THE DISPOSAL OF OUR DEAD BY CREMATION. By GREGORY SPROTT, M.D., D.P.H.

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The subject of to-night's paper is perhaps a somewhat sad one, and appeals largely to the sentimental part of our natures, but it is nevertheless of the greatest importance from a sanitary point of view, and that shall be my apology for bringing it under your notice. The disposal of our dead by some other and better method than earth burial is one of the sanitary reforms that must be adopted sooner or later. Cremation is the only practicable mode that we know of at present, which gives the greatest protection to the living, and if decently and reverently carried out cannot insult the dead nor hurt the feelings of those left to mourn their loss. time usages and predjudices have led many to believe that earth burial is the only Christian method, and that cremation is of heathenish origin, and all those who advocate the burning of dead bodies are without religious feeling. I trust I will be able to show you that not only need no religious feelings be violated, but that the beautiful service for the dead may be made even more impressive. Still there are some who will have sentimental objections to urge, but as we become better acquainted with the life history of disease germs, and the part they play in the causation of infectious diseases, we will be forced, whether we like it or not, to find a more sanitary way of disposing of our dead than by our present mode of burial. It may be the full benefit of cremation would not be felt in our time, but assuredly our children's children would enjoy the good that would come of it when our colony is more densely populated and our cities more crowded.

Perhaps before dealing with cremation, it might be well to briefly mention some of the more common methods of disposing of the dead in ancient

and modern times.

One of the commonest methods is what is known as exposure—that is without any burial at all. This was practised by the ancient Syrcanians, who abandoned their dead to wild dogs, while Kamschatdales keep special dogs to devour their dead, believing that those who are eaten by fine dogs will have fine dogs in the next world. Many of the Indians of North America, some of the Kaffir, as well as some of the Australian tribes, simply carry their dead into the bush to be eaten by wild animals, in this way following the customs of the ancient Asiatics. In some parts the Hindoos at the present time expose their dead on the banks of the sacred rivers to be carried away by aquatic animals. Nowhere do we find this method carried out more fully than by the Parsees of Bombay. Here we find the "Towers of Silence," at the top of which the body is exposed to be devoured by vultures the moment the friends and mourners withdraw. The bones which have thus been picked clean, often in less than half-an-hour, are allowed to dry in the sun for some days and then put away in an ossuary to decay. "Sea Burial" is another method of exposure and carried out by the inhabitants of the Chatham Islands and those living around the Persian Gulf. In our naval and mercantile marine service we are familiar with this method in cases of death at sea, and although it must be carried out in such cases in the interest of the survivors, there are many objections to its adoption as the principal mode of getting rid of our dead. The late Dr. E. A. Parkes favours this method in his Practical Hygiene, but the expense and the difficulties inland towns would experience would render it wholly impracticable, not to speak of the feelings that might arise amongst a community, whose food, to a large extent is fish.

In the early part of the Stone Age, when man gave up his cave to live in tents, we find the caves being used as burial places for the dead. Similar to the cave we get Tomb Burials, and many of these tombs have been found in Algeria, Poland, and France, as well as in Devonshire. Later we find the common mode of sepulture was that of "Dolmens." The simplest form of Dolmen was that of three or four upright slabs of stone fixed in the ground, with another laid on the top of them. The body was then placed inside in a sitting position, the whole was then covered over with earth, making what is known as a Dolmen or Funereal Mound. These Dolmens can be seen from the Baltic to Morocco, also in Asia and South America. They are common in England and France, and their use lasted till the Bronze Period.

Dolmens simply covered over with stone were known as "Cairns."

What is known as "Barrows" was simply an earth mound piled over a stone chamber, with a passage leading into the centre, so that the body could be seen or the tomb cleansed. While Dolmens and Barrows were common in the first half of the Bronze Period, burning was practised to a large extent in the second half. But as civilisation progressed, strange to say, cremation was given up, and we meet with, in the early part of the Iron Age, earth burial. This earth burial took the place of cremation it is said because of the expense of fuel, and partly because of the increased power of man in using efficient tools. From whatever cause, it became common in Europe several centuries before the Christian era. Since then it has been practised by all Christian people, in fact any other mode of disposing of the dead was, for a time, looked upon as pagan. The most persistent practisers of this method are the Chinese. They have never carried out any other method, and no nation of people pays greater respect to the dead than the Chinese; their idea being that unless the body lies comfortably in the grave that misfortune will follow the family. This is the secret why the celestial is so anxious in life that his bones should be sent back to lie with his forefathers in the Flowery Land from the many and different parts of the world where he may have migrated to.

