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GOD'S ACRE BEAUTIFUL

5.





"Preferisco la pura fiamma di Cremazione all'orrovola putridine della tomba. —From the Will of MADAME POZZI-LOCATELLI.

"The ancient Romans believed in immortality, and yet they believed in burning the bodies of their dead. Urn-burial was certainly quite as decent as the practice of interment, for anything he saw ; and urns containing the ashes of the dead were more picturesque than coffins. Could they suppose that it would be more impossible for God to raise up a body at the resurrection, if needs be, out of elementary particles which had been liberated by the burning, than it would be to raise up a body from dust, and from the elements of bodies which had passed into the structure of worms? The omnipotence of God is not limited, and He would raise the dead whether He had to raise our bodies out of churchyards, or whether He had to call our remains, like the remains of some ancient Romans, out of an urn in which they were deposited 2000 years ago."—BISHOP FRASER'S Sermon at opening of Cemetery at Bolton, 1874.



GOD'S ACRE BEAUTIFUL.



A CEMETERY OF THE FUTURE.

FRONTISPIECE.

GOD'S ACRE BEAUTIFUL

or

The Cemeteries of the Future



LONDON The Garden Office 37 Southampton Street, Covent Garden

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THE CEMETERIES OF THE FUTURE:

PERMANENT, UNPOLLUTED, INVIOLATE.

THE sanitary reasons for preferring urnburial are admitted to be many and strong, even by those who, for other reasons, are not among its advocates. I propose to consider the subject from another point of view altogether—the æsthetic one—or that of the beauty of nature and art, which an improved system of burial would make possible in all that relates to the resting-place of the dead. Many are apt to consider cremation as meaning the absence of all the forms of

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respect we usually bestow on this; and finally, of such associations as are generally gathered round the spot. But it is, on the contrary, the present system of burial which is open to the greatest objections in this respect. The history of many graveyards in crowded cities is this : Comparatively few years' accumulation of bodies, say from one to two generations, then finally closing from overcrowding. A generation or two passes away; many changes occur among those interested in preserving the graves, and soon their voice is heard no more in the matter. Then, at the will of some one or more persons desirous of disposing of a place which, frequently, is extremely valuable, at any moment the remains of every person buried therein are liable to be subjected to the utmost degradation; to be carted away as secretly as may be by some contractor,

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whose only object is to find a convenient shoot for them. Such changes are not unfrequent in London, though they are usually carried out as quietly as possible.* That secrecy, however, is not always exercised in operations of this kind is evident, from the fact that the remains from a disused cemetery in the west-central district of London,

* DESECRATION OF CITY GRAVEYARDS .- Are we not becoming too much accustomed to the idea that anything, however sacred, may be turned into money? Is not this the case with regard to burial-grounds? They fetch a large sum and they disappear. After the Great Fire of London care appears to have been taken in rebuilding the City to reserve in the main the burial-grounds of the parishes in which the churches themselves were not rebuilt. They are dotted as green spots all over the City, as many must often have observed. When the present extensive buildings of the Bank of England were erected, one whole parish was swallowed up. It was generally understood that its churchyard was respected, and is represented by the pleasant open garden court which gives such cheerfulness to the offices around it. St. Clement Danes' parish appears to view the subject in another light, and makes short work of the matter. Some years ago one of its

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were spread over a couple of acres of Kensington Gardens a few years ago.

In Paris the state of things is no better, as there the bones are taken out of the ground, and the headstones and other memorials often destroyed within a few years of their being placed in position.

In America, owing to the extent of the beautiful cemeteries now existing near the larger cities, such evils are not so apparent,

burial-grounds, situate in Portugal Street, was disposed of for the site of part of King's College Hospital, and all trace of its former use has now disappeared. We have just heard that it has parted with another of its burialgrounds, adjoining Clement's Inn, for the site of a portion of the New Law Courts. One burial-ground, its principal one, in the middle of which the church of St. Clement Danes stands, still remains to the parish. An effort is being made, in connection with the Law Courts, to induce the parishioners to sell this also. Can we hope, after what has been done, that they will be proof against it? I trust we may. Sites can be got without invading these small churchyards, which have been bought over and over again by those who lie in them.—W. B., in *Times*.

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though they exist there also. No matter how large cemeteries are, they are certain, in time, to have serious drawbacks from the conditions inherent to the present mode of burial. Under this system, the whole area of the place must, sooner or later, be filled with bodies; and must, eventually, be closed, unless in very sparsely-peopled districts. The small cemeteries in a city like London disappear from time to time, as noted above. The park-like ones in America may seem more secure from violation ; but every future generation cannot, as the present one, enclose many hundreds of acres of valuable ground for burials. The American way is more decent than what is usual in France, but the difficulties of space alone would make it, if not impossible, a difficult plan to follow in the future.

PERMANENT AND BEAUTIFUL CEMETERIES

POSSIBLE WITH URN-BURIAL.

With any inoffensive and prompt system of reducing the body to ashes, this drawback of our burial system at once disappears. The ground not being occupied with bodies, there is no need to close the cemetery at any time. In graveyards of the size of the present overcrowded London ones, urnburial could be carried on for hundreds of years without the slightest offence to the living. By the common consent of mankind "God's acre" is most fittingly arranged as a garden; and as the place for urn-burials need not occupy more than a fourth of the space of a large cemetery, the whole central or main part would be free space for gardens and groves of trees. The cemetery of the future must not only be a garden in

the best sense of the word, but the most beautiful and best cared-for of all gardens. But as the present way of using the ground often leaves no room for either garden or planting, it may be best first to consider the subject in relation to monumental art, and to the dismal regiments of stones which cover the soil of our graveyards.

It is impossible to over-rate the opportunities for improvement in all that concerns the beauty or even the sentiment of the matter, which would be secured by the condition of *permanence*. Apart altogether from the closing of the burying-place, the decay from exposure, which now defaces memorial stones, is a very serious drawback. So recent a headstone record even as that of Gilbert White, in Selborne churchyard, is found with difficulty by the stranger; and many memorials erected in London ceme-

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teries during the past fifty years are now crumbling to dust. There is no reason why these stone records should not be at least as enduring and as legible as the paper ones within the church. Most persons will agree that it is desirable that they should be so; now they are the very image of decay. While long duration is not possible under our present system, with urn-burial the simplest stone inscription may be in as good order a thousand years hence as today. With it also there would be a satisfactory realisation of the meaning conveyed by the word cemetery-a resting-place, or place of sleep, for the dead.

THE PRESENT GRAVEYARD NOT A PLACE OF REST.

The ordinary city graveyard being now only of temporary use, such monuments as

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it possesses share the general fate of all the other materials when it is closed. The frequent disturbance of the ground for interments is against any good work in such art as the place invites. In a London cemetery, such as that on the high road near the Marble Arch (St. George's, Hanover Square), it may be noticed that the memorial stones are crumbling away, although this is one of the best cared-for of closed cemeteries. One cannot regret the poverty of the "art" displayed in such places to decay and be forgotten. In Paris the foundations of roads are made of headstones only a few years erected; and though in London memorial stones, erected to "perpetuate" the memory of persons, are not cleared away so promptly, the result in the end is very much the same. Pieces of broken monu-

mental stones, some of them bearing dates,

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were among the débris for which a contractor found a convenient place in a London public park. The effect of the tombs and stones dotted thickly over crowded city cemeteries is as ugly as it can well be, but it is in accord with the very

temporary interest which, in the nature of things, these places have for the public.

Notwithstanding the great attention and vast and unselfish expense devoted by the American people to their cemeteries, this passage, from Oliver Wendell Holmes, points to the fact that the same evils exist there :—

The most accursed act of vandalism ever committed within my knowledge was the uprooting of the ancient gravestones in three, at least, of our city burial-grounds, and one, at least, just outside the city, and planting them in rows to suit the taste for symmetry of the perpetrators. The stones have been shuffled about like chess[11]

men, and nothing short of the Day of Judgment will tell whose dust lies beneath any of those records, meant by affection to mark one small spot as sacred to some cherished memory. Shame! shame! shame!—that is all I can say. It was on public thoroughfares, under the eye of authority, that this infamy was enacted. I should like to see the gravestones which have been disturbed or removed, and the ground levelled, leaving the flat tombstones; epitaphs were never famous for truth, but the old reproach of "Here *lies*" never had such a wholesale illustration as in these outraged burial-places, where the stone does lie above, and the bones do not lie beneath.

NOBLE AND ENDURING ART MADE POSSIBLE THROUGH URN-BURIAL.

By the adoption of urn-burial all that relates to the artistic embellishment of a cemetery would be at once placed on a very different footing. One of the larger burialgrounds now closed, perforce, in a less time

than that of an ordinary life, would accommodate a like number of burials on an improved system for many ages. The neglect and desecration of the resting-place of the dead inherent to the present system would give place to unremitting and loving care, for the simple reason that each living generation would be as much interested in the preservation of the cemetery as those that had gone before were at any previous time in its history. We should at once have, what is so much to be desired from artistic and other points of view-a permanent resting-place for our dead. With this would come the certainty that any memorials erected to their memory would be carefully preserved in the coming years, and free from the sacrilege and neglect so often seen. Hence an incentive to art which might be

not unworthy of such places. The know-

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ledge that our cemeteries would be sacredwould be sacred to all, and jealously preserved by all, through the coming generations-would effect much in this new field for artistic effort. In days when careful attention is bestowed upon the designs of trifling details of our houses, it is to be hoped that we shall soon be ashamed of the present state of what should be the beautiful and unpolluted rest-garden of all that remains of those whom we have known, or loved, or honoured in life, or heard of in death as having lived not unworthy of their kind.

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In endeavouring now to obtain any good effects, defeat is certain through the essential conditions of the present mode of burial. With urn-burial everything we can desire for the artist is not only possible but easily attained. Soft, green, undisturbed lawns; stately and beautiful trees in many forms; [14]

ground undisturbed, except in certain small parts; a background of surrounding groves; no hideous vistas of crowded stones; and the certainty that the monumental work done may remain permanently. And these are not all of the advantages which another system of burial would give us from the point of view of monumental art. The adoption of cremation does not necessarily do away with the tombs. So far from that, in old Roman cemeteries beautiful tombs may yet be seen, with the urns within them in as good order as when placed there two thousand years ago. In such cases a single tomb served as a family burialplace. The expense which is now spread over a variety of graves, headstones, and the purchase of ground, would, intelligently applied, build a tomb which might endure for ages. To make it beautiful and endur-



IN POMPEHI-TOMBS USED FOR URNS.



ing as man and stone could, would be an aim not unworthy of an artist. A single burial in such an urn-tomb need not be so expensive as one in the commonest of the graves with which such large areas in our cities are now covered. The disturbance of the ground would not be necessary, as it is now; not to speak of the abolition of other onerous charges. The question of space is settled by the fact that one hundred of the simplest forms of urn could be placed in the space necessary for the burial of a single body in the ordinary way.

UGLINESS ABOLISHED AND INSCRIPTIONS AND

MEMORIALS PRESERVED FROM DECAY.

The need for headstones would be done away with at once by urn-burial, inasmuch as it would lead to burials in columbaria, which are, in fact, large urn-tombs. In

many of them in Italy may still be seen exposed the little urns containing human ashes, dating from before the time of our era, in as perfect preservation as if placed there only a few days ago ! Witness, for example, the marvellously well-preserved columbaria on the Vigna Codini and Via Aurelia. With our present system no trace now remains of some cemeteries in active, and as was supposed "permanent," use a few generations ago. The design of these columbaria or tomb-temples would be worthy of the best efforts of the architect, and their formation in the most lasting and noble form would not be so costly as the system of deep burial of the body, the headstones, and the continual and laborious moving of the ground. These buildings would save all memorials from destruction through exposure. This saving of all inscriptions and

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memorials of the dead from the ravages of time and weather is in itself a precious gain, which no one will undervalue who thinks of the importance of such records in legal and other questions of public or private interest.* Buildings, sacred or otherwise, may be adapted for urn-burial. The massive walls which should surround cemeteries might be formed into a covered way, or series of covered ways, in which urnburial might be carried out.

* The external history of the Etruscans, as there are no native chronicles extant, is to be gathered only from scattered notices in Greek and Roman writers. Their internal history, till of late years, was almost a blank; but by the continual accumulation of fresh facts it is now daily acquiring form and substance, and promises ere long to be as distinct and palpable as that of Egypt, Greece, or Rome. . . . We are indebted for most of this knowledge not to musty records drawn from the oblivion of centuries, but to monumental remains—purer founts of historical truth—landmarks which, even when few and far between, are the surest guides across the expanse of distant ages—

ALL RELIGIOUS OR BEAUTIFUL CEREMONY EASY.

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Inasmuch as no ceremony, sacred or otherwise, need be omitted in the mode of burial here advocated, so there would be fitting opportunities for the building of such religious structures as might be thought desirable in each case. When we come to the ceremony of urn-burial itself, we find it one that needs by no means be repulsive. The simplest urn ever made for the ashes of a Roman soldier is far more beautiful

to the monuments which are still extant on the sites of the ancient cities of Etruria, or have been drawn from their cemeteries, and are stored in the museums of Italy and of Europe. The internal history of Etruria is written on the mighty walls of her cities, and on other architectural monuments, on her roads, her sewers, her tunnels, but above all in her sepulchres; it is to be read on graven rocks, and on the painted walls of tombs; but its chief chronicles are inscribed on *stelæ* or tombstones, on sarcophagi and cinerary urns.—Dennis, *Cities and Cemeteries of Etruria*. than the costly funeral trappings used in the most imposing burial pageant of modern times. Of urns of a more ambitious kind, the variety and the beauty are often remarkable, as may be seen in our national and various private collections. It would be a gain to art if some of the money spent on coffins, which rot unseen in the earth, were devoted to such urns, which do not decay, and which might be placed in the light of day, and perhaps teach a lesson in art as well as bear a record. There is a square-sided marble urn in the Woburn collection, with simple carving of the shoots of the common ivy over it, which is more suggestive of all that is beautiful in a memorial than any elaborate effort in a modern cemetery.

The ceremony of burial in this way, too, how different it may be made from that with which we are familiar! What a contrast
there is between that picture of the noble Roman woman, surrounded by her maidens and friends, herself bearing her husband's ashes to the tomb, and the black array, the paid, half-besotted, mutes, and the hideous box in which the remains of poor humanity are nailed up for a decay as needless as it is odious, to any one who has seen it or thought of it. What a gain it would be to get rid of much of this Monster Funereal, the most impudent of the ghouls that haunt the path of progress! Vulgar show may, of course, be indulged in as much one way as the other; but it is pleasant to think of the ugly things and trades that may be abolished in cities when urn-burial became practicable. No doubt simplicity is possible, and is sometimes practised as far as may be, with the present system; but with urn-burial certain main causes of expenditure

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MARBLE, PORPHYRY, AND TERRA-COTTA CINERARY URNS AND CHESTS, DRAWN FROM SPECIMENS IN THE BRITISH MUSEUM.



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and show may be abolished altogether great difficulties of transport being one of them.* Given a crematorium near the town, and transport to the cemetery, however distant, involves little trouble. To a people scattered over the world, like our own, the ease with which remains could be brought from any distant country, without inconvenience, and at little cost, to its final resting-place at home, deserves consideration.

* I am speaking now of sentimental reasons, and I adduce a second, which first called my own attention to the unpleasant consequences which arise from our present system. It has been my misfortune to lose four of my nearest relations in different parts of the world. It has been also a subject of regret to me that their remains lie so far off. I care little for the fate which happens to their bodies —and yet, had such a practice as Cremation been in use, it would sometimes have been a comfort to feel that I had their ashes with me. Collected in an urn, they might either repose in columbaria, like those at Rome, or in a mortuary chapel in my own house.—The Rev. Brooke Lambert. BURIALS IN AND AROUND CHURCHES AND PUBLIC BUILDINGS MIGHT BE PRACTISED TO ANY EXTENT.

