POSSIBLE EVIDENCE FROM SPRINGHEAD FOR THE GREAT PLAGUE OF A.D. 166

By W. S. Penn, B.Sc.

Summary and Acknowledgments

In A.D. 166, a tremendous plague originated in the east and rapidly spread through the western provinces of the Roman Empire to Gaul and the Rhine. It seems reasonable to believe that it also spread to Britain but there is no literary or epigraphic evidence on the point.

An unusual concentration of eighteen infant burials in the temple area at Springhead may possibly be the result of this plague. Evidence for and against this hypothesis is discussed in some detail. It should be stressed, however, that the suggestion has been made merely because of the lack of other evidence (it thus seems important to consider any available evidence) and in the hope that it will encourage others to look for further signs of this important event.

I wish to record my thanks to those who have assisted in the preparation of this paper. In particular I should like to thank Professor S. S. Frere, M.A., F.S.A., for reading the manuscript and offering valuable criticism and much advice; C. E. Stevens, Esq., M.A., F.S.A., for assistance with historical sources and drawing attention to a most important inscription from Salzburg, and A. C. Harrison, Esq., B.A., for interpreting the inscription. However, in view of the highly controversial and tenuous nature of the hypothesis, I must state that I am solely responsible for the views expressed.

Origin

Marcus Aurelius delayed a visit to Pannonia in A.D. 167 because of more pressing matters at home. An army, in a campaign in Mesopotamia, had contracted a serious disease which it spread among other troops and civilians wherever it went. It thus began in the east in A.D. 166 and rapidly spread throughout the western provinces (1, 2, 3).

The nature of the disease is not known but it is generally agreed to have been the greatest plague of antiquity, comparable with the Black Death of 1348 and the Great Plague of London in 1666. Recruitment for the army became difficult, agriculture suffered and, in fact, the plague has been regarded by some as the beginning of the downfall of the Roman Empire.

The cause must clearly have been due to poor hygiene, but the

ancients regarded it as punishment from the gods. A soldier is said to have accidentally opened a golden casket in the Temple of Apollo at Seleucia which contained the dread vapour. In addition, Seleucia itself had only been taken in violation of an agreement. Eventually the Christians were blamed and persecutions followed. Marcus apparently took all this superstition seriously and summoned priests of a number of foreign religious rites to purify the City in every way. This attitude is important to the thesis of this paper.

Extent of the Plague

The exact extent of the plague is not known. We are told, however, that it raged throughout the Marcomannic wars and caused great destruction in the City and extended to the provinces of Gaul as far as the Rhine (4). It even continued to rage in the reign of Commodus (5).

If the plague reached the Rhine there is no physical reason why it should not have reached Britain. There would always have been a movement of soldiers and merchants and they could easily have carried it across the Channel. However, there is no documentary evidence on the point. How, then, is it possible to determine whether or not the plague reached Britain?

Clearly the most satisfactory way would be by means of epigraphic or literary evidence. At the moment none has been found in Britain, but to demonstrate that this is possible it seems relevant to refer to epigraphic evidence from Austria. A tombstone (6) found in the area of Salzburg tells us that Victorinus lost his parents, his wife and his brother. Such a tragedy could, of course, have occurred for a number of reasons, but fortunately the inscription also tells us that 'they departed this life by reason of the plague'.

Another interesting point may be noted from this tombstone. It appears that the inscription had probably been cut first whilst the brother was still alive for his name had been added at the end. He had been a soldier of the Second Legion Italica and may even have been the one who contracted the disease. Whether, however, the addition was made days or much later is impossible to say.

Unfortunately no such excellent evidence is available for Britain and we are thus left with the results of excavation. But interpretation of results of a dig is extremely difficult, particularly in view of the hazards of dating Romano-British pottery of the Antonine period (7). A number of Antonine cemeteries have been found and they have contained many burials. These, however, may well have been the result of deaths by natural causes and large cemeteries of the period would, in fact, be expected in view of the relative opulence and large populations of the time. How, then, could normal burials be distinguished from those of the plague if, indeed, the latter existed?

One possible way would be to show that a large number of burials were made within a few weeks. Unfortunately, even where potters' marks exist, as they often do in fair numbers, it is impossible to give a date closer than a few years. This method is thus denied to us. A burial of many people in a communal grave would be another possible indication, but no such burial of the period, although it may well exist, has yet been reported.