The Jews, like the Chinese, have always practised burial, first in tombs and then in graves. Men of wealth bought tombs, while the poor were buried where they died in their wanderings. Criminals and unclean things were thrown into the fire. Of recent years the Jews in the East End of London have adopted a method of half-and-half cremation, viz., by adding quicklime or caustic soda to the body. This is scarcely ever likely to become common.

As you know, the ancient Egyptians had a dread of decay, believing that the soul returned to the body in about 3,000 years, and hence they practised This process of embalming was confined to the Egyptians embalming. except in the case of Jacob and his son Joseph. We are told that "Joseph commanded his servants, the physicians, to embalm his father, and the physicians embalmed Israel," and when Joseph died "they embalmed him and he was put in a coffin in Egypt." Some have advocated embalming at the present time, but for what purpose?—there is no object in keeping from Nature her own, and what she insists upon, whether we return it to her in an hour, a year, or 1,000 years. Besides, embalment could only be carried out in a dry hot climate such as Egypt is, and it is questionable even if the Egyptians would have cherished the idea of having a "mummy" of their beloved friend placed in the Hobart Museum—on exhibition, even to satisfy our indefatigable curator. The last process which I will mention before speaking of cremation, is one practised by the ancient Peruvians and I believe also by some of the South Australian tribes, and is known as "Desiccation." The body is dried in the sun, then bandaged, and the saltpetre in the ground completes the process with the Peruvians, while the South Australian hangs up the body on the limb of a tree. It was some such process as this that enabled the remains of that great and good

man David Livingstone to be carried back to be buried amongst his own people. Some years ago Dr. Bayles, of Orange, N.J., tried this process of drying, and with some slight chance of success, but the expense of the process will practically prohibit it. Such are a few of the methods that have been adopted, but I must pass on to my subject.

Cremation has been in vogue more or less since all time, and was commonly practised in the second half of the Bronze Period by the Greeks and Romans, and also in Norway, Sweden, Denmark, and to some extent in England. It has been practised by nearly every nation at some time or other of its history-the Chinese being the exception. Even amongst the Jews we find that the bodies of Saul and his three sons, after the battle in Gilboa, were burned, and their ashes buried under a tree, and that in time of pestilence fires were kept burning in the Valley of Tophet to consume the dead. impossible to say why the ancients burned their dead. It may have been as a sanitary measure with some, while others believed that fire was the only way of freeing and purifying the soul from the unclean body. Associated with the burning of the dead there are some strange customs—the practice of putting ashes in urns was almost universal, and the finding of these urns in Great Britain shows that the practice was common in these parts. The Greeks originally buried their dead: then they learned cremation from the Phænicians; then they went back to burial. With the Greeks the custom was to burn with the body everything esteemed by the deceased.

The Aracan tribes of Further India burn their dead, and leave packets of rice on the spot. Neglect of this duty is a bar to inheritance. Hindoos have always practised cremation, and in former times, when too poor to buy enough of fuel, they half burned the body, and then cast it into the sacred rivers. This was prohibited, however, by Sir Cecil Beadon, who erected a cinerator on the banks of the Hooghly, where all could be burned at very nominal cost, something about 4s. I have seen cremations in this cinerator at Calcutta, and though it was extremely simple and nothing done to destroy the fumes, I did not perceive anything very offensive, neither did I notice any want of reverence in the ceremony. The revival of interest of recent years in the cremation movement is altogether of a sanitary reform, and the result of scientific investigation. In England the prime mover is the well-known and highly accomplished surgeon, Sir Henry Thompson, ably assisted by the late Mr. Wm. Eassie, sanitary engineer, and Sir Spencer Wells, whose remains were recently cremated at Woking.
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In 1874 Sir Henry Thompson's first article appeared in the Contemporary Review, and soon after its appearance a society was formed, having as its original members many well-known names:—Shirley Brooks, William Eassie, Ernest Hart, Rev. H. R. Haweis, G. H. Hawkins, John C. Jefferson, F. Lehmann, C. F. Lord, W. Shaen, A. Strahan, Henry Thompson, Major Vaughan, Rev. C. Voysey, T. Spencer

Wells, and Mrs. Crawshay.