In connection with this part of the subject, it may be well to consider the opportunities which urn-burial would afford for depositing the inoffensive remains of the dead in our churches-old and new. It would have the great advantage of permitting burials to be carried out in churches and city graveyards to any extent, and for any number of years. For various reasons, many persons would prefer burial in churches or near them; but, as is wellknown, the evils of the present system of burial became so horrible and so evidently dangerous in the case of city graveyards and churches, that burial within cities had to be forbidden by law, and not too soon. The

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state of things from which extra-mural burial saved us are again appearing in populous suburban districts. At Highgate, for example, strong undertakers' men have been made seriously ill while at work by the underflowing drainage from the higher parts of the burial-ground.* At no distant day, under the present system, the numerous family tombs and graves in our extensive suburban cemeteries must fall into disuse. As extra-mural burial was not made law in London only, but in other large cities

* Communications have reached us, and observations been made, which compel us to draw serious attention to the condition of some of the cemeteries within the metropolitan district, which are rapidly becoming sources of peril not only to the neighbourhoods in which they are situated, but to the whole metropolis. The emanations from some of the newly-opened graves is so horribly offensive as to occasion nausea among those who attend at funerals. As cases of actual illness, after being present at interments in some of the cemeteries, have occurred, there can be no doubt about the danger. Meanwhile the crowding of the [24]

throughout the United Kingdom, it was a most radical change. Families who had for generations been buried in city churchyards have now to take their dead without the walls. Urn-burial would change all this. Establish this system, and people who have family-tombs in our neglected city graveyards would begin to take a renewed interest in them, an interest that might save them from the desecration so often mentioned. It would tend to make our churches more interesting, and even our cities, for there is

graves is apparent. The number of bodies laid in the earth may not be excessive when calculated upon the whole acreage of the space licensed, but with an eye to the future the ground seems to be appropriated in parcels, while in some of the older cemeteries there is really no room for more graves, and the licence ought to be withdrawn. This is a matter of so much concern to the health of the community that we forbear to run the risk of weakening the evidence of facts by any comment. The intervention of the Secretary of State should not be delayed.—*Lancet*, September 27, 1879. [25]

a certain fitness in men resting in death near the scene of their life and labours. The ashes of those who had deserved well of their country might be brought home from any distant place where they had perished, and receive a place of honour in our national churches or buildings. Our great dead now, very properly, find a resting-place in Westminster Abbey, and there is no reason whatever why other great cities or other parts of the country should not have the same system for their own most worthy sons. But you cannot long have a place of horror and a place of honour too, and therefore urnburial makes this public honour of the memory of the great dead to any extent, and for all time, not only possible but easy. Urnburial is, in view of the change it would cause in this and in other ways, worthy in all its bearings of the serious consideration

of the clergy. In the cemeteries of the future, of which a slight outline will be given further on, buildings will have to be formed for the reception of the memorials of the dead. In our churches these already exist, and would, for a long time, have the advantage over all others. Vaults, passages, niches, and walls, would form suitable places for urns, and their accompanying inscriptions or memorials. In new or old churches, when these places were insufficient, portions of the building could be constructed for this purpose, which, being in complete harmony with the object and associations of religious buildings, would tend to encourage good architectural and artistic work. And not the church only, but the surrounding space would be valuable for the same reason. It is well to remember that some of the more beautiful tombs to be seen in modern cemeteries are based on ancient models of tombs, used as depositories for urns. Such family tombs would probably be built in our now disused churchyards; they might be above ground, and they would involve no disturbance of the earth, as the present grave-burials do, and little or no interference with trees or planting.

CEMETERIES BEAUTIFUL AND PERMANENT PUBLIC GARDENS.

Apart from the question of art is the important consideration of the great advantages the improved system would give us in adding natural beauty to the gardens of the dead, and improving many large open spaces in our cities of all sizes. Given a space equal to one of our largest London cemeteries, or one of those in America several hundred acres in extent, we may begin to outline what the cemetery of the future may easily be made. Permanent and inviolable it must be. The cemetery of the future not only prevents the need of occupying large areas of ground with decaying bodies, in a ratio increasing with the population and with time, but leaves ample space to spare for those open green lawns, without which no good natural effect is possible in such places. It is to be a national garden in the best sense; safe from violation as the via sacra, and having the added charms of pure air, trees, grass, and flowers. The open central lawns should always be preserved from the follies of the geometrical and stone gardeners, so as to secure freedom of view and air, and a resting-place for the eye.

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THE CEMETERY OF THE FUTURE: BUILDINGS.

29

Approaching the boundary, but not quite near it, should be erected a covered way, as strong and lasting as rock. This is to form a series of urn-receptacles on its inner side, well but simply designed with the best architectural skill obtainable. This alone, in the case of a large place, could easily be arranged to afford space for burials for ages. All other tombs, and buildings of whatever kind, should be confined to a belt of the ground within and near the covered way, and, with their accompanying groves, should not occupy more than a fourth of the whole The covered way should not be space. the work of one man or period, and this being so, it would be well to separate its parts by planting or otherwise-the division

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occurring, if possible, in places commanding views of the surrounding country.

We are now considering a cemetery of the largest size and first importance-a national or metropolitan one. Several reasons determine that the covered way and main buildings shall not be on the extreme boundary; namely, to have them in as quiet a position as possible, as safe from injury on their outer as on their inner sides : to secure freedom from any kind of nuisance which might arise, from the buildings being placed too near property over which the governing body of the cemetery had no control; also to allow of the buildings being screened from the surrounding neighbourhood by tall trees, on any side where the views were not such as would add to the landscape beauty of the place.

Thus it would be possible to control the



URN OF CARVED MARBLE (Vatican.)



[31]

views not only from the centre to the covered way and tombs, and vice versa, but also beyond them, and to secure freedom from any objectionable sights or sounds. The actual boundary would be secured in more ordinary but effectual manner. a There being ample space within and without the great covered way and accompanying tombs for much noble tree-planting, the larger trees need not be planted near tombs, as there have been many instances of the disturbance of these by their roots. The buildings should be near and between groves of evergreens, and the dwarfer flowering, weeping, or columnar trees. These would partly conceal and soften them, as seen from the central parts. A main walk passes by these groves and the monuments, and it should be the principal, and if possible the only, road in the place. A beautiful church

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or classic temple, such as that at Munich, might form the entrance; this and all other structures being built subject to the approval of a group of artists and architects who would see that their design and workmanship were not unworthy of the spot.

FREE AND SIMPLE BURIALS FOR THE POOR.

Some might claim the privilege of erecting urn-temples or other buildings for public use, or for securing free urn-burial to the poor who desired it. It may be easily shown that urn-burial is much the less costly way, and those who have to combat the prejudices against it must take care that it is made as inexpensive as possible. Moreover, as it is desirable that no person, however poor or friendless, who desires it should be denied for pecuniary reasons this [33]

mode of burial, so there should be free burials for the very poor-free from any demeaning condition.* Although the plan of this paper is to deal with only certain of the aspects of the question, not commonly considered, a very sad one which many must notice is that of the cruel sufferings of the poor owing to the ordinary system of burial. Few but those who go among them much, know the hardships to which they are reduced through the death of the head, of the breadwinner, or other working member of the family. This is frequently preceded by the exhaustion of all the little means of the house, wholly derived, perhaps, from the labour of the one who lies dead. Then come these excessive burial and funeral

* The mode of burying paupers in London and Paris is an abomination and a disgrace. In London, as may be seen by reference to the Appendix for the account of the Tooting Cemetery, it is a public danger as well as a horror.

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charges, which often cannot be met; or, if met, absorb the last shilling in the house. A case was some time ago reported in the daily papers where an undertaker in London allowed a body to lie in the house till the police had to interfere, because the widow could not advance him the whole of the sum of eight pounds. Proportionate charges for the most useless and hideous of all forms of display are too well known in every rank; and cases such as the above are not uncommon in our towns, though seldom reported in the newspapers.*

* BOW STREET.—AN UNBURIED BODY. A poor woman named Laller applied to Mr. Vaughan on Tuesday, and stated that on Monday week her son had died. He was nineteen years old. The body was taken to an undertaker named France, who lived at 9 Great White Lion Street, Seven Dials, who agreed to bury it for $\pounds_3:3s$. She paid him $\pounds_2:1os$, but could not at present make up the remainder. The man France had made her sign a paper by which it was agreed that he need not bury the body unless the whole of the money was paid, and as she could



From the Museum of the Vatican.

SYLVAN AND FLORAL BEAUTY OF THE CEMETERY.

The sylvan charms of such a spot might be greater than is usually obtained in public not pay the 13s. the body still remained unburied. She

had received only about $\pounds I$: 5s. Mr. Mitchell said the parish were quite willing to bury the body, but they had wanted the case to come before a magistrate first, as this was not the first case of the kind against this man France. He had been at this court and at Marlborough Street several times for not burying bodies. [36]

gardens. The protecting architectural wall is far enough from the boundary to allow of groves of oak and other hardy native trees being planted outside it; these groves to have grass and wild and naturalised flowers beneath and between them. The interior groves and gardens might be the home of all the beautiful green things that grow in our climate. The main portion of the surface being always free for such ends, we should soon have a beautiful tree-garden which might even be of great public use. As some might desire to enrich the place with useful buildings, so others might claim to plant memorial trees or groups, where the opportunity existed. The views should be numerous and carefully considered. The planting should be wholly natural, in the best sense of the word. The outer portion, with its bordering tombs, columbaria, architectural covered way, and churches, should contain all the purely artistic adornments of the place; while the central portions should be quite free from the drill-master manner of marshalling plants, and sundry like effects of a too prevalent style of gardening.

However all-sufficient the sylvan charms of the place might be, a desirable structure, in a bad climate like ours, would be the winter-garden, in which religious or burial ceremonies could take place at inclement seasons-in an agreeable temperature, and in the midst of a variety of beautiful living things. Few would object to this plan were it not from the objectionable way in which such structures are generally designed, the too frequent idea being that a glass shed more or less vast is the best plan. But the palm-house in the Edinburgh botanic garden, and a variety of structures used as [38]

winter gardens in continental cities, prove that vegetation thrives in buildings with stately and solid walls. Far more beautiful effects are obtained in such, from the contrast of the graceful forms of palms and other fine plants with noble building, than in the ordinary way. The temperature necessary to keep plants from temperate climes in health, would be also that which would make it agreeable to people assisting at ceremonies, for which, of course, its most important spaces should be reserved.

CREMATORIUM, OR ANY STRUCTURE AN-SWERING A LIKE END, BEST SEPARATED FROM THE CEMETERY.

As no body in a state of decay should ever enter into our garden-cemetery, the process of cremation, or any improvement on it, may be carried out elsewhere. But where, as will no doubt often be the case, the crematorium is constructed on the spot, it will be best to separate it from the general scene by planting or buildings. There is no reason why such a building should be so planned that any of its arrangements need offend the most sensitive person. There is no reason why any rite or act to be performed therein should not be carried out in accordance with due respect to every feeling of the friends of a deceased person. One of the earliest impediments in the way of improvement will probably be the failure to give due weight to these considerations in plans of crematoria. It need scarcely be said that such a building should only be erected under the supervision of an architect of proved good taste and care.

An important result of the change herein advocated would be the preservation, as

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public gardens, of the many large cemeteries now in use, because with urn-burials continually going on they would remain inviolate. Their fate when filled and finally closed is, as before shown, very doubtful.

IMPROVEMENT IN PLANTING OLD GRAVEYARDS.

Apart from the question of improvement in burial, the present state of our rural cemeteries may be fittingly alluded to here. Possessing often considerable advantages as to site and soil, and associations that always seem to call for some care in adorning them with trees and flowers, they are often seen amidst our fairest landscapes as bare as a stoneyard, and, as regards vegetation, much less interesting than the hedgerows by which they are surrounded. The churchgarden, even if small, need never be arid or



URN FOUND AT PERUGIA.



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ugly. But if there were only the walls-so often hard and naked-they alone might form a garden. Fresh foliage and blossoms are not often seen to greater advantage than against the worn stones of our churches, often unadorned with even ivy or Virginian creeper. Many of the best climbing roses and other climbers may be grown well on these walls. The several sides of the church might each have the plants suitable to their shelter or position. The walls round graveyards might also offer a suitable position for numerous low-climbing plants and bushes. Tombs may be partially garlanded with trailers, sweetbriar, or honeysuckle, and all this without disturbance of the ground or It is best to adorn or gracestones. fully relieve, instead of obliterating, such objects. The ground is generally well adapted for trees, and even the turf itself [42]

may be converted into a garden of early flowers. Indeed, the graveyard might often be a tree-garden, and one not without its uses. In planting it is essential not to hide the building from important points of view; too much care can hardly be paid to the views obtainable towards or from the site.

In cities and large towns trees often embellish the space round the churches to a much larger extent than in the rural districts, though the practice of planting evergreens in city churchyards is a foolish one in all ways, as they can only perish under our smoke plague. In such cases the summer-clad trees only should be used. Our old city churchyards could all be easily converted into oases of trees. The not unusual way of levelling or removing the headstones, and making the whole into a formal garden, is not the best. There is no real need for any sacrilege of the kind. The trees that flourish in such places are those that require little preparation of the ground —weeping and other native trees. Much short-lived and formal flower-gardening should be avoided, in consequence of the ceaseless care and cost it requires; the attention should mainly be devoted to the suitable hardy trees.

PRIVATE BURIAL-PLACES.

Near country seats urn-burial would lead to the family burial-place within the grounds —a quiet inclosed glade in some sunny spot, chosen for its beauty, embowered in a grove of evergreens, the grass sprinkled with hardy native or naturalised flowers only—so as to prevent any frequent attention on the part of workmen. Such a spot, with its carpet of turf, and walls of musical-leaved trees, wholly free from the long-lasting and many-staged horror of decomposition, which makes the ordinary churchyard so far from inviting to many persons, would form a fitting place of meditation for the living, as well as of repose for the ashes of the dead.

COUNTRY CEMETERIES.

The drawbacks of various kinds known to exist in connection with large urban cemeteries, are often supposed not to exist in the case of rural ones; but, unhappily, they are sometimes in quite as bad a state as those in cities. Overcrowding is far from uncommon in country districts, but here there is less chance of the wholesale removals before mentioned. Some years ago, however, when certain changes in the church required the raising of a number of bodies in the churchyard at Cobham, in



MARBLE URN IN THE VATICAN.



Surrey, the work of the navvies was of the most horrible and dangerous character, and was accomplished with difficulty in the early mornings, partly under the influence of repeated doses of gin administered to the men. Such removals are not uncommon, but they are performed as secretly as possible, for fear of raising opposition. In many quiet country places there is as great need to close the graveyard as ever existed in large ones, and sometimes greater danger, owing to imperfect drainage. In such cases any improvements or changes are extremely difficult to carry out, owing to the state of the ground. The same plan already spoken of in connection with great urban or national cemeteries would be proportionately no less advantageous, on a small scale, for country towns and villages. Danger to the living; pollution of earth or water; overcrowding;

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decay of memorials through exposure; hideous ugliness of stone, telling of accumulated horrors beneath the turf-all these, and many other evils, should be avoided in country as in town, while the various advantages of the improved system would be as precious in one case as in the other. The church and its vaults, and other unused spaces, and a covered way, replacing the whole or a portion of the usual fence, would in most cases suffice for ages for urn-burial, leaving the whole of the churchyard itself free, as a beautifully planted spot. Urns placed under memorial windows, and in various positions on the walls, would invite monumental work of the highest class. The sentiment that people's ashes might repose in the church where they worshipped during life would not be interfered with in this case, whereas, frequently in rural districts nowadays,

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the present system compels the formation of a new graveyard away from the church.

"THE EARTH TO EARTH" SYSTEM.

The "earth to earth system," or the burial of the body without a more or less solid covering, has been much talked of as a substitute for the usual mode of burial. It has in reality no merits whatever. Bv coffinless burial our ugly and noisome cemeteries can in no sense be bettered. The ground is occupied in the same way. It is an advantage to dispense with the needless and more or less costly wooden or leaden envelopes, but it is a mistake to suppose that very rapid decay takes place through their absence, as it has been proved that bodies deeply buried without coffins often decay slowly in ordinary soils. But even if the action of decomposition were always as
rapid as it is in some soils, burial without coffins in no way frees us from the serious responsibility of needlessly polluting earth, air, and water. All the drawbacks, all the horrors, all the dangers of the present system would be just the same with this proposed alternative, which is, indeed, worthy of no serious attention as a substitute for the usual mode of burial. It has not even the merit of being a safe system, and those responsible for the public health could not permit of its use in the case of persons dying from confluent smallpox and putrid fevers.

This earth to earth system, so called, is merely a recurrence to the old-fashioned English way of burial in a shroud of woollen or other material. There are many evidences of the commonness of this practice in our forefathers' time, and it is not on record that they were any less free from the evils

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of the graveyard than ourselves. The wholly odious use of leaden coffins is defended by no one, not even the undertaker. Mr. Haden, who strenuously advocated the use of this old system, with, as some have thought, the needless addition of basket-coffins, has dealt with this question in an ugly utilitarian way, which will, it is to be hoped, commend itself to few, and certainly to no one who has a particle of the feeling which animated the old Romans when they took their very effective precautions against disturbance of, or insult to, the ashes of their dead. It has been proved, over and over again, that the saturation of the soil by human remains is fraught with the greatest danger to the public health. We have it on the testimony of trustworthy and scientific witnesses, embodied in reports to Parliament, that disease on an extensive

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scale has been traced directly to this systematic and extensive pollution of the ground with bodies, yet Mr. Haden has nothing better to offer us than further pollution of the same description.