Thus, the problem of recognizing plague burials is formidable and there must clearly be very special features. It is believed that such a feature exists at Springhead and details are discussed below. It should be stressed that the result can, at the best, be only conjectural, but in view of the exceptional circumstances which are unlikely to be matched elsewhere, it is felt that they must be seriously considered.

The Religious Background

Seven Romano-Celtic temples have been found at Springhead up to the present time (8). The reason for this exceptional number is almost certainly the eight springs which rose in the vicinity. For the same reason, the temples may be associated with 'cults of source'.

There is ample proof that such worship was mainly concerned with healing and fertility both at Springhead and analogous sites on the Continent. Stylized parts of the body in bronze, stone or wood depicting diseases and represented by several hundred examples at the source of the Seine are reflected at Springhead by a bronze thumb, arm and hand.

Many of the Continental temples were considered to have been particularly associated with children. Various bracelets, necklaces and small beads in particular have such an association and all are well represented at Springhead. It would, therefore, not be unusual for anything connected with children to be found at the site.

Thus, in time of trouble, devotees might well expect to turn to the cult-of-source gods for assistance and Springhead is one of the principal centres of such worship in Britain.

Temple IV

This small temple or shrine has special significance and has been reported in detail (9). It is particularly noted for the four infant burials under its floors which may be briefly considered.

The shrine had two successive floors, both made of rammed chalk. The upper (later) one had a complete crouched burial of a child in the south-east corner and a decapitated child-burial diametrically opposite in the north-west corner. The lower, earlier, floor repeated the pattern except that the burials were in the south-west and north-east corners respectively.

It might be considered that these burials were foundation deposits. There are a number of factors which seem to make this suggestion at least doubtful. The two burials in the earlier floor might be thought of as foundation burials but the additional floor in the same building would hardly require any more; the burials have all the appearance of a ritual nature; human beings as foundation deposits are rare and such deposits are frequently just outside the building or under the walls. Such evidence is rather indirect but fortunately in the case of this temple, a foundation burial of a bird was made against the outside of the north-west corner wall. It thus seems reasonably certain that the infant burials were not foundation deposits.

Whether the burials were sacrifices or natural deaths will not be considered at this point. The temple was, however, constructed during the Antonine era with two burials under the first floor. Grass then grew over the first floor (taking at least a year or two) when two more burials were deposited and a new floor laid. Since the second burials deliberately avoided covering the first two, those responsible must almost certainly have known of the latter. The whole arrangement of the four burials is too symmetrical to be a coincidence.

Any consideration of the circumstances of these discoveries must explain not only the burials but the separation of the two ceremonies by a short period.

Intrusive Burials

Burials, which may be termed intrusive, are, of course, common enough on Roman sites. Usually an existing floor is cut through for the insertion of the burial and this could occur almost anywhere and in any period. Alternatively, burials could be made in derelict buildings not necessarily in a made-up floor. All such burials, however, can usually be readily recognized as intrusive holes in existing ground levels. Thus, if any special significance is to be attached to the burials of children, proof must be offered that they were not intrusive. Such intrusive burials at Springhead may be listed as follows:

1. A young child-burial in a path just north of building B.8. No associated grave goods or datable pottery.

2. A young child-burial in the rubble of building B.8. Associated with a pewter pot and pottery of late third-century date.

3 and 4. Two young child-burials in the derelict building B.10. Each child associated with a 'toy' pot and pottery dated to the late third century.

5. A young child-burial in a path to the south of building B.1. Associated with fourth-century pottery.

Thus, during the extensive trenching which has taken place at Springhead over a period of 17 years, only five intrusive burials were

found. They were thus not particularly common and were not confined to any specific area. Moreover, they were probably all of the third century or later.

The Temple Area Kitchen and Burials

A curious lean-to (10) was built *c.* A.D. 120 alongside the Watling Street (road R.1) and north of the spot to be occupied some 30 years later by Temple III.

The building contained nine ovens which appear to have been employed for the preparation of ritual meals or sacrificial bread. However, the ovens were not all in use at the same date. Five of them were in use in the Hadrianic-early Antonine period and were covered with a thick clay bank when they went out of use. The remaining four were built on top of the clay bank and were probably not in use later than A.D. 180.