These formed the committee, and Sir H. Thompson was elected the first president. He still holds that office. In 1879 a crematorium was established, but the then and succeeding Home Secretaries threatened adverse legislation if the society attempted to put it into operation. The society therefore deemed it prudent to adopt a quiet policy, and delay all operations for the time being.

In 1884 Dr. Price, the Welsh Druid, burned the body of his child, against the order of the Coroner. He was charged first, with having prevented the holding of an inquest on the body; and secondly, in having attempted to burn the child's body. Sir James Stephen, who presided over the court at Cardiff, addressed the Grand Jury at some length on this case, and finally declared, "After full consider-

ation I am of opinion that a person who burns instead of burying a dead body does not commit a criminal act unless he does it in such a manner as to amount to a public nuisance at common law." After this decision the Cremation Society decided upon the execution of their project, and issued notices stating that the crematorium would be used under certain regulations, which were strict in every detail, and left very little chance of any concealment of crime.

Although the burning of a body is not illegal, the law does not recognise it as a legal way of disposing of the dead. In the year 1884 Dr. Cameron, M.P. for Glasgow, brought up a bill in the House of Commons "to provide for the better regulation of cremation and other modes of disposal of the dead." His bill was defeated by 142 to 79 on the second reading—not a very great majority, considering the

whole facts of the case.

In 1886 Dr. Creed, M.L.C., Sydney, got a bill through the N.S.W. Legislative Council, making cremation a legal means of disposing of the dead, but the Assembly threw it out. Since 1885 cremation has gone on steadily in England, and up to the end of 1896 870 bodies have been cremated at Woking, while at Manchester there have been 52, at Glasgow 11, and at the new crematory, opened in Liverpool in September, 1896, there have been 3 cremations.

While all this trouble was going on in England, cremation was already recognised by law on the continent of Europe, and many cre-

matories had been established.

Italy.—In Italy we find Professor Coletti writing of it in 1857, and in 1869 the Sanitary Congress at Florence passed a resolution recommending it. The law sanctioned it in 1873, and a crematorium was erected in 1876 at Milan, through the munificence of Baron Kellar. In 1880, a Gorini furnace was put up at Milan, and since then another at Rome. The practice is becoming very common in Italy, and in this, as Professor Sacchi stated at the above Congress, the Italians are only following up the custom of their forefathers.

France.—France was not slow to follow the example set by Italy, and Dr. de Pietra Santa was a strong advocate for it. In 1880 a society was formed, and in 1887 a crematorium was erected in the Pere la Chaise on the Gorini principle, and since then four furnaces have been erected. Cremation is indeed common in Paris, and in the first quarter

of 1896 over 1,200 bodies were cremated.

Germany.—In Germany the Government permitted cremations as early as 1879, since then a crematorium has been established at Gotha,

where the practice is regularly followed.

Crematories, or societies for the promoting of cremation, have been established in many other European countries, notably Denmark, Switzerland, Holland, and Sweden, while in the Australias we have societies in Melbourne and Sydney.

America.—In the United States cremation has become very popular. There are at the present time about 26 crematories, and the advance in favour of it is shown by the fact that in 1885 there were only 36 bodies disposed of in this way, while in 1895 there were 876 cremations. From this short history of the movement you will at once see that cremation is slowly, it may be, but nevertheless surely, growing in favour with the people of every civilised community.

It is not to be expected that a reform of this nature will be effected until the people are educated up to it, but I feel convinced that as soon as the advantages of cremation are appreciated, so soon may we

expect those in authority to move in the matter.

It will now be my duty to place before you the advantages of cremation over all other methods of disposing of our dead, and to explain away some of the objections which have been urged against it. What are the advantages?—(1) Sanitary reform. (2) Economic undertaking. (3) Prevention of premature burial. (4) Beautifying our church yards, etc.

Objections.—(1) Religious feeling and sentiment. (2) Defeating

ends of justice and increasing crime.

Sanitary Advantage. — Whatever objections may be urged from a sentimental or religious point of view, it must be clear to all that, as a sanitary measure, cremation has much to recommend it.