Since, he says, it is impossible for nature to err, and since it may be taken as an axiom that she will ever be found ready to supply us with the means of doing that which she requires us to do, need we ever be at a loss for ground in which to bury our dead? If it be true that a body, properly buried, is resolved in five, or at most, six years, it follows that at that interval, or at intervals as much longer as we please, we may bury again and again in the same ground, with no other effect than to increase its substance and to raise its surface. Is there, however, no ground in the immediate neighbourhood of our own city that would be the better for this increase and for being thus raised? The cremationists will tell us that there is not, but is there the shadow of a foundation for such a statement? Along the course of our great river from London to the sea,

for instance, have we not vast lowland tracts of rich alluvial soil deposited by that very river and capable of being drained, planted, and beautified, in which, with equal benefit to the land and to ourselves, we may bury our dead for centuries? If, as we have seen, the surface of the Holborn Burial-ground was raised 15 feet or 18 feet by the interments within it of three centuries, why should not the lowlands of Kent and Essex be raised and reclaimed in the same way, and as much as possible of the valuable ground in and about the city, now occupied as cemeteries, be restored to better uses? What if it take us thousands instead of hundreds of years thus to reclaim and elevate such lands, and so practically dispose of our difficulties as to burial for ever ?

Anything more puerile and impracticable could surely not be thought of or written by any person who knows the state of our graveyards and cemeteries, and has ever desired their reform. In the "Report on

the Practice of Interment in Towns,"* presented to both Houses of Parliament, it is stated that "there appear to be no cases in which emanations from human remains in an advanced state of decomposition are not of a deleterious nature;" and yet Mr. Haden, in the name of progress, seriously proposes to raise and reclaim "the lowlands of Kent and Essex" with decaying human bodies ! He knows that in the course of ages small patches of ground in London and other cities have been raised by piling them with boxes containing bodies, and, accordingly, proceeds to improve the home counties agriculturally in the same wholesome way! Happily our lowlands are not in want of any such "improvement," which is all the more singular as a suggestion from one who poses as a teacher of graveyard reform and

* Clowes and Sons, Stamford Street, 1843.

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æsthetics. Proof that the "earth to earth" plan is also unsound from sanitary and scientific points of view will be found in the Appendix.

BURYING REPEATEDLY IN THE SAME SOIL.

Official authorities, in opposing urn-burial, have maintained that in "good soil the body may be considered as decomposed and non-existent in from twenty to twentyfive years, and that the same spot may then be used again for the purpose of burying, precisely as if it were virgin soil." This was in reply to objections as to the great areas of land that must be used for this purpose. "No!" Mr. Holland replies, "the same land can be used at least four times in a century if it is 'good,'-is dry and well drained 'soil'" - a remarkable admission

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from those who desire to respect or preserve their ancestors' dust! This system of reburying in the same ground again is part of Mr. Haden's pet plan, but what the feeling of the public is about all such plans is shown in the following extract from a lecture by the Rev. Brooke Lambert :—

"The results of the improvements in the Tamworth churchyard show me that, however little I may be susceptible to what becomes of my own remains, there is no subject on which people feel more deeply than the disturbance of the remains of their ancestors, and even the displacement of effete memorials of them. From the letters of the better class to the comments of the inhabitants of "Day's Yard," who wished that those beneath would come up and punish me and my Churchwardens, I find that the prevailing feeling is that the dead ought never to be removed, nor the position of their monuments changed even by a hair's breadth. Now whilst our present system of burial remains, such changes in their places of interment must occur."

The system of removing the bodies after a lapse of years and burying in the same

ground again is carried out in all its ugliness in the Paris cemeteries, but it is so evidently wrong from a sanitary point of view, and also from that of common decency, that it is to be hoped it will never be practised in this country, and it has no chance of success in America, where, more than in any country, the dead receive decent burial. What law, human or divine, justifies this ignoble disturbance of the remains of the dead, and the use of the ground for the burial of other bodies, to be in their turn disinterred in like manner? One may see the effect of it in many exposed bones and skulls in Alpine and North Italian valleys, where thousands of acres of waste land lie around. It is no less offensive, and more dangerous, in large cities; and those who advocate it

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for our English cemeteries must indeed be at the end of their arguments. Those who know the revolting way the remains of all not rich enough to pay for the ground in "perpetuity" in French cemeteries will not regret to learn that the Municipal Council of that city have opened an important competition, calculated to ascertain the most prompt and inoffensive way of reducing the body to its inoffensive parts, and thus eventually lead the way to a much needed reform.

ONE TRUE WAY TO BURIAL REFORM.

There is not, and there never can be, any satisfactory system of disposing of the dead, which does not do, as promptly and as inoffensively as possible, what is now done in the slowest and most horrible manner. Until some better system is devised, crema-

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tion is the only method which will rapidly resolve the body into its harmless elements by a process which cannot offend the living, and which shall render the remains of the dead innocuous. This system is also that which gives us the amplest opportunity for

making "God's acre beautiful" a blessing instead of a danger to its neighbourhood; by its means we may have memorials preserved from decay; ground from sacrilege; soil and water from impurity; art not unworthy of its aim; church-burial for all who desire it; space for gardens and groves in our cemeteries; the mindfulness and care of each successive generation; deliverance from the undertaker, and his "effects;" many precious open spaces in cities free from dread or danger; age-enduring cemeteries, in which efforts towards "perpetuating" the memory of the dead need not be so delusory

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as they now are; quiet places, where the ashes of the dead should never be dishonoured, but might find unpolluted rest.



Irish Cinerary Urn-County Down.

THE MANAGEMENT AND CONTROL OF CEMETERIES.

Whatever the future of our cemeteries may be, it is much to be desired that they should not be controlled by trading companies. This is not the way the Americans have established their beautiful cemeteries, which are as well arranged and kept as is possible under the present system of burial. So large and so important a question as the burial of the dead should never be in the hands of those who merely regard it from the point of view of money-making. It is well known that the profits from certain cemeteries in some of the pleasantest suburbs of London are very large; the temptation to continue burial in them, longer than decency or sanitary reasons would permit, will probably lead to danger in the future from pollution of air and water. The present state of some of our cemeteries close to London is already dangerous and offensive; on this point, Mr. S. Haden makes

Considering that our reason for discontinuing intra-mural interment was that the soil of the old city graveyards had become so saturated and super-saturated with animal matter that it could

some just remarks :---

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no longer properly be called soil, it might have been supposed that, in establishing the new cemeteries, stringent provision would be made that such a pollution of the ground should not again occur; the more so that it must have been foreseen that, by the inevitable extension of the town, the then suburban would become again the intramural cemetery, and that the horrors of the old graveyard would thus come to be repeated and multiplied. Not only was no such provision made, but one of the chief of the new companies gave prompt proof of its unfitness to comprehend and to use the powers intrusted to it, by making the extraordinary proposal to bury 1,335,000 bodies in seven acres of ground. Here, since it may not else be believed, is this amazing proposal :--- "It has been found," say the newly installed directors of the General Cemetery Company (Kensal Green), in recommendation of the plans which they are proposing for their future guidance,-"" it has been found that seven acres will contain 133,500 graves; each grave will contain ten coffins; thus, accommodation will be found for 1,335,000 deceased paupers." The very naïveté of this proposal might, one

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would think, have at once opened the eyes and excited the alarm of those who were conferring on these companies almost unlimited powers, and have prepared them for the abuse of those powers which speedily followed. No such alarm, however, appears to have been excited, and a system of interment founded, we must suppose, on this surprising calculation, was at once inaugurated and permitted. If, in the old graveyards, the Vestries and Guardians of the poor saved themselves expense by piling coffin upon coffin till the hole which they had dug would contain no more, the new cemetery companies increased their dividends and propitiated their shareholders by doing precisely the same thing. It is surprising that the Government, which refused to listen to the recommendations of the Board of Health in this matter, should have preferred to intrust the sanitary interests of a great city, and so important a duty as the burial of its dead, to a class of men who, however respectable, had shown themselves ignorant of the very first principles which should govern them in the management of such things.

Again, apart from the improbability that a

mere trading company would prove itself competent to deal with so large, so technical, and so delicate a question as the burial of the dead, it might have been foreseen that the material interests of such a company, its obligations to its shareholders, and its trade associations, could never be in harmony with, but must ever be opposed to, the interests of the public.

The very different spirit with which the new cemeteries in America are undertaken by the leading citizens is well known to many who have travelled there. Cemeteries in America, as well as in Europe, are conducted on various plans. A number of them are under the control of the city authorities, and of course are seldom selfsupporting. Others, again, are the property of religious communities, which sometimes manage to pay expenses, and have at times something left for the benefit of the church; but in these cases there is very little security



URNS OF SQUARE FORM FOUND AT PERUGIA



to the owners of burial-places, for, the city council or the trustees of the church may at any time pass an ordinance for the removal of the dead to other quarters, particularly if the burial-ground be situated in or near a city and has become valuable for other purposes. In that case the last resting-place of the dead is easily condemned as a nuisance, and the consecrated ground is sold for building purposes, for the sake of gain; and in this way, as in our cities, the houses of the

The plan that has given the greatest satisfaction to the public, and led to the creation of the nobler cemeteries near all the larger cities, and to many beautiful cemeteries in the Western States, and in remote places, is that where every lot-holder is a member of the corporation of the cemetery, and where the entire income is devoted to

living are erected over the graves of the dead.

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the improvement and perpetual care of the cemetery. Some of these bodies, in addition to forming garden and park-like cemeteries, to which the best in Paris and London are mere stone yards, have already accumulated a considerable surplus, and there is not the least doubt that in a few years they will have a fund the interest of which will be more than sufficient to keep the grounds perpetually in complete order.

The following extract is from the Act of Incorporation of the Spring Grove Cemetery at Cincinnati.

SECTION 6. This Corporation is authorised to purchase, or take by gift or devise, and hold land exempt from execution and from any appropriation to public purposes, for the sole purpose of a cemetery, not exceeding three hundred acres; one hundred and sixty-seven acres of which, such as shall be designated by the directors, shall be exempt from taxation, and the remainder shall be



MARBLE CINERARY URN



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taxed as other lands, until the legislature shall otherwise direct. After paying for such land, all future receipts, whether from the sale of lots, from donations, or otherwise, shall be applied exclusively, under the direction of the board, to laying out, preserving, protecting, and embellishing the cemetery, and the avenues leading thereto; and to paying the necessary expenses of the Corporation.



Marble Cinerary Urn-British Museum.



Large Glass Cinerary Urn, found at Southfleet, in Kent, now in British Museum



Urn in Clumber Collection-(White's Worksop).

APPENDIX.

As the preceding pages deal mainly with the æsthetic side of the burial question, the following are added for the convenience of those who wish to satisfy themselves as to other reasons for reform in our mode of burial.

BURIAL: A HORRIBLE PRACTICE.

If people could see the human body after the process of decomposition sets in, which is as soon as the vital spark ceases to exist, they would not want to be buried; they would be in favour of cremation. If they could go into a dissecting-room and see the horrid sights of the dissecting-table, they would not wish to be buried. Burying the human body, I think, is a horrible thing. If more was known about the human frame while undergoing decomposition, people would turn with horror from the custom of burying their dead. It sometimes takes a human body fifty, sixty, eighty years—yes, longer than that—to decay. Think of it ! The remains of a friend lying under six feet of ground, or less, for that length of time, going through the slow stages of decay, and other bodies all this time being buried around these Infants grow up and pass into manhood or remains. womanhood; grow old and get near the door of death, and during all that time the body which was buried in their infancy lies a few feet underground in this sickening state, undergoing the slow process of decay. Think of thousands of such bodies crowded into a few acres of ground, and then reflect that these graves, or many of them, in time fill with water, and that water percolates through the ground and mixes with the springs and wells and rivers from which we drink. Why, if people knew what physicians know, what they have learned in the dissecting-room, they would look upon burning the human body as a beautiful art in comparison with burying it. There is something eminently repulsive to me about the idea of lying a few feet under ground for a century, or perhaps two centuries, going through the process of decomposition. When I die I want my body to be burned. Any unprejudiced mind needs but little time to reflect in forming a conclusion as to which is the better method of disposing of the body. Common sense and reason proclaim in favour of cremation. There is no reason for keeping up the burial custom, but many against it, some of the most practical of which are but too recently developed to need mention. There is nothing repulsive in the idea of cremation. People's prejudice is the only opponent it has. If they could be awakened to a sense of the horror of crowding thousands of bodies under the ground, to pollute in many instances the air we breathe and the water we drink,

their prejudice would be overcome. Cremation would be taken for what it truly is, a beautiful method of disposing of the body.—Dr. S. D. Gross.

PRECAUTIONS AS TO PROOF OF DEATH.

The only serious objection urged from any quarter against the prompt and harmless reduction of the body to its inoffensive parts is that of the supposed immunity it would give to poisoners; and this question is dealt with by Sir Henry Thompson and Mr. Lavel of Paris.

It has been said, and most naturally, what guarantee is there against poisoning if the remains are burned, and it is no longer possible, as after burial, to reproduce the body for the purpose of examination? It is to my mind a sufficient reply that, regarding only "the greatest good for the greatest number," the amount of evil in the shape of disease and death which results from the present system of burial in earth, is infinitely larger than the evil caused by secret poisoning is or could be, even if the practice of the crime were very considerably to increase. Further, the appointment of officers to examine and certify in all cases of death would be an additional and very efficient safeguard. But-and here I touch on a very important subject-is there reason to believe that our present precautions in the matter of death-certificate against the danger of poisoning are what they ought to be? I think that it must be confessed that they are

defective, for not only is our system inadequate to the end proposed, but it is less efficient by comparison than that adopted by foreign governments. Our existing arrangements for ascertaining and registering the cause of death are very lax, and give rise, as we shall see, to serious errors. In order to attain an approach to certitude in this important matter, I contend that it would be most desirable to nominate in every district a properly qualified inspector to certify in all cases to the fact that death has taken place, to satisfy himself as far as possible that no foul play has existed, and to give the certificate accordingly. This would relieve the medical attendant of the deceased from any disagreeable duty relative to inquiry concerning suspicious circumstances, if any have been observed. Such officers exist throughout the large cities of France and Germany, and the system is more or less pursued throughout the provinces. In Paris no burial can take place without the written permission of the "Médecin Vérificateur;" and whether we adopt cremation or not, such an officer might with advantage be appointed here. It is not generally known that many bodies are buried in this country without any medical certificate at all; and that among these any number of deaths by poison may have taken place for anything that anybody knows. Is it in the provinces chiefly that this lax practice exists? No doubt, and more particularly in the principality of Wales. But it occurs also in the heart of London. A good many certificates of death are signed every year in London by some non-medical persons. In one metropolitan parish, not long ago, which I can name, but do not, above forty

deaths were registered in a year on the mere statement of neighbours of the deceased. No medical certificate was procurable, and no inquest was held; the bodies were buried without inquiry. This practice is not illegal, and, in my opinion, it goes far to make a case for the appointment of a "Médecin Vérificateur."

It would be possible, at much less cost than is at present incurred for burial, to preserve, in every case of death, the stomach and a portion of one of the viscera, say for fifteen or twenty years or thereabouts, so that in the event of any suspicion subsequently occurring, greater facility for examination would exist than by the present method ot exhumation. Nothing could be more certain to check the designs of the poisoner than the knowledge that the proofs of his crime, instead of being buried in the earth (from whence, as a fact, not one in a hundred thousand is ever disinterred for examination) are safely preserved in a public office, and that they can be produced against him at any moment. The universal application of this plan, although easily practicable, is, however, obviously unnecessary. It is quite certain that no pretext for such conservation can exist in more than one instance in every five hundred deaths. In the remainder, the fatal result would be attributed without mistake to some natural cause—as decay, fever, consumption, or other malady, the signs of which are clear even to a tyro in the medical art. But in any case in which the slightest doubt arises in the mind of the medical attendant, or in which the precaution is desired or suggested by a relative, or whenever the subject himself may have desired it, nothing would be easier than to make the

requisite conservation. As before stated, the existence of an official verificator would relieve the ordinary medical attendant of the case from active interference in the matter. If, then, the public is earnest in its endeavour to render exceedingly difficult or impossible the crime of secret poisoning—and it ought to be so if the objection to cremation on this ground is a valid one—the sooner some measures are taken to this end the better, whether burial in earth or cremation be the future method of treating our dead.—Sir Henry Thompson, in *Contemporary Review*.

Avant de l'exposer, nous croyons indispensable de répondre à la principale, on pourrait même dire à la seule objection présentée contre la crémation, c'est-àdire le danger de faire disparaître les traces d'empoisonnement. M. Cadet a discuté cette question de la manière la plus satisfaisante. Il partage, comme la Commission du Conseil de salubrité, les poisons en deux catégories.