Interspersed with the ovens were fourteen young child-burials all in the usual crouched position. Twelve of them associated with the earlier ovens, had been covered by the clay bank and were thus definitely not intrusive. Of the other two burials, one was over the bank and the other by the side of it and could have been, but were not necessarily, intrusive.

The Walled Cemetery (11, 12, 13)

This building was discovered in 1799 and has not been excavated in modern times. Apart from a number of cremation burials, presumably of adults (one associated with the potter's mark GRANIANUS—Dr. 31), the burials of two infants are of immediate concern.

These were contained in a 'stone tomb 6 ft. 2 in. long, 4 ft. 5 in. wide and 1 ft. 9 in. deep, covered with two large stones, to each of which an iron handle was fixed with lead. Inside were two plain lead coffins which had apparently at one time been enclosed in wood.' Each coffin contained the skeleton of a small child, one richly bedecked with gold necklace, bracelets and ring.

The richness of one of these two burials suggests that at least one of the children may have been that of a member of the civitas aristocracy.

Dating of Structures

Dating of the various strata is difficult but clearly important. One of the skeletons in the clay bank had a dupondius of Trajan between its legs. As the coin was very much worn it could have been in use for several decades. The clay bank also produced a coin of Antoninus Pius and a potter's mark TITVRONIS of Lezoux, usually dated

A.D. 140-180. Such dating evidence would normally be summarized as Antonine, but clearly any choice between A.D. 140 and the end of the century is possible.

In the case of Temple IV, the first floor was dated 'early Antonine' and the second 'Antonine'. The evidence, however, is not particularly strong and the safest interpretation is Antonine with one floor earlier than the other. It is really not possible to say exactly what time elapsed between the construction of the two floors but at least it must be at the minimum some months and at the most several years. During this brief interval, the floor became badly worn which necessitated the erection of a wicker fence to keep people out. Since the floor was made of soft chalk it would have worn very quickly and the growing of turf over it may have been encouraged as protection, particularly when the initial impact of the tragedy had been somewhat softened.

It is interesting to note, however, that once these two floors had been laid in quick succession, no more floors were laid and the building was in use until at least the beginning of the third century.

Interpretation

The facts concerning all the known infant burials have now been presented and an effort must be made to interpret them.

The outstanding situation is clearly the eighteen burials within a small specific area inside the temenos. On general grounds alone these can hardly be intrusive: such a high concentration here compared with the remainder of the site and the choice of a spot near an important temple much used at the time are both considerations which argue intention. Archaeologically, too, they were not intrusive for they were of much the same date and of the fourteen in the lean-to building, all except two were covered with a single, continuous layer of clay.

In order that all the children except two should be covered by the same clay layer they would have to have died within a very short period of one another and the deaths of twelve children in such circumstances seems unusual. If we can take the Black Death of 1348 as an example, the plague hit the very young (hence the Springhead children) and the strong and they died within hours or, at the most, days of contracting the disease.

Again, consider what this more or less simultaneous number of deaths meant to the community. Assuming a population of 1,000, which is reasonable for this type of settlement (perhaps even large), approximately 500 would be females, say 170 (one-third) of child-bearing age. If each had two children (= 340) evenly spread between the ages of new-born to 14 years old, this would give, say, 24 in their first year. Obviously such a calculation can only be approximate but it clearly does mean that eighteen to twenty deaths (the latter

figure including the two from the walled cemetery) represents an exceedingly high proportion of the young population. As a corollary, the number of infant deaths may give a clue to the population of Springhead.

It may reasonably be asked at this point, where were the older age groups buried? Presumably this would be outside the town. The position of what must be a substantial cemetery or cemeteries has not yet been found though the walled cemetery may give an indication.

The only reasonable explanation of the large number of deaths assuming them to be approximately contemporary, as is almost certainly the case with twelve, is that all the children died during an epidemic. It did not have to be a plague, measles, for example, could possibly do the same in a primitive community. A plague, however, is an equal possibility and there is nothing in the dating evidence to preclude it having been the plague which started in A.D. 166.

Another possibility is that the children came from a temple brothel. In such circumstances, however, presumably eighteen children would have taken some time to accumulate and they would not have died (or been exposed) quickly enough to form part of the same burial group. In any case, the burials have all the appearance of urgency, why otherwise would the 'kitchen' area have been destroyed to make way for them? Children from a brothel could have been buried leisurely in a special cemetery, within the temenos if necessary.

