XXVI. *Sequel to a paper on the tendency to Calculous Diseases, and on the Concretions to which such diseases give rise.* *By* JOHN YELLOLY, *M.D. F.R.S. &c.*

Read June 17, 1830.

IN a paper which the Royal Society did me the honour to publish in the last volume of its Transactions, I gave the analysis of 328 of the calculi contained in the cabinet of the Norfolk and Norwich Hospital; but was prevented from extending my observations over the whole series of specimens, from the circumstance of the remainder not being then divided. Since that period, however, the division of the whole has been effected; and I have therefore been able to complete the analysis, of which I have now the honour to lay the result before the Society.

In my former paper I stated it as probable, that the proportions of the different descriptions of calculi, which formed the undivided part of the cabinet, would not differ materially from that of those which I had analysed; and this proves, in a considerable degree, to be the case. But it may be remarked, that some of the specimens which had been broken in the extraction, and whose interior had been considered as sufficiently exposed for the correct examination of all their laminæ, were found to exhibit some slight differences in their centres, on a more complete division.

I shall adopt the same plan which I pursued in my former paper, and present the results of the analysis in a tabular form, giving, in the order of their occurrence from the centre, the consecutive deposits of the different materials of which the calculi are composed, according to the most prominent character of such material. I shall include in the Table, both those of the former, and the present analysis, amounting together to 663 specimens, in order to present, at one view, a summary of the chemical composition of the whole cabinet *.

* I have placed in the cabinet, a book containing an outline of each calculus, with references; and would also observe, that some of the facts stated in this communication, have been added since it was presented to the Society.

Calculi consisting principally of one deposit.

Lithic acid	164
Lithate of ammonia	55
Oxalate of lime	21
Phosphate of lime	5
Mixed phosphates	35

Calculi consisting af two deposits.

Lithic acid and lithate of ammonia	49
——— and oxalate of lime	10
——— and mixed phosphates	15
——— and phosphate of lime	8
Lithate of ammonia and lithic acid	21
——— and oxalate of lime	63
——— and mixed phosphates	22
——— and phosphate of lime	9
Oxalate of lime and lithic acid	15
——— and lithate of ammonia	3
——— and mixed phosphates	20
——— and phosphate of lime	7
——— and silex	1
Mixed phosphates and oxalate of lime	1
——— and phosphate of lime	2
Phosphates of lime and mixed phosphates	3
——— and oxalate of lime	1

Calculi consisting of three deposits.

Lithic acid, oxalate of lime, and phosphate of lime	2
——— oxalate of lime, and lithate of ammonia	4
——— oxalate of lime, and lithic acid	5
——— lithate of ammonia, and oxalate of lime	2
——— lithate of ammonia, and lithic acid	2
——— lithate of ammonia, and mixed phosphates	2

Lithic acid, oxalate of lime, and mixed phosphates 3
Lithate of ammonia, oxalate of lime, and mixed phosphates . . . 13
——— oxalate of lime, and phosphate of lime 13
——— oxalate of lime, and lithic acid 16
——— oxalate of lime, and lithate of ammonia 7
——— phosphate of lime, and lithate of ammonia 1
——— phosphate of lime, and lithic acid 1
——— phosphate of lime, and oxalate of lime 1
——— phosphate of lime, and mixed phosphates 4
——— lithic acid, and mixed phosphates 6
——— lithic acid, and lithate of ammonia 1
——— lithic acid, and phosphate of lime 4
——— lithic acid, and oxalate of lime 3
Oxalate of lime, lithic acid, and lithate of ammonia 3
——— lithic acid, and oxalate of lime 3
——— lithic acid, and mixed phosphates 5
——— lithic acid, and phosphate of lime 1
——— lithate of ammonia, and phosphate of lime 3
——— lithate of ammonia, and oxalate of lime 2
Mixed phosphates, phosphate of lime, and mixed phosphates . . . 1

Calculi consisting of four deposits.