It may be urged that there is no need for it in country places where population is not great, and burial successions are not too frequent, as the earth will assimilate her share of the remains. In practice, however, we find that graveyards are generally overcrowded, and that the earth is not able to assimilate all the putrid gases which are given off from the putrefying organic matter. This has been demonstrated over and over again. The late Dr. Parkes wrote 30 years ago:—"The air over cemeteries is constantly contaminated, and water which may be used for drinking is often highly impure. Hence, in the vicinity of graveyards two dangers to the population arise, and, in addition, from time to time the disturbance of an old graveyard has given rise to disease. It is a matter of notoriety that the vicinity of graveyards is unhealthy."

These words are as true to-day as they were ther, and from scientific investigations made in bacteriology we know why these places are so unhealthy, and how they may become public nuisances by disseminating the germs of disease, either through the air or contaminating the watercourses, or by the germs being wafted about on particles of dust

brought to the surface by the common earth worm.

Of late years our burial system has been much improved—that is, by having our cemeteries outside the cities, but the suburbs of this generation will probably be the centres of business and activity in the next—e.g., Sydney Town-hall stands on a former graveyard—and so we are only putting off, and not getting rid of, the evil; as Sir Henry Thompson says—"Laying by poison nevertheless, it is certain, for our children's children."

That graveyards do give off noxious gases is undoubted, as was pointed out by the Special Commission appointed nearly 50 years ago "to inquire and report on a general scheme for extra mural sepulture."

I will not read to you at any length the details of that report, but I must quote one paragraph bearing on the pollution of the air. "We" (say the Commissioners) "may safely rest the sanitary part of the case on the single fact that the placing of a dead body in a grave, and covering it with a few feet of earth, does not prevent the gases generated by decomposition with putrescent matters which they hold in suspension from permeating the surrounding soil, and escaping into the air above and the water beneath."

But hear the testimony of one well qualified as a Professor of Chemistry, and who has had honour after honour thrust upon him. Lord Playfair, writing in 1885, stated: "In most churchyards the dead are harming the living by destroying the soil, fouling the air, contaminating water springs, and spreading the seeds of disease. I have officially inspected many churchyards, and made reports on their state, which, even to re-read, makes me shudder."

Those who believe in earth burial are themselves alive to the danger of polluting the air as well as water, and the Local Government Board of England in 1883 issued a memorandum on the sanitary requirements of cemeteries, in which they state that "certain requirements must be observed in the establishment of a cemetery to prevent it becoming a source of nuisance and danger to the living." This is certainly an

admission, showing they are alive to the dangers themselves. The memorandum states:—" Nuisance and danger to health may be occasioned not only to grave-diggers and persons attending funerals, but also to the inhabitants of houses in the neighbourhood of the burial ground."

They advise that no one should live nearer than 200yds. to a grave-

yard.

They then speak of water pollution, and state that, in order to obviate risk, the cemetery should be at a sufficient distance from subterranean sources of water supply, and in such a position in respect to them that the percolation of foul matter from one to the other may be impossible.

I need not say more on the pollution of air or water, but will pass on to what is of greater importance to my mind—namely, the property the earth has of preserving for a long time the specific organisms of

bodies dead of infectious diseases.

It is well known that these bacilli and their spores live and thrive in the earth, and, when we know that the body of every person dying of an infectious disease contains myriads of germs, we can easily imagine how cemeteries may become a source for the dissemination of he seeds of death.

Mr. Wheelhouse, an eminent surgeon, of Leeds, records one case of scarlatina germs germinating after 30 years:—"In a Yorkshire village part of a closed graveyard was taken into the adjining rectory garden. The earth was dug up and scarlatina broke out in the Rectory, and spread to the village. It proved to be of the same virulent character that destroyed the villagers 30 years before, who were buried in that precise spot."

The late Sir Spencer Wells quotes a case where the "earth surrounding the body of a man who died of yellow fever a year before contained the germs of the disease. Animals placed in a confined space along with some of the mould from this grave died in five days, their blood and tissues being found crammed with the germs of yellow fever."

Pasteur has shown that the specific germs and their spores of anthrax keep alive a long time in the earth. He examined the surface mould of a grave where a diseased cow had been buried two years previously, and although the carcase had been buried 7ft. below the surface, and the earth had not been disturbed in the interval, he was able to obtain the germs, which, when inoculated into guinea pigs, produced anthrax.

