probably in the first century A.D. at the beginning of the Roman Empire. It is probable that later the interest in these amulets gradually decreased, as in the first century a rather important Christian community arose in Ephesos. The gentiles who became Christians renounced the amulets with Ephesian formulas and burned them. This fact proves that together with metallic tesserae wooden and leather tesserae were also used which could be burned. We may suppose that metallic tesserae, because of their durability, could be rather an object of interest of rich people. The development of the Ephesian Artemision during the Empire could not increase because, as is well known, Nero had already bought artistic objects of this Temple which had been ransacked in the year A.D. 262 by the Goths and later destroyed by an earthquake.

The metallic tesserae from Ephesos bearing magic formulas are rare and are not mentioned in great specialized collections of medals relating to medicine as, for example, in Brettauer's, Faludi's and other collections. And One specimen, similar to ours, is indicated in the catalogue of the collection of the British Museum and two other similar specimens may be found in the collection in Copenhagen. One of them is perforated, which proves that it had been worn as an amulet for protection from different illnesses.

The tesserae of Ephesos bearing magic formulas are of the same value for the history of medicine as Greek coins with symbols of the Asklepios cult reminding us of the existence of numerous Asklepions in antiquity. As far as the protection from certain diseases which the man in antiquity was looking for, the Ephesian Artemision within the range of its action had the same mission as any Asklepion. We have therefore in future to range these Ephesian tesserae among the same material as antique coins and medals with subjects belonging to the cult of Asklepios.

REFERENCES

- 1. HART, G. D., Can. med. Ass. J., 1966, 94, 77-89.
- 2. DAREMBERG, CH., and SAGLIO, E., Dictionnaire des Antiquitées Grecques et Romaines, 'Ephesia', p. 639, Paris, 1896.
- 3. HOLZMAIR, E., 'Katalog der Sammlung Dr. Josef Brettauer', Medicina in nummis, Wien,
- 4. FALUDI, G., Medicina in nummis, Budapest, 1929.
- 5. Catalogue of Coins in the British Museum, London, 1892, 'Ionia', plate XI, fig. 10.
- 6. Sylloge Nummorum Graecorum, Copenhagen, 1946, plate 8, fig. 355 and 356.

JAROSLAV OBERMAJER

WILLIAM HILL AND THE ORMSKIRK MEDICINE

THERE are many medicines and preparations named after the people who invented them, but it is unusual for an eponymous title to be employed for a therapeutic agent using the name of a locality or town. Such is the case for a powder that was prescribed in the eighteenth century for the treatment of the bite of a mad dog, and for the prevention of rabies. William Hill of Ormskirk in the county of Lancashire was the

owner of this powder, and the preparation was known throughout England as 'The Ormskirk Medicine', or referred to simply as 'The Ormskirk'.

Despite many inquiries, there does not appear to be a sample preserved anywhere in Ormskirk or south-west Lancashire of this remedy that made 'The Ormskirk' at the time a household word, but a packet was discovered in Cornwall in 1958. It is in excellent condition and is now in the Wellcome Historical Medical Museum. On the outside of the packet are printed the names of the proprietors, Messrs. Hill & Berry, and the places at which it could be purchased in London (Fig. 1). This packet is made from a piece of paper seven inches by six inches in size, and when the paper is folded the actual packet is $3\frac{3}{4}$ inches by $2\frac{1}{2}$ inches. The outside wrapper contains two smaller packets, each three inches by two inches in size and both of these contain a fine powder, brick red in colour. On one of these packets is printed the instructions for its use externally, and on the other, the names of the proprietors (Figs. 2 and 3). On the back of one of the packets is the remains of a broken seal (Fig. 4). It is believed that the seal is that of Hill, and that Berry signed it to prevent counterfeit. The instructions for the use of the powder only explain its use externally, and there appears to be no guidance as regards internal administration. That it was given internally is obvious from the medical literature of the time and precise instructions are described by a Dr. Heysham for this method of administration. Perhaps there was another powder to be taken by mouth, apart from the one which has been discovered, but no mention of two powders is evident in the reports. There seems little doubt that this medicine was used extensively and from the medical accounts of hydrophobia in the eighteenth century, it was known to have been prescribed not only in Lancashire and the north, but in Leicester, in London, and also in the west country. Many families probably kept a packet, as, according to Bailey in his History of Southport, and quoting from Gough's Britannia (1787), it was 'accounted sovereign against the bite of a mad dog' and Ormskirk had been 'rendered famous' by it.

