ON SOME ANCIENT GREEK MEDICAL VASES FOR CONTAINING LYKION; &c., AND ON THE MODERN USE OF THE SAME DRUG IN INDIA.

The physicians and surgeons who, in ancient times, pursued their medical profession at Rome, and in different parts of the Roman empire, have left us various palpable relics of their craft. Thus, in the ruins of Pompeii and Herculanum, numerous surgical instruments, pharmacy and drug-bottles, &c., have been found; and elaborate drawings and accounts of these have lately been published by Savenko, Vulpes, Renzi, and others. On the sites of the old Roman cities and colonies throughout Western Europe, various surgical and me-
...dical relics of the same kind have been at different times discovered: as lancets, probes, cupping-glasses, scalpels, oculist-stamps, and phials, &c. But of medicine, as it was still earlier exercised in Greece and in the Grecian colonies, few such tangible vestiges remain. We have, it is true, had carefully transmitted down to us the imperishable professional writings of Hippocrates and others of the purely Greek school; but time has spared few, or, indeed, almost no material remnants of the professional instruments or vessels used by the ancient Greek surgeons and physicians.

Perhaps the great rarity of such archaeological remains may serve as some apology for the present notice of some specimens of ancient Greek medical vessels or vases. Besides, the vases which I wish to describe are interesting in other points of view. They are all of them intended to contain one and the same drug, as shewn by the inscriptions on their exterior;—this drug was derived by the ancient Greeks from Hindostan,—one of the many points of evidence of the former freedom and frequency of the traffic between the south of Europe and India;—and, at the present day, the same drug is still employed, extensively and successfully, by the native practitioners of the East, for the very purposes for which it was, in former times, used by the medical practitioners of Greece.

The drug to which I allude is the Indian Lycium or Lykion, the ΑΤΚΙΟΝ ΙΝΑΙΚΟΝ of Dioscorides. In modern collections and writings, I know of four ancient vases or drug-bottles intended to contain this valued eye-medicine. If our museums, however, were properly searched, perhaps various other Greek vases for the same or for similar medicines would be detected. The four specimens of bottles or vases for Lycium to which I have adverted are the following:—

1. In the collection of Greek antiquities contained in the British Museum is a small vase, made of lead, and of the exact form and size represented in Plate II., fig. 1. The vase is of an ovoid form, and is somewhat above an inch in height, and about three quarters of an inch in breadth. An inscription, preceded by the ornament of a small tripod, encircles the middle of the vase. The inscription is in Greek letters, of which the following is a correct copy:—

ΛΥΚΙΟΝΝ ΑΡΑΜΟΥΣΑΙΟΥ

This inscription may either be read as ΑΤΚΙΟΝ ΠΑΡΑΜΟΤΣΑΙΟΥ—the Lycium of Paramusaeus—as suggested to me by Mr Birch, who first had the kindness to direct my attention to this vase; or, and perhaps more correctly, it may be rendered ΑΤΚΙΟΝ ΠΑΡΑ ΜΟΤΣΑΙΟΥ—the Lycium sold by Musaeus. Mr
Birch informs me that he thinks he met with the name of Paramusaeus as a medical practitioner in Fabricius' Bibliotheca Graeca. I have not been fortunate enough to detect the name in question, notwithstanding some considerable search through that learned work. On the other hand, the name of Museus or Musaeus is well known in Athenian biography. (See Fabricius' Bibliotheca, vol. i., p. 120–133.) I should, perhaps, have already stated that the vase in question was sent to the British Museum among a collection of antiquities from Athens.

2. Through the kindness of M. Sichel of Paris, I am enabled to give, in Plate II., fig. 2, an engraving of a second Lycium jar, not hitherto published, of nearly the same dimensions as the specimen contained in the British Museum. This second specimen is not made of lead, but of pottery-ware. It bears upon its side the inscription

\[ \text{H P A K A E I O T} \]
\[ \text{A T K O N} \]

This inscription—the Lycium of Heraclitus—has the word ATKON spelt without the \( i \); errors of this kind being, as is well known, very common in old Greek and Roman letterings.

3. M. Millin of Paris published, nearly forty years ago, an account of a similar vase found at Tarentum, a well-known Greek colony and settlement. (Description d'un Vase trouvé à Tarente. Paris, 1814.) This vase is slightly larger than either of the above, but somewhat mutilated. It is made of clay, and has on its front, in Greek letters, the inscription Lycium of Jason,

\[ \text{I A C O N O C} \]
\[ \text{A T K I O N} \]

The form and size of this jar are represented in Plate II., fig. 3. M. Millin fancied that probably this small vase or jar was intended as a child's toy; but two years after he wrote, M. Tochon d'Annece gave an account of a similar jar, and first suggested that it must have been destined to contain a collyrium or an ointment—destiné à contenir un collyre ou un onguent. (See his Dissertation sur l'Inscription Grecque. Paris, 1816.)