"La première, renfermant les poisons qui ne peuvent être retrouvés que dans les cendres : substances organiques, ainsi que le mercure qui est volatil, et le phosphore, ce dernier corps étant en quantité considérable dans notre organisme ; La deuxième, comprenant les poisons susceptibles d'être retrouvés : arsenic, antimoine, zinc, cuivre, plomb, etc. ; Il est inutile de s'arrêter aux poisons de la première catégorie ; car tous, excepté le mercure, ne se retrouvent pas plus dans l'inhumation que dans la crémation."

M. Cadet examine ensuite la seconde catégorie et prend pour exemple le poison le plus connu, l'arsenic. [73]

Il rend compte de nombreuses expériences par lui faites sur des animaux qu'il a empoisonnés par l'arsenic, et qu'il a ensuite incinérés. Il a retrouvé l'arsenic dans les cendres. La société ne serait donc pas désarmée vis-à-vis de tentatives criminelles. M. Cadet ajoute des réflexions extrêmement justes, que nous croyons devoir transcrire, parce qu'elles élucident la question de la manière la plus péremptoire.

"Quand même les poisons ne seraient pas retrouvés dans les cendres, est-ce que cette objection, quoique sérieuse, faite au nom de la médécine légale, que la crémation entrave les investigations de la justice, dans certains cas de crime, est-ce que cette objection, dis-je, pourrait être un obstacle? Elle impose tout simplement la nécessité de prendre des précautions telles, que tout individu tenté de commettre un empoisonnement, ait à réfléchir avant de consommer le crime. Ne peut-on pas établir un mode plus rigoureux de constatation des décès? Une enquête sévère ne pourrait-elle pas être faite avant de délivrer le permis d'incinération d'un cadavre? Un certificat du médecin qui aura donné les soins, constatant la nature de la maladie ; un certificat du pharmacien, sur lequel seront transcrites les prescriptions du médecin, pendant la maladie; un certificat du médecin chargé de la vérification des décès, indiquant dans quel état il a trouvé le cadavre, avec les signes qui lui sembleraient extraordinaires; le tout envoyé à un médecin contrôleur, seraient des garanties supérieures à celles exigées aujourd'hui pour l'inhumation. En cas de mort subite ou de mort résultant d'un accident ou d'une maladie quelconque, pendant laquelle aucun médecin

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n'aura été mandé pour donner ses soins, le médecin vérificateur fera une enquête dans la maison du décédé, soit près des parents, soit près des voisins, constatera exactement, dans son certificat, tous les renseignements recueillis, et avisera de suite le médecin con-Si, dans la visite de ce dernier, il s'élevait trôleur. le moindre soupçon, un ordre de s'opposer à la crémation serait envoyé à qui de droit, et le Parquet prévenu du fait. Que peut-on exiger de plus? Toutes les précautions exigées en cas d'empoisonnement ne sont-elles pas suffisantes? Puis, pendant la maladie, ne pourrait-on pas exiger du médecin, chaque fois qu'il remarquerait des symptômes douteux ou suspects, qu'il appelât en consultation un ou deux confrères, et après examen sérieux, si le doute persistait, qu'il prévînt la justice? Et les matières vomies ne devraient-elles pas être recueillies? Dans de telles circonstances, l'autopsie serait faite ; les viscères, le foie, les organes utiles pour l'analyse chimique, seraient conservès; puis, apres un examen attentif de la part du medécin, le corps serait brûlé. Il est bien entendu que, sur la demande d'un des membres de la famille, ou sur les désirs manifestés par le décédé pendant sa maladie, ou sur les moindres soupçons ou indices d'une personne quelconque, l'autopsie aurait lieu de droit."

Voilà un ensemble de précautions parfaitement propre à rassurer. La crémation étant autorisée, la police, en vertu des attributions qu'elle possède, et sans qu'il y ait besoin de lois nouvelles, userait de son droit de faire des règlements sur les formalités à remplir. Elle pourrait, dans les cas douteux, prescrire l'autopsie. Mais cette

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opération laborieuse et dispendieuse ne serait pas la règle générale; car il y a toujours une infinité de cas où la cause de la mort est parfaitement connue et où, par conséquent, la crémation ne présente aucun inconvénient. Pour obvier au danger signalé par la Commission d'hygiène, d'enlèvement ou d'altération des cendres, on pourrait exiger que chaque urne fût scellée et conservée dans le cimetière, pendant plusieurs années ; de manière qu'on ne pourrait y porter atteinte sans commettre le délit de violation de sépulture.—*Rapport au Conseil Municipal de Paris*, 1879.

THE STATE OF OUR GREAT SUBURBAN CEMETERIES.

The greater portion of the public probably suppose that the forbidding of burials within the town has saved us from all present danger. The following concerns cemeteries in the immediate suburbs of London—some of those situated in the most pleasant, and which will soon be crowded, suburbs of London.

During the time that the merits of cremation have been under discussion its advocates might have strengthened their case had they been cognisant of the way in which two of the cemeteries of South London were being managed. We refer to the Battersea Cemetery, controlled by a Burial Board elected by the Vestry of Battersea; and to the Tooting Cemetery, managed by a Burial Board elected by the Vestry of Lambeth. The Tooting Cemetery is not in the parish of Lambeth, but is in the parish of Tooting Graveney, which is comprised within the district of the Wandsworth Board of Works; and the Battersea Cemetery abuts upon the district of the Wandsworth Board. Therefore, the members of the Wandsworth Board are concerned, on behalf of their constituents, in the sanitary condition of both cemeteries. In this matter at least the multiplicity of local authorities has not been without its advantages, for it has required the action of the Wandsworth Board to put a stop to the violation of the Secretary of State's regulations in both cemeteries.

In April and May an impression prevailed among those resident near the Battersea Cemetery that an exceptional amount of sickness in the neighbourhood, including cases of scarlet fever and diarrhœa, was due to the overcrowded and consequent insanitary condition of the burial-ground. Whatever the cause of the sickness, its existence was a fact. The medical officer of health for West Battersea, Dr. Oakman, reported to the Wandsworth Board that the overcrowding also was a fact, and that it was assuming dangerous and alarming proportions. The Home Office was communicated with, Mr. Holland held an inquiry, and all that had been alleged was proved or admitted. The only person responsible in such a case for the violation of the law is the superintendent of the cemetery, who may be fined for every proved offence. In this instance, his resignation was required by the Home Office. He has suffered for the sins of himself and his Board, and has been superseded : and under the management of his successor,

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it is hoped that the regulations of the Secretary of State are being observed.

A description, in the London weekly organ of the Presbyterians, of a Sunday funeral at Tooting Cemetery, first directed attention to that burial-ground. It was an Irish Catholic funeral, and the mourners lowered the coffin. That was an unusually long one, and, being slightly tilted, it stuck fast half-way down the grave. A grave-digger touched it with his feet, or stood upon it, and some excitement ensued. The object of the writer was to furnish reasons for the discontinuance of Sunday Incidentally, he mentioned circumstances funerals. which pointed to illegalities in the conduct of funerals and to the overcrowding of the ground. The article was read in the Lambeth Vestry. The burial Board instituted an inquiry into what happened on the Sunday, but ignored the suggested illegalities. They sent a letter to the Vestry declaring the article to be sensational and The Vestry appointed a committee to inquire untrue. into the ignored charges. The Clerk to the Board and the Superintendent of the Cemetery being examined as witnesses, made a clean breast of it, and admitted everything. The Vestry Committee reported unanimously that every charge was established.

The irregularities at both the Battersea and the Tooting Cemetery have been of a similar character. In both cases the object was to economise ground and keep down current expenses. The length of time a burial-ground will be available is a mere question of figures if the graves are to be of a certain depth, if there is to be a foot of earth between each coffin, and if no

coffin is to be within three or four feet of the top. Dr. Oakman, in his Report on the Battersea Cemetery, concludes that, if all regulations are to be carried out, it does not contain sufficient space for a year's burials, and in another part, that it must be closed in three years. This contingency it was which led the Board, with ground drained to the depth of 8 feet, to permit graves to be dug deep enough to hold the coffins of 14 adults or 26 The percolation of water into these common children. graves produced decomposition before the graves were filled; and the emanations from them endangered the health of the clergymen and the mourners at each successive funeral up to the 14th or the 26th, as the case might be. However, as the Board have sacrificed their manager, it may be hoped that these irregularities are things of the past at Battersea.

With regard to Tooting Cemetery, what the Wandsworth Board did was to appoint Mr. D. C. Noel, medical officer of health for Streatham and Tooting, and Mr. James Barber, the surveyor for the district, to inquire and report. The soil is gravel and clay, the latter predominating; and it therefore retains water. One day, on making a visit, they saw a coffin exposed in a private grave; it had been laid bare at the request of a family for a member of which the grave had been re-opened. The head of the coffin was immersed in one or two inches of black offensive water. It was intended to place the next coffin immediately upon that exposed, so that a greater number could be buried in the grave. Messrs. Noel and Barber addressed a series of questions to the Lambeth Burial Board, and these were frankly answered.

In this case, too, the ground is drained to the depth of 8 feet. One question was, "Is the under-drainage such as to prevent the accumulation of water in graves?" The answer is, "As far as possible." Another question was, "What is the greatest depth to which graves are dug?" The answer is, "Generally 12 feet, but in some few cases 14 feet." Messrs. Noel and Barber infer from these answers that there is no deep under-drainage. The material regulations affecting this cemetery are that there is to be a foot of earth between each coffin, 4 feet above the top coffin, and no second interment in an earthen grave on the same day unless it be of a member of the same family. The object of the last requirement as it affects common graves, is, that time may be allowed for the deposit of a foot of earth, "which shall be closely rammed down, never to be again disturbed." It used to be required that graves should be filled up, but the stringency of this regulation was relaxed by the provision that if a foot of earth were closely rammed down over a coffin, the grave might be available the next day and on each succeeding day until it had received the proper number of coffins to leave the last 4 feet from the surface. Messrs. Noel and Barber do not seem to have noticed this. The questions and answers bearing upon these regulations are as follow :--- "Are several coffins buried in one grave on the same day or during the same week?" -"Yes." The offence here is in the second interment on the same day; and it was admitted before the Vestry Committee that two interments on the same day were usual, and sometimes there were three. "Is any layer of earth placed between the coffins in the same common
grave, and what thickness ?"-" Hitherto from 4 inches to 6 inches, but now one foot." "What is the greatest number of persons over 12 years of age in one common grave?"-" Up to the present time, six; but now, as a foot of earth is placed between each coffin, only four." "What is the greatest number under 12 years of age?" -"Ten up to the present time; but, as a foot of earth is to be placed between each coffin, there will only be seven." It is stated, in answer to one question, that six are the greatest number of coffins buried in a family grave; and the extreme depth of any grave, is said, in another answer, to be 14 feet; whereas, to place one foot of earth between each coffin and to place 4 feet of earth between the last coffin and the surface of the ground would require that the grave should be originally at least 15 feet deep, instead of only 12 feet or 14 feet. Messrs. Noel and Barber find, in conclusion, as the Vestry Committee found before them, that the regulations have been violated; but they have apparently fallen into an error in supposing that this cemetery was subject to the regulation which requires that any and every grave shall be filled up after one interment. They report that the ground is not drained to such a depth and in such effectual manner as shall prevent the accumulation of water in any grave therein, and that a layer of a foot of earth has not been left over a previously buried coffin.

As the municipal government of the Metropolis is under discussion, it may not be inappropriate to point out that, although the Vestry elects the members of a Burial Board, and the Vestry votes the money required by the Board, the Vestry has no control over the Burial Board, the members of which are practically irresponsible. When the Committee of the Lambeth Vestry asked for the attendance of the clerk to the Burial Board and its superintendent at the cemetery, it was found that they were unable to comply with the request without the consent of the Board. The consent was given, but not without a protest against a resolution passed by the Committee, and with the proviso that the permission was not to be treated as a precedent, because the Burial Acts did not authorise the interference of the Vestry in the functions of the Board.

The enforcement of the law and of the existing regulations will, it is said, necessitate an appeal to the Home Secretary for some relaxations in the case of the metropolitan cemeteries, most of which it is broadly insinuated by the delinquent Boards have been guilty of the same practices. There is something startling in local Boards urging their deliberate breach of well-considered laws as a reason why those laws should be amended. The absorbent properties of soils, the progress of decomposition in different soils, the emanation and diffusion of poisonous gases, the risks of mourners and of adjoining residents, are all elements which have determined the present state of the law, and what is based on scientific fact and experience cannot be changed, to the detriment of the living, for the sake of enabling a local Board to pursue a policy of so-called economy.-Times, November 17, 1874.

After reading the foregoing passages in italics

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no one can say the *fosse commune* of Paris, abominable as it is, is the worst example of the burial of the poor. Do the public, and particularly the women of England, know and acquiesce in the fact that human bodies are stacked, one over the other, with from four inches to a foot of soil between them ?

The *Pall Mall Gazette* of the following day contained the following :----

Mr. Holland, the Government Inspector of Burial Grounds, held an official inquiry yesterday into certain allegations which had been made respecting the management of Tooting Cemetery, and the way in which bodies were interred. The most serious charge was that the Cemetery Board had never adopted any measures for the sufficient drainage of the cemetery. A very insufficient system of mere surface drainage was, it had been stated, all that had been provided, and in one case, at least, a coffin had been placed in a grave with water in it sufficient to cover the head of it. This was admitted by the Cemetery Board, the chairman of which, Mr. Robert Taylor, explained that the more efficient drainage of the ground had been under consideration, and that communications had been in progress for the past eight years. Mr. Holland remarked that communication with the main drainage was what was required, and said that unless some steps were speedily taken in the matter the closing of the cemetery would probably be the result.

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In the course of the enquiry it was elicited that the entire drainage of the cemetery was conducted into a neighbouring ditch, which discharged itself into the river Wandle, from which many of the inhabitants in its vicinity were accustomed to draw supplies of water.

After such facts one can sympathise with the declaration of the Rev. Brooke Lambert, in a lecture at Tamworth, that the whole process is, from beginning to end, revolting and disgusting. Such a revolution in our burial arrangements will not come suddenly, but perhaps a little reflection may serve to convince those who have feelings of repulsion to urn-burial, that, as a matter of fact, less dishonour is done to the remains of those whom one loves in subjecting them to a fire which reduces them to ashes which can be carefully preserved, than in allowing them to become the subjects of the loathsome process of corruption first, and then subjecting them to the chance of being ultimately carted away to make room for some metropolitan or local improvement.

Few would not say as much who knew the shocking realities of the cemetery, but those connected with such places do all in their power, for obvious reasons, to keep the painful facts as much concealed as possible from the public. According to the *Times* report, quoted above, a mere incidental allusion in a class paper was what called attention to such a disgraceful and repulsive state of things. And yet we have a Government Inspector of Burials!

A correspondent of *Land and Water*, E. N. R., sent to that journal the following :---

How we BURN OUR DEAD POOR.—Emerging a few days ago from the dismal recesses of a metropolitan railway-station, I chanced to ask my way of an intelligent young fellow who was going in the same direction, and who cheerfully undertook to conduct me. Having, after some consultation, decided the great question of the weather, past, present, and to come, I casually directed his attention to a large cemetery on our right—one of those huge metropolitan burial-grounds established originally far away enough from the haunts of men, but now surrounded by dwellings and closely overlooked by many hundred families.

To my astonishment I found I had touched a very familiar chord, for my guide, though not himself following the profession, had an intimate connection with the grave-digging interests, his father having "worked" in that particular cemetery for three-and-twenty years. It was really with the enthusiasm of a man who knows his subject that he imparted to me the inner working life of the Necropolis, first drawing the broad distinction between the "privates" and the "commonses," alluding almost with pathos to the sacred soil devoted to the former, and detailing with professional *sangfroid* the management of the ground dedicated to the latter.

It is scarcely worth while to reproduce the suburban vernacular in which his remarks were clothed, but he • spoke like one who had seen something worth seeing when he exclaimed, "You should go in there of a night, sometimes, Sir, and see them burning the bones and the coffins. You see, they dig up the 'commonses' every twelve years (of course they dare not interfere with the 'privates'), and what they find left of them they burn."

The minute particulars of this exhumation and the subsequent cremation were described with a particularity of detail which I am sure I need not attempt; but the moral I draw from this little tale is, that if the poor are to be subjected to cremation at all, surely it would be at least as well to do it in the first instance, and to do it decently, as to postpone the operation for twelve years, and then allow it to be done anyhow !

To put the matter quite plainly: a corpse buried in 1862 is dug up to-day (in 1874) and burned, very properly; and apart from the miasmatic exhalations of the grave there is an end of it; but, admitting that the earth was virgin ground then, it has now been thoroughly tainted, and its disinfecting powers having been largely exhausted, a new corpse, forsooth, is placed in the old grave to tenant it for a new term !

This is a state of things deserving very serious consideration, for it is clear that it cannot go on without fatal results from a sanitary point of view, for such plans as these are only subterfuges—and, I submit, very im-

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proper ones—which serve to shelve the great and pressng question for a time.