A review of the medical literature of the period gives, as one might expect, conflicting accounts of the value of this remedy. Heysham⁵ (1777) stated that the powder had been introduced into the western parts of England 'with most happy' success and that the medicine had become so thoroughly established that there could be no reason to doubt its value. On the basis of trials and analysis (confirmed in part by a Dr. Black) Heysham concluded that the remedy was compounded of:

Powder of chalk half an ounce
Armenian bole three drachms
Allum [sic] ten grains
Powder of elecampane root one drachm
Oil of Anise six drops

On the other hand there were those who thought the medicine was useless. For instance, in An Essay on the Bite of a Mad Dog John Berkenhout² (1783) believed that the people of the north of England considered the powder very effective, but he was very doubtful of its value. Likewise J. Fothergill⁴ (1779) stated that it was with some repugnance that he had to point out the inefficacy of a remedy which in this country had established a reputation for being infallible.

Very little is known about William Hill. In the Archives of the Lancashire Records

at Preston, there is an original will of a William Hill. This will was made on 16 November 1774, and the date of probate was 30 April 1778. This might well be the will of the owner of the Ormskirk Medicine, as Thomas Percival' in 1789 refers to the late William Hill, and in the list of Burials at Ormskirk Parish Church, there is a William Hill buried on 13 April 1778. There is no account of the powder in this will. In the will, a Mr. James Barton is mentioned, and this is of interest in that Dr. Miles Barton became the possessor of the Ormskirk Medicine after the death of William Hill, so the mention of the relative Barton in the will does connect the two family names, and makes it more than likely that this will is that of William Hill, the owner of the medicine. There is also a bequest to Sister Berry's two sons which relates the Berry of the medicine with one of the near relatives of Hill, but this may not be of significance as the name of Berry appeared to be a common one.

Hill appears to have been a person of some consequence, living at the Hall in Ormskirk and also being a Justice of the Peace. In the Additional Manuscripts in the British Museum³ dated at the time William Hill was alive, are documents referring to a Justice of the Peace named William Hill of Ormskirk, and three of these bear his signature. It is reasonable to suppose that the Hill mentioned in these documents and whose name and signature appear in his capacity as a Justice of the Peace, is the same person who owned the medicine, and this would confirm the description that he was a gentleman of some rank.

Dr. Miles Barton, who died in 1810, was a son of Dr. Henry Barton of Ormskirk, and in a directory of Ormskirk of 1787 he is described as a 'surgeon' and as 'Propprietor of the celebrated Ormskirk Medicine'. In 1787 William Hill had died, and so the ownership of this powder had by then passed to Dr. Miles Barton. It was the same Dr. Barton who instituted sea bathing as the 'best' remedy for rabies and sent his patients to Southport, thus maintaining a continuing interest in hydrophobia. Further unorthodox behaviour of Dr. Miles Barton was that he paid rent for a mud hole near the Bridge at Town End, Ormskirk. This is mentioned in the Constable's Accounts of 29 September 1797 from the Lords of the Manor of Aughton. This mud hole may have some reference to the Earth Cure made famous by the celebrated quack, James Graham.

The apparent success of Hill's remedy lay in the widespread fear of rabies. However, it is unlikely that many of those treated had been bitten by an infected dog, although the persons concerned thought the dog rabid. In these cases hydrophobia would not develop and the case could be ascribed as a remarkable treatment that had prevented the rabies, especially as it was usual in such instances to kill the animal, and there was no effective way of proving it to be infected.

ACKNOWLEDGEMENTS

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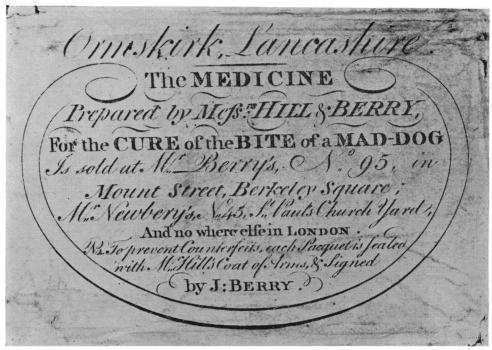
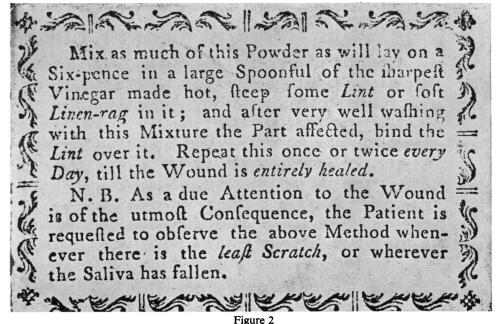


Figure 1
The outer wrapper containing the two smaller packets.