Lithic acid, lithate of ammonia, lithic acid, and lithate of ammonia . 1
——— oxalate of lime, lithate of ammonia, and phosphate of lime . 1
——— oxalate of lime, lithic acid, and oxalate of lime 1
——— oxalate of lime, lithic acid, and lithate of ammonia . . . 2
Lithate of ammonia, oxalate of lime, lithate of ammonia, and mixed phosphates 5
——— oxalate of lime, lithate of ammonia, and oxalate of lime . . 3
——— oxalate of lime, mixed phosphates, and oxalate of lime . . 2
——— oxalate of lime, lithic acid, and lithate of ammonia 1
——— oxalate of lime, phosphate of lime, and mixed phosphates . 1
——— oxalate of lime, lithic acid, and mixed phosphates 1
——— oxalate of lime, lithic acid, and oxalate of lime 1

Lithate of ammonia, oxalate of lime, lithate of ammonia, and lithic acid	1
——— phosphate of lime, oxalate of lime, and lithate of ammonia	1
Oxalate of lime, lithic acid, lithate of ammonia, and lithic acid	1
——— lithic acid, oxalate of lime, and phosphate of lime	1
——— lithic acid, oxalate of lime, and mixed phosphates	1
——— lithic acid, lithate of ammonia, and mixed phosphates	1
	663

The general results of the annexed Table, differ in no very material respect from those mentioned in my former paper. The great preponderance of calculi of lithic acid, and lithate of ammonia, or of their nuclei; and the usual presence of carbonate of lime, with phosphate of lime, and the mixed phosphates, are prominent characteristics of the whole cabinet. But it will be seen, with interest, that *silex* enters into the composition of one specimen; and as this is a point of great rarity, I shall state to the Society the circumstances under which it exhibited itself, and the mode by which its existence has been ascertained.—In examining a dark brown calculus of oxalate of lime, of about five grs. in weight, which was removed many years since from a boy of nine years of age, I found some minute, colourless, transparent crystals, diffused irregularly in the substance of the dark oxalate, which, from their great hardness, and their insensibility to all the usual reagents, I suspected to be siliceous. The specimen was however so small, as to make it important to establish its nature by one set of experiments only; and I therefore, in my first subsequent visit to London, in February last, requested a valuable member of this Society, Mr. FARADAY of the Royal Institution, to examine it with me; which he obligingly did; and the following is an account of the experiments which he employed.

A portion of the calculus being separated, which contained about nine of these granules, the oxalate of lime, and whatever other substance might be in combination with it, was destroyed by heat, and afterwards by muriatic acid. The granules were then left transparent and colourless; capable of scratching glass and agate, and unaffected by nitric or muriatic acids. These granules were then dried and exposed to heat, with a fused mixture of carbonate of

soda and potash. They gradually dissolved, evolving carbonic acid; and a solution of the mass, when cold, being made in water, and neutralized by muriatic acid, gelatinized silica was thrown down from it. A slight excess of muriatic acid was then added, and the whole evaporated to dryness. After withdrawing the muriate of potash and soda by distilled water, the silica was left in its usual white, insoluble state. By comparing the magnitude of these granules with some which were taken from a sand bath, it was calculated that they did not average more than the 400th part of a grain in weight. The granules were thus unequivocally proved to be of silex; and as they were imbedded in, and diffused through, oxalate of lime, a substance of known urinary origin, it is impossible to avoid the conclusion, that the production, or deposition of these two substances, went on simultaneously.

I am the more particular in mentioning the circumstances under which the siliceous deposit exhibited itself, because much discrimination is occasionally necessary, on the part of medical men, to prevent their being deceived, by the mistakes of patients, or their friends, in matters of an unusual nature. And as if the love of exciting surprise and admiration by the marvellous, were not confined to the traveller, there is sometimes found in patients, however singular the fact may appear, an inclination to impose on their professional attendants, by the description or exhibition of something strange and anomalous*.

There are only three instances on record, as far as I know, of the existence of silex in urinary calculi. Two are mentioned by MM. Fourcroy and Vauquelin as occurring among 600 calculi which they analysed; and here the silex was found blended with oxalate of lime, as in the specimen which I have mentioned. The third was observed by Prof. Wurzer, and its principal ingredients were phosphate of lime and lithic acid, the weight of the calculus being 870 grains, and the quantity of silex being one per cent.†. In none of these calculi, however, is the magnitude of the siliceous particles stated.

The deposition of siliceous gravel is mentioned by Dr. Venables of Chelmsford, in a communication published in the Quarterly Journal of Science, Lite-

* Portions of coal, brick, common gravel, and sea shingle, have occasionally been produced, as of urinary origin.

† Annales de Chimie, tome lx. p. 313.

rature, and Art, for Oct.—Dec. 1829*; and the correctness of that gentleman's observations, receives a strong and important confirmation by the instance which I have brought forward; though they might, at first view, be considered as liable to some doubt, both from the circumstance of the granules being uncombined, and from its being necessary to depend, to a certain extent, on the fidelity of the patient as to their source.

