom" to the area. But why, it is asked, should farmers in the shires pay rates to maintain roads for people who, not living in their district, choose to use their roads for "motoring," say, from London to York? A tax on the petrol used for motor cars, to be applied to the upkeep of the great highways, is felt to be a fair arrangement (*v.* pages 432 and 440 for difference between a *rate* and a *tax*).

Planning of Roads and Streets.

The course of the roads in the open country, it will be found, generally follows the easiest route, along a river valley, through a gap in the hills, for instance. The course of streets in a town, however, seems to

follow no system at all. Show the children plans of some rectangular American city and let them see the convenience and also the monotony of such an arrangement. In some of our older towns the arrangement of the streets is very puzzling. A main road which appears to have run straight to the town will seem to lose itself in a tangle of narrow streets before it passes out again. This is due to historical causes. The town was in existence before the road, its lanes and alleys grew up in haphazard fashion round its church or market, and it was only later that it felt the need of joining on to other centres and made the road accordingly. The streets were not *planned*; they grew up accidentally. Thus in the City of London we find many narrow winding streets running down towards the river. It is said that these represent the narrow lanes between the gardens of the merchants who once lived there. In modern London and in other towns it is becoming more usual for corporations to consider the relation of streets to one another, and the general aspect of the "building line" as one looks down the street, before they pass plans making or altering streets and the houses on either side. The "building line" is also required to prevent people from building forward on their own land, and so shutting out light and air from their neighbours. In the years to come we may expect more attention to be paid to securing noble views and beautiful perspectives in our principal thoroughfares and open spaces. Draw the attention of the children to any specially fine "street vistas" in their own district.*

* *V. Town Planning,* by Raymond Unwin.

CHAPTER XX

THE TRAFFIC ON THE ROADS

THE streets of the town, and in a less degree the highways that link the towns, have constituted through all ages the great free spectacle of the people. Rudyard Kipling's wonderful picture of the Great Road in "Kim" might be paralleled, though in quieter tints, on any great highway in our own country. There is something in the mere view of the coming and going of people and vehicles which never ceases to attract. And the ordinary town dweller, no less than Dr. Johnson and Charles Dickens, unconsciously turns his feet to the most thronged thoroughfares. One observer, Professor MacDougall, attributes this to a merely irrational gregarious instinct such as sheep show. Another, Mr. Reginald Bray, points out in his book, "The Town Child," that a certain excitability is bred in the dwellers in cities which is both aroused and partially satisfied by the life of the streets. Mr. Bray remarks elsewhere of town life: "A mass of impressions are hurled at the spectator, a thousand scenes sweep by him, but there is nothing to hold them together, nothing to produce a sense of order, nothing to give a perception of similarity. Consider, for example, the public street: an unending line of vehicles moves on, ceaselessly altering and apparently coming out of the nowhere and going into

The Movement of the Streets.

the nowhere. . . . There is only a chaotic confusion of change, with nothing permanent to be the supporter and bearer of the change. . . . The continuous panorama of shifting scenes produces no conception of a world of connected phenomena." * Doubtless this is true, but nevertheless these are the inevitable conditions under which thousands of children must be brought up. Can the teacher do nothing to bring something like cosmos out of this chaos of impressions —to give significance to the transient shows presented by the highways? We believe that he can.

He might proceed somewhat in this fashion : The children take a keen interest in vehicles. This interest can be made the starting-point for a backward and outward view of all that wheeled traffic means. The highway is constructed mainly for the wheel. Every child likes a wheeled toy. Have one of these as a model and examine it with the class. Now the wheel is a marvellously complex human tool. In the case of other tools we can often see that Nature has given us suggestions. Thus the head of a hammer is like a closed fist, and the handle corresponds to the arm. The idea of an oar was doubtless developed from a stretched arm and extended hand. A floating log probably first suggested the idea of a boat. But the wheel is not found in Nature at all. No natural organism can possess a wheel as one of its parts, because complete rotation on an axle, which is the essence of the wheel, would involve in a natural organism the rupture of tissue. It must have taken man a long time to arrive at an arrangement so ingenious. At first people, perhaps, moved heavy objects by rolling them on round logs, and we may

The Wheel a great Factor in Civilisation.

* Essay on "The Children of the Town" in *The Heart of the Empire.* (Fisher Unwin.)

still sometimes see workmen moving heavy articles, such as iron safes, on steel rollers. There were doubtless many stages of improvement which it is now impossible to trace, but eventually the rough wheel, perhaps something like that on a child's toy go-cart, was an accomplished fact.

Once arrived at, the wheel made the higher civilisation possible. Not only the conquest of distance achieved by modern modes of locomotion, but all the elaborate mechanical inventions by which man has amplified the power of his hands lay hidden in the first wheel, however clumsy it may have been.

It is not surprising, therefore, that man takes a special delight in the wheel, and is always discovering fresh uses to which it may be applied. All children, whether in town or country, have constant opportunities of watching wheeled vehicles. Set them to observe how each kind of vehicle is adapted to the power which is to be applied to it. Some wheels are made to move by *hand-power*—barrows and light carts. These are made to be pushed from behind. Dog-power was formerly used in England, as it is even now used in some countries, for drawing small carts; hence we still have the term "dog-cart," though the use of dogs has been forbidden by law for over seventy years. *Horse-power* is applied to all kinds of light and heavy carts, and to great wagons requiring the employment of several horses. Vehicles drawn by animals are *dragged* from the front, and the vehicle is built to suit the height of the animal. A tramcar runs on a specially prepared part of an ordinary street, its wheels moving along sunken rails laid in the middle of the road. The word "tramcar" really means "trammel car,"

The Wheel and the Power applied to it.

the rails being trammels to confine the wheels to the track.

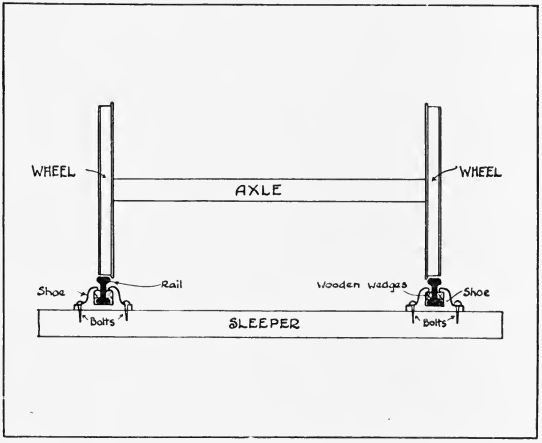


Diagram showing the Flanged Wheels which confine a Tramcar or Railway Car to the Track.

Very few tramcars are now drawn by horses. Electric traction is everywhere superseding them. Children are keenly interested in electric contrivances, and both in town and country they are now brought closely into contact with some form or other of the mechanical use of electric power. It is not easy to explain to children the details of electric contrivances, but there is fortunately no real need to go much into these. It is important that our scholars should realise certain generalisations. They should know, for instance, that the force used to propel electric cars and to work the telegraph and the telephone is the same as that with which

they are familiar in Nature through the phenomena of thunder and lightning. *Electric power* should be illustrated by reference to the destructive force of lightning. We cannot explain to them what electricity is, but the children can be told that the force which splits an oak can be guided through metals. Let them notice the lightning-rod fixed on tall buildings. That a *force* is conducted through the wires can be illustrated by the familiar "shocks" felt when a galvanic machine is used. If the tramways of the town are worked on the "overhead" system the children can see how the long pole above the car makes contact with the wire running horizontally above it, and they will notice the miniature lightning flashes which occur every now and then. If the cars are worked on the underground system, the only essential difference is that the motor or driving machine which each car carries gets its driving "power" of electricity from a charged rail running underneath the road, the long slit between the rails on which the cars run being left to make possible the connection between the motor of the car and the "live rail" through which the electric force is conducted. Here also, below the car, flashes of light may be seen occasionally. These electric sparks or flashes are really lightning, only on a very small scale. The story of the work done in the power station where the currents are generated must be reserved for the technical school, but the children may be told that here also, as in machinery generally, the results are largely obtained by wheels acting upon wheels.

Electric Powers.

The children will know that horse-power is being superseded by what is called "motor" power. That is, the vehicle carries within itself the machine that

causes it to move. In the case of the motor omnibus, carriage, or cab which interests the children so much the motive power is usually petrol, derived from petroleum—a mineral oil obtained from natural wells and springs. The petrol "motor" should be explained by reference to the explosive force of a mixture of air and coal-gas, or air and petroleum vapour, of which the children will have heard in connection with domestic accidents. The series of *small regulated explosions* which cause the vehicle to move are both heard and felt. The class might also be shown that it is really the same *explosive production of gases* by the ignition of solids which drives the shot from a gun. It is obviously outside the province of the non-technical class to explain the machinery in detail, but the children should be put in touch with the main conception, and any analogies coming within their experience should be pointed out.

"Motor" Power from Petrol.

Steam as a motive power may be considered when we deal with railways, but heavy wagons moved by steam are often seen on the roads and streets. All these powers—hand, horse, steam, petrol, electricity—are so applied as to make the wheels of vehicles go round, either directly or indirectly through the movement of other wheels.

To return to the streets. The children will know, perhaps, that wheeled vehicles used for private purposes are taxed, though trade carts bearing the owners' names are free of taxes. Vehicles have their own characters, their points of strength and beauty. William Morris, the poet, desired to be carried to his grave on one of the broad wagons, painted red and blue, and used for carting hay, which are so picturesque and so admirably fitted for their

Modern Vehicles.

purpose. The horse-drawn hansom cab has been called for its lightness and elegance the "gondola of London." The modern motor carriage, square-built and compact, is typical of modern efficiency, carefully calculated for use, and gradually becoming less ugly in form. How are the various types of carts or carriages which the children see in the streets fitted for their respective uses?

Help the children to understand something of the evolution of the cart and carriage. In such a book as Jusserand's "English Wayfaring Life in the Middle Ages" (chapter ii.) the teacher will find pictures of the carts and carriages of a bygone time. A fourteenth-century MS. in the British Museum shows a common cart, a mere square massive box made of planks borne on two wheels and drawn over a distressingly uneven road by three dogs, whose efforts are helped by those of a man pushing from behind. Even a royal carriage was a most cumbrous and awkward affair, gorgeous with carving and gilt, but in structure merely an oblong cart with a tunnel-like vault or hood over the top. It was no wonder that both men and women preferred to ride on horseback to being jolted in a carriage. Even in the fifteenth century, when a country gentleman, John Paston, was ill in London, his wife, in writing to him, did not think of suggesting that he should take a carriage in order to come home to be nursed. There was nothing for it but to stay in London until he was well enough to bear the horse ride, unless, indeed, he had been moved in a horse litter. In London itself in the time of Queen Elizabeth there were not more than about five hundred wheeled vehicles. The increase in the number and the improvement in the construction of these partly depended upon and partly caused the

Ancient Vehicles.

improvement of the roads. The two things evolve together. Modern vehicles with comparatively delicate springs, making them comfortable for riding in, are only usable on good roads. Farm carts and army wagons, which are made for use where there are no roads, are built without springs, and are very uncomfortable things to ride in. We now look forward, owing to the exigencies of motor traffic, to new roads of a dustless type, and also to special roads being set apart for high-speed traffic; while, as we know, new types of wheels and "gear" are constantly being developed to secure speed and smoothness and to resist wear.

The Rule of the Road.

Probably no symbol of law and order is so impressive to a child as that of a policeman standing in a crowded City crossing-place and restraining, merely by a lifted hand, a whole line of waiting vehicles. The costermonger's cart, the brewer's dray, and the peer's carriage must alike stand still while a group of foot passengers cross the road. The way in which the currents of traffic move across such a space illustrates the rule of the road in this country. In driving each party is required to bear or keep to the left. If a nervous person is crossing a thoroughfare where there is no policeman to "hold up" the traffic for him, he should therefore look chiefly to the right until he gets half-way across the road, when he must look chiefly to the left, for it is from this direction mainly that vehicles will be coming towards him. (The word "mainly" and not "exclusively" is used, because the foot passenger always has to remember the possibility of a vehicle crossing over to his side of the road in order to pull up.) Let the children notice also that when a vehicle passes another going in the same direction, the foremost vehicle bears to the left

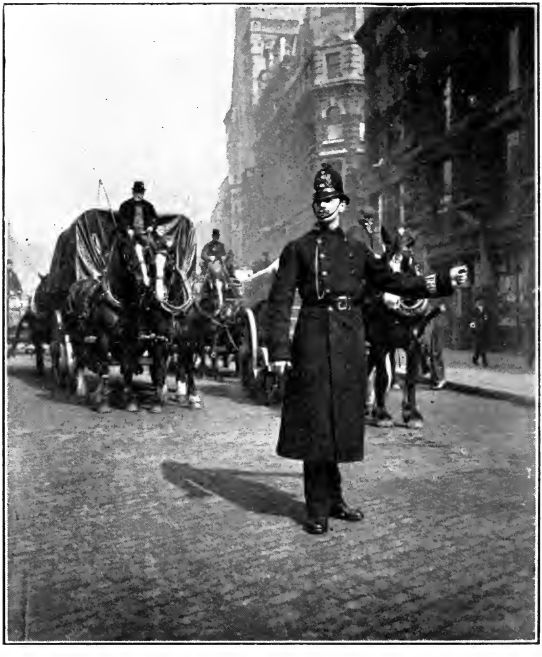
and the other passes on the "off" side, or side farthest from the pavement. This rule about passing, by the by, has to be modified somewhat on roads where tramcars run. In a road which is fairly clear of traffic the driver need not keep strictly to his proper side, but if he does not he must maintain a sharper look-out. At night he should adhere to the rule, so that the position of his lighted lamp, and hence the space on the right of him, may be judged at a distance. All carts, &c., must carry lamps at night, and if only one lamp is in front it must be on the "off" side.—*i.e.* the side farthest from the footway. The rule for "lighting-up" time for cycles as well as for vehicles is another "rule of the road" framed in the interests of pedestrians and other users of the road, as is also the regulation about the cyclists' bell and the motor "horn."

The rule of the pavement is "keep to the right," and young people should be taught to observe it.

Street Courtesy.

They also need a hint that it is contrary to "street manners," because it is contrary to the rule of consideration for others, to monopolise the pavement by walking three or four abreast. The ethics of borough laws against the defilement of the pavement by spitting, and against throwing down banana skins and orange peelings instead of putting them into the proper receptacles, need pointing out to young citizens in certain town areas. This kind of moral instruction comes in with better chance of acceptance if given by the indirect method—that is, if brought in apparently quite by the way, in the course of an "observation" or "Town Study" lesson, rather than as part of a set homily. The child is occupied with the intellectual aspects of the lesson, and the moral slides in

unobtrusively to be incorporated with the rest of the subject-matter, and to be acted upon not as the result of a sententious exhortation, but as the outcome of a rational view of the whole question.



A Symbol of Law and Order

CHAPTER XXI

RAILWAYS

School children are easily interested in railways; even more than in the varied spectacle of the streets. The isolation of the railway track, the magnificent power of the massive engine drawing its train of carriages with such ease and smoothness, the long perspective of the metals, the sinuous curves sometimes made by the train in its course, are quite unique in their appeal to the eye. And despite Ruskin's diatribes against railways it is certain that a moving train, seen at a distance winding through a fair landscape, is by no means an unpleasing sight; while seen near at hand it is at least imposing.

Keep in the child's mind that a railway is a *specialised road*, and let the principle of the steam locomotive be explained to him as part of his general education. It is not difficult to do this in outline, at least, though details of mechanism belong, of course, to technical education. The homely phenomenon of the dancing kettle-lid, moved upward by the pressure of steam from within, may be the starting-point in the explanation to the children, as it is said to have been the starting-point in the discovery of the first steam-engine by James Watt.

The Principle of the Steam Locomotive.

The children will readily see that in the case of the kettle or saucepan upon the kitchen fire a very small

amount of steam in the narrow space above the water does the lifting work, and that as soon as the steam is able to escape the lid falls back again. It will be easy to show them how, in place of the saucepan, we might arrange a cylinder with a closely fitting lid which would just move *inside* the cylinder. A rod like a broom-handle could be fixed to the lid, and

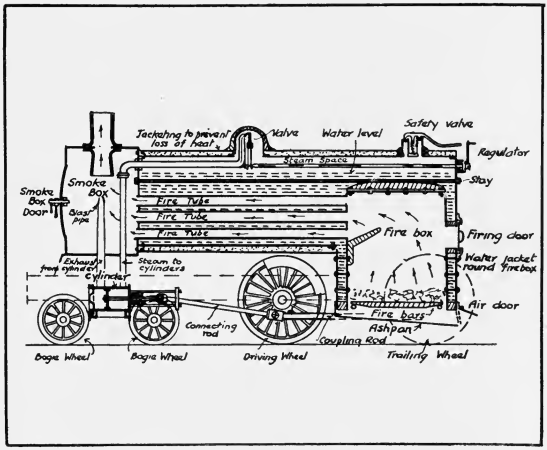


Diagram showing parts of a Locomotive Engine

then we should have in essence the piston-box and the piston-rod of the steam-engine. The children will understand that it is only when steam is cramped for space—when it is under pressure, as we say—that it can do work; and by a simple diagram they could be shown how steam from a big kettle or a boiler might be conducted to our cylinder and made to move the disc or "lid" with the piston-rod

attached to it. They can easily be made to understand also how the piston can be driven alternately forward and backward by causing steam to come in first on one side and then on the other, escaping after its work is done.

The External Parts of the Engine.

Plenty of opportunities may be found for the actual observation of a steam-engine at work, whether stationary or locomotive, and the principal and essential parts can be pointed out—the boiler, where the steam is formed; the furnace, which supplies the heat; the piston-box, with its piston-rod protruding and by its to-and-fro motion turning a wheel which in its turn moves other wheels.

The Railway a Specialised Road.

Boys will eagerly collect picture postcards and drawings of the types of engines in use on their own or other railway lines and compare their "points." The class should follow in imagination these engines on their journey. They should be specially interested in any railway line that runs through their own town. What is its terminus? Through what towns does it pass? Through what kinds of scenery? What kind of goods does it carry in addition to its passenger traffic? The railway station is the starting-point of an imaginary excursion into different parts of the homeland. The children should realise that, like the ordinary highway, the railway links their own town or village with the ends of the earth.

A railway is, in fact, a specially prepared road reserved for a certain type of wheeled carriage. With this idea in their minds, the children may be interested to hear how the reservation came about.

The railway had its origin in the tramway. Before the days of Macadam (*vide* Chap. XVIII.) the roads were with difficulty kept in repair,

Origin of the Railed Road.

and colliery owners on Tyneside had great trouble in getting their heavy wagons of coal from the pit's mouth to the shipping place on the Tyne, or to the towns where it was to be consumed. This led to their laying planks for the wheels to run upon and so prevent the cutting of the deep ruts which were commonly found in the roads. These planks or timbers were later kept in place by being fastened to heavy timbers laid across the road —"sleepers," as they were called—and covered with earth to protect them from the horse's feet. Later on two parallel rails of timber instead of wide planks, were laid upon the "sleepers." These were made of lengths of good sound oak, with smaller pieces at the joins, which were held in place by oak nails. Bulky carts were made with four wheels fitting the rails. It was found that a horse which could draw only 17 cwt. on a common road could now, on these railed roads, draw 42 cwt.

Naturally improvements were gradually devised. Cast-iron rails were first placed at the top of the wooden rails; then were used in their place. These rails had a continuous flange or ledge on their inner edge which served as a *trammel* to keep the wheels on the track; hence our word "tramway." (*V.* page 172.) The flange was soon, however, given to the wheel instead of to the rail. The wheels, it will be noticed on modern railway carriages, engines, and trucks, clasp the rails on either side as they run over them.

The Railed Road used for Passengers.

To substitute the more durable wrought iron for cast iron was another obvious improvement. The advantages of this mode of transport were so obvious that people naturally began to demand that it should be used for the conveyance of human beings. The great

coach roads of the country were now kept in good repair, but the coach fares were very expensive and the journey was slow. Thus it took at least fifteen hours to get from London to Birmingham, a journey now accomplished in less than three hours. It was in the North Country, however, that the railway enterprise began. In 1821 a railway was opened from Stockton to Darlington. The Act of Parliament which sanctioned the railway said that the power might be applied by animals, men, or *otherwise*. The "otherwise" gave opportunity for the employment of the *steam* engine, which had been invented in 1710, but which had been chiefly used for draining water from the mines. Every boy knows that it was George Stephenson, the son of a Tyneside engine fireman, who first combined the steam engine and the railway by the invention of the locomotive. He went to work with his father at an early age, and his interest in his engine amounted to a real love for it. He studied it with care, and though he worked twelve hours a day he went to a night school to study the rudiments of general knowledge. He was made engine-wright at a colliery near Newcastle at a salary of 100*l*. a year, and in 1813 produced his first working locomotive, "The Puffing Billy," as it was called by scoffers, which was used for dragging coal from the colliery to the banks of the Tyne.

The Steam Locomotive.

So dangerous, however, did Stephenson's locomotive then appear, that on the Stockton and Darlington Railway the *passenger* coaches were at first drawn by horses while the *goods* trucks were entrusted to steam power.

The price of coal at Darlington fell from 18*s*. to 8*s*. 6*d*. per ton, and this was only a hint of the more startling changes which the railway system,

by its cheapness and its speed, was to introduce into economic and social life.

Obviously the possibilities of cheapened transport were so tempting as to overcome not only old-fashioned prejudice and unimaginative ignorance (such as that of the member of Parliament who gravely inquired in the House what would happen if a "cow" got upon the rails in front of an advancing locomotive), but also the fear of danger. The line between Liverpool and Manchester was opened in 1830, in the presence of the Duke of Wellington, at that time Prime Minister. A line from London to Birmingham was opened in 1838, and gradually a number of other great lines were formed radiating from London and having inter-connections with one another all over the country, so that there are but few villages in England to-day more than a few miles from some railway station.

Archaisms in the Railway.

The railway system, modern and artificial as it is, contains reminiscences, as it were, of earlier ways and customs. Thus Mr. H. G. Wells has pointed out that the ordinary width of the line, 4 feet 8½ inches, is that of an ordinary cart-track; and the older type of railway carriages—coaches, as they are still called—are modifications of an ordinary closed carriage, though these are giving way to longer carriages of the "corridor" type. We are still said to "book" our seats at a "booking-office," a reminiscence of the old coaching days, when seats were literally "booked." The termini and more important stations, with the adjoining hotel for the accommodation of travellers, correspond to the posting stations and inns that were formerly such centres of bustling activity on the great roads. And the operations of signalling—the lifted rod for danger, the dropped rod

for safety—are merely representations of a man's arms outstretched, or allowed to fall at the side, as may still be seen when goods trucks are being shunted on to a siding under the charge of a man on the line. A man facing cattle who want to take the wrong road, or a policeman regulating traffic, behaves in precisely the same way.

The making of a railway is an interesting topic for a class conversation. In the first place, an Act of Parliament has to be passed in order to give the company which proposes to make a railway compulsory powers to buy land. Owners are obliged to sell their land for the purposes of the company if Parliament is persuaded that the railway would be for the advantage of the nation as a whole. Also the company obtains powers to make bye-laws—*i.e.* laws which are not, like the laws of the land, generally operative, but which must be observed by persons using the railway.

The Construction of a Railway.

The construction of the railway is a great undertaking. There must be a terminus where not only passengers may be booked, but where storage places for goods, locomotives, and wagons can be provided. The lines must be laid so as to secure economy. It is obviously better to avoid steep gradients where possible; thus we find that a railway line tries to follow a river valley or a tract of level country. The Great Western Railway runs along the Thames valley; the Great Eastern follows the valleys of the Lea and Stort; the Great Northern runs first to Peterborough, in the Fen district, then, through level country, to Doncaster, then north through the vale of York and by the coastal plain of Northumberland into Scotland. The Midland Railway, when it leaves the "Midlands" proper to run to Carlisle,

takes advantage of the gap made by the river Aire through the Pennine Hills. Let the children, with a contour map, trace the path of the railway that runs through their own district and see how difficulties have been avoided.

If a range has to be crossed, as when the London and North-Western runs into Lancashire from Yorkshire, it goes over the lowest pass—in this case Shap Fell, between the Pennine Range and the Lake Mountains. If a gradient is very difficult it may be less expensive to make a cutting or a tunnel. A tunnel is to be made to save the climb at Shap Fell. The cost of cutting or tunnelling may be balanced by the saving on the wear and tear of the engines and on the extra length of line needed for the gradient. Railway cuttings are very instructive to the young geologist, by the by, as strata are exposed which he might not otherwise see. The young Londoner, for instance, on his way to the watering-places of Kent or Sussex, sees cuttings through chalk and greensand, and then, after passing through the Weald, enters cuttings again through greensand and chalk and may learn the wonderful story of the removal of all the chalk and greensand that once lay above the present surface of the Weald. If a cutting is to be more than sixty feet deep it is generally found more economical to burrow in the earth and form a tunnel.

Railway Cuttings and Tunnels.

The presence of tunnels and cuttings along a line also tells us something of the lie of the land through which we pass. The Londoner passes through tunnels on his way to Brighton; his train pierces the Wealden Heights and the Downs. The northern water-parting of the Thames has to be penetrated by the Great Northern at Highgate and

near Barnet; by the Midland near Elstree, and by the London and North-Western near Watford. If the children realise that in ancient times these hills were real barriers between tribe and tribe, they will see how the railways in piercing the hills bind all parts of the country together.

Special Railway Towns.

It must not be forgotten that some towns depend for their prosperity in a special sense on railways. Thus Peterborough, when its importance as a monastic settlement had waned, was a sleepy cathedral town until the Great Northern Railway made it a centre for its workshops and enormously increased its population. The industries of Derby have been supplemented in the same way by the Midland Railway; while Crewe on the London and North-Western, and Swindon on the Great Western, owe their importance solely to the fact that they are junctions for many lines of railway and therefore convenient centres for the manufacture of locomotives, carriages, and other things which a great railway needs.

Railroads Run to the Sea.

The English child should note that our railway lines, like our highroads, all lead to the sea. The first thing we should have to do in case of an invasion would be to secure the railway lines running inward from the coast. Happily, however, the vision which we can now call up is that of peaceful activity. We can lead the children to think of railroad traffic merely as an extension of road traffic running to the edge of the sea, where it is taken up by steamships carrying men and merchandise to and fro all over the globe.

Finally the teacher should remember to point out that the power of steam, great as it is, seems likely to be superseded by electricity, as is already the case on many London lines. Steam-power and

petrol-power must be applied, as it were, on the spot, but electricity can be applied from a central generating station at practically any distance. The waterfalls of Switzerland could be made to produce electricity enough not only to provide electric light and el ctric traction, but to render Switzerland, if it chose to be such, a manufacturing nation. And in the rise and fall of the tides around our island coasts may some day be found power enough not only to run our trains, but to economise human labour in ways undreamt of yet.

Steam to Give Way to Electricity.

CHAPTER XXII

WATERWAYS (1)

Wheelways and Waterways.

We have been considering highways and the railways developed from them. We have seen that the perfected highway was specially made for *wheeled* traffic. We have seen how the hard, smooth road has been gradually adapted for vehicles running on well-made wheels. We have seen that good roads and good wheels, by reducing friction, make possible the moving of heavier loads and make possible, too, a much higher speed. We have seen also how the accurately-laid railway of hard steel rails and the carriages with accurately made hard steel wheels have made it possible to move still heavier loads and to obtain still higher speeds. We are now to consider waterways, which were of course the earliest "roads" used by man, though to-day their importance is overshadowed by the more frequent use made of highways and the railways developed from them. Waterways introduce us to a new set of principles of very great interest, and the consideration of these, if carefully elucidated, can be made of great educational value.

Every child likes to sail boats on water, and will readily imagine any little floating object to be a great ship, and any pool, or even a bowl of water, to be a river or the great and wide sea. It would be well to

begin the consideration of waterways with an experimental lesson with a bath or large bowl of water and various objects that can be made to float.

The children will know that, speaking generally, wood will float and that iron will sink; but they will probably not know why. Show them that a tin can or an iron saucepan or saucepan-lid or other similar object can be made to float if the hollow vessel of tin or iron, or other substance, be put upon the water so as to displace such an amount of water as is of sufficient weight to balance it, while the same vessel will sink if loaded with water or other substance heavy enough to overbalance the water displaced. The children will see that it is a question of relative weights as between the water displaced and the floating or sinking objects. They should lift some pieces of lighter metal from under the water and notice how it feels heavier in coming out. They should try to push wood under, and notice how it comes up again.

Why a Body Floats or Sinks in Water.

When the children have grasped this matter of balance of weight between the water displaced and the floating load, let them turn to consider the water itself, which makes a way or road for their little ships. Let them see that this "way" is made up of particles which move on one another at the slightest touch. A tap on the side of the vessel will raise tiny waves, so will a mere breath. Ask them to imagine what a road would be like if its stones moved freely about directly they were touched. But that is exactly what happens in the case of the particles of water which make up the waterway. The greatest loads can be balanced upon it if the water be deep enough —far greater loads than could possibly be moved with our present appliances upon roads or railways.

Water Made up of Particles Moving Readily One on Another.

But these enormous loads can be very readily moved on a waterway because the *water particles* which make up the "way" itself *give place at once in any direction if new force be brought to bear upon them.* It will be quite possible on a class excursion, or even by a suitably chosen experiment in the classroom, to show the children how infinitely easier it is to move a load floating on water than to move the same load on the land or on the schoolroom floor. Children who have visited the seaside will have noticed how difficult it is to move a small boat even downhill on a sloping beach, and how several men have to push hard sometimes to get it down to the water, and yet, when once it is afloat, the pressure of a child's hand can make it rock to and fro. Children who live near a canal will know how barges loaded with very many tons of goods are easily towed along by one horse mile after mile and can readily be moved merely by hand-power. Even sea-going ships, as may be seen when they come to a port, can be moved by the sailors hauling at a rope, though the load be many hundreds of tons. In point of fact we do not so much move the actual load on a "waterway" as move out of the path we wish our load to take the easily displaced particles of water immediately in front of the load, and so allow the load to slide forward, the water behind pressing it on.

A Moving Road.

Let the children next imagine how interesting it would be if in coming to school all they had to do were to step out of their doors on to the road, and then the road should set off running with them and finally put them down at the school gate. But this is what many waterways actually do. Children who live near a river, tidal or other, may see this wonder any day. London children may be taken to one of the bridges over the Thames to see the great barges, with loads of many

tons in weight and big enough to fill a small house, set broadside on to the river current and travelling slowly up or down stream without sail or oar—for the long oar which they may see a man leisurely pulling is being used only to guide the barge and not to propel it.

Illustrations of the Economy of Waterways.

Let the children see pictures of the great rafts of timber—many hundreds of tree trunks fastened together—floating down a Canadian river; and lead them to realise how inexpensive water carriage makes it possible to get cheap timber here in England, where we do not produce anything like enough timber to supply our needs. The rivers bring the rafts of timber down from the forests to the sea. There the logs are placed on board ship and carried thousands of miles to England at a cost which is nothing compared to the cost of carriage by road or rail. And all this and much more is possible because the waterway is a wonderful, moving road—able to carry weights of any amount if placed in properly made vessels, and also giving way everywhere at a touch, so that the balanced load can be moved with comparatively very small power.

The Surface of the Waterway Needs no Repair.

Let the children consider also how a waterway is a road which needs no repair (we disregard for the present the necessity for keeping up banks of rivers and canals), its surface does not wear into holes, nor does it rapidly wear out the carriage moving upon it.

The History of the Boat.

In this general consideration of waterways let the children try to imagine the first time that a man used one. He floated at first, perhaps, simply on a log of wood. Then he hollowed the log out and made the beginning of a rude boat. Later, he learned to build his boat with a lighter framework, so that the

balancing water might allow him to carry a heavier load. At first he relied for power on his own hands applied to paddles or oars, or he put up a sail and so made the wind work for him. Thus the boat was pushed against the water particles in front and displaced them, so that it could slip along the waterway. The shape of the ordinary boat, which the children may be familiar with, enables it to cut through the water with the least output of force. If the school is far removed from actual boats a model should be shown, and the chief parts—keel, rudder, stern, &c. —pointed out. As his boats improved, man could venture on wide rivers, and then on the sea; and now that steam and other motive power have been applied to water carriage as to land carriage, it is possible to be independent both of oars and of wind, and goods and people alike can be transported from one part of the world to another much more quickly than formerly.

The sea was a great terror to primitive man, and the great divider between races. But we see everywhere that when man learns to use the forces of Nature, that which was his great dread becomes his efficient servant. The power that appears in the lightning flash can be made to subserve domestic needs, as in lighting and the telephone; fire can be tamed so as to produce steam; and the sea, the great divider—the great *waste* as it was formerly called—can become the great highway of the nations. English children in particular must think of it as the great highway which links together the people of these islands with others of their race in different parts of the world. The smallest town or village on a navigable English river is thus connected by a continuous waterway with the most distant shores of the Empire.

CHAPTER XXIII

WATERWAYS (2): CANALS AND RIVERS

THE considerations brought forward in our previous chapter show that it is easier to make a boat and sail up and down a stream than to make a way through marshes or dense forest. We have already pointed out that most of our oldest towns are upon the banks of navigable rivers. When the English tribes invaded England they made their way up its broad streams—the Thames, the Trent, &c.—and established their "ings" and "hams" and "burgs" along their banks. The aspect of many of our rivers has altered since early times: thus the tidal Thames was once much broader and shallower, so that there was a ford at the point where London Bridge was afterwards built, and another at Westminster. The Nene, on which Northampton stands, was a much larger stream when the keels of the English invaders first pushed up its course.

Rivers the Oldest Roads between Town and Town.

Since the improvement of the highroads, and still more since the introduction of railways, rivers and canals have been much less used as roads than in former times. Thus in the time of the Tudors and Stuarts it was much more convenient for Londoners to use boats and barges in passing, say, from Whitehall to St. Paul's or the Tower than to take the road along

Rivers less used as Roads.

the Strand. Now, with the improvement of roads and swift-wheeled traffic, it saves time to take the straight way by land rather than follow the curves of the river in a boat; and the steamboat service, introduced more than once for the use of Londoners, has failed to find sufficient patrons.

Rivers as Waterways for Heavy Freights.

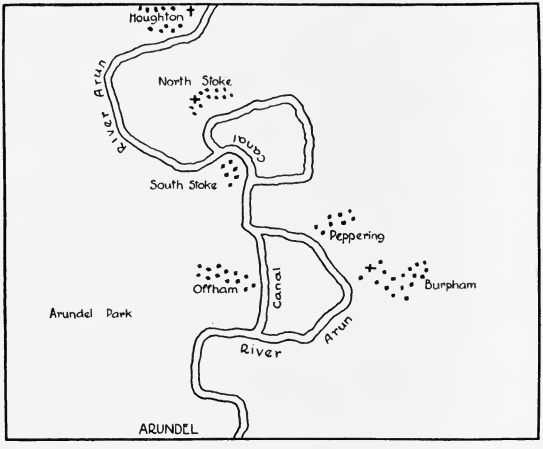
But, for the reasons given in our last chapter, waterways are still used for transport. In cases where *cheapness* rather than *speed* has to be considered the river maintains its usefulness as a road along which heavy freights can be borne most conveniently. This is specially true of tidal rivers, where ocean-going ships can discharge heavy cargoes in the very midst of the great towns where they are to be distributed, as in the ports of London or Liverpool, and can also take up loads for export.

Difficulties of River Navigation.

The children, however, will realise that a river is not always adapted for transport traffic, or, indeed, for any kind of navigation. Sometimes it contracts into a narrow channel where the current rushes with great force; sometimes it descends abruptly from one level to another; sometimes it spreads out into shallow pools or marshes. It has therefore been found necessary in many cases to interfere with the natural behaviour of the river. The waters of shallow pools would be collected, as it were, by being forced to run between embankments in a deepened bed. A rocky portion of a series of loops would be avoided by making a cut across from one end of a loop to another; a silted estuary would be dredged so as to enable larger vessels to enter a port. (This has happened in the case of the Thames, the Tyne, the Bristol Avon, and the Clyde.) In cases of a sudden fall in the bed of

A "Canalised" River.

a river, boats were at first lifted or lowered, according as they were proceeding up or down stream. Then at last another device—the lock—was introduced into England, either from Holland or from Italy, in the fifteenth century. A river treated in this way was said to be *canalised*. (The word *canal* is merely a



A Portion of the Sussex Arun, showing Canals cut to enable Barges to avoid the Loops of the River

form of *channel*.) This process will be best understood by getting the class to observe and report on what they notice in any canal in their own neighbourhood.

The History of the Canal.

A canal may be called an artificial river. It was at first merely a *channel* for conveying water for irrigation. When these shallow ditches were made wide and deep enough for boats it was natural to cut such passages

to join one body of water with another. The Chinese, Egyptians, and Romans made very extensive canals; one of those made by the Romans in our own country—the Foss Dyke—which was probably a cutting to bring water from the River Trent to Lincoln, still exists. But none of these nations understood how to get over the difficulty of inequalities in the river bed by the use of the lock.

Let the children think out the difficulties of canal-making. In making the channel engineers are of course anxious to avoid gradients which in the case of a highway or railway can be climbed with comparative ease. Therefore they follow the course of the valleys, wind round the bases of the hills, and cut through the plains, making straight lines whenever possible in order to avoid cost of labour and material. The bed of the canal must not be porous, or the water will disappear into the earth; there must, generally, therefore, be a *made* bed of puddled clay. The canal must be fed by streams, by the surface drainage of surrounding higher lands, &c. Its embankments must be firm to resist the "wash" of the barges in so narrow a passage; they are often "pitched" with stones and also lined with brushwood, which is inexpensive and very effective in breaking the waves. Floods must be guarded against by weirs, or pool-like enclosures to receive any surplus water. The great canal-maker, James Brindley, remarked that water in a stream is "a furious giant overturning everything, whereas if you lay the giant on his back he loses all his force, whatever his size may be."

Canal-making: its Difficulties.

The children will enjoy walking along the towing-path. ("Tow" is an old English word meaning "to draw.") Let them notice how the path slopes

away from the edge of the canal; if it were otherwise, rainwater falling on it would wear away the embankment. The surface water flows into drains on the farther side of the embankment, and these run underneath to help feed the canal. The children will have seen a great barge drawn by a horse along the

The Towing-path.

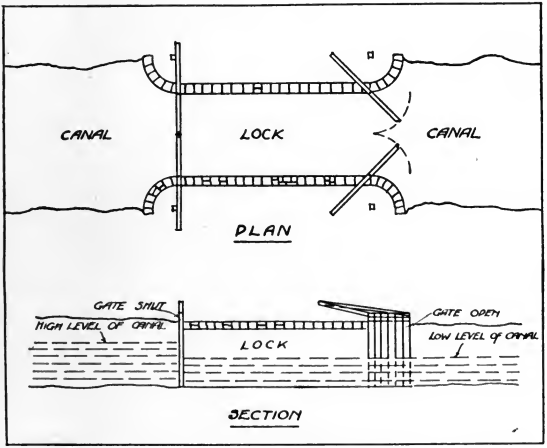
CANAL WITH LOCK. THE WATER BEYOND THE LOCK IS AT A HIGHER LEVEL THAN THAT NEARER THE SPECTATOR

towing-path. A horse that can draw only one ton on a road can draw forty tons on a canal (*vide* Chapter XXI.). But there is a tendency to replace horsepower by steam power; for when the power is straight ahead there is less friction from the "wash" on the bank.

The inequalities in the bed that cannot be avoided are met by the use of *locks*. A lock is really an

enclosure of that part of the water in a river or canal where there is a descent from an upper to a lower level. The lock chamber, as it is called, has a gate at each end. When a vessel is coming down stream water is let into the chamber of the lock till it is on a level with the higher water and thus the vessel

The Lock.



PLAN AND SECTION OF LOCK SHOWN ON THE OPPOSITE PAGE

can enter; the upper gate is then closed. The sliding doors in the lower gates are now gradually opened; the water in the lock falls to the level of the water in the lower part of the bed, then the gates are opened, and the vessel passes out. When a boat is ascending the stream the operation is reversed: when it enters the chamber the gates behind it are closed, the doors in the upper ones open gradually, reinforcing

the water in the chamber from the water beyond them until it rises to the same level with it, and the vessel proceeds. A canal lock usually has a lift of from eight to ten feet.

The value of canals as cheap highways was not, however, realised until the time of James Brindley. Brindley began work as an apprentice to a millwright and was thought to be a very clumsy one—he could scarcely write or spell; but his cleverness with all kinds of machinery was most wonderful. He was employed by the Duke of Bridgewater, who owned coal-mines at Worsley, now a suburb of Manchester. The coal had to be carried from Worsley to Manchester in panniers on horseback, 280 pounds being the usual load. Owing to the cost of carriage the Manchester people had to pay for the coal double the price at the pit's mouth. Brindley, taking his idea from the means which had been used to make rivers navigable, thought out a plan for an artificial river, or canal, on which the coal could be carried in barges. This small canal was so successful that the Duke was encouraged to let Brindley make a longer canal between Manchester and Liverpool. The Duke risked all his fortune in the attempt, and Brindley worked for 3*s*. 6*d*. a day, charging his employer the most moderate sums for his expenses. "Ating and drinking, 6*d*.," is one entry, for he could never conquer the difficulties of spelling, and "novogation" was the nearest approach he could make to "navigation"—the object of all his labour. But he did wonders in making navigation by artificial waterways possible all over England, and completed 365 miles of canals before he died. In designing the Manchester and Liverpool Canal he had the bold idea of avoiding the delay inevitable when

The Great Canal-maker, James Brindley.

locks are used by carrying his canal on a bridge or aqueduct *over* the Mersey. "I have heard of castles in the air," said an engineer who was called in to advise, "but I never before saw where one of them was to be." But the aqueduct over the Mersey at Barton was a success, as was also the tunnel which led the Grand Trunk Canal through the heart of a hill. In these and other devices he showed the way to future engineers. London children will be interested in knowing that the Regent's Canal runs in a tunnel under Hampstead.