The printed instructions on one of the small packets describing the method of using the powder externally.

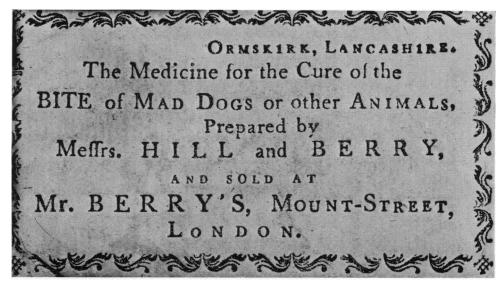


Figure 3
The wrapper of the other small packet.

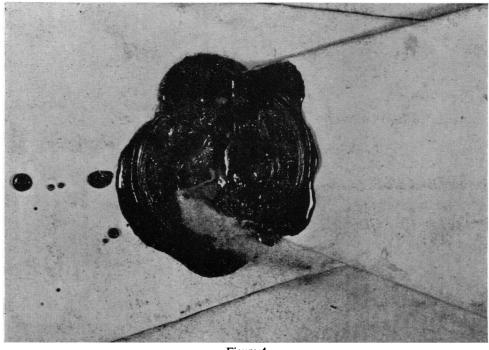


Figure 4
The broken seal of Hill.

REFERENCES

- 1. BAILEY, F. A., History of Southport, Southport, Angus Downie, 1955, p. 37.
- 2. BERKENHOUT, J., An Essay on the Bite of a Mad Dog, London, R. Baldwin, 1783.
- 3. British Museum, Add. MS. 36876.
- 4. Fothergill, J., 'The Case of a Hydrophobia', in: Medical Observations and Enquiries, 2nd ed., 1779, vol. 5, p. 195.
- 5. HEYSHAM, J., Dissertatio Medica de Rabie Canina, Edinburgh, 1777. Information taken from review in Medical and Philosophical Commentaries, 1777, 5, 43-52.
- 6. Newstead, G. C., Gleaning towards the Annals of Aughton, Liverpool, Ratcliffe, 1893, p. 140.
- PERCIVAL, THOMAS, Essays Medical Philosophical and Experimental, 4th ed., Warrington, J. Johnson, 1789, vol. 2.

W. R. HUNTER

SOEMMERRING AND THE SUBSTANTIA NIGRA

CREDIT for the first description of the substantia nigra has usually been awarded to the well-known German anatomist and physician Samuel Thomas von Soemmerring (1755–1830). Medical dictionaries still use as a synonym for that structure the term 'Soemmerring's substance' (Wakeley, 1953; Dobson, 1962), and although Sano stated many years ago (Sano, 1910) that priority ought to be accorded to Vicq d'Azyr who in several of the plates of his *Traité d'Anatomie et de Physiologie* (1786) clearly illustrated the substantia nigra, which he described as 'tâche noire' or 'locus niger crurum cerebri', and that the error was due to Luys, this is not commonly recognized. For example, Stern (1966) states that 'the earliest description of the substantia nigra is generally attributed to Soemmerring'.

Stern goes on to say that Soemmerring 'distinguished (1778) between the ashen or grey matter (substantiae cinereae) of the cortex and the brain-stem—"The mass is tinged a dark colour which in adults resembles neither the whiteness of the medulla nor the cinereal part of the brain but is, so to speak, midway between the cinereal and medullary parts"—and described a particular aggregation of dark substance within the cerebral peduncles. Soemmerring was familiar with the intimate relationship of this pigmented structure to the emerging third nerve fibres and observed that pigmentation was less distinct in the brains of new-born children and foetuses.' Stern maintains, therefore, on the one hand, that Vicq d'Azyr failed, in 1786, to acknowledge Soemmerring's priority, but that on the other hand, 'most modern anatomists equate "Soemmerring's substance" with the substantia nigra.'

Soemmerring published in 1778 a work entitled: De basi encephali et originibus nervorum cranio egredientium libri quinque. Cum IV tabulis aeneis, Göttingen, apud Abr. Vandenhoeck viduam, 1778, 4°. According to Choulant (1852 rep. 1962), Vol. II (pp. 1-112) of Ludwig's Scriptores neurologici minores, Leipzig, 1791-94, 4°, is an enlarged edition of Soemmerring's book of 1778 revised by him. With the aid of both these texts, and a fresh human brain, it has, we think, been possible to clear up the confusion.