It has been argued by some, notably by Mr. Haden, that an "earth to earth" system would get rid of many of the evils attached to our present mode of burial, but while decomposition would be more rapid, it is more than likely that the germs immediately set free would be more virulent than they would have been had they been closed up in

coffins for some years.

It has been shown that the earth worm is instrumental in bringing to the surface these germs. Pasteur demonstrated that the bodies of the worms found over the cow's grave were full of germs of anthrax. What is true of anthrax is true of all infectious disease, and more especially of tuberculosis, typhoid fever, tetanus, leprosy, etc. If you will only think of animals eating the herbage in graveyards, as we sometimes see, and imagine the effect of heavy rains washing the earth mould into streams, you will have some idea of a channel of infection not generally thought much about.

Darwin long ago told us that the whole earth surface in old pasture land passed through the bodies of the earthworm in the course of years burrowing deeply down in the dry seasons, and coming to the surface.

in the damp ones. You can readily perceive, then, how disease germs may be brought up to the surface in graveyards, where bodies have been

buried that died of infectious diseases.

Nothing short of destruction by chemicals or fire will destroy these specific germs, and "hence it is vain to dream of wiping out the reproach to our civilisation, which the presence and power of these diseases in our midst assuredly constitute, by any precaution or treatment, while effective machinery (earth burial) for their reproduction is in constant daily action."

Lately, in Victoria, the health authorities gave permission to burn the bodies of two persons who had died of leprosy, the disease being

due to a soil micro organism.

Economy.—While as a sanitarian I would advocate cremation on that score alone, there is a commercial view of the question. It cannot be overlooked, however, in considering this question, though it may be repugnant to the feelings of some. You may say we have plenty of land, and with our small population we need not trouble for some time; but that is not the question. Nature has intended that after our life here the material elements of our body must go to form food for plant life; but when we place the bodies of deceased ones under the earth, are we returning to Nature what we ought, and in such a way as we ought? I say no. Nay, more, we are huddling together bodies at a depth that are absolutely useless and a source of danger. Since every dead body must sooner or later become part of the vegetable kingdom, is it not better that it should become so in an hour's time rather than after a long series of years, during which time it may be doing a vast amount of mischief to the living? The amount of land used for cemeteries is enormous. In London the estimate is 2,000 acres, worth over a quarter of a million sterling.

In Hobart district alone there are 10 cemeteries with 104 acres. The using up of the land in this way is simply a question of time and popu-

lation.

The late Bishop Fraser, speaking on this subject at the Social Science Congress in Manchester in 1879, said:—"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 of £100,000.

"It is very beautiful, but two thoughts occurred to me. First, this is a long distance for the poor to bring their dead; and, secondly, here is another 100 acres of land withdrawn from the food-producing area of the country for ever. 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. I hold that the earth was made, not for the dead, but for the living. Cemeteries are becoming not only a difficulty, an expense, and an inconvenience, but an actual danger." But besides this indirect expense, if one might use that term, the lavish expense which accompanies the ceremony of burying our remains would be greatly diminished.

It is estimated that the cost of funerals alone in England and Walesis not less than £5,000,000 per annum, and in London £1,000,000, and
one-third of this amount would amply suffice for cremation. What
a blessing that would be to the widow and orphans whose small portion
is often enough cheerfully parted with, so that they may testify to
their loving memory of a kind husband or affectionate father. I say
there are many other ways of paying the last "tribute of respect"
more fitting than by mere vulgar display of funerals.

Premature Burial.—Among other advantages that one might claim for cremation is that of preventing premature burial. I do not think that premature burial ever does actually take place amongst us, who

keep our dead so long before burial; but that the secret dread does exist in some I am fully convinced; even in my short experience in this colony I know of a case where two doctors were called in to certify that death had actually taken place. The deceased had many

times expressed a fear that she might be buried alive.