Dr. VENABLES has kindly allowed me the inspection of his specimens, which bear some resemblance (though they are much more minute, and are of an amber tinge,) to those which I have mentioned as coming under my own view; and he has stated in a letter to me, that in one instance, after carefully filtering and putting aside for a fortnight, a portion of the urine from which some of the granules mentioned by him had been derived, he found the inside of the glass studded, in two or three places, with minute crystals of silex, strongly resembling those which were thrown down by the urine. The precise modes in which silex is capable of being held in solution, have not all of them been distinctly ascertained; but this fact bears a considerable analogy to the deposition of regular crystals of rock crystal, from solutions of silex in fluoric acid, or in alkalis, after such solutions have been put aside for a considerable period.

I have not much to add to the statistical observations which I made in my former communication. I may remark, however, that it appears, from information lately obtained by Mr. COPLAND HUTCHISON, that the calculations relative to the tendency to calculous diseases in Scotland, in which I followed Mr. SMITH of Bristol, have been a good deal under-rated; and that the average disposition of that part of the kingdom to such complaints, differs but little from that of England in general†.

There seems to be much of the same variation with regard to the prevalence of calculous diseases in Scotland, that there is in England; some districts being exceedingly liable to these complaints, while others are very free from

* New Series, No. XII. p. 234.

† Further Inquiry into the comparative Infrequency of Calculous Diseases among Sea-faring People; with some Observations on their Infrequency in Scotland. Medico-Chirurgical Transactions, vol. xvi. p. 94.

them. My own inquiries, in addition to the valuable information communicated by Mr. HUTCHISON, in the paper already referred to, enable me to state the proportional frequency of the disease in a few districts.

The operations which have been performed at the Dundee Hospital, on cases belonging to Dundee, and to the county of Forfar generally, are about 54 in 36 years, or 1.38 per annum*; this, as the population is 113,000, is at the rate of one case for 107,000 inhabitants.

In the Aberdeen Hospital, the proportion is much more considerable; for in the course of 77 years, as by a list which Mr. CROMAR of that establishment was so good as to transmit to me, 285 operations have occurred, on cases belong to Aberdeenshire, and to the town of Aberdeen, containing together, a population of 155,000; which is at the rate of one case for every 42,000 inhabitants. On the other hand, in the Hospital of Inverness, not more than 5 operations, as Mr. HUTCHISON states, have occurred in the last 20 years, which, for the population of 90,000 contained in Inverness-shire, including the town of Inverness, is not at the rate of more than one for every 300,000 inhabitants. But when it is considered, that this hospital is resorted to by the poor of the contiguous counties of Ross and Nairn, as well as by those of Cromarty and Sutherland, the extreme paucity of stone cases, in this mountainous district, must be manifest.—In the Infirmary of Glasgow, 49 cases have occurred, in the course of 15 years, according to a list which Dr. MACFARLANE did me the favour to forward to me, or about 3.26 per annum; and of these, 31 belonged to the city and suburbs, containing about 147,000 inhabitants, which is at the rate of 2 per annum, or one for every 71,000 inhabitants. The remaining 18 were from the country; but I am unable to state the districts from which they were derived. There is reason, however, to suppose, that the tendency of the neighbouring counties to this disease, is very much less than that of Glasgow, for they have only afforded as small a number of calculous diseases as 18 to the Infirmary of that city, which may be regarded as the principal establishment for cases requiring capital operations in the West of Scotland.

In the neighbouring town of Paisley, consisting of 38,000 inhabitants, about 18 cases have occurred in 10 years, all of them of poor inhabitants of

* Observations on the Operation of Lithotomy, by JOHN CRICHTON, Esq. Edin. Med. & Surg. Journ. vol. xxix. p. 225.

the town, which is at the rate of 1.8 per annum, or one for every 21,000 inhabitants.

In the Infirmary of Edinburgh, 41 cases have occurred in the last 10 years; but I have not been able to procure, separately, the numbers which were derived from the city and the country respectively. Taking, however, the proportions as similar to what is found to be the case in the Glasgow Hospital (which is probably not far from the truth), there would be 24 of that number belonging to the city of Edinburgh, including Leith, and containing a population of 138,000, which would be at the rate of 2.4 per annum, or one case for every 57,000 inhabitants.