EVIDENCE AS TO POLLUTION.

"We," say the reporters of the Sanitary Commission, "may safely rest the sanitary part of the case on the single fact, that the placing of the dead body in a grave and covering it with a few feet of earth does not prevent the gases generated by decomposition, together with putrescent matters which they hold in suspension, from penetrating the surrounding soil, and escaping into the air above and the water beneath."

After supporting this statement by illustrations of the enormous force exercised by gases of decomposition, in bursting open leaden coffins whence they issue without restraint, the reporters quote the evidence of Dr. Lyon Playfair to the following effect :—" I have examined," he says, "various churchyards and burial-grounds for the purpose of ascertaining whether the layer of earth above the bodies is sufficient to absorb the putrid gases evolved. The slightest inspection shows that they are not thoroughly absorbed by the soil lying over the bodies. I know several church[87]

yards from which most fetid smells are evolved; and gases with similar odour are emitted from the sides of sewers passing in the vicinity of churchyards, although they may be more than thirty feet from them."

. . . He goes on to estimate the amount of gases which issue from the graveyard, and estimates that for the 52,000 annual interments of the metropolis (a number which has already reached 80,000 in 1873, so rapid is the increase of population. The above was written in 1849), no less a quantity than 2,572,580 cubic feet of gases are emitted, "the whole of which, beyond what is absorbed by the soil, must pass into the water below or the atmosphere above." The foregoing is but one small item from the long list of illustrative cases proving the fact that no dead body is ever buried within the earth without polluting the soil, the water, and the air around and above it : the extent of the offence produced corresponding with the amount of decaying animal matter subjected to the process.

But "offence" only is proved; is the result not only disagreeable but injurious to the living? The report referred to gives notable examples

of the fatal influence of such effluvia when encountered in a concentrated form; one being that of two gravediggers who, in 1841, perished in descending into a grave in St. Botolph's Churchyard, Aldgate. Such are, however, extremely exceptional instances; but our reporter goes on to say that there is abundant evidence of the injurious action of these gases in a more diluted state, and cites the well-demonstrated fact that " cholera was unusually prevalent in the immediate neighbourhood of London graveyards." I cannot cite, on account of its length, a paragraph by Dr. Sutherland, attesting this fact; while the many pages detailing Dr. Milroy's inspection of numerous graveyards are filled with evidence which is quite conclusive, and describes scenes which must be read by those who desire further acquaintance with the subject.

Dr. Waller Lewis reports the mischievous results of breathing the pestiferous air of vaults, and the kind of illness produced by it. His long and elaborate report of the condition of these excavations beneath the churches of the metropolis, presents a marvellous view of the phenomena, which, ordinarily hidden in the grave, could be

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examined here, illustrating the many stages of decay; a condition which he describes as a "disgrace to any 'civilisation.'" But it may be said all this is changed now; intramural interment no longer exists; why produce these shocking records of the past?

Precisely because they enable us to know what it is which we have only banished to our suburban cemeteries; that we may be reminded that the process has not changed; that all this horrible decomposition, removed from our doors—although this will not long be the case, either at Kensal Green or Norwood, to say nothing of some other cemeteries—goes on as ever, and will one day be found in dangerous vicinity to our homes.

STATE OF COUNTRY CHURCHYARDS.

To return to our reporters; we have seen the condition of graveyards in towns, but it will not be undesirable to glance at the evidence relating to the condition of provincial churchyards, where, in the midst of a sparse population, the pure country air circulates with natural freedom numbers of such spots are mentioned—let one single example be "Cadoxton Churchyard, near Neath." Respecting this, the reporter writes :---"I do not know how otherwise to describe the state of this churchyard than by saying that it is truly and thoroughly abominable. The smell from it is revolting. I could distinctly perceive it in every one of the neighbouring houses which I visited, and in every one of these houses there have been cases of cholera or severe diarrhœa." This is not a selected specimen, some are even worse ; for further examples, see the report of Mr. Bowie, describing graveyards at Merthyr-Tydvil,

Hawick, Roxburghshire, Greenock, and other

places.—Sir H. Thompson.

At a vestry meeting at East and West Looe, Cornwall, the chairman, the Rev. H. Mayo, Vicar of Talland, described the state of the churchyard at Talland, which is the burial-place for West Looe. Over 8000 bodies had been interred, he said, in a little more than half an acre of ground. The usual depth of graves was about $4\frac{1}{2}$ feet deep, deeper graves being out of the question, owing to the friable nature of the soil, which was being continually turned over. There are no spaces between the graves, and whenever a person had to be buried the remains of others had of necessity to be disturbed. The sexton had a curious mode of determining whether or not he would be safe in opening any particular spot. He drove a long iron bar down to the requisite depth,

and if he met with no substantial obstacle the grave was dug. Only last week, the chairman said, he saw a woman beside a newly-opened grave in bitter distress, because the remains of one dear to her had been ruthlessly dug up and exposed. The repeated burials had raised the soil to such an extent that the church appeared to be in a pit, and the polluted atmosphere rendered the sacred edifice unfit for public service. There was constantly oozing from the graves in the higher part of the yard a horrible slime, which came on the floor of the belfry. He was obliged to keep disinfectants for the safety of the ringers. Fresh primroses, which were gathered and placed in the church for decoration on Easter Saturday, were almost black by the following evening, and a scientific friend had told him it was owing to the presence of sulphuretted hydrogen in the atmosphere, in such quantities as would endanger human life. On Ash Wednesday so foetid was the air in the church that the congregation was obliged to withdraw. Under these circumstances it is not surprising that Dr. Holland, the Government Inspector, is of opinion that something must be done to provide a cemetery for the united townships; the ratepayers, however, are determined to put off the evil day of spending money as long as possible, and a motion in favour of taking steps for the formation of a Burial Board was defeated .- Times, 1874.

STATE OF FOREIGN CEMETERIES.

A SPANISH CEMETERY .- There is a little walledin spot of sandy, rocky ground, some two miles outside the town from which I write-it is the cimenterio, where at last the bones of the Spanish peasant are laid in peace, waiting for the touch of that magic wand which one day is to make all things new. I entered that sacred ground a few nights since for the first time. Much as I had heard of the beauty of burialyards abroad, I looked at least for decency and cleanli-The first thing that struck me as I opened the ness. gate and took off my hat was the sickly, putrid smell, that well-nigh caused me to vomit. Close before me, on a rough hewn and unlettered stone, stood two tiny coffins; the lids (always of glass) were not screwed down. I pushed one aside, and there, beautiful even in death, were the rich tresses and pink cheeks of a child of some eight summers. The other was the coffin of an infant. Both bodies were wrapped, as is customary here, in coloured silver paper-for the clothes are burnt invariably, as they might be a temptation to some dishonest person to exhume the coffin from its shallow grave. Just then I looked down, and lo! the whole place was covered with human bones, lying on the surface. The evening breeze rose and fell, coming from the distant Sierra Morena, and wafted to my feet-it *clung around* my feet -a light loose mass of long and tangled hair. Stooping down to look, I saw that there was plenty of it about; on the gravestones, and around the dry thistles, which grew in abundance, it twined and clung. There was no

grass, no turf—only sand, and rocks peeping out. This then, was the end of life's brief drama here: the rude end of a still ruder life! I saw no tombstones worthy of the name. I asked the old gravedigger when would he bury the two little coffins? "Manana" (to-morrow), he answered; "but the place is so full, I hardly know where to scrape a hole."

Just then I heard the strains of martial music coming near. A civil funeral came, heralded by its band; and as the shades of evening fell one more coffin was deposited on the rude blocks of stone, to wait until the morrow's dawn.—From "Spanish Life and Character in the Interior during the Summer of 1873," in *Macmillan's Magazine*.

Similar unpleasant scenes may be witnessed in many of the fairest mountain districts of Europe, where, notwithstanding thousands of acres of Italy and Switzerland lying waste around, the bones are dug up and exposed for no other "reason" than "want of room"!

THE CEMETERIES OF PARIS.

This nuisance, in various ways bound up with superstition, is unseen in France, but, to any one accustomed to associate cemeteries with gardens more or less beautiful, the cemeteries of Paris are far from being agreeable. In these, human [94]

love does not fail in its testimony; but such are the evils of overcrowding, of still following plans less evidently wrong when the city was much smaller, and of the odious system of using the same ground for interments many times overthat the best aspects of these cemeteries are painful. Nothing more agreeable is to be seen than crowded stones, and whole acres covered with decaying blackened "immortelles." In the portions devoted to the graves of the rich, or of such as passed on their way to the grave by the paths of fame or glory, a little chapel or a ponderous tomb often prevents for a time the dust of individuals from mingling with the common clay of their neighbours, and the earth is not used merely as a deodorising medium, as in other parts of the same cemetery.

Where the poorer people bury their dead in this part of the graveyard may be seen a most revolting mode of sepulture. A very wide trench or fosse is cut, broad enough to hold two rows of coffins placed across it, and one hundred yards or so in length. Here they are rapidly stowed in one after another, close together, no earth between the coffins, and wherever the [95]

coffins, which are very fragile, happen to be short, so that a little space is left between the two rows, those of children are placed in lengthwise between them to economise space; the whole being done much as a workman would pack bricks together. This is the fosse commune, or grave of the humble class of people, who cannot afford to pay for the ground. The remains of these people thus dishonoured are not even allowed to rest in the grave, such as it is, but after the lapse of a short time their bones are dug up and the ground prepared for another "crop." A cutting, 13 to 14 feet wide, with the earth thrown up in high banks on either side, a priest standing at one part near a slope formed by the slight covering thrown over the buried of that day, and, frequently, a little crowd of mourners and friends, bearing a coffin. They hand it to the man in the bottom of the trench, who packs it beside the others without placing a particle of earth between; the priest says a few words, and sprinkles a few drops of water on the coffin and clay; some of the mourners weep, but are soon moved out by another little crowd, with its dead, and so on till the long and wide trench is full. They do not

even take the trouble to throw a little earth against the coffins last put in, but simply place a rough board against them for the night. Those places not paid for in perpetuity are completely cleared out, dug up, and used again after a few years. The wooden crosses, little headstones, and countless ornaments, are carted away or are thrown together in great heaps, the crosses and consumable parts being generally sent to the hospitals as The headstones from such a clearance fuel. (when not claimed in good time by their owners) go to make the drainage of a drive, or for some similar end. And yet these people, who cannot afford to pay for the ground in perpetuity, go on erecting inscribed headstones, and bringing often their little tokens of love, knowing well that a few years will sweep away these, and that afterwards they cannot even tell where is the dust of those that have been taken from them. One day, when in the Cemetery of Mont Parnasse, I saw the workmen making a new road, the bottom of which was formed of broken headstones, many of them bearing a date four years before. These had been placed on ground that had not been paid for in perpetuity, and were consequently

grubbed up at the end of a few years when the ground was required again for another series of these disgusting interments. The plan is, however, on the whole, more decent and less dangerous than the London one of piling many bodies one over the other, with a very little soil between each.

DISRESPECT AND INSULT TO THE DEAD.

A correspondent of the *Medical Times and* Gazette, writing from Bordeaux, says :---

The earth around one of the oldest churches . in Bordeaux seems to have something peculiarly antiseptic in its nature, so that the bodies buried during ages were converted into mummies. During some alterations at the beginning of this century these bodies were laid bare, and instead of being decently buried again, they were taken out of their resting-places and ranged upright, in a row, around a crypt under the bell-tower of the church of St. Michel. Here they constitute a disgusting and demoralising show, which is visited by crowds of people, and I am afraid that the clergy of the church are not ashamed to pocket the profits. A rough fellow, with a candle on the end of a stick, such as they have in wine-cellars, goes round as showman. He taps and thumps the bodies to show that they are perfectly sound, tough like leather trunks, and not the least brittle. "See here, gentlemen, is a very tall man; see how powerful his muscles must have been, and what excellent . [98]

calves he has now ! The next is the body of a young Remark the excellent preservation of her woman. chemise, though it was buried 400 years ago; and see ! it is trimmed with lace! The next, gentlemen, is a priest; you can see his soutane with the buttons on it. There is a woman with a dreadful chasm in her breast; she had a cancer. The next four are a family poisoned with mushrooms; observe the contortions on their faces from the *coliques* they suffered. See next a very old man with his wig still awry upon his pate. The next is a poor misérable that was buried alive. See how his head is turned to one side and the body half turned round, in the frantic effort to get out of the coffin, with his mouth open and gasping." (It is quite true that the attitude is singular, but it does not warrant the inference which the showman draws from it.) But enough of this disgusting mercenary exhibition of the human body in its lowest state of humiliation. If the guardians of consecrated sepulchres, in which people have paid an honest fee to be buried, are to dig them up and cart them off as in England, or make a show of them as here, why I can only say that "cremation" will gain a good many converts. Any one would prefer urn-burial to the chance of being thus made a spectacle. So good, too, it must be for the rising population, to take off the edge of any salutary horror they may feel at death and decay, or of reverence for the dead !

MALTA.—One of the chief sights of Malta is the crypt of the Franciscan Convent, in which are preserved the dried bodies of the monks. A monk, holding a lighted candle, went down before us into the vault or [99]

crypt, into which air and a small allowance of daylight are admitted by windows placed high up in the roof. All round the crypt, in niches, stood the bodies of former tenants of the convent, and a most ghastly sight they were. Each figure was dressed in a monk's habit and cowl, and was propped up by a wooden bar placed before the waist. Our guide held the light close to each figure, so that we might be able to see all the revolting details. In one niche the still corpulent figure of a monk lolled against the wooden bar which supported him: the jaw had sunk, and the tongue hung out of the mouth. In another a tall figure stood with its withered hands, like mouldy parchment, crossed in front of it; the brown beard still clung to the chin, but the eyes had decayed away, and the lips had shrunk back from the teeth, giving the face a dreadful leering expression, greatly at variance with the reverent attitude of the hands. The sight of these horrible figures made me a stronger believer than ever in the advisability of burning the dead. I fancy even the prejudice with which public opinion clings to the unhealthy and disgusting plan of endeavouring to preserve the bodies of the dead would receive a slight shake on having ocular demonstration of what very horrible things our mortal remains must become, even under the most favourable circumstances. The old heathen did very wisely in destroying, as far as possible, all disgusting associations with death; and surely there is much less shock to sentiment in having the ashes of those we have "loved and lost" carefully guarded in a cinerary urn, than knowing that the body is lying festering below, amid all the noxious abominations of churchyard earth.—Edith Osborn, Twelve Months in Southern Europe.

A correspondent of the *Times* writes from Alexandria:----

The other day, at Sakhara, I saw nine camels pacing down from the mummy pits to the bank of the river, laden with nets, in which were femora, tibia, and other bony bits of the human form, some two hundred weight in each net, on each side of the camel. Among the pits there were people busily engaged in searching out, sifting and sorting the bones which almost crust the ground. On inquiry I learned that the cargoes with which the camels were laden would be sent down to Alexandria, and thence be shipped to English manure manufacturers. They make excellent manure, I am told, particularly for Swedes and other turnips. The trade is brisk, and has been going on for years, and may go on for many more. It is a strange fate-to preserve one's skeleton for thousands of years in order that there may be fine Southdowns and Cheviots in a distant land !

ENGLISH VAULTS.—When it is necessary, as sometimes it must be, to disturb interments not older than the rest, but of a more ambitious character, the spectacles disclosed are such as to make one envy the pauper his quicker return to Dame Nature's all-teeming, all-receiving bosom. The family vaults of old parish churches are, as anybody may know, the scene of more grotesque incidents, more sacrilegious robberies, more horrible profaneness, than any spots above-ground, however open

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to the every-day world. Nuisances, as they certainly are, they suffer a Nemesis in the dishonour and contempt they often bring on the poor remains they were designed to protect and honour.—*Times*, Leading Article, 1874.

FUNERAL CEREMONY.

Our whole process of sepulture, with its wood and lead coffins (only necessitated by our custom of keeping the dead so long in our houses) and brick vaults, seems to me almost like an insult to God and a defiance of Nature's laws, endeavouring as we do—how vainly !—to impede or even prevent the carrying out of those laws.

And now, Sir, one word on a subject akin to the above, not necessarily combined with it as regards reform, though in my opinion they should go hand in hand. I allude to the processes and operations to which, dead and alive, we have to submit from the moment of death to that of placing the remains in the How long, I would ask, are we to be subjected grave. to the tyranny of custom and undertakers? How long are we to be smothered with flowing hatbands, scarves, and mourning cloaks, mobbed and overpowered by mutes, ostrich feathers, etc.? How long are we to continue to see the remains of some quiet old gentleman or lady, who perhaps never in his or her life sat behind anything more exalted than a small pony, drawn to their last home by four long-tailed black horses, or some one who, having lived unloved, dies unmourned, and is yet attended to his grave by half a dozen hired mourners at 5s. per day and their beer? Truly, it is all vanity

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and vexation of spirit—a mere mockery of woe; a prolongation and refining of misery to the really miserable, a source of ridicule and contempt to those who are actors or spectators; costly to all, far, far beyond its value; and ruinous to many; hateful, and an abomination to all; yet submitted to by all, because none have the moral courage to speak against it and act in defiance of it.