Soon a network of waterways was laid down all over England, mostly between 1770 and 1830. The children will like to know that a "navvy" is a "navigator"—a representative of the sturdy race of workmen able to handle heavy material whom Brindley called into existence to carry out his schemes of inland *navigation*. Rivers were used as much as possible, and the canals connected them with one another. Let the children trace out the connections of their own waterway, *e.g.* "How is the Thames joined to the Mersey? Through what towns does the local canal pass?" The canal system was especially a boon to trades using heavy material. Thus the pottery trades in Staffordshire used flints brought from the chalk hills in South-East England and clay from Cornwall. These materials, and even the coal and lime used in the furnaces, had to be brought on horseback. The finished pottery, fragile as it was, had to be distributed in the same way, and it is no wonder that the goods cost 1*s.* per ton per mile. Pottery travelled from Wolverhampton to Liverpool on horseback or in wagons at 5*l.* a ton, with much risk of breakage. The Grand Trunk Canal, running from the Trent to the Mersey through the Potteries

Result of the Canal System.

(making use of the River Weaver) changed all this. Pottery now travelled from Wolverhampton to Liverpool for 1*l.* 5*s.* a ton.

"The stimulus given to industry by the invention of canals was as great as that given by the invention of the locomotive, but the second followed so rapidly on the first that the fame of Brindley has paled before that of Stephenson. We look upon canals as relics of a primitive past; we have no opportunity of looking on the rough tracks called highways which rendered the carriage of goods a difficult and perilous task before canals made water-carriage almost universal." * Even now canals are used largely for the transport of heavy goods which are not needed in a hurry, *e.g.* hay, salt, coal, metals, hardware. In this way they are a great relief to the overburdened railways. Slowness is, of course, the chief drawback to canal navigation. If the vessels move very quickly, the wash of the water against the sides is very destructive to the banks, and a slow speed is almost inevitable. On the other hand, many economists think that there may be, in the near future, great developments in our canal system, so long overshadowed, as Bishop Creighton remarks, by the swifter railroad. The canals will probably be made much deeper and wider. The formation of great ship canals, such as that which bears large vessels from Liverpool to Manchester—a distance of thirty-five and a half miles—is one feature of this development. The Corporation of Manchester thought it well worth while to borrow five million pounds for this undertaking. Tidal estuaries, such as those of the Tyne,

The Canal Overshadowed by the Railway.

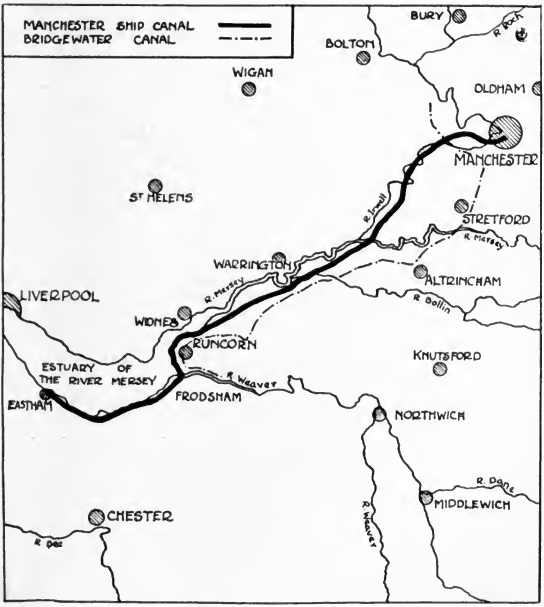
The Drawback of Canal Navigation.

Modern Developments.

* *The Story of Some English Shires.* Mandell Creighton.

the Bristol Avon, and the Clyde, which are constantly dredged to allow the largest vessels to enter the docks of the great ports, may also be regarded as ship canals. A ship canal connects Gloucester with the navigable part of the Severn.

REFERENCES.—Teachers may refer to the article "Canals" in the *Encyclopædia Britannica*, and to the article on "The Canal System in England," by C. Townshend Warner, in vol. v. of Traill's *Social England*.



MAP OF THE MANCHESTER SHIP CANAL

CHAPTER XXIV

HARBOURS, PORTS, AND DOCKS

THE consideration of waterways and railways will lead us to the shores of the island, whither so large a part of our manufactured goods is taken and whence come the major part of our food and the raw material for our work. Since the days of the Spanish Armada, or, at any rate, since Nelson stopped the threatened descent of Napoleon, we have perhaps been a little too unimaginative as to what it means to live on an island. In the present day it means, among other things, that this island itself does not produce anything like enough food for the subsistence of its children, and that therefore its existence depends in the last resort upon ships. Ships of commerce, to bring food and other necessities; ships of war, to protect the merchant ships and the island itself from possible enemies.

Our Dependence on Ships.

The amount of attention paid to ships and shipping industries depends, of course, largely on locality. Children in the many coast towns of England will spend more time on maritime matters than inland children. But inland children must never in these days be allowed to forget that they are islanders. The fact must be brought home to them that their peaceful highroad, their swift railway, their gliding canal or

Ships: the Wagons of the Sea.

river all find their way to the sea, bearing to our ports whatever goods a manufacturing locality has to produce, and bringing to us from the sea, in barge or railway truck or loaded wagon, the greater part of the things we want: grain and flour, meat and bacon, timber, butter, cheese and margarine, fruit, sugar, tobacco, eggs, tea, &c., as well as raw cotton and wool, leather, oils of different kinds, &c. Figures alone without some imagination are not sufficiently impressive in making the future citizen realise facts about imports and exports. As an inhabitant of a crowded island he should grasp the fact that our imports are stuffs without which our factories would stand idle and without which he would starve. Our ships are not merely the walls of our country; they are the water wagons which feed us. The child in Staffordshire or Warwickshire no less than the child in Plymouth or Bristol needs to be interested in the fact that the English more than any other nation "occupy their business in the great waters."

Need of Harbours.

The ships that come to our coast, or go to and fro along it, sometimes need to seek shelter in a storm, to find a harbour. A harbour is literally a place of shelter, and harbours may be natural or artificial. A natural harbour is formed by an estuary or a bay where land projections serve to break the force of the wind and waves outside. We have round our coasts many such harbours of refuge, as they are called, where in peace any ship may find a haven, and which would be of the greatest value to our fleet in time of war.

Sometimes, however, a harbour is made artificially. Breakwaters are built and piers are thrown out so as to enclose a sheet of water which, screened

from the force of wind and waves outside, forms a tranquil port wherein vessels can ride at anchor, or be moored to the quays at its side. London children will have seen the curved piers with the entrance way between them which form Ramsgate Harbour. Let the teacher sketch or show a model of any harbour the pupils

Artificial Harbours.

A Harbour, mainly natural, but artificially improved, Brixham, S. Devon

are likely to see. Even a straight pier such as they find at an ordinary watering place forms a kind of harbour for vessels on its lee side—the side sheltered from the wind—though it is of little use when the wind blows straight upon the shore. Let the children describe how the water falls over a breakwater. Either the breakwater is vertical and the rising wave ascends vertically and then descends

vertically so that it is reflected back into the sea, or it is built with a long outward slope so that the force of the waves is gradually overcome as they rush up the slope. Tell the class how such breakwaters effectually control the terrific force of many thousand tons of moving water. Work out with the class the conditions of a good harbour: (1) There must be shelter from the wind and high seas; (2) there must be good holding for the anchored or moored vessel; (3) the harbour bed must be free from dangerous rocks; (4) the entrance must be such as will render it possible for ships to move easily in and out—*e.g.* it must not be too much exposed to a prevailing wind, and it must not be too wide, or the heavy seas will sweep in and ships may be worse off inside than outside. Often the entrance to a harbour and the harbour itself tend to become blocked by sand, silt, &c., so that dredging boats are constantly at work. This is specially the case in a tidal river, such as the Mersey.

Conditions of a Good Harbour.

There are some natural harbours of refuge which are quite remote from centres of population, such as the harbours on the west coast of Ireland. But when a harbour is at the mouth of a navigable river or other navigable water, or is connected by good roads and railroads with a "hinterland" which is rich in agricultural or industrial produce, the harbour becomes a *port*. The word "port" itself (Latin, *porta*, a gate) suggests that a port is an outlet from the hinterland, as it is also an inlet for goods coming from overseas; thus the idea of the sea as a highway is borne out.

Ports: the Inlet Gates of the Realm.

What are the conditions of a successful port? First, the harbour must be *deep* enough for large vessels to come up close to the shore, for it would

be expensive to unload their cargoes into smaller boats in order to land them. Secondly, the port must be *near good markets* which send goods to it or receive goods from it, so that there is less cost for carriage, which would raise their price. Milford Haven is one of the best harbours in Europe, but it is not so prosperous as Bristol or Cardiff or Swansea, for goods from or for the south of England are shipped and unshipped at these ports instead of being carried on to the extreme corner of Wales. Milford, in fact, leads to nowhere. London, being nearest to the Continent, gets the lion's share. In this connection it is important for the children to realise that much of the trade of our ports, especially the Port of London, consists in receiving goods from other countries and re-exporting them. This is due to the fact that we stand as it were between two continents, Europe and North America, between countries some of which trade very little with one another directly, but find it cheaper to use London as an intermediate depôt (*entrepôt*) to which their cargoes can be consigned for reshipment. Since, too, our ships carry abroad bulky cargoes such as cotton goods and coal, it is an advantage for them to bring back as ballast goods which we may not need for ourselves, but which we can sell cheaply to other nations.

Best Conditions for a Port.

The "Entrepôt" Trade of our Ports.

A port must be provided with places where ships can unload in still water, where ships can be made and floated, and repaired if need be. These are the *docks*. A dock is a kind of vast artificial pond with wharves on all sides of it. It is furnished with gates like a lock, and these can be opened and closed at will. Ships can pass in on the rising tide, while during the ebbing of the tide the

Docks.

gates are closed to prevent the escape of the water, and the vessels ride within at nearly the same level as before. This arrangement is particularly useful on tidal rivers, for if a large ship were left outside at low tide it would be stranded in the mud, and its weight being no longer borne by the water, its sides or bottom would be strained or give way altogether.

Royal Dock, Grimsby

A Dry Dock.

A dry dock is a contrivance for repairing the sides and bottoms of ships and for shipbuilding. It consists of a deep hollow space excavated at the side of the harbour, and lined with masonry. It has gates by which water can be let in. If the dock is used for shipbuilding, the ship is put together in the dry bed; then, when she is finished, water is admitted, which lifts up her weight

and she passes out through the gates. If the dock is used for repairing, the gates are opened to let the ship in, the water is then pumped out, the ship is supported on the floor of the dock by timbers, and her sides and bottom can be thoroughly examined. Not only the docks but other parts of the banks of a port are lined with quays or landing places ("quay" means "enclosure"), or with wharves (a wharf is properly a bank or dam), where goods can be laden and unladen.

Quays and Wharves.

If deep water comes up close to the shore the vessels can come beside the shore; if not, piers are built out into the stream so that the vessels can unload while riding in deep water. Along tidal rivers such as the Thames a great amount of produce is carried in barges. These have broad bottoms unlike the spring and curve of faster boats, and they can "squat" down on the mud at low tide without injury. London has about forty miles of quays along the busiest part of its enormous port. Close to the quays and wharves are the warehouses where goods are stored until they are to be distributed to the buyers. A port also has its Custom House, where taxes on goods, such as tobacco, wine, and tea, are collected. These taxes help to form the revenue of the nation. And here we may notice that though the docks, wharves, &c., are in many cases private property belonging to individuals or companies, the appointing of any place for a harbour is the right of the sovereign, who is the "guardian of the ports and havens which are the inlets and gates of this realm."

Barge Traffic.

The commerce of England is carried on in ships belonging to private persons or companies. The ships of war that protect this commerce and constitute the "walls" of our

The Navy.

island form the Navy. The ships of the Navy are often made for the Government in the harbours of the coal and iron districts of the north—*e.g.* on the Tyne or the Clyde. But since any invasion would probably come from the Continent across the narrow seas (for an invading fleet would have to fall back on Continental ports for its fuel supplies), and since also the first step of an invader would be to secure the rich port and city of London, the waterway of the Thames and the railways having their terminus in the metropolis, it is the south and east of England that is most jealously guarded. The Government has in the south—at Chatham, Sheerness, Portsmouth, Plymouth, and Pembroke—its great naval stations, or Royal dockyards as they are called, and in the east a new naval station at Rosyth, on the Forth. These are great water towns containing docks, building yards, and stores. The harbours of Portland, Dover, and Harwich form additional refuges on these coasts, but the Royal dockyards form the *bases* of our naval operations, and are the background, too, of the fleet we keep in the Channel. There is a naval arsenal (or storehouse of arms) at Woolwich, and there are naval schools at Dartmouth, Portsmouth, and Greenwich.

Royal Dockyards.

England is not mistress of the sea in the sense that the highways of the sea belong to her. But when we say that the defence of Britain rests on her command of the sea we mean that in case of war she must be able to prevent an enemy's fleet from landing an army on her coasts, and this she can only do by carrying her own fleet out into the Channel to destroy the enemy's fleet or to blockade it securely so as to render it inactive. As Professor Mackinder

The "Command of the Sea."

THE HARBOUR AT DOVER, WITH WARSHIPS WITHIN

points out, the national frontier would for the purpose of the war, and for that purpose only, be carried out into the seas as far as the enemy's coast.

"Harnessing the Tides" for the Work of Towns.

We may look forward to the time when our coasts may come into yet more intimate connection with our inland towns. Britain stands upon a submerged plateau on which the tides rise and fall, moving up and down countless tons of water twice in every twenty-four hours. Some day, perhaps, before all our coal is exhausted, this enormous power may be used to provide electrical energy which may be conveyed to a distance and made to work for man. Each of the great railway companies may then have a terminus with generating stations on the coast, and every inland town, and perhaps every village, may draw from the coast the power necessary to turn the wheels of the machinery in all its factories and mills, and economise labour in its humble household operations, as well as to light its streets and drive its cars.

TEACHERS' REFERENCE.—H. Mackinder's *Britain and the British Seas* (chapters on Strategical and Economic Geography). Heinemann.

CHAPTER XXV

THE WORK DONE IN THE TOWNS

We have seen that a town has its origin in a group of houses clustered round a market or a church. The towns dotted all over the country are linked together at first by navigable streams, by lanes and roads; and, later, by canals and railways also. All the various kinds of roadways and waterways lead ultimately to the coast, with its ports opening on to the wide highway of the sea.

Roads and Food Supply.

The children will realise that the first essential in their town—in any town—is that the people shall be fed. This is the final meaning of the intricate system of roads and waterways we have been considering. All possibility of work, and of that complex condition which we call civilisation, depends in the last resort upon *food supply*.

But in this climate, at any rate, food is only to be obtained as the price of labour. Nothing, not even the barest necessities of life, can be obtained for nothing. The people who live in towns have their various occupations, with the proceeds of which they satisfy their wants. The occupation of the scholars' parents may be very varied; on the other hand, in most villages and in some towns there will be a considerable

The Town's Food and the Town's Work.

homogeneity of employment. Most of these cases of localised industry can be traced to some special geographical circumstances.

Primitive Occupations depending on Regions.

Roughly speaking, we may say that in a primitive state of society, before the rise of great manufactures, the people who live near the coast will be fishers, sailors, shipbuilders, and traders. The level plains and river valleys are given over to the plough, the upland slopes are the pastoral districts, while in the hills mining operations are carried on. This is illustrated in our own country. The coast towns, especially on the east, where the seas are shallow, have always been fishing-places. The adventurers from coast towns, such as Bristol, laid the foundations of our commerce beyond seas. The comparatively flat regions of the east are still corn-growing areas; the Downs, Salisbury Plain, Dartmoor, the Pennines, the slopes of the Welsh hills, still give pasturage to sheep, and the mines of Cornwall and Wales are well known. Coal was found in the banks of the Pennine and on the eastern and south-eastern sides of the Welsh Highlands—fortunately near the rich deposits of iron. Since the discovery of coal, which enormously increased our power of dealing with iron and hence with machinery of all kinds, the occupations of our people may be divided far more sharply than was formerly the case into two great classes—farming and manufactures.

The Village.

The villages are nearly all concerned with some form of farming; the bulk of the inhabitants are actual workers on the soil, and the rest —the doctor, parson, shopkeeper, &c., —minister to them in various ways. The people in the scattered agricultural villages of the country are food-producers for the rest.

Market towns, as we have seen, are larger centres in the midst of a farming district, and we should say that the chief business of their inhabitants is to *distribute* the produce brought them. Thus York has always been the chief market of the vale of the Ouse; though here, as in other cases, the convenience of the situation has caused other interests to arise, and a certain proportion of the inhabitants are connected with the activities centred round the cathedral. The towns in the coal and iron districts, however, do not concern themselves with the production of food. It is more advantageous for them to be fed from the farming areas (at home and abroad) and to devote themselves to the making of things other than food-products—to manufactures. The barest geography text-book will give the names of manufacturing towns and their products, but the teacher will try to vivify these dry bones of knowledge by showing how it is that certain industries characterise certain areas.

The Market Town.

The Manufacturing Town.

Children in the towns of the woollen manufacture—the oldest in England—should know that it originated on the eastern side of the Pennines because the slopes of these hills gave abundant pasture for sheep, while the water in the streams flowing through the dales was very pure and suitable for scouring and dyeing the wool. But at present the home-grown wool is quite insufficient to feed all the looms in these towns, and quantities are imported from our colonies in Australia. In the West of England the woollen manufactures at Stroud and Bradford, in Wiltshire, were supplied from the sheep of the Cotswolds, which also send down numerous

Manufactures Dependent on Natural Advantages; on Means of Transport.

The Wool Industry.

streams, whose waters can cleanse the wool. The coalfields of Bristol and the Forest of Dean are close at hand, and Bristol forms a convenient port.

Cotton Industries.

The cotton towns of South Lancashire—Manchester, Ashton, Oldham, Rochdale, Bury, Bolton, &c. (and Stockport in Cheshire)—and those on the north of the Lancashire coalfield—Burnley, Blackburn, Preston—are near the port of Liverpool, which faces America, whence comes most of the raw cotton which feeds their mills. They form a ring round Manchester—now more of a business or market town for the rest. The climate in this region has just the degree of dampness necessary to prevent the fibres of the cotton from becoming brittle and snapping in the process of spinning.

The Iron Industries.

The iron industries of South Staffordshire began before the discovery of coal because there was a plentiful supply of timber in the district for smelting the iron ore.

The Sheffield cutlery trade arose from the supply of a local stone specially good for grindstones, from the presence of rapid streams to drive the stones, and also from the fact that by means of the river Don a supply of pure iron, suitable for making steel, could be procured from Sweden. When coal is found close to the sea we have engineering and shipbuilding towns. Thus the lower channel of the Tyne forms a "water street" for a set of towns engaged in this work—Newcastle, Gateshead, Jarrow, South and North Shields, Tynemouth. On the Wear we have Sunderland and Wearmouth; on the Tees, Darlington, Stockton, Middlesbrough, and Hartlepool.

Engineering and Shipbuilding Industries

Lesser industries may similarly be explained by

natural advantages. The beer of Burton is supplied by the hopfields of Worcestershire and by an abundance of water suitable for brewing. The growth of Cardiff is due to the discovery of smokeless coal, which it exports, and which would be extremely valuable in war-time, since the presence of ships below the horizon could not be detected.

These examples might be multiplied indefinitely. The children should be trained, in the case of any specially flourishing industry, to see how it depends upon (*a*) natural advantages, (*b*) facilities of transport. Sometimes the advantages, though present in the past, are not conspicuous nowadays; thus Northampton is said to owe its boot trade to its surrounding forests of oak, supplying tannin, and to the rich pastures of the valley of the Nene, which yielded such abundance of hides. Sometimes, also, the cause of a flourishing industry will be found, not in these obvious conditions, but in what seems to be a mere historical accident. Thus it happened that in 1717 an enterprising person set up a silk-mill at Derby and founded a trade which still exists. Worcestershire lost its trade in cloth by the dishonesty of its merchants, who did not give fair measure, and by the obstinacy of the workmen, who would persist in weaving a thick and heavy cloth long after the demand had arisen for a lighter "make." But having learned from experience, Kidderminster * turned from the manufacture of cloth to that of carpets, and Worcester turned to gloves and afterwards to porcelain, bringing a specially fine clay by canal from Cornwall.

Historical Explanation of Town Employments.

The early freedom of Birmingham from the restrictions exercised by a lord of the manor, by in-

* "Brussels" carpets, not "Kidderminster," are made here.

corporation, and by trade guilds, made it attractive to clever artisans of all kinds, and, as Mandell Creighton says, almost every description of ingenious manufacture found a home there. Burke called it "the toyshop of Europe," meaning by "toys" all the ingenious trifles which add to the elegance of life. One of the first arts it practised was the japanning of snuff-boxes.

The Factory System: Its Development from Home Industries.

The briefest survey of town manufacture will lead to some consideration of the *factory* system. Children need to be reminded that every manufacture began originally in the home, though some trades, *e.g.* the smith's, would soon be compelled to have a separate shelter. But it would be interesting to trace the oldest textile trade—the woollen—to its origin. "The Yorkshire manufacturers were originally farmers living in the valleys. They used their own wool, and travelled round the country on horseback to buy more if they needed it. . . . The wool that they gathered was cleaned and sorted at home. It was partly spun by their own wives and daughters, and partly sent to shopkeepers in little villages that they might dispose of it amongst those who wished to earn money as spinners. Women and children would be seen in fine weather seated out of doors and keeping up a merry chatter above the hum of their wheels. It was work that could be put aside and taken up at any moment." * When the wool was spun it had to be distributed among weavers, who wove it at the looms in their own homes. Then it was "fulled" or cleansed at mills by the waterside and carried away on packhorses to the different fairs and markets in England, to be sold wholesale to shopkeepers. Obviously, much

* *Story of Some English Shires.* Mandell Creighton.

time was lost by carrying the wool to the spinners, from them to the weavers, and so on, to say nothing of the cost. It was natural to bring the spinners and weavers together, so that all the processes could be carried on in one place by the waterside where the fulling-mill was at work. Thus the system under which each one worked at home gradually gave way to the factory system, where all worked in a common building.

At first few were wealthy or adventurous enough to raise factories alone; they were the result of co-operation on the part of separate manufacturers, who used a building and machinery in common. It is easy to see how such a system developed into the great trading companies with which we are familiar. It is easy also to see how the invention of the steam engine made it possible to use machinery instead of human power, and how men constantly using machinery would think of all kinds of improvements in it. (Machinery, by the by, is a term which covers every sort of artificial contrivance, from the simplest to the most complex. The first loom was probably made of four straight sticks tied at the corners.) The story of the opposition to new machinery is well known. The first attempt to set up a steam factory in Bradford in 1793 had to be abandoned before the threats of the chief employers in the town. If they had not sufficient imagination to see the advantage they would derive from the proposed change, still less would the workmen be expected to acquiesce in contrivances which they thought would oust them from their employment. The machinery riots belong to the general history course. Since the age of prejudice is not dead, children should hear the story of these riots, because they can see how here, as in the case of railways,

Machinery.

successful opposition would have been the greatest disaster; and this remembrance may be useful to them when confronted with the innovations which their own adult life will surely bring.

Children in manufacturing districts will pick up something of the laws governing factory labour and factory conditions. The story of Lord Shaftesbury's life told them in school will help to put these in right perspective. In a town like London, where a number of small miscellaneous manufactures are carried on, the meaning of a factory necessarily has to cover a pretty wide and varied area. A *factory* is understood to be a place where work is carried on by the help of machinery moved by steam, water, electricity, &c. If there is no such machinery, the place is generally called a *workshop*.* Both workshops and factories have to be inspected. The children should know what are the duties of a Factory Inspector. By what principle can this apparent interference with the liberty of the subject as to hours of work, cubic space for working, and so on, be justified?

Work in Factories.

In London and in other large towns there appears to be in the principal streets less evidence of downright work than of what is vaguely called "business." The black-coated men in offices are apparently producing nothing, and handling nothing but pens and paper. They have homes in the suburbs, and their food and other wants are mainly supplied by shops in other areas than those in which they earn their bread. But these men are all engaged, primarily, upon one great employment; they are arranging for the *distribution* of the

Work in Offices.

* Teachers working in industrial areas will find useful notes on the distinction between factory and workshop, and on regulating labour in factories, in the *Encyclopædia of the Laws of England*, to be found in any good public library.

goods which the labour of other men has extracted from the earth. Some of them are in the service of merchants who are buying and selling in large quantities the goods that will afterwards be distributed to the shops. Records of these sales must be kept, and letters must be written. Some are employed by bankers who receive the surplus wealth of this "nation of shop-keepers," and arrange for its profitable use. Then there are the offices of the many companies and societies whose object it is to provide various advantages for the army of workers, from some small invention upwards to a religious organisation for their spiritual needs. Some are distributing the workers themselves to where they are wanted, as in the Labour Exchanges managed by the Board of Trade. Of these black-coated workers some have to think and plan, others have to carry on correspondence and to keep accounts.

The "Non-productive" Workers.

And in town and suburbs there are workers who appear to produce nothing, and to distribute nothing, but are nevertheless needful for the well-being of the community. Such are the doctors who soothe pain and check disease; teachers of children who prepare them to take their place as social workers later on; artists and authors, and lecturers, and ministers of religion who teach and inspire grown-up people, so that they may remember that life is more than food and raiment. "None of us liveth to himself" is especially true of men who have learned to live in community. Whereas a savage does everything for himself, a civilised man is dependent upon countless other workers of different grades.

For the Teachers' Reading.—H. J. Mackinder's *Britain and the British Seas*, chapter xiv., "Industrial England," *et seq.* (Heinemann.)

CHAPTER XXVI

THE HEALTH OF THE TOWN:

SEWAGE DISPOSAL

"If the first concern of a town is to be useful, the second is to be healthy." The question of sanitation presents some difficulties for discussion with pupils; nevertheless, it may be lifted to the level of a deeply interesting historical subject on the one hand, and on the other to that of a still more interesting study in the dependence of man on the ministry of Nature.

The Chief Hygienic Danger of Collective Life: Examples.

The generalisation that whenever human beings come to live together in groups it is immediately the concern of some one to arrange for the disposal of waste matters produced by their bodies and by their household occupations may be illustrated by some of the most lurid pictures in old-time history. The story of the Iliad opens with a grandiose scene in which the sun-god Apollo, fulfilling the prayer of one of his priests whose daughter had been taken captive in the camp of the Greeks, comes down from high Olympus with bow hung upon his shoulders and with full quiver and lets fly his arrows on the mules, the dogs, and lastly on the men of the Grecian host, so that many died, and funeral fires were constantly being kindled throughout the camp.

But this merely means that the sun's rays, pouring upon the low-lying coast on which the tents were pitched and where numbers of men were crowded without careful arrangements for sanitation, favoured the growth of deadly bacteria and the evolution of foul gases, inducing typhoid and similar diseases.* The same calamities have occurred in nearly every great war, down to the Boer war of our own times, in which we lost so many men, not through the bullets of the enemy, but through enteric fever and other forms of disease engendered by the neglect of this important matter of the proper disposal of excreta. And the early history of our English towns shows the same causes producing horrible effects in the guise of pestilence in various forms, of which the Black Death was perhaps the most appalling. Want of personal cleanliness and overcrowding no doubt contributed, but a main cause of these calamities is doubtless to be found in the fact that there were no proper arrangements for removing what is called sewage, and that the nearest stream or the open gutter in the middle of the street was regarded as the handiest place for discharging all kinds of refuse.

When men are scattered on the land these mischiefs are much less liable to occur. Nature herself seems to have planned her activities so that a sparse population engaged in the primitive work of man—agriculture—is in the best position for maintaining her ceaseless beneficent processes of waste and renewal. The sewage matter from a peasant's cottage, if mingled with the earth in a sufficiently large garden, is not only free from offence, but a positive benefit.

The Cottage Householder.

* *Translation of the Iliad.* Butcher, Leaf, and Lang. Macmillan, 7*s.* 6*d.* Or, for children, *Story of the Iliad.* Church. Seeley & Co., 6*d.*

Bacteria may be noxious or beneficent, and in the soil there are friendly bacteria which at once begin to act upon the offensive matter and convert it into substances which enrich the earth as the supporter of plant life. But when numbers of men, ignoring Nature's apparent intention, crowd together in towns, it becomes the duty of responsible people to see that the result obtained through the action of the decent cottager in his own little domain is secured on a large scale as regards the sewage of all the inhabitants taken collectively.

The ordinary householder, especially if uneducated, will not take this trouble, even if he had effective means at his disposal for doing so. It is difficult to make poor people understand the importance of proper sanitation, because the mischief is an invisible one. Dr. Alex. Hill, Master of Downing College, once suggested to teachers that the school walls, in order to impress the imagination with the unseen terrors of disease, should display pictures of disease microbes. But even were this invincible ignorance removed, it would still be too much to expect that each urban family should organise its own system of waste disposal. Here is a case where co-operative action is clearly necessary. Accordingly, in the year 1875,* a Public Health Act was passed dividing up the country into sanitary districts, urban and rural, and placing each of these under a "sanitary authority"—a body of men chosen by the various communities for the purpose of guarding the health of their respective districts. The local sanitary authorities are all under the control of a

Co-operative Action Necessary in Communities.

"Sanitary Authorities."

* Various "Sanitary Acts" had been passed earlier in the century—in the 'fifties and 'sixties.

department of the central Government of the State—the Local Government Board.*

The sanitary authority has before it two main problems with regard to sewage. It must arrange for the *removal* of sewage from the homes of men where it breeds disease germs, and it must consider the *disposal* of it after it has been removed. In this work we must be guided by the operations of Nature, and the pupils, in connection with what might be regarded as a repulsive subject, can be led to marvel at and admire her beneficent economies. Broadly speaking, there are but two ways of getting rid of bodily waste matters—*on* or *into* land, and into water. "One or the other of these methods has been practised ever since the appearance of man on the earth, and the same is true of the excrementitious wastes of other animals than man. When we consider the volume of organic wastes since the dawn of animal life upon the globe and the fact that only within recent years has there been any scientific attempt to dispose of them, the stupendous and beneficent task performed by Nature through the centuries becomes apparent." All this loathsome organic matter has been transformed by Nature into fresh vegetable and animal organisms or into harmless mineral compounds, or into pure water. And this mighty task has been performed by the agency of unseen millions of the tiniest known forms of vegetable life, the bacteria.

The Methods of Nature Our Guide.

The most economical way of disposing of sewage is evidently to place it upon the land. In country districts and small towns the sewage of each house can be received in small moveable receptacles, sanitary

Disposal on Gardens and Farms.

* The "authorities" are: The Borough Council, the Urban District Council, and the Rural District Council. See chapters li. and lii.

pails, and the like. Townsfolk have a distrust of such arrangements, which is the result of mere prejudice. The offensive matter can be at once disinfected with dry earth or ashes, which will remove all smell. Then, at frequent intervals, the contents of the receptacles are placed upon the garden of the cottage, or, in the case of towns, upon the farms of the district. The particles of sand or soil are teeming with friendly bacteria, while the spaces between the particles, being filled with air, supply the oxygen necessary to this bacterial life. Some towns, such as Leicester, Cheltenham, Croydon, &c., maintain sewage farms to which the sewage is carried. Frequently it is treated in special tanks by chemical preparations until as much of it as possible has been reduced to a fluid condition, and then the "effluent," as it is called, is applied to the soil. If the soil is clayey and loamy it is spread over the surface, for clayey soils, however unfavourable to rheumatism and such diseases, favour the quick action of the useful bacteria. If the soil is sandy and loose, the sewage is directed downwards. Underneath the surface of a tract of meadow land there will be laid long channels of loose-jointed pipes radiating in all directions. The flow of sewage, which has been reduced to fluid form, is directed along each of these in turn; the nutrient stream leaks from the joints all along the drain and the vegetation springs up abundantly. Then these special drains are shut off and others have their turn. For in the management of a sewage farm, or even of a garden, the important thing to be remembered is that Nature has her limits, and must not be overworked. The sewage must be applied in regulated "doses," in order that there may be sufficient bacterial life avail-

Nature's Limits on Land.

able to deal with it at the time. Because of this difficulty, the sewage disposal of a large city can hardly be met by sewage farms. In some inland cities, such as Salisbury and Manchester, it is turned into bacterial beds artificially made with clinkers (furnace refuse), coke, cinders, gravel, &c., where the growth of bacteria is encouraged. Sewage is turned into these beds, purified by the bacteria, and turned out again into another bed, while the first contact-bed has a resting period during which the air can act upon its pores.

Artificial Bacteria Beds.

In the case of very large towns the earth system of immediate disinfection and the cartage to sewage farms is not practicable. As the pupils will know, in such cases the sewage of each household is carried down by water into pipes under the streets. The proper arrangements for sanitation within the house belong to what may be called the *house-study* branch of hygiene. The pupil, however, should know that the pipes carrying sewage from any one house, its stables and outbuildings, are called *drains*, and the pipes receiving these drains are called *sewers*. All alike are pipes; the distinction is merely a legal one, rendered convenient by the fact that the cost of fixing and repairing a drain falls on the owner of the house, while the sewer belongs to, and must be cared for by, the sanitary authority. Directly a drain receives a drain from a second building it becomes a *sewer*. A sewer is a large underground conduit made of brick and concrete, and egg-shaped in section. The pupil will probably know that it is ventilated by vertical shafts opening high up in the air and that it is provided with manholes by means of which workmen can descend for

Water Carriage.

Drains and Sewers.

examination and repairs. Beneath the streets of every large town is an enormous network of these great pipes. The sewers, of course, are so laid as to have a fall towards the outlet, so that gravity helps the flow. In most towns, too, things are so arranged that the sewers receive also the surface water from the streets and from the gutters of houses, thus assisting the current. It has been found more economical on the whole to have the same channel for rainwater and for sewage rather than to maintain two separate systems of pipes. If, however, the sewage is to be put upon the land, the rainwater dilutes it so as to render it less valuable.

Disposal of Sewage in Rivers.

In towns situated near a river the obvious way to dispose of the sewage is to let it flow into the river. Whether this can be safely done depends on the size of the town and the volume of the river. Here, again, we have to remember that Nature must not be over worked. Excessive quantities of organic matter in water rob it of the oxygen necessary for the action of the bacteria, consequently foul-smelling gases arise, while scum and grease collect on the surface. When this happens it is an indication that an ampler supply of water for dilution must be found, or the sewage must be turned on to the land. It must not be forgotten that in manufacturing towns there is a special source of pollution in what is called "manufacturing waste," which is generally turned into the streams.

Nature's Limits in Water.

The town of Shrewsbury has 29,000 inhabitants, and it has been calculated that the volume of its sewage entering the river Severn is one per cent. of the volume of the whole stream. This is sufficient to make it unfit for drinking purposes; but the inhabitants

can at present use it for washing and other household needs. If, however, the volume of the sewage increases greatly there would be danger in using it even in this way, since germs of disease might be lodged, for instance, in milk vessels that had been washed in it.

Recovery of Purity in Rivers.

A flowing river will recover itself, just as the land does, from an overdose of sewage. There is always a large dilution; some impurities sink to the bottom; bacteria and the dissolved oxygen in the water act upon others. So it is possible that by the time the river reaches the next town its waters may again be fit for drinking. But such an arrangement would not be possible were it not for the ceaseless action of Nature's purifying process in the running stream itself.

Disposal in Tidal Rivers.

Towns near the mouths of tidal rivers discharge their sewage into the stream at a point where it can be carried down by the ebb tide. Thus the sewage from London is discharged at Barking and at Crossness, about twelve miles below London Bridge, between high water and half ebb.* The Mersey receives the sewage of Liverpool and Birkenhead and the Tyne that of Newcastle and Gateshead without detriment. Of course the valuable manuring properties of this sewage are thus apparently lost. It has been calculated that, each ton of London sewage containing 2*d.* worth of manure, the annual value of the whole, if it could be realised, would be $1\frac{3}{4}$ millions sterling. But it would be so difficult

* London is partly supplied with water from the river Thames at Hampton, but in order to avoid danger to London no sewage is now turned into the Thames at any part of its course above the estuary.

to find a sufficiently large area of sewage farms near enough to make conveyance practicable that it is more economical to let the sewage be carried out to sea, where, indeed, it is not really wasted, for the ocean supports bacterial life as truly as the land, and nothing in Nature is ever lost.

Disposal in the Sea.

Towns on the coast carry out their sewage to sea in pipes laid in such a direction and of such length as will prevent it from being washed back by the tides. Thus Brighton carries its main sewer along the coast to a point four miles beyond its eastern boundary, and then out to sea by a pipe 1,100 feet long. Enormous quantities of the evil stuff may be deposited in the sea without harm. "The moving waters at their priestly task of pure ablution round earth's human shores" render it all into harmless water, into food for countless marine creatures, or into deposit which one day may, if sea and land shift their relative positions, form the soil of new fields. The incessant energy and the beautiful economy of Nature can be nowhere better brought out than in this problem of town life—the disposal of its foulest waste.

REFERENCES.—*Municipal Engineering and Sanitation*, by M. N. Baker (Macmillan & Co.), and *Sanitary Engineering* (2 vols.), by Moore and Silcock (Batsford & Co.). In the current *Municipal Year Book* each teacher can find a statement of the arrangements made for sewage disposal in his own area.

CHAPTER XXVII

THE HEALTH OF THE TOWN (2): SCAVENGING

THOUGH the most serious danger to the health of the town consists in the accumulation of sewage matters, yet there is also considerable danger in the miscellaneous waste known as town refuse. Whenever people live together in communities, each householder has some surplus of waste food, discarded clothing, broken vessels, &c., which has to be got rid of in some way. In the Middle Ages such rubbish, as well as waste from butchers' shambles and stables, cinders from foundries, &c., was thrown into the street, which sloped from each side to a gutter in the middle. Here dogs and pigs acted as scavengers, and heavy rains washed down the residue into the nearest streams. Now and then, when the rain failed or when the accumulations became so large that they could not be disposed of in this way, the corporation in a fit of energy would hire carts to have it removed.

Town Refuse.

Old Time Methods.

As a large portion of this town refuse, even apart from sewage, consists of organic matter—animal and vegetable substances in various stages of decay—it is only less dangerous than sewage itself in breeding disease. It is no wonder that "even without the aid of pestilence the ordinary mortality of a borough in the

Dangers.

Middle Ages was almost equal to that of a town during a visitation of cholera to-day. Even the first well-meant efforts of corporations to shut pigs out of their streets and banish wandering dogs by levying fines from any inhabitant who had an 'irrational animal going about' in the church-yard or market, doubtless added to the dangers of pestilence by removing the only scavengers known to the early borough." *

In the reign of Richard II. town officers were ordered to clean their towns of all that could corrupt and infect the air and bring disease. The best method of doing this, however, has been a puzzle even down to our own time. The first and simplest way of managing all public works was by way of forced labour. The burgesses of the town had either to do with their own hands such work as repairing highways and keeping the streets in order, or to pay substitutes. Naturally those who could afford it paid substitutes, and gradually this system gave place to our present system of paying collectively by a rate. The first scavengers were paid, however, by a toll taken for corn "shown" in the market. This tax was called the "showing," "shewage," or "scavadge" tax, and hence we have our later word, "scavenger." †

Co-operative Action Necessary.

The children are familiar with the scavengers' carts of to-day and know that they make regular visits. How are these carts constructed? Why are they covered? Note the shape of the lids. What lettering do they show? Mostly the municipality

The Scavenger's Cart.

* *Town Life in the Fifteenth Century*, vol. ii., chap. ii. Mrs. J. R. Green.

† *Ibid*, chap. iv.

owns the carts and employs the scavengers. The work of the scavenger, though repulsive, should be shown to be honourable in its degree. The City of Westminster and many other authorities confer some dignity on the humble employés in this service by giving them something like a uniform, which ensures tidiness. Sometimes, however, a municipality pays a contractor to remove the town refuse. In any case it is the duty of the sanitary authority of the borough, the small town, or the rural district to see that no heaps of decaying rubbish are left to stand so as to cause evil smells (which are merely danger signals to give warning of conditions favourable to disease). In the care of towns there must be some system of removal of house refuse and of refuse swept up from the streets. Waste matter of this kind, unlike sewage, cannot be carried away in underground channels, and therefore comes more constantly under the notice of the townsfolk than the sewage.

The Householder's Part.

The children will know what are the constituents of house refuse : ashes, cinders, dust, bones, the uncooked parts of rabbits, fowls, &c., potato and apple parings, cabbage leaves, straw, paper bags, tins, crockery, glass, iron, bits of rag, and the sweepings of streets and markets. It is the organic portion of this miscellaneous stuff that is dangerous to health. The tidy cottager burns such organic matters as cannot be used as food for pigs or hens, and buries useless and unsightly waste, such as old tins or broken glass. Owing to the danger of increasing the fog nuisance it is doubtful whether town householders should assist the authorities, and also protect themselves and their neighbours from the danger of disease, by at once burning all animal and

vegetable refuse instead of placing it in a "dustbin" until the day of collection comes round. The reform to aim at seems rather a daily collection of such waste from every household. The "dustbin," or "garbage can" as the Americans more truly describe it, should be of zinc, not of wood, for disease germs are easily harboured in the soft rotting tissues of wood.

How can this miscellaneous material be got rid of? In some towns situated on tidal rivers it is carried out to sea. But if the weather is rough the heavy barges cannot proceed, and their detention in harbour is a nuisance to the surrounding houses; and also it sometimes happens that a beach is spoiled and disfigured by the tides washing up the refuse once more. A town so near the sea as Liverpool which at one time dumped its rubbish into the sea itself—a natural thing to do, one would suppose—has now found it wiser to abandon sea disposal and to seek other means.

Methods of Disposal by Authorities: In the Sea.