With cremation, and a proper inspection of all cases after death, there need be no such fear. And, again, what is the history of our graveyards? It is this—and this is the common history all over the world—they are placed on the outskirts of the city and used for the burial of our dead for a generation, or it may be two. Then it is found they are too near the city and its dwellings, and also that they are becoming overcrowded. An order is issued that they be closed, and no more burials can take place in them. A new cemetery is found again on the outskirts, which will serve for another generation; but what has become of the old? Those who have relatives or friends buried there have passed away or ceased to take any interest in it. The graves are uncared for, the tombstones begin to crumble and tumble down, and sooner or later we find the "last resting place of our dead" being dug up, the remains removed to some other cemetery, so that the ground may be built upon, or it may be, as we find it in our own city here, converted into a sheeprun. One has only to look at some of the burial places, such as the one at the top of Campbell-street, Davey street, or Trinity Hill, to appreciate the full meaning of what I

With cremation and urn burial all this would be changed. ordinary burial ground would then be able to accommodate the remains of our dead for many generations, and 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 No one can admire the art displayed in these disused cemeteries. Consider how different it would be with urn burial. Here all tombstones will be done away with, and instead we would have artistic urns, carefully placed in well-designed columbaria, or, if desired, in family tombs. These would protect all memorials of the dead from the weather and the ravages of time. In Rome tombs may be seen with urns in them as good as when they were placed there some thousands of years ago. Such, then, are the cremation over earth burial. What are the objections? Such, then, are the advantages of

The first objection raised is that it shows a want of feeling and

reverence for those whose memory we cught to cherish.

It must be admitted that ancient custom and the long standing prejudice against any other than earth burial, which has always been associated with religious rites, will make people very slow to adopt

any other than the present mode of burial.

With many whom I have discussed this subject it is a matter of indifference what becomes of their bodies after death, but they shrink from the sudden destruction of the body of those whem they have loved and honoured in life, by the process of burning. I am proud to think our nation does respect the memory of its dead, but would not cremation and urn burial tend rather to keep the memory of those we love ever fresh with us? Is it not a fact that after a graveyard has been officially closed, that the graves become uncared for, and the memory of those lying there has faded because, forsooth, we are never reminded by anything in the church vault as we would be with urn burial? Admiring sentiment up to a certain point, we must be careful not to allow it to dictate to science, and what does chemical

science teach us if not this, whether we bury or cremate our dead, the altimate result is the same—though the process in one case may take 20 years and the other but an hour. But those of you who reject the flame because of the sudden destruction of the body, pause and think what takes place in that cold and dismal grave. We often hear of respected ones being placed in their "last resting place," but the grave is no place of rest. The moment life has passed away and before the body has yet been buried, a new life has begun, myriads of microorganisms have set to work to resolve that body into the elements of Nature.

In Nature's harmonious cycle of developement it is imperative that that body must be dissolved so as to become plant life, and so we ultimately find that after a long and slow process that it has been resolved into carbonic acid, ammonia, water, and mineral elements. Now this is just exactly what happens when we destroy a body by fire, but in the case of burial there is great risk of doing injury to the living, while with cremation there is absolutely no such risk. If then the ultimate result of burying or cremating dead bodies is the same, why should we run the risk of mischief being done to the living if the same end can be accomplished without that risk by another method—more imple, more economic, and altogether quite as reverent? Is it not enough to do harm to others while we live without having any wish to inflict injury after death?

Religious objections.—I have already told you that on the advent of Christianity that cremation was looked upon as heathenish and against the Christian idea of the resurrection; others object to it because the body of our Saviour was not so treated, but we must not forget that our Saviour was a Jew and that the manner of the Jews is to bury. But even with the Jews cremation was not unknown, as I have already told you. We may dispose of this argument simply by saying if we are to take the burial of our Saviour's body as being the right way, then we

ought to bury in sepulchres.

I need not offer any opinion of my own relative to this objection; true it is that Bishop Wordsworth did say "some weak minded brethren" might have their belief shaken in the doctrine of the resurrection, but the reply of the late Lord Shaftesbury to such an objection was unanswerable. In a letter to Sir Spencer Wells he disposes of this objection simply by asking "What then will become of the blessed martyrs who have died at the stake in ancient and modern

persecutions?"

The late Bishop Fraser, who was deeply interested in the cremation movement, speaking at Bolton in 1874, said: "The ancient Romans believed in immortality, and yet they believed in the burning of the bodies of their dead. Urn burial was 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 would have to call our remains, like the remains of some ancient Romans out of an urn in which they were deposited 2,000 years ago." Speaking again in 1879, he said: "No intelligent faith can suppose that any Christian doctrine is affected by the manner in which this mortal body

of ours crumbles into dust and sees corruption."