LORD ESSEX.

CREMATION, NATURE'S PROCESS.

It is easily demonstrable that cremation is nature's one only process of resolving lifeless matter into its elements, and that under any circumstances it is but a question whether this mode of consuming the lifeless human body shall occupy a longer or a shorter period. The sun is the source of all chemical change. All chemical action is, in fact, a form of cremation. Life itself is carried on by a process of combustion, and all human beings are carrying on the process within them from the cradle to the grave. When the fire which effects this result is extinguished, we should get rid of the body by nature's most rapid means of cremation and burn it. Nature gets rid of fermenting, corrupting matter by this means, and often indicates the consummation she is aiming at by spontaneous combustion.

If inhumation had been nature's best process of getting rid of dead animal and vegetable matter, we may depend upon it that the beasts would have instinctively buried their dead. But not only has she not implanted such an instinct, but she has developed birds and

savage beast to feed on garbage and carrion, and by this means to cremate what would otherwise prove noxious and pestilential, by the process of digestion. Fire was always considered to be a sacred element by the ancients. It was never allowed to expire in the temples, and it still burns as an emblem of purity and intelligence before the altar. Cremation was esteemed the acceptable mode of making an offering. "I will purge with fire," " I will not suffer my Holy One to see corruption," are familiar texts. Which, then, is the greater desecration of human remains, to burn them with fire or to give them over to the earth and to a long process of slow combustion and corruption-a corruption that one instinctively revolts at, and which is too horrible to be contemplated?

Cremation insures the purity of the atmosphere and of the springs, both of which are contaminated to a frightful and incalculable extent by the present system of interment, as we shall immediately show. Data shall be given which will put the state of things resulting from this system in its most appalling light. The registered deaths in the United Kingdom for 1874 were 699,747. Taking this as an approximate annual death registry for Great Britain, and allowing ten years for the complete resolution of the body under the present mode of interment-a period, it is believed, considerably below the mark-we have in the kingdom nearly seven millions of dead bodies lying in various stages of decomposition, and giving off noxious exhalations by means of percolation to the atmosphere, and by sending down contaminating matter to the subterranean reservoirs. Calculating

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for London alone, there were, in 1872, 76,634 deaths; there are therefore, at a rough estimate, nearly a million of human bodies festering in its immediate neighbourhood. Fortunately for the springs, some of the cemeteries are on clayey soils, and bodies interred in them are to a certain extent locked up in their clay vaults, only to be a source of mischief when they are opened. Some of these graves have been described, by one who is bound to know, as "very cesspools" of human remains, which give forth their noxious gases whenever broken into for the purpose of some fresh interment, as many a mourner has experienced to his cost. Bodies, on the other hand, which have been buried in sandy soils are more quickly resolved, say in some six or seven years. Interments in sandy soils, however, are more likely to endanger the health of the living, for by percolation the fluids contaminate the springs and the foul gases are exhaled into the atmosphere. If human remains were buried in quick lime their dissolution would be more rapidly effected; but on the slightest reflection it is perceived that this method is but a method of cremation. Why not, therefore, at once adopt the more direct, complete, and rapid progress of cremation, and ensure the purity of the air and water for the benefit of the living? Deference should be paid to custom and to prejudice. We would not interfere with the sanctity of the funeral rite, nor deprive the Church of its dues. It would be a good bargain if we could obtain the adoption of cremation at the price of double fees. It is quite possible to have cremation with precisely the same funeral ceremonies as at present .- W. Cave Thomas, Social Notes.

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REASONS AGAINST COFFINLESS BURIAL, OR THE "EARTH TO EARTH" SYSTEM.

Though strongly averse to half measures on a question of such vital and universal importance, I hail with pleasure Mr. Seymour Haden's proposals concerning reform in the undertaker department as a step in the right direction, but still am inclined to go deeper and dive to the root of the evil, by maintaining the importance of a more decided change.

In the first place, I would remark that one great argument in favour of cremation is that the present poisoning of our watercourses and springs would be for ever at an end so far as our cemeteries are concerned, but that if Mr. Seymour Haden's proposals should be adopted (admirable in intention as they are), still the evil would remain, and not only remain, but be aggravated doubly—ay, trebly.

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To illustrate my meaning, suppose a cemetery in which there are, say, for the sake of argument, 30 interments weekly. Under the present system, which is opposed to nature, and revolting in the extreme, the 30 bodies encased in the strong leaden or oaken prisons decompose slowly, taking years over that operation, and do not contaminate the surrounding earth or springs or vitiate the air in at all a sudden manner.

But turn now to the other picture; look at it in the new light, and suppose—horrible supposition—that the 30 bodies (in which the process of decomposition has already set in while above ground), encased in some light covering, as wickerwork for instance, about as durable when compared with lead or oak as paper is to sackcloth, are fast mingling with that powerful earth, and as speedily carrying poison to our springs and along our watercourses. A change is needed, and a change is demanded, but "Heaven defend us from our friends," if we are to supply the present slow contamination of our springs by one doubly more speedy and efficacious.

Secondly, by resolving all that was mortal of one we loved into our mother earth, by means of interment in slender cases instead of leaden or oaken coffins, we effect that operation in a far speedier manner, though with the necessary delay of some years. But what need is there of any delay? Why retard nature instead of rapidly furthering her ends? I appeal to the gentler sex, whose attention has now been drawn to this vital yet depressing subject, and ask them whether, for mock sentiment's sake, the fair human body should slowly and for years go through that dreadful process, when in an hour or two, at the expense of no real sentiment (I use the expression in its loftiest and genuine sense), all that nature demands is accomplished?

"I presume no one is likely to question Mr. Seymour Haden's contention that a dead body is more quickly and innocuously resolved into its elements and assimilated, in proportion as it is brought in closer proximity with the earth. This is common knowledge. What I had hoped to see stated was how far a process of burial without coffins is likely to be less injurious to the community. Will not noxious gases still arise, and would

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not water be polluted by percolation from a burialground? This seems the real question at issue. Before the body has decayed and been assimilated, is its condition not likely to be as injurious, or nearly so, as under the present system? In every burial-ground there would be dead bodies constantly brought in, and therefore decay would be constantly going on. I do not yet see how, unless people stop dying, the mere quickening of the decay will do away with all evil results, though it may modify their harmfulness. What I understand the advocates of cremation to argue is that under their system all poisonous influence would be avoided. Mr. Seymour Haden urges as a result of his system that the same ground might be used over and over again at frequent intervals. To my mind it would be more painful to dig up and destroy the graves of those we loved, than to preserve only their ashes."-" Y" in Times.

The question is, will the abolition of coffins always improve matters? The interment of the body in a mere shroud is no new idea, and under many a lych-gate in our old churchyards have such uncoffined corpses been borne. Indeed it has not died out yet. In county Kildare there resides an ancient family, the deceased members of which are always carried to the graveyard at Tully in this manner. It is considered in the neighbourhood to be an eccentric practice, but, nevertheless, the family observe this peculiarity, and have done so from time immemorial. There can be no doubt that in ancient times the practice was almost universal amongst those who buried their dead. It is hoped that by dis-

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pensing with the coffin the body will sooner return to the elements, about which there can be no question, provided that the earth in which it is interred be a suitable But that is not always the case, for under certain one. circumstances of humidity in the soil the muscular fibres of the body are, for instance, converted into adipocere, and this substance has been even sought for to use as cart-grease. Soils which keep out the atmospheric air are nearly always favourable to the generation of this substance. Here it need hardly be stated the earth is unsuitable for sepultural purposes. The ground chosen for a cemetery may not only be too damp and clayey, and impervious to air and moisture, but it may be of too open a character. Were we to bury in light gravelly soil of this class without coffins, it is not unlikely that the foul gases would levitate faster than they ought to do. From graves with plural interments the danger would be increased. We do not know exactly why coffins were originally resorted to, but it is just possible that our forefathers discovered that in certain soils the earlier and fouler stages of decomposition proceeded at too rapid a pace for the comfort of the living. The depurative power of the soil was not equal to the strain cast upon it.

This is not an altogether theoretical statement, for an eminent foreigner has noticed that this is the case in graveyards which he had visited. A coffin may, therefore, be a desirable thing under some circumstances. It is a fit question to consider also whether it would be safe to bury the body of a man who perished (for instance) from smallpox, without protecting it by a coffin. Mischief would be less likely to result after such a lapse of time as was found necessary to destroy the coffin. Here it is where the advantages of cremation appear, for with the body is burned up all disease germs whatsoever. The thing to consider is, how many persons die from contagious diseases the germs of which not even the earth can destroy? It is not so much a question of coffin or no coffin. When the Minchinhampton churchyard was disturbed, and the black earth carted to the gardens round about, the population was simply decimated; and the same would have occurred, one would imagine, even if the coffin earth had been absent.— *Sanitary Record.*

As a man of science, we think Mr. Haden has committed the very pardonable error of trying to claim too much for his method; and the confiding reader of the first part of his letter would be led to infer that organic matter is not only incapable of putrefaction, in the ordinary sense, if buried in the earth, but that it is incapable of working any harm. The ordinary reader could infer nothing else from the following paragraph, for instance, in which the high authority of Mr. Simon is invoked by Mr. Haden :—

"Nor, again, is the effect of the earth upon fluids in a state of putrescence at all less remarkable than upon solids, filtration through a few feet of common earth being sufficient to deprive the foulest water of⁴ any amount of animal or other putrid matter contained in it. We need go no further for a proof of this than to a certain pump in Bishopsgate Street which stands opposite the rails of the old churchyard there, and of which Mr. Simon, the distinguished medical officer of the Privy Council, gives us the following interesting account :---'The water from this well is perfectly bright, clear, and even brilliant; it has an agreeable soft taste, and is much esteemed by the inhabitants of the parish, though, as will be seen by the subjoined analysis, it is an exceedingly hard water . . . (yielding carbonates of lime and magnesia, sulphate of lime, chloride of sodium, nitrates of potash, soda, magnesia, and ammonia, silica, and phosphate of lime, but of organic matter none or scarcely a trace). The quantity of nitrates in this water is very remarkable. These salts are doubtless derived from the decomposition of animal matter in the adjacent Their presence, conjoined with the inconchurchyard. siderable quantity of organic matter which the water contains, illustrates in a very forcible manner the power that the earth possesses of depriving the water that percolates it of any animal matter it may hold in solution; and, moreover, shows in how complete and rapid a manner the process is effected. In this case the distance of the well from the churchyard is little more than the breadth of the footpath, and yet this short extent of intervening ground has, by virtue of the oxidising power of the earth, been sufficient wholly to decompose and render inoffensive the liquid animal matter that has oozed from the putrefying corpses in the churchyard."

The above, we are afraid, would be likely to cause a false impression, for it is a well-ascertained fact that the surest carrier and most fruitful nidus of zymotic contagion is this brilliant, enticing-looking water, charged

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with the nitrates which result from organic decomposition.

What, for example, was the history of the Broad Street pump which proved so fatal during the cholera epidemic of 1854? Was its water foul, thick, and stinking? Unfortunately not. It was the purest-looking and most enticing water to be found in the neighbourhood, and people came from a distance to get it. Yet there can be no doubt that it carried cholera to many who drank it; and its analysis showed that in composition it was very similar to the water near the graveyard in Bishopsgate Street alluded to by Mr. Haden. We are afraid Mr. Haden will have to confess that at present the only known method of making organic matter certainly harmless is the process of cremation.— *The Lancet*.

Speaking of the soil, Mr. Haden says :---

It is the most potent antiseptic known it is resolvent and re-formative as well; what under the influence of the air was putrefaction, in the earth is resolution; what was offensive becomes inoffensive; what was decay, a process of transmutation. Now the word "antiseptic" means that which opposes putrefaction. But it is not true either that the soil is the most potent antiseptic known, or, in a strict sense, that it is antiseptic at all. When a body is buried naked in the soil it putrefies, and its organic components are resolved, for the most part, into gaseous substances. Some of those substances are exceedingly fetid, just as they are when, under ordinary atmospheric conditions, they are evolved

from a body putrefying above ground. When, however, the gases are made to traverse a layer of soil several feet in depth, the fetid portion of them is oxidised by the atmospheric oxygen contained in the soil, and so converted into inodorous matter, such, for example, as carbolic acid, or, what is equivalent, it is slowly burnt. Combination with oxygen is promoted by the mechanical action of porous substances like soil. Again, every drop of rain water falling upon the ground and percolating the soil contains oxygen, which in that state of solution exerts a strong oxidising action. If it were true that the soil is even a potent antiseptic in the accepted sense of the word, then it would follow that the burial of a body naked in the soil would favour its preservation. But this is exactly what Mr. Haden does not desire, though it is certainly what would result from the substitution of wickerwork coffins for those of wood, if the soil were an antiseptic. If I correctly interpret Mr. Haden's letter, one reason for his objecting to the use of ordinary coffins is that what he calls the process of transmutation-an improper application of the word when applied to such changes as he refers to-is retarded. Now, if this be the case, the evolution of gases from a body enclosed in an ordinary coffin will continue for a much longer time than from a body buried naked in the soil; and, therefore, their oxidation in the former is, pro tanto, more likely to be complete than in the latter .- "X." in Times.

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Ancient Sepulchral Urn, Anglesea.

THE BISHOP OF MANCHESTER ON THE EVILS AND WASTE OF BURIAL, AND ON CREMATION.

The remarks of the Right Rev. the Lord Bishop of Manchester, made during the opening of the Social Science Congress at Manchester, October 1, 1879, are worthy of being reproduced here. He said :---

I now draw attention to the provision made in our cities for interment of the dead. On Friday last I consecrated a portion of a new cemetery, provided by the Corporation on the south side of Manchester, fully five miles from the centre of the city, containing 97 acres, at a cost, including the land, the fencing, the laying out, and the inevitable three or four chapels, of £100,000. It is very beautiful; but two thoughts occurred to me as I was consecrating the portion of it assigned to those who desire to be buried according to the rites of the Church of England. In the first place, this is a long distance for the poor to bring their dead; in the second place, here is another hundred acres of land withdrawn from the food-producing area of the country for ever. I do not think we always observe or calculate how much this area is being gradually contracted by the infinite number of works and processes, requiring space, but not producing food, which are encroaching upon it more and more every year; nor to what extent the power of the country to support its population is reduced thereby. " Fam pauca aratro jugera regiæ Moles relinquent." In times of peace and plenty we can afford to be indifferent to this consideration; but I can easily conceive the existence of circumstances which would make this a very serious condition indeed. I feel convinced that before long we shall have to face this problem, "How to bury our dead out of our sight" more practically and more seriously than we have hitherto done. In the same sense in which the "Sabbath was made for man, not man for the Sabbath," I hold that the earth was made not for the dead, but for the living. No intelligent faith can suppose that any Christian doctrine is affected by the manner in which, or the time in which, this mortal body of ours crumbles into dust and sees corruption. I admit that my instincts and sentiments-the result, however, probably of association more than of anything else-are somewhat revolted by the idea of cremation. But they are perhaps illogical and unreasonable sentiments. Sir Henry Thompson has stated the case in a calm and

thoughtful paper, which shows how little ground there is for the somewhat morbid sentiments that indeed prevail in relation to the whole subject of the interment of the dead. All I call attention to is that it is a subject that will have to be seriously considered before long. Cemeteries are becoming not only a difficulty, an expense, and an inconvenience, but an actual danger.


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TURKISH CEMETERIES.

The following has been sent me, since the passing of the foregoing pages through the press, by Mr. C. W. Quin, who recently lived some years at Constantinople :—

It is a generally accepted but erroneous notion, that the Turks take especial pains to keep the graves of their dead free from desecration. Turkish cemeteries are simply picturesque cypress woods in all their natural wildness, not the slightest effort being made either to cultivate or even level them. They are generally unenclosed, except when they are attached to mosques, or are surrounded by houses, as in the case of the cemetery of the Dancing Dervishes in Pera, where the famous French renegade, Ahmed Pasha, the Comte de Bonneval, is buried. There are two large cemeteries in Pera, known respectively as the Grand and the Petit Champs des Morts. They are both being gradually eaten up by the encroachments of the builders and the public. It is a painful sight for a European to see human bones protruding from graves which have been scratched up by the numberless herds of wild dogs. The Turks bury their bodies without coffins; a single parish coffin, so to speak, being used to convey the body to the grave. The body is placed in the earth in its "habit as it lived." The Turkish mode of burial is about the most contrary to sanitary rules that could have been devised. The graves are very shallow, sometimes not more than a foot in depth, the reason for this being that most old-fashioned

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Turks still retain the superstition that the soul does not leave the body until some time after burial, when it is drawn from the grave by the Angel of Death, who would find great difficulty in performing his task if the body was buried too deeply. The consequence of this is, that in warm weather a horrible stench arises from the cemeteries. The walk from the Golden Horn to the Sea of Marmora, outside the famous Byzantine land walls, is replete with historical associations at every step of the seven miles; but it can only be taken with comfort in cool weather, the stench from the great cemetery outside the Adrianople Gate being too great to be borne. Frightful incidents are told of dogs and wolves rifling the graves of the dead; and during the severe winter of 1874-75 two wolves were found in the English cemetery at Pancaldi, outside Pera, scratching at the newly made grave of a respected member of the English colony. They had already scratched their way down to the coffin.