It was formerly the custom to carry out the refuse of a town to some disused quarry, or to some hole whence clay had been dug, and "dump" it there. One still sees occasionally the notice "Rubbish may be shot here" when a landowner wishes to fill up a hollow or quarry. If no cavity was found it was spread upon the land. There were always, however, houses in the vicinity to whom these "refuse tips" were a nuisance owing to wind-blown dust or to evil smells, or to both. And since, to avoid cost of cartage, the dumping ground would be fairly near the town, it often happened that the town grew and grew so that the ground on which refuse had been tipped was advertised as an "eligible

"Refuse Tips" on Land.

building site," and new houses would be run up on a foundation of "made" soil that had not been sufficiently acted upon by oxygen and friendly bacteria to render it harmless. For this reason that central department of the State, called the Local Government Board, which, as we explained in our last chapter, controls the doings of the local "sanitary authorities," will now rarely allow an authority to borrow money to buy land for dumping town refuse, advising them rather to seek a safer and more scientific way of disposing of it.

Their Danger.

This safe and scientific way is found, as in the disposal of sewage, by imitating as far as possible the method of Nature. Now, Nature's way of disposing quickly of bulky waste matter is by fire. Fire is the great destroyer; but it is also the great purifier. The contents of the scavengers' carts are in most modern towns disposed of by burning. The decent housewife often gathers together her potato parings, cabbage stumps, with the scraps left on dinner plates, &c., and puts them on a clear hot fire, which at once serves to dispose of the refuse in a cleanly fashion, and to keep the fire going without so much fresh fuel. The enlightened modern town council causes the contents of its scavengers' carts to be carried up an inclined roadway and tipped into a great furnace called a destructor. This is what Liverpool did when it abandoned sea disposal, and this is becoming the almost invariable method, though, of course, different types of destructors are used in different places.

The Method of Nature: Destruction by Fire.

Children at the stage to take an interest in these matters like to gasp in astonishment at high figures. They know that the temperature of boiling

water is 212° Fah., and they will be much impressed in hearing that in order to secure complete combustion in the destructor a temperature of 1,350° Fah. must be maintained, while in order to get rid of all disease germs and all offensive vapours the temperature must be 2,000° Fah. This is the meaning of the high chimneys they see in connection with the destructor; there must be a very strong draught of air to supply the oxygen needed for such a heat. The thriftless habits of the ordinary housewife in allowing cinders and bits of unburnt coal to find their way into the dustbin helps the burning process considerably, though as a rule it is necessary to supply the furnace with some extra fuel of a more combustible kind than the bulk of the refuse.

Town Destructors.

The disposal of town refuse by burning in destructors is not only on the whole the most sanitary, but also the most economical. Thus the Borough of Shoreditch finds that the cost of destroying its refuse by cremation in a destructor at 2*s.* 5*d.* per ton is less than the cost of conveying it away by barges down the river. The refuse, indeed, serves as fuel, and the heat of the furnace provides electrical power for lighting purposes. At one time attempts were often made in the interests of economy to sort out the rubbish before burning it, but this practice is being abandoned. The sorting had to be very elaborate; the rubbish might be placed, for instance, on a kind of rolling platform with men and boys stationed on either side to pick out respectively bits of metal, wood, rag, &c.—a loathsome and degrading as well as ill-paid occupation, which the products obtained rendered not worth while. But the stuff is not really wasted. Nothing in Nature, as we now know

Economy of this Method.

her operations, ever comes to nought. The organic part of the refuse is turned into water vapour, carbon-dioxide, and nitrogen—oxides and ammonia, all found in ordinary atmospheric air. The mineral matter sinks as fine ash or as caked masses called *clinkers*, about one-third of the original bulk of the refuse. The clinkers will make roadways, or can be compressed into paving slabs; the ashes will help to make mortar. Moreover, the heat of the furnace can be utilised to provide steam power or to generate electricity for the town. The town of Southampton, for example, is very thrifty with regard to the working of its destructor. Not only has it paved roadways and cycle tracks with the clinkers, and manufactured from them the paving steps for its police station, and made mortar for its municipal stables and swimming-baths from the ashes, but with the electric power generated from the heat of the furnace it lights its town hall, its municipal offices, its technical institute, its church clock, &c.

It is always well to show to children the private virtues of order and thrift reflected, as it were, on a larger scale in civic life; and it is also well to help them to realise that all those concerned in the disposal of foul waste of any kind, from the scavenger upwards, are communal servants deserving all sympathy and respect in their vicarious work. Indeed, it has been well said by Professor Patrick Geddes that the dustman or scavenger in his foul clothing ought to be looked upon as "a poor lay brother of the Order of St. Pasteur," fulfilling his appointed service in the ministry of health.

REFERENCE. — Moore and Silcock's *Sanitary Engineering*, vol. ii. (Batsford & Co.), where illustrations of the types of destructors used in many English towns are given, can be obtained in any good municipal library.

CHAPTER XXVIII

THE HEALTH OF THE TOWN (3): OTHER DUTIES OF SANITARY AUTHORITIES

By the time that they have learned something of the difficulties of sewage disposal and scavengering on a large scale, the pupils will have realised that the health of the town depends upon a number of details which are apt to be overlooked, just as our forefathers ignored the dangers of open drains and heaps of rotting rubbish. They will further have realised that apparently small matters affecting health are so important, and at the same time so troublesome to deal with by individual action, that they have to be taken in hand collectively. Collective action finds expression, as we have seen, in electing bodies of men who shall attend to these matters—the sanitary authorities (see Chapter XXVI.)—and in submitting to pay rates to defray the cost of their undertakings if necessary.

The Care of Public Health a Complex Matter.

We may now, in an unavoidably dull chapter, pass in review such of the other duties falling on the sanitary authorities as are likely to come within the range of the children's experience. The teacher will point out that most of these measures have for their aim the *prevention* of disease—the establishment of good conditions of health. If he lives in a rural

Other Duties of Sanitary Authorities.

district, he will also note that the duties and powers of the rural district councils are somewhat more limited than those of the urban district councils.

Taking first the powers and duties of the urban and rural sanitary authorities alike, we find that these include the following :—

1. Sewerage and drainage. This we have discussed in Chapter XXVI.

2. Collection and removal of house refuse. (*Vide* Chapter XXVII.)

3. Provision of water supply : This is of great importance, and will demand a future chapter.

4. Inspection of the district with a view to discover houses unfit for human habitation, or premises kept in such a condition as to cause a nuisance to neighbours : these are evidently cases in which it is not expedient to allow a man to do what he will with his own. For instance, he may not keep a pig-stye on his premises in the neighbourhood of other dwellings. Take some instance reported in the local papers. Offensive trades causing undue smoke or bad smell are also regulated for the public good.

5. Registration and inspection of workshops and domestic factories, including bakehouses and laundries. (*Vide* Chapter XXV.) What are the special dangers to be found in bakehouses? Why have underground bakehouses been abolished? Laundries are dangerous to the workers unless means are taken for getting rid of steam. Care must also be taken that linen, &c., from infectious patients is washed separately. "Workplaces," a general term which includes such places as stable-yards and restaurant kitchens, are also under inspection.

6. Regulations with regard to infectious disease : The sanitary authority is bound to carry out the regulations of various Acts of Parliament for prevent-

ing the spread of infectious disease.* Thus it will see that houses where there has been any case of infectious disease are properly disinfected, it will cause heads of households and doctors to notify any cases of infectious disease occurring in their households or in the course of their practice, so that sufferers may be removed to hospitals, or otherwise isolated. It will arrange for the disinfection of houses, bedding, and clothing. Children in poor neighbourhoods should be told that this is done free of charge if their parents apply to the medical officer of health at their town hall.

7. Inspection of food and dairies. In our chapter on markets we pointed out how the overseers of markets in the Middle Ages protected the consumer from dishonesty. Now that we know more of the dangers lurking in diseased food we can still less afford to let the ignorant consumer protect himself as he best can. The medical officer or the inspector of a sanitary authority may inspect and examine any meat, vegetables, milk, fruit, &c., which is exposed or prepared for sale. If it is unfit for human food it is ordered to be destroyed.

Milk is an article of food which must receive special attention, for two reasons—first, because of the readiness with which it absorbs disease germs; and, secondly, because of its importance as the staple food of infants. If an authority has taken to itself all the powers which Parliament allows it, and has "adopted" the Infectious Diseases Prevention Acts, it can not only inspect

Milk Supply of Towns.

* The enforcement of the provisions of the Acts for the notification and prevention of infectious disease is compulsory in London and "adoptive" elsewhere. But an increasingly large number of urban and sanitary districts adopt the Acts, and there is thus a tendency to a uniform standard of precaution in all towns.

dairies and take samples of milk, but also inspect the milking sheds whence the supply comes, and stop the supply of milk from any dangerous or suspected farms. Moreover, some municipalities—such as St. Helens in Lancashire, and Battersea in London—have constituted themselves milk purveyors, and supply to the townspeople milk of which the purity is guaranteed (municipal milk supply). The utmost care is taken to secure that the milk supply, when received, comes from healthy cows, who are kept clean and are milked by clean milkers; that it is conveyed to the milk depôt in clean vessels, and, once arrived there, passed into sealed bottles with every care to avoid contamination.

8. Provision of cemeteries, mortuaries, and crematoria: these, for obvious reasons, are best touched on lightly with children, and may be treated as suggested in Chapter XIV.

9. Provision of houses for the working classes, and regulation of buildings.

The housing question, as it is called, is a matter of the highest importance. As the years pass we may expect more attention to be paid to the provision of proper houses for poor people, to the removal of such blots on our civil life as we now have in "slum areas." (*Vide* page 168.)

10. Provision of open spaces. This must always be considered in reference to housing problems. (*Vide* Chapter XLIX.)

11. Provision of hospitals, to which we shall devote a succeeding chapter. (*Vide* Chapter XXIX.)

12. Lighting: this is another topic, having great objective interest, which must be discussed somewhat fully. (*Vide* Chapter XXX.)

These powers, as we have said, are possessed by urban and rural sanitary districts alike. *Urban*

sanitary authorities have further powers with regard to :—

1. Cleansing and scavengering of streets. Rural authorities, also, are often required to undertake this kind of work. (Chapter XXVII.)

2. Provision of baths and wash-houses. (*Vide* pages 278-9.)

3. Town improvements of various kinds, which may be discussed in connection with provision of open spaces. (*Vide* Chapter XLIX.)

We may likewise remind the children that, as pointed out in Chapter XIX., the sanitary authorities are also the *highway* authorities for their area. This is reasonable, and may be explained by historical reference to the streets and roads of olden days, which were not only, from their ill-kept condition, liable to cause accidents dangerous to life and limb, but were also in constant danger of pollution from sewage, stagnant water, deposits of refuse, &c. Moreover, the poorer streets of a town and the streets of a village are nearly always the playgrounds of the children, and therefore must be kept as wholesome as possible. It was stated in evidence before the Royal Commission on the Causes of Physical Deterioration that the gutter is the next best place to the open country for quite small children—far better than the crowded class-room in the infants' school. If there be any truth in this statement, it is obvious that the "gutter," and all that it stands for, must be so overlooked that it may be a really safe playground from a hygienic point of view.

Sanitary Authorities are Highway Authorities.

How does a sanitary authority make its influence felt. Explain that it has the power within its own area of making "by-laws." It is said that the term "by-law" is

By-laws.

derived from the Danish word *by*—a township or hamlet—which we have seen in such place-names as Grimsby, Whitby, &c. This would make "by-law" to mean the law of the *by*, or town. Just as Parliament makes laws to control the whole nation, so a borough council or an urban or rural district council may make laws to control the doings of people in its own area. Thus, if a man wishes to erect a new building even in his own garden he must send particulars to the town surveyor, who will not allow him to carry out his plan unless the proposed structure is at a certain distance from every other building, so that the by-laws of the town with regard to air space, &c., may be observed. Of course, no by-law must conflict with the great laws of England. For instance, a sanitary authority may not interfere with the right of traffic on the King's highway, or cause a man to be arrested without a proper warrant. A man's liberty is only curtailed by by-laws in so far as it is necessary to prevent his injuring the health or interfering with the reasonable comfort of his neighbours.

Officers.

The work done by the chief officers of the sanitary authorities should be known. The medical officer of health is an essential official. He must be a properly qualified doctor, competent to watch over the health of the district, and especially to advise what precautions are to be taken in case of an outbreak of infectious disease, and to see that these are carried out. There must also be one or more *sanitary inspectors* who investigate "nuisances," such as improper water supply, evil smells, unhealthy houses, &c.

Obedience to Sanitary Authorities.

Not only should the duty of obedience to by-laws be inculcated, but also influence should be used against the passive resistance arising from inertia and ignorance, which often makes people careless or obstructive in

matters of health reform. "In spite of the spread of education, we are most of us in such matters like half-blind people, who cannot distinguish objects clearly beyond the ends of our noses, and the scientific men who have gained the ear of Parliament and caused it to legislate in this fashion and to commit this power of administration to local bodies are like men of clear sight, who can see half a mile off, and have, besides, telescopes and microscopes which we cannot use at all. When they tell us that certain things are, it is the part of wise men to believe them, and to act on that belief. Experience is all in favour of the enforcement of sanitary rules. The death-rate of places where they are adopted has fallen, and the enlightened people who obey them are just the people whose houses are the healthiest, whose children grow up the strongest, and whose lives are lengthened."*

Children who have reached what has been called the "mercantile" stage of their development are also anxious to know "where the money comes from," so a word or two may be said about the financial aspect of sanitary local government. Sometimes a town, or even a parish, has *property* of its own. It has rents of houses and land to fall back upon. Towns, also, have revenues derived from market tolls, harbour dues, &c. A town may also have control of, and make a profit on, the supply of water or gas. *Fines* inflicted for ordinary sanitary offences make another source of income—*e.g.* if any person deliberately allows the washings of a gas factory to flow into water belonging to the public he may be fined very heavily. Income from all such sources may pass into the treasury of the sanitary authority. Some help is given in cases of need by *grants* from the

How Sanitary Authorities Pay Their Way.

* *The Rights and Duties of a Citizen.* By H. E. Malden.

treasury of the whole nation. For a large undertaking a sanitary authority, provided always that it can obtain the sanction of the central authority, the Local Government Board, may raise *loans* from the general public. Money will be lent to the Local Authority by private individuals, who will receive interest. They know that their money will be safe if they should wish to realise it, because the Local Government Board would not allow the Local Authority to borrow money if it had not reasonable expectation of repayment either from its own property or from the future rates.

The *rates*, of course, form the source which must make up all deficiencies of annual income. A "rate" is really a *share* paid by each householder towards the town's expenditure. The amount paid in rates by individual householders, it should be remembered, represents but a fraction of the amount which each individual would have to pay if he were obliged to undertake in his own time, and at his own charges, the many labours necessary to the convenience, the safety and the health of a civilised household.*

Fairness and Convenience of Paying Rates.

* Summaries of the constitution and powers of sanitary authorities will be found in the latest editions of useful little books called respectively *Local Government*, by Percy Ashley, M.A. (Jack & Co., 1*s*.), or *English Local Government*, by Edward Jenks, M.A. (Methuen, 2*s*. 6*d*.)

CHAPTER XXIX

THE HEALTH OF THE TOWN (4) : THE HOSPITAL

The Hospital a Symbol of the Public Care of Health.

THE most impressive outward symbol of the public care of health to an ordinary child is certainly the hospital. The building itself is generally imposing and its position a waymark of direction in the district. Besides this, poor children have often some knowledge of the inside of a hospital, for if they themselves have not been within it, they are almost certain to have some member of their family or acquaintance who can tell them of the long, well-lighted wards with their rows of beds, the thermometer chart hanging above each bed, and the ministrations of sisters and nurses. Well-to-do children are encouraged to prepare gifts for hospitals, nor can they be ignorant of the recurrence of Hospital Sunday and Hospital Saturday, which have now become institutions. They know that to give to hospitals is one of the commonest forms of charity; even where piety seems absent, human pity leads to almsgiving in this particular direction.

The Word "Hospital."

The word "hospital" is interesting in itself. The children will like to connect it with Latin *hospes*, a guest, and to notice the forms *hospital*, *hospice*, *hostel*, *hotel*, *spital* (cf. Spital Square, Spitalfields, &c.), as well as *hospitality*. The earliest hospitals, indeed, were houses of shelter for travellers. Thus we read

of a hospital, founded in Yorkshire before the Conquest, "to prevent travellers from being devoured by the wolves and other voracious forest beasts." In the days of pilgrimages, *sick* pilgrims specially needed care; hence our present use of the word as a house of reception for sick guests. The word is also applied to a place of gathering for a "college" or community of scholars, as Christ's Hospital, or Cheetham Hospital in Manchester; or of old pensioners, as the Charterhouse. But its most ordinary use, of course, is that of a place of temporary shelter for the sick and hurt.

Infirmary.

The word "infirmary" has also acquired a specialised meaning in town life. It was originally a place for the *in-firm* (*in*, not; *firmus*, strong), *i.e.* the sick and aged in a monastery or college, and in such an institution it still retains that meaning. But in towns it is used either as synonymous with "hospital," as the Royal Infirmary, Manchester, or to denote the department for the sick which is provided by Poor Law guardians in connection with workhouses.

A *dispensary* is a smaller establishment, where patients are not received for treatment, but where medicine and advice are given or dispensed. There is, of course, a dispensary department attached to every general hospital.

Origin of Hospitals.

The origin of hospitals is interesting. As is the case with so many other useful agencies, they owe their origin not to the State, not even to municipal activity, but to religious and philanthropic effort. Our hospitals can be traced back to the monastic infirmaries where sick, blind, or otherwise afflicted inmates were specially cared for. Hence we find in old records an old hospital sometimes called a *masondew* (Maison

Dieu), or God's house. In the course of time separate buildings sprang up. These were often founded and maintained by pious benefactors who, we can but think, were not only anxious to secure the welfare of their own souls by their good deeds, but were also constrained by Christian fellow-feeling and human pity for the sufferers. Thus Archbishop Lanfranc, a familiar figure to young students of the Norman Conquest, founded two hospitals, one for general cases and one for lepers. Rahere, the friend of Henry I., returning from a pilgrimage to Rome, had a vision in which he was commanded to build a hospital for the poor (*vide* Chapter XIV.). He obeyed, and his foundation still exists as St. Bartholomew's Hospital, Smithfield. He also built a priory, which was a building distinct from the hospital; the latter was, as we should expect, under the direction of the monks. The hospital was at first a very humble affair. "If it had any endowment at all," says Sir Walter Besant, "it must have been very small, because the master, a Hospitaller, had to go every morning to the shambles, Newgate, in order to beg meat for the maintenance of the sick." But later King Edward IV. and the famous Sir Richard Whittington became its benefactors, and until the Reformation it was in a flourishing condition.

An Instance: St. Bartholomew's.

Besant gives us a word-picture of St. Bartholomew's in its early days which may serve as a suggestion of the sort of conditions we should find in lesser institutions. "The hospital, according to the custom of the time, consisted of a double hall, or single hall with aisles. Between the aisles, or at the end of the hall, was the chapel. Along the aisles were the beds of the sick. . . . As the patients were brought

Picture of a Mediæval Hospital.

in they were put to bed—two, four, or even eight in one bed—without any regard to the kind of disease from which they suffered, so that in case of contagion the other occupants of the bed were certain to catch it. One wonders how, in these circumstances, any one ever came out of the hospital at all, and how any one could ever expect to recover. But all diseases were not infectious or contagious; and, as regards the patient, he was probably, from long exposure to dirt and confined air, secure as regards many things which would now be fatal. Then there was food for all. There was nursing of a kind; if one were hungry he could eat, if he were thirsty he could drink; the sisters were gentle and pitiful; the physician was always in readiness; his remedies were strange and wonderful, but the groundwork was the old wife's knowledge of herbs and their uses —lore not to be despised; moreover, the chief terror of death was removed, because the priest was always in readiness with the last offices of the Church to fortify the dying. The hall was spacious, lofty, and well-lit—a paradise to a fever-stricken wretch from a hovel without chimney, floor, or window—the beds were soft and clean, as cleanliness was then understood; the way of death was made easy, even if the recovery of health were denied."

The Fate of Early Hospitals at the Dissolution of the Monasteries.

The dissolution of the monasteries meant, among other things, that the hospitals which had been the only refuge of the sick poor came to an end; the buildings were confiscated, and the "religious" who had tended the sick were thrown back into the world with their patients. While the King and his courtiers were dividing the spoil, the sick poor were forced to sit openly in the streets begging or "to lie in their houses in most grievous pains and

die for lack of aid." These evils were so great in London that the town councillors petitioned Henry VIII. that the hospitals of St. Bartholomew and St. Thomas might be given to them. Henry accordingly restored the first, and St. Thomas's Hospital was purchased from his successor, Edward VI.

The Action of the Citizens.

Here we have an instance of communal effort, apart from purely religious activity, directed to social ends. Sir Walter Besant, continuing his narrative, says: "When suppressed, St. Bartholomew's was valued at a yearly revenue of 35*l.* 5*s.* 7*d.* How, we ask, could a house, consisting of a master, eight brethren, and four sisters, be kept on 35*l.* 5*s.* 7*d.* a year, and with what funds were sick people to be fed and treated? There must have been some method of getting subscriptions, donations, alms, and gifts in kind." The story of what happened when the place was taken over by the City shows that voluntary and organised help for the sick was surely no new thing: "Then also were orders devised for the relief of the poor; the inhabitants were all called to their parish churches, when by Sir Richard Dobbes, then Mayor, their several aldermen and other grave citizens, they were by eloquent orations persuaded how great and many commodities would assuredly come upon them and their city if the poor of divers sorts were taken from out their streets and bestowed and provided in hospitals. Therefore was every man moved liberally to grant what they would impart towards the preparing and furnishing of such hospitals, and also what they would contribute weekly towards their maintenance for a time—to make short, every man granted liberally according to his ability."

An Early Appeal for "Voluntary Contributions."

By some such means hospitals must have been supported through Elizabethan and Stuart times.

Founding of Modern Hospitals.

The opening of the eighteenth century saw a marked outflowing of the humanitarian feeling in our towns. Several of the great London hospitals—Guy's, Westminster, &c.—had their origin about this time. Every county town soon had its infirmary or local hospital. None of these were endowed, all were supported by the voluntary contributions of subscribers. This tradition has continued down to our own day. The legend "Supported by Voluntary Contributions" and constant appeals for support, sometimes by such impressive methods as "Give a penny and support the London Hospital for one second" are quite familiar to the children. It would be idle to

Reasons for Supporting Hospitals.

pretend that the support of hospitals, though largely, as we have said, due to genuine human pity, is the product of unmixed benevolence. No doubt contributors are vaguely aware of what used to be called the "commodity" of removing the sick poor to places (especially in cases of infection) where they could cause no danger to the community. Also in large towns and University centres the hospital serves as a school of medicine and surgery where the doctors of the future may learn the practice of their profession, and the whole community is thus indebted to the sufferers whose "cases" form instructive object-lessons to the inexperienced practitioner.

Hospitals a Home of Pioneer Enterprise showing what is Possible.

The value to the community of private philanthropic effort is well exhibited in the matter of hospitals. In the first place, as a recent writer on social matters has remarked, "The work of voluntary enterprise is essentially of an experimental or

pioneering character. . . . The splendidly equipped modern infirmary is only the development of the pioneering work of those who built the first hospital."* The experiment develops with the discoveries of science and the resources of the times. "Consider," says Besant, "into how great, how noble a foundation the little hospital of Rahere has grown. . . . We see thousands of patients received each year; the eight brethren and four sisters have become an army of thirty physicians and surgeons, besides dressers and other assistants, and more than 150 sisters and nurses; a school of medicine, museums, libraries, lecture-rooms, have grown up about the place. . . . It all sprang from the resolution of one man. . . . Out of one good deed has grown a never-ending stream of refreshment and healing. It has lasted for more than seven hundred years already; there seems no reason why it should ever stop." But if it goes on it will assuredly continue to adapt itself, as it has done in the past, to the needs of the time and to the means which science reveals of more effective help. (*Vide* pages 114-5.)

Private Action and Collective Action.

The second great value of such philanthropic enterprises as hospitals is that they educate the intelligence and the conscience of the whole community. They show the way along which the community must follow. When the task is too large and the cost too great, the burden must be shifted on to the broader shoulders of the city or the State. Accordingly we find that in addition to hospitals supported by endowments or subscriptions we have rate-supported hospitals provided, where necessary, by the sanitary authorities. Some of these are general hospitals and some are isolation hospitals to be used in case of infectious

* Reginald Bray in *The Town Child* (Fisher Unwin & Co.).

diseases. Refer to hospitals of each kind in the neighbourhood of the school or used by the people living near the school. Sometimes a sanitary authority makes payment to a voluntary hospital for the reception of its patients.

Elder children may be told that many people would go farther, and, carrying to its final conclusion the general principle of the responsibility of a town or a country for its sick and helpless members, would place all hospitals, whatever their origin and history, under the control of the "authorities" of the district to whose needs they minister, relieving subscribers of their maintenance, and charging this upon the rates. Such reformers would also favour the establishment in crowded areas of many smaller hospitals and local dispensaries, thus doing away with the long weary journeys and waiting periods endured by the crowds of poor patients attending the great central hospitals, and also increasing the fraction of a physician's time that falls to the share of each sufferer. The advantages of State or municipal control as against private philanthropic enterprise are, however, matters upon which good men and women do not always agree, but the question is one which the next generation will probably have to solve.*

The Future of our Hospital System.

* The *pros* and *cons* of individualism and collectivism are discussed with impartiality in the book we have before mentioned—*The Town Child*, by Reginald Bray—a book dealing, as its title denotes, with the child in an urban environment, and therefore of great interest to the town teacher, who should by all means recommend it for his municipal library. Sir Walter Besant's *Mediæval London*, vol. ii., gives full and interesting sketches of the early history of hospitals, and *The Mediæval Hospitals of England*, by R. M. Clay (Methuen), gives interesting particulars of local foundations in various parts of England.

A Great Modern Hospital (St. Thomas') on the Banks of the Thames in London

CHAPTER XXX

THE LIGHTING OF THE STREETS

Light Satisfies a Primitive "Hunger."

THE causes which determine the flow of population from the country to the town are sometimes quite trivial; they are to be found far below the surface, in the obscure primitive instincts of human nature. One of these causes, we are persuaded, is identical with that which attracts the moth to the candle—the glamour of the lighted streets. The attraction to light is one of the fundamental "hungers" of the mind. We have all heard how the Arctic explorer suffers in the long winter darkness of the North. In the same way the countryman is vaguely depressed by the gloom of the roads after sunset, and pines for the movement and glitter of illuminated streets. And the chief recreation of the poorest classes in the towns is to stroll slowly in herds through the liveliest streets—those where there are most shops, most movement, and the strongest glare of light.

Even children who have had no country experience can readily form a mental contrast between the gloom of a rural road on a moonless night and the gaiety and brightness of the high street or any main thoroughfare in their own district. This may be the starting-point for the conception that the luxury of lighted streets is comparatively modern, and for the more interested observation of various modes of street lighting.

Help them to imagine a mediæval street at night. If there is no moon, the only light obtainable comes from the faint gleams of candles here and there in some unshuttered house. The overhanging fronts of the houses produce the deep shadows in which the villain or robber of the historical tale is always lurking in readiness to attack the unsuspecting hero as he passes along the street. If any one goes abroad, which is comparatively seldom, torches, made of tow steeped in resin, or lanthorns enclosing candles, have to be used to light the way through the uneven and often miry thoroughfares. This state of things went on for centuries. In the middle of the eighteenth century, says Besant, the streets were as ill-lighted as in the middle of the fourteenth.

A Mediæval Street at Night.

In 1716, it is true, the Corporation of London made a decisive order that each householder should display a candle outside his door on dark nights to light the streets. The candle, of course, would have to be enclosed in a lanthorn. But this lighting was only compulsory on moonless nights—*i.e.* about ten nights in every twenty-eight days; and only during the darker months, from Michaelmas to Lady Day. Moreover, the candle need only be supplied from 6 P.M. to 11 P.M., so that after the latter hour the streets were again in black darkness. The provision of the nightly candle was a trouble to the well-to-do householder of which he was glad to be relieved; an enterprising individual who contracted to supply the illumination on condition of receiving 6*s.* a year from each householder made a handsome profit.

The Beginning of Collective Action.

In 1736, however, the Mayor and Corporation of London undertook to supply the street lights from

the rates. These lights were oil-lamps. In one of Hogarth's pictures we see the lamplighter carrying a tin vessel filled with oil. (Remind the children that this must be colza oil, made from cabbage-seed, for the days of petroleum are not yet.) These lamps were likewise to burn until eleven, but as the oil was frequently stolen they often died out before this hour. Even when they were all glowing they were of very little use. They were one hundred feet apart, and the light was about as strong as that given by the inside lamp of an old-fashioned omnibus, so that one still had to grope one's way in comparative darkness, and when one went out it was still necessary to have the services of the link-boy with his torch. (Link = light.) Obviously the streets were unsafe, for robberies could easily be committed under the cover of darkness; the cheerful evening promenade of our own times would be impossible, and the poor had to sit within doors in semi-darkness, with no greater aid to work or play than that afforded by a tallow "dip."

Town Councils Undertake Street Lighting.

Presently, however, the shopkeepers of London began to contribute to the gaiety of streets at night by the simple advertisement of placing candles inside their windows and on their counters. A traveller from Birmingham in 1780 waxes quite enthusiastic about one shop in London which presented, it appears, quite a dazzling sight, being illuminated by no fewer than twenty-two candles.

Lights in the Shops.

We are now on the eve of the discovery of coal gas as an illuminant. It is a little difficult for children to realise the revolution brought about in our social life by the discovery of petroleum and of coal gas. The lamp

Change Effected by Discovery of Coal Gas.

or the gas jet replacing the candle in our houses has indefinitely multiplied the comfort and cheerfulness of the home; the lighting of our streets by gas has made urban life more and more secure from crime, as well as more attractive.

Early Experiments.

The story of the discovery of gas is always entertaining to intelligent children. Refresh their memory of the favourite experiment in which coal-dust is put into the bowl of a clay pipe and covered with clay. Heat is then applied to the pipe bowl, and after a time a lighted match applied to the mouthpiece. They see that an inflammable gas has travelled up the stem of the pipe. Tell them how the "Philosophical Transactions of the Royal Society" record in 1739 the experiments of Dr. Clayton, who distilled from Newcastle coal an inflammable gas or "spirits of coal" which he caught in bladders, and on pricking the bladders he was enabled "to inflame the gas at pleasure." Tell them how in 1767 the Bishop of Llandaff invented gas-pipes. He found that the gas was not only inflammable as it came from the distillating vessel, but "retained its inflammability after having been made to pass through water and suffered to ascend through two high curved tubes." Relate how Murdoch, of Redruth, of whom many exciting anecdotes are told, carried the gas in tubes no less than 70 feet high above the forest trees, where a flame from 8 feet to 10 feet long burned in the gaze of marvelling spectators.

First Application of Coal Gas to Public Lighting.

Obviously the next step was to make the gas illuminate buildings. Murdoch showed what could be done by lighting up the Soho Foundry in Birmingham by piercing the tube with holes like those in a watering-can; then in 1803 a "demonstration" was given at the Lyceum Theatre in London.

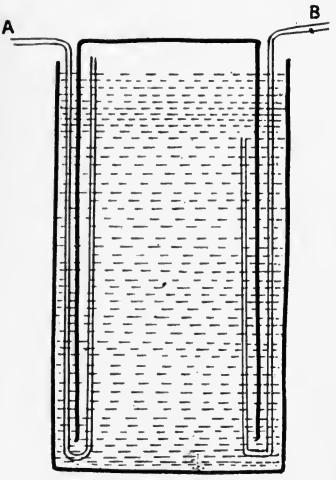
Five years later, *i.e.* about 100 years ago, Pall Mall was lighted in the same way, as an experiment. A few shops and private people were so taken with the new invention that they made gas on their own premises for the sake of the better light.

The "Gasometer" or Gasholder.

To-day the children will know that the manufacture of gas is undertaken by companies, who distil the gas and supply it to our houses through underground pipes—gas mains—and through smaller pipes to the burners in our rooms. The great "gasometers" are conspicuous if somewhat unsightly features on the outskirts or in the backways of our towns. Explain to the children that they are not so much gas *measurers*, as the name would seem to imply, as *gasholders* placed conveniently for distributing the gas to consumers. Children in London will be interested to learn that often gasometers, such as those at Westminster and at Kennington Oval, are really at some distance from the "works" where the gas is manufactured.

The children will themselves have noticed the rising and falling of the huge iron cylinder within its circular frame of stanchions and connecting girders, but they will probably not have been shown the working of the gasometer. An easily wrought experiment with simple apparatus will make the principle of the contrivance clear to them. All that is needed is a couple of tin canisters, one about an inch wider in diameter than the other, and a couple of bent glass tubes. In the accompanying diagram the thick lines represent in section the tin canisters; the dotted lines represent water, and A and B are the bent glass tubes. If the canisters be filled with water and the smaller one be inverted and placed inside the larger, while the tubes are arranged as shown in the diagram, it is possible by closing tube A and blowing through tube B to intro-

duce air (which here represents the coal-gas) into the smaller canister, and cause it to rise in the containing canister higher and higher as more air is blown in. Then if tube A be opened, the air will be driven out by the weight of the smaller canister, and the model gasometer will sink again.



The "Incandescent" Gas Light.

Gas is still the principal medium for street lighting. It has been much improved by the introduction of various forms of incandescent burners. The children will want to know about these, but the full explanation, of course, belongs to inorganic chemistry. They can be only partially satisfied by being told that the "mantle" or "hood" of such a burner is woven of specially prepared cotton which is soaked

with certain rare metals in solution that have entered into combination with oxygen and formed metallic oxides. These oxides when heated by the gas-flame give out a brilliant *white* light—far stronger than the light from the yellow flame of the gas. (Incandescence=white heat.) A Welsbach burner is capable of giving a light equal to 300 candles.

The lamplighter who was the hero of the childish literature of a bygone day no longer does his work in the same fashion. Set the children to note where the gas-lamps are brightest, and how the gas is turned on.

Electric Light.

In many towns gas lighting is giving place to electric lighting. Here, again, curiosity can only be partially satisfied. The children may be reminded of what they learned in a former lesson, that the great force with which they are familiar in Nature through the phenomena of thunder and lightning can be controlled and used for the purpose of propelling tramcars and driving machinery generally. They may now be told that the same force can be used for lighting streets and houses. Children both in town and country are vaguely familiar with the fact that the force of electricity can be conveyed for long distances through wires, and many of them will know that the wires used for this purpose are made of copper. It should be explained to them that copper is chosen because it is a "good conductor" of electricity, and a "good conductor" may at this stage be explained as simply material which allows the electric force to pass through it readily, while a "bad conductor" is one which allows the passage of the force only with difficulty. They may be told that a *thin* wire made of platinum forms a bad conductor of electricity, and that if a short piece of

Incandescent Lamps.

thin platinum wire* be inserted so as to join up lengths of copper wire through which electric force is passing, the piece of platinum wire may, if the force be strong enough, be raised to a white heat and give out light. Many other substances, and in particular thin filaments of carbon, can be made incandescent—that is, brought to a white heat—if electricity be made to pass through them; and if at the same time they are protected from the oxygen in the air so that they may not be consumed they may be used for lighting purposes. The ordinary electric lamps seen in houses consist of a filament of carbon arranged within a small glass globe from which the air has been exhausted. The two ends of the carbon filament are so arranged that they can be made to join up the wires which convey the electric force, and the filament in this way is raised to a white heat and gives out light. If the filament were in the open exposed to the oxygen in the air there would be one flash and the filament would be consumed, but being enclosed in the glass globe from which air has been withdrawn, it is protected from the oxygen and gives out light without burning away.

Arc-lamps.

For street lighting a different kind of electric lamp, called the arc-lamp, is used. No detailed explanation is possible here, but it may be said, briefly, that the arc-lamp is produced by a very strong current, and instead of a piece of platinum wire being introduced between the wires which are good conductors, rods of carbon are attached to the ends of the wires, and these are so arranged by suitable contrivances as to first of all be brought into contact and then separated

* Platinum is in itself a good conductor, but it is used because it does not melt as iron would do. The wire must be very thin.

by a very small space. Across this space the discharge of electricity takes place, somewhat in the same way as the electric discharge in the clouds which we call lightning. Particles of carbon are carried across the tiny space from one carbon rod to the other, and these and any solid particles in the air and also the immediate tips of the two rods are raised to an intense heat and give out a very dazzling light. So brilliant is the light that the arc-lamp is not suitable for small rooms, and even in streets and large shops it is necessary to use obscured globes to moderate its intensity.

Set the children to note in various public places the use of the arc-lamp with its obscured glass globe and of the incandescent filament lamp with its transparent bulb.

REFERENCES.—Besant's *London in the Eighteenth Century* gives an account of the origin of our present lighting system. Hunt's *History of the Introduction of Gas Lighting*, published by Walter King, gives interesting stories of the early experiments. *Public Lighting by Gas and Electricity*, by W. J. Dibdin (Sanitary Publishing Company, Fetter Lane), is a standard work on the technical aspects of the subject.

CHAPTER XXXI

THE TOWN WATERWORKS (1)

THE children have already grasped the idea that the very existence of a town depends from the beginning on water supply. Even a solitary hut or farm must be so placed as to command a supply of fresh water. And when men wish to live together in communities their first care must be to find a stream or a spring near which their dwellings can be placed. If there is no stream or spring they may dig a well—necessarily in primitive times a somewhat shallow one. This is what the patriarchs did in the times recorded in the Book of Genesis. This is what the first Londoners did if their homes were inconveniently far from the Thames or from its tributaries, the Fleet and the Walbrook. And this is the history of the early water supply in most towns. (*Vide* page 43.)

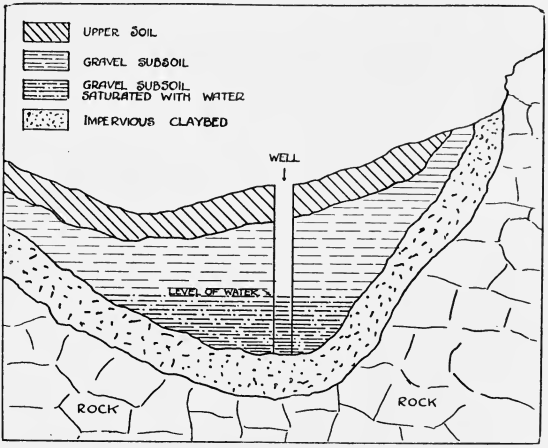
Water a Prime Condition of Town Life.

Here the children may be reminded of their physical geography lessons, and shown how the adaptations necessary in town life depend in this, as in all cases, on natural laws. All our water supply comes primarily from the clouds in the form of rain, snow, &c. Quantities of this water falling on a porous soil sink through the surface of the earth until they come to a non-

Town Springs and Wells.

permeable layer. The layers or strata of earth above this non-permeable layer become super-saturated, and are known as the water-bearing strata. These strata may, owing to some bending or scarping away of the earth's crust, crop out on the surface, and where this happens we have springs of water and the beginning of rivers.

Where the water-bearing strata do not crop out at



the surface they may often be reached by sinking a well or by making a deep boring, and the water rises in the well or in the boring because in the well or the boring, as the case may be, the pressure of the earth above the water-bearing beds has been removed. This may be explained by a simple diagram such as that given above.

If adequate supplies from streams, springs, or

wells are not procurable, the city will not grow. Thus for many years—in fact, until water could be brought from a distance, the growth of London was confined to the neighbourhood of the river, or to places where gravel beds above the clay were met with. Villages arose above water-bearing strata at Islington, Highbury, or Hampstead, but the districts now known as Holloway, Camden Town, Regent's Park, and St. John's Wood, being directly on clay, could not be settled.

Growth of Towns Dependent on Fresh Sources of Water Supply.

If the town population grows denser, not only does the ordinary supply become insufficient, but the quality of the water as well as its quantity becomes a matter of concern. For, as we have pointed out in a previous Chapter, there is danger from contamination when the organic matter present exceeds the power of the oxygen in the water to act upon the impurities. The rivers are polluted with refuse, and the water in shallow wells becomes tainted with the drainage of the surrounding soil. Deeper wells have to be dug, and if the pressure of water in the overlying strata is not sufficient, pumps have to be used to raise it to the surface. The village or town pump is still a working institution, or an interesting survival, in many parts. The water brought up from deep wells is generally pure, because it is protected from impurities by the overlying strata which act as filters to the surface water as it percolates downward. In places where pumps are used, the teacher must, of course, revise his answer to the stock question of his old examination days, and "Explain the action of the common pump."

Deeper Wells.

The Village Pump.

If more water is wanted than is supplied by existing wells the first remedy is to sink fresh wells,

or to drive headings from the bottom of existing wells in various directions. Both these plans have been resorted to at Brighton in order to keep pace with the increased demands due to the rapid growth of the town. It follows, however, from what we have said (*vide* diagram) that if very large demands are made on the water stored up, for example, below chalk strata, the level of the surface of saturation in the water-bearing beds will be much lowered.

Danger of Water Exhaustion.

Not only will the wells be lowered and some springs dried up, but the volume of the streams that survive will be diminished. The mills on their bank no less than the pastures which they fertilise will suffer, and the town supply shrinks. Town authorities therefore have to cast about for fresh sources of supply.

They go further afield, to the head waters of large rivers or to some natural reservoir, such as a lake.

Concern of Authorities.

Then they have to devise means of bringing the water where it is wanted. Their work, in fact, comprises four important branches—Collection, Storage, Purification, and Distribution.

In a country cottage where there is no well, water is collected from the roof by gutters and pipes, and

Collection of Water for Towns.

passed into a storage tank, whence it can be drawn when it is wanted. For a large community this has to be done on an enormous scale. Thus Sir Hugh Myddelton, who lived in the time of Shakespeare, offered his services to the Corporation of London to collect water from the distant springs in the Hertfordshire hills and to

Example of Water Collection: the New River.

bring it to the city. He made a great canal or conduit forty miles long, called the New River, which even now can be seen flowing through the

northern suburbs of London into the reservoir at Islington. Subsequent generations have widened, shortened, and improved this stream, but the credit of the undertaking rightly remains with this far-seeing citizen, who realised what would be the wants of London in the future.