Yet another possibility is that the children, from whatever source, could have been buried over a long period of time and then covered with a layer of clay. The suggestion is, however, probably precluded by the fact that a long time is not archaeologically available and the significance of burial in a temple building must not be overlooked either.

It should be stressed at this point that it is not claimed that the clay was used to seal off infection. The role played by bacteria was not fully realized until the nineteenth century, although at the same time we know that in the case of the Black Death, for example, contact with afflicted people was avoided if possible. The use of a sealing layer of clay was common procedure for levelling sites but since the clay was not level here, it may have had some religious significance and the people realized in some subconscious way that contact had to be avoided. On general grounds it seems desirable to cover burials before using a site again. Clay of this type could always be part of a collapsed wall, but in this case archaeological evidence precluded it. A possible reconstruction of the situation is as follows. If the plague did spread to Britain, which seems possible, then the communities would have known about it. A number of infant deaths would probably have caused a panic, and as it was almost certainly regarded as a punishment

from the gods, the latter would have to be placated—hence Temple IV was built with its two burials in the floor, but whether the children were sacrificed or victims of the plague is impossible to say. The remaining dead children were buried in the temple area as the most suitable place to draw the attention of the gods to the situation, and their graves were covered over with a sealing layer of clay.

There was a resurgence of the disaster two or three years later, although on a reduced scale. It is known that such resurgences occurred for a number of years. Thus two more children were buried in Temple IV by the same people who buried the first pair (hence they did not cover over the first two) and other burials were made outside the clay seal area. It may be noted that other burials may yet be found as the clay bank extends beyond the area of the excavations and will be examined eventually.

Why a new floor was laid instead of intrusive burials being made in the existing floor is probably explained by the poor state of the irregular turf-covered surface.

Whether the children in the walled cemetery died in the same catastrophe is impossible to say. All the burials in the temple area itself were virtually unfurnished except for one coin and two toy pots. Curial children, with rich grave goods, might have been buried elsewhere. The dates are not inconsistent.

Temple IV was kept open for many years after the tragedy (however it was caused), at least several decades. The children were perhaps remembered then as victims of a tremendous natural catastrophe (rather like our war memorials).

It is possible that Temple III, the 'sacred pool' was associated with the same event. Certainly it was constructed *c.* 150-170 and went out of use during the early third century. This period would coincide with the need for a place to make votive offerings in connection with the children's 'cult' and it is immediately adjacent to the burials.

Summary and Conclusions

It seems probable that a catastrophe occurred at Springhead when eighteen to twenty children died somewhere between A.D. 140 and 180. The deaths were probably regarded as punishment from the gods and hence the erection of the 'burial temple' about the same time as the interment of the children. This was within the temenos of a prominent 'cult of source' centre of worship.

Clearly the event was an outstanding one in the life of the settlement and may have been caused by at least a local epidemic if not a Continental plague. The majority of the children must have died within a short time of each other and the situation bears resemblances to the events of 1348.

If it is assumed that the deaths were caused by the plague of A.D. 166, then this explains a number of points, particularly the reason for the burial temple; the two floors of this temple (i.e. resurgences of the plague) and the relatively short lives of this temple and perhaps of Temple III.

The case for evidence of the plague of A.D. 166 from Springhead can only be claimed as possible or at the most probable rather than certain. Since, however, such excavation-evidence is likely to be rare, it is well worth while to draw attention to the possibility.

REFERENCES

(1) Vita Veri C.8.

(2) J. F. Gilliam, *American Journal of Philology*, lxxxii (1961), 255 ff. (Detailed discussion and further references.)

(3) A. Birley, *Marcus Aurelius*, 202 ff. Eyre & Spottiswoode (1966).

(4) Vita Marci C.13.

(5) Dio Cassius 172, 15.

(6) C.I.L. iii, 5567.

(7) M. R. Hull, *Roman Potters' Kilns of Colchester*, 176-77.

(8) W. S. Penn, *Archæologia Cantiana*, lxxx (1965), 107. (A summary of the discoveries and map of the site with references to buildings.)

(9) *Ibid.*, lxxiv (1960), 118.

(10) *Ibid.*, lxxix (1964), 170.

(11) A. J. Dunkin, *Memoranda of Springhead*, 135 (1848).

(12) *Victoria County History of Kent*, 90.

(13) R. F. JESSUP, *Journal of the Archaeological Association*, 3rd Series, xxii (1958).