Iridescent Glass Cinerary Urn from Collection in British Museum.

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DESECRATION OF THE WHITFIELD BURIAL-GROUND.

Here is an instance, reported in the daily papers during the last few weeks, of the fate of burial-grounds in London :—

Nathan Woolfe Jacobson, of 311 and 312 Oxford Street, was on Wednesday summoned by William Rouch, inspector of nuisances for the parish of St. Pancras, for having on 30th March removed the remains of human bodies from a portion of a disused-burial ground on the north side of the Congregational Chapel, formerly George Whitfield's Tabernacle, in Tottenham Court Road, without a licence, contrary to the provisions of the Burials Acts. These proceedings were instituted by the vestry in the interests of the public health as well as of public decency. The Rev. George Whitfield in 1756 founded a chapel or tabernacle, with a piece of ground of about half an acre attached to it as a buryingground, and held the land upon lease. The ground was not consecrated. The lease expired in 1827, and then the ground was closed for some three years. In 1831, however, the trustees of the chapel purchased the copyhold, but in order to secure the money borrowed they mortgaged the land to a Mr. Tudor, who ultimately foreclosed, and in 1862, the land being sold by order of the Court of Chancery, the defendant became the purchaser of two-thirds of it. Now, the first interment in the ground had taken place on November 19, 1756, and the last in October 1853. The ground was used

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for ninety-seven years as a place of interment, and 30,000 bodies were interred in the half-acre of ground during that time. The defendant appeared to have purchased it with a view to some building speculation, and in 1863 he began to move some of the bodies from one part of the ground to the other. He was immediately summoned to that court, and fined by Mr. Knox \pounds 5, and costs. He then desisted, and allowed the ground to become the receptacle of refuse, until it became such a nuisance that the sanitary authorities proceeded to fence it in with the view of making ornamental grounds. Thereupon the defendant filed a bill in Chancery, and in February of the present year succeeded in obtaining a decree restraining them from Having obtained that decree in his interference. favour he had now resumed his attempt to excavate the ground and to disturb the remains of the dead. He thought the magistrate, after hearing the evidence, would consider the defendant's proceedings to be most indecent, and to call for his intervention.

Mr. William Rouch, inspector of nuisances, said he knew Whitfield's burial-ground, the area of which is about half an acre. He had known it thirty years. It had been closed about 1853. It was thickly studded with graves in every part, and was in a populous neighbourhood. On Tuesday he went to the ground, which was then enclosed by a high hoarding. He was refused admission, but subsequently was admitted by an order from the magistrate. He found men at work excavating the ground, and there were horses and carts being loaded. Men were digging, and earth and human bones were being dug out together. He saw parts of human skulls, rib bones, leg bones, shoulder bones, etc. There were decayed pieces of wood, which had formed parts of coffins. There were about a bushel of human bones in a box near the carts which were being loaded, and in a trench he found about a cartload of human bones, which had been previously dug out; there was only a sprinkling of earth over them. The workmen said they had no appointed shoot for the mould, and that they took it to Haverstock Hill or elsewhere. He had visited the place again on Wednesday and found the men still at work. Four horses and carts were being loaded, and the mould taken away through the streets.

Mr. Harston argued that the burial-place not being consecrated it did not come within the Act, as there had been no interments there since 1853, and the Act was not passed till 1857. It had been so decided by the Court of Queen's Bench in the case of *Foster and Dodd*, and when this matter was recently before the Master of the Rolls he said there was nothing whatever to prevent the defendant building on it. The point had been fought out over and over again, and had always ended in one way. I can assure you we do not wish to make any scandal. Mr. Newton—But it is a scandal. Mr. Harston—You must remember the Bank of England is built on an ancient burying-ground. Mr. Newton—I know nothing of that. Still it is a scandal that this thing should be permitted. [I2I]

VIOLATION OF THE GRAVES AT ST. DENIS.

The other day I came across a somewhat rare little brochure,—an account of the violation of the royal sepulchres of St. Denis during the first French Revolution :—

The work of destruction and sacrilege commenced early in October 1793, and lasted all the month. The first corpse found was that of Henri IV., the once beloved Henri de Navarre. Some curiosity, if not affection, still seems to have lingered even among those patriots who had constituted themselves body-snatchers, and the Bearnais was propped up against the church wall in his shroud, and became quite an attraction for the crowd. One of the Republican Guards even condescended to cut off the king's gray, upturned moustache, and place it on his lip; another removed the beard, which he declared he would keep as a relic. After these marks of attention were exhausted, the body was thrown into a huge pit filled with quicklime, into which successively followed those of its ancestors and descendants.

On the next day the corpses of Henri IV.'s wife, Marie de Medecis, that of his son Louis XIII., and that of his grandson Louis XIV. were added to this. The body of the Sun King (as Louis XIV.'s courtiers loved to call him) was as "black as ink." What a contrast to that majestic, bewigged head, as we see it on the canvas of Le Brun and Rigault, must not that poor blackened skull have been! The body [122]

of the Grand Monarch's wife and that of his son the Dauphin (father of Louis XV.) followed. All these, and especially the latter, were in a state of shocking decay.

The following day poor harmless Marie Leczinska's body was torn from its resting-place, as also were those of the "Grand Dauphin," the Duke of Burgundy and his wife, and several other princes and princesses of the same race, including three daughters of Louis XV. All these were in a state of terrible decomposition, and in spite of the use of gunpowder and vinegar the stench was so great that many of the workmen were seized with fever, and others had to continue the gruesome work. By a strange chance, on the very morning that Marie Antoinette's sufferings came to an end on the Place de la Révolution, the body of another unfortunate queen again saw the light of day-it was on the 16th of October that the body of our Queen Henrietta Maria, who had died in 1669, was taken from its coffin and added to the ghastly heap in the "ditch of the Valois," as the pit into which these royal remains were hurled was called ; that of her daughter, the once "Belle Henriette," came next; and then in quick succession the bodies of Philippe d'Orleans; that of his son, the notorious Regent; of his daughter, the no less notorious Duchesse de Berri; of her husband, and half-a-dozen infants of the same family. On the same day a coffin was cautiously opened. This was found at the entrance of the royal vault (the customary position for that containing the latest deceased king), and contained the remains of Louis "le bien aimé." No wonder that the body-snatchers hesitated

before withdrawing the corpse from its enclosure, for it was remembered that Louis had perished of a most terrible illness, and that an undertaker had died in consequence of placing the already pestilent corpse in its coffin. Consequently, it was only on the brink of the ditch that the body was removed and hastily rolled over the edge; but not without the precaution of discharging guns and burning much powder, and even then the air was terribly tainted far and near.

I turn the page and find that we are only in the thick of all these dead men's bones and uncleanness, for the Republican Resurrectionists began by the Bourbons and had still to disentomb all the Valois, and further back, up to the Capetian line, and are not content until the almost legendary remains of Dagobert and Madame Dagobert reappear. Suffice it to add, that after Louis the Well-Beloved had been disposed of, came in succession, like the line of royal ghosts seen by Macbeth, Charles V., who died in 1380, whose body was one of the few well preserved, and was arrayed in royal robes, with a gilt crown and sceptre, still bright; that of his wife, Jeanne de Bourbon, who still held in her bony hand a decayed distaff of wood; Charles VI. with his Queen, Isabeau de Bavière; Charles VII. and his wife, Marie d'Anjou; and then Blanche de Navarre, who died in 1391. Charles VIII., of whom nothing but dust remained, Henri II., Catherine de Medecis, Charles IX., and Henri III. were disinterred on the morning of the 18th; "after the workmen's dinner," Louis XII. and his queen ; and among other less interesting royal remains, the bones of Hugues, Comte de Paris,

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father of Hugues Capet. And so on the work went, till one tires even of the details of the preservation of this or that king and queen. Can anything be more shocking than to know that all the horrors of decay and decomposition will remain even after two or three centuries have passed over the lifeless form, and that, supposing one has the ill-luck to be thus coffined and one's body removed, "a black fluid, emitting a noxious smell," will run from out our last home, as was the case with those Royal remains during that hot summer month at St. Denis in 1793?— LORD RONALD GOWER in *Vanity Fair*.

Who, after reading such instances, can doubt that it is infinitely better that the dead should be quickly resolved into white and odourless ashes, than subjected to insult and degradation even much less shocking than the cases mentioned in the foregoing pages ? Some pretend that they do not care what becomes of their bodies after death, but a healthier feeling would make us determine that all such horrors, as disgraceful to the living as disrespectful to the dead, should be impossible now and for ever.

A CONTRAST: BURIALS IN CHINA AND JAPAN.

The following note has been sent me by Mr. Maries, who has recently spent several years in China and Japan. It throws some light on the question treated of in the previous pages, in the comparison between two populous countries, one practising burial and the other cremation :—

In the country, near Shanghai, the land is a continuous graveyard. Everywhere, almost in every field, are graves in mounds of earth, or coffins standing exposed on four legs. I believe these remain for some time exposed, and are afterwards buried or set on the ground, and a large mound piled over them, 2 feet to 5 feet high and 7 feet through. All round the walls of Ichang is this graveyard, notwithstanding that the land for agricultural purposes is valuable, and there is a dense population. There are always dozens of dogs in these cemeteries. I saw once, at Ichang, these brutes devouring the body of a boy, who had been buried a day or two before in a coffin not sufficiently strong, and with only a few stones put on the top of the lid. Many such horrible sights are seen by travellers in various parts of China.

I saw, just outside the town of Chinkiang, on the river Yangtse, about twenty coffins stacked on the top of each other, the coffins being only a few rough boards nailed together. The place was too horrible for anyone

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to go near. There also are low hills of considerable extent, covered with graves of men who fell in the Taiping rebellion, each marked by a little mound of earth, which is covered with rough grass; no cultivation is attempted in the place. There are also old Mandarins' or high officials' graves in this neighbourhood, which take up more space. The Ming tombs at Nangkin, where monster stone figures are set up on each side the road leading to the tombs may be mentioned. There are smaller ones at the old warriors' graves, with men, horses, elephants, lions, etc., in stone, guarding the path to the graves of the old rulers or warriors, and often taking up an enormous space of valuable land that is uncultivated now, and the home of pheasants and hog-deer. At Ichang I noticed a graveyard of several miles extent, and of the most valuable land for agriculture. Not a tree or bush was to be seen, of any size, except at a temple.

My impressions of China are the reverse of the pleasant ones I have of Japan. It is, in fact, so far as I saw it, a sad and unpleasant country, and is to a great extent made so by the very inefficient and disgusting modes of burial one is there compelled to witness in travelling by the roadsides or in the fields. It is also a most costly plan to the country, as it prevents much of the choicest land in it from producing food, or beautifying the land near the cities with trees or parks.

The Japanese, on the contrary, burn their dead in all cases, and while they thus save their land for the use or pleasure of the living, their cemeteries are really beautiful places. Sometimes they are placed in a lovely valley, shaded by enormous pines, and sometimes on little lawns or ledges on hillsides. Usually each family using the cemetery has a small square of ground allotted to it in which the ashes are buried.

There is, of course, a great saving of land as compared with the Chinese, or even with our own method. Over the buried ashes a stone, often beautifully cut, containing the name of the family or individual, while vases for flowers and lamps are frequently seen near the graves in these beautiful and in no way offensive cemeteries. The evergreen bushes used to plant in these cemeteries are Ilicium religiosum, the Tea-shrub, Camellias, and Euryia japonica. I have seen specimens of the Maiden Hair tree or Ghinko (Salisburia) in these cemeteries. In the principal ones, too, may be seen noble specimens of the Umbrella pine and other This desirable result is attained notwithrare trees. standing the fact that the Japanese mode of cremation is a very imperfect one, much more so than it need be. I speak of what I saw in villages; but in some of the cities a better system is in use. The Japanese are firmly persuaded of the merits of their system.

We have now had some evidence of the great need for burial reform, and of the state, so often shameful, of cemeteries in many different lands. The ideas set forth in the first part of this book are printed in the hope that all who cherish the memory of their dead may be led to consider the many evils of the present system, and that they may help to save us from the danger, the horror, and the degradation of the grave. It is for the most advanced and cultivated of the great nations of the West to lead the way in this essential reform, called for in the interest of the Living; of beauty of open spaces in cities; respect for the memory of the Dead, of Art, and of natural beauty.



Glass Urn, Sardinia (Henderson Collection, British Museum).

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APPENDIX II.

AN ACCOUNT OF THE FIRST CREMATIONS IN ENGLAND IN MODERN TIMES.

ONE of the few present at these, I say something of them here, as the history of a separate and initial act of this kind may serve to throw light on the present state of burial in England, and may be helpful to those who wish to escape from its sickening horrors, even before there are public or recognised aids to doing so.

On Sunday evening, the 8th October 1882, the body of Mrs. Hanham, wife of Captain Hanham, was reduced to ashes by fire at Manston House, in the county of Dorset. The following evening, the 9th of October, the body of Lady Hanham, wife of the late Sir James Hanham, Bart., of Dean's Court, in that county, and mother of Captain Hanham, was also decomposed by Mrs. Hanham died in July 1876 of cancer; Lady fire. Hanham in June 1877, in her ninetieth year. Mrs. Hanham expressed to her husband and various friends her wish that her body should not be buried, but reduced to ashes in this manner, and Lady Hanham desired that hers should share the same lot as that of Mrs. Hanham. Captain Hanham, her only surviving son, respecting these wishes, determined to carry them out in the face of all difficulties. These are numerous, owing to the fact that no public body exists in this kingdom which carries out cremation, and those who desire to execute the wishes of their relations in such a case were driven to seek aid in foreign countries at an amount of trouble and expense which made it impossible for most.

The cremations were carried out in a simple and inexpensive furnace, not only without any nuisance to the neighbourhood, but without the slightest unpleasantness to those who stood within two feet of the white flame which promptly resolved the bodies to their harmless Though effected under many difficulties, not elements. one of which need occur if the practice were organised amongst us, the act was well and quickly done in each instance, nothing being left but perfectly calcined bones. The fragments of the larger ones looked like frosted silver, and they broke at a touch. The ashes of each body were collected with great care and placed in a large china bowl, in which they will remain until urns of an approved form are ready; then they will be moved to the mausoleum among the trees on the lawn.

Compared with the contents of such Roman and other urns as I have seen, the ashes are greater in amount and much more perfectly preserved. This was owing to complete and quick combustion, and to the body being kept from direct contact with the fire. Every part of the bony structure is represented in the ashes, but without any definite form which would make them recognisable to any but experts. In size the remains vary from pieces $1\frac{1}{2}$ inch long to ashes and fine dust.

Each body was, since decease (five and six years ago

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respectively), encased in a strong elm coffin, and that in a lead one. The lead was only adopted because the bodies were placed on a stand in the mausoleum, and to prevent the violation of sanitary laws. The coffins, lead and all, were placed in the furnace on firebrick and iron plates, which allowed the flames to play freely up, but prevented the ashes from falling into the furnace below. Thus the shells had to be consumed before the bodies, compelling the use of greater heat and longer time than usual, so adding another obstacle. The lead soon ran through the furnace into the ashpits, and the white flames played round the strong elm shell, until that fell at white heat over the body, of which, about one hour afterwards, only the ashes remained.

The crematorium was made in a simple and effective manner by Mr. Richards of Wincanton in Somerset, whose hands were, however, tied by the conditions first laid down to him. The plan was to burn the bodies in the vault of the mausoleum, so as to avoid removing them, and also for the sake of avoiding idle curiosity or interference, but the lower chamber was only 12 feet in diameter, thus making a long side opening necessary instead of an end one, and weakening the contrivance in various ways. But before the time of trial approached it was feared that the heat and other difficulties would make the operation doubtful, and therefore it was determined to erect the furnace in an orchard adjoining the lawn, surrounded by a temporary building. In this success was complete.