The prudent cottager dependent on rain water knows better than to trust for his supply to daily showers. His tank forms a reserve store to which he can have recourse when rain does not fall. In the same way the water supply and storage accommodation for a city must be sufficient to tide over rainless periods. Rainfall is more abundant in the winter than in the summer; and there is more likely to be a drought after a dry winter than after a rainless summer. Accordingly one often sees in a remote upland valley one or more great reservoirs or artificial lakes, which serve to store water drawn from the surrounding springs and streams so that it may be available for use in some great town. The accumulation of a winter's rain here retained forms a supply for the next summer. If a lake is naturally formed by the springs, here is a collecting reservoir ready to hand. Accordingly we find that Lake Thirlmere affords a natural reservoir for Manchester, ninety-five miles away; Loch Katrine for Glasgow; and Lake Vyrnwy (sixty-eight miles away) for Liverpool. Sheffield, Derby, and Nottingham are supplied from the Peak Valley; Leeds and Birmingham depend on moorland springs at a distance. It is thought that London, which has hitherto supplied herself from the Thames, the Lea and its tributaries, and from deep wells in the chalk, will soon be obliged to have recourse to Bala or some other of the Welsh lakes. In fact, as Mr. Mackinder remarks,

Storage Reservoirs.

the uplands of Wales and the North are becoming a national water estate. The lakes in the above cases are often supplemented by artificial reservoirs of masonry or earthwork built in a series of steps corresponding to the levels of the descending stream.

In such cases the water must, of course, be carried in aqueducts or in conduits to some of the places

LAKE VYRNWY, WHICH AFFORDS A WATER SUPPLY TO LIVERPOOL, SIXTY-EIGHT MILES AWAY

where it is wanted. It is stored in "service" reservoirs situated on the highest point nearest to the town to be supplied. The reason for this is that the district may have the reservoir to draw upon in the event of the supply main being under repair. In London, however, the water supply from the Thames and from

Conduction by Conduits or Aqueducts.

the lower parts of the Lea valley has to be raised by pumping, and this is true of other places where the supply comes from a low level.

Purification.

Often the supply is not fit for immediate consumption. The water of Glasgow is, if anything, too pure; that is, it contains so little lime that Glasgow infants are said to suffer largely from rickets. But usually the trouble is that the water contains organic and other impurities. (*Vide* pages 229-230.) In the case of a town supplied with water from a river it is constantly found necessary to move the waterworks farther up stream. Thus, though at one time water was drawn for London from the Thames at Battersea, it is not now taken from a lower point than Hampton. Even then precautions must be taken. The water is made to pass through filtering beds. Layers of clean material are spread over the bottom of the tanks to a depth of from two to three feet. The material consists of several layers, the lowest layers being composed of rubble, and the size of the material of each succeeding layer decreasing until we have sharp sand as the top layer. The water is made to percolate slowly through these beds, leaving behind as it does so quantities of solid matter which form the chief harbourage for dangerous germs. The filtering beds are occasionally scraped and sometimes renewed.

Distribution.

Finally the water must be distributed. Main pipes are laid down under the streets, and from these pipes are led to every house. Whereas in olden times every householder had to fetch his own water from the nearest stream or fountain or pump, in these days no one may inhabit a house in a town which has not a proper supply of water laid on.

CHAPTER XXXII

THE TOWN WATERWORKS (2)

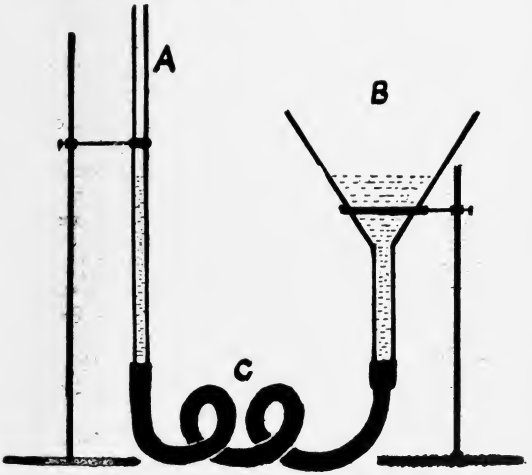
In the last chapter we suggested to the teacher those broad facts about water supply which are needed to explain some of the commonest experiences of town life. The children in towns are so accustomed to turn a tap and see the water flow that they are apt to take a continuous supply as a matter of course. Help them to trace the water backwards as it were through the house pipes, along the *service* pipes as they are called, which connect the house pipes with the "mains" running along under the street, on to the service reservoir into which it has been pumped from a well or river near by, or to which it has descended from some upland lake or stream. They may notice that the reservoirs in their own neighbourhood are placed upon relatively high ground. They should be shown that the reason for this is that water can be supplied thence by simple gravitation to the top stories of tall buildings if only they do not stand at a higher level than the reservoir. Children will be delighted with a simple experiment illustrating this. It may be arranged as shown in the accompanying diagram, where A represents a long piece of glass tubing and B a glass funnel, while C indicates a connecting length of indiarubber tubing. If water

Water Distribution in Towns.

Distribution to High Buildings a Matter of Balance.

stained with ink be poured into B until it rises in A it will be seen that the water will stand at the same height in A and B, and if B be raised or lowered the level of the water in A and B will be changed, but will still be balanced at an equal height in each.

In this country, water, a prime necessity of life,



like the air we breathe, is so plentiful that in a certain sense it is free to all. But it is only free if one takes the trouble to appropriate it by carrying a vessel to the stream or spring where it flows or by arranging tanks to catch that which falls from the heavens. In the beginning of village and town life each household depended on its own pitchers and tubs for its water

Evolution of Town Distribution.

supply. So troublesome a duty was soon given over to others who would undertake it regularly in exchange for payment. There was in London in olden times a guild or company of water-bearers—the Brotherhood of St. Christopher they called themselves—who had evidently organised the supply of water to the citizens on a large scale. In Tudor times, too, we hear of water-carriers called "Cobbs," who brought water to the houses in large vessels holding three gallons each. Here we have instances of individual action giving place to collective action—such collective action being due to private enterprise. But, as in other cases of public service, the action of philanthropic individuals was very helpful in bringing about better conditions for their neighbours. Thus we read that J. Wells, grocer, and Mayor of London in 1433, caused fresh water to be conveyed from Tyburn, a stream the course of which is indicated by the Serpentine in Hyde Park, to the "standard" in Eastcheap. This was a great benefit, because the dense population had caused pollution of the wells and springs in the City itself, and to find pure water the citizens and the water-bearers would have to travel a long distance. Again, a certain William Eastfield, mercer, dying in 1538, left provision in his will "to convey sweet water from Tyburn and to build a fair conduit by Aldermanbury Church," and to make a "standard" in Fleet Street. Lamb's Conduit Street, in London, is called after a citizen named Lamb, who in 1577 "drew several springs of water to a head and made them pass into a conduit."

The Individual Supply.

Supply by Town Carriers.

Private Effort for Public Benefit.

Townspeople, however, seem to have felt that

the town authorities should arrange for water supply, and some towns were very energetic in this respect. Thus in 1421 the water supply of Southampton was undertaken by the council, and it was furthered by the bequest of leaden pipes from a burgess "for the good of his soul." In 1490 the council had not only made an aqueduct, but also provided a watering-place for horses and a washing-place for the women. London was more chary of public enterprise. Though before the time of Sir Hugh Myddelton several Acts had been passed empowering the Corporation to bring water from greater distances, the City Fathers were very timid of the great scheme which was to tap such distant sources as the Chadwell and Amwell springs in Hertfordshire. "The said Maior and Comonaltie and citizens considering the greate charge and expense of the saide worke and doubtinge much loss, did therefore forbeare at their Common charge to undertake the saide worke." Sir Hugh consequently was obliged to form what we should now call a "syndicate" of his own friends to provide the money for his undertaking, and, as a matter of fact, lost over it. This was the origin of the water companies of which we have heard so much. It is disappointing to find that Londoners were too inert to draw their water from the New River which Sir Hugh had brought to them, and preferred, through ignorance and laziness, to use their own doubtful well-water. This went on until in the Great Fire the wells were choked by the ashes of their standards and pumps, and since that time we have had no return of the Plague to which the impure water from those wells had contributed.

Public Enterprise.

Origin of Water Companies.

Even if the supply of water was good, it was a

toilsome business to carry it in buckets from the pump or conduit to the houses, and still more toilsome to carry it if these were on a hill. Then, of course, if water were needed on an upper floor, it had to be carried by the occupants. It was a momentous occasion, therefore, when, on a day in 1580, Peter Morrice, a Dutchman, demonstrated to the Lord Mayor of London, who had come in state for the occasion, how water from the Thames could be raised high enough to supply water to the upper parts of the City of London, and actually threw a jet of water over the steeple of St. Magnus' Church. No such thing had ever been seen before. Morrice pumped the Thames water up to his tanks by means of a water-wheel placed in the first arch of London Bridge and driven by the tide. He soon occupied five arches with his wheels, and his family continued to supply the adjacent part of the City for generations, until a company was formed, afterwards merged in the New River Company. In other parts of the City water was still drawn up in pumps from wells, and fresh water from good springs had still to be carried round in great butts mounted on wheels, and sold in buckets at the doors. Eventually London was supplied by no fewer than seven companies, whose powers were arranged by Parliamentary statutes. In 1902 these various companies came to an end—their undertakings being purchased on behalf of the public—and London became responsible for its own water supply under a special body of men called the Metropolitan Water Board, representing the various local authorities of the area served. Thus the progress has been from the individual pitcher at the spring or pump, through the street carriers, the private benefactor

Devices for Raising Water.

Municipal Control of Water Supply.

bringing in fresh supplies, the private companies collecting, conducting, purifying, and distributing on a larger scale, and finally the municipality undertaking all these duties.

The water supply is now in the hands of the municipality in two-thirds of all the "county boroughs" of England and Wales, in nearly all the ordinary boroughs which are not county boroughs, and in about half the "urban districts." In other places the water is still supplied by companies or by private or public wells or tanks. Where the local authorities think it desirable to acquire the rights of supplying water from the companies, Parliament nearly always gives them "compulsory powers," as they are called, to purchase these rights. "The Municipal Year-Book" will tell the teacher what is done in his own town. In any case, pure and plentiful water is of such importance to public health that the supply has to be narrowly watched. Public water-works, indeed, come next to highways in importance. For not only is water needed for domestic purposes, it is needed for extinguishing fires, for sprinkling streets, for flushing sewers. It is used also in the various industrial processes on which the life of the town may depend, including the provision of steam for manufacturing power.

Various Uses of Water in a Municipality.

The water supply of a town suggests various topics for home discussion. It is obvious that for many purposes pure filtered water is not essential. In some places a dual supply is provided—a small supply of pure filtered water for drinking and cooking, and ordinary river water for washing, street watering, and the like. In other places it has been found that the cost involved in providing a double service would be quite as great as the

"Dual Supply."

cost of passing all the water through the filtering beds.

Very many people are careless about wasting water; and it is, therefore, sometimes urged that an intermittent supply should be given, the water being turned on at a certain hour in the morning and turned off again after a few hours, until the evening, when it could again run for a time. Some, again, have urged the use of water-meters. On the whole, however, it is felt that in this country it is better to encourage the freest use of water by the poorer class, and to trust to education to make consumers see that it is not only wrong to waste the actual water, but wrong also to throw away, by neglecting to turn off a tap securely, any of the labour and money expended on the collection, purification, and distribution of water to our houses.*

Constant and Intermittent Service.

The children will know that water is paid for by a "rate," or forced contribution from each householder, and the foregoing considerations will have shown them how vast an expenditure of labour and capital is necessary to supply water to a large town. If a company provides the water the charge is regulated by Act of Parliament. Many towns which themselves provide their water prefer to charge for it by a special rate; others make no direct charge, the cost of water supply being included in the general rates. Towns do not look to make a profit on their water rate, but they find that a good water supply is a real economy in its effects on the general health and prosperity of the town.

Water Rates.

For many reasons it is desirable that a munici-

* It is not generally known that waste of water is subject to a penalty.

pality should provide public baths and washhouses. Many poor persons live in such a crowded space that the privacy necessary for a proper bath is unobtainable. Personal uncleanliness is a menace not only to the comfort but even to the health of the rest of the community. To be clean for the sake of others is an important social duty. Moreover, "a clean body will not tolerate dirty clothing, or a dirty home, or dirty streets. The securing of universal cleanliness would do much to unite antagonistic classes and solve the problem of the slums. For, after all, it is not their poverty or their ignorance, but their filth which creates the barrier between the very poor and the rest of society." Again, in the poorest homes the family has but one room, to serve as sitting-room, dining-room, and kitchen. If this room is also a laundry, the washday, with its accompanying steam, suds, and confusion, effectually destroys the comfort of the family; and the higher the standard of cleanliness, the more does this recur. At a public laundry, the mother, at the mere cost of the fuel required at home, may command all the modern conveniences and avoid all the confusion and petty misery of washing-day in rooms quite unfit for the work.

Public Baths and Washhouses.

Further Developments.

Collective enterprise, municipal or private, has done much in the matter of water supply, but it may conceivably do much more. Already in many cases hot water for baths and other household purposes is supplied from a central boiler heated by a furnace to the separate tenements of blocks of "flats" or "workmen's dwellings," and we may expect that this common supply of hot water will be developed and may by-and-by provide for the warming of such blocks of houses as well as for the ordinary domestic purposes.

CHAPTER XXXIII

THE FIRE STATION

EVERY schoolboy who is worth his salt makes a hero of the fireman, and no child of school age is likely to be unable to give some account of the methods adopted by town or village in dealing with fire.

Fires in Country Villages.

In villages, of course, each little group of people rely in dealing with an outbreak of fire on mutual help. Buckets are filled at the nearest water supply. A tank is put on a cart and carried to the burning cottage or hayrick. Somebody borrows a hose, and plenty of willing hands do battle with the flames. But in most rural districts there is also a voluntary fire brigade, the members of which can be summoned to give assistance, and which is somewhat more organised. The members have collected subscriptions to procure the right kind of appliances, they have undergone some instruction and drill, and they are able to render more skilled aid than could be afforded by country folk who are without experience. But voluntary aid, even when organised, is insufficient in crowded populations, where people like to feel the security that comes from having a paid and highly trained fire brigade.

Volunteer Brigades.

Municipal Fire Service.

"Some of the advantages of a paid over a volunteer fire brigade are better men, better and quicker service, and thus more prompt and

efficient control over fires in their early as well as in their later stages. It is a well-known fact that it is the first few minutes after a fire begins that determines its magnitude. It stands to reason that men engaged in the ordinary occupations of life cannot get to a fire so quickly nor do so efficient service when there as those who are ready to jump on to the fire apparatus the minute the gong sounds, and who have had years of continuous training and experience." * Besides, paid fire brigades include horses and motors as well as men, so that when the alarm sounds it is not necessary to go in search of them and bring them to the station before a start can be made.

Accordingly, every municipal borough or urban district has power from Parliament to establish a fire brigade, and provide fire engines and all necessary means for extinguishing fires, and in the majority of places this course has been taken. The brigade may attend fires outside the district, but in this case the owners of the premises where fires occur must pay the reasonable expenses of the brigade. So that places too small to make it worth while to maintain a brigade for themselves may be sure of help if someone telephones to the nearest town which maintains a brigade.

The children will see here the sequence so often observed in other institutions, *e.g.*, in gas and water supply. First, individuals have to rely upon themselves and their neighbours; next, some more definite organisation of a voluntary character, such as were at one time formed by insurance companies and such as are still managed in some country places, takes the place of the chance help given as between man and man; and then common efforts are gathered together in muni-

Evolution of a Municipal Service.

* *Municipal Engineering*, Baker (Macmillan).

cipal action, and everyone contributes, whether he will or not, to agencies which are intended for the protection of all.

The children may be helped to realise the conditions which were customary in towns of olden time. There is no doubt that fires were frequent, though not so destructive as some history books would lead us to think, for, as Sir Walter Besant points out, there were really only two disastrous fires to record in London—one in 1135 and the Great Fire of 1666. When we are told that the houses were mostly made of wood, we must not think of matchboarding or of the thin planks which form floors in our own day, but of massive oaken beams, strong and square, and oaken beams do not readily catch fire; moreover, the spaces between the beams were filled with plaster, which is not combustible. These houses were not high, scarcely ever more than two storeys. Then, too, there was but one fire in the home of the ordinary citizen, and that was laid on a flat hearthstone. At night, when the inmates went to bed, the ashes were swept up and the glowing embers covered with a *couvre-feu* (whence our word *curfew*). A *couvre-feu* was of metal and shaped somewhat like a helmet, and it not only prevented the ashes from scattering, but kept in a little fire until next morning. This was important, as otherwise fire would probably be fetched from a neighbour's. There were rules about carrying it from house to house. Thus, even in 1722, the parish vestry of a Lincolnshire village passed a rule that no person was to fetch fire from any neighbouring house "without the same being carried in a lanthorn or a warming-pan."*

Fires in Old English Towns.

* *English Local Government*, S. & B. Webb.

When fires did break out it was mostly in the poorer parts of the city, where the houses were huddled together more closely, and where, in defiance of the rules, the roofs were made of thatch instead of tiles. Then, as now, the fires were not so much due to the houses themselves catching fire, as to the fact that they often contained stores of inflammable things, such as oil, wool, tallow, &c.

Appliances in Olden Times.

In dealing with fires, our ancestors not only threw on water from the nearest stream or well, but they also understood how to check the progress of a fire by pulling down the adjoining houses with hooks and grappling irons. The town council would often, says Mrs. Green, send a crier round the streets to bid men have water at their doors for fear of fire. "Hooks, ladders and buckets" were also ordained to be in readiness. As a better water supply became available, and engines for forcing the water to a height were contrived, these labours were managed more scientifically. The churchwardens and overseers of parishes and the town councils began to acquire engines and buckets of their own. Boys will hear with relish that the scholars at Bridewell Hospital, in London, were in the eighteenth century allowed to go out and help the City firemen with their buckets.

Modern Appliances.

Such a chance of adventure would not be afforded to-day, but most children have felt something of the excitement which attends the rush of the fire engines through the street when an alarm is given. Help them to marshal their observations so as to have a connected view of the arrangements involved in the work of a fire brigade. Perhaps we may begin with the fire alarm. In these days there are swifter means than running or riding to fetch help. In all large towns there are

fire alarms, the whereabouts of which should be known in every district. In London the authorities have adopted the device of a red lamp-post with a red tablet in the form of a hand attached to it. The hand points to a smaller red post in the upper part of which is a sheet of glass. In case of fire this must be broken and the caller must pull back the knob which he will find within, and then wait until the firemen arrive in order that he may save their time by telling them the exact scene of the fire. The glass plate was put to enable boys, &c., to be arrested for *malicious damage*, there being no power in law to arrest for merely giving a false alarm. If a fire breaks out where there is a telephone the exchange should be rung up for "Fire Brigade"; no attempt need be made to get the brigade's number.

The Alarm Call.

A visit to the district fire-station, or failing this the teacher's description and a rough blackboard drawing will enable the children to realise what happens. At the porter's lodge of the fire station someone is on duty day and night. The pulling of the electric signal at the alarm post causes a gong to ring within the station, and at the same time a label is exposed on a frame in the porter's lodge showing whence the call came. At the sound of the gong those firemen who are on duty put on their helmets, which are just under their hands, and descend from the rooms above. Horses are standing in the stables ready harnessed, but with the harness so arranged as to relieve them of the weight. The harness is let fall into its place, and the horses are led to the fire-escape. This is a kind of long, light cart, which carries two important things. The first is the well-known ladder in sections which may be put up against a burning house. The

The Fire Station.

second is a long length of coiled hose lying on the escape beside a sort of tank, which contains about twenty-two gallons of water. There is also a cylinder of compressed air. The great doors open by pulling a lever, and out flies the escape. All this has to be done in one minute after the alarm is given. The horsed escape, as it is called—though it is possible that when motor-power is more trustworthy than at present the horses may be superseded—is the first to leave the building. For lives may be in danger, and the escape must be put in position as soon as possible. Meanwhile the store of water in the tank is sufficient, when let out through the hose, to check the progress of any ordinary fire, and the compressed air is used to drive the jet with more force as the pressure of the water in the tank becomes less. Directly after the horsed escape comes the low wagon with the fire engine, bright with its polished metal boiler and force pump. There is already steam coming from the engine, for while it is standing the water is kept boiling day and night over gas jets, so as to be ready at any moment. When the engine is taken from above the gas the place of the latter is supplied by a coal fire ready laid in a kind of bowl below the boiler. This is lighted and "burns up" on the way through the streets, so that there is plenty of steam quickly generated. A supply of fuel is carried also. Arrived at the scene of the fire, the firemen in charge of the engine go to the nearest fire hydrant or "plug," as it is more commonly called. The children will have seen metal plates in the pavement with the words "Fire Hydrant" upon them; sometimes the letter "H" on an opposite house is an additional guide. The firemen have a bar to open the metal plate, and a key wherewith to turn the plug, so that they can get

The Fire Escape.

The Fire Engine.

Pumping Water from the Main.

access to the water in the water-main below. They now attach the pump of the fire-engine to the water-pipe, and run out the long canvas hose they have brought. The little steam engine works the pump, so that a good jet of water is forced through the hose, which is carried along the street to the burning building. If it is an hour when there is likely to be less water than usual running through the mains, someone at the station has telephoned to the turn-cock and the nearest pumping station has been roused to send more supplies to the reservoir which feeds the mains of the district. Also, if the fire is a serious one, telephone messages have been sent to other fire stations, which are likewise sending up engines, so that a number of streams of water can be poured on the fire at once. Bystanders must be careful not to hinder the firemen by getting in their way, and if they give any assistance it should be under the direction of the brigade officers. The work of the firemen at the scene of the fire is to put out the flames by directing the hose to the right spots. The axes which they carry are necessary to hack their way through windows or debris of any kind; sometimes the fire is under a floor, and the boards must be torn up. If there are inmates in the house, a fireman mounts stairs or ladder and helps them on to the escape. The Superintendent of any fire station will give such mere unadorned facts of deeds of bravery performed by local heroes as ought to make any spirited boy feel that a fireman is at least as splendid a fellow as a soldier. The silver medal for exceptional bravery is treasured in not a few firemen's families, and the children will be told of the King's Police Medal for policemen (including fire brigade men) which is

Bringing up other Help.

The Firemen Fighting the Fire.

a kind of Victoria Cross for these heroes of civic life.

The children will like to know something of the firemen's daily routine, and will understand that constant drill and constant attention to the apparatus, methods of repairing it, &c., are necessary. The handsome fire station which most municipal bodies have erected contains comfortable quarters for the men. Some of them are married, and have rooms allotted for their families. If a man dies in discharge of his duty, his wife and children are provided for, and if he is no longer able to work he receives a pension.

Precautions against Fire.

A Town Council must not only consider the extinction of fires, but also their prevention. It accordingly tries to secure broad thoroughfares so that there is no danger of flames leaping across narrow streets as they did at the Great Fire of London; houses must be made of incombustible material—a wooden house would not be allowed; there must be a good water supply, with plugs at frequent intervals. In London they are found at distances varying from 50 to 400 yards, according to the district, so that no building is more than a quarter of a mile from a supply. If a Council contracts with a water company, it makes the company fix such plugs, and pays it for the necessary water. Large buildings are often fitted up with high-pressure hydrants on the premises, for which the owners pay a special rate. And finally, the use of the electric telephone makes it possible to summon aid so quickly that though the population is denser and larger, there are far fewer fires than formerly. Let the class review common acts of carelessness which may cause fires—neglect of foul chimneys, unguarded gas jets, etc. Protection from fire depends largely on the inhabitants themselves.

CHAPTER XXXIV

THE POLICE CONSTABLE AND THE KING'S PEACE (1)

The Police Constable and General History.

THE late Bishop Creighton was fond of recommending that the study of history—by which he meant not mere biography, but the study of national development — should begin with the policeman. This seemed a hard saying, if not a bit of doctrinaire foolishness, to those teachers who, having been brought up on the ordinary text-books, did not know as much history as the Bishop. Dr. Creighton was, in fact, one of the greatest historians of our time, and he had good reason for what he advised. For the modern police constable is a symbol of the British people, at once the most free and the most law-abiding nation on the earth. And the story of the experiments by which the police constable was evolved is well adapted to give young people an insight into the principles of good government. Some time, therefore, may be profitably spent in considering how it is that English life in town and village has come to be so secure as we find it to-day.

The King's Peace.

When a policeman arrests an offender to-day he does so, as the class will know, "in the King's name." He represents the Crown itself and is the conservator of what is called "the King's Peace." Our early English forefathers, when they were united under

Edgar into one people, looked to their king to be the guardian of the peace—"the highest maintainer of the peace," as he was called. In return for their allegiance he promised to maintain a state of security in the kingdom. He was not only to be an hereditary ruler, but also the chief magistrate of the country. The national or public peace became the "king's peace," and so strong was the idea that the orderliness of the kingdom depended on the presence of a ruling magistrate, that when the king died all peace and law were supposed to die with him and to rise again only when his successor was proclaimed.* A chronicler, referring to the death of Henry I., writes: "The king died on the following day after St. Andrew's Mass-day in Normandy; then there was tribulation in the land, for every man that could forthwith robbed another. A good man he (the late king) was, and there was great awe of him. No man durst misdo against another in his time. He made peace for man and beast." It was found necessary in the reign of Edward VI. to state definitely the legal maxim "The king never dies," *i.e.* there can be no break in the office of kingship, for directly a king dies his successor is in authority, and thus the national peace is maintained. The "king's peace" is, in fact, the peace of the realm itself. A quarrelsome person who does not quite deserve to be sent to prison is often "bound over" by a magistrate "to keep the peace."

The King's Peace the Internal Peace of the Realm.

How did the king maintain the peace? Obviously he must delegate his function. The early English kings looked to each "thane," or resident owner of an estate, to be responsible for his dependants and to bring them to justice if they broke the law. Poor

* Stubbs's *Constitutional History*, vol. i. chap. vii.

freemen who owned no land which might be forfeited on their misbehaviour had to find some one to be responsible for them. The arrangement was that the heads of ten homesteads should band together so that their joint belongings might be pledged for the good behaviour of each member. The ten men were responsible for one another and bound to bring any one of their number to trial if needed. In case of wrongdoing fines were imposed on the whole group. The people were thus made to govern themselves. The arrangement was *local*, and it was *mutual*. Every man had to find some one among his neighbours, his overlord, or the members of his *tything* (as the groups of ten were called) to act as his security or go bail for him. A group of ten tythings was called a hundred. The members of a tything elected one of their number to be their representative. This personage is the earliest original of our modern police constable.

A Local and Mutual Police System.

But theoretically all men were policemen, and it will be seen that their interest lay not in detecting crime after it was committed, but in preventing any crime from occurring, "in *foreseeing* that nothing be done that tendeth to the breach of the peace." There were, of course, persons who had not sufficient reputation among their neighbours to induce the prescribed number to become responsible for them—these were outlaws literally—men outside the protection of the law.

"Every Man a Policeman."

After the Conquest the same system was maintained, but it did not work so well as formerly, since the royal sheriffs who were appointed to see that it was properly carried out were harsh in their dealings with the people, and exacting in the collection of fines. So ex-

Policing the People after the Conquest.

cessive were these fines that in Magna Charta, as the pupils will remember, it was laid down that fines must be proportioned to the offences for which they were a punishment, and that no man might be fined to his "utter ruin," the merchant must not be stripped of the goods he had for sale, and the villein must be allowed to keep his agricultural implements.

As time went on, the little groups of ten were broken up, and the overlords themselves were so lawless that they could not be trusted to keep law among their vassals. In the reign of Edward I. a famous statute, the Statute of Winchester, was passed in order to put the police system of the country on a better footing. The hundred was still made responsible for the offences committed within its boundaries. Special police regulations were issued intended to keep order in towns, and to ensure the capture of runaway criminals. This statute has handed down to us two well-used phrases "Watch and Ward" and "Hue and Cry," and the children will be interested in hearing of their origin.

"Watch and Ward."

The law, or police regulation as we may call it, with regard to "Watch and Ward" (ward = guard) ordained that the gates of walled towns were to be shut between sunset and daybreak. During the summer nights between Ascension Day and Michaelmas a watch of six men were to be stationed at the gate, apparently lest any one should carry off the standing corn or other crops which were then to be found close to the walls. Moreover, every town had to provide watchmen, four to twelve in number, according to the size of the town. Each householder, it should be noted, was bound to take his turn in watching by night in the streets, unless he chose to pay a substitute.

"Hue and Cry."

The "Hue and Cry" meant that if a criminal did not allow himself to be arrested by the watch, the inhabitants of the place were bound to pursue him with "hue and cry" into the next place, where again the inhabitants were bound to leave their work and to take up the chase, and so on from hundred to hundred "till they came to the sea-side," or until the man surrendered. This might be exciting once in a while, but the children can imagine that it would soon become very vexatious to the farmer who was gathering in his crops, to the weaver finishing a web at his loom, or to the trader concluding a bargain. Fines, however, were imposed if a town were remiss in the "hue and cry." "The citizens of Lincoln were fined fifty marks for suffering a robber to escape."

Ancient Substitutes for the Policeman's Baton.

Another police regulation of the Statute of Winchester—the "Assize at Arms," also entailed some personal inconvenience on the householders. Every male between the ages of fifteen and sixty was required to have armour and weapons in his house, according to his rank and means. Knights had hauberks, helmets, swords, as well as a horse each, while the poorest must have at least bow and arrows. Compare this array of weapons with the simple truncheon carried by our policemen. In those days it could not be said that every Englishman's house was his castle, which, so long as he kept the law, none might enter against his will, for in each hundred two officers were appointed to make a half-yearly inspection in men's houses to see that their arms were sufficient, and to fine for shortcomings. It will easily be seen that though this provision was ostensibly to keep the king's peace,

yet it gave opportunity for the king's officers to call together a large force of men for military purposes.

The system of oversight by sheriffs was so unsuccessful that a new office less offensive to the people was created, that of Conservators, Wardens, or Justices of the Peace, as they were at last called. These justices were country gentlemen of good position, whose influence among their neighbours might, it was thought, be somewhat like that of a *good* feudal overlord. Their work was quite local, and they administered justice of a simple kind in their own areas, receiving no payment, but deeming it an honour and a duty to serve their country in this way. This institution has lasted down to our own day.

Justices of the Peace.

Now these justices required subordinates; and hence for the first time we have the regular petty constable, whose title has descended to our present-day policeman. "Constable" is a word of somewhat exalted origin, "comes stabuli" (an equerry or master of the horse), and was applied to so many functionaries that the term "petty" was used by way of marking the humble position of these officers. These men owed their authority to the fact that they represented the Crown, being charged with the maintenance of the "King's Peace." They were "sworn in" very solemnly to this effect when they took office. The petty constables of each area were to be overlooked by a "High Constable." We may remind the children that our own law does not recognise the word "policeman"; our familiar guardian of the peace is always described in official language as a "constable," and "constable" includes all, from the Chief Commissioner downwards. The petty constable had to see that watch

and ward were kept, to receive wrongdoers handed to him by the watch, to pursue with hue and cry any peacebreaker, and to "present" before the justices all "bloodshedding affrays, outcries, rescues," and other offences committed or done against the King's Majesty's "peace." Thus, the petty constables were to the justices "as eyes and hands." They were to bring under the scrutiny of the justices cases of wrongdoing, and with their hands, by warrant or process, they were to act as instrument of the justices on the bench. This relationship exists to-day between our modern constables and the magistrate who administers the law.

The Petty Constable the "Hand and Eye" of the Justice.

Ordinary townsmen continued to fulfil some of the functions of the peace officers of our own day, and from the reign of Richard I., indeed, all freemen had to take an oath to help to keep the peace by being ready to aid the officers to arrest "misdoers," to take their turn to keep watch in the town, &c. The constable was taught to look for the support of his fellow-citizens in case of need. This principle remains down to our own day; it is still the duty of every citizen to give aid to a policeman who requires help in arresting an offender, and persons refusing to assist may be tried for an offence against the law.

The Police Responsibilities of Townsmen.

As time went on it was more and more felt irksome that ordinary citizens should be compelled to leave their work in order to do police duties. The trade-guilds had set the example of substitution by employing petty officers to control their markets and manufactures, and this was followed by the townsmen generally, who engaged deputies or proxies. By the time of

The Paid "Watch": their Deficiencies.

James I. the tything had ceased to exist, the parish constable had taken the place of the tything man. But these deputies were generally a very inferior class of men. The teacher should read to the class, or get them to act, the famous Dogberry and Verges scene in "Much Ado About Nothing." It is clear that in Shakespeare's time the "watch" must have been a matter of common ridicule, yet this state of things went on for generations, with very serious effects on the peace and morality of the realm. Statutes were repeatedly passed with a view of maintaining good order, but there were no efficient police to carry them out. The High Constables appointed to superintend the police of each shire neglected their oath and their office, and the petty constables followed suit, calmly going about their private business instead of carrying out the laws solemnly passed at Westminster. The country villages were worse off than the towns, "for there the magistrates could only afford to hire the part-service of a farmer-constable, who spent his day in agriculture, and left the plough to lead the hue and cry as far as the parish bounds. When the chase reached these limits, Master Constable was as like as not to sit down and thank God they were well rid of a thief, while the criminal pursued his way, feebly followed by the officers of other parishes, even less interested in his arrest as he drew farther from the scene of his crime." * The ordinary history books tell us anecdotes to show how very inefficient was the watch, not only in the days of Elizabeth, but in the days of Queen Anne, when wealthy young men thought it a good joke to beat people in the streets, to roll women going to market down a hill in a tub, to knock down the watchmen, to imprison them by upsetting their watchboxes on

In Elizabeth's Time.

* G. M. Trevelyan's *England Under the Stuarts*, chap. i.

them as they dozed inside, to steal their lanterns, staves, and rattles, and so forth. Every one made fun of the watchmen, or "Charlies," as they had been called since the attempt that had been made to organise the watch in the reign of Charles II. They were, for the most part, old and infirm men who could not obtain any better employment, for the wages offered by the parishes were miserable in amount. "Dressed in heavy capes, muffled up to the ears, provided with long staves and dim lanterns, they issued from their watch-boxes twice an hour for a minute or two to call the time and the state of the weather." "Past three o'clock, and a fine but cloudy morning." They acted, in fact, as clocks and barometers rather than as watchmen. They would strike their staves on the pavement and show their lantern so that a thief had plenty of warning to run into the next parish if he chose. Even if they wished to interfere they were so feeble as to be quite unable to cope with any wrongdoer who chose to be obstreperous.

In Queen Anne's Time.

Evidently something had to be done. And here it is worth while pointing out that the problem of our rulers was to keep order in the streets and highways, and to safeguard citizens from robbery and violence, without at the same time hurting their sense of freedom by anything suggesting a discipline that might become an instrument of tyranny. For fortunately the temper of the British nation was such that the military arrangements serviceable for defending the country from invaders would by no means be tolerated as a means of maintaining the ordinary internal peace within the realms.

The Problem to be Solved in Modern Times.

REFERENCE.—*A History of Police in England.* By Captain W. L. Melville Lee, M.A. (Methuen & Co.)

CHAPTER XXXV

THE POLICE CONSTABLE AND THE KING'S PEACE (2)

In the early part of the nineteenth century, when our towns began to multiply and to grow larger, and when communications between them were so improved that people were less confined to one area, it was clear that there must be some more thorough and also more uniform police system than had hitherto prevailed. For in no two provincial towns was exactly the same system of police adopted, and even different divisions of the same town acted independently of one another. Thus in the case of Bath, then a smaller town than now, there were three antagonistic police systems, and during an election riot the city police, though appealed to by the mayor in person, refused to make any efforts to repress disorder, leaving the constables of the two remaining areas to do the best they could. "If a felony was committed in the city the guilty party could only be apprehended on the warrant of a city magistrate, and if the felon should succeed in reaching the suburbs the city constables could not execute the warrant until it was backed by a justice of the county of Somerset."*

Differing Police Systems: Result.

Mr. and Mrs. Sidney Webb remark of the same city: "No administration of justice could be otherwise than defective when the thief or vagrant had

* *English Local Government*, by Sidney and Beatrice Webb.

only to . . . get behind the 'bear' that marked on the bridge of Bath the limits of borough jurisdiction to be in practice safe from pursuit.''*

The police at Coventry were, generally speaking, unpaid, but when employed in quelling a riot the constables were sometimes given a shilling or eighteenpence for refreshments. "In Hull the chief constable supervised thirty-nine officers, who were only paid for work done; that is to say, the constables were allowed so much an hour for time actually spent in apprehending vagrants or felons, on the principle 'no prisoner no pay.'" Not only so, but the different towns were often very jealous about their local liberties, and clung to the ancient privilege of policing themselves as they thought best.

London and Provincial Places.

In London some reform had already been attempted. Special officers, called from their general briskness and from the fact that they were under the control of the Bow Street magistrate "Bow Street runners," had been organised to track down the criminals who haunted the metropolis. Unfortunately a system of rewards given for the conviction of prisoners led some of these men into the temptation of letting a possible young criminal drift into crime in order that money might be made when he actually fell. Another evil result of superior vigilance in London was the general exodus of thieves, &c., into the provinces, where they would not be hunted down so sharply. These considerations will lead the class to see that there are two essentials of a good police system. (1) It

Need for Uniformity.

must be *uniform*, so that all the inhabitants of a country may be alike protected and that wrongdoers may not feel that they are more secure in one part than in another; (2) it

* *English Local Government*, by Sidney and Beatrice Webb.

must be *preventive* in its action rather than *detective*. Special officers (detectives) may be and are necessary for detection of criminals, but we may lay it down as a principle the general action of the police should be to render crime difficult. In the year 1856 a new scheme, designed to secure both uniformity and such efficiency as would serve to *prevent* breaches of the law, was set working under "The County and Borough Police Act." All the special privileges, except those of the Metropolitan Police District and the City of London, were swept away. Local authorities are still, however, allowed a certain amount of independent action, since they act through committees which, though under the control of the Home Secretary, have power to divide up their areas into districts and to appoint their own chief constable, and through him his subordinates.

Prevention more Important than Detection.

Present Police System.

If the children live in a village or small borough they are protected by the police of their *county*. The *chief constable* appoints a certain number of *petty constables* in each district, and each group is under the charge of a *police superintendent*. Larger boroughs have each their own separate force, with chief constables and borough constables. A Watch Committee, as it is called—the name is a survival from olden times—is appointed by the borough council to control the working of the borough police.

County Police.

Borough Police.

But all arrangements as to clothing, pay, pensions, accoutrements of the police are everywhere under the final control of the Home Secretary, who represents the Sovereign, being, indeed, the first and principal Secretary of State. He sends inspectors all

The Police of the Metropolis: Special Arrangements.

over the country to inspect the working of the local police. The police of the metropolis (but not those of the small area of the City of London) are dependent entirely and solely upon the central authority—the Home Secretary—and are directed by a commissioner who is appointed by the King. Let the children consider why this should be so. Is it an insult to London not to allow her the same measure of self-government in police matters that provincial towns enjoy? The reply is that London differs in many important respects from all other towns. Thus provincial towns and districts have only local interests to guard, whereas metropolitan London contains buildings which are not local but Imperial institutions, such as the Houses of Parliament, the British Museum, public offices, and offices of foreign embassies—London, again, is unfortunately the focus of crime, and it is convenient that it should also be the headquarters of the general national machinery for its prevention. And, lastly, London is the seat of Government, the political centre of the Empire. It is the place where political agitation in times of unrest may be expected to be most serious. Moreover, the police force of London is so large that it constitutes a veritable army. It is necessary for all these reasons that the control of the police force should be directly in the hands of the central Government. Londoners pay, like other places, half the bill for their own protection, which is not unreasonable, considering their extra advantages in neighbourhood to the great national buildings on the one hand and their greater danger from thieves and pickpockets on the other.

The small area of the ancient City of London is quite independent. It retains its ancient privilege of

policing itself, and so long as it does it efficiently and entirely at its own expense, there seems no reason why it should not continue to do so. If any slackness occurred, this would affect so many thousands of people coming daily to transact business in the City that the privilege would at once be in danger.

The City of London: Special Arrangements.

The children may have a very vague idea of the exact powers of a policeman. He may arrest (note the etymology—*arrêter*, to stop) any one whom he finds actually committing a crime, or any one who is handed over to him by a citizen as having committed a crime. But he may not enter into any man's house and arrest him on mere suspicion of wrongdoing. He must have a "warrant" from a magistrate. A warrant is a document giving him power from the magistrate (whose "hands" he is) to arrest an offender. This is to safeguard the English people from having their police turned into spies. Tell the children how in Russia the police may enter the house of a "suspected" person and seize his private papers and find out what he *might* do, though he may not actually have done anything at all criminal. Let the children note the neutral attitude of the police, *e.g.* when political speeches are being made in the open air. The existing Government may be discussed and criticised and abused, but the representative of the King's peace remains perfectly indifferent. It is only if there is any attempt at what is called "incitement to sedition" by encouraging the listeners to acts of violence which might lead to a "breach of the peace"— *i.e.* danger and loss to other citizens and their property—that he will make an arrest. Again, a policeman is not a soldier; he

What a Police Constable may do.

has no military status. His sole weapon is his baton, or truncheon. If there is too dense a crowd his policy is merely to keep the people moving, and he must do it in such a way that they are not exasperated. For in the last extreme, when the police force is not sufficient to prevent a serious disturbance and cause of alarm amongst the King's subjects, a magistrate reads the "Declaration" in the "Riot Act," and if the people do not disperse within an hour they are guilty of felony, and any force, even involving the aid of soldiery, may be used to disperse them. But the "Riot Act" is hardly ever used. "Before 1830 there were only two methods of dealing with a riotous mob; the first was to leave it severely alone, and the second was to allow a regiment of cavalry to trample it into submission." But the tact and moderation of the police have enabled them to acquire a popularity which stands them in good stead in time of stress. It is not that the strength of "the man in blue" lies in the fact that he has "the man in red" behind him. Though in the last resort military strength might be used, there is no alliance between army and police against the liberties of the people. The strength of "the man in blue" really lies in the fact that he has behind him the whole weight of public opinion. The police officer when about his duty has the sanction and approval of the great majority of his fellow-citizens, whose paid servant and representative he is. The old idea that each citizen is responsible for public order is still maintained. If a police constable is in need of assistance he can call upon any bystander and in the King's name demand his help. Also, in times of disturbance, ordinary citizens become for the time being members of the

The "Man in Blue" and the "Man in Red."