In the southern and south-west parts of Scotland, as well as in the northern, the disease is exceedingly rare; for Dr. CRAIGIE of Edinburgh informs me, that it is hardly known in the Dumfries Hospital, which, as being the only establishment of this kind south of Edinburgh and Glasgow, takes in a very large district in that part of the kingdom; and Sir GEORGE BALLINGALL, the Regius Professor of Military Surgery in the University of Edinburgh, states to me, on the most respectable authority, that in Kelso and its neighbouring district, calculous complaints scarcely ever occur.

The county of Northumberland, and that part of the county of Durham which is contiguous to the Tweed, a good deal resemble, in the unfrequency of calculous diseases, the adjoining districts of Scotland; for by a list which was obligingly transmitted to me by Dr. HEADLAM of Newcastle, it appears, that 95 cases of stone operation occurred in the Newcastle Infirmary during the last 30 years, which is at the rate of 3.6 per annum. Of this number, 64 belonged to the above district, including Newcastle, with the addition of Gateshead, which lies on the opposite bank of the Tyne, in the county of Durham; and these afforded 2.13 cases per annum, which, as the population was 213,000, gave one case for every 100,000 inhabitants. But if the country district be taken without Newcastle or Gateshead, there will then be 29 cases in 30 years for a population of 166,000, and one case for every 172,000 inhabitants.

As very little has been hitherto known concerning the proneness to calculous diseases in Ireland, though it is generally believed that such complaints are unfrequent, I have lately instituted inquiries on the subject, at the various

hospitals in that kingdom, to which Sir CHARLES FLINT, the resident Under-Secretary of State for Ireland in this country, has obligingly given me every facility. From the result of those inquiries it appears, that calculous diseases in Ireland are very rare, particularly in its country population. In various extensive districts from which I have been favoured with returns, stone is entirely unknown; and in others, it occurs with extreme unfrequency. Thus in the counties of Antrim, Armagh, Londonderry, Donegal, Fermanagh, Tyrone, Carlow, Kildare, Kilkenny, and Longford; in King's County; and in the counties of Louth, Wicklow, Clare, Kerry, Galway, Roscommon, Tipperary, and Mayo, containing, together, a population of above three millions and half of persons, not a single operation of lithotomy has occurred in any of their respective hospitals since their establishment; nor has one example, among the poor of those extensive districts, come within the cognizance of the eminent and well-informed practitioners, who have done me the favour of replying to the queries which I transmitted to them on the subject.

In the counties of Down, Monaghan, Leitrim, Sligo, Limerick, and Waterford, and in Queen's County, the population of which amounts together to about 1,200,000 persons, 9 cases of stone operation only have occurred, during the whole time to which the records of the hospitals, or the information or inquiries of their medical officers extend, and which embrace a period hardly short of 40 years. This is at the rate of not more than 0.25 per annum, or one case in 4 years.

In the city and county of Cork, containing, together, above 800,000 inhabitants, about 13 operations of lithotomy have been performed in the last 18 years, or about 0.66 per annum, of which 10 occurred to Dr. WOODROFFE of the South Hospital.

In the hospitals of Dublin, including the Meath or county of Dublin Hospital, it appears from information with which I have been favoured by Mr. RONEY, late President of the Royal College of Surgeons of Dublin, and Mr. CRAMPTON, the Surgeon-general of Ireland, that about 6 cases occur in the course of the year; and this estimate is confirmed by Mr. CARMICHAEL'S opinion, as stated by Mr. HUTCHISON.

Making a suitable allowance, therefore, for those counties from which I have

been disappointed in not yet receiving returns*, it does not appear that more than 8 operations of lithotomy occur annually among the poor of Ireland, the whole population of which was considered, in 1821, to be about seven millions†. But when we refer 5 of those cases to the city and county of Dublin, containing, together, a population of about 350,000, (which, from the documents with which I have been favoured, seems to be very near the truth,) it will be seen how minute the proportion of calculous cases must be in the remaining population of Ireland, when not more than 3 operations of lithotomy occur, annually, among the poor of a population of between six and seven millions.