Canon Liddon, preaching in St. Paul's, London, stated, "The resurrection of a body from its ashes is not a greater miracle than the resurrection of an unburnt body; each must be purely miraculous."

Such testimony as this ought to convince the most sceptical, I cannot myself tee how cremation instead of burial in the earth, should outrage in any way religious feelings, but decently and reverently carried out with those beautiful words, "ashes to ashes, and dust to dust," I believe it cou'd only add solemnity to that very impressive ceremony for the burial of the dead. I leave further discussion on this part of the subject with our clerical friends, trusting they will give us their views and assistance, knowing what a power and influence they have in the matter of the disposal of the dead.

Medico-Legal Objection.—The last objection which I shall deal with is, to my mind, the only reasonable one against cremation—the medicolegal one-that is, if a body poisoned or murdered is burnt, all trace This, of course, applies in cases where of the crime is destroyed. suspicion has not been aroused until some time after death. To overcome this objection, those who advocate cremation say we must have greater care exercised in the giving of death certificates It is better to provide the means of detecting crime before the disposal of a body, rather than rely upon the slight chance of finding it out from an exhumation. Hence, in France, Italy, Germany, and some other continental countries, we find a "medicin verificateur" who examines every body before it is buried or burned. With such an inspection it would be almost impossible to overlook cases of poisoning; and it is recorded that at Milan the parents of a deceased child, after having received all certificates necessary for its burial, decided to have it cremated. The examination required by the rules of the Cremation Society there was such as to reveal the fact that the child had been poisoned by eating sweetmeats containing copper. This fact shows you that cremation carried out with a strict inquiry as to the cause of death would be more likely to prevent crime than to hide it. Rest assured the. murderer will not seek to dispose of a victim by this method if he or she knows such inquiries must be made. With our present system we are surrounded by dangers. Many bodies are buried without any medical certificate at all; and even with medical certificates there is a big risk, because the medical man may not be called in till the case is in extremis, and then gastro enteritis might easily simulate many cases of poisoning. But when we consider the number of poisons that could be detected on the body after exhumation we find there are practically only four, viz., arsenic, antimony, lead, and mercury. All the vegetable poisons, such as strychnine, prussic acid, morphia, aconite, etc., would decompose very shortly after burial; while the irritant poisons would not escape notice at the time of inspection.

Under our present burial system in England about 5 per cent. of the deaths are certified to by the coroner, and 3 per cent. are buried without any certificate. In Scotland the percentage of uncertified deaths is even greater.

Now, while this large percentage of deaths is allowed to be buried without any certificate at all, it is surely inconsistent on the part of those who object to cremation on the slender chance they have of discovering crime by exhumation.

In 20 years in England and Wales there have been 102 exhumations, giving an average of five annually, and about one (1) to every 6,100 inquests.

Of this 102, Sir H. Thompson gives the following details:-

Natural causes, 57; accident causes, 20; murder, 13; manslaughter, 4; open, 8—102. And very few of these are cases of poisoning.

I think, therefore, I have shown you that there is little protection against murder under our present system of burial, and so near home we are told by Judge Williams, speaking in Melbourne in November,

1893, that "Scores of people are poisoned and laid in the ground, and the crimes are never detected."

With cremation, under the precautions recommended by the various societies taking an interest in it, such a state of matters would be impossible. No friend of this movement will be satisfied with any rules which do not include a proper examination of every dead body by some disinterested person before being disposed of.

In this way the medico-legal objection is practically gone, and that crime, instead of being undetected, will be more likely to be discovered.

Such, then, sir, is a brief outline of the history, advantages, and socalled disadvantages of cremation, and I will not at this time move any formal resolution asking this society to decide in favour of cremation as against our present system of burial.

I believe if the people as a whole knew the risks of our present mode of burial, if they were confident that no religious rites would be interfered with, and that cremation could be carried out without shock to the feelings, that a large majority would desire cremation to burial.

Time does not permit me to speak of our local cemeteries; their condition and management would, I am sure, be sufficient matter for an interesting paper. I have only now to thank you very heartily for the patient and attentive way you have listened to my remarks on this melancholy but important subject, the disposal of our dead by cremation.