The Police Officer Represents the Mass of Citizens.

"force." They make the declaration of loyalty which is required from ordinary constables; act side by side with them as "special constables." Refusal, as we have said, is a crime for which one may be tried and imprisoned.

Other Duties of the Police.

That part of police work which consists in the prevention of crime naturally engages the attention of the children at first; there is a certain morbid instinct in human nature which makes this inevitable, and the only thing a teacher can do, especially in "rough" neighbourhoods, is to build up by definite instruction a conception of law and of the police as impersonal agents of law. But the other activities of the police force, so necessary to the smooth and decent working of life in large bodies of men, should never be overlooked. The lifted hand of a policeman controlling a whole stream of wheeled traffic in the busiest parts of a great city is the most impressive symbol of order and respect for law a child can see. The kindly offices of the police in giving directions to strangers, in guiding nervous people across the roads, in carrying injured people in their ambulance cars to the hospital, and so forth, are well known. In fact, so numerous are the duties of a modern police constable that many reformers think there ought to be some differentiation of officers, that we should have different police for guides, for charity, for rendering aid to those injured or taken ill in the streets, and so forth.

Grades.

The children will probably know the characteristic dress of the police constable and also the distinctive dress-tokens of constable, sergeant, inspector, and superintendent respectively. They will like to know how the public rewards its servants and what is the special

rate of pay in their own area. They can be told how, after twenty-five years of faithful service, a police officer can claim a pension—an equitable arrangement when one considers that there may be, as in the case of firemen, some risk to life and limb in the discharge of their duties. Such an arrangement, too, ensures steady good conduct; an officer will not lightly run the risk of forfeiting his pension.

Rewards.

The question arises: How are the police paid? The expense is divided between the Treasury, or purse of the whole realm, and the local purse of the county or borough. The Home Secretary's inspectors report to him, as we have said, as to the efficiency of the police in each area, and when this is satisfactory—and a mere threat is generally sufficient to cause any necessary improvement to be made—he signs a certificate for a grant to be given. In practice half the expense is borne by local rates, the other half is met by a grant from the Treasury. (The teacher will note that grants to *boroughs* are paid through their *county* councils, and not directly. *Vide* Chapter LII). We have already said that the City of London proper maintains and pays for its own police. Special payments are made by the State for police in public buildings.

How the Expense of Police is Met.

References.—Throughout the whole of this chapter the writer has made use of Captain Melville Lee's *History of Police in England*. Any good manual of Local Government—e.g. *English Local Government*, by E. Jenks (Methuen), or *The Municipal Manual*, by A. E. Lauder (P. King & Co.)—will give the constitution of county and borough police systems, &c.

CHAPTER XXXVI

THE COURT OF JUSTICE

The Work of the Courts.

We have been considering in the last two chapters the subject of "The King's Peace" and the body of men—the police—charged with the duty of guarding it; that is to say, of preventing breaches of the peace and of arresting offenders and bringing them before the courts of law. No child fails to hear of these courts, and their maintenance at the public expense is a matter of course. He should be led to see that the existence of such a building is a witness to an important principle of civilisation. When children quarrel among themselves they are apt to decide too promptly that a wrong has been done, and to punish it without reflection. Civilised society knows that the person who suffers a real or fancied wrong, or his friends, cannot be trusted to look at the facts impartially; they think the fault is worse than it is; they may even punish the wrong person. Therefore society causes cases to be *tried*—an expressive term—before persons of wisdom and character. At one time our forefathers were tried in the Court Leet of the Lord of the Manor; we now have a uniform system of trial under magistrate and judge. The courts of law have to deal not only with breaches of the peace and other offences against law and order; they also administer justice as between man and man in cases of dispute about property of

all kinds, about payments for work done or for goods supplied, and the like. The business coming before the courts falls therefore into two divisions—"criminal cases" and "civil cases" as they are respectively called. A *criminal* case is one where a person is charged with having committed some crime, such as a burglary, for instance. A *civil* case is one where one person charges another with having done him some wrong either by doing something he ought not to have done or by failing to do something he ought to have done. The damaging of a neighbour's property would be a civil offence, and so would failure to pay rent that is due or any other debt.

Criminal and Civil Cases.

The children will know that for offences against law and order, such as street brawling, drunkenness, thieving, and the like, committed in his own presence or in the presence of persons who call his attention to them, a policeman may arrest an offender at once and lead him away to the police station. In other cases where offences have been committed secretly a suspected person may be arrested on a "warrant," which is an order signed by a magistrate and authorising the arrest to be made. Private persons may arrest for felony and certain minor offences. In any case the arrested person is conveyed to the police station in readiness to be brought before the magistrates in the court.

"Warrants" and "Summonses."

In cases not serious enough to justify the arrest of a suspected person, and in civil cases generally, a "summons" is issued—that is to say, a notice signed by a magistrate or other proper officer requiring the person who is charged with breaking the law to appear before the court on a certain day and there make answer to the charge. The expression "the court," though sometimes used to mean

the building in which justice is administered, really signifies the magistrate or body of magistrates, or the judge or judges, who in a particular place hear and decide upon the cases brought before them. When the magistrates or the judges, as the case may be, come to hear cases the court is said to be "sitting" or "in session," and hence we get the word "sessions." The buildings in which the various courts are held—County Court, Court House, Assize Hall, &c.—are all well known in every town. It would be out of place to go into detail as to the different kinds of higher courts—High Court of Justice, Court of Chancery, Court of King's Bench, and Court of Appeal. It should suffice to point out that justice must be administered *locally*. Therefore, in every district, besides what is known as the "County Court" where small money disputes are settled, but where no criminal business is done, there is another court which meets very frequently. In London and in some other large towns it is known as a "Police Court," and is presided over by a Justice of the Peace usually called a "magistrate." In country districts and in smaller towns the corresponding court is known by the name of "*Petty Sessions*," and it is presided over by unpaid magistrates called "Justices of the Peace," who sit in a "Court House" or in certain rooms of the Town Hall. The Police Courts and Petty Sessions deal outright only with comparatively trivial offences. More serious cases are heard, but instead of being finally decided upon they are "committed for trial," as the phrase goes, in one of the higher courts. These higher courts are constantly held in London. In the chief country towns *Quarter Sessions* are held four times a year before the County Justices. Still more serious cases are committed to

Sessions of the Courts.

Kinds of Local Courts.

the *Assizes* (or sittings) of the Judges of the High Court in London, who travel into the country three times a year and hold their courts in certain appointed towns. As they represent the King himself, they are received in great state.

Juries.

When a serious criminal case comes before a court, and when civil cases which turn upon matters of fact come up for trial, the guilt or innocence of the prisoner, or the matter of fact in the civil action, is decided upon, not by the judge, but by what is called "the jury." The word "jury" means "sworn," and it consists of a number, usually twelve, of ordinary citizens who are bound by a solemn promise or oath to give their decision, or "verdict" as it is called, fairly and solely upon the evidence brought before them.

Procedure in a Court.

The course of procedure in a court of justice may be made very clear to the children by setting out an imaginary criminal court in the class-room and putting different scholars to represent the judge, the clerk of the court, the usher, the prisoner, the policeman, the jury, the witnesses, the barristers, the general public, the reporters, and so on.

It would be explained that the trial is held in public * and all that takes place may be reported in the newspapers. There is a raised seat or "bench" on which the judge sits. The clerk sits in front and below the judge. On one side is a kind of pew for the jury, called the "jury-box," and there is a special place for the prisoner, called the "dock." This consists of a couple of parallel iron fences with just enough room between them for a prisoner to sit

* Except where children are tried; their cases are heard in private.

down and a police officer to stand on either side of him. There is also a special place for witnesses to stand in, called the "witness-box." The proceedings begin by the usher calling for "Silence!" and the judge enters and takes his seat on the bench. The prisoner is then placed in the dock, the jury are sworn, and the charge against the prisoner is read out by the clerk. There is a "barrister," or "counsel," or "advocate," as he is variously called, to press the case against the prisoner, and another to defend him. The prisoner has taken his case to a "solicitor" (once called an "attorney")—let the teacher track down from a dictionary the original meaning of all these titles. The solicitor has prepared all the facts of the case and given a statement of them to the advocate. If the prisoner is too poor to pay fees on his own account, the judge allots him an advocate who is paid by the State. The duty of the prisoner's advocate is to say all that can be said to guard the life and liberty of his client, and it is felt that a man with a trained mind and clear head can do this better than the accused person placed in circumstances which are likely to make him bewildered and agitated. But he may, of course, defend himself if he pleases. The barrister who is against the prisoner states what the prisoner is said to have done, and calls witnesses to prove that he did it. These witnesses are sworn—*i.e.* made to promise solemnly that they will speak the truth—and then they give their evidence. The barrister who is defending the prisoner cross-examines the witnesses, *i.e.* questions them in all sorts of ways to try to show that they are either mistaken or not telling the truth. When the witnesses against the prisoner have been heard, the barrister who is defending the prisoner gives *his* statement of the case and calls witnesses to show that *his* story

is true. The prisoner may give evidence if he wishes, but he cannot be forced to do so. These witnesses are cross-examined by the barrister who is against the prisoner. When all the witnesses have been heard, and the barrister against the prisoner and the barrister defending the prisoner have made their speeches on the evidence, the judge "sums up," *i.e.* he goes through the evidence and explains important points to the jury; he also tells the jury what the law affecting the case is. The jury then consider their verdict, retiring to a private room, if necessary, to do so. When all the members of the jury have agreed as to their verdict they come back into court and the clerk asks them whether they find the prisoner "Guilty" or "Not guilty." If the jury reply "Not guilty," the judge discharges the prisoner. If the jury reply "Guilty," the judge passes sentence and the prisoner is removed to prison.

Before passing sentence, the judge has the evidence of a special police officer, who inquires into all the circumstances of the prisoner, his education, &c.; if necessary, sentence is put off until inquiries have been made. For first offences prisoners are almost always released "on probation" for a year.

CHAPTER XXXVII

THE PRISON

MOST children, as we have remarked before, take an interest in punishment of all kinds. This is a survival of an ancestral condition which is akin to cruelty; it must be lifted up into a reverence for law. They must be shown that the same principle which leads society to take the *fixing of guilt* out of the hands of an injured person, and to put it into the hands of judge and jury, decrees also that society and not the sufferer must *allot the punishment*. So careful have we to be that the feeling of the moment does not prescribe a penalty that we do not allow even the judge unlimited freedom in deciding what the punishment shall be; the penalties attached to various crimes are settled by the laws of the land as framed in Parliament, and the judge can only pronounce sentence up to certain limits, though it is allowed to his discretion to give smaller or heavier sentences within these limits. For while revenge, as Lord Bacon says, is "a kind of wild justice," a State penalty is a piece of justice that has been considered without any sense of personal feeling. The teacher may put before the children Bentham's three kinds of punishment: (1) The *vindictive* kind, which merely aims at making the wrongdoer smart; (2) the *deterrent*, which is designed to prevent him and others from repeating the offence; and (3) the

The State punishes for the Individual.

The Aims of Punishment.

reformative, which aims at the improvement of the wrongdoer. Obviously the two latter motives are those which should influence a civilised, to say nothing of a Christian, people. Our prison system, it must be owned, has not yet the effect of rehabilitating the moral nature of the prisoner to the degree in which we hope this may be possible. This is one of the problems of the future which children now growing up will have to settle. A survey of the road we have travelled may serve to keep their faces towards the right goal. And when we look back on the punishments of the past we can see that we have travelled far.

Public Punishments: the Stocks.

In some villages there are still to be seen the remains of the ancient stocks. In olden times these stocks were used by the parish constable to secure his man until he could conveniently bring him before a magistrate; but as time went on fastening in the stocks became a common mode of punishment for minor offences, and often a constable would inflict it on his own responsibility.

The Pillory.

"The pillory was a more serious affair, and its pains were beyond the power of a constable to inflict; it was generally resorted to in cases where the offender had been guilty of practices which rendered him particularly obnoxious to the people, so that the punishment he received at their hands was nicely proportioned to the degree of unpopularity he had earned for himself. The baker who gave short weight or the dairyman who watered his milk received such a lesson at the hands of his customers that he was little likely to repeat the offence. It was customary, moreover, in sentencing a man to the pillory to make the punishment fit the crime as much as possible, and to compel the

culprit to advertise his guilt in some personally unpleasant fashion; thus the man who had stolen a cart was forced to pull it through the streets to the place of punishment; and the offending vintner had to drink a full draught of the sour wine that had disagreed with the frequenters of his shop."*

These minor public punishments, as well as the awful spectacle of public executions, have been abolished on the same principle which leads a wise teacher to minimise public punishments in school, viz. that there is something degrading to the onlooker in witnessing the degradation and pain of another human being. It seems incredible to us that at the beginning of the nineteenth century children were taken to Newgate or to the nearest place of public execution for an outing, or that a gallows should have been a frequent object in any open space near a town.

The Effect of Public Punishment.

Prisons in some form or other had doubtless existed from the earliest times. Each great fortress had its "dungeon," a miserable place with which the children are familiar from the ordinary reading-books and from the historical romances which they like at this stage. But these were more frequently private strongholds rather than penal establishments under the control of the State. The great fortress-prison of Newgate in London, however, was built in the twelfth century. It is not possible to contemplate with any steadiness of nerve the fate of prisoners before the days of John Howard, the prison philanthropist, and such horrors are certainly not for the young. The pages of Major Arthur Griffiths and Sir Walter Besant on this subject make gruesome reading. One of the most serious defects of the old system,

Prisons.

* *A History of the Police in England.* By Captain Melville Lee.

apart from the physical horrors of bad food, filth, and disease, was that the convicts were mixed together indiscriminately and allowed to corrupt one another and to plan new crimes. It was not until the middle of the last century that we abandoned the practice of herding convicts together in crowded gaols or in filthy unsound ships—"the hulks"—and established prisons of a more rational type.

Life in Prison: Solitary Period.

The architecture of a prison always impresses children in its gloomy way. They will want to know about cells, food, exercise, &c., but they are generally somewhat too well primed in these matters by the help of the illustrated papers. Under our present system the convict sentenced, say, to a long term of penal servitude spends the first nine months at a local prison—such as Wormwood Scrubs in London, or the county gaol—and is kept to solitary hard labour of an irksome kind, such as mat-making, stone-breaking, untwisting old ropes and pulling the strands into loose hemp for caulking the seams of ships (picking oakum), making mail-bags for the Post Office, &c. It is thought that at this period of his punishment it will do him good to have time for reflecting on the past, and that he will be ready to listen to good counsel for the future. Then he is moved to one or other of the Public Works Prisons, at Dartmoor or Chatham, where his life at once becomes less monotonous. He may now work at more interesting occupations.

Life in Prison: Work.

At Portland the convicts have constructed a breakwater, a fortification at Portsmouth, at Chatham large dockyards, at Borstal a chain of forts protecting the Medway, and at Dartmoor they have reclaimed many acres of land from the waste moorland. If the

convict is under forty, and needs such instruction, he is taught to read and write; he is taught also some kind of trade. Most of his work, though performed in silence, and under observation and control, is done in the open air, and in the company of his fellows. Also, if he is industrious and obeys the prison rules, he may hope for some remission of his sentence, and he may earn a small sum (four pounds in a five years' sentence) to maintain him after leaving the prison while he looks about for fresh employment.

Humane Methods: less Crime.

It should be pointed out to the scholars that the reduction of the pains of punishment has always been accompanied by a lessening of crime. When people were hanged for stealing sheep or for highway robbery, sheep-stealing and highway robbery were common crimes—now they are very rare. When Queen Victoria came to the throne 50,000 of her subjects were convicts; now, although the population of these islands has just about doubled itself, convicts number fewer than 6,000. Thus, in the words of Sir James Mackintosh, addressing the House of Commons in 1822, we are still learning the secret of "increasing the efficiency of the criminal law by diminishing its rigour." This will probably in the next generation be carried further, to the stage of the abolition of capital punishment. On the other hand, it may be necessary to deal more severely with incorrigible criminals who, after many convictions, return again and again to prison, and to treat them as incapable of civil life and therefore to be confined for indeterminate periods or in perpetuity. Even now a criminal who is convicted by a jury of being an "habitual" criminal may be specially detained for a long term of years.

It is important, above all, to stop the stream of crime at its source, and to preserve the young from familiarity with prison life, so that any early offence may not become a habit. Thus youthful offenders are no longer dealt with in an open court among older culprits, but are examined by the magistrate in a separate "Children's Court." Elder pupils should know this, as well as that offenders under sixteen years of age are sent to a Reformatory instead of to a prison, and that juveniles under fourteen in danger of growing up to a life of crime are sent to Industrial Schools. At Borstal prison, near Chatham, there is a section for prisoners aged from sixteen to twenty-one, and there the lads are educated, taught trades, drilled, and allowed small hobbies. They are not pampered, they are made to keep strict discipline, and are punished for any act of insubordination; but their punishment is administered in so humane a fashion by an enlightened governor, who takes them in hand personally and individually, that about half of them have reformed and have not returned to criminal lives.

Youthful Offenders.

Those who believe that "there is some soul of goodness in things evil," could we observingly distil it, are looking to Borstal as an indication of what may be done in the future, not only with younger criminals but with older prisoners, other than those who are the victims of disease and must therefore be considered as irresponsible.

CHAPTER XXXVIII

THE BARRACKS AND THE DRILL HALL

To the child and to the uneducated generally there is always a certain glamour about a soldier. They see the soldiery as a rule under conditions of pomp and display, marching in procession or drawn up on parade, with music playing, with imposing unities of colour moving in harmoniously contrived evolutions. In our own time the interest in the "man in red" or the "man in khaki" is very strong, and the old distrust of the soldier on the part of civilians has given way to admiration and to something like enthusiasm. Military analogies are introduced into the discipline of the young, they learn military verse at school. This form of sentiment may easily be over-stimulated. The scholars need a more rational understanding of what part the soldier plays in the body politic.

The presence of the soldier, as of the policeman, is a reminder that we live in a world as yet imperfect.

Need for a Soldier Class.

The forces of reason and of righteousness do not yet wholly prevail. The towns and villages of England, and the cultivated lands that nourish them, may need to be defended. In England, fortunately, the danger of violence or disorder within our own frontiers can be fairly well checked, as we have seen, by a body which is mainly civil in its constitution—the police. But until the feeling of universal brotherhood is more strongly developed there always remains the danger of foreign invasion. England being an island, her chief safety

lies in what is called the "command of the sea." If, however, the command of the sea were once lost, an island, with its indentation of coast line, making a long water frontier easily approached from any side, would be very difficult to guard, and the problem of land defence would be most serious. Another peculiarity of the British Empire is its vast extent; a large section of its regular army is required for India and the colonies.

No Special Soldier Class in Early Times.

The ordinary soldier of the regular army is, as the children are aware, a specialist. He gives himself up to the trade or profession of defending the ordinary citizen. The citizen, on his part, pays taxes for the upkeep of the army so that he can go tranquilly about his own business, knowing that his person and property are being guarded by a section of the community specially trained for the purpose. But for many reasons it is well to go back to primitive times and to remind the children that in pre-Conquest and in Norman days every free Englishman between the ages of fifteen and sixty was liable—the clergy and infirm excepted—to be called out to defend the lands he had tilled, the house he had built, and also the lands and property of his neighbours. This militia of the shires, or Land Fyrd,* as it was called, was organised, like the police system, in tythings and hundreds. It could be called out if disturbances were feared, each man bringing weapons according to his property. But, except to repel foreign invasion, a band of militia of the shire could not be compelled to serve beyond the limits of its own shire, which provided for its maintenance during the time that it was "out."

In order to call it out it was necessary, before the Conquest, to have the consent of the Witan, and

* Fyrd (Anglo-Saxon, Army).

when that had been obtained the members of the Witan had to go back to their shires and hundreds and begin to gather the men together. This was a slow process, and the difficulty of keeping together an unpaid body of men, who in those days of bad roads could not even be sure of regular food supplies, was so great that even a leader like Alfred could not do much with such instruments against the Danish invaders. As a matter of fact, we know that after Alfred's death the Danes finally triumphed, and that the "fyrd" was equally unable to repel the later invasion of the Normans. Rulers began to see the necessity of a more permanent force. King Canute was apparently the first English ruler to surround himself constantly with a band of men specially trained for fighting. These, the Housecarles, or King's Thingmen as they were called, formed the nucleus of the standing army of later times.

Defects of the "Fyrd" System.

When the feudal system was introduced, land was granted on condition of the holder doing military service to his overlord for forty days. But it soon became customary to accept from the vassals, instead of personal military service, a money payment. With this money substitutes could be hired, whose time of service was not limited by feudal custom. It is from the system of providing shillings (*solidi*) wherewith to hire substitutes that the term "soldier" is derived. The great wars of Edward I. and Edward III. in Scotland and in France were carried on by paid soldiers, English, Welsh, Irish, and Gascons, who were archers, men-at-arms, or musketeers. Thus grew up a class of professional soldiers and thus, too, arose the power of the House of Commons, which had to make grants to carry out these expensive foreign wars. When peace

Origin of the Word "Soldier."

Professional Soldiers.

returned, however, the soldiers were dismissed; there was no standing army such as we have to-day. For any emergencies at home the Government relied on a national militia, founded partly on the old "fyrd" system and partly on the feudal tenure. Thus, Queen Elizabeth ordered that in every county "a convenient number of able men" should be "sorted in bands and trained and exercised in such sort as may reasonably be borne by a common charge of the whole county." But London was the only place at which these "trained bands" undertook any serious training, and the unpreparedness of the country should the Spaniards have effected a landing is mentioned in every history book. Then, as now, our chief safety lay in "command of the sea."

"Trained Bands."

It was not until the Civil War that regular armies were raised and drilled. Cromwell's "New Model," called into existence and built up on the threefold principle of religion, organisation, and discipline, is generally regarded as the origin of our present regimental system. But Englishmen found that the efficient army was in danger of replacing Parliament as a means of government, and this attempt "bequeathed to English political life a rooted aversion to standing armies and an abiding dread of military rule."

A Regular Army: the "New Model."

The restored Stuarts kept a standing army, it is true, but the distrust of a military organisation for ever threatening the country and being turned into a possible instrument of tyranny was very strong in the minds of Englishmen. The pupils will recollect that William III. was not allowed control of the army. In the Declaration of Rights drawn up before the Crown was offered to William and Mary it was

solemnly declared that no army could be kept up in time of peace without grant or consent of Parliament.

Parliament Controls the Army.

A Mutiny Act, succeeded in later times by the Army Act, made not only the army, but its discipline, a matter of annual renewal at the will of Parliament. Every year Army Estimates are presented to the House of Commons, and every year the Army Act is formally re-passed. If these were omitted the army would be liable to come to a sudden end; the Sovereign would not be allowed to maintain it at his own expense. The Englishman knows that his country requires an army, but by this constitutional device his instinct of liberty is saved, and he gladly assents to keep the Sovereign as the head of our military system. The troops are enlisted "in the King's name," the officer receives his commission from the King, and the King is the symbol of the soldier's patriotism, but the actual control of the army lies with Parliament.

Constitution of the Army.

Many pupils may know that there are four chief branches of the regular army—the Infantry, Cavalry, Artillery, and Engineers. The Infantry — foot-soldiers — are armed with rifles and bayonets. Boys are very interested in drawing the weapons which preceded these—the cross-bows, pikes, &c.—by which the great battles of English history were won. The Cavalry carry swords, or lances and rifles. The Artillery work the guns, while the Engineers undertake the duties of sapping foundations, making mines, building bridges, and so forth. The army is divided into regiments, and these again into battalions (of infantry) and squadrons (of cavalry). Several regiments constitute a brigade, and several brigades a division. The titles of officers—Commander-in-Chief, General, Colonel, Major, Cap-

tain, Lieutenant, and so on, may require setting forth in order in some localities.

The pupils will know that a soldier's life in peace is largely made up of drill, parade, and of scrupulous attention to details of dress, accoutrements, &c., though he may likewise learn a trade. They will know also that a soldier has to yield to his superiors a more unquestioning obedience than is required in any other walk of life. "It is necessary that a soldier should be subject to a stricter law than an ordinary citizen. The use of an army depends upon its discipline. The mere possession of weapons and the knowledge how to handle them are not enough to make an army. The habit of absolute obedience to orders, of absolute subordination to lawful commanders, of acting together in consequence, are what make a regular army able to do its work. The soldier is a citizen who for the common good has to part with many of the ordinary liberties of a citizen and to be prepared to go to unhealthy climates, to take his chance of disease or accident, to risk or perhaps certainly lose his life."*

A Soldier's Life.

Because of this difference from the conditions of civil life, and because also it would be dangerous to create a class of men living for many years apart from the interests of the ordinary citizens, it is our practice to allow soldiers to enlist for a relatively short period of their lives. A recruit is not to engage for more than twelve years; some of these are to be spent "with the colours," as it is called, *i.e.* under purely military discipline, and some with the "Reserve." The time spent with the colours varies in different corps from eight years to one year. While in the Reserve the soldier is engaged in ordinary civilian occupations, but is liable to

* *The Rights and Duties of a Citizen.* By H. E. Malden.

be recalled in time of need. Of those with the colours a large proportion are abroad in India and other parts of the Empire; the remainder are in garrison towns, *i.e.* in places specially fortified, and in barracks throughout the English counties. A map recently published shows that the greater proportion of the forces are disposed either in camps or garrisons in the south and south-east of England—which region fronts the quarters from which it would be most natural to expect invasion—or around the coast. This is what we should expect from our island situation.

The modern barracks are large airy buildings, with comfortable sleeping quarters and dining-rooms for the men. Separate quarters are provided for married men, and there are always regimental institutes and clubrooms for games. There are regimental savings banks, where some of the soldier's pay can be kept until his transfer to the Reserve. Outside the barracks, too, there are soldiers' institutes and other voluntary agencies for giving the soldier fresh interests and friendships.

A "Citizen" Army.

Side by side with the regular army there has always been, in theory at least, a citizen army or militia. A militia is defined as a body of men enrolled and drilled according to military law as an armed force, but not as regular soldiers. These bodies of men are called out periodically for drill and exercise and, in an emergency, for actual service. This citizen army has been variously called in past times the Fyrd, the General Levy, the Trained Bands, the General Militia, the Local Militia, the Yeomanry (mounted Militia), and the Volunteers. These are now superseded by the Territorial Army, as it is called. This force is a *voluntary force* raised by County

The Territorial Army.

Associations, but organised as part of the regular army for home defence. Its members receive a partial training in time of peace. Unlike the Volunteers, the Territorials cannot resign, since, as we have said, they are part of the regular army.* The training consists of individual instruction in the local drill hall or exercise ground, and of an annual training in camps, besides week-end camps whenever possible. If we should be threatened with war, these men would be called out and would receive a short period of further training to enable them to act efficiently with the regular army. Men between seventeen and thirty-five may enlist, and for a period not exceeding four years. When they are actually in attendance for purposes of training they receive payment to compensate them for the loss of time.

Problems of the Future.

One of the problems of the future will be the testing of this experiment. Obviously, if the men of England themselves or their employers are not found willing to make the sacrifices involved in such a scheme, some other means must be found for the defence of the country in time of invasion. To create a much larger *regular* army does not seem possible. Many think that *all* the manhood of England would gain by being compelled for a limited time to subject itself to military discipline, and to be accustomed to the thought of learning to defend the country as part of the duties of the citizen. In other words, we may have to face the institution of compulsory and universal military service. In the meantime, by the formation of Cadet Corps, Boys' Brigades, Scout Patrols, and the like agencies, those engaged in education are endeavouring to secure for growing lads some of the best qualities of the ideal soldier.

* The "Militia" are now special reserves of the active Army.

CHAPTER XXXIX

THE WORKHOUSE (1)

A CONSPICUOUS building in every large borough is the workhouse, or, as it should be more properly called, the poorhouse. Children of all classes have some knowledge of the part played by the "workhouse" in town or village; they know that it is a refuge for the very poor. They know, too, that the decent poor have a great shrinking from seeking its shelter. This is partly because their sense of independence is wounded in having to accept help from others. But the spirit of independence does not account for all the reluctance, for poor people will often come to the state of cheerfully accepting private alms, wherein they are equally exhibiting a loss of independence. The fact seems to be that the wearing of a uniform, the conformity to rules, and the necessary restrictions of workhouse life give something of the suggestion of a prison. And, as in prison, the inmate of a workhouse cannot "choose his company." He may be compelled to associate with people often of a lower level of manners and respectability than himself. For there are always, roughly speaking, two classes of indigent people—those whose poverty is due to sheer misfortune, to the want of opportunity for providing against old age, unemployment, and sickness, and those who are destitute by reason of their own idleness or thriftlessness. We

The Poorhouse: its Unpopularity.

have not yet learned how to discriminate between these two classes and how to treat them separately, so as to give the members of each class the kind of treatment they should receive. It is evident that the aged poor, the sick, and those rendered destitute by long illness, by sudden accident, or by loss of work should be tenderly treated. But persistent "loafers" and the "unemployables"—*i.e.* persons who can do nothing well enough to make it worth while for an employer to give them even a living wage, though they must not be left to perish from want, must be put under disciplinary treatment which will educate them up to the point of being self-supporting. Both these classes are in need of what may be described by the useful phrase "Public Assistance." The generation now growing up will have to settle the means by which public assistance may most profitably be organised, and even at the present moment our Poor Law is under a revision which will probably lead to considerable reconstruction.

The Problem of the Future with regard to Public Assistance.

The history of the past, showing how our forefathers dealt with the poverty of their time, is specially useful in connection with this problem. Pupils of secondary school age and upwards should study some elementary history of economics, as well as the story of Labour Laws in England, that they may be able to discharge with the more knowledge that part of the strong citizen's duties which consists in bearing the burdens of the weak. But even younger children may have presented to them some facts which will help to explain the modern workhouse, and to realise that it only represents a milestone on the road of progress.

Two sets of facts may stand out as illustrating prin-

ciples. First, in the early days of English history, in feudal times, the question of unemployment, so acute to-day, did not arise. Every poor man was supposed to find a subsistence, however coarse, on his lord's land. The time when the condition of the poor was most desperate was probably the century after the dissolution of the monasteries, when agricultural lands were rapidly being turned into broad pasture lands for sheep, and when consequently fewer men were wanted and numbers of labourers were sent adrift. The most ferocious laws were passed in the name of the boy-king, Edward VI., against "vagrancy." A vagrant might be branded, given as a slave for two years to the person informing against him, fed on bread and water, beaten, chained, "put to any work no matter how vile it might be"; and if he ran away and took to a wandering life again he was to be made a slave for life, and on a third offence he was to be put to death as a felon. It was very fortunate that the police of the time were so inactive that these savage laws could not be carried out. They were specially unjust because society was not prepared to offer work to the "vagrant." The problem of dealing with the "able-bodied" destitute is always bound up with the problem of *sufficiency of work*.

Poverty and Unemployment in the Past.

Again, the pupils will know that before the Reformation distress of every kind was mostly relieved at the gate of the abbey or the priory. Quite early in English history we hear of one-third of the tithes of an abbey being allotted to the poor. Rich men would constantly make benefactions to the poor through the religious houses, whose inmates served as their almoners, administering charity in a wholesale way. While the monasteries did much good

Indiscriminate Almsgiving in the Past.

in providing for the sick and infirm, there is no doubt that their openhandedness to all comers did much harm. Giving was regarded as meritorious in itself, without regard to the moral consequences of the giving.

From the beginning of the thirteenth century, however, we find the public secular authorities becoming aware of the mischief caused by charitable people carelessly giving alms to everybody who applied. An Ordinance of Labourers (1349) was passed to restrain the liberty of givers. It provided that no one should give relief to able-bodied beggars; they must be compelled to work for their living.

On the other hand, we find towns realising their own responsibilities to their poorer inhabitants.

Collective Responsibility for the Poor.

London in 1547 and Ipswich in 1557 made regulations for levying compulsory payments for the poor. They were not obliged to do this by Parliament, but they seem to have recognised the necessity for public relief, and for wisdom in allotting it. In the days of Queen Mary the authorities of the City of London complained that the beggars relieved at the Savoy Hospital were a cause of disorder and "a hindrance to the good government of the city." They had evidently grasped the principle that giving must be accompanied by consideration. In the time of Queen Elizabeth the feeling of local responsibility was carried farther. The celebrated Poor Law of 1601

The Poor Law of Elizabeth: Local Responsibility and Necessity of Work.

recognised both of the two principles which had been emerging through the centuries. It provided for the principle of charity beginning at home, among one's own neighbours and in one's own place, in that it ordered overseers of the poor to be appointed in each parish, and

gave them power to raise the money necessary to relieve the poor of that parish. But the statute also provided that the overseers should find work for the honest unemployed, and that "sturdy beggars" refusing to work should be sent to a house of correction or gaol, or flogged at the whipping-post of every town until they reached their own parishes. This provision then had less hardship in it because work had become plentiful; the greater number of sheep had caused the price of wool to fall, so that farmers were once more raising crops from their land, while there was already a steady growth in manufacturing industries. The principles of this Act were steadily carried out for two centuries, and at an early stage the Justices of the Peace were charged with the duty of seeing that the poor rate was duly levied and that the overseers of parishes carried out their functions properly.

Public Assistance Claimable as a Right.

Since the reign of Charles I. it has been recognised that the claim on "public assistance" is not only a boon but a right. That is to say, all who cannot obtain food and shelter for themselves or from their nearest relatives have a legal claim to relief from a compulsory rate levied upon the rest of the community, so that it is literally true that in England "no one need starve." But to claim this right it is necessary to go to the places of shelter provided—the workhouses as they are called. In 1697 the overseers of the town of Bristol decided that no one should be relieved unless he would enter the workhouse, and this plan was so successful that in 1722 a law was passed allowing other parishes or groups of parishes to build workhouses and apply the same test. The arrangement, however, was not adhered to. Towards the end

of the eighteenth century the number of poor persons needing relief was very large. This was owing to a combination of causes, such as the enclosure of common lands, the low rate of wages, the expensive war with France, and the high price of food. It was felt that something must be done for those who were suffering through all these causes. But the Government of the time (1796) committed a serious mistake in allowing the Justices of the Peace to relieve the honest industrious poor, who were not actually paupers, by grants from the poor rate, the sums varying in each case according to the price of corn and according to the number of children to be maintained. The effect of this was to demoralise the poor and to teach them to look to their neighbours to support them as a matter of course. Meanwhile the ratepaying portion of the community, many of them only just above the class that would accept this relief, were heavily rated to support the others, so that it actually seemed almost more desirable to be a pauper than a ratepayer. Employers, too, were able to give lower wages than was just and right, for they knew that any difference between what they gave and the sum necessary to afford a bare subsistence to their labourers would be made up from the poor rate.

Evil Wrought by Lavish "Outdoor Relief."

It was felt at last that the working classes were being so degraded by this system that the law must be amended. Accordingly, in 1834 a new Poor Law was passed, allowing parishes to group themselves together into Poor-law Unions. This did away with the difficulty which had been produced by the fact that each single parish was naturally so anxious to charge its own rates with the support of as few

Poor-law Unions and the Lessening of Outdoor Relief.

people as possible that often selfish landlords would not allow poor people to settle in their district at all. Each union of parishes had its own Union Poorhouse for the reception of persons who were really paupers, and the giving of outdoor relief was so much discouraged that the workhouse again became a real test of destitution. Both outdoor relief and admission to the poorhouse were put into the hands of locally elected Guardians of the Poor, whose work was to be watched over by the Government. A few parishes still manage the relief of their own poor single-handed, but most of the parishes in England form part of Unions, for it is more economical to have one fund for rates, one set of officers, and one poorhouse for a considerable area than to multiply these in small areas. The Poor Law of Elizabeth explains why people still talk of receiving " parish " relief, and the Poor Law Amendment Act of 1834 explains why they speak of the building for the reception of paupers as the " Union," meaning the poorhouse established by the Union of parishes.

CHAPTER XL

THE WORKHOUSE (2)

After a brief historical survey of the main ideas which have governed the machinery for relief of the poor in times past, we may now come to the inquiry, By what means are the poor helped to-day? The rates, as we have seen, form a fund out of which the poor can be helped. Who administers that fund?

The poor of every Union are placed under the care of a Board of Guardians—Guardians of the Poor.

Guardians of the Poor.

As the ratepayers find the money, they have a right to choose the people who shall spend it on their behalf. Accordingly every spring, at the end of March or the beginning of April, there is an election in each parish of certain persons who are to become guardians. Find out what is done in the Union in which the school is situated. Let the children notice that clergymen and women may become guardians, and discuss the special reasons why their help is valuable. It is pointed out by the Royal Commission on the Poor Laws that there would be a better chance of obtaining specially skilled persons to undertake this work if the area from which they were chosen were larger than the present Union.

What can the guardians do for the poor of their Union? As we saw in our last chapter, there are two ways in which a destitute person can be

relieved. He can be taken into a workhouse provided for the purpose by the guardians, and can there be sheltered, fed, and clothed. This may happen only as a casual occurrence, as when a man seeking work comes to the casual ward of a workhouse for a night's lodging. Perhaps the period spent in the workhouse is longer, as at a time when work is so slack that it is specially difficult to find employment. It is intended that in such cases the shelter of the workhouse should be made use of only temporarily, and that the person who seeks it should not become chargeable on the rates for an unlimited period. Thus a man will often leave his wife and children in the workhouse while he looks for work, and bring them out again when he has found it. In the case of the old and infirm the workhouse may become a permanent home.

Indoor Relief.

The person who is receiving what is called "indoor relief" is not supposed to be idle; indeed, the term "workhouse" itself suggests the opposite. "Able-bodied" paupers are required to work at such tasks as wood-chopping, stone-breaking, &c. It is difficult for the guardians to find enough work of a suitable kind for their able-bodied inmates, for the workmen outside do not like the idea of "pauper labour" competing against them, and the guardians, on their part, are less able to find work than county councils would be. This is one reason why it is proposed that the Board of Guardians shall be superseded by a committee of the County Council. Aged and infirm paupers suffer from *want* of employment; there is too little to occupy their minds. A voluntary organisation called the Brabazon Society, which has various local branches, aims at relieving the monotony of the lives of these

Work in the Poorhouse.

people by teaching them some light occupation such as woolwork or mat-making. It is a work of kindness to visit the old folk at the permitted hours and show them how to occupy themselves.

The Infirmary.

A word must be said about the infirmary or parish hospital, which is a retreat for the poor in case of illness. It is an extremely useful institution, and the poor do not shrink from resorting to it in sickness as they shrink from entering a workhouse when in want. A man may enter the infirmary for a time without losing his vote as a citizen, though if he receives ordinary indoor relief he is disfranchised.

The "In and Out" Pauper.

Unfortunately the hospitality of the ordinary workhouse is too often sought by a class of able-bodied persons familiarly called "ins-and-outs," loafers who drift into the workhouse in the intervals of odd jobs and tramping, and who, secure in the *legal* right to indoor relief which they enjoy, do not care to persist in the task of building up a home for themselves. Thus there are many undesirable characters in the workhouse as well as persons who are merely helpless and unfortunate. The difficulties of providing for so many grades of paupers within the walls of a general workhouse are obviously great, even if the officials are earnest and careful, so that there must be considerable hardship inflicted on the respectable poor who are merely the victims of misfortune. So strongly has this been felt that a system of old-age pensions has been adopted to relieve poor respectable persons from the dread of being obliged to spend their old age within the workhouse walls. It is proposed also that instead of the present arrangement those of the poor who "come upon the rates"

Old-age Pensions.

Proposed Classified Institutions.

should be divided into classes and cared for in separate institutions. Within each institution also there should be further classification according to conduct before and after admission, and inmates should be individually dealt with as far as possible so as to make them desire to be independent. These recommendations will have to be carried into effect in some form or other by the generation now growing up, and it is not too soon to make children realise from this inquiry that, on the one hand, "evil communications corrupt good manners," and therefore we do wrong in exposing those whose chief disability is their poverty to the danger of moral contamination; and, on the other, that all real improvement is effected by influence brought to bear on the *character* of individuals. Men and women, especially those who are below the level of ordinary citizenship, can only be raised to better ideals by personal influence and by education.

In such a classification special pains would be taken with the inefficient or unskilled but respectable workman, and endeavours would be made to train him to be self-supporting. But stern measures would be taken with the strong, sturdy fellow who from sheer hatred of work or from giving way to drink or gambling throws himself or those belonging to him on public assistance. It is recommended that such persons should be sent to "detention colonies" for a time. Here they would be bound to remain for a prescribed period instead of coming in or out of the "house" at their pleasure, and they would be under discipline and would be made to work. This, if it did not form habits of industry, would at any rate prevent them from sinking lower, and the knowledge that destitution caused by wilful idleness would be dealt with in this

Detention Colonies.

way would prevent others from following their example.

The other mode of assistance consists in giving doles of money or food to poor people who are still living in their own homes. This "outdoor relief" may also take the form of medical assistance (the "parish" doctor), payment of funeral expenses, or cost of emigration. It may also be given as employment—"relief works" as they are called—though here, again, the guardians have the same difficulty as in the case of indoor relief. It is not generally thought advisable for them to compete with the ordinary employer. They have not the necessary knowledge and power to provide work on a large scale. This would be better managed by more influential bodies, such as the county or borough councils.

Outdoor Relief.

After the experience of the demoralising effects of outdoor relief which we noted in the last chapter, Parliament has been very chary in allowing guardians to give outdoor relief. It is to be limited with regard to able-bodied applicants to cases of sudden or urgent necessity, such as accident, sickness, widowhood, &c. The guardians appoint paid persons called "relieving officers" to inquire into the circumstances of poor persons seeking outdoor relief. By the law as it now stands no one has a legal right to outdoor relief of any kind. All he can claim as a right is admission to the workhouse.