I have mentioned in my former paper, a suspicion, from some facts there stated by me, that the principal occurrence of calculous diseases is in towns. This idea is strengthened by a consideration of the lists of stone cases, for which I have been indebted to Dr. HEADLAM of Newcastle, and Mr. EDDISON of Nottingham. In the town of Newcastle and Gateshead, calculous cases have occurred, within the last 30 years, in the proportion of about one for every 40,000 inhabitants; while in the county of Northumberland, independently, together with that part of the county of Durham which borders on the Tweed, the proportion, (as I have already remarked,) has only been one for 172,000 inhabitants. —In the town of Nottingham, the proportion, in 48 years, has been at the rate of one for every 67,000 inhabitants; while in the county of Nottingham only, it has been one for every 146,000 inhabitants.

In the town of Dundee, the calculous operations have occurred in the proportion of one to 41,000 inhabitants; yet in the county of Forfar, in which Dundee is situated, the proportion has been one to 82,000.

In Glasgow, the proportion has been, in the last 15 years, about one in 71,000; in Paisley, in 10 years, one in 21,000; and in Edinburgh, in a similar time, one in 57,000; while there is every reason for supposing (though I cannot speak from direct evidence upon the subject) that the stone cases afforded to any of those establishments, by country population, is exceedingly small. It is to be remarked, however, that the proportional numbers furnished by the town and country population of Aberdeenshire, during a period of 70 years, are nearly

* These are Cavan, Meath, Westmeath, and Wexford.

† Statistical Illustrations, 3rd edition, 1827.

alike; or rather, that those of the country population have somewhat preponderated; for while Aberdeen has afforded to the amount of one case for 44,000 inhabitants, the proportion of Aberdeenshire alone, without any obvious cause for such difference, has been one for 40,000 inhabitants.

In Ireland, the great preponderance of calculous cases originating in towns, is likewise strongly marked; for in Dublin, to judge from the returns of the county hospital for the last 12 years, two thirds of the cases, or 4 per annum, seem to be furnished by that city, which is about one half of the number afforded by the whole remaining part of Ireland, and is at the rate of one for every 45,000 inhabitants. In Cork likewise, the proportions are much less than those of Dublin, being about one for 160,000 inhabitants; yet this infinitely exceeds the usual product, either of the county of Cork, or of Ireland generally.

Where the circumstances which have a tendency to produce calculous diseases, are so very obscure, so difficultly traceable, and so full of anomalies, I have thought it useful to notice the local situations which are remarkable either for the frequency or unfrequency of such maladies, because the attention of observers may thus be directed to analogies, or discrepancies, which may not before have been sufficiently the subject of remark. That there are certain affections of the digestive organs which favour the occurrence of calculous complaints, is very generally admitted; and that these affections are likewise exceedingly prevalent in towns, and more especially among persons who practise sedentary occupations, is likewise well known. But while dyspeptic complaints are so common, that they form a very large share of the diseases which present themselves in the medical charities, both of London and the country, it still remains a problem, to what particular circumstances of constitution or habit, the origin of stone is to be attributed, which, in comparison of other chronic maladies, is so rare; and what are the peculiarities which render some dyspeptics liable to the complaint, and thousands of others exempt from it.

That there is a certain connection between calculous tendency, and some prevailing diathesis of towns, is supported by the greater frequency of stone in town, than country populations; and I was inclined to consider it not improbable, that this diathesis might be the scrophulous, both from mesenteric diseases

prevailing so much among the children of crowded cities, and from scrophulous affections being very common in Norfolk. Still, however, the same difficulty presents itself, as occurs with regard to affections of the digestive organs; namely, why so minute a portion of scrophulous persons should be affected with this disease, and so large a number escape. I am disposed, indeed, to consider the idea of a probable connection between a scrophulous and calculous diathesis, as very much weakened by the consideration, that in many of those parts of Ireland, where calculous complaints are hardly at all known, scrophulous affections are stated to me to be exceedingly common.

I must still confess the difficulty of referring the disposition to calculous affections, to any known circumstances of air, water, soil, or habits of life. The eastern position of Norfolk and Suffolk, produces more than the average bleakness of other parts of the kingdom, particularly in the spring months; but this inclemency is exceeded, both in the northern parts of the island, and the more elevated parts of Ireland. The poorer part of the population have much of a farinaceous aliment, often not well fermented: but still the main article of food is fine wheaten bread, which has been, for a long period, in such common use over the whole of England. In Scotland, too, the latter is, as I am informed, fast superseding the bread made of the coarser grains.