4. The vase described by M. Tochon is delineated in Plate II., fig. 4. It is of the same material, and nearly of the same size, but less mutilated than that previously delineated by M. Millin. It presents also the same inscription, namely,

\[ \text{I A C O N O C} \]
\[ \text{A T K I O N} \]

M. Tochon believes further that this vase was found, like that of Millin,
at Tarentum. At least, it was given to M. Tochon originally by a person who had resided for a long time in that city, and who had himself acquired the specimen there. M. Sicel has reason to think it not improbable that his specimen also came from Tarentum. And it is perhaps not uninteresting to remark that Galen, Celsus, and various other old medical authors repeatedly mention a Greek physician of the name of Heraclides or Heraclides, who practised at Tarentum, and was the author of various treatises on the Materia Medica, &c. (See Kuhn’s Opuscula, vol. ii., p. 156, &c.) Among his large collection of collyria and medicines for diseases of the eye, Galen gives formulae for making different eye medicines bearing the name of Heraclides, as, for example, two, ‘agglutinatoria pilorum Heraclidæ Tarentini. (Ἡρακλίδης Ταρακνών.)’ See Kuhn’s edition of Galen, vol. xii., p. 741.

The medicine mentioned in the preceding inscriptions, the Lycur or Atkon, was a drug which enjoyed much favour among the ancients, and it was supposed to be possessed of great medical value and virtues. It was used principally as an astringent remedy to restrain inflammatory and other discharges. Dioscorides, Galen, Oribasius, and Paulus Ægineta, dilate upon the medicinal properties of the Lycur. Two varieties of Lycur were in use, one obtained from Lycia and Cappadocia, &c., and the other from India. The latter was regarded as by far the most potent and valuable. Thus, when treating of the two varieties of Lycur, Galen states that the Indian is the most powerful for all purposes—τῷ Ἰνδικῷ ἰσχυρότερῳ ἢστιν ἵστρον ἰς ἰππαν. (De Simp. Medicam., Lib. vii., 64.)

Of all the uses to which the Lycur was applied in medicine, by far the most important was the employment of this drug, and particularly of the Indian variety, as a collyrium or local application to the eye, in the treatment of different varieties and forms of ophthalmic inflammation. Thus, Scribonius Largus, the reputed body physician to the Emperor Claudius, and one of the most original among the ancient medical writers, declares, that he attributes to no collyrium whatever, such great efficacy as to the genuine Indian Lycur used by itself. For, if,’ says he, ‘near the commencement of ophthalmia, any one anoints himself with this collyrium, he will immediately—that is, on the same day—be freed from present pain and future swelling. It is unnecessary (he adds) to dilate on its virtues, for a person experienced only in other collyria would scarcely credit the effects of this simple drug.’—(De Composit. Medicamentorum, cap. 3).

The Lykion or Lycur is still used extensively by the native medical practitioners of India, under the Hindoo name of Rusot or Ruswat. In a learned article on the nature of the χυξιον of Dioscorides, contained in the Transac-
Professor Royle has shewn that the Indian Lycium or Rusot is an inspissated extract prepared from the wood or roots of several species of Berberis, as the *Berberis lycium*, *aristata*, &c., growing on the mountains and plains of Upper India, and principally procured from Nuggur-kote, near Lahore.¹ On inquiring, says Dr Royle, in the shops of the druggists in the bazaars of India, I everywhere learned that both the wood (*dar-huld*) and the extract Rusot were imported from the hills into the plains, and that large quantities continued to be brought from Nuggur-kote as well as other places. And he adds, the Rusot is, at the present day, procurable in every bazaar in India, and used by the native practitioners, who are fond of applying it both in incipient and chronic inflammation of the eye; and, in the latter state, both simply and in combination with opium and alum. It is sometimes prescribed by European practitioners; and I have heard that it was found very efficacious by Mr M'Dowell in the ophthalmia of soldiers who had returned from the expedition to Egypt. I have myself occasionally prescribed it: and the native mode of application makes it particularly eligible in cases succeeding acute inflammation, where the eye remains much swollen. The extract is, by native practitioners, in such cases, rubbed to a proper consistence with a little water, sometimes with the addition of opium and alum, and applied in a thick layer over the swollen eyelids; the addition of a little oil I have found preferable, as preventing the too rapid desiccation. Patients generally express themselves as experiencing considerable relief from the application.

My friend, Dr Wise, the author of the very learned work, the *Commentary on the Hindoo System of Medicine*, has confirmed to me Dr Royle's statement about the great use of Lycium in eye-diseases in India, and the frequent success of its employment. I have myself seen, in Edinburgh, one or two cases of recent conjunctival ophthalmia treated by the application of some Lycium brought home from India by Dr Wise; and with immediate relief. Mr Walker, who has tried it at the Edinburgh Ophthalmic Institution, informs me that he has found it fully as efficacious as the preceding accounts led him to expect in most forms of external ophthalmia, whether acute or chronic.