What is done, under the present Poor Law, for the *children* of paupers? At present they are dealt with by various methods. Sometimes they are maintained in large barrack-like schools, where they are housed and educated until they go out into the world. This has a very depressing effect upon their bodies and

Children under the Poor Law: Various Methods.

minds. They live by rule, isolated from the rest of the world, and never know the cheerful haphazard "give-and-take" of an ordinary home. Those who are maintained in the workhouse itself and sent daily to a neighbouring school are better off in that they see and mix with other children, but worse in that the associations of the workhouse surround them more closely. Another method is to erect a group of cottage homes round a school, each home being managed by a workman and his wife, and the children being arranged so that those of different ages live together. Sometimes these homes are not grouped, but scattered over the district in houses provided by the guardians. In this case the children attend the various public elementary schools near them. Finally, the children may be "boarded out" in cottage homes or adopted by private persons. This last plan seems to have produced happier and more capable boys and girls than any of the other plans, and it will probably be more widely adopted in the future.

Central Control of Poor Relief.

The care of the poor of the country is so grave a concern that though it is in the hands of the local bodies the central Government keeps a much stricter watch over this work than over any other department of local government. The Local Government Board, which is the organ of the central Government for this particular work, issues regulations and orders which the guardians must obey, and it constantly sends out circular letters of explanation and advice. The inspectors of the Local Government Board have a right to be present at the meetings of the guardians and to visit all Poor Law institutions, such as workhouses, schools, infirmaries, &c. The object is not only to see that the poor are properly cared for, but also to secure that

as much uniformity as possible is maintained throughout the country. This, however, is scarcely practicable when the size of the Unions, and therefore the rates available, vary so much. Thus one Union, Welwyn, has a population of only 2,200 people to care for, while West Ham has 580,000. In some workhouses the aged poor are very comfortable; in others the life is extremely dreary. Accordingly one of the reforms of the future will probably be the rearrangement of the present areas so that the conditions of public assistance will be more uniform over the country.

"Public assistance," however, has a wider meaning than is covered by the agencies of our existing Poor Law. There is every year an enormous amount of money spent by benevolent persons and societies. Some of these, according to local circumstances, may deserve to be brought to the notice of the children. Homes and refuges for destitute children, shelters, soup kitchens, and almshouses are a few among many institutions maintained by voluntary effort. The offices of the Charity Organisation Society are to be seen in most towns. More closely approaching the ideal of collective and *neighbourly* help, perhaps, are such institutions as the Civic Guild or Social Guild which we find in some towns. The principle of these is that all the more intelligent and prosperous inhabitants divide up the whole of the poor area of their district, and each worker gets into touch with so many families, irrespective of character or creed. Hence there is no overlapping of ministrations on the part of church or chapel, relieving officer, and charitable almsgiver. Each "case" is considered by a committee which handles all the many resources, and which knows what avenues of help are really

Public Assistance and Voluntary Agencies.

open to the applicant and what form of help it can best give. It is hoped that in the future this arrangement may be extended, and that voluntary associations, instead of working independently of one another, so that a widow with children, for instance, may be visited and helped by the agents of four or five different bodies, may form "Voluntary Aid Councils" and Committees which will work in unison with the bodies charged by public election with the duties of public assistance.

But the young citizen should not be trained to suppose that everything is to be done *for* the poor.

The Poor and Self-help.

The agencies by which the poor may help themselves should be a matter of interest, especially perhaps in poor neighbourhoods. It would be obviously ridiculous, did it not show want of heart, to expect that a man who has a mere subsistence wage should make substantial savings, but there is no doubt that the thoughtless and unproductive expenditure of people just above the poverty line represents a sum which, if thriftily employed, might save them from much hardship in time of sickness and unemployment. The teacher in poor districts often acts as an unpaid savings bank official, and moreover has opportunities of pressing upon outgoing scholars the advantage of such sound investments as those offered by the Post Office or by the best benefit and insurance societies. This should be done not only for the sake of the material advantage, but also on account of the moral effect of even partial independence on a worker who feels himself to be not wholly without security against any sudden reverse. Side by side with the better organisation of employment there must be a levelling up of the character and capacity of those who are to be employed. The evil of pauperism must be combated by all serious and

earnest persons. The formation of "Labour Exchanges," in order to bring employers and workmen together, must be regarded as only one of a series of efforts designed not only to help the unemployed, but to lessen the numbers of the unemployable. In poor districts, especially, the teacher should urge upon children who leave school to begin work the advantages of the continuation school—a most useful agency for preventing the formation of a class of unskilled workers who are likely to drift into pauperism. "Each and every section of society has a common duty to perform in combating this evil and contracting its area, a duty which can only be performed by united and untiring effort to convert useless and costly inefficients into self-sustaining and respecting members of the community. No country, however rich, can permanently hold its own in the race of international competition if hampered by an increasing load of this dead weight; or can successfully perform the rôle of sovereignty beyond the seas if a portion of its own folk at home are sinking below the civilisation and aspirations of its subject races abroad."*

* Report of the Royal Commission on Poor Laws and the Relief of Distress, published 1909. An account of the working of the existing Poor Law may be found in Lauder's *Municipal Manual* (King & Co.).

CHAPTER XLI

THE SCHOOL (1)

THE school buildings of a town naturally interest young people. But they are generally very ignorant of the functions of schools belonging to any other type than their own, and they have little conception of the past that lies behind their own school. To the grown citizen the school is perhaps the most significant building in his town; he realises that it embodies the traditions of his country, that it reflects the state of progress which has now been reached, and that the future is being shaped within its walls. All this is, of course, beyond the range of the child of school age. But the average child may to a certain extent be interested in such questions as: What kind of schools did children go to in olden times? How was it that our schools came to be built? Who manages and pays for our school? Are there any other kinds of schools?

The Significance of the School.

If we could have travelled through our towns and villages for some time after the Norman Conquest, instead of finding a school in every village and many schools in every large town, we should find no buildings which we could recognise as schools. But attached to every monastery there would probably be a little school, often held, as we have seen, in the cloisters. Here the young people of the neighbourhood might come to learn a little reading and writing. But the young people

Monastery Schools.

of the neighbourhood had no high opinion of the value of such an accomplishment. The boys learned quite early to dig, to cut wood in the forests, to keep swine or cattle; they had no need of a bookish education. Only the few who felt drawn to the vocation of a priest would wish to spend long hours in the monastery school at what to them would be a far severer task than the agriculture or forestry which fell to their lot. The thoughtful, bookish boys, however, came to the monastery and learned not only reading and writing but also Latin and the art of chanting in church, with a view of one day becoming priests. And it must always be remembered to the credit of the Church that her orders were open to all, however humble, who had the earnestness and ability to press themselves into her service.

As Langland makes "Piers Plowman" say (1392), "The child of a cobbler or a beggar has but to learn his book. He will become a bishop and sit among the peers of the realm, and the sons of lords shall bow down to him, in spite of his origin and his parents."

The Knights' School.

For youths of gentle birth there was always the training in knighthood. Every great man's household might be a small school, where two or three at least of his friends' sons were received to learn successively the duties of page, squire, and knight, and withal to imbibe some of those sentiments of chivalry which we see illustrated in Chaucer's "verray perfet gentil knight."

Our Unschooled Forefathers.

Speaking generally, we may say that there was no special training for any vocation in life except the Church and war. But though it is true that the mass of the people were ignorant, it must not be forgotten that a valuable training was given by the process of their ordinary

industrial work. The rude forefathers of the hamlets of England might not have been able to read or write, but the present generation has no right to look back upon them with a lofty superciliousness, and assume that they were fools. The workmen who built our beautiful old English churches and cathedrals with such thoroughness and intelligence, and who were able to take pleasure in the varied spectacles shown them within their walls, were by no means insensible and debased, though they may have lacked what the modern clerk or typist calls "education." Besides, we must remember that at this time books were so costly that poor people could not afford to possess them, even if they had learned to read them.

With the growth of towns and the trading spirit came the desire among prosperous citizens to give their sons the benefit of such learning as was enjoyed by the clergy. Sometimes a guild would found a school. Sometimes a merchant who had prospered in the world would build a school for his native place. These schools were called "grammar" schools, and "grammar" in the Middle Ages always means the Latin grammar, for Latin was then the medium of communication between all scholars in Europe. There were also "song" schools attached to the great churches, the pupils being trained, like the little Hugh of Lincoln in Chaucer's "Prioress's Tale," * to help in the services of the Church. Small parochial schools were formed for similar purposes. Sometimes the town itself would found a school, and the mayor and town council would manage it without any assistance from the clergy. Often a chantry priest, *i.e.* a priest

Town Schools.

* "This litel childe his litel book lerning,
As he sate in the schole at his primere,
He *Alma Redemptoris* herde sing—
As children lered hir antiphonere."

appointed to chant masses for the dead, would, in addition, instruct boys in his little room over the western porch of the church or in the porch itself.

School Discipline in Olden Times.

The school discipline of olden times was severe to a degree which would be incredible to young people of to-day. It was assumed that nothing could possibly be learned without frequent whippings and birchings. Children need not hear too much of these evil days, but they may all realise their advantages as compared with their predecessors. They will be interested in the outcry of an unfortunate mediæval scholar who said :—

> I would my master were an hare
> And all his bokis houndis were,
> And I myself a jolly huntere.
> To blow my horn I would not spare!
> For if he were dede I would not care.

Rank was no defence against severities at school. Tusser, who went to Eton in the sixteenth century to "learn straightway the Latin phrase," says that fifty-three stripes were given him at once :—

> For fault but small
> Or none at all.

It became more usual to educate boys of gentle birth at home in company with one or two others of equal rank. Thus Edward VI. had two boys to learn with him.

Education under the Tudors and the Stuarts.

At the dissolution of the monasteries the monastic schools were, of course, dispersed. One good result of this, among many injustices, was the establishment of a large number of grammar schools with part of the proceeds of the spoil. But, on the other hand, many poor schools, small and obscure, "song" and "writing schools," were quite extinguished, for the Government of Edward VI. gave money to the

schoolmasters instead of the lands which had formerly been allotted as the endowment for their support; and as the purchasing power of money was rapidly falling, the schoolmasters were unable to live on their stipends.

The distress among the poor all through the Tudor period was so great that they had little concern for education. We hear of children being apprenticed away from home as early as seven years old, thus making impossible anything like what we understand as schooling for the humblest classes. At the outbreak of the Civil War, however, every little country town possessed a grammar school of some kind or other in which the children of the middle classes could get some kind of learning.

The eighteenth century was a century of philanthropy and enlightenment, and the conscience of the better-instructed was roused on behalf of the children of the poor. This was the age when private individuals and private societies began to found free "charity schools" and the like, for as yet the State had not realised its collective responsibility for its children. During the wars with France at the beginning of the nineteenth century there was need—as we saw in our chapter on the workhouse—for special concern for the welfare of the poor, and this took the form of providing their children with means of education. Religious voluntary effort, as was so often the case in other good works, showed the way to the national conscience. In 1811 the "National Society for Promoting the Education of the Poor in the Principles of the Established Church" was founded. These "National" schools, as, until the other day, they

"Charity Schools" of the Eighteenth Century.

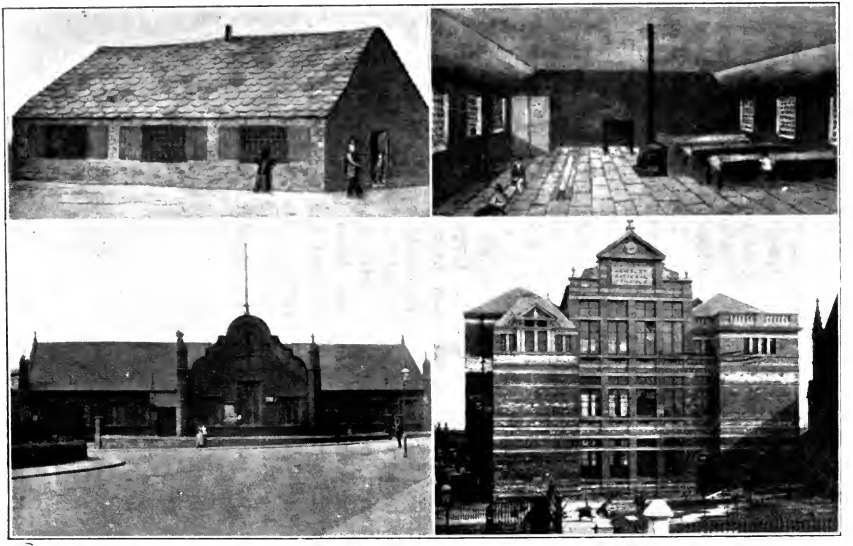
"National" Schools and "British" Schools show the Way to State Effort.

were universally called, were not provided from the treasury of the nation, but from the purses of subscribers to the "National" Society, who were, and are, to be found all over the country. Three years earlier the British and Foreign School Society was founded largely, though not altogether, by Nonconformists, and the schools so founded, in which the religious teaching was undenominational, were called "British." Nearly all the primary schools in the country belonged to these societies. But in 1833 the Government felt that it should not leave them to bear their burdens alone. It therefore then began to give grants to help the building of schools; and from 1853 grants were given towards their general expenses. Still, these schools could not provide for all the children, and moreover not all the children could be induced to accept education. By 1870 we had reached the conception that education is so important that the State must undertake to secure it for *all* children; none must miss it through the ignorance or neglect of their parents. Moreover, by this time a far larger number of poor men had been allowed to vote for members of Parliament, and hence to share in the government of the country. "We must educate our masters," said a statesman of that time. Accordingly education was in 1870 made universal and a few years later compulsory. That education should be *free* was a natural consequence, though it did not come for another twenty years. In 1870 England was divided into districts, and "School Boards" were elected in most of these districts, consisting of persons whose business it was to erect and maintain schools over and above those provided

Government aids Voluntary Schools.

Education Universal, Compulsory and Free.

School Boards.



A Church School (Hunslet) at three stages of its existence
Dates of building—1700. 1843, and 1895

by the voluntary bodies. In 1902 these Boards were abolished, because it was thought that education should not be set in a compartment by itself away from other matters relating to good citizenship, and that it was better to put the schools under the same authority as that which overlooks other functions of municipal life. The county council or the borough council is therefore the Education "Authority" in every part of the country. This authority has power to "provide" schools which are wanted for their district, whether elementary or higher; such schools are called "provided" or "council" schools. Elementary schools which were built at private expense, such as the "National" and "British" schools, are called "non-provided" schools. Over half the children of the country are educated in non-provided schools. These, like the provided schools, are now kept going by money from the rates as well as the taxes, but those who supply the buildings, in the case of the "non-provided" schools, have to keep them in repair, and often to improve them at heavy cost. Also they have to conform to the standard set by the local authority and by the Government in respect of what is called "secular" education.

Schools placed under the Local Authorities.

CHAPTER XLII

TYPES OF SCHOOLS IN TOWNS.

THE ELEMENTARY AND THE SECONDARY SCHOOL

HAVING roughly traced our present school system through the past, we must now help the pupils to see how this system has broadened out, as it were, to fulfil the needs of a more and more complex society. The pupils should realise that there are other kinds of schools beside their own, and that "education" is a word of very wide application. The teacher will, of course, concentrate more attention on the kind of school in which he himself works, but he will show how this school is *part* only of a great piece of machinery, not yet working perfectly, the object of which is to fashion the various types of citizens which a State requires. If we go through the streets of a large town with the special purpose of noting what schools it provides for its inhabitants, we shall almost certainly find that there are schools of many different types. The most numerous, of course, are those which provide elementary education. These, as we saw in our last chapter, are of two kinds.

Complex Civilisation needs Different Type of School.

The Elementary School.

1. Schools provided by the County Council (in small towns) or by the Borough Council, if the town is large enough to constitute a borough in itself. These are called Council or "Provided" schools.

2. Schools originally established by voluntary

effort, such as the "National" and the "British" schools—of which we spoke in the last chapter—schools in connection with Roman Catholic churches, &c. These are called "non-provided" schools, *i.e.* schools not *provided* out of the rates, though they now receive help from the rates in their maintenance.

Tell the children in the elementary school about the officers of such schools—the inspectors from the Board of Education and from the Local Authority, who see that the school is doing its best; the managers, who come into more frequent relations with the pupils and the teachers, the school attendance officers, &c.

In these schools the pupils receive the beginnings of their education, and the State has decided that no effective education can be given if the scholar leaves before the age of fourteen; hence attendance is compulsory until then. Sometimes the term "Primary schools" is used. In America or in Switzerland we find children of all classes attending these schools for the early stages of their education. In England they are generally thought of as schools for children of the poor; but it is becoming more usual for well-to-do people to send their children to them. If, as we hope may one day be the case, the manners, personal cleanliness, and modes of speech of certain sections of the poor do not differ in so marked a way from those who are better off, it will be possible to make the "Common School," as it is called in America, a place of education where rich and poor may meet together in youth, and learn by early comradeship to sympathise with and respect one another. At present it is unfortunately true that "in no other European country is there so wide a gulf of separation between the educated and the non-educated

class. In no other European country is the educated class so small in proportion to the aggregate."*

"Equality of Opportunity."

Nevertheless it is a hopeful thing that we have an elementary school system, universal, compulsory, free, which gives every child a chance of developing whatever native power he may have. Men are not born equal in mental capacity any more than in physical strength; but just as a civilised State ought to see that the conditions of life into which a child is born, and under which he is nurtured, give him at least an opportunity of growing up healthy and sound in body, so it ought to provide him with a certain minimum of mental nurture. This is what we mean by "equality of opportunity." Education, as Ruskin points out, is not a *leveller* of minds, but a *discerner* of spirits. Among the children of the industrial classes there may be some specially fitted to serve their country in other ways than by the less skilled forms of manual labour. The elementary school enables such children to be discovered and sent on, by means of scholarships, to other schools where they will be fitted for other kinds of work. But it must be remembered that this higher work need not necessarily be of the clerkly kind—engineering, for example, is one of the most intellectual forms of work. The skilled artisan exercises more intelligence than the lower class of clerks. It must also be pointed out that all honest work is honourable; every genuine worker has his own place in the Commonwealth. Nevertheless the teacher will be sadly aware that the lot of the scavenger, the miner, the brickyard worker, the agricultural labourer, the dock hand must be at present so laborious as to exclude, even in leisure, those modes of intellectual activity which are

* J. L. Paton, *English Public Schools* (George Allen & Co.).

so attractive to the clever bookish scholar. He can only hope that scientific invention in the future will reduce the disagreeables of such employment so as to level up the condition of those who follow them more nearly to that of the skilled workers of every grade. Meanwhile the elementary school can give these people, not only a happy childhood, but a higher standard of the manners that "makyth man," and also some tastes and aptitudes that will survive into later life, especially if fostered by the evening continuation school.

The Secondary School.

Our town will also contain, perhaps, one or more municipal secondary schools, likewise supported from the rates. Here education is continued, roughly speaking, up to the age of sixteen. Pupils from the elementary schools who show that they are able to profit by a secondary education are admitted to the secondary school by scholarships.

As in the case of the elementary school the voluntary system goes on side by side with the municipal or county system, so with the secondary schools, many of which were established by private bodies or persons who left money or land to carry them on.

Endowed Schools.

These are called "Endowed schools," and, if they were originally established for the purpose of teaching Latin and Greek, they are known as "Grammar schools," even though the curriculum may have been altered to suit modern requirements. Since many endowments have increased beyond any degree that might have been expected by the donors, and since also ideas concerning the subjects that should be taught and concerning methods of teaching have greatly altered, the State has intervened through Parliament to make new rules for the disposal of the property, and for carrying on the schools. Some

of these secondary schools, though founded independently, are yet glad to receive help from the rates, which is given only if they are efficient. So we have secondary schools (1) wholly supported by the rates, (2) partly supported by the rates, (3) wholly independent of the rates. "County Boroughs" manage their own secondary education; but a mere "borough," though it manages its own primary education, has to leave its secondary education in the hands of the County Authority (*vide* Chapter LII.).

Private Effort in Secondary Education.

England is the home of freedom, and the State does not interfere with parents who prefer to have their children educated in private schools. So that we still find in our towns schools conducted by individuals or private bodies—from the kindergartens or preparatory schools for quite small children to the boarding or day schools for children of the secondary school age or even beyond it. The education of girls has been almost wholly due to private effort. In 1872 the Girls' Public Day School Company was formed to provide a certain number of schools. The fees charged to the parents were high enough to cover the cost of education and to allow a small interest to the shareholders on their capital. Other famous schools, such as the North London Collegiate School and the Ladies' College, Cheltenham, were once private schools, and owe their present existence to the energy of enlightened head-mistresses. Boys were more fortunate in finding grammar schools with an endowment, and in some cases, if the endowment came from land, the land increased in value so much that when the trusts of the endowment were revised there was discovered a surplus which might serve to found a girls' school also. Thus the revenues of St. Paul's School,

Girls' Secondary Schools.

founded by Dean Colet, have allowed of the formation of a sister grammar school for girls. The London estates of a certain Harpur, born in Bedford, were bequeathed by him in the time of Edward VI. to provide schools for his native town, and are now so valuable that Bedford is known all over the English-speaking world as a place of cheap middle-class education.

Also we have the "Public schools," as they are called, for boys. This is a somewhat misleading title, for the schools are, as a matter of fact, places of education almost exclusively for the sons of the "directing classes." The eight great or chief public schools in England are Charterhouse, Eton, Harrow, Merchant Taylors', Rugby, St. Paul's, Westminster, and Winchester. These are all "old foundations," *i.e.* ancient schools with endowments which have greatly increased in value since they were first started. Their founders were men who desired that boys should be trained in good morals no less than in Latin and Greek. The schools are absolutely free from State control, and they have jealously guarded their independence. "The distinction between grammar and public schools is absolutely modern. The difference is one of numbers and wealth, not of subjects of instruction." * At the present time it is thought by some that they have fallen behind the requirements of the age, but in times past they have influenced the history and education of the country only in a less degree than the Crown and the Parliament. "Since 1714, with a few exceptions, every statesman who has left his mark on his country's history has been educated in one of these schools. The three most notable exceptions were William Pitt, too delicate to go to Eton; Edmund Burke, an Irishman; and

The Great Public Schools.

* A. F. Leach, *History of Warwick School.*

Disraeli, the son of an English Jew. The management of our foreign affairs and finances has for the last century been mainly in the hands of public school men."*

It used to be thought that the "public school spirit" was the special prerogative of certain old foundations. But the rise into prominence of such schools as Uppingham, Shrewsbury, Repton, Clifton, Marlborough, Wellington, Haileybury, &c.—some of old and some of quite modern foundation—has shown that the personality of one or two wise and strong head-masters could build up a living structure as noble as any that have come down to us from olden time.

The English upper and middle class parent has up to the present time usually favoured boarding schools.

Public Schools mostly Boarding Schools.

"A study of origins would soon explain how the English schools in the first instance came to be boarding schools. Few studies are historically more interesting than to trace this development from the monastic school with its simple clause of "*continuetur schola*," by which the King, who abolished the monastery, became the pious founder of the school, or from the old practice of sending the *filii nobilium* to learn all knightly exercises under the eye of some neighbouring baron or knight. It is from the blending of these two elements—knightly hardihood with mental and religious culture—that the unique quality of these institutions is derived. Such training in mediæval times was impossible at home, and now that the conditions are changed the old system still remains."†

New Type of Public Schools.

There is a tendency to favour a newer type of experimental public boarding school, such as Abbotsholme and

* J. C. Minchin. *Our Public Schools* (Sonnenschein & Co.).

J. L. Paton, High-Master of Manchester Grammar School.

Bedales, where boys of the directing classes are trained in industrial work and farming as part of their general education. The importance of these will be seen when we consider how many sons of the directing classes emigrate to the colonies and repeat in undeveloped countries the primitive occupations that have made our own islands habitable. The new secondary schools now springing up, however, are mostly of the day school type, and as Mr. Paton points out, their problem is to build up the same *esprit de corps*, the same Christian manliness of character as public school boys have learned under such great teachers and leaders as Thomas Arnold and Edward Thring.

The Mission of the Secondary Day School.

In a perfectly articulated system of national education we should have the primary school providing elementary instruction for all, while those who could profit by it would proceed to the secondary school. But caste feeling in English society prevents many parents from availing themselves of the elementary schools for their younger children, and these children may be found in large numbers receiving primary instruction in the lower forms of a secondary school. Thus we see that the term "secondary" is applied to schools of many different types. It may include schools managed by companies and trusts, endowed schools, the so-called grammar schools, municipal secondary schools, and private "high" schools. The use of the term in connection with any school does not necessarily mean that only a secondary education is given, for its activities may begin with a kindergarten for quite small children. Properly speaking, however, the term "secondary education" covers all education given between the elementary school and the university.

Wide Use of the Term "Secondary." Overlapping.

CHAPTER XLIII

THE TECHNICAL SCHOOL, THE COLLEGE, AND THE UNIVERSITY

General and Special Education.

THE elementary school and the secondary school are places of *general* education. A general education should give the child not only the power of profitably using the three R's, but also the power of understanding the civilisation in which he lives and how it has come to be. But the time approaches when the young citizen will cease to be a mere learner; he will become also a worker. By far the larger proportion of the inhabitants of an ordinary town or village will have to earn their subsistence in some form of industry or in some of those callings, *e.g.* that of the clerk or the draughtsman, which depend upon industry. In all but the lowest forms of labour—unskilled labour as we call it—some *special* education or training is necessary. So that in their town the children will probably find, in addition to the ordinary schools, some form of *trade* school or *technical* school.

Here we must make a distinction. The *trade* school and the *technical* school are not, strictly speaking, identical. It is true, however, that both have their origin in the old system of apprenticeship, whereby a workman who was master of his craft took one or more lads into his house and into his shop and by example, by precept, and by carefully supervised practice, instructed

them in all the details of their future work. Each craftsman thus received a special education in his chosen branch, and by the Rules of the Guilds he was not allowed to set up for himself until he had gained it. But during the period of vagrancy, caused by the dissolution of the monasteries, and by the bad government of Edward VI.'s Protectors, so many destitute children were adrift upon the country that the well-to-do inhabitants of each parish were required to undertake the charge of a certain number, each man according to his means, to feed them and to teach them their respective trades—farmer, smith, joiner, shoemaker, etc. These children thereby came to form a humbler class of apprentice, and the wholesale system of "parish apprenticeship" caused the well-to-do families to become shy of the practice of apprenticeship for their own sons and daughters. Other causes, which we need not discuss here, contributed to this decline. The modern trade school is an attempt to supply the teaching given by the old apprentice system. It is a place where boys and girls can thoroughly learn such trades as carpentering and dressmaking. It is designed to reduce the number of unskilled, and often unemployable, labourers who have not "a trade in their hands," as poor people forcibly express it.

Apprenticeship and Trade Schools.

Trade schools, however, are not an entirely new idea. Thus we find that in 1591 a "knitting school" was established in Lincoln, and eventually carried on in the cloisters under the Grammar School. John Cheesman, the knitter, undertook to instruct "all such as were willing to come to him or were sent to him by the Alderman and to hide nothing from them that belongeth to the knowledge of the said science." A

Old Trade Schools.

few years later the wife of a shoemaker in Leicester was approved as a suitable teacher of kersey knitting. In 1672 the Overseers of the Poor for Aylesbury paid Mary Sutton five shillings to teach the pauper children to make lace.* The modern trade school, it need scarcely be said, is a much more ambitious undertaking. It is well equipped, and the instructors are thoroughly capable. The trade school, however, is at present only in its infancy.

Technical Schools.

The technical school is much more firmly established. It is a school where instruction is given, not at all necessarily in the practical carrying on of any trade or industry or employment, but in the principles whereby such trades and employments can be properly carried on.† Thus the great School of Technology in Manchester does not use the labour of its pupils to produce cotton goods from the looms or to make the engines that are to drive the looms, but by the help of experiments, specimens, models, it prepares these pupils to understand all that will be done in the factory or workshop. Drawing and other branches of art that may afterwards be employed in the industries—*e.g.* designing patterns for cotton goods—are also included in technical education.

Origin in Voluntary Effort.

Technical schools, like so many other public institutions, began in voluntary enterprises in mechanics' institutes and the like. In the year 1800, George Birkbeck, a young professor of physics in the college at Glasgow, went into a tinman's shop to buy some material for his apparatus, and was so struck with the intelligence and eagerness for knowledge shown by

* Professor Foster Watson, *The Beginnings of the Teaching of Modern Subjects in England* (Sir Isaac Pitman).

† Definition of technical instruction given in Technical Instruction Act, 1889.

the workmen that he decided to admit them to his lectures, a proceeding which was regarded at the time as very revolutionary. But the better kind of workmen in nearly all the great towns were eager for knowledge, and mechanics' institutes sprang up everywhere. Birkbeck soon devised courses specially suited to working men, and many of these still exist as technical schools or polytechnics (Greek *polys*, many; *techné*, an art). They are now carried on by the aid of the County and County Borough Councils, who have a special fund from the Inland Revenue divided among them for the purpose of technical education.

Technical or special education, however, must not be thought of as entirely apart from general education, for with our usual tendency to overlapping we find technical classes, *e.g.* woodwork and cookery, in the primary school, and also a "technical side" to secondary schools.

Colleges.

The town or its neighbourhood is sure to contain some place of education styled a college. The word "college" is very loosely used. A private school for children held in a modest dwelling house may be called a "college." But the word really means a company of people gathered together for some common purpose (Latin *con* [=*col*] and *legere*, to gather), and having some kind of legal status or public recognition. Thus a hospital or asylum for the aged is often called a college, and we have learned associations such as the College of Physicians, College of Heralds, etc. But the term has come to be applied more commonly, first to a group of teachers and adult students governed by a body which has generally been "incorporated," so that it can hold property, etc. (page 67), and secondly, to the

place where they meet. There are colleges for general and for special education. Examples of the latter kind are colleges for learning the military or naval profession, colleges for intending teachers, colleges for learning music, etc. The students of a college, while still in the status of pupils, are thought of as largely self-governing—as themselves building up the corporate life of the college and maintaining the traditions in a way which children at school cannot be expected to imitate. "In its very notion," as Cardinal Newman remarks, "the word suggests to us position, authority, stability." *

The University.

A few towns in England are the seats of universities, but the idea of a university may be brought home in some fashion to the humblest scholar over twelve in every town and village. The university, they may be told, was the final place of education of the doctor, the parson, etc., and it is the goal of the scholarship courses, the highest round of the education ladder.

The Old University: A Kind of Guild.

What is a university? Its earlier and better name was *Studium Generale*, which gives a truer idea of its purpose. *Universitas* is the mediæval name for a corporation of any kind; and therefore it came to cover the guilds of students who leagued themselves together to secure learning. Finally, it came to mean a recognised and established seat of learning—a place where pupils and teachers alike are following higher studies, and where the proficiency of the pupils is, as a rule, attested by diplomas or *degrees*. These degrees are conferred by a body of representatives of the university, who must be "incorporated" for that purpose. At first there were no colleges; the students merely grouped themselves as

* Idea of a University.

they were drawn by the fame of some special teacher. The first students were humble, needy folk; they had to beg their bread along the common roads to their goal, and when they arrived there they had to find what squalid lodgings they could and live on hard fare. Colleges and "halls" were a later development, due partly to the benefactions of the rich, who gave and bequeathed money for the benefit of poor students, and partly to the necessity of bringing under some sort of discipline the miscellaneous crowd of young men, who annoyed the townsfolk, carrying on a feud between "Gown and Town" which has, perhaps, hardly yet quite died out.

Universities resembled the craftsmen of the time in forming themselves into Guilds and in instructing apprentices. The apprentices were the undergraduates, and just as the apprentice when he had reached a certain stage of skill was recognised as a master and might take apprentices of his own, so the degree was the hall-mark of the student who was now qualified to teach. A graduate is one who is certified to have attained a certain *degree* or *grade* of learning.

Degrees.

For many years Oxford and Cambridge were our only universities, and though they have done good service in educating the sons of the directing classes, they have not, it is thought, at any rate until lately, been eager enough to lead the van in scientific discovery or to adapt themselves to the demands of a more widely educated population. The creation of universities in London, in Durham, Manchester, Liverpool, Birmingham, Leeds, and other provincial centres has brought the higher learning nearer to the intelligent youth of the nation as a whole. The old universities, too, have learned to provide courses in all the various branches

The Newer Universities.

of modern study and not only in the "humanities," so that the clever pupil who mounts the "ladder" is not obliged to seek distinction in one groove. Many reformers consider that the nation needs to spend far more on education of a university type. But we have, at any rate, reached the point whereat the child of poor parents, yet of higher capacity, can mount the educational ladder from the elementary school to the university and learn the best that his time and his country can give him. Though much remains to be done, we can see that the three grades—elementary, secondary, and university education—have been fairly delimited and yet related to one another. A general elementary education is to be thought of as leading nowhere beyond itself; secondary education is designed to lead to the university. "We have now a universal compulsory free system of elementary education, and this is dovetailed into a rich secondary system, which, in its turn, is dovetailed into a poor, but efficient, university system."*

The Educational Ladder.

It is highly desirable that intelligent children, before leaving school, should have put before them a kind of conspectus of the educational advantages which their town offers, and of the educational systems which act upon it from without its own area.

* De Montmorency, *The Progress of Education in England* (Knight & Co.).

CHAPTER XLIV

THE POST OFFICE. (1) ITS ORIGIN: A MONOPOLY OF THE CROWN

THE Post Office may be made interesting to children in many ways. The history of its origin is attractive. It is the expression symbol of an ever-growing sentiment of human fellowship; all unconsciously we have been, by its means, binding ourselves to our kinsfolk over the whole earth in a way that was impossible when communication with those afar off was scarce and costly. Again, the organisation and method of the working of the postal system has a fascination of its own. And for our English children, now growing up to reflect upon the relative advantages of individual and collective action, it affords a good example of a Government monopoly.

Points of View.

Let us help the children to reduce our history of national postage to its simplest elements. We may begin with the word "post" itself, which comes from the Latin *positus* = placed. A "post" is literally a piece of timber placed in the ground. It was a natural thing for a ruler over a large area to wish to have news of what was going on at a distance from his capital. It was an obvious plan, therefore, to have a service of runners, or couriers—or horsemen in countries where horses were used—to travel along the great roads to bring or take news to the capital. These

The Word "Post."

great roads would be divided for courier purposes into sections. At each "post" would be a fresh runner or a fresh relay of horses, ready to take up the message from the exhausted courier who had brought it so far. Thus we came to have posting houses or inns of refreshment by the way, and relays of posting horses for the messengers. In Edward I.'s time we find such "posts" established along the great roads in our own country. At these points horses could be had by any persons wearing the royal livery. On ordinary occasions, however, the services of runners were deemed sufficient, even by kings. Edward II. kept twelve messengers with a fixed salary; they went with him on the visits which the thrifty monarchs of those times constantly paid to the households of the nobles, and were always ready to start running, with the royal staff in their hand and their wallets by their side. They received threepence a day when they were on the road, besides four shillings and eightpence a year to buy shoes. Horses, of course, were used on special occasions and in time of war. When Edward IV. was at war with Scotland, relays of horses were very frequent along the Great North Road, but this expense ceased when the war came to an end.

Runners or Couriers.

Private letters and parcels could only be sent by messengers. Not only the king, but bishops, abbots, and nobles kept a constant service of them. This is natural when we consider that by the policy of William the Conqueror the feudal estates of the great barons were scattered in different parts of the country, while an abbey would have dependent priories and churches at a considerable distance from the mother institution. The poor man, however, had to wait until some travelling

Private Posts.

pedlar brought him news of a distant kinsman, or until some friend went on a journey. We must remember, on the other hand, that the poor of that day were much more stationary than now. People born on the soil did not migrate to the towns in large numbers, and there were no colonies to take off the adventurous ones of the family, so that the need for "news by post" was less felt.

Origin of our Regular Inland Post.

Indirectly we owe our first regular inland post to that much misunderstood person—the foreign competitor. Foreign merchants in London set up a private post to give news of their dealings to other ports. Then the Government in 1568 set up a post office for letters to foreign countries; this was an *outland* service for the benefit of English merchants. An *inland* post was the natural sequel to this, and in the time of Charles I. a "post" was organised between Edinburgh and London. The journey to Edinburgh and back took six days. Soon there were eight main lines of "posts" along the principal roads of the country and "by-posts" along cross-roads. Private letters, which had been carried by special messengers or by common carriers travelling with their pack-horses from town to town or from fair to fair, were henceforth to be sent by the royal mails.

The Post made a Government Monopoly.

The post was now made a Royal *monopoly*. And when an enterprising individual tried in 1683 to set up a penny postal system in London it was suppressed as contrary to the principles of this monopoly, though the Government had the sense to see that the traders of a great city needed such a convenience, and shortly set up a London district postal system, wisely placing over it the man who had successfully worked the private enterprise.

The fact that the post is a branch of the Government is generally well realised by children. The monogram of the sovereign on the mail vans, the image on the stamp, are symbols of this. The officials are known to be Civil servants. But it is not generally realised that it is a legal offence for a private person to carry letters for money; a carrier may not bear letters from one village to another unless they relate to the goods or parcels he is carrying in his cart. Of course this sort of restriction would not be tolerated by a free people unless they were convinced that their Government did the work for them better and more cheaply than private individuals or companies would do. It is, in fact, a form of Socialism of which every one approves. They trust, too, in the honour and secrecy of the Government. Cromwell approved of the monopoly posts which his victim Charles I. had created, because, as he remarked, "They will be the best means to discover and prevent many dangerous and wicked designs against the Commonwealth"—a saying which may be taken in two ways. But very rarely has the Government allowed itself to take advantage of its monopoly to open letters, especially of late years. When the correspondence of the Italian patriot Mazzini, then resident in London, was tampered with in 1844, there was so great an outcry that it seems very improbable that such a thing will ever be repeated. The teacher may compare this with the state of things that prevails in Russia (*vide* page 3).

The Secrecy of the Post in a Free Country.

When mail coaches came into general use, from about 1784, and the great roads were improved by the skilful engineers of the period, it was found that the mail-bags (*cf.* French *malle*, a bag) could now be carried

Mail Coaches.

much more economically than on horseback. The Government contracted with the owners of the coaches to carry the mails, and the box containing the mail was placed under the feet of the guard at the back of the coach; it was regarded as a sacred trust to be defended at all hazards against highwaymen, and to be borne doggedly through snow-drifts and floods. The "mail" (for coach and burden were alike called the "mail") rattled through the towns at night, receiving the bags which, to avoid delay, might be dropped from the bedroom windows of the postmaster's house, and carrying besides a few passengers, whose fares helped to reduce the cost of the conveyance. Every one thought the perfection of speed had been gained. The speed was as a matter of fact from six to ten miles an hour. But the system was very imperfect, according to our ideas. It took seven days to get a reply from Penzance to London. Neighbouring towns not on the same main road had very little benefit from the system. Thus Gloucester and Chippenham, only thirty-five miles distant, were five days' post apart. As for parcels, it was so very expensive a business to send these by mail that people had recourse to sea or canal carriage. Thomas Carlyle in 1829 explained to his wife the delay in the arrival of a German grammar which he wanted by the fact of the London smacks being all becalmed.

Mail Trains.

The mail-coach system lasted about sixty years. Then, as every one knows, the mails as well as passengers and goods began to be carried by the newly invented railway trains. Mails were first carried by railway train in 1830, on the line between Liverpool and Manchester.

Up to this time the charge for letters had been in

proportion to the distance, weight, and number of enclosures. A letter consisting of a single sheet of paper, weighing less than an ounce, cost one shilling and eightpence when sent from London to Cumberland. If a second sheet of paper were used, this was another enclosure, and the charges were doubled. This is why our grandparents "crossed" their letters; it was a habit induced in the time when it was important to get the utmost value for the heavy postage. The average rate for the whole country was sixpence a letter. The charge was not prepaid, as now; the postman had to collect the fee when he delivered the letter. Poor people had not the means to pay the fees, and suffered cruelly from the absence of their relations, since that absence meant unbroken silence. A labouring man declined an eightpenny letter, though it came from a far-off daughter, because the price meant one loaf the less for his other children. They were naturally tempted to defraud the Government in various ways. A poor woman refused a letter brought to her door by a postman. A kindly person wished to pay the fee for her that she might have the letter. She asked him not to do so. The letter, she said, was blank, but her absent son, who had sent it, had adopted this means of letting her know that he was alive and well; the envelope in his writing was the only message. In spite of the penalties against infringing a Government monopoly, good-natured people going on a journey packed into their luggage batches of letters from their neighbours to friends in the districts they were to visit. Members of Parliament were allowed, on signing their names on the cover of their letters, to have them delivered free of charge. The letters were said to be *franked* (*franc*=free).

Heavy Charges for Postage.

However, they franked their friends' letters also, even when these friends were wealthy, and no one was ashamed of the request.

A Uniform Penny Rate.

The discomfort and trickery involved in all this was brought to an end by Rowland Hill, who was born in 1795. He became a schoolmaster, and was interested in social reform generally. He calculated that if a uniform charge of one penny per letter were made all over the country for all distances the revenue from the national post would actually increase. His pamphlet on the subject, published in 1837, aroused delighted expectations in merchants and tradesmen, who petitioned Parliament in favour of Hill's proposals. Members of Parliament and Post Office officials opposed it on the grounds that letter-writing should not be encouraged to this extent—that the walls of the Post Office would burst under the strain of the mail-bags, and so on. It is always instructive to look back upon the beginnings of any social reform, to consider the objections made to it in the light of our present knowledge, and to reflect that the objections against the reforms urged to-day may be just as ill-founded. But the scheme was adopted, and eventually Sir Rowland Hill became Secretary to the Post Office. In January, 1840, a letter might be sent anywhere in these islands, even to the North of Scotland, for a penny, and, as Hill prophesied, the stimulus given to the practice of letter-writing—it has increased to more than twenty-five times what it was before the reform—speedily sent up the receipts of the Post Office, so that the revenue it yields is now considerably over four millions of money every year.