In Ireland, the diet of the humbler classes of society is very much confined to potatoes, and butter-milk, or skim-milk; often, unfortunately however, without either of the latter; and it appears highly probable that this diet, and perhaps, to a certain extent, the use of ardent spirits, is unfavourable to the formation or deposition of lithic acid, with which the tendency to calculous diseases is much connected. The freedom from this formidable class of complaints seems, however, to be dearly purchased, by the want of many of the comforts which the labourers of England and Scotland possess; nor is it accompanied by a less than usual tendency to many of the most ordinary complaints of Great Britain, as pulmonary consumption and scrophula, which are mentioned by several of my intelligent correspondents, as being very frequent among the Irish commonalty. The effect of a town residence, in producing a tendency to calculous complaints, is very strongly exemplified in Dublin, where they are so much more prevalent than in other parts of Ireland. This circumstance will, I venture to hope, meet with the particular attention of the Dublin

faculty, who unite, in so a high a degree, the requisites for prosecuting a difficult professional investigation.

The middle and active period of life, laborious and healthful occupations, together with a fair opportunity of obtaining nutritive aliment, and ordinary comforts, seem best adapted for producing a freedom from chronic ailments, and among them, from urinary calculus.

Mr. HUTCHISON has shown, how unfrequent the latter is among sailors; and there is every reason for supposing that this freedom is, in a considerable degree, participated by the military profession. On this point I have thought it desirable to institute some inquiries, the result of which I shall have the honour to lay before the Society.

In a valuable report published by Sir JAMES MACGRIGOR, on the diseases of the British army in the peninsula, under the command of the Duke of WELLINGTON, no case of calculus appears to have presented itself during the period of which he treats, viz. between December 1811 and June 1814, though above 330,000 cases were admitted into the general and regimental hospitals during that period*.

In the last 15 years, Sir JAMES informs me, that 4 cases only of calculus have occurred in the English army in Britain; and Mr. CRAMPTON, the surgeon-general of Ireland, states, that one example of lithotomy only, in which the operation was performed by himself, has occurred, within the same period, in the army in Ireland. I am, however, able to add to this, on the authority of Dr. PITCAIRNE of Cork, the case of an officer of the Scots Greys, whom I had occasion to visit at the barracks here, who was operated upon at Cork, by Dr. WOODROFFE, about two years since, in his way to join his regiment. Mr. CRAMPTON likewise informed me, on the authority of Sir JAMES WYLIE, physician to the late, and to the present Emperor of Russia, that calculous diseases are hardly known in the Russian army.

The Baron DELESSERT of Paris, has done me the favour to procure from the Baron LARREY, and M. GAMA, surgeons-in-chief to the great military hospitals of Gros Caillou, and Val de Grace, in the French metropolis, a report as to the prevalence of calculous complaints among the French soldiery. The Baron

* Sketch of the Medical History of the British Armies of the Peninsula of Spain and Portugal during the late Campaigns. Medico-Chirurgical Transactions, vol. vi. p. 381.

LARREY states, that in the course of 30 years, only 5 operations of lithotomy have been performed at the Gros Caillou, (4 of which were on soldiers, and one on a soldier's child,) and one operation at the Val de Grace. M. GAMA states, that during 6 years that he has been surgeon-in-chief of the military hospital of Val de Grace, and 8 previously, that he exercised the same functions in the military hospital at Strasbourgh, he has not once had occasion to perform the operation of lithotomy. He mentions likewise, that the disease is very rare in the army generally; and that no case of stone operation has occurred to him, during any part of his extensive military service.—It is very probable, however, that as the circumstances which concern health can be more particularly guarded in the naval service, than the military, according to the very judicious observations of Sir JAMES MACGRIGOR upon this subject, there may be, upon the whole, a less liability to disease in the former, than in the latter.

Before closing my observations, I cannot forbear expressing my regret, that since the introduction of lithotrity by M. CIVIALE, as a succedaneum for the operation of lithotomy, the beneficial effects of that practice do not seem to have been completely established in this country; though it has been recommended by the singular dexterity, and the conciliating deportment, of the Baron HEURTELOUP and Mr. COSTELLO. It is highly to the credit of our principal metropolitan surgeons, that all of them with whom I have conversed on the subject, are anxious that this plan of removing a calculus should have a fair trial; and I trust that in a matter in which the interests of humanity are so intimately concerned, such attention may be speedily given to the subject, by those who are qualified to direct public opinion, as may lead to a proper appreciation of the merits of the practice, the circumstances under which it may be best exercised, and the mode by which the manual dexterity which it requires, may be most readily obtained.

Carrow Abbey, near Norwich,
June 16, 1830.