The four ancient Greek vases, mentioned in the preceding notice, as inscribed with the name of the drug *Lykion* or *Lycium* are each of very small dimensions, the plate representing all of them of their original sizes and forms. They are small, in consequence, in all probability, of the foreign drug which they con-

¹ The other variety of Lycium described by Dioscorides as procured in Asia-Minor (Lycia, Cappadocia, &c.) is now generally supposed to be an extract from the *Rhamnus infectorius*, or other species of *Rhamnus*. See Professor Royle, in *Linnean Transactions*, vol. xvii., p. 87.
tained being difficult to procure in large quantities, and being hence an article of high price in the markets of Greece and Italy. The value set upon the contained drug would seem to be indicated by another circumstance—namely by the shape of the interior of the vases. In the specimens described by Millin and Tochon, the cavity of the jars is narrow and conical from above downwards, the mouth being wide, and the interior becoming more and more tapering and contracted as it descends downwards. Hence these jars contained, in fact, much less of the Lykion than their mere external appearance indicated. This remark, at least, holds true of the two vases from Tarentum bearing the name of Jason. The vase of Museus from Athens, belonging to the British Museum, is more honest in its construction. The high price of the pure Lykion probably led also to the fact mentioned specially by Dioscorides and Pliny—of the frequent adulteration of the drug. And, perhaps, as in similar inscriptions on some modern medicine-nostrums, and packets, the names of the preparer or vender, Jason, Heracleus, and Museus, stamped on the vases, were added in attestation of the purity and unadulterated character of the drug which these vases contained.

March 8, 1852.

JOHN WHITEFOORD MACKENZIE, Esq., in the Chair.

The following Gentlemen were elected Fellows of the Society:—

Robert Horn, Esq., Advocate.
James Mellis, Esq.
T. A. Wise, M.D., H.E.I.C.S.
John George Wood, Esq., W.S.

Various Donations were presented, including—The Guide to Northern Archaeology: by the Right Hon. The Earl of Ellesmere.

A Bronze Bridle-ring, and Buckle of rude workmanship, found in a Stone Cist, near St Andrews: by Robert Bryson, Esq., F.S.A. Scot.

A small Powder-Horn, with silver mountings, formerly the property of Colonel Ramsay, of Roseheartie, who commanded a regiment under Prince Charles Edward, at Culloden; and a compartment of
Arabesque Ornament, with an Arabic Inscription, from the Palace of the Alhambra: by Richard Huie, Esq., M.D., F.S.A. Scot.

Models of the Megalithic Temple of Avebury, and of that of Stonehenge, as it now stands, and restored; executed by Mr Henry Brown, of Amesbury: the gift of Beriah Botfield, Esq., F.S.A. Scot.

The Pattern-Shaft of the Charlotte Dundas Steam-boat, the first steam-vessel constructed for use. It was made by Mr William Symington, the constructor of the steam-engine employed in the original experiments made by Patrick Miller, Esq., of Dalswinton, in 1788, and used on the Forth and Clyde Canal in 1801; and was examined there by Mr Robert Fulton, the American engineer, in 1803: by Mr William Grosart, of Grangemouth.

A Portrait in Oil of Sir Ewen Cameron of Lochiel: by David Laing, Esq., F.S.A. Scot.

A Silver Cufic Coin of Al Motawekkil ala’llah, tenth Abbaside Khalif, A.D. 860, found in the vicinity of Göttenberg: by Mrs Robert Chambers.

The Arabic inscriptions on this Coin read:—

Ob. Area: Non est Deus nisi, Allah unicus, cui non est socius.
Below: El Motezz billah.
Inner Circle: Nomine Dei! cussus est hic dirhem in Meru, anno ducentesimo quadragesimo sexto.
Outer Circle: Motto from the Koran, chap. 30, v. 3, 4.

B. Area: Mohammed legatus Dei
Above: Deo!
Below: Al Motawekkil ala’llah.
Margin: Motto from the Koran, ch. 9, v. 33.

Al Motawekkil ala’llah was the tenth khalif of the Abbaside dynasty. He reigned from 231 to 247. In the year 240 he assigned to his son, Al-Motezz-billah, the superintendence of the provincial mint, and ordered that his name should appear on the coinage. This coin, struck in the year 246 (860 A.D.), in the city of Meru or Merw, in Khurasan, bears his name, as seen above. Tornberg gives a similar coin struck in the City of Grace (Medinet-el-selam), that is, Bagdad, in this year, but mentions none of him struck in Merw. (Numi Cufici,
p. 88, No. 365 a.) Marsden gives a gold coin, a dinar, struck in Merw, but of the year 245 (*Numismata Orientalia*, p. 57, lvi.) Schroeder describes a similar coin to this, in the cabinet of the Academy at Upsal. (*Numismata Cufica*, p. 6, No. 28.)