When Rowland Hill began his work at the Post Office mail coaches were at the height of their

success. When he became Secretary in 1854 all the great railways were in the course of construction or were already open, and mail coaches had almost entirely disappeared. This made his work much easier, both by quickening the transit and by cheapening its cost. But his fertile brain was not content with this; he did not rest on his achievement, but was ever seeking to take advantage of the ground already won in order to add to the public convenience. Thus he bethought him of a way of prepaying the penny tax on the letter by enclosing it in a "little bag called an envelope" and affixing to it a "duty label with a glutinous wash on the back." A Scotch printer named Chalmers improved on this idea by inventing our familiar adhesive stamp. Street-boxes, the wall-box, our familiar red pillar post, which is a reversion to the original "post" of olden time, were an afterthought to encourage letter-writing. Sir Rowland also rearranged the work of the Central Post Office in London, so that it was no longer possible to persist in the curious muddled procedure which had survived from the old conditions, whereby if two letters were addressed, one to Highgate, on the North Road, and one to Wolverhampton, 118 miles further on the same road, the letter to Wolverhampton would arrive first. The reforms which he began did not end with his lifetime. Thus the inland penny postage has led, in these days of fast steamships, to a penny postage throughout the Empire, and will probably lead finally to an international penny postal system.

Other Improvements in the Carriage of Letters.

Reserving for the time any consideration of the further activities of the Post Office, it is worth while letting the children consider a few concrete

cases of the human value of penny postage. A merchant hears quickly of new markets, customers can order goods, work of all kinds can be planned by letter, thoughts exchanged and schemes developed. A scattered family can keep up home-ties, however far its members may have settled from the parent roof.

The Human Value of Cheap Postage.

The humble village post office, carried on perhaps in a living-room or in the corner of the general shop, the smarter town branch office, or the big district office, the collecting-boxes within easy reach of every household, represent an enrichment of the possibilities of life of which we can only form a complete conception if we transport ourselves in *time* to the letterless days of Angevin England, or in *space* to the lonely missionary within the Arctic circle who receives his letters once a year.

NOTE.—The teacher will find interesting material for lessons on Post Office reform in *Sir Rowland Hill: the Story of a Great Reform*, told by his daughter. (Fisher Unwin.)

CHAPTER XLV

THE POST OFFICE (2)

CHILDREN in a village will know that their letters are taken to the little rural sub-post-office, which is sometimes only a corner of the village shop, or the front "parlour" of a cottage; that they are put into a sealed bag and delivered to the postman or to the driver of the mail-cart, which is generally an ordinary cart hired by contract from someone in the neighbourhood. Thus the mails are collected from one village after another along the road to the railway station. What happens to the letters then? The cart is so timed that it reaches the station before the passing of the mail train. All the "mails" brought by hand or by horse and cart along the various lines of road are enclosed in canvas bags, which are tied up and sealed, the wax being impressed with a crown and the name of the despatching office. The train, however, does not stop at every little station to take up the mail-bags. As the train passes through the station it picks them up without stopping. The process is so rapid that the children must have sharp eyes in order to see what really takes place. The bags are hung on an arm at the end of the platform, and as the train rushes through it sends out a projecting pole which knocks them off the arm into a net which is stretched out from one of the

The Village Post Office.

Picking up the Mails from Country Stations.

A Travelling Post. Sorting Letters on a Mail Train.

carriages of the train in order to receive them. These letters are then sorted in a special carriage, so that when the train reaches a junction each group may be forwarded along the line of railway which will take the letters to the towns lying on or near it. Thus the sorting-carriage from Manchester to Crewe picks up by its apparatus letters from some of those towns in Cheshire which are not on the direct mail line to London, and these can be distributed in "lots" at Crewe according to the railway lines which will carry them to their destination. For though when we write letters addressed to such places as Newport, Bradford, and names belonging to more than one place in England, we must be careful to add the county, yet Post Office sorters have to think less of the *county* than of the railway line running nearest to the town or village to which the letter is addressed.

The Travelling Post.

How does our village *receive* its letters? The mail train can not only "pick up" letters without stopping at a small wayside station—it can also "drop" them. The bags are hung out of the mail carriage in passing, caught into a net fixed at the station, taken to the rural post offices, and thence distributed by the rural postmen.

What happens in the town? Here, as the children will know, there are to be found a number of local post offices—"branch" offices, as they are generally called—where the work consists mainly of selling stamps or postcards over the counter, and perhaps issuing money orders and sending telegrams. The "branch" offices are staffed by officers who are under the control of the postmaster in the "general" office of the town; the premises and their fitting-up are arranged for by the Government. Besides the branches there are also,

Branch Offices in Towns.

in the town as in the country, "sub-offices," usually kept by a shopkeeper who is paid by commission on the work done, stamps sold, &c. In the case of *town* sub-offices the postmen collect the letters from the *outside* of the office in the same way as from the street letter-boxes. In rural sub-offices the letters, as we have seen, are col-

Sub-Offices.

THE GENERAL POST OFFICE OF THE CITY OF LEEDS. LET THE CHILDREN CONTRAST THIS WITH THE LITERAL "POST" OF PRIMITIVE TIMES.

lected from *inside* by the rural postmaster and given to the driver of the mail-cart.

Letters and parcels are not sorted either in the ordinary "branch" office or in the "sub-office"; they are taken away by the postman in his bag. He "clears" the pillar-boxes or wall-boxes in the street

in the same way. The children will certainly have noticed the time-tablets on these, which show when the next clearance is to be made and also serve as a check on the postman's regularity. What becomes of the letters now? These are taken to what is called by the public the "general" post office of the town, though it is officially known as the "head" office. When one is late in posting a letter at a "branch" office one can often secure that it does not miss the post by taking it to the "general" office, which has to receive the "branch" letters and deal with them. Here there are rooms where the letters are dated, stamped, sorted into various divisions, tied up in bundles, enclosed in bags tied and sealed at the neck, and sent on to their various destinations in the great red vans with the Royal monogram which we see proceeding to the stations. This is called "dealing with the *outward* mails," *i.e.* the outgoing letters. In some towns, especially towns with important railway junctions or termini, such as Crewe or Stafford, however, it is found convenient to have a branch office quite near the railway station and for all the sorting for the district to be performed there, so that the mails can be wheeled straight from the sorting office on to the railway platform. The teacher can easily find out if this occurs in his own town. The "general" post office also deals with the "inward" letters which have been brought to it. These are first sorted into "walks" or "rounds," then each postman arranges his letters in order of delivery. It is much easier, by-the-by, for this hardworked public servant if letters for suburban villas are addressed to *numbers* and not merely to fancy names, such as "Fern Lea" or "Woodmanhurst." The post town should be the last line on envelope, except in

The "General" Office in Towns.

cases of two towns having the same name, when the county should be added.

London Post Offices.

London, which is a number of towns, is divided into districts—N.W., N.E., &c., each having a "head district" office. These districts, again, are divided into sub-districts, and each of these has one important post office which serves as the "head" office of the sub-district. Thus the N.W. district comprises Mill Hill, Hendon, Hampstead, &c., each having one important office whose officers overlook the branch offices of the sub-district. In each sub-district there are separate postmen's offices, where the sorting and stamping are done, so that the space in the ordinary post office may be free for other work.

In London the General Post Office in St. Martin's-le-Grand is the official home of the Postmaster General, who, since the post is the King's monopoly, is a very important person, and may be a member of the King's Cabinet. Descriptions of the arrangements of the General Post Office can often be met with in the illustrated magazines, and it is not very difficult to obtain admission behind the scenes to see how the enormous piles of correspondence are dealt with. The office in St. Martin's-le-Grand, however, cannot accommodate *all* the work of the Post Office, many branches of which are carried on elsewhere in London: the Parcels Post at Clerkenwell and the Savings Bank at West Kensington.

Other Uses of the Post Office.

What other work is done at the town post office? It will be easy for children to see that when once the Government had assumed control of a system for the transport of letters and for selling stamps in prepayment of the charge for this transport—the same offices, the

same arrangements, and even the same persons, might be economically used for doing other public work.

Accordingly the Post Office issues licences of various kinds—on dogs, carriages, guns, male servants, etc. These licences have to be paid for: thus the Post Office acts as a tax-collector for the State. The children will know that the employés at the local post office are not concerned only with the selling of stamps. They do many other things for the convenience of the public. Let these be recounted, and add any particulars that will make the children see the advantages which this form of collective action has brought about. Thus they will know that there is a Book Post, which dates from 1837. The story of Carlyle's German Grammar mentioned in the last chapter shows us what were the difficulties of scholars before a Book Post was established. Books are things which—beyond all other articles, perhaps—should be made to circulate freely. Somewhat the same principle explains the cheap transport of newspapers. From the Book Post and the Newspaper Post we may pass to the Parcel Post, introduced in 1883. In the days before Rowland Hill, a parcel forwarded as a letter, though its weight and size were such that it could have been put into a man's coat-pocket, actually cost £11 to send from one part of the kingdom to another. In point of bulk the postcard comes at the opposite end of the scale to the parcel. The postcard is an invention to which children owe much in these days. It was designed at first to secure, to people who wished to write a little only and did not care about secrecy, the advantage

A Tax-collector for the State.

The Book Post.

The Parcel Post.

The Postcard.

of a halfpenny payment, and was introduced in 1870. The development of the "picture" post-card, by-the-by, is one of those accidents which has contributed enormously to the diffusion of a certain elementary kind of culture, and has added to the interest of life and to the desire for travel.

Sending Money by Post.

To send money by post is obviously a convenience. How can this be done? Let the children find out the difference between a Post Office Money Order and a Postal Order. Finally, the machinery of the Post Office has been used by the Government to encourage thrift. The school child may save his pence in buying stamps, which are affixed to a form, and elder people can save money, at a low rate of interest—$2\frac{1}{2}$ per cent.—with the knowledge that their savings are perfectly safe. Managers and teachers should impress on all boys and girls leaving school the importance of possessing a Post Office Savings Bank Book. Moreover, by the help of the Post Office annuities can be bought, lives can be insured, and interest may be earned by buying Government stock. All these things are familiar matters to the teacher, but there is always a generation growing up on whom such aids to thrift have to be pressed. And, finally, the Post Office has been made the instrument of dispensing old-age pensions, thereby at once differentiating this form of public assistance from poor-law relief.

Aid to Thrift.

Old-Age Pensions.

CHAPTER XLVI

TELEGRAPHS AND TELEPHONES

THE tall telegraph posts, with the wires stretched between them, are always interesting to children.

Telegraph Wires

They like to listen to the music they give forth in the wind, and to watch the birds perched upon them in quaint rows, silhouetted against the sky. Perhaps they will also notice the little porcelain caps which the poles bear, and to which the wires are fastened. They will ask the meaning of these. They can be told that the "electric current," as we are obliged to call it, tends to escape into the ground. Sometimes we are glad that it should do so and we put up metal lightning-rods by the side of tall buildings, such as churches or factory chimneys, that the destructive electric force set free in a thunderstorm may pass harmlessly down the metal rods into the ground, instead of "striking" the buildings themselves. But we are using the telegraph wires for doing very different work, and we do not wish the current, which we have artificially produced and led into these wires, to escape. We therefore see that the wires are separated, or "insulated," as it is called (*insula*, an island), and, as porcelain is a non-conductor, these little caps are used to carry the wires, and thus the electric current cannot escape down the pole. Another way of "insulating" is to cover the whole

wire with some material which acts as the porcelain does. Thus wires running under the earth or under the sea are "insulated" by coverings of various substances, the most important being indiarubber and gutta-percha. Children may sometimes see these coated wires being taken up in the streets for repair.

Let the children notice that telegraph posts serve as guides, for they take the shortest route between town and town. Also, when one follows the telegraph wires into a town or village, one can find one's way to the Post Office by noticing where one or more of the wires pass down from the poles. Practically all telegraph wires end sooner or later at a Post Office. The Postmaster-General has a monopoly of all the telegraphic service in the country, for though it is true that merchants in cities have private telegraphs, no one may set them up without the licence of the Postmaster-General. Before the days of electric telegraphy people had to depend on running posts, or on the lighting of beacon fires on the hill-tops. Compare the fire signalling described in Macaulay's "Armada" with what would happen nowadays. Fire signals gave only a vague message of alarm; for carrying more definite tidings over the country people used semaphore signals similar to those still employed on the railway (Greek *sēma*, a sign; *phero*, I bear). Thus there was, until 1847, a system of semaphores set up on a series of heights from the Channel to Hampstead Heath, so that the Government at Whitehall could at once learn if there were any danger of an attacking force landing on the south coast.

The Telegraph and the Post Office.

Ancient Systems of Signalling.

The modern telegraph is not merely a matter of signalling, it may also be actually *writing* at a distance.

(Greek *téle*, at a distance; *grapho*, I write.) For pupils who are not yet in the stage of technical education little can be done to simplify the explanation of the working of the modern telegraph. But they are familiar with the idea that the force which is shown in the wild and sudden lightning can be generated artificially and, so to speak, tamed, and made to do *work*. They will like to hear that some attempts to transmit news by electricity were made by certain monks in a German monastery as far back as the middle of the 16th century. In 1753 a Scotch surgeon named Morrison charged twenty-six long wires with electricity, and connected his own house with a distant cottage in the same village. He succeeded so well in his attempt to communicate between the two places that he thereby won the reputation of a wizard. It will be noticed that his twenty-six wires equalled in number the letters in the alphabet. Both in the cottage and in his house he hung from the end of each of his twenty-six wires a metal ball, and immediately under each ball he placed a small piece of paper bearing one letter of the alphabet. The operator at one end would charge from his electrical machine the wire above the letter "A," and the receiver would find a corresponding "A" attracted at the other end. Thus a whole message might be spelled out. An improvement on this scheme, Mr. Morrison suggested, would be to make the little metal balls strike against twenty-six gongs, each with a different sound, and the person using the apparatus would soon understand the language of the bells. This is the first idea of a "sounder" telegraph, and it is by sound that most of our telegraphic messages are received to-day.

Early Attempts at Telegraphy.

The earliest electrical displays were made by

rubbing amber, which then showed a power of attracting bodies to itself. The Greek word for amber is *electron*, and the mysterious power shown by the amber under friction was hence called *electricity*—a name which we owe to one of Queen Elizabeth's physicians. An Italian professor named Volta found out how to produce electricity by placing two dissimilar metals—*e.g.* discs of copper and zinc—in a jar of acidulated water. The ordinary domestic "battery" which makes the bells ring in a suburban house consists of a set of these jars, or "cells," as they are called, with connecting wires. The children probably know something of the properties of a magnet. A Danish philosopher, Oersted, showed that a magnet, or compass-needle, could be made to move by an electric current passing through a neighbouring wire. Our English Faraday found that the converse of this was true, and that if a coil of wire were quickly moved in the neighbourhood of a magnet an electric current would be generated in the moving coil. This discovery has given electricians another means of producing electric currents which is for many purposes far less cumbrous and much more convenient than the older methods of friction machines or voltaic batteries. Our telegraphs depend upon the power of the electric current in a coil of wire to cause a magnetic needle to move. The operator who sends the message, say, in London, so manipulates his apparatus as to produce a series of brief electric "shocks," which pass along the wires to the apparatus at the receiving end, say Birmingham. Both the London and the Birmingham operators have a code (Morse code), according to which the letters are spelt out into "shocks" at the sending station

How Electricity is Supplied.

How the Telegraph Works.

Sending the Message.

(London), and these shocks are spelt out into letters at the receiving station (Birmingham). "A person desiring to send intelligence to a distant friend writes down his message in ordinary writing, hands it in at the nearest telegraph office, where the operator's brain transforms the message into telegraphic signals, known as the Morse code. An electric current under the control of this operator then causes a distant electro-magnet to move a lever, producing a series of click-clacks, which the receiving operator translates into ordinary alphabetical letters, and again reconstructs the words of the message, which is written out once more into ordinary alphabetical letters, and delivered to the addressee. It is very probable that ere long the transformation from the Morse code will be entirely dispensed with, and that the sending operator will directly control a distant type-writing telegraph instrument. The message, printed in letter form by this receiving apparatus, will be taken off the machine and delivered to the addressee just as it is received. This is, in fact, now done from our General Post Office to Vienna, Rome, Paris, and Berlin. In some measure this has long been the practice on the Continent, but the message is there printed on a narrow tape, and this is then pasted on to a telegraph form." *

Reconstructing the Message.

Children in coast towns are already familiar with "Marconi" stations for signalling to ships at sea without using wires, and since an apparatus has been lately set up on one of the Derbyshire heights for communication with London it is probable that very shortly inland towns will be similarly provided. The useful

Stations for Wireless Telegraphy.

* *How Telegraphs and Telephones Work.* By C. Gibson. (Seeley & Co.)

little book mentioned at the end of this chapter will help the teacher to give a provisional explanation of this marvel. The children may be reminded of the beacon fires which were once the only means of signalling. The burning fire caused vibrations in that *something* (not air) which fills all space, and which is called ether. Ether conveys vibrations of light and of heat, also of electricity. In the case of the beacon fires, vibrations of light affected the *eyes* of the observers. It had been arranged beforehand that when the fire was set alight it would have a certain meaning, and so the blaze could be interpreted. Also when one person speaks to another the speaker merely causes vibrations in the *air*, which affect the delicate apparatus of the inner *ear*, the brain acting as interpreter. Now, in wireless telegraphy the sender produces vibrations, not in the air, as in the case of sound, but in the *ether*, as in the case of light, and an apparatus is contrived which is so exceedingly sensitive that it can detect these waves at a great distance. The waves of ether causing the sensation of light are very minute. The waves set up in wireless telegraphy are yards in length; that is the difference between them.

Analogies.

It is obvious that these waves might cross one another, and so interrupt messages. They do, in fact, interrupt one another, just as light and sound waves do in everyday experience. The Post Office, which retains the power of granting licences to persons who wish to put up wireless stations, has therefore at certain places round our coasts refused to allow such stations, because the waves of vibration might cross and interfere with those set up by some other station already working in the same district. But the receiving apparatus can be *tuned*,

The Post Office and the Wireless Station.

as it were, so as to respond only to the vibrations sent by a particular transmitter, and by this means the effects of cross-interruptions are avoided.

Telephones.

The children may know that the Post Office is now taking over the monopoly of telephones, as it has of telegraphs. They see in various places notices of "Call offices," or "You may telephone from here," but all the proprietors of these places must have licences from the Post Office. The telephone (Greek *tēle*, at a distance; and *phonē*, a sound) is an instrument

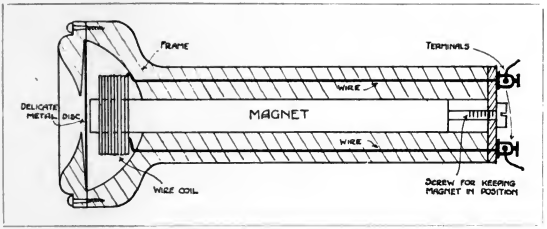
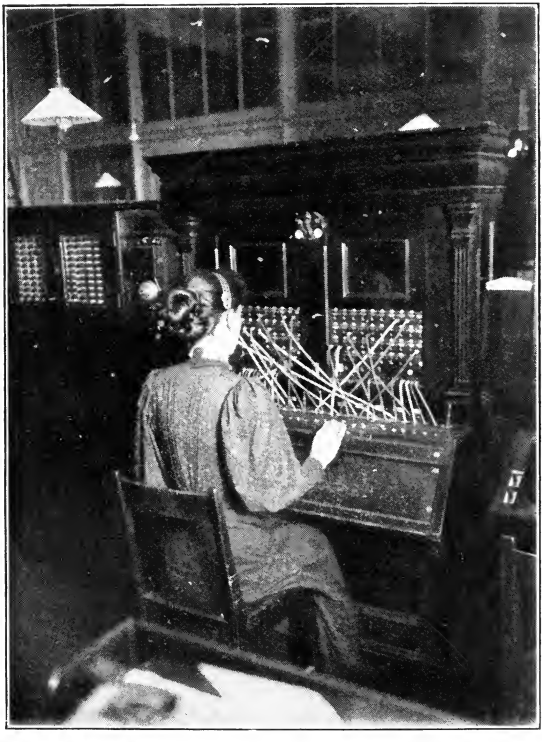


DIAGRAM OF TELEPHONE.

by means of which we are able actually to speak to one another at great distances apart. Boys are fond of making toy telephones by taking two discs—lids of tin canisters or cardboard boxes, for instance—and connecting the centres of the two discs by a tightly stretched string or wire. When they speak into one disc the disc vibrates, the stretched string or wire conducts the vibrations to the other disc, and the original spoken word is reproduced. In the electric telephone a delicate disc vibrates under the waves of air produced by the voice. This disc controls an electric current and



IN A TELEPHONE EXCHANGE. A SWITCHBOARD BY MEANS OF WHICH DIFFERENT SUBSCRIBERS ARE PUT IN COMMUNICATION ONE WITH ANOTHER.

causes it to vary. The variations in this current passing along a wire to the receiving station affect an

electric magnet in the receiver held to the ear and thus cause a sensitive disc in the receiver station to

This illustration shows the Pneumatic Tubes through which Telegrams sent from Central London Post Offices are received at the G.P.O. to be despatched by Telegraphists over the Wires.

vibrate so as to imitate exactly the sounds made at the sending station.

It is obviously convenient to be able to speak to *any* person who has a telephone, so that in towns telephone wires are led to one central office, or Exchange, as it is called, where any two wires can be connected temporarily by an operator there. Thus we find that when we want to speak to a friend we have to give the name of the exchange with which his telephone is connected, and also the *number* of his telephone. Not only the various parts of a town are connected with one another, but also distant towns are linked by what are called *trunk* lines. The Telephone Trunk lines, which connect the various exchange areas throughout the kingdom, are the property of the Postmaster-General, and are worked by his officers.

Exchanges.

Trunk Lines.

The Post Office will no doubt continue to provide the public of the future with whatever further facilities for communication the advance of science shall render possible. Some improvements may depend only on management. Thus we may one day have the system of shopping by post, which we find in Switzerland, where the postman not only brings goods to the door but will take charge of the payment for them.* Other improvements depend on scientific progress. Thus many people think that our system of telephones will be so much improved that it will become quite common for rich and poor alike to speak through telephones to their friends, however distant they may be, instead of writing to them.

Future Postal Developments.

N.B.—The *Post Office Guide* (published quarterly, price 6*d.*) gives a vast amount of information, some of it curious and out-of-the-way. A most useful little book written in non-technical language is *How Telegraphs and Telephones Work*, by Charles R. Gibson (Seeley & Co., 1*s.* 6*d.*).

* This is now done from England to Egypt.

CHAPTER XLVII

THE BANK

THE bank is an institution which, especially in a small country place, serves as a kind of landmark. Children regard it vaguely as a "place where money is kept," and imagine stores of gold behind its prim windows. If they have acquired any grasp of the idea that a town or village is a place where *wealth* is produced, they may be interested in learning a little of the part which the bank plays in the life of the farmers, shopkeepers, and merchants around them. In the first place we may take them back to the origins of that trade which the bank helps to keep in full swing.

Storing "Wealth" in Early Times.

No doubt in a very early stage people liked to store the surplus wealth they had produced, and we must always remember to make clear that *wealth* consisted, and still consists, primarily in *things*, not in money. Thus the husbandman's wealth was his corn or fruit, the fisherman's was his fish, and so forth. The fisherman would often wish that, instead of setting out again with boat and net, he could store the surplus of his catch; the husbandman would wish to profit by an unusually good harvest of fruit. But these things were liable to spoil and perish. It was very much more reasonable, instead of hoarding them until they spoiled, to exchange the fish, for example, and the fruit. This was the

method of trade by *barter*. Then, as time went on, people found it inconvenient to take the fish to the fruit-garden, or *vice versâ*; it was much more convenient to find something that would *represent* so many fish or so much fruit and use that instead. This "token"—a bit of leather, a shell, a bit of metal—could be taken to the fruit-garden and given to the fruit-seller in exchange for fruit. If the holder did not happen to want fish, therefore, he could use the token to buy something else that he desired. If he did not want anything at the moment he could save the "tokens" for some future time. The tokens themselves would not feed him or clothe him, but the holder knew that they could always be exchanged for food or clothes, or some little luxury. They were certificates that the holder had command over some produce or other. In the same way, when an English farmer or manufacturer brings his money to the bank, this money represents so much wool, so many sheep, so many bushels of corn, or so many dozens of iron articles that he has produced or has command over. Our modern coins, though valuable in themselves, are really also a kind of certificate of the things which their owners have produced or obtained command over.

Bartering Surplus Stores.

Coins: Certificates of Value Produced.

The first users of tokens or coins found that these could be more easily stored than the goods they represented. But then came in the danger of theft. The owner of coins in early days had to undertake the work of storing them for himself. This was a temptation to thieves, and also the money was lying "idle," as we now say. The stories of "buried treasure" of which one often hears are due to the fact that owners of gold

Difficulty of Storing Coins with Safety.

were in the habit of hiding their hoard to conceal it from thieves. Old country people to this day will hide their money in all sorts of out-of-the-way places "for safety," as they say. But when banks were started people could bring their money to a place of real safety. The word "bank" really means a bench or stall (Italian, *banco*). The bench or stall of the goldsmiths, who were the first bankers, has become a large and imposing building, and the term "bank" is applied not only to the building but also to the "corporate body" (*v.* page 67) which carries on the business. The Venetians, who were very fond of jewels and working in metal, kept special fire-proof and robber-proof rooms to contain their gems and metal material, and London goldsmiths learned to follow their example. Private persons saw the advantage of this, and would bring their gold to the goldsmiths to have it kept in safety, paying something in return for the trouble and risk. Some goldsmiths had so many deposits of this kind that they ceased to practise their craft in the shops, and devoted themselves to taking care of other people's money. Their goldsmiths' shops had become banks for deposit. Gradually not only goldsmiths, but also private persons and groups of persons have undertaken the care of other people's savings.

The Origin of the Bank.

The earliest bankers were merely warehousemen taking charge of the money left with them. In return for the trouble and risk they would have to make some charge, and at one time people were glad to pay this charge for the sake of feeling assured that their savings were in safety. But while the money lay in the bank it was doing no good to any one; it was merely being hoarded. However, in the eighteenth century bankers began to lend out

The Earliest Bankers merely Guardians of Wealth.

the money entrusted to them and to charge interest on it. This enabled the money to be much more useful to the whole community. Let us take the case of a man who has a bog on his farm which, if drained, could be turned into fruitful land and made to produce good crops. The man is not rich enough to undertake the necessary expense, and is obliged to leave the bog alone for want of knowing some one who could lend him the money. He may require so much that one man's savings would not be sufficient. But if he can borrow from the bank he can use the savings of people whom he has never seen and pay interest on their money to the bank. When his bog is drained so as to produce good food, it will give back not only the money spent upon it, but also extra food for the people. In the same way a manufacturer who wants new and expensive machines can borrow the money to buy them and thus produce more wealth. When a depositor takes his gold or notes to the bank he believes that the banker will lend it prudently to honest men and to sound companies, and he is quite content that it should be so lent. He believes that the banker will not lend away *all* the deposits, small and great, which he receives from those around. If the owner should want his money at any time there will always be in reserve a sufficient portion of the common stock of savings (which the bank holds for all its customers taken together) to pay any ordinary demands on any day.

Modern Bankers Lend their Customers Money.

Also, if the owner wants to lend money and have interest on it for himself the bank will, for a small charge, arrange this for him, or the depositor may, with other depositors, spend his savings in becoming part possessor of a steamship, or a railway line, which will

The Help which Banks give in Production.

bring in a profit. In some cases, though it is not the general way, the banker manages this also for him by buying *shares*, as they are called, in the customer's name. Very few people would be rich enough, or skilled enough, as individuals, to build a steamship or a railway line, but if a number of persons, through their banks, lend their savings to those who have the necessary skill, the country is richer for the steamship and the railway line; many people can use them, and the small "fare" or "hire" which each user pays goes to replace the original capital and pay its interest. Thus banks help to send money from where it is not wanted for immediate use to where it can be applied to make something useful for the whole community.

Deposit and Current Accounts.

In some cases a bank will not only take care of its customers' money without making any charge, but will even pay interest on it. Thus a man will have at the same bank a *deposit* account, on which he gains interest, and a *current* account, on which he draws to pay his bills. As the first is stationary, and the banker knows he can use the money for some time, while the second is, as it were, fluid, or constantly running away in small payments, it is reasonable that interest should be paid for the one and not for the other. The banker, of course, gains a larger interest by lending it again than that which he pays to the depositor. Remind the class how the Post Office manages to give to small depositors a small interest on their deposit accounts, even though these may be withdrawn at very short notice.

Banknotes.

Show a Bank of England note. The children will know that though the actual paper on which it is printed is worth scarcely anything, the value of the note in golden coin is

5*l.*, 10*l.*, &c., according to the figures which it bears on its face. How was it we came to have paper money? Let the class imagine the inconvenience, especially in large businesses, if heavy bags of coins had to be conveyed from place to place at every transaction. Indeed, the world does not contain enough gold coins to meet the daily demands of its trade. The banknote is simply a printed promise to pay the sum named upon it at any time to the bearer. In buying and selling, a note does just as well as coin, for under a Government like ours people are quite sure that the Bank of England would at any time change the note for hard gold.

We have another device for avoiding making payments in heavy gold. Show a cheque. The cheque is a piece of paper on which the owner of a deposit in a bank transfers a part of that deposit to some one else, *e.g.* a tradesman to whom he owes money, the secretary of a charity, and so on. The cheque directs a certain bank, say in London, to pay Mr. So-and-so a certain sum. This cheque is sent in a letter to Manchester, we will suppose. But the person in Manchester who is to receive the money need not come, or even send, to the London bank for the amount named in the cheque. He takes it to his own banker in Manchester, who receives it as if it were cash. But very likely the London banker, in his turn, has been called upon to receive or pay cash for a cheque drawn by some one in Manchester. Each bank thus collects many cheques representing money in other banks. In London, Manchester, and other large towns there is a place called the "Clearing House" where representatives from all the banks meet daily, bringing the sheaves of

Cheques.

cheques. Each bank then collects its own cheques and sees how much money its customers have paid out in cheques during the day and how much has come to it through cheques from other banks. They exchange the cheques among themselves, and often the sums nearly cancel one another, so that only a small balance has to be paid by one bank to another. This is managed by a cheque on the Bank of England. Thus it happens that all these payments have been made by people all over the country through their banks, without using either gold or notes.

London children see and hear of the Bank of England—the headquarters of which are opposite the Mansion House. There are branches of the Bank of England in some provincial towns also. How does the Bank of England differ from other banks? In the first place it acts as banker to the Government, receiving its deposits and paying its bills and the interest on its debts. Formerly, says Macaulay, "when the Treasury was empty, when the taxes came in slowly, and when the pay of the soldiers or the sailors was in arrear, it had been necessary for the Chancellor of the Exchequer to go, hat in hand, up and down Cheapside and Cornhill, attended by the Lord Mayor and by the aldermen, and to make up a sum by borrowing a hundred pounds from this hosier and two hundred pounds from that ironmonger." Now the Government manages its own money matters by the help of the Bank of England alone, and when advances are necessary it is from the Bank of England that it obtains them.

The Bank of England: the Bank of the Government.

Secondly, the Bank of England is the bank of all

the other banks. In local banks there is not much more money stored than will serve daily needs, but the treasure-vaults of the Bank of England, guarded all night by soldiers, contain many millions of money in gold and silver, and much of this forms the "reserve" of other banks of the country, all of whom have an account with the "Old Lady of Threadneedle Street."

The Bank of all other English Banks.

THE BANK OF ENGLAND.

CHAPTER XLVIII

THE NEWSPAPER OFFICE

In a country town the elder scholars will be familiar with the name of the local newspaper, and the "local paper" is also an important item in suburban life. In large towns the newspaper vans and newspaper vendors are constantly seen in the streets; the newspapers themselves are brought to the homes, and there read and commented on in the presence of the younger members of the family. It is vain for the teacher to attempt to influence his pupils against newspaper reading. As a rule they are sufficiently protected by their own strong interests in other directions; the journals with stories of adventure and school-life appealing specially to boys and girls seem to them much more attractive than the ordinary newspaper. But, especially in the case of children leaving school early, some ideas of the true function of a newspaper may serve as a guide to the right use of this specially modern institution.

How "News" Reached the Townsfolk in Olden Times.

How did the people in our town hear "news" long ago? In the first place we must remember that people met out of doors much more freely then than now, and "news" was passed from lip to lip in a way that has been superseded by the arrival of the halfpenny or penny printed sheet. When people met on market days in the space round the market

cross, or when they came to church on Sundays and feast days, they would tell one another of what had happened in their own corner of the parish. Also local news would be officially proclaimed by the town crier. The town crier still survives in some old-fashioned English towns, though mostly merely as a picturesque feature maintained out of respect to the

THE TOWN CRIER : THE PRECURSOR OF THE LOCAL NEWSPAPER.

past; his office is in the main filled by the public poster and the newspaper. But in the Middle Ages the crier was a very important person. Such events as the opening of the market or the holding of the Mayor's Court were proclaimed by the sounding of the common horn or the common bell, which also served as an alarum in times of danger. But the crier was accustomed to perambulate the streets to proclaim the bye-laws of the town—to bid men have water at their doors for fear of fire, to shut their shops during the time of

The Town Crier.

Divine Service, &c. He was also employed to call aloud, from market-place or church gate, any Royal proclamation or any summons of citizens to the King's muster. The professional crier was not the only vociferator. Wares were called in the streets to a degree which we should now find intolerable; and we read that even players and minstrels who now quietly announce their entertainments in the advertisement sheets of the newspaper were then allowed to "cry the banns" of their performances in the streets. All this was part of the attraction of outdoor life; the dulness, as we should find it, of a bookless indoor existence was relieved by the constant noisy proclamation of news without. "The merchant, the apprentice, the journeyman, the shopkeeper, gathered in the same crowd to hear the crier, who recorded every incident in the town life or brought tidings of coming change. News was open, public, without distinction of persons." *

News from a Distance.

News from a distance would be brought to the officials of the towns by the King's "posts," by chance travellers along the roads, by carriers passing to the great fairs, and also by friars, palmers, and pilgrims. As we have seen, news of some great event of national importance, such as the sighting of the Armada, would be conveyed by a system of beacon-fires. In our day telegraphic despatches to the great newspaper offices of the country would be sent off, and the ordinary citizens would learn in a few words what had happened merely from the large printed posters which the newspapers display to make their clients desire further details.

It was not until the seventeenth century that we find the germ of our modern newspaper. It began,

* Mrs. J. R. Green: *Town Life in the Fifteenth Century.*

not as a printed paper at all, but as a *letter* of news. "The news-letter was the work of a man living in London. He went day by day from coffee-house to coffee-house, listening to all that men said in those great places of resort, collecting news and gossip of every kind. Then once a week he sat down and wrote out his budget on a large sheet of paper; this was the news-letter. It went down by post to his patrons in the country, and thence it was passed from hand to hand, from house to house, until it became too black to read, and fell to pieces through sheer thumbing and handling."* The first *printed* papers had for their chief object to make known the announcements of the Government and the proceedings of the Houses of Parliament, but the Government were very severe in the check they put upon this sort of intelligence. No daily paper appeared until 1702, and then the *Daily Courant* was printed—a tiny sheet measuring fourteen inches by eight inches and at first printed only on one side. Other newspapers followed, but the Government of the day were very distrustful of them, and most of them were killed by taxes There was a tax in the form of a stamp duty on every half-sheet of paper, a penny upon a whole sheet, a shilling upon every advertisement, and finally a tax upon the mere paper itself. Thus only the best newspapers survived; and these, while raising their prices, gradually improved the quality of what they offered to their readers. Newspaper taxes were removed in the middle of the nineteenth century, and since then the growth of the newspapers has been enormous. Daily papers are published not merely for a penny, but for a halfpenny, and some of them are illustrated.

The News-Letter.

The First Newspapers.

* John Fennimore: *Social Life in England.*

Benefit of Newspapers in a Free Country.

The restraints on reporting what is said in Parliament have long ago been removed. (What is the advantage of this in a self-governing country?) Not only so, but the newspaper comments freely on the doings of the Government and suggests lines of future action. If a bill is discussed by the Houses of Parliament, it is discussed also by the newspapers. Men who write the "leading articles" in the best papers are generally highly educated persons whose judgment is very influential in forming what is called "public opinion" all over the country. Just as we have the right of free speech by word of mouth, so we have also a "free press." A newspaper, provided it does not directly urge its readers to rebellion, or wilfully defame a man's character, may make what comment it chooses on the affairs of the time. Compare this condition of things with the censorship and its blacked-out lines of newspapers in Russia.

"News" from Far and Near.

The modern "paper" fulfils the function which its name implies—of giving "general news," and now "news" is rapidly communicated from all over the world. An earthquake in South America, a flood in China, are immediately reported in London, and associations such as Reuter's Agency and the various "Press Associations" have been formed to receive all these incoming telegrams and let the newspapers have the news they contain at once. Some papers, however, have a representative of their own in important cities such as Paris, or they will at least send a skilled writer to any place where specially interesting events are occurring. Thus we hear of "war correspondents," who are ready to go at once to a scene of combat, and send home to their newspapers accounts of what is happening. Important

provincial newspapers have a " correspondent " who is always in London, and whose business it is, like the news-letter writer of the eighteenth century, to let the country editor know what is being done and thought in London ; only instead of writing he sends his letter by telegraph, or the newspaper may even have a private telegraph wire hired from the Post-master-General.

Newspapers and Trade Prices.

An important part of the work of the great daily newspaper is to turn the world into one gigantic market-place. By looking at the money columns, traders can see how prices are going all over the world, and the buying and selling of " shares " in one place is regulated by the prices being obtained in far distant markets.

Newspapers Give Knowledge of Good and Evil.

News includes, of necessity, the record of the ill-doings of men. It is right that the community should know of serious breaches of the law under which it lives. In a self-governing country it is dangerous to suppress social facts of which responsible citizens ought to be aware. Moreover, we must remember that the newspaper is a substitute for the old stocks and pillory. When a man did wrong in olden days, he was placed in an ignominious position where he was exposed to the contempt of his neighbours. In these milder days, the thought of the disgrace of being " put in the papers " is no doubt often a help to respectable conduct. But two principles must be laid down in connection with this subject of recording evil-doing. First, the wrong-doing should be recorded in such a way as to give the bare facts without dwelling on details that might occupy weak or vicious minds too closely. The precept which Virgil gave to Dante in the Inferno is a wise one in these matters : " Speak not of these, but look,

and pass." Eager curiosity about details of crime shows a vulgarity of which the best minds are incapable, and some hint of this should be conveyed to adolescent boys and girls. Carlyle never read criminal reports. "One murder," he said, "is just like another." He found other things in life and in books infinitely more interesting. The second principle is that a newspaper should *always* give more prominence to the doings of good men than to the misdoings of bad men. The newspaper which chronicles efforts made by individuals or by societies for social betterment is helping forward in no small degree "the good time coming."

The Newspaper a Kind of Continuation School.

The newspaper can act as an educating agent in other ways. By its criticism of books, pictures, dramas, &c., it carries on the work of adult education. It is, in fact, a handmaid both of the school and of the church.

Production of a Newspaper.

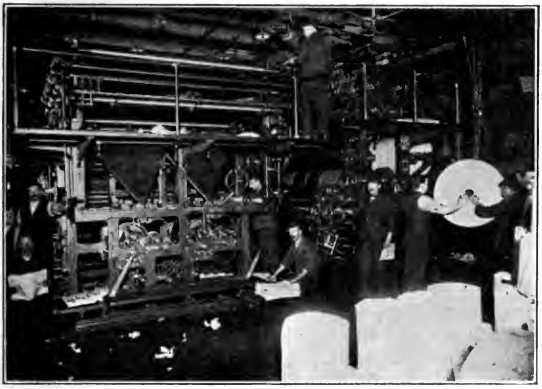
The actual production of the newspaper is a topic which will interest the children, especially if they have themselves started a school journal. A small local weekly newspaper involves comparatively little work and expenditure. The news is supplied from the larger papers, and the bulk of the paper is filled with such accounts of the doings of the neighbourhood—the local flower-show, the barn burnt at such a village, the petty offences dealt with by the justices of the peace—as can easily be gathered by one or two reporters, who may not infrequently help in setting up the type in the printing shop at the back of the office. But the preparation of a daily paper published in London or any large town is a very expensive and complex business. Much of the work, of course, has to be done at night. Try to make the children imagine how

many persons co-operate. There is the editor, who is responsible for the whole. Under him are sub-editors attending to various departments—the financial, home, and foreign news, &c. Then there are writers of articles. (The "leading article" is so called now because of its importance, but it is interesting to know that it was originally named because the lines of print were "leaded," that is, divided from one another by strips of lead so as to show more clearly.) The leading article is mostly political. Then there may be articles on a social event, such as the opening of a harbour, or an exhibition, or on events in foreign parts. A whole staff of reporters have been at the Houses of Parliament, taking down what is said in shorthand, working in "turns" of generally not more than fifteen minutes each, after which each man will write out his notes and give them to the special messenger who is waiting to take them to the newspaper office, while another reporter is continuing to take notes where the first left off. Other reporters have been here and there attending meetings, listening to speeches, &c., and telegrams with foreign and provincial news have been coming in all the time.

The Printing Press.

The great printing presses adjoining the editorial offices are hard at work through the night. Some of the type is set by hand in a way familiar to every child who has experimented with a little printing press of its own. Sometimes now, however, the type is set up by what is known as a "Linotype" machine. By the use of these wonderful machines the lines of type are cast afresh as they are wanted. The compositor in this case, instead of picking up metal types, works on a keyboard somewhat like that of a typewriter, and as he touches each letter a corresponding movement

in the machine puts into position a mould for that letter. When a line has been completed the moulds are shifted to another part of the machine and liquid metal is forced into them. Another movement turns out the moulded type in one bar for the completed line, and so the process goes on, completing column after column. After the letters have been used, the type can be melted down and used again. When the



How News is sent forth daily : Printing the Daily Paper. The white objects are Rolls of Paper.

rows of type have been prepared, a "cast" is taken, and the circular plates thus obtained are fixed in place round a cylinder. Then by machinery the front part of a very long roll of paper is placed in position, the paper is passed over the inked type which is arranged on the outside of the cylinder, and finally comes out printed, folded, and cut, ready for sale. The paper can be passed through a machine at a rate of over twenty miles an hour!

CHAPTER XLIX

PARKS AND OPEN SPACES

Ancient Towns and their Breathing-places.