The furnace, such as it was, however, deserves a few words as the first ever used in England, and one which, though rude, did its work thoroughly. The furnace was rectangular in shape, the body of brickwork 8 feet long, 7 feet 6 inches high, and 4 feet 6 inches in breadth. The two ends and back were carried up in solid brickwork, the other side or front being where all entries and firing were effected. On the ground was the ashpit, which is cleared by four firebrick doors in a row. Immediately above the ashpit is the grate which is fed by five holes cast in



THE MAUSOLEUM AT MANSTON.

fireclay, and supported on the brickwork in which the ashpit doors are set. These holes are fitted with stoppers, being firebricks with iron handles about 9 inches square and 2 inches thick. Along the top of these upper holes rests a vertical cast-iron frame, 7 feet long and 2 feet high, which forms the entrance to the consuming chamber. Directly above the fire are firebrick arches about 6 inches apart and a foot wide, the tops of which are level with the bottom portion of the iron frame. To fill these spaces

between these arches flat iron plates are placed, resting one end on the level of the lower part of the entrance to the consuming chamber, the other in the brickwork opposite. Both arches and plates are across the grate. The flames come up between the arches and curl round the iron plates freely, while the ashes could not fall to the fire below. The consuming chamber is arched over, and three holes fitted with dampers cut in the top at equal intervals. These are the communication with the flue which runs along the whole length of the top and discharges the smoke into the chimney raised on a brick platform of its own, and joining at the back of the building. The chimney is wrought-iron, 16 feet high and 14 in diameter, the first 8 feet being lined with clay pipes. It was found that ironwork in the furnace anywhere was a mistake, the iron plates being consumed by the intense heat. It would be easy to replace such ironwork as was used with fireclay plates.

As an instance of the harmless way in which the process may be carried out, it may be stated that the female domestics of the house came out in the dark on both occasions, stood around, and even looked into the furnace, without any unpleasant sensations. If in so simple a beginning, in an untried and rudely put together apparatus, such success is attained, it is needless to say that the ceremony might easily be made the most beautiful and inoffensive of all.

Among the few who witnessed the process in each case were Dr. Comyns Leach, Medical Officer of Health for the Sturminster District; Captain Hanham, husband of Mrs. Hanham, and youngest son of Lady Hanham; Mr. J. C. Swinburne, son by her first hushand of Mrs. Hanham; Fleet-Surgeon Edney; Messrs. Stickland, Swetman, Day, and Harris, trusted helpers, who assisted in carrying out the work; and the writer. Mr. Spencer Wells, the distinguished Surgeon and President of the Royal College of Surgeons, who took much interest in the matter, was to have been present, but was prevented by important operations. Mr. Wells is a hearty advocate of the practice of cremation. He attended Mrs. Hanham, and knew her wishes, and has read a paper on cremation before the British Medical Association, at which the following address to the Home Secretary was adopted, at Mr. Wells' suggestion :—

"We, the undersigned members of the British Medical Association assembled at Cambridge, disapprove the present custom of burying the dead, and desire to substitute some mode which shall rapidly resolve the body into its component elements by a process which cannot offend the living, and may render the remains absolutely innocuous. Until some better mode is devised, we desire to promote that usually known as cremation. As this process can now be carried out without anything approaching to nuisance, and as it is not illegal, we trust the Government will not oppose the practice, when convinced that proper regulations are observed, and that ampler guarantees of death having occurred from natural causes are obtained than are now required for burial."

It is as well to tell here, in Captain Hanham's own words, the origin of the wish to avoid the common graveyard in the cases in question.

"Manston House is situated on the bank of the river

Stour, and its grounds surround the church and its graveyard. The river Stour frequently overflows its banks, and on some such occasions the water is within 8 inches or a foot of the surface of the graveyard. This graveyard, having been in use some hundreds of years, is full of bones. My predecessor lowered the graveyard considerably, throwing the earth, etc., over the grounds of Manston House, and filling up a depression once a pond. When I first resided in Manston, the rector was the Rev. G. F. St. John (he was rector of the parish forty-seven years). Soon after, 1852 or 1853, the sexton having prepared an open grave for the reception of a body which was to be buried in the afternoon, I observed a dealer in rags and bones named 'Porter' in the graveyard, having a bag on his shoulder. Mentioning this circumstance to the rector, asking him how it was that a relative of Porter's was to be buried in the parish, as they did not belong to it, he became excited, saying, 'That rascal there again. He has been there many times before with the object of collecting the bones thrown out of the grave, which he sells !'

"I made a voyage to the Pacific in the yacht Themis in 1864 returning in 1866. Whilst at Monte Video, a friend residing there asked me to attend a funeral. I did so, and there saw the body of the deceased person borne to a cemetery, the procession halting opposite a kind of catacomb. Here the lid was removed, the body of deceased exposed dressed in his usual clothes. A quantity of quicklime was then thrown into the coffin, lid replaced, and the whole thing hoisted up in a kind of pigeon hole. Asking my friend what was the next move with these remains, he took me to another part of the cemetery, where he showed me a most disgusting sight, namely, thousands of bones, debris of coffins, etc., heaped up inside a boarding or species of barn, which he told me was the resting-place when the pigeon holes were cleared out, which occurred when the supply for room in them exceeded the demand. I believe

a register was kept of the dates, and the oldest inhabitants of the holes were the first made to leave.

"I left the island of Tahiti, having previously visited the islands of Hawaii, and on the 6th January 1866 my wife, Josephine Ida Dodson Hanham, having been an invalid for many years, died not far from the island of Oparo, in the Pacific Ocean, about 4000 miles from Valparaiso, which was to be our next port. The crew did not like a voyage with a dead body on board, but on my informing them that they might leave the yacht then or at any other time or place, but that certainly I and the body would return in the yacht, I heard no more on the point. The body was landed at Weymouth in September 1866, conveyed to Manston, and borne to the vault by the crew, my only child and the late Mr. Mark Philips, her guardian, being My wife had often expressed her desire that her present. remains should be near Manston House and the garden she loved, but had a dislike to the graveyard on account of its saturation with water. Bearing this in mind, I purchased from the rector for \pounds 10 the right to construct a vault outside but adjoining my private aisle in the church. This vault was so well made that, on testing it, it held water, and therefore it was assumed it would keep out water. But when my only child, Maud Phelips Agatha, died in 1869, the vault was reopened, when there was found 19 in. of water which had percolated through the arch of the vault. The water was bailed out, and my little girl placed by her mother's side. I then recalled vividly a wish my late wife once expressed in Hawaii: "When I die I wish I could be burnt instead of buried." It was, alas ! too late, as the body was in the parish graveyard, and in the water to which she had such a repugnance.

"In January 7, 1867, my old friend, the Rev. George Frederick St. John, died in my arms in this house of typhoid fever, he having requested to be moved here that he might be close to me. Many years since a vault had been pre-

pared for him in the graveyard at Manston by Lady Shelley at the time of the decease of her first husband the Hon. Charles St. John, brother of my friend. Round the vault are high iron railings, and Lady Shelley has from the demise of her first husband to the present time charged my gardener to look after the flowers and creepers in his spare time. Here is always to be seen some flower every day in the year. To prevent the destruction of these, an excavation, about 9 feet square and about 2 or 4 feet deep, was made outside the vault, so that a hole might be made under the plinth (stone work) on which the iron railings rested, to allow the coffin to be slid inside the vault. The day on which he was buried the snow fell heavily, and rain the night before. The water rose rapidly in the vault, which was at a greater depth than the external hole, and as the coffin was pushed into its place it went down with a splash into the deep and foul water !

" I married my last wife, the widow of the late Major John Swinburne, in 1868. What I have narrated here was on more than one occasion a subject of conversation, and she made me promise soon after we married that I would have her body cremated if I survived her, she promising to do the same for me should I die first. As she was some eight years younger than myself, and apparently enjoying the best of health, I little thought the active part would fall to me, and I gave her a list of names of those I thought would assist her at the right time. Fate decided otherwise. A fatal disease having been discovered in February 1876, she died in July following at Brighton. I at once resolved that nothing I could do to keep my promise should be left undone. Feeling if the body were once buried I should lose my control over it, and being desirous at the same time that in all my acts I would obey the law and give no rightful cause of offence to any one, I had the body placed in a wooden shell and that in lead, Within forty-eight hours the body was at Manston, and

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placed under a canopy in the conservatory. As I knew I should have to leave home before all I desired could be effected, and not thinking this plan secure, I set to work to erect a mausoleum as a temporary resting-place until cremation, and afterwards for the urns. The completion of this occupied the greater part of a twelvemonth, and within a few days of its finish, my mother, who was residing with me, died. She was much attached to my late wife, and requested me to promise that her body should share the same lot as Mrs. Hanham's and my own, and she watched with great interest the erection of the mausoleum. That such was her wish was known to Dr. Comyns Leach, who witnessed the consummation of that wish. At her death her body was placed in an elm coffin, and again in the inevitable lead. After a deposit for a few days in the conservatory, by the side of Mrs. Hanham, both were conveyed to the mausoleum, where they rested until Sunday evening, 8th October. During those intervening six years I was much occupied in seeking means to effect our object. I sought the secretary of a society, called the Cremation Society, which I heard had erected the much to be desired crematory at Woking. It would be wearisome to recount all my interviews and disappointments in this quarter. At one time all was arranged, and then it could not be done just yet; then it would be all ready in three weeks if I would arrange for conveyance to a station; but, though strong iron-bound cases were made and I was ready, other obstacles arose. Then I applied to the secretary of the society asking the plain question, Could an apparatus be erected at my own cost in the mausoleum? to this application, up to this date, I have not received a reply.

"In the meantime I had a friend who went to Milan, who brought such a picture of the difficulties, apparently insurmountable in the way of foreigners desiring urn burial. Among others, a written license from H.M. Secretary of State for this country was said to be needed to [139]

be shown to the authorities in Italy before the bodies could be landed; and the tedious formalities to be gone through after arrival and disembarkation in that country, the difficulties, delays, etc., on its passage from one stage to another previous to arrival at Milan, then the various formalities to be gone through to various persons, made me abandon this as hopeless and above my strength. An American friend, Dr. Elsberg of New York, not only kindly made these inquiries at Milan for me, but also got all the information he could from the United States of America, where I made sure at one time the object could be effected. Then he informed me that a resolution had lately been adopted at the crematory not to permit the cremation of aliens. Knowing the lives of the strongest are limited, and I being in feeble health, anticipated the inevitable hour would arrive with my promise unfulfilled, and therefore decided to take the matter into my own hands. I sought the aid of one who has always been successful in his work, and engaged him to design the apparatus which has fulfilled my most sanguine expectations. I only hope that those I leave behind, who have promised to dispose of my body in the way I approve of, may not have a tithe of the difficulty that I had to encounter."

With the view of avoiding some of the preliminary difficulties, the bodies were not buried, but kept in a strongly-built mausoleum of good design in the grounds. It was essential to the control of the final operation that the bodies should not be buried, and this led to the erection of a mausoleum. The building, though not large, is of the most massive and enduring character, the solid walls of the vault being 3 feet and those of the superstructure 2 feet thick, composed, as are also the ceiling and floor of the vault and the principal dome, of cement concrete. The concrete is formed of Portland cement from Portsmouth, gauged with washed grit from Moreton, and mixed with flint gravel found in the neighbourhood. This gravel was washed five times, upon a platform built out into the river near at hand, until it was free from all impurity; the result being a conglomerate, hard and imperishable as granite, and perfectly impervious to wet.

Owing to the proximity of the river Stour, and the pervious nature of the gravel soil, the site of the mauso-



MANSTON HOUSE.

leum is liable not only to be flooded on the surface, but also to be saturated by any rising of the water; and it therefore required some ingenuity so to construct the floor of the vault as to resist the combined action of damp and hydraulic pressure. The floor is an invert, or reversed dome, the outer segment of which consists of 9 inches of brickwork in cement; within this, hard impervious tiles are bedded in cement; then again brickwork in cement, and the hollow of the invert brought up [I4I]

solid and level with cement concrete, upon which is spread the smooth-trowelled cement floor. The ceiling of the vault is a segmental arch, at once light and strong, not more than 4 inches thick, but composed of plain tiles bedded solid in cement, and carefully bonded, while the haunches are filled up solid with concrete. Thus it not only forms a secure support for the tiled floor of the mausoleum above it, but is also capable of carrying a much heavier weight than will ever be placed upon it, and is at the same time both fire and water proof. Provision was made for the efficient ventilation of the lower vault by glazed stoneware pipe flues built in the solid walls, and communicating with the upper air by means of terra-cotta perforated panels, set in the frieze of the principal external cornice.

The walls and dome are finished on the outside with Portland cement stucco, and in the interior with fine London-made Parian cement, trowelled to a perfectly smooth surface. The architraves, the cornice, and the vault and eye of the dome are elegantly moulded and polished, and of exquisite whiteness. The entrance door of the mausoleum is approached by a flight of steps of solid wrought Pennant stone. The folding doors are of East Indian teak, hung upon hinges of brass. The dome is crowned by an octagon lantern, the columns of which are of polished Cornish granite, the caps and bases of white marble, the entablature of white Mansfield (Nottinghamshire) stone, and the smaller dome is cut in solid yellow Mansfield stone. The whole is finished by a ball and Latin cross, pointing to the skies, of the purest Pantelic marble, highly polished. The interior is finished in

a permanent and beautiful manner, but without excess or doubtful taste in ornament or decoration. The building stands upon a level plateau of smooth shaven turf, a terrace raised at an angle of 45 degrees forming the plinth of the building; and the whole is surrounded by a "ha-ha," or sunk fence, 64 feet by 44 feet, faced with solid masonry of Henstridge stone.

From the observations made here, a few words may be written as to some points to bear in mind in the construction of future crematoria. Ease of passing in body at end of flame-chamber; simple good design of covering building-no kind of decoration or ornament, in the ordinary sense, being attempted, except what comes from good proportions, form, and material. Easy way of withdrawing ashes, a contrivance which would serve to carry in the body and out the ashes (a kind of tray, perhaps, of non-combustible metal?). If the fire-chamber could be made in connection with some temple where rites were performed, all the better; and in this case the chimney might be embedded in a building so as not to be visible as a separate convenience. The lower the chimney the better, consistent with the absolute need for a heat that no organic matter can resist. There should be ample openings under roof, or in it, to secure free ventilation. Easy way of controller seeing progress of combustion without opening the furnace essential-iron or metal caps swung on pivot over holes at most convenient end, and also at side, would do. It is desirable to consider cost as much as possible, consistent with efficiency, for the sake of the poor-now oppressed by the undertaker, and his various charges, in their direst need. No

iron should be used in the furnace; walks and approaches should be dry and convenient. These points refer to the crematorium only. It is needless to say that the ashes should be honoured with the most beautiful buildings we can devise. At Manston House the mausoleum is at once strong and beautiful, and it may contain the ashes of a family for a thousand years.

We who are advocates for cremation being generally adopted would be the last to desire arbitrarily to limit the disposal of the dead to the only method we believe to be free from danger to the living, which saves us from the pollution of earth, air, or water,-the way truly respectful to the dead and most beautiful; but we claim the right to exercise our own judgment and action in this matter, provided we violate no law. The difficulty of detecting poisoning, the only objection to cremation which needs remark, is to be met by scientific and independent testimony as to the cause of death, precautions being taken by not permitting cremation or burial in cases where, in the opinion of those qualified to judge, there is any reason for doubt, until the doubt is removed. Meeting this one objection should lead us towards another end to be desired for its own sake-exact knowledge and record of the causes of all deaths throughout the land. This is a duty of the gravest importance for State, scientific, and many other reasons, but which is now performed, when performed at all, in an imperfect or perfunctory manner by persons interested in the case, or utterly ignorant of the cause of death.

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A Section through portion of a London Cemetery.

If what actually takes place in our cemeteries were known to the public, there would be an outcry against the burial system which would soon put an end to it. This diagram gives some rude idea of what has taken place in our own day in a cemetery in South The ground around London. is being built over, and soon the cemetery will be as much "within the walls" as the old graveyards that were closed a generation ago. It may be that the system here shown will not be put a stop to by reasoning only, and that horrors or evils that all will hear of must come first. But it must come to an end some day, with five millions of people in one centre, and the great cities of the world growing larger every day. Whether, as shown in evidence, the coffins have been and are placed directly on each other, or (See p. 75, et seq.)



Section showing number of Coffins in each Grave in London Cemetery. (See p. 75, et seq.)

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whether separated by the few inches of soil the law requires, makes little difference in the defects of the system. Evils and confusions in the world one cannot often see a remedy for : here all is clear. Purity, beauty, sentiment, feeling, all give the same answer to those who know the facts and consider the matter. Words were never made strong enough to express the state of things, as regards sanitation or decency, which this cut feebly suggests. As to beauty, if one turns from this cut (or any aspect of our funeral and graveyard matters) to the plates of vases in this book (facing pages 30, 40, 44, 62, 64), he will scarcely require more to be said on this point ; but very much more might be said.



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