THERE are few towns which cannot boast some sort of park or recreation ground or open space belonging to the town itself, and set apart for the pleasure of its inhabitants. In the towns of olden times, however, this was by no means the case. The "burgs" were small and confined within walls, and though the richer householders would have their private gardens the poorer ones would have no other open-air lounge than the churchyard or the market-place. The streets, as we know, were narrow, and the houses often overhung the footway, so there was little chance for sunlight and air to make their way and purify such open spaces as the thoroughfares themselves afforded, and this was one of the causes of the frequent epidemics which made life in towns so perilous. On the other hand, it must be remembered that since the towns were so small it was easy to get outside them into the open country. Wealthy citizens were accustomed to have outside the city gate ampler gardens and orchards than their town houses afforded, where they might go for rest and recreation, while even for the poorer citizens there were the meadows or woodlands close at hand.

But in our modern towns, where bricks and mortar

tend to spread on every side to a degree which would have been thought impossible to our forefathers, those responsible for the welfare of the town—the corporation, or in more recent days the town council—have realised the necessity of making provision for open spaces among the streets themselves. They do this for various reasons, which it is worth while summarising for the class.

Open Spaces a Need of Modern Towns—

It seems to have been no less a person than the great Lord Chatham who first called the parks of the metropolis the "lungs of London." Children who are working at Nature study will appreciate the fitness of this analogy. It is obviously an advantage for the citizens and their children to be able in their hours of leisure to move about in a space of unbreathed air which has not passed through the lungs of men and animals, as must be the case in a densely crowded neighbourhood.

For "Lungs";

There is a certain "freshness" of air even in a great flagged market-place if it is open to sun and wind. But, as the elder children will know, the "freshness" of an open space is much increased if it is planted with green foliage, trees, shrubs, grass, &c. The green parts of growing plants actually take in a waste product of animal breathing—the gas called carbon-dioxide—decompose it, and work it up into new compounds in their own tissues. They also give out a certain amount of the oxygen gas essential for human respiration. So important it is to keep the balance between animal and vegetable life in this way that many people consider that when a town reaches a certain size a ring of unbuilt land should be secured all round it, and kept planted with vegetation as a perpetual public garden, and that

any new buildings should be on the other side of this zone. The towns of Melbourne and Adelaide, in Australia, have been so built. But as our English towns are mostly built in a very haphazard way, authorities have to be content with securing an open space in such positions as shall provide a "lung" for every considerable area of the town. The movement for building "garden suburbs" and "garden cities" is perhaps an indication that the town planning of the future will involve forethought for open spaces not only here and there, but for every considerable group of houses.

Another reason for securing open spaces is that a town must have playgrounds for its children. The modern teacher knows the educative value of play, and realises that for town children especially it is a substitute for the original open-air experiences of the race. There should be a playground within half a mile of every house. Let the class consider the advantage which the nearest public park affords them—green spaces for cricket, an open-air gymnasium, &c. It is always well to lay some suggestive stress on the advantage of *open-air* recreations. Finally, there is a certain influence exerted on the physical and moral health by mere beauty. After passing through rows of monotonous houses it is a pleasure to come out into a space that has been designed to present to the eyes a scene that is really beautiful. A mere stretch of living grass has a certain beauty; but let the children notice how in their own "park" other elements have been artfully introduced. Trees have been planted in lines, or in groups, or singly, where they may make an effective contrast with the green sward, or with the flower beds and borders. Perhaps a miniature lake with

As Playgrounds for Children;

As an Education in Taste;

foliaged shores and an island has been formed, or a stream of natural water flows through the park. An open space of this kind, too, often gives a charming natural setting for a statue or a fountain, although these should not be so grandiose as to draw attention from the more natural beauty of the scene.

Training-grounds for Nature Study.

These open spaces and public parks and gardens serve incidentally another purpose—they are excellent out-of-door schools for Nature study. It is important to remember that in our great towns thousands of children are growing up who have hardly any opportunity of realising that the earth's surface is not all macadam and pavement. The child who has experienced the changing of the seasons as affecting the whole aspect of a country-side, who is familiar with woodland trees, with green pastures and hedgerows, and with all the shy wild life which they conceal, has a different mental imagery from one whose daily vision is of streets and shops and omnibuses. We are more and more conceiving it to be our duty to remedy this privation as far as possible, and to make the utmost use of such bits of Nature as we can find in, or bring to, a town environment. The nearest park or public garden should be a training ground for the observation of such boons as they afford. Thrushes, blackbirds, and starlings will hop upon the lawn, and yet often a town child knows no other birds than sparrows and pigeons. The flowers and shrubs bloom in the beds and borders of the garden. The trees hang out their blossoms and fruit, but they are merely flowers and trees, not familiar acquaintances. The town teacher has to give the teaching which will make the public garden a place where interesting friends can be recognised as the months

come round. And we would add that it is well that the town councils should be induced, in the case of the more formal parks and gardens at any rate, to affix labels with English names to the trees and other growing things. It is quite a fallacy to suppose that a town-bred person, much less a child, can always distinguish even such common English trees as an oak or a beech. The name serves as a peg for recognition, and the label need not be more unsightly than is the case, say, in the arboretum at Kew.

Origin of Town Spaces.

The origin of the town parks or open spaces is often interesting. The market-place or the space before the parish church is, of course, a heritage from the time when it was the meeting-place of the "tun." As to the parks, the children may notice that "park" really means an enclosed space. Thus the "Royal" Park of Richmond, near London, is an enclosure belonging to the Crown—though thrown open to the public. A park round a country mansion is often enclosed by a wall. Public parks are likewise enclosed with railings and entered by gates.

Parks.

A public park often began its history as a private park. It happens that as a town grows, a great mansion which was once rural becomes surrounded by houses, is no longer desirable as a residence, and the owner is tempted to sell his property for building purposes. As an alternative he may give or sell his house and grounds to the Corporation or the Town Council. London, Bradford, Manchester, and many other rapidly growing towns have acquired some of their most beautiful parks in this way. In other cases the owner of a park or garden will retain it in his own possession, but allow the people the free use of it. Thus Mr. Evelyn, a descendant of

the Evelyn whose house of Sayes Court, Deptford, was the English home of Peter the Great, allows the beautiful historic gardens of Sayes Court to be used as a recreation ground for the people of Deptford.

"Made" Parks.

In some cases the authorities, seeing the houses increase in an area where there is no ancient open space available, have courageously resolved to spend the public money to make a park. Thus one of the most beautiful parks in London—Battersea Park—was made out of a river-side swamp. The site of the municipal park may receive some attention. Let the children notice if a hillside has been utilised so as to secure a view, or if a river front has been the chosen position. When a park is out of the question, a mere garden is a grateful oasis in city life. In very crowded areas a disused churchyard may be made into a public garden. Occasionally a village green which has been overtaken by bricks and mortar, and would become a mere untidy waste, is transformed into such a garden, with its trees, flower-beds, and seats for rest. The village green of "Merrie Islington" has been transformed into such a garden—a pleasant island in one of the noisiest thoroughfares of London.

Public Gardens.

Or perhaps the open space is literally "open," *i.e.* unenclosed. The space may be an old tract of common land, or an unenclosed remnant of such land. Thus in the South of London there is a ring of "commons"—Clapham, Tooting, Wandsworth, Wimbledon, &c. Blackheath and Hampstead Heath are in the same way remnants of common lands. In many cases these common lands were originally quite literally "common" to all, as part of the "mark" of a

Open Commons or Heaths as Town Spaces.

township, where every one had rights of pasturage and wood-cutting. Under the feudal system this land, along with the rest, was parcelled out into manors, and the "rights of common" came to be regarded as privileges granted by the lord of the manor to certain of his tenants. As buildings or railways threatened to encroach on the commons it seemed likely that these natural "lungs" would be lost. The rights of the lord of the manor had to be bought out by the authorities, so that the commons might be secured to the people for ever. In the case of Blackheath, of highwaymen fame, the lords of the manor gave the free use of the heath, and it is preserved as an open space for ever. Commons and heaths have the advantage of presenting a wilder natural beauty than is possible in a trimly-kept park or municipal garden.

A rich corporation should not merely secure lungs within, or on the edge, of the town. It should realise that the people ought to have access to scenery less formal than city parks afford. Many American cities have prudently bought up, while they could be had at comparatively low prices, "reservations" of wide areas of hill and valley, forest, lake, and stream left as nearly as possible in their natural condition. Electric trams and bicycles make such spots accessible even where they are some miles distant. In our own country, unfortunately, land cannot be bought for this purpose at similar rates. But the Corporation of London, in securing such spots as Burnham Beeches and Epping Forest for the City, have set an example which the manufacturing cities of the North may have to follow if the descendants of their working population are to enjoy their native moorlands.

Tracts of Remote Scenery Secured for Towns.

In some open spaces of the town, in the market-

place, on the river embankment, or perhaps in the public park, there may be some public monument, a statue, a memorial column, fountain, &c. The statues of Nelson and Gordon in Trafalgar Square, of Priestley and John Dalton in Manchester, of Bunyan at Bedford, of King Alfred looking up the High Street of Winchester, the memorial of the Armada on Plymouth Hoe, are familiar examples. We English have had but little success in our public statuary, and we cannot always point to our town statues as triumphs of the sculptor's art. On the other hand we have had much success in our great men and women, and it is in personages, rather than in the art of sculpture, that the young are interested. Whatever local celebrity, whatever person of historic importance, the town has produced, should be a matter of remark to the growing generation.

Adornment of Public Places by Statues, &c.

It is still, unfortunately, not superfluous for the teacher to make this discussion on the open spaces of the town a text for instruction, whether direct or indirect, on minor morals. Notices against plucking flowers, &c., are essential, because there are not enough flowers for all, and the class should notice the suggestion contained in such reminders as: "The public is requested to assist in the protection of its own property." In some neighbourhoods it has to be pointed out that rough horseplay where a number of people are quietly enjoying themselves, throwing waste-paper on a green lawn or among growing flowers, carving one's name on public benches, throwing matches among the furze on the common and the like, are offences against our neighbours. Such acts prevent the enjoyment of what is intended

Proper Care of Public Gardens, &c.

A Fitting Adornment for the open space of an ancient town. King Alfred looking up the High Street of Winchester.

for all, and damage the property of the ratepayers. Such acts, moreover, are criminal offences under Acts of Parliament. Respect for things that are beautiful in themselves, and regard for the rights of property that has not a visible owner, are among the finer products of education, which are happily far more in evidence than used to be the case when there were more opportunities for hooliganism and fewer for rational outdoor enjoyment, though we cannot be said to have reached a uniformly high standard of citizenship in this respect.

CHAPTER L

MUNICIPAL BUILDINGS, MUSEUMS, ART GALLERIES, LIBRARIES, &c.

The Municipal Offices: Town Hall.

In every town there are certain buildings, other than churches, offices, or private houses, which stand out from the rest by reason of size or architectural dignity. Among these one of the most interesting to the young citizen should be the building in which the work of local government is carried on. Thus the County Council has its home in an imposing County hall, or perhaps a Shire hall, as it may be called in those geographical and administrative counties, such as Bedfordshire, which are also ancient English shires. The town council, too, or the borough council as it may also be called, is lodged in a "Town Hall" or a "Borough Hall," or in "Municipal Offices." Sometimes an ancient Guild-hall belonging to the corporation is utilised for part of this work.

A Civic Home a Necessity.

It will be seen that it would not be in the interest even of economy for the varied work of a local governing council to be done in hired offices in a hole-and-corner way. The council, though itself unpaid, has to employ many officers, clerks, &c., who require space for their work. For financial reasons alone a central building is more economical, for the rents paid for

offices would in the long run cost more than a town hall. Moreover it is convenient, and indeed essential, for the various departments of the work—the sewerage, the highways department, &c.—to be in close touch with one another. Sometimes, it is true, a very important committee, such as the Education Committee, is separately housed, because its work is so extensive and complex. Let the children tell where their own "Education Offices" are.

The Town Hall a Dignified Civic Home.

The town hall, if we take this as a type of a group of municipal offices, must be large enough to allow the council to gather all at once, and for as many of the citizens as wish to come and listen to the discussions. There must be offices for the heads of various departments and their clerks; there must be rooms to contain records, maps, plans, and account-books. But, besides this, it is a moral advantage for the town hall to be such as every citizen can look at with admiration and satisfaction. It is every one's hall; it is the home of the "city fathers"—the guardians of the good town. If a poor citizen can speak with pride of "our town hall" this alone shows that it has an uplifting influence in his life which is morally valuable. To build a stately and magnificent town hall is not a waste of public money. "Imagination plays a great part in human affairs, and a sovereign without the pomp of royalty, a judge without his robes, and a town council without their town hall, would be less respected than they should be." *

Public Museums, Art Galleries, &c.

The same uplifting effect is produced in some degree by other public buildings, such as the museum, the local art gallery, and the public library. London contains great

* H. Malden: *Life and Duties of a Citizen.*

libraries, museums, and art galleries which belong to the whole nation. The British and South Kensington Museums, the British Museum Library, and the National Gallery are *national* and not merely *municipal* buildings. But it is a sign of prosperity and intellectual life when a town determines to possess such buildings, though on a smaller scale, for itself. The museum and the art gallery are older

Municipal Buildings, Leicester

institutions than the free library. Perhaps the site or the building, or both, has been given by a wealthy townsman or some other philanthropist, who may also have given or bequeathed a collection of pictures or other objects as a nucleus for a larger collection. Others will give, or the trustees of the property, if any money has been left for the purpose, will buy, what they think may fitly be added. Sometimes a rich

corporation will both erect the building and see that it is furnished with suitable contents.

Adoptive (or Permissive) Act for Public Libraries, &c.

In 1893, however, an Act was passed enabling local authorities, if they chose to "adopt" its powers, to establish museums, art galleries, &c., as well as libraries, at the cost of the rates, though in ordinary cases the rate made for this purpose may not exceed a penny in the pound. In many English boroughs philanthropists have given sites and buildings, and the inhabitants have only needed to pay a halfpenny rate for the upkeep of the libraries.

The "Strong Points" of Local Collections.

Nothing is more common than to see groups of children and adults aimlessly trailing through the sections of an art gallery or museum, seeing and admiring nothing. The provincial teacher owes it to the founders of these places and to the young citizens under his charge to get whatever possible good can be obtained from them. He ought to make the children perfectly aware of the answers to such questions as "What is the strong point in our local museum?" Perhaps it is a collection of pottery, of local antiquities, of birds' eggs. In any case this special collection will be a point of concentration to which reference can be made in work outside the museum. The teacher will know the contents of the cases and he will be able to say, in a geography lesson, for example, "You will find specimens of raw cotton, or a model of an Indian bullock-cart, on such-and-such a floor in the museum." Most local museums contain some illustrations of the antiquities and history of the town; these, of course, are specially valuable from the point of view of Town Study. A flint arrowhead, a Roman coin unearthed in local excavations, an engraved seal

Pedagogic Use of Museums, &c.

of any period, a relic of some distinguished person, give life and meaning to the past of the town in the most vivid way possible. "The harvest of a quiet eye" may be richer for a provincial with limited opportunities than for a Londoner careless of the wealth of impressions which the great national museums themselves are ever offering him.

Or in the case of the art gallery: Which are the best pictures in our gallery? What stories do they tell? Why are they considered so excellent—because of the story, or for any other reason? Here, again, concentration is necessary. No attempt should be made to see everything in *one* visit, and a visit should always be made with some more definite object than a mere stroll through the rooms. Thus a separate visit will be planned, for example, to see the landscapes or the historical pictures, or the works of some one artist.

Public Libraries.

The children require much less stimulation to use the "free," or, as they are more properly called, "public" libraries. In some large towns a children's section of the public library is arranged, so that young readers can not only borrow, but read at special tables. The shelves are planned so that they can see what they want, and there is an attendant to advise them as to their choice. And practically all libraries have a juvenile section in their lending departments. The profitable use of public libraries is a very favourite topic of discussion, and ratepayers have some justification for cavilling at the number of books taken out and read under the heading of "Fiction." But a properly equipped public *reference* library is such a boon to the teacher himself that he will naturally give constant suggestions to the elder scholars of its use. An educated man, as has been well said, is one

who knows what evidence is, and this involves, in certain domains of thought, the appeal to authorities.

The Ethic Value of Noble Civic Architecture.

The external appearance of these buildings under municipal care forms part of that general architectural distinctiveness of the town which has such a subtle but important effect on the mind and behaviour of the citizens. Stately buildings, set off by ample open spaces, make a town a fair and seemly place even now, when the general effect of its poorer streets is apt to be depressing. In the good time coming we may hope for decent houses, with private or public garden strips or squares for even the humblest citizens.

And in the meantime we want the young to take a pride in their town, not only in its traditions, but in its general appearance and ornamentation. It is said that the Parisian scarcely feels the need of "home," as we understand it, because his beautiful city spreads a continual feast before his eyes; he is tempted to live out of doors, where gorgeous buildings, gilded bridges, harmonious perspectives of grandiose buildings, bright and leafy boulevards, and alluring gardens with their flower-beds and fountains and kiosks are compensations for his somewhat comfortless *intérieur*. The prudent English teacher who is also a ratepayer will remember that Paris has a larger municipal debt than any city in the world, and will not wish the young citizen of his own country to make the outdoor attractions of Paris a standard of aspiration. Nevertheless he will realise that the tendency to take an interest in the external dignity and beauty of the town is wholesome. He will feel it wise, as we have hinted before, to inoculate the young townsfolk with the idea that it is a good thing to

The City a Larger Home.

be citizens of what may be truly described as "no mean city."

It is probable that the municipality of the future will recognise more frankly than is now the case the need of the modern citizens for something corresponding to the opportunities given by the mediæval town for the action of what may be called the play spirit—some substitute for the tourneys, the guild pageants, the folk dances, the processional festivals of the Church. It has often been remarked, too, how the classical city provided for this element in the life of its people, building the theatre and the stadium as it built the market-place and the temple.

The City Beautiful.

"We have not forgotten," said Pericles, speaking of the public life of the Athenians, "to provide for our weary spirits many relaxations from evil; we have our regular games and sacrifices throughout the year; and the delight which we daily feel in all these things helps to banish melancholy. . . . We are lovers of the beautiful, yet simple in our tastes, and we cultivate the mind without loss of manliness."

The teacher will feel that what was in a Greek state the ideal of a privileged class only ought to become more and more the ideal of all members of a civilised democracy. One result of education should be to render rich and poor alike sensitive to the truth expressed in Ruskin's great saying: "Life without industry is guilt; industry without art is brutality."

CHAPTER LI

ELECTION DAYS

(1) AN ELECTION FOR PARLIAMENT: THE CENTRAL GOVERNMENT

EVEN the quietest town or village is affected by the stir of a General Election, and under the Septennial Act such an excitement is provided at least once during the school life of every child. This event is connected with what they hear of in their history lessons as to the doings of Parliament.

The Local Member.

If the last election lies some years behind the period at which the child becomes interested in human institutions as such, and if there has been no bye-election, a starting-point of interest may be found in the doings of the local member as recorded in the local newspaper. The figure of this personage may lead up to the conception of Central Government. And as children of twelve or thereabouts rather enjoy hard words, now is the time to give interpretation to such terms as "constituency," "Government," "legislation," "Executive," and so on.

To begin with our own "member." The body of which he is a "member" is the House of Commons—so called because it represents the whole mass of "common" people, as distinguished from the small minority of nobles or peers who form the House of Lords. Parliament consists of the two Houses

Of what he is a "Member."

of Lords and Commons, and every new law made has to be agreed to by both Houses of Parliament and by the Sovereign. Every member of the House of Commons is elected by some portion of the community. The country is divided into *constituencies*, which may be either counties, cities, or boroughs. Each constituency sends one or more members to the House of Commons, and most of those that send more than one member are divided into "divisions," each division having its own member. (Note the physical metaphor of *holding* or *standing* together implied in the word *constituency*.) Do the parents of scholars in the school possess votes as inhabitants of a *county*, of a *city*, or of a *borough*?

Lists of Voters.

An objective reminder of the privilege of voting can be seen by the scholars in the lists of ratepayers eligible to vote, which are hung up on the doors of churches, chapels, post-offices, police stations, and other public places. The lists are made out every August by the overseers of the poor—whose duty it is to collect the poor-rate. Their lists include only the names of male householders who have occupied their premises for a whole year. But men who have a right to vote as lodgers, or in any other way, must make a claim to the overseers in writing. Then in the September of every year the lists are revised by a barrister, who is appointed by one of his Majesty's judges. Any person whose name is on the register may vote in any election occurring during the year, beginning on the following first of January.

Polling Stations.

Then the constituency or division of a constituency is divided up into polling districts (poll = a head), and each district has a polling station. A voter must register his vote, if he votes at all, at the polling station assigned for his own district.

The Ballot.

In the polling station there is a little private recess, which the voter enters after having received a printed slip with the names of the candidates, and there, where no one can see him, he puts a X opposite the name of the man whom he desires to represent his constituency. Then he folds the paper up and puts it into a sealed box—the ballot-box; so called because in some cases (though not in parliamentary elections) little balls were used instead of tickets. This, it will be seen, is a method of *secret* voting: no one can know how the man really votes. At one time voting was done openly, and then voters were often led by threats or bribes to vote to please their employers or other influential persons, instead of voting according to their convictions.

The Work of "Our Member."

When the votes are counted, the candidate who has received the largest number is declared to be duly elected member of Parliament for that constituency—in other words, he is its *representative* in the House of Commons, and takes part in making laws for the whole nation. What difference will this man make in the life of the constituency which he represents? He will help to "legislate," to make the laws which apply to all the country, including his own constituency. Thus, to take a recent example which the scholars will understand, the Houses of Parliament have recently passed Acts which affect the welfare of children all over the country.

The member of any constituency has also an important responsibility with regard to the financial upkeep of the whole nation. For it is the House of Commons alone which proposes the taxes to be levied from the people, and the way in which they are to be collected. If the inhabitants of a certain constituency

have to pay taxes, they have the satisfaction of paying them, not as wrung from them by the authority of a despot, but as free people who, through their representative, have their part in the raising and spending of them.

What is Meant by "the Government."

We thus see that an important part of the work of the House of Commons is legislation, or the making of laws. But there would be little use in making laws if there were no arrangements made for carrying them out. Hence we have what is called an Executive Government. The permanent head of the Executive Government is the King, and it is in his name that the whole work of government is carried on. But while the work is done in the King's name, the responsibility to the country and the real direction of affairs rest with the Prime Minister, who is some statesman possessing the confidence of the House of Commons, and on that account chosen by the King to take the direction of affairs. The Prime Minister chooses other statesmen to assist him, and they also thus become Ministers of the Crown, and are appointed as responsible heads of the various Departments of the Executive Government, such as the Admiralty, the Post Office, the War Office, &c. Each of these great departments is thus presided over by a Minister of the Crown who is a member of one or other of the Houses of Parliament. The permanent officials and their subordinates and employés who actually do the work of these departments make up what is known as the Civil Service. The presiding Minister is responsible to Parliament for all that is done, not only by himself, but by the Civil servants under his oversight. Thus Parliament not only makes laws but has a check upon their administration. The work of all these departments taken

together constitutes the Central Government of the country.

The Central Government and its Effect on the Town.

The work of some of these central departments affects town life in a specially marked manner, according to situation, &c. Thus in some towns which are naval ports the regulations of the Admiralty will come under notice; garrison towns will be greatly influenced by the War Office. In rural districts and in market towns the regulations of the Board of Agriculture and Fisheries attract special attention. But in all towns there are institutions which remind the citizens of their subordination to a *central* Government. Thus, though the police force, the prison, the reformatory, and industrial schools are local institutions, and to some extent locally managed, they are all under the eye of the official of the Government called the Secretary of State for Home Affairs, or the "Home Secretary" or head of the Home Office. He appoints the paid or "stipendiary" magistrates; the unpaid magistrates or "justices of the peace" are appointed by the Lord Chancellor. The Home Secretary advises the magistrates and the police all over the country, for he has the responsibility of keeping the King's peace and protecting life and property throughout the kingdom. Factories, workshops, firework factories, and coalmines are overlooked by inspectors from the Home Office. Labour Exchanges are managed by the Board of Trade.

Another central department is the Local Government Board. It would be wasteful and vexatious for Parliament to make laws for the management, say, of the water supply of a country town. This is left to *local* government. But the Local Government Board supervises the way in which the local

authorities do their work. They are specially careful to see that the various regulations for the public health are properly carried out, that the paupers under the Poor Law are rightly dealt with, and that the authorities are not too rash in spending the ratepayers' money by buying land, &c., for which they cannot pay without incurring too heavy a debt. Again, the Board of Education, another central department, makes regulations which must be observed by local authorities, school managers, and teachers if the schools of any area are to be aided by grants from the national Exchequer—mainly filled, it must be remembered, by taxation. The Board of Trade keeps the standard of our weights and measures, directs the testing of weighing machines, controls the issue of patents and trade marks, arranges for treatment of cases of bankruptcy, overlooks insurance companies and other companies, such as railway, tramway, water, or gas companies, which offer trading facilities to the public. Finally, the Post Office, as we have seen, is a central department to which is entrusted the King's monopoly of the letter-carrying trade of the country, and by its various useful agencies makes the benefit of this special form of Central Government everywhere appreciated.

Central Government Checks Local Government.

There is one branch of the State service which is not affected by changes of party in the House of Commons. Parliament makes laws, and the public departments govern the country according to law. But there must be a power to execute the laws against those who break them, and to decide disputes among the citizens. This is the Judiciary Department, which is to be thought of as representing the Crown. The

The Judges Represent the Crown.

highest Judge in the land is the Lord Chancellor. He presides in the House of Lords when it sits as a legislative assembly, and he also usually presides in it when it acts, as it very frequently and regularly does, as a court of law for trying important cases referred to it. Though the Lord Chancellor himself goes out of office when the Government of which he is a member ceases to have a majority in the House of Commons, yet the Judges of the High Court, appointed by the King on his advice, retain their office for life at high salaries, and are treated with the greatest respect. When a Judge of the High Court goes on circuit the scholars in an assize town will know that he is received by the High Sheriff of the county, and is generally taken to the court-house each day in a State carriage, attended by servants in State livery. This is because he represents the law—he is a permanent symbol and instrument of the State. (*Vide* pp. 307-308.)

To sum up: The election of a member of Parliament to represent any constituency is a guarantee that this constituency shall have its share in making the laws of the country, in deciding what sums shall be raised by taxation, and how these sums shall be spent. The constituency has the chance of its representative being one of the majority which shall provide the King with advisers for the time, and which shall also provide the great central departments with responsible heads.

Summary.

But the administration of the law in the matter of justice between man and man is in the hands of permanent Judges, who are irremovable so long as they do their duty. They declare the law as it has been made, and settle points in dispute.

Except the Post Office, which is a department

actually earning money for the State, and the Patent Office, which is a branch under the Board of Trade, all the departments of Central Government and the Judiciary Department have to be maintained by the country at large. For these purposes taxes are rightly demanded from the inhabitants. The tax-collector's claims coming in at the beginning of the year bring home to scholars their parents' share in providing the national revenue. They will also know of dog-licences, gun licences, licences for selling beer, spirits, &c. An interesting discussion might be raised on the difference between taxes which a man ought not to avoid, and, as a rule, cannot avoid paying, such as land-tax, inhabited-house duty, income-tax, and those he is justified in not paying unless he likes; *e.g.* the tax on spirits and tobacco can be evaded by not using either. This leads to the distinction between direct and indirect taxation.

The Tax Surveyors' Office: What it Means.

See that the children realise the distinction between rates and taxes. Rates are sums required to carry on *local* government, and to provide the advantages which we expect to find in our towns. Taxes are sums demanded from the citizens for the expenses of *central* government, and are fixed by Parliament.

CHAPTER LII

ELECTION DAYS

(2) ELECTIONS FOR LOCAL GOVERNING BODIES

BESIDES the elections for Parliament there occur in every part of the country other elections, which unfortunately attract much less attention than they should. These elections are intended to secure fit persons to take part in what is known as *local* government. But many men who are ambitious of entering Parliament still do not think it worth their while to give time and trouble to managing the affairs of their own locality, and many voters who become excited about a Parliamentary election will not take the trouble to go to the poll when it is a question of governing their own town. This shows a very imperfect patriotism. A man should take a pride not only in his country but in his town or village, and should try to secure for his own neighbours the best kind of government he thinks possible for them.

Imperfect Patriotism.

What are the various kinds of local elections that may occur in any neighbourhood?

To begin with the largest, we may have an election for the County Council. Here we shall have to explain that the word "county" has not quite the same meaning as the county of the geography book, for seven of the

Elections for the County Council.

counties have been divided for the purposes of local government into two or three counties. London is regarded as a county by itself, so that altogether there are sixty-two administrative counties, as they are called. The County Council is elected every three years, from the 8th of March, and women, as well as men, may vote for County Councillors. The Local Government Board decides how many councillors a county may have. The councillors elect from among themselves aldermen and a chairman, who must not be confused with a mayor.

Much of the work of the County Council will come home to the scholars if they keep their eyes open, but the drawing up of a summary may be useful. The County Council—

Duties of the County Council.

1. Keeps up all *main roads* and bridges within its area.*

2. Makes bye-laws with regard to preservation of *health*, prevents river pollution, carries out statutes relating to contagious diseases of animals and to destructive insects.

3. Protects the fish and wild birds of the county as the law requires.

4. Controls the education of all the rural villages and the smaller towns in its area,† as well as the reformatory and industrial schools.

5. Grants licences to theatres, music-halls, race-courses, &c.

6. Enforces the statutes which aim at securing accuracy and uniformity of weights and measures throughout the country.

7. Records all important establishments within the county, the places of worship, learned societies

* Unless an urban district council (*q.v.*) specially insists on keeping up that portion of the road which runs through its own district.

† *Vide* "Municipal Boroughs" and "Urban Districts."

and their rules, loan societies and their rules, particulars of charitable gifts, &c.

8. Finally, the County Council takes the general oversight of the smaller local authorities within its area, giving its sanction to their more important undertakings, and sometimes, when they need it, helping them with money.

It will be noticed that the work of the County Council and of the lesser councils for local government, of which we shall presently speak, is, in the main, *not* legislative. It is true that these bodies have the power of making what are called "by-laws," or bye-laws—*i.e.* laws of the "by" or town. These are mostly of minor importance, and do not affect any one outside the area governed by those who framed them. But the main work of these councils is to *administer*—to carry out the laws which Parliament has decided as binding on all citizens of the country. In other words, *the local governing bodies have to keep the standard of civilisation in their areas up to the mark which the collective wisdom of the nation has decided that all should reach.*

Local Governing Bodies Administer: they do not Legislate.

One body of men could not possibly attend to all these matters with equal skill. The English method is to parcel out the various kinds of work which a body has to do into smaller groups called *committees*. The working of a School Library or Games Committee will illustrate the advantage of this. Thus in our County Council we shall have a Parks Committee, an Education Committee, and so on. The council must have some kind of home, a place where its meetings and the meetings of its committees can be held. Hence we have the County Hall, or perhaps the old Shire Hall, a building

Committees.

The County or Shire Hall.

which, as we have seen, is rightly a very imposing one.

Within our county we shall find a certain number of *municipal* boroughs (which are not always identical in area with the Parliamentary boroughs). A municipal borough is a town which has secured for itself a charter of *incorporation*. That is to say, its inhabitants are regarded as *one* body (*corpus*), which is legally quite distinct from any of its individual members. It can hold property, and it can bring an action in a court of justice as though it were one individual (*vide* pp. 67-68). Many of these towns, as we have seen, obtained their charters of incorporation from kings or overlords in olden time, and even now, if a town wishes to be incorporated it has to make a petition to a committee of the King's Privy Council. It is not often that a town containing fewer than 20,000 inhabitants receives a charter, but if a charter is given the town is divided into *wards*; and each ward elects so many councillors. The corporation itself is always regarded as being composed of (1) the mayor, (2) the aldermen (elder or chief men), who are elected from among the councillors, and (3) the *burgesses*, or inhabitants of the burgh or borough. The burgesses, of course, form the main body of the corporation, but they take no part in the administration of borough affairs other than by electing councillors. Women burgesses have the right of voting in borough elections if they are qualified as householders. The elections for borough councillors take place in November.

The Municipal Borough: a Corporation.

There are in England and Wales seventy-three large towns which are practically quite independent of the administrative counties surrounding them.

These towns have this privilege either because they have a population of over 50,000 or because they have had the privilege of a county for many generations before the Act of Parliament was passed giving local government to newer towns. Bristol, Canterbury, York, Exeter, and Norwich are examples of these old cities which, along with great cities like Liverpool, are to be thought of as taken out of the counties and governed by their own town council.

County Boroughs and Cities.

Scholars are apt to be jealous over local distinctions, *e.g.*, Is the place in which they live a *city* or a *town?* The distinction is really only a complimentary one. A borough is called a city either because it is the seat of a bishopric, or because it has been granted that title by the Crown, as the City of Leeds. The burgesses of a city are called *citizens*, and those of an ordinary borough mere *burgesses;* but, on the other hand, all burgesses are called citizens in common speech, while the language of the law itself knows nothing of citizens, but classes all municipal voters as burgesses. In the case of the ancient City of London the head of the Corporation has long been styled Lord Mayor, and this dignity has in recent years been granted by the Crown to some of the larger provincial boroughs, such as Manchester and Birmingham.

City or Town.

Citizen or Burgess.

What is the work of the Town Council, or Borough Council? for it bears either title. "It has the right to acquire and manage municipal property; it is the public health authority; it deals with drainage, sewerage, water supply, lighting, markets, street improvements; it *may* provide hospitals for infectious diseases, or carry out schemes for housing the poor; it may also provide the

The Work of a Town Council.

town with libraries, baths, washhouses, parks, open spaces, museums, art galleries, gymnasiums; it may establish tramways; it may make bye-laws for the good rule and government of the borough. Boroughs with more than 10,000 inhabitants may have separate police forces." Some of these things, it will be noted, the Town Council *must* do; others it *may* do, if it makes use of what are called the Adoptive Acts, which allow a town to carry out certain improvements if it is ambitious to do so. Thus it *may* establish libraries, museums, art galleries, and so forth. Sometimes the Town Council will undertake very costly improvements, such as the bringing of an expensive water supply from a distance, or even, as in Manchester, the engineering of a great ship canal. School children will notice that county boroughs and municipal boroughs manage their own elementary and higher education. The County Council may be in charge of a school a little way outside the borough boundary, but within the town the Education Committee of the Town Council has its own school.

The Urban District.

But perhaps the school is situated in a town which is not either a county borough or an incorporated municipal borough. This will be governed as an Urban District. Our election in this case will be for persons to serve as Urban District Councillors. These are elected for three years, but as one-third generally retire at a time, there is an election each year, in April. There are no aldermen; the council elect a chairman as their head, who, while he is in office, is a justice of the peace for the county. Though it has not the formal dignity which a Town Council enjoys, the Urban District Council has the same work to do as the Town Council. We have already pointed out in a previous chapter

the important work which it does as a sanitary authority. If an urban district has as many as 20,000 inhabitants it may manage its own education without reference to the County Council, and the council of any district, whatever its size, may supply, or aid the supply, of higher education. In practice, however, the urban districts generally leave this to the county. [Bring out what is done in the case of the urban district in which the school is situated.]

The Peculiar Government of London.

The local government of London has been arranged on a special system of its own. First, the old City of London proper has been left to the rule of its ancient Common Council, with its two hundred and six councillors, its twenty-six aldermen elected for life, its two sheriffs, and a Lord Mayor. The City of London is very jealous of its independence. Thus, as we have seen, it continues to manage its own police, while the rest of the police of London are under the control of the Home Office. In many other ways the City of London differs from other cities. Outside the City there are twenty-eight metropolitan boroughs, as they are called, including the City of Westminster. These are managed by Borough Councils, elected as in other boroughs. Finally, the whole area forms the Administrative County of London, the governing body of which is the London County Council.

The Rate Collector.

In either the town hall, or perhaps in some modest house of the town we shall find the office of the local rate collector. He is appointed by the Town Council to collect from each householder the "rate"—that is, the proportion which he ought to pay of the expenses of the town and for the poor. We have already pointed out how much more efficient and convenient it is for a general

assessment of this kind to be made than for such things as lighting, paving, and scavenging to be left to individual effort or to chance. Note that while taxes are to meet the expenses of *central* government, the rates are to defray the charges of *local* government.

The Urban Parish not Self-Governing.

We must not forget that all the towns and cities of the country contain smaller divisions, called parishes. It would not be necessary or economical for each of these urban parishes to govern itself; they fall therefore under the general government of the town.

CHAPTER LIII

LOCAL GOVERNMENT IN COUNTRY VILLAGES

If our school is not situated in a county borough, in a municipal borough, or in an urban district, it is in a rural district, or, to give it its full title, Rural Sanitary District. Each of these districts has a council of its own, elected for three years. Women may serve on Rural District Councils.

The Rural District Council.

The Rural District Councils, taken all together, have for their chief business the sanitary care of the whole country outside the towns. They try to control infectious diseases, to improve insanitary dwellings, to secure proper drainage and water supply. Besides this, they are responsible for all the country roads, some 95,000 miles in length, which are not *main* roads, and they may be entrusted by the County Councils with the care of the main roads also. They also attend to such things as the provision of allotments, and for protecting rights of way and maintaining rights over common lands. The district councillors also act as guardians of the poor in their district.

A rural district, like an urban district, is a combination of *parishes*. In the parish we get the smallest, and also the oldest, unit of local government. The parish was originally the "tun," or cluster of "tuns," under

Rural Parishes Self-governing.

the spiritual charge of a single priest, and this parish continues to exist to-day, though its boundaries are not always the same as that of the "parish" as arranged for civil government. There are about 15,000 civil parishes in England and Wales, over 13,000 of them being rural.

The Parish Meeting.

In every rural parish there must be held at least once a year, about March 25, what is known as the "Parish Meeting." Every one in the parish, man or woman, who resides in a house and pays rates, every man who owns land worth more than 5*l.* a year, or who rents land worth more than 10*l.*, and men lodgers in the parish who hire rooms to the value of 10*l.* a year, have a right to come to the Parish Meeting. If the parish is very small—with fewer than three hundred inhabitants—this meeting is really the local governing body. It very commonly meets in the schoolroom; it must not, unless no other room can be had, meet in a public-house. It must meet at least twice a year, and it may levy rates up to sixpence in the pound.

Its Duties.

In such cases it has to do a great deal of work. It appoints the overseers of the poor, the trustees of the parish charities, and certain of the school managers. It looks after foot-paths, allotments, and the village pump, if there is one. It watches local sanitary conditions to keep the Rural District Council informed of what ought to be done, and if that body neglects its work the Parish Meeting can appeal to the County Council. It manages, through a chairman and trustees, any property belonging to the parish. The Parish Meeting, we notice, is not elective or representative; it practically includes *all* the people of any standing in the parish.

If our rural parish has *more* than three hundred inhabitants it *must* have a council to look after parish affairs, and that body, elected by the Parish Meeting, is called the Parish Council. It is the smallest *representative* unit we have, and may consist of from five to fifteen persons, who hold office for a year. Women may serve upon Parish Councils as well as men.

The Parish Council.

We may note that a parish which has even fewer than three hundred inhabitants *may* have a Parish Council by permission of the County Council.

Of the 13,000 rural parishes in England and Wales about one-half have Parish Councils and the rest are governed by the Parish Meeting. The Parish Meeting maintains considerable control over its council. It must meet, as we have seen, at least once a year, and at this meeting it discusses some of the things which the Parish Council cannot do without its consent. Thus the consent of the Parish Meeting must be had if the council wishes to pay for the public lighting of the roads. The Parish Council cannot ask for a higher rate than 3*d.* in the pound without the consent of the Parish Meeting.

The Parish Council do all the work which in smaller parishes has to be done by the Parish Meeting. Their most important work is to act as guardians of parish property. They utilise water supplies for the benefit of the inhabitants, provide allotments, maintain footpaths, and so on. They also appoint the overseers of the poor. Each parish *may* look after its own poor. But, as we have seen, most parishes prefer, for this purpose, to combine into Unions. These Unions may consist of parishes which are entirely rural or entirely urban or mixed.

We may now give a survey of the areas of local government, beginning with the largest :—

The "Units" of Local Government.

1. The Administrative County. Governing body : its County Council.

2. The County Borough—not subject to, or represented upon, the County Council. Governing body : City Council, also called Borough Council, or Town Council.

3. The Municipal Borough—a borough with a corporation. Governing body : Town Council.

4. The Urban District—no mayor or corporation. Governing body : Urban District Council.

5. The Rural District. Governing body : Rural District Council.

6. The Rural Parish. (*a*) With a Parish Council ; (*b*) with a Parish Meeting only.

This outline of the machinery for local government in towns is obviously insufficient for teaching purposes. We merely offer a rough chart, as it were, of the various arrangements which may order the life of the town in which the child lives. To give actuality to the survey there must be a simple *questionnaire* to be worked out by the scholars—if possible, out of school. Such questions as the following may be set :—

Hints for the Teacher.

How many kinds of votes has your father?

Does your father vote for a county council, a county borough council, a municipal borough council, or an urban district council?

Have you heard of a woman having any kind of vote?

Tell me the name of a county borough, a municipal borough, an urban district, which is near this place, or which you have visited, or in which any of your friends live?

Are any of these councillors paid for their services? Do they pay any other people for serving the county, the county borough, &c.?

What is the name of the body which keeps our streets in good repair?

Who sees that every child goes to a school of some sort?

Who grants licences for public-houses, &c.?*

At election times show an imitation ballot

BROWN . . .	X
JONES . . .	

paper, and allow a little rehearsal of what is actually taking place at the polling station. Try to work up more interest in municipal elections. Because there is less of the sensational and, as it were, adventurous element in these than in a General Election, it is forgotten that they involve a national sphere of administration which, however humble, is absolutely essential to the good of the country.

* *Vide* Pamphlet on "The Teaching of Civics in Public Schools," by C. M. Spence, M.A. (Clifton College), with preface by the Rev. A. A. David, Headmaster of Rugby.

